

COMPETITION COMMITTEE



Role and Measurement of Quality in Competition Analysis

Series Roundtables on
Competition Policy

N° 141

Unclassified

DAF/COMP(2013)17

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

28-Oct-2013

English, French

**DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS
COMPETITION COMMITTEE**

DAF/COMP(2013)17
Unclassified

THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS

JT03347406

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

English, French

FOREWORD

This document comprises proceedings in the original languages of a roundtable on the role and measurement of quality in competition analysis held by the Competition Committee in June 2013.

It is published under the responsibility of the Secretary General of the OECD to bring information on this topic to the attention of a wider audience.

This compilation is one of a series of publications entitled "Competition Policy Roundtables".

PRÉFACE

Ce document rassemble la documentation dans la langue d'origine dans laquelle elle a été soumise, relative à une table ronde sur le rôle et la mesure de la qualité dans le cadre de l'analyse de la concurrence qui s'est tenue en juin 2013 dans le cadre du Comité de la concurrence.

Il est publié sous la responsabilité du Secrétaire général de l'OCDE, afin de porter à la connaissance d'un large public les éléments d'information qui ont été réunis à cette occasion.

Cette compilation fait partie de la série intitulée "Les tables rondes sur la politique de la concurrence".

Visit our Internet Site -- Consultez notre site Internet

<http://www.oecd.org/daf/competition/>

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
BACKGROUND NOTE	11
CONTRIBUTIONS BY DELEGATIONS	
Australia.....	43
Canada	59
Chile	67
European Union.....	77
Indonesia	85
Japan	89
Mexico	95
Portugal.....	101
United Kingdom	103
Ukraine	115
United States.....	119
BIAC.....	127
EXPERT CONTRIBUTIONS	
<i>By Theodore Voorhees, Jr. - The Role and Measurement of Quality Factors in Competition Analysis – The Incomplete Case of How Vertical Price Restraints are Handled under the Rule of Reason in United States Litigation</i>	145
SUMMARY OF DISCUSSION	157

SYNTHÈSE.....	169
NOTE DE RÉFÉRENCE.....	175
COMPTE RENDU DE LA DISCUSSION	211

EXECUTIVE SUMMARY

*By the Secretariat**

- (1) *The level of quality that a product offers to consumers is a fundamental aspect of competition in many markets. Quality represents perhaps the key non-price consideration that determines whether consumers will purchase a product. Moreover, quality considerations frequently drive innovation within a market, thereby improving dynamic efficiency. Yet there are difficulties in terms of measuring quality attributes accurately, as well as in determining the impact of quality factors within the broader competition context. Thus, while most competition authorities would acknowledge the potentially key role of quality within competition enforcement, few agencies have as yet succeeded in incorporating systematically the assessment of quality within their competition analytical processes.*

Product quality, alongside price, is a key determination of competition in many if not most markets. The extent to which quality competition exists within a particular market may depend upon the extent to which goods are homogeneous, or, alternatively, upon the price sensitivity of consumers. At least in principle, a decrease in product quality (where price is not adequately adjusted) can be as harmful to consumer welfare as an increase in price (where quality is not adequately adjusted). In addition, business efforts to increase product quality are linked to innovation and thus to economic growth more generally.

However, while most competition experts would agree upon the importance of quality as a competition consideration in theory, in practice it has proven rather difficult to account for quality attributes within conventional competition analysis. Quality was thus described in one Roundtable contribution as an “important but somewhat elusive topic.”¹ This apt description reflects both a general consensus that quality considerations ought to be incorporated in any comprehensive analysis of market competition, as well as the practical reality that few competition agencies have developed an effective means by which to do so systematically to date.

- (2) *While the importance of quality is undisputed, the task of providing a comprehensive definition of quality is rather more complex. In broad terms, quality refers to the flow of service, or the level of value, that consumers derive from a product. It is multidimensional in nature, encompassing a wide variety of factors. Moreover, quality is a subjective concept, insofar as different consumers may perceive or value certain quality attributes to a differing extent. The conceptual distinction between vertical differentiation and horizontal differentiation of products provides a (somewhat inexact) means by which to distinguish objective, universally valued quality attributes from subjective elements that reflect individual consumer perceptions*

* This summary does not necessarily represent the consensus view of the Competition Committee. It does, however, encapsulate key points from the discussion at the roundtable, the delegates’ written submissions, and the Secretariat’s background paper.

¹ See Roundtable on the Role and Measurement of Quality in Competition Analysis: Note by the BIAC, [DAF/COMP/WD\(2013\)57](#).

Identifying a single exhaustive definition of quality is a challenging endeavour. Quality is a multidimensional concept that encompasses, *inter alia*, the durability, reliability, location, design and aesthetic appeal, performance and safety of a product. Product choice can also be treated as a quality attribute, although it remains dissociable from the individual product itself. In essence, quality is a relative concept, insofar as the level of quality found in any one product is defined by reference to the quality levels of other products. Quality incorporates a significant element of subjectivity, because certain quality aspects may be valuable only to some consumers, or more valuable to some than others. Consumers may also disagree as to ranking of product characteristics that are each viewed as desirable to a certain extent. Accordingly, while some quality attributes are certain, objective and observable (for example, the engine power of a car), others are subjective, unobserved and dependant upon the perceptions of consumers (for example, the prestige associated with a particular automobile marque). The multifaceted and indistinct nature of quality thus complicates the task of providing a robust definition of this concept.

In order to provide a degree of conceptual clarity in this area, economists distinguish between vertical and horizontal differentiation of products. Vertical differentiation refers to those product characteristics that all consumers would agree are valuable and thus constitute quality attributes. Horizontal differentiation refers to product characteristics that are considered desirable only by some but not all consumers. The degree of simplicity that this distinction generates can be overstated in practice, however. Within a given vertical differentiation, consumers may still differ as to the ranking of discrete quality attributes, while, in the context of horizontal differentiation, consumers may disagree as to whether certain product characteristics should be characterised as “quality” attributes as such.

- (3) *The inherently fluid and subjective nature of quality can present difficulties in terms of the evaluation of quality factors, particularly in respect of efforts at quantitative assessment of quality levels. At present, competition agencies employ mainly qualitative tools, such as customer surveys and interviews, to assess quality where necessary. Experience with the implementation of quantitative econometric techniques by which to measure quality is rather limited. In the future, however, such techniques may become more readily applicable and widely used. Alternatively, in some markets the use of sector-specific experts to assess quality levels may be appropriate.*

The partially subjective, perception-dependant aspect of the concept of quality creates difficulties in terms of identifying and measuring relevant quality attributes for the purposes of competition analysis. Although certain quality metrics can be measured and compared with little difficulty, others will vary in terms of how they are perceived by different consumers and are conditioned by essentially immeasurable subjective preference factors. Thus, while it may be possible to *describe* these preferences on the basis of empirical market research, it is considerably more difficult to *quantify* and compare levels of product quality in such circumstances.

As a result, at present competition authorities tend to rely upon qualitative methods of assessing product quality where necessary. Such methods can include the use of material obtained through prior or on-going market investigations, from consumer surveys and interviews, as well as an examination of internal documents and business practices of the firm(s) under scrutiny. Market information gathered by such means might then form the basis for revealed preference analysis, or other analytical techniques by which market dynamics can be assessed. By contrast, the use of robust econometric mechanisms by which to quantify quality levels within a market is far less common at the enforcement level. The development of such techniques has been the subject of considerable recent academic work, however, and there is some likelihood that these tools may achieve a more widespread application in the future. The use of hedonic price models, which

convert nominal prices to real prices by taking account of the impact of quality on product value, received particular attention at the Roundtable as a technique with the potential to enable competition agencies to engage in detailed quantitative analysis in regard to quality. Some participants expressed a degree of scepticism, however, as to whether the necessary market data would be available in most instances to allow these calculations to be performed. Another technique discussed in the roundtable focuses on the analysis of variables which may be regarded as proxies of quality levels, for example, firms' expenses on salaries paid to service personnel.

One possible alternative to qualitative or quantitative analyses of quality performed by the competition agency is the use of a sector-specific expert in quality. This approach was adopted by the US enforcement agencies, for example, in a series of merger cases involving the hospital sector. Any credible expert witness will also need to rely upon qualitative and/or quantitative techniques to assess product quality in the market, however, and so the use of quality experts may simply outsource the limitations and/or difficulties of these techniques to another party.

- (4) *From a competition policy perspective, perhaps the most difficult aspect of quality as a consideration within competition analysis is its somewhat equivocal relationship to market concentration. Economic theory predicts competition may either increase or decrease product quality, depending on the situation. Perhaps the only uncontroversial insight is that, in markets with regulated prices set above marginal cost, firms tend to compete away these excess profits, including by means of product quality improvements. This raises the possible spectre of excessive (sub-optimal) quality levels in such markets. The empirical evidence that is available suggests that increasing competition can have either positive or negative effects on quality levels, depending on the particular market circumstances. For similar reasons the relationship between quality and prices is also somewhat ambiguous. These findings underline the fact that the assessment of quality in relation to competition must be conducted on a case-by-case basis.*

The relationship between quality and the degree of competition within a market is uncertain and equivocal both in theory and practice, a feature that tends to complicate the task of including quality considerations within any competition analysis. Unlike prices, which generally fall as competition increases, increased competition can either cause quality levels to rise, if firms begin to compete more vigorously in relation to quality attributes, or to fall, if the need to reduce prices leads to a concomitant reduction in quality as production costs are cut. For this reason the relationship between quality and price is also somewhat indeterminate, and dependent upon the particular market forces at issue.

While a considerable amount of economic literature has considered the relationship of competition to quality, the overall conclusions reached by the economic theory reflect this ambiguity: there is no simple answer. Theorists agree as to one aspect, however. Where prices are regulated and set above marginal costs, firms generally compete away these excess profits either through increased promotional activity or through quality improvements. The latter possibility illustrates the interrelationship between price and quality levels. Furthermore, it suggests that there may be a risk of quality levels that are “too high”—that is, wasteful of social resources—in certain circumstances.

The empirical evidence follows theory. It is not the case, for example, that an increase in market concentration necessarily leads to a decrease in product quality or choice. Moreover, market entry by low cost airlines is expressly premised, for example, on lower (or more basic) levels of service in exchange for lower ticket prices. Yet there is some evidence of low cost carriers' service being generally more successful at delivery of one specific quality attribute, punctuality, which air passengers may view as indispensable. Depending on the particular market at issue,

therefore, the empirical research indicates that changes in competition levels can have either positive or negative effects on quality.

The implications for competition enforcement are straightforward to describe yet potentially quite demanding in practice: any assessment of the impact of competitive forces or changes in market concentration upon product quality must be conducted on a case-by-case basis rather than on the basis of any *a priori* assumptions regarding the relationship between these elements.

- (5) *At the level of competition enforcement, the role of quality as a factor in assessing the legality of horizontal and vertical restraints is well established. Co-ordinated efforts between competitors to limit quality improvements or to degrade existing quality are generally most appropriately treated as equivalent to a cartel. There are, however, certain forms of horizontal co-operation that may be welfare enhancing, for example where collaboration benefits consumers by reducing information asymmetries. Similarly, the assessment of vertical restraints under competition law may also involve a balancing of the effects upon consumer welfare of any potential price rises against any likely improvements in product quality.*

In certain areas of competition law enforcement, agencies are already well attuned to account for possible quality implications of business behaviour. Quality levels are a central consideration in many market investigations, for instance. Typically, horizontal agreements to restrict innovation, limit product choice or degrade existing quality are treated as hard-core cartel offences equivalent to price-fixing or market sharing. Conversely, certain types of less obviously restrictive horizontal co-operation between competition firms may be acknowledged as generating efficiencies in the form of product quality benefits. may be the case, for example, where the co-operation is intended to counterbalance information asymmetries that leave consumers with imperfect information, or where the co-operation leads to product innovation or otherwise improves performance and customer choice.

Similar issues arise with respect to the use of vertical restraints, such as resale price maintenance (RPM). Suppliers often impose vertical restraints as a means by which to ensure the high quality of their products at the retail level, yet, typically, the higher prices that ensure result in a collateral disadvantage for consumers. Increasingly, competition agencies and courts have begun to recognise the potential efficiencies that result from improvements in product quality. Yet not every vertical restraint is benign or pro-competitive on balance. Accordingly, in certain cases may a balancing or trade-off between the competing welfare interests in lowering prices and improving product quality may be required.

- (6) *The use of quality attributes to inform the task of market definition is, to an extent, well established. Consumer preference towards product quality is key for market definition, and is an important factor for application of the SSNIP test. The more controversial question is whether, in appropriate circumstances, markets can and should be defined by means of a quantitative assessment of quality and its competitive impacts. This could involve the use of a SSNDQ test to assess the impact of a “small but significant non-transitory decrease in quality”.*

Current practice with respect to the task of market definition places considerable emphasis on product quality attributes. Location, for example, is an aspect of quality which is routinely taken into account by competition authorities. Consumer preferences and valuation of other various aspects of product quality also inform the process of market definition, and in particular, the application of the SSNIP test. In certain cases, neglecting to take account of quality considerations and focusing on price only may lead to an overly narrow market definition. In other cases, where the quality attributes of two products are so dissimilar that consumers would

not switch from one to the other even in response to a price rise, competition authorities may reach the conclusion that separate product markets must be defined.

A more contentious issue, however, is the application of quantitative tools for market definition that focus primarily on quality effects. The SSNDQ test is posited as one means by which a quantitative focus on quality might be realised in relation to market definition. This measures the impact of a “small but significant non-transitory decrease in quality” in a manner equivalent to the SSNIP test’s assessment of price increases. The SSNDQ test faces criticism that in practice it is unworkable, however, given the inherent difficulties of measuring quality alongside the existing complications of the applying the SSNIP test itself within real market situations.

- (7) *The Roundtable identified the question of quality effects in the merger control context as one of the most vexatious—and still unresolved—issues within this topic. In particular, trading off between quality effects and price effects raises particular issues.*

In merger cases, potential positive effects on quality are often invoked as a resulting efficiency that justifies any collateral anticompetitive price effects. This includes the potential for the merged entity to engage in greater innovation, through, for example, research and design synergies, or enhanced profits generated by scale economies, although the relationship between market concentration and innovation also remains somewhat ambiguous. Conversely, potential negative effects on quality and product choice post-merger can lead a competition authority to prohibit a proposed transaction, or to seek to have it overturned subsequently.

In certain merger cases, competition authorities may therefore be required to carefully balance any pro-competitive potential impacts on product quality and innovation against negative effects on price. The analysis of such cases may benefit from reliable and sufficiently operational approaches to the assessment of quality for the purposes of competition analysis.

BACKGROUND NOTE

By the Secretariat *

1. Introduction

In principle, concerns about quality are just as pervasively interwoven in competition policy as concerns about prices. After all, a decrease in quality (holding price constant) can harm consumer welfare just as much as an increase in price (holding quality constant), and firms compete on the basis of quality as well as price. Merger guidelines routinely mention not only higher prices but lower quality as potential outcomes that can raise competition concerns. Similarly, entrenched monopolists are undesirable from a competition perspective not only because they cause inefficiencies and reduce consumer welfare through supracompetitive pricing, but because they tend to become complacent, letting the quality of their products and services slip. Competition authorities pursue cartels not only because they conspire to raise prices artificially, but because they sometimes conspire to reduce quality, too. Furthermore, behavioural remedies for competition law violations sometimes require companies to provide certain minimum levels of performance, which could be categorized as “quality” conditions.

It is not obvious how to incorporate quality considerations into actual competition analysis, though. Price considerations are much easier to incorporate. Price is a single, objective factor. Every consumer will prefer a lower price for a given level of quality. Quality, however, is a multi-dimensional, subjective factor. Consumers may disagree on what better quality means with respect to a certain product *at any price*. And even if they agree on what the relevant components of quality are, they may disagree on how to rank the importance of those components.

For example, a set of pizza delivery customers might all agree that both the speed of delivery and a diverse menu are important factors, but some may consider the delivery speed to be the most important factor while others care more about whether certain types of pizza are available. Or, to take a more nettlesome example, suppose we are analysing the market for chemotherapy drugs. At first, one might think this is the perfect counterexample – one that supports the argument that surely there exist some products for which quality is an obvious and universal concept. After all, everyone will agree that the most important quality feature in a chemotherapy drug is how effectively it fights cancer. Or will they? We might find, when comparing the views of youths and octogenarians, that people can have very different perspectives about quality even when they are cancer patients talking about cancer medicine. A young person may indeed give top priority to a drug’s effectiveness against cancer, regardless of the drug’s other traits. But an elderly person who has already been through cancer and its treatments once or twice before might prefer a drug that has milder side effects even though it is less effective. Or the older person might care most about whether the drug is administered orally or intravenously, or how frequently he or she will have to leave home to see a doctor during the course of treatment.

Such differences in consumers’ outlooks can make measuring quality and incorporating it into competition analysis more difficult than measuring and incorporating prices. That is a likely explanation for the fact that courts and competition authorities rarely address quality concerns as thoroughly as they address price concerns.

* This paper was written by Anna Pisarkiewicz and Jeremy West, OECD Competition Division.

We begin this paper by delving into some definitional questions associated with quality. What do we mean when we use that term? Is choice an aspect of quality? Can quality be used to define markets? Then we turn to the question of how changes in the level of competition affect quality. We examine that issue from the perspectives of both microeconomic theory and empirical studies. Next, we look at how quality concerns have been analysed by courts and competition authorities in a variety of competition law enforcement contexts.

2. Definitional questions

2.1 *Defining quality*

As the Introduction suggested, trying to define quality is a bit like trying to nail jelly to a wall. It is an elusive, fluctuating concept because different people often have different ideas about what it means, both generally and with respect to particular products or services. Yet we all share some ideas about what quality is. We may not be able to come up with a narrow, uniform definition that suits everyone in a given market, but we can identify what some of the main considerations are. Quality concerns things like workmanship, materials, design, reliability, durability, aesthetics, location, and performance.

In this paper, we are not talking about characteristics of products and services that can be easily translated into prices or costs. For example, if we offer you 500 grams of sugar for 3 euros but our competitor offers 1 kg of sugar for the same price, it could be said that the competitor is offering a higher-quality deal simply because buyers will get more sugar for the same price. But it would be a simple matter to compare these offers purely on price terms: our price is 6 euros per kg and our rival's price is 3 euros per kg. Who would not want twice the sugar for the same price? That is an easy decision. It is not at all what this Note is about. Similarly, we are not talking about things like how long one light bulb lasts in comparison to another. It is trivial to compare a 70 watt bulb that lasts for a year and costs 3 euros with a 70 watt bulb that lasts for ten years and costs 10 euros. That is really just a difference in quantity per euro again.

Instead, we are talking about the features of the product itself: not how much of it there is, but how *good* it is. Sugar is a commodity. Generally speaking, all sugar tastes the same, dissolves the same, pours the same, etc. So there is not much variation in quality from brand to brand. Customers base their buying decisions almost entirely, if not entirely, on price. But what about something like an automobile? Or a holiday package? Or accounting services? For those kinds of products and services, a lot more matters than the price/quantity pairing. For an automobile, considerations like cargo capacity, styling, handling, and fuel economy matter. But some customers may care a great deal about a car's appearance and horsepower and much less about its cargo capacity. Others may agree that appearance and horsepower matter, but disagree on which factor is paramount. For holiday packages, location obviously matters a great deal. But how can one determine in an objective, universally applicable way whether Rome or Phuket is the better holiday destination? Such questions are much harder to answer than whether 3 euros for 500g of sugar is better than 3 euros for 1 kg of sugar.

Economists have come up with a semantic way to distinguish features that all consumers agree are desirable from features that only some consumers find desirable. The former are grouped under the heading "vertical product differentiation" while the latter are categorized as "horizontal product differentiation." That is useful terminology, but it does not change the facts that, to some consumers, a given horizontal product differentiation will count as "quality" while to others it will not, and that even among vertical differentiations, consumers sometimes disagree on how important various features are relative to one another.

Faced with this situation, analysts wishing to study quality in a market could try to identify and measure most or all of the variables that matter to consumers. Box 1 provides an example of this approach,

taken by a sectoral regulator in Ireland that looked at 13 different elements of service provided by an airport authority. Alternatively, one could rely on the theory of revealed preference, which holds that the preferences of consumers can be revealed by their buying habits. By observing which products customers buy, and how much they buy, we can learn what quality is and who is providing it.

Box 1. How do sectoral regulators assess quality? An example from the Dublin Airport Authority

In accordance with the latest determination made by the Commission for Aviation Regulation on the maximum level of airport charges,* the Dublin Airport Authority (the DAA) must ensure that the level of revenue collected from airport charges does not exceed the maximum revenue permitted per passenger. The maximum revenue is set by a specific formula into which the Commission introduced a quality term, thereby creating a direct link between the price cap and the quality of service delivered.

For example, for the regulatory period covering year 2010, the formula provided that the maximum revenue per passenger should be $[\text{€}8.93 + T_{2010}] * QS_{2010}$ where

T_{2010} is an increase in the maximum permitted revenue per passenger allowed if Terminal 2 (T2) became operationally ready in 2010, and QS_{2010} represents a Quality of Service adjustment that took a value between 0.965 and 1, depending on how many service quality targets the DAA managed to achieve.

If the DAA met all the targets, the value would equal 1. If, on the other hand, it failed to meet any target, the value would be 0.965, so the level of maximum permitted revenues would decrease by 3.5% (and by 4.5% in subsequent years).

Thirteen service measures were used to monitor quality of service, but only 12 of them could affect the level of airport charges. These were:

- Whether security passenger search time took longer than 30 minutes
- Percentage of time out-bound baggage handling system unavailable for more than 30 minutes during hours of operation
- Percentage of time in-bound baggage handling system available during hours of operation
- Ease of way-finding through airport
- Flight information screens
- Cleanliness of airport terminal
- Cleanliness of washrooms
- Comfort of waiting/gate area
- Courtesy/helpfulness of airport staff (excluding check-in & security)
- Courtesy/helpfulness of security staff
- Overall satisfaction (all passengers) Communication/telecom/e-facilities
- Feeling of being safe and secure

Nine of these measures are calculated on the basis of the results of passenger surveys, which are currently carried out by Airports Council International (ACI) on a quarterly basis. The three other measures, relating to security passenger search times and the availability of out-bound baggage and in-bound baggage systems, are taken by the DAA.

Prior to releasing its determination, the Commission published consultation papers, which discussed the question of how quality of service should be treated. While the current quality of service regime has been developed following consultation with all interested stakeholders, and most respondents welcomed the introduction of a monitoring scheme for the quality of service at Dublin airport, one party (Ryanair) asserted that the Commission had failed to identify what is meant by a good quality of service.

Naturally, although regulatory authorities may include a quality term in their formulae, parties may never fully agree on what constitutes good quality of service. Indeed, the responses submitted by various stakeholders to the Commission revealed the existence of, at times, significantly different opinions on the precise scope of a proper quality monitoring regime and the manner in which various indicators should be measured. To ensure the robustness of the monitoring scheme and to reflect the diversity of views presented, the Commission opted for a mixture of measures, which it considered to be sufficiently wide.

*Available at: http://www.aviationreg.ie/_fileupload/2009_CP4_Final_Determination.pdf.

2.2 *Choice: An aspect of quality, or something different?*

Is the availability of choice – say, the option of choosing from hundreds of different styles of shoes – an aspect of quality? Or is choice a factor that is separate from quality? Given that the choices available in a market may themselves be differentiated on the basis of their respective quality (say, luxury-brand shoes versus an unknown brand made with cheap materials), it would seem that choice is something separate from quality. Furthermore, choice is obviously essential to competition’s ability to cause improvements in quality, as customers must have options before they can effectively “vote” for higher quality products and services with their money. Then again, if one compares shoe retailers rather than individual shoe brands, choice not only becomes an element of quality, but a very important element. Customers may prefer to shop at shoe stores that carry a wide variety of brands instead of a more limited product line. The customers would therefore view larger shoe selections as an element of quality for shoe retailers. As a recent OFT report found, people seem to value choice for its own sake, apart from its effect on the quality of a given service or product.¹ So choice and quality have a somewhat fluid definitional relationship. In this paper, we treat choice as an element of quality.

2.3 *Using quality to define markets*

Can quality be used to define markets? For example, could the well-known SSNIP (small but significant, non-transitory increase in price) test be replaced with a SSNDQ (small but significant, non-transitory decrease in quality) test? Even if it could, would we ever want to do that in the first place? In other words, are there situations in which the SSNIP test would yield an incomplete or inaccurate result because it focuses on price, and in which the SSNDQ test would yield a more accurate result?

Hartman, Teece, Mitchell and Jorde have argued that a SSNDQ test is not only feasible, but necessary, for defining markets and assessing market power in sectors subject to rapid technological change.² Starting from Schumpeter’s premise that antitrust analysis focuses too often on existing market structures rather than how those structures are created and destroyed, Hartman, et al. lay out a case for complementing the static SSNIP test with a dynamic SSNDQ test. Firms do not compete only on price, they emphasize, but on innovation and quality. That is especially true in markets featuring swift technological progress. Customers in such markets may care far more about product features than about price. To assume that two products in those markets can be in competition with each other only if customers are so price-sensitive that a hypothetical five percent increase in the price of one induces a switch to the other leads to overly narrow market definitions, the authors argue. Therefore, some markets should not be defined with a method that relies on price alone.

Hartman, et al. do have a good point about competition not always taking place on the basis of price alone. Google did not topple Yahoo in the internet search market and Facebook did not crush MySpace in social networking, for example, because of price competition. That was quality competition.

The authors’ featured example is the medical diagnostic device industry, which includes technologies such as X-rays, nuclear imaging, ultrasound, and magnetic resonance imaging. They argue that the SSNIP test would have viewed each of those technologies as belonging to distinct product markets because the cross-price elasticities among them were very low and the price differentials were very significant. Hartman, et al. show, however, that competition in the medical diagnostic device industry is based more on performance (quality) competition than on price competition. They also show that what the SSNIP test

¹ Office of Fair Trading (UK), *Choice and Competition in Public Services: A Guide for Policy Makers*, OFT1214, p. 28 (2010).

² Raymond Hartman, David Teece, Will Mitchell & Thomas Jorde, “Assessing Market Power in Regimes of Rapid Technological Change,” 2 *Industrial and Corporate Change* 317 (1993).

would have suggested was market power was actually transient, at most, due to rivalry from technologies with very different price points but competitive features.

Seasoned competition enforcers might not be terribly worried by this argument. It is purely hypothetical in the sense that it assumes competition authorities and/or courts will blindly apply and follow the SSNIP test. In reality, enforcers would have likely spotted the competition between different types of devices when they interviewed company officials, customers and competitors and when they examined corporate documents. The SSNIP test is only a guideline, after all. If customers indicated that CT scans are so much clearer than X-rays and nuclear imaging that they compete with X-rays and nuclear imaging despite the fact that CT scans are far more expensive, for example, then a good competition investigation would have reflected that without needing a formalized SSNDQ test.

Nevertheless, Hartman, et al. roughly delineate what such a test would look like. The primary question, they say, is whether “a change in the performance attributes of one commodity would induce substitution to or from another. If the answer is affirmative, then the differentiated products, even if based on alternative technologies, ought to be included in the relevant product market.”³ Rather than the five percent price increase that is typically used in the SSNIP test, the authors propose a 25 percent decrease in a major performance attribute for their SSNDQ test. So the idea is that if an existing manufacturer were to reduce quality to that extent, holding all else equal, and no substitution to other products occurs, then the first type of product is a relevant market. If substitution takes place, then the other products are in the relevant market, too.

But this is the type of exercise on which differences in the nature of price and quality have a substantial impact – one that makes implementing the authors’ proposal quite challenging. As they acknowledge,

performance changes are more difficult to quantify than price changes because performance is multi-dimensional. As a result, quantification requires measuring both the change in an individual attribute and the relative importance of that attribute. Unlike price changes that involve altering the value of a common base unit [currency], performance changes often involve changing the units by which performance is measured.⁴

Hartman, et al.’s idea is therefore probably more useful as a loose conceptual guide than as a precise tool that courts and competition authorities should actually attempt to apply.

3. How does competition affect quality?

One of microeconomics’ core principles is that competition causes the market price to fall until it equals an efficient firm’s marginal cost. Is there a similar economic principle for competition’s effects on quality? Specifically, will more competition cause quality to improve? Will less competition cause quality to deteriorate? Intuitively, it might seem reasonable to expect that changes in competition have the opposite effect on quality that they have on price, but the truth is that it depends on the situation. Economic theory alone cannot predict competition’s effect on quality in most markets. Therefore, we must usually rely on empirical work to determine how competition affects quality.

³ Hartman, et al., *supra* n.3 at 334.

⁴ *Id.* at 339.

3.1 *Theoretical insights*

Microeconomic theory has a habit of assuming that goods are homogeneous or commoditized, produced by identical plants using identical technologies and operating at the minimum efficient scale. It also usually assumes that quality is constant and that buyers have a perfect understanding of the quality they are getting for their money. Ignoring differences and changes in quality, and comparisons of quality, simplifies equilibrium analysis. It allows economists to focus on just two main variables: price and output. Therefore, the emphasis in microeconomic equilibrium analysis tends to be on price competition, not non-price competition. Competition analysis, having been strongly influenced by economic analysis, likewise focuses on price competition.

But most markets in the world do not conform to those assumptions. Almost a century ago, J.M. Clark observed that “there is so wide a field in which a difference between the goods offered by the different makers is one of the essential features of the competitive struggle that this is really the typical case rather than the exception.”⁵ Consumers spend time comparing the quality of competing products, while sellers spend resources on improving their products and persuading consumers that those products have superior features.

Moreover, consumers do not necessarily want to have the absolutely lowest price possible if that means they will have only one choice available. For example, a firm’s economies of scale might be so large that if every consumer were content to buy exactly the same item, then the manufacturer could offer a much lower price than if it offered several choices. (Think of Henry Ford’s mass-produced Model T automobile.⁶) But consumers do not always, or even usually, prefer to have such a restricted choice set. While competition for staple products like table salt probably is based almost entirely on price competition, consumers obviously like being able to choose from among thousands of wines, scores of automobiles and options for each model, endless varieties of artwork, and so on – and they are often willing to pay more to get a product that closely matches their wants, or simply to get something different for a change. “It would be preposterous, for example, to imagine the toy industry deciding to produce a single ‘standardized’ toy, or even a given number of such toys.”⁷

3.1.1 *How competition affects the range of products and services offered.*

We can examine, in a somewhat more formal way, the likely effects of different degrees of competition on the choices available to consumers, along with the implications for producer and consumer surplus of the range of choices available. Figure 1 is a hypothetical representation of the surplus associated with the available sizes of notebook computer screens.⁸ We are assuming that only two screen sizes are available, a small one at nine inches and a large one at 17 inches. Of course, people will also care about factors other than the size of the screen. But we can make some useful theoretical points without fussing over all the other features that notebook computer users associate with quality.

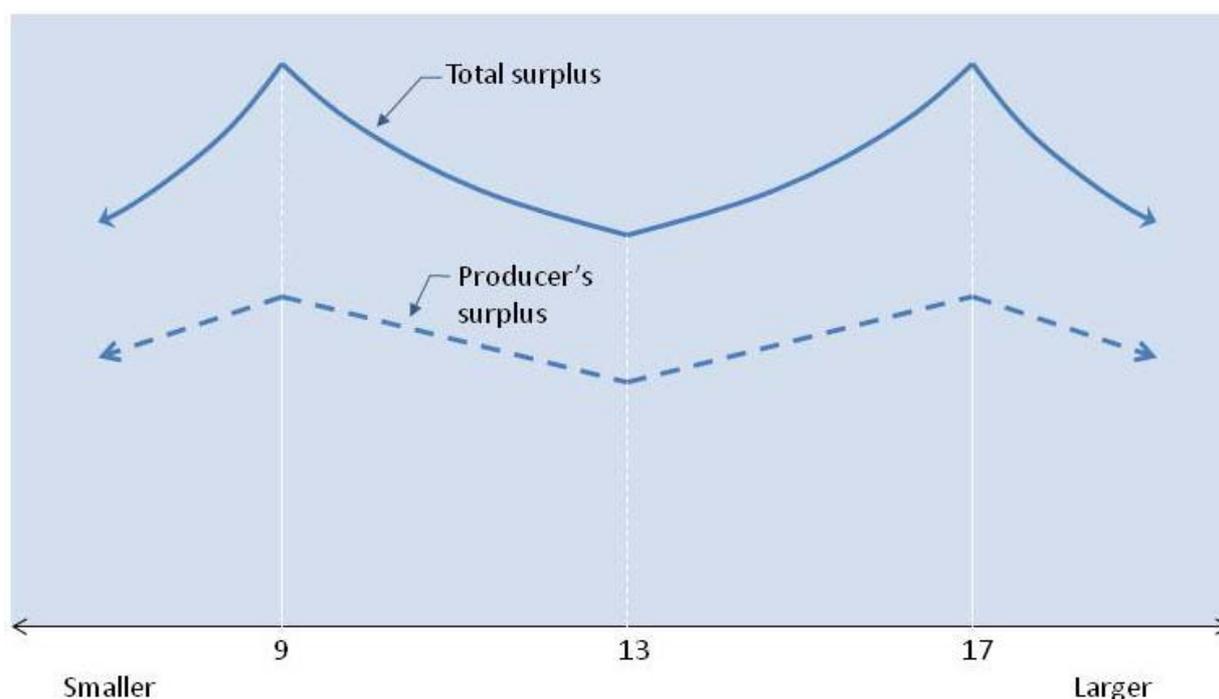
⁵ John Maurice Clark, “Economics and Modern Psychology,” 26 *Journal of Political Economy* 1 (1918).

⁶ Ford carried his no-choice philosophy to extremes. At one point he told his management team that “Any customer can have a car painted any color that he wants so long as it is black.” Henry Ford & Samuel Crowther, *My Life and Work* (Garden City Publishing Co.: 1922).

⁷ Lawrence Abbott, *Quality and Competition: An Essay in Economic Theory* 16 (Columbia University Press: 1955).

⁸ This figure is adapted, with slight alterations, from F.M. Scherer, *Industrial Market Structure and Economic Performance* 395 (Houghton Mifflin: 1980). The accompanying discussion also draws on Scherer’s analysis.

Figure 1. Surplus implications of having two choices for computer screen sizes.

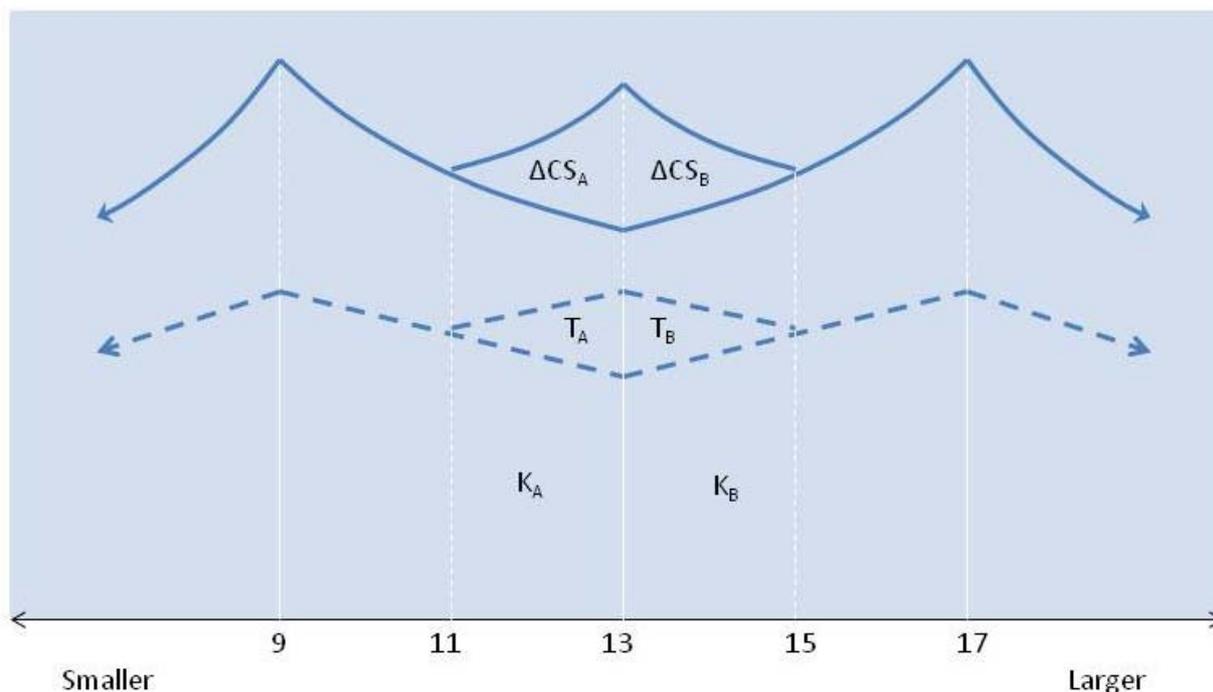


The horizontal axis shows the size of the screen, while the vertical axis reflects the surplus associated with each size. Customers that prefer larger screens are located to the right side, while customers that prefer smaller screens are located to the left. For simplification, we have assumed a uniform distribution and intensity of preferences. Total and producer's surpluses peak at the two sizes that are actually offered, reflecting the gains from sales to consumers who have preferences for exactly those dimensions. However, we assumed a uniform distribution of consumer preferences, so other consumers will either have to accept the 9" or 17" size or else buy an alternative product such as a tower style PC or a tablet computer. Those other consumers will derive less surplus from the notebook computer market than they would have if there had been screen sizes that perfectly matched their preferences. Accordingly, they will demand less than the customers with preferences at exactly 9" and 17". The larger the gap between a preferred size and a size that is actually offered, the less demand there is for that size from the customers with that preference.

Now suppose that a third screen size is offered halfway between the existing sizes. This 13" screen will attract customers who prefer moderate screen sizes, leading to an increase in consumption at that spot on the horizontal axis. Some of these customers will be drawn away from the 9" and 17" products. Others will be consumers who had previously declined to buy notebook PC at all because they did not want either of the available screen sizes. A new peak appears above the 13" point on our surplus chart, as shown in Figure 2, to reflect the additional consumer and producer surplus from the new sales.⁹ With the additional assumption that the prices and other features of notebook PCs are equal for all three screen sizes, the market is now equally divided between the three screen sizes.

⁹ Figure 2 and the accompanying discussion are adapted from *id.* at 396-98.

Figure 2. Surplus implications of having three choices for computer screen sizes.



The important question to ask here is “Under what circumstances will the 13” screen be offered?” The answer naturally depends to some extent on the costs of providing that screen relative to the revenues it will generate. But it also depends on market structure and the nature of competition in the market. If the market is monopolized and entry by other notebook PC manufacturers at the 13” point is not possible for some reason, then the incumbent will consider the payoff from introducing a 13” screen to be area T_A plus T_B . If T_A plus T_B is greater than the fixed cost of offering the new screen size, then the incumbent monopolist will supply it. Otherwise, the 13” screen will not be offered.

But if entry is possible, a potential entrant at the 13” point will consider its payoff to be not only T_A plus T_B , but K_A plus K_B , as well. (This assumes, in Nash fashion, that the prices of notebook PCs with all three screen sizes are equal and that the 9” and 17” model prices do not change in response to entry.) Areas K_A and K_B were previously producer surplus for the monopolist, but upon entry by the outside firm at the 13” point, they are transferred to the entrant. Therefore, the attractiveness of offering a 13” screen is much higher to an entrant than it is to the incumbent. Whereas T_A plus T_B alone have to exceed the fixed cost of supplying the 13” screen for the incumbent to offer it, an entrant would offer it as long as $T_A + T_B + K_A + K_B$ exceed the fixed cost. For this reason, Scherer and a host of other economists have concluded that a market with monopolistic competition and open entry is likely to yield more variety for consumers than a monopolized market with no (or little) possibility of entry.¹⁰

As always, though, much depends on the shapes of the curves and the assumptions built in to these charts. For example, we have assumed that all notebook computer manufacturers face the same fixed and variable costs for each screen size. If we relax that assumption, it becomes possible that, upon the entry of a rival seller at the 13” point and the consequent loss of K_A and K_B by the incumbent, the fixed costs of

¹⁰ *Id.* at 397 (citing, e.g., Michael Spence, “Product Selection, Fixed Costs, and Monopolistic Competition,” 43 *Review of Economic Studies* 217 (1976); Michael Lovell, “Product Differentiation and Market Structure,” 8 *Western Economic Journal* 137 (1970).

supplying the 9” or 17” model will exceed the remaining producer surplus associated with offering that screen size. If that turns out to be the case, then the incumbent may withdraw the now-money-losing model(s) from the market, leaving consumers with no overall gain from the introduction of the 13” model.

Another possibility if entry is possible is that the incumbent, eager to keep rivals away, may make entry less attractive by offering a 13” screen model itself. That way it can hold on to $KA + KB$, even though it will have to spend more to do so. This means that an entry-detering monopolist may provide as much choice to consumers as monopolistic competitors would, all else being equal.

If we accept their assumptions, Figures 1 and 2 show that greater range alone can be welfare-enhancing for consumers. A larger available range of choices can make consumers better off, in other words, even if prices do not decline. (In fact, depending on their preferences, they might be made better off even if prices increase as a result of having more choices.) Furthermore, an open, competitive market is likely to bring about more options than a closed, monopolized market.¹¹

On the other hand, Figure 2 can also show how there may be such a thing as too much variety. From an overall societal perspective, a new product should be introduced only if its net contribution to surplus is greater than the fixed costs of introducing it. The net contribution to surplus is equal to areas ΔCS_A and ΔCS_B . Figure 2 happens to be drawn such that $\Delta CS_A + \Delta CS_B$ is much smaller than $T_A + T_B + K_A + K_B$. That means it could well be the case that entering at the 13” point will be appealing to an outside manufacturer even though the fixed costs of doing so are greater than the net contribution to surplus of providing the new model. In other words, the market could encourage too much variety in comparison to the level that would maximize social welfare.¹²

3.1.2 *Quality and variety: Too much or too little?*

Intuitively, it must be true that there can be such a thing as too much variety. If there are too many different types of products available in a market, then it becomes harder for all producers to capitalize on scale economies and their resulting inefficiency leads to products that are all too expensive. Consumers in such situations would be happy to give up some choices in exchange for lower prices.¹³ The market therefore has to make an implicit trade-off among choice, price, and cost.

It is also possible for there to be too much quality and yet not enough variety. Although the theoretical literature about competition’s effects on quality is full of uncertainties, one firm conclusion it reaches is that when prices in competitive markets are regulated and set at a level above marginal cost, expenditures on quality and marketing will increase until the economic profits are competed away (*i.e.* until marginal cost rises to the level of the regulated price). Lawrence White demonstrated that point in 1972.¹⁴ With the

¹¹ At least, that is the case when prices are not regulated. See n.15 *infra* and accompanying text regarding the effects on variety of competitive versus monopolistic markets under price regulation.

¹² Taking this to the extreme, it is perhaps easier to see how it would be impractical and inefficient for manufacturers to offer, say, 25 different screen sizes in one millimetre increments. Yes, almost even the most exacting buyers would have their preferences met, but economies of scale would have to be sacrificed.

¹³ Psychologists have also done work on a very different point, which is that having many choices can be detrimental to consumers because it can cause anxiety, dissatisfaction and regret. *E.g.*, Barry Schwartz, *The Paradox of Choice* (Harper: 2005).

¹⁴ Lawrence White, “Quality Variation When Prices are Regulated,” 3 *Bell Journal of Economics and Management Science* 425 (1972). See also Martin Gaynor, “What Do We Know about Competition and Quality in Health Care Markets?,” NBER Working Paper No. 12301, p. 10 (2006) (noting that “the theoretical literature on competition and quality when prices are regulated is clear” and that “[w]hen price is above

simplifying assumptions that every consumer views a certain element of quality as not only desirable, but equally important relative to other features, White's model clearly predicts the profit-dissipating result.

White's model also made four related predictions:

1. Unregulated, competitive industries will produce a range of quality offerings, whereas price-regulated competitive industries will produce more uniform quality offerings;
2. The quality of the competitive firms' offerings varies directly with the regulated price. The regulator therefore sets both the price and the level of quality.
3. Virtually all consumers are worse off when price controls are placed on a competitive industry because the range of price/quality choices available to consumers becomes very narrow; and
4. Price-regulated firms in competitive industries offer more quality per unit of output than an equally regulated monopolist would produce.

The first prediction expresses the idea that when competing firms are not subject to price controls, they will offer a variety of price/quality pairings to suit the tastes and preferences of different customers. Some customers, for example, may be more price-sensitive than others and therefore prefer a lower price/quality point. But when prices are controlled, the only way firms can compete is by raising quality, so they will raise it until their profit margins disappear (just as they would have lowered their prices until the margins disappeared if price competition were allowed and quality were held constant). Quality will rise until the most efficient firms are earning zero rents; relatively inefficient firms that cannot afford to match that level of quality will be eliminated.

Prediction 2 follows from the main (profit-dissipation) principle and Prediction 1. The higher the regulated price, the higher the quality the market will produce. This is the effect that creates the possibility that price controls on competitive markets will lead to "too much" or "wasteful" quality. If regulators choose a price/quality pairing that is higher than what most consumers want, the industry will not operate efficiently.

Prediction 3 reflects the fact that, once the new price/quality equilibrium is reached under price regulation, the only consumers who will not be made worse off are those who happen to prefer that exact pairing. Every other consumer loses welfare because they all preferred a price/quality pairings that the market no longer offers.

White was unable to make a solid prediction about what would happen to consumer welfare if a monopolistic industry were suddenly subjected to price control. That is because consumers lose choice (presumably the monopolist was able to price discriminate) but gain a lower (in theory, at least) price.

Prediction 4 reflects the fact that a monopolist would not be motivated to offer higher quality for the purpose of stealing business away from rivals because, after all, it has no rivals. Its only consideration with respect to quality will be the entire market's sensitivity to quality at the regulated price. It will set quality at a profit maximizing point such that its marginal costs equal its marginal revenues, just as it would have set its price at the point where $MR = MC$ if it were operating in a market without price control and constant quality. The only difference is that in the former case it chooses the quality level, whereas in the latter case

marginal cost, competition leads to more quality"). Furthermore, as we shall see in Part 3.2, empirical results support White's theoretical work. For a more mathematical review of the economic theory of product differentiation, see Paul Belleflamme & Martin Peitz, *Industrial Organization* 113-125 (Cambridge University Press: 2010).

it sets the price level. Furthermore, in both cases the monopolist will produce and sell less output than the competitive firms would collectively produce and sell, resulting in deadweight loss.

Note that White's main finding is also applicable to markets that are subject to resale price maintenance or price-fixing cartels. It should not be surprising that quality will rise in rivalrous markets with minimum RPM. The whole point of minimum RPM is to induce retailers to provide better service.¹⁵ It might come as more of a surprise that quality could rise under a price-fixing cartel, but it could happen, especially if the relevant product is heterogeneous and the cartel members are not very disciplined. Obligated by their cartel agreement not to engage in price competition, the cartel members may turn to quality competition as a way to increase their sales at the expense of their co-conspirators. In theory, at least, a firm that is inclined to cheat could do so by investing in greater quality up to the point where it has competed away its profit margins. Therefore, just like a regulator that imposes a price cap, a manufacturer that imposes RPM or, potentially, even a cartel that fixes a price is, in effect, setting not only the price but the level of quality.

Artificially setting a particular quality level is not desirable from society's viewpoint because, as Scherer puts it, "society is almost always better off when consumers enjoy a wide range of choices between high-quality, high-priced and low-quality, low-priced opportunities than when they face a severely restricted choice set."¹⁶ Hammer and Sage agree, noting that "[w]ell functioning markets respond to different consumer preferences by providing a range of tailored products or services. Actions by entrenched market participants that artificially restrict the range of market alternatives available are inherently suspect from an antitrust perspective."¹⁷

Seen in that light, RPM is less worrisome than either price regulation or cartels because RPM leaves open the possibility of interbrand competition, so the market may still offer a range of qualities (and prices) across brands. It is also quite possible that the same markets in which RPM is imposed would yield a choice set that is just as limited without RPM as with it, but instead of only high price/high quality options, there would be only low price/low quality options. Unless manufacturers are using RPM as a cartel enforcement mechanism, they would have few, if any, reasons to impose RPM unless customers tend to prefer the high price/high quality pairing.

3.1.3 *Unpredictable outcomes when both prices and quality are variable*

Outside of the context of competition under price regulation, theoretical predictions about competition's effects on quality are murkier.¹⁸ As the microeconomics textbook by Belleflamme and Peitz states, "models of imperfect competition in which firms choose product characteristics [and prices are not regulated] do not necessarily generate predictions concerning prices and product choices."¹⁹

Horizontal mergers, for example, have a variety of clashing potential effects on quality. To avoid cannibalization, the acquiring firm might change similar products in its newly expanded product line to

¹⁵ An exception might occur if the real aim of imposing RPM is to facilitate a cartel, but in that case the market either cannot be said to be rivalrous or the colluding firms will switch to non-price competition and compete away their margins, just as White predicts.

¹⁶ Scherer, *supra* n.9 at 394.

¹⁷ Peter Hammer & William Sage, "Antitrust, Health Care Quality, and the Courts," 102 *Columbia Law Review* 545, 624 (2002).

¹⁸ Readers interested in the theoretical models reaching these ambiguous results will find several of them in Gaynor, *supra* n.15 at 4-10 and in Belleflamme & Peitz, *supra* n.15 at 113-125.

¹⁹ *Id.* at 118.

make them less similar. Or the merger might create efficiencies that make it more cost-effective to introduce new products. Those outcomes would enhance variety. On the other hand, after the merger the acquiring firm might opt to withdraw a product from the market altogether if it is similar to another product in its portfolio. Or it might decide to bunch its products more tightly by making their features more similar. That could deter entry by closing gaps in the product variety space that potential entrants might otherwise exploit. Either of those actions would reduce variety.

It is, in fact, possible that competition authorities will approve a horizontal merger because it will raise consumer welfare by increasing price competition, even though the merger's effect on choice will reduce consumer welfare – and perhaps by enough to overwhelm the price effect. Consider a hypothetical example,²⁰ in which a town has two supermarkets: one gourmet, high-end store and one discounter. Then suppose a supermarket chain, also a discounter, acquires the high-end store and converts it to a discount format because the chain finds it cost effective for all its stores to operate as discounters. If we suppose that zoning laws or insufficient demand make new entry infeasible, the town is now stuck with two supermarkets that are both discounters. The townspeople will benefit from greater price competition between those stores, but their choices have been reduced. Some consumers will have shopped only at the high-end store previously, and many others likely shopped at both stores. All of those consumers lose some welfare as a result of the acquisition. But because of the increase in price competition, it is unlikely that a competition authority would challenge the transaction.

Generally, when both prices and quality are variables, the theoretical literature can offer only limited guidance because outcomes will largely depend on the relative strengths of the price elasticity of demand and the quality elasticity of demand. Simply put, sellers will do what buyers most want them to do. In some markets, buyers will prioritize low prices. In others, they will care more about high quality. Buyer preferences, in turn, will depend to some extent on how transparent price and quality are. Buyers tend to care more about features they can perceive, and quality is sometimes less observable than price.

One can easily see how that latter situation could lead to a socially non-optimal underemphasis on quality in some markets.²¹ Firms may simply be reacting to relatively strong price elasticities of demand. By the same token, where market demand is much more sensitive to quality than to price (for example, in health care markets where patients choose their provider but pay nothing themselves), the market may develop a socially non-optimal overemphasis on quality.

Consumer welfare can be improved by both competition on quality and competition on price, but in some situations price competition is inferior. That is more likely to happen when quality is difficult for customers to observe. In such situations, price competition can cause quality to deteriorate because companies will be more confident that they can get away with funding price cuts by reducing quality to reduce costs. Granted, it is also true that quality competition might cause prices to rise. But customers usually do not have a problem observing how much they are paying, so they will typically be able to make more accurate judgments about the price/quality pairings that are being offered.

²⁰ Maurice Stucke, “Is Competition Always Good?,” __ *Journal of Antitrust Enforcement* 4 n.17 (forthcoming 2013) (citing example given by Davies).

²¹ This is the well-known “market for lemons” problem in which quality deteriorates because consumers make their decisions on the only product trait they can perceive well: price.

3.2 *Actual effects*

3.2.1 *Evidence from the media sector.*

A number of empirical studies focus on the effects that horizontal acquisitions in radio broadcasting and newspaper markets have on the variety of formats available to listeners and readers. The studies consistently find that product variety actually increases as a result of horizontal mergers.

For example, Berry and Waldfogel studied the effects on variety of a wave of horizontal acquisitions in the US radio broadcasting market that took place between 1993 and 1997.²² During that time, the average Herfindahl-Hirschman index across 243 major media markets increased by nearly 65 percent, from 1272 to 2096. While the increase in concentration was correlated with a decline in the entry of new radio stations, it was also correlated with greater variety per station when the number of stations was held constant.²³ In other words, the conditions in the study were that the number of stations remained the same, but they came under the ownership of a smaller number of firms, which then offered a larger number of programming formats per station. Indeed, even without holding the number of stations constant, the authors found evidence that industry consolidation increased the overall variety available to listeners.²⁴

We mentioned in the previous section that mergers can have conflicting effects on quality, so it is hard to predict what their overall impact will be based on theory alone. The Berry and Waldfogel study supports the idea that the strongest effect probably stems from the acquiring firms' incentive to spread products apart so as to avoid cannibalization. The main point they want competition authorities to take away from their study is that greater concentration reduces potentially excessive resource use for station entry without hurting listeners.

Lisa George conducted a similar study of the US daily newspaper market and obtained similar results. She examined the effects of a spike in newspaper mergers in the 1990s by tracking the topics that 25,000 reporters and editors were assigned to cover in 1993, 1994 and 2004. Her study shows that having fewer newspaper owners led not only to more differentiation among newspapers, but to coverage of a larger number of topics per market. George concludes that US antitrust and communications policies toward media mergers incorrectly presume that limiting concentration ensures greater variety.

A problem with both the Berry/Waldfogel study and the George study, however, is that these authors all assume that multiple content formats provided by one firm are just as valuable as multiple formats provided by many firms. That assumption misses the point that it might be important to a society to keep its media markets unconcentrated because that helps to ensure that a variety of points of view and biases are expressed in the media. Another way of saying this is that there is more to variety and choice than simply whether radio listeners can tune in to classical music, talk radio and sports formats, or whether newspaper readers can find articles on 20 different topics instead of 15. The political, demographic, and cultural diversity of the people and firms controlling the media might be an important aspect of choice, too.

²² Steven Berry & Joel Waldfogel, "Do Mergers Increase Product Variety? Evidence from Radio Broadcasting," 116 *Quarterly Journal of Economics* 1009 (2001).

²³ "Greater variety" here means more programming formats, e.g. jazz, news, sports radio, etc.

²⁴ There is also evidence that listeners value variety. Research shows that more people listen to radio when radio programming variety increases. Berry & Waldfogel, *supra* n.23 at 1019 (citing Steven Berry & Joel Waldfogel, "Public Radio in the United States: Does It Correct Market Failure or Cannibalize Commercial Stations?" 71 *Journal of Public Economics* 189 (1999); Robert Rogers & John Woodbury, "Market Structure, Program Diversity, and Radio Audience Size," 14 *Contemporary Economic Policy* 81 (1996)).

George acknowledges that point²⁵ but Berry and Waldfogel do not. We are not arguing that it should be up to competition authorities to take societal concerns about cultural diversity into account in their merger analyses. Problems related to the concentration of ideas or cultural viewpoints might be more appropriately placed in the domain of communications policy than that of competition policy. The point is simply that there is more to choice and variety in media markets than just the formats on offer.

3.2.2 *Evidence from the airlines industry.*

The experience of regulation in the US airlines industry is empirical proof of the validity of White's conclusion that imposing price control on a competitive market will cause quality to rise to the point where economic profit disappears and possibly to the point where there is "too much" quality. Airfares in the US were regulated during the 1960s and early 1970s. Prices were set at a level substantially higher than what a low-cost airline would have offered, so airlines had resources with which to compete on quality features such as conveniently timed (but not necessarily full) flights, meals, in-flight films, etc. As a result, the market neglected customers who would have preferred less convenience and lower prices.²⁶

Douglas and Miller studied US airline data from the period when prices were regulated.²⁷ Reported profit rates confirmed that the airlines were bidding their potential profits away. Other data show that most of those potential profits were spent on scheduling competition, *i.e.* on providing more flights to suit customers' schedules. The airlines were offering so many flights that they typically managed only to break even on any given route. The results also showed that average load factors (and therefore profit) tended to increase as the number of competitors on a route decreased. Finally, whenever estimated break-even levels changed, the actual load factors tended to follow and equal them. The authors concluded that

*in a market in which scheduling competition bids away all rents, the regulator in choosing price implicitly determines the equilibrium number of travellers and the expected per passenger schedule [convenience]. The regulator's role, therefore, is one of serving as a proxy for the population of consumers in choosing the appropriate combination of service quality and price from the opportunity locus of these variables.*²⁸

A different study of quality and competition in the US airline industry focuses on the period after deregulation. Analyzing data from the Bureau of Transportation for the year 2000, Michael Mazzeo found that the frequency and severity of flight delays were significantly less on routes served by more than one airline providing direct (non-stop) service.²⁹ Mazzeo, who published his study in 2003, lamented that US antitrust authorities did not pay more attention to quality effects in their analyses of two cases in the airlines industry from that period. One was a predatory pricing case against American Airlines, while the

²⁵ Lisa George, "What's Fit to Print: The Effect of Ownership Concentration on Product Variety in Daily Newspaper Markets," 19 *Information Economics and Policy* 285 at 290 (2007).

²⁶ Lawrence White, "Quality, Competition, and Regulation: Evidence from the Airline Industry," in Richard Caves & Marc Roberts, eds., *Regulating the Product: Quality and Variety* 17 (Harvard University Press: 1975).

²⁷ George Douglas & James Miller III, "Quality Competition, Industry Equilibrium, and Efficiency in the Price-Constrained Airline Market," 64 *American Economic Review* 657 (1974).

²⁸ *Id.* at 663.

²⁹ Michael Mazzeo, "Competition and Service Quality in the U.S. Airline Industry," 22 *Review of Industrial Organisation* 275 (2003). This study is typical, by the way, among empirical studies on competition and quality in the sense that it uses just one (fairly obvious) dimension of quality rather than trying to tackle the grand question of what all the components of quality are in a given market. The timeliness of flights was the most common subject of customer complaints about airlines. *Id.* at 276.

other was a proposed merger between United Airlines and US Air. He did not necessarily expect quality effects to displace price effects as the chief concern in those matters. Given the relationship between concentration and flight delays, however, as well as the fact that cancellations and delays were a growing problem at that time, he thought it would have been a good opportunity to raise harm to quality as a competition issue.

3.2.3 *Evidence on advertising bans by professional associations.*

Professional associations sometimes limit their members' ability to advertise. Common rationales for such restrictions are that they eliminate misleading advertising and make it harder for price-cutting, low quality providers to win customers, thereby preventing a "race to the bottom". In 1980, the US FTC issued a staff report on a study that tested those claims in the context of the optometry industry.³⁰ The report showed that price advertising for eyeglasses and eye exams lowers prices without significantly reducing average quality.

This research capitalized on the fact that advertising optometry services and eyeglasses is allowed in some areas of the US and curtailed in others. The results indicated that average prices were substantially lower in cities with the lightest restrictions on advertising while the average quality of service was approximately the same as in cities with heavier restrictions, thereby casting considerable doubt on one of the favourite excuses professional associations use to justify anticompetitive rules against advertising. Competition in professional services markets, or at least in markets for optometry services, does not appear to harm quality.

Survey research experts ("testers") working for the FTC took 434 eye examinations and bought 280 pairs of glasses in cities across the US. Senior optometrists and optometry schools helped the Commission to define medically appropriate quality measures, design the survey and evaluate the results. Testers were asked to buy a particular type of frame, if possible, to minimize cost variation. The results showed that the average prices of eye examinations and eyeglasses in the most restrictive cities were 33.6 percent higher than in the least restrictive cities.

To measure quality, testers answered a set of standardized questions about the details of each examination. The glasses they bought were then evaluated for quality. Testers were also examined by two optometry schools to determine their appropriate prescription, which was then compared with the prescriptions given in the field. The study featured several quality measures, including: (1) thoroughness of the eye exam (2) accuracy of the prescription, and (3) accuracy and workmanship of the resulting eyeglasses. The results undermined arguments by professionals that simple price comparisons fail to take account of quality differences and that it would be wrong to assume that quality is the same in both restrictive and non-restrictive cities. The results also undermined claims that if professionals advertise they will also reduce their quality of service, and that even non-advertising professionals will do the same in response.

The thoroughness of eye exams by optometrists in restrictive and non-restrictive cities was found, on average, to be about equal. Furthermore, eye exams by non-advertising optometrists in non-restrictive cities were, on average, *more* thorough than exams by non-advertising optometrists in restrictive cities. It was simply not true that optometrists who gave thorough examinations were driven out of market in which advertising was unrestricted. About 55 percent of optometrists in the non-restrictive cities did not advertise. Results for both the accuracy of prescriptions and the accuracy and workmanship of the glasses showed that consumers were better off in the non-restrictive cities.

³⁰ Ronald Bond, John Kwoka, John Phelan & Ira Whitten, "Staff Report on Effects of Restrictions on Advertising and Commercial Practice in the Professions: The Case of Optometry," US Federal Trade Commission, Bureau of Economics (1980).

3.2.4 Evidence from the vehicle emissions testing market.

Stucke finds that in some circumstances competition causes a race to the bottom, in which society suffers. In particular, he notes that customers in intermediary information markets may succeed in pressuring sellers to alter their reports in the customers' favour. The more competitive such a market is, the more willing the sellers are to be dishonest, he concludes.³¹

One such market is vehicle emissions testing. Stucke refers to an empirical study of emissions testing in the state of New York. It examined whether greater competition led testing services to attract customers by certifying that their vehicles complied with state emissions standards even when they did not.³² In New York's testing system, vehicle owners must periodically choose a privately-owned emissions testing centre and pay for its services. The price of testing services was fixed by the state government.

Just as economic theory predicts for competitive markets under price control³³, the rival test centres – unable to compete on price – focused their competitive efforts on non-price factors. One tactic they employed to please customers was to lie, allowing cars that should have failed the test to pass it. The study found that as the number of competing test centres rose in local markets, so did the vehicle pass rates. It concludes that competition among test centres “can induce firms to increase quality for their customers in ways that are both illegal and socially costly.”³⁴

That terminology is exactly right. From the test centres' perspective, the customers were the vehicle owners, not the state of New York. It was the vehicle owners, after all, who selected and paid the centres. Competition did indeed cause quality to increase, in the collective view of the customers. The policy problem in this example is not that for some strange reason competition worked counter to the way it normally works and wound up reducing quality. Competition did exactly what it should do when prices are fixed, which is to raise quality *as it is perceived by the customers who select the provider*. The real policy problem in this case was that, to accomplish what it was intended to do, the emissions testing system should have been designed so that the government, not the vehicle owners, selected the testing centres. If that had been the case, then the testing centres would have had every incentive to provide the most accurate information possible.

Faulting competition for reducing accuracy in New York's emissions testing programme is a bit like blaming a piano for playing a C when you press the C key. Yes, a composer may mistakenly put a C note in a chord and that may ruin the song. But that does not mean there is something wrong with the piano.

Granted, competition does motivate firms to try harder to win business and the testers in New York went so far as to lie. But they did so because lying was in the interest of their customers. It is much less likely that they would have lied if their customer had been New York, the entity with the biggest stake in receiving accurate information. New York's emissions testing system suffered from a design flaw, not excessive competition.

The same conclusion applies to Stucke's other example of an intermediary information market in which competition is said to have been the cause of inaccuracy: the bond ratings industry.³⁵ Like New

³¹ Stucke, *supra* n.21 at 29-35.

³² *Id.* at 33 (citing Victor Bennett, Lamar Pierce, Jason Snyder & Michael Toffel, "Customer-Driven Misconduct: How Competition Corrupts Business Practices" *Management Science* (forthcoming 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2005779).

³³ See discussion of White (1972), *supra* n.15 and accompanying text.

³⁴ Bennett, et al., *supra* n.33 at 2.

³⁵ Stucke, *supra* n.21 at 31-33.

York's emissions testing programme, the ratings industry has a flawed payments model. Instead of ratings agencies being selected and paid by the people who actually rely on the accuracy of their reports, it is the credit issuers who select and pay them.³⁶ One of the lessons of the 2008 financial crisis is that credit issuers do not necessarily have a strong interest in the accuracy of credit ratings. As the ratings agencies competed with one another, they tried ever harder to give their customers what they wanted. In some cases what the customers wanted was inflated ratings. Had the customers wanted accurate reports, competition would have ensured that they received accurate reports.

3.2.5 *Evidence from the supermarket sector.*

David Matsa recently published an empirical study of competition's effect on inventory shortfalls in US supermarkets.³⁷ Frequent shortfalls and limited product variety are the leading cause of consumer dissatisfaction with supermarkets, so shortfalls are a useful indicator of quality. The expansion of Wal-mart into the supermarket sector, which Matsa describes as "the most significant shock to industry market structure in half a century," provided the variation in competition that made the study possible.³⁸ Wal-mart became the largest grocery retailer in the US within 14 years of opening its first grocery store in 1988. It also became the first genuinely national chain, so its entry was indeed a shock to the industry. Matsa found that Wal-Mart's entry was not only correlated with but *caused* a 33 percent decrease in shortfalls at large supermarket chains.

Matsa studied data on how incumbents adjusted their inventories in response to entry by Wal-Mart. He found that different stores reacted in different ways. Wal-mart is well known for competing on the basis of low prices, which are enabled, in part, by relatively low levels of service. Matsa found that chain stores tended to respond to Wal-mart's entry by improving their quality. They seem to have figured out that they had no hope of competing on price with Wal-mart's economies of scale and buyer power. Instead, they improved the availability of products in their stores. The number of inventory shortfalls fell by one third. Independent stores, on the other hand, tried to compete on price. Many failed, so as a group they did not survive Wal-mart's entry as often as the chains did.

Matsa also found that low shortfall rates were correlated with good performance on other measures of quality, such as cleanliness, staff courteousness, and average checkout speed. Supermarket chains that succeeded in reducing shortfalls seemed to have been improving in those categories, too, as well as in the freshness of their meat, fruit, and vegetables and in the variety of their product lines. This suggests that Wal-mart's entry was a greater boon for consumers than was previously realized. Consumers were getting more than a new, deep discount option in the form of Wal-mart. They were also getting significantly improved quality from the incumbent chains.

3.2.6 *Evidence from the hospital services sector.*

The hospital services sector, like the health care industry generally, has certain characteristics that interfere with competition's ability to motivate improvements in quality. Chief among them is that patients do not always have good access to information on the comparative medical quality of the doctors, nurses, drugs, and equipment in hospitals, either before or after treatment. Exacerbating this problem, hospitals sometimes compete by focusing more on the aspects of care that are most transparent to patients, such as the aesthetic appeal of their rooms, than on actual medical outcomes. Consequently, patients' choices do

³⁶ See OECD, Competition and Credit Rating Agencies (2010), available at www.oecd.org/daf/competition/sectors/46825342.pdf.

³⁷ David Matsa, "Competition and Product Quality in the Supermarket Industry," 126 *Quarterly Journal of Economics* 1539 (2010).

³⁸ *Id.* at 1539.

not necessarily reflect the medical quality of the health care they receive. That means that quality competition does not usually function as well in health care markets as it does in markets where the elements of quality are more transparent.

Consistent with theoretical conclusions on competition's effect on quality, empirical evidence from hospital services markets usually shows that where prices are regulated, competition improves quality (as measured by mortality rates). Where prices are unregulated, the evidence is mixed.

It is no accident, incidentally, that most of the empirical studies on hospital services focus on just one quality factor (mortality rates). There are many other factors that the studies could have examined, at least in principle. These include the overall level of patient/family satisfaction, the adequacy of the information given to patients and their families, and the extent to which the hospital stay improved the patient's condition (as opposed to the binary variable of whether the patient died or not). Those factors are all subject to a degree of subjectivity, though, whereas mortality rates are not. So by focusing on mortality, the studies gain objectivity but sacrifice completeness.³⁹

3.2.6.1 *Studies on the effect of competition on quality in price-regulated hospital markets*⁴⁰

Kessler and McClellan conducted one of the first empirical studies on the effects of competition on hospital service quality.⁴¹ They examined the impact of market concentration (using Herfindahl indices) on the quality of US hospital services for Medicare beneficiaries as measured by the risk-adjusted one-year mortality rate from heart attacks. The results are striking because they show that quality is significantly lower in markets that are more concentrated. Patients in the most concentrated markets had mortality rates that were 4.4 percent higher than patients in the least concentrated markets. That translated into a difference of more than 2000 deaths between the least concentrated and most concentrated parts of the dataset.

Cooper et al. examined whether hospitals facing more competition lowered heart attack death rates more quickly than hospitals in monopoly markets after competition was introduced in the UK's health system in 2006.⁴² The study relies on four different methods for defining hospital service markets and two measures of competition. It consistently found that hospitals facing greater competition decreased mortality rates in heart attack cases about a third of a percentage point more quickly than monopoly providers. With a 12 percent mortality rate, that difference was substantial. The authors surmised that the role played by general practitioners in the UK system had something to do with that outcome. The expert knowledge and experience gained by general practitioners seems to have made quality a more important factor for hospitals as they competed for patients.

In a study pointedly entitled "Death by Market Power", Gaynor et al. found strong evidence that under a regulated price regime, hospitals engage in quality competition.⁴³ The authors detected significant

³⁹ For more on the measurement of quality in the health care sector, see Arik Mordoh, "Critical Review of the Quality and Competition Measures and Identification Strategies Used in Health Care Studies," Occasional Paper 11/05, Office of Health Economics (UK) (2011).

⁴⁰ This sub-part is partially based on OECD (2012), *Competition in Hospital Services*, Secretariat Background Note at 47-55, [DAF/COMP\(2012\)9](http://www.oecd.org/daf/competition/50527122.pdf), available at www.oecd.org/daf/competition/50527122.pdf.

⁴¹ Daniel Kessler & Mark McClellan, "Is Hospital Competition Socially Wasteful?" 115 *Quarterly Journal of Economics* 577 (2000).

⁴² Zack Cooper, Stephen Gibbons, Simon Jones & Alistair McGuire, "Does Hospital Competition Save Lives? Evidence from the English NHS Patient Choice Reforms," 121 *Economic Journal* 228 (2011).

⁴³ Martin Gaynor, Rodrigo Moreno-Serra & Carol Propper, "Death by Market Power: Reform, Competition and Patient Outcomes in the National Health Service," CMPO Working Paper No. 10/242 (2011).

improvements in mortality and reductions in the average length of stay without changes in total expenditure or increases in expenditure per patient within two years after competition was introduced in the UK health system. They also concluded that if the UK took steps to de-concentrate hospital markets, the gains could amount to more than 276 million GBP.

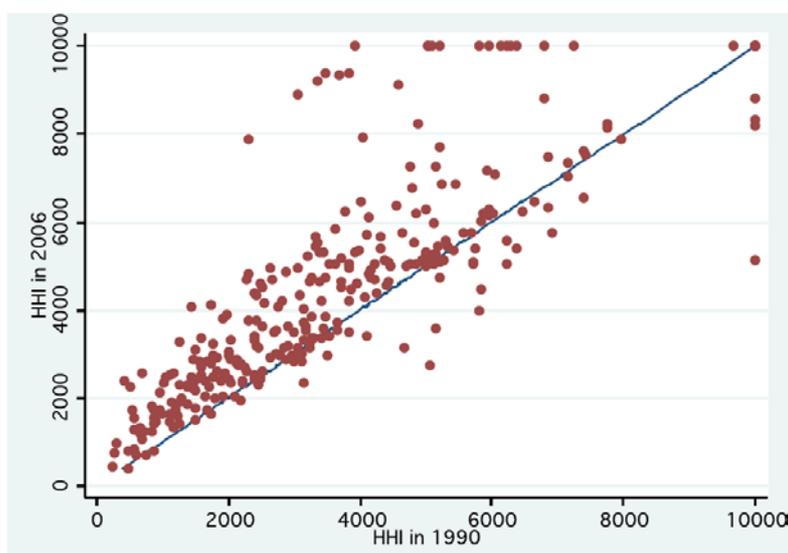
Bijlsma et al. focus on the relationship between competition and quality in the Dutch hospital sector after pro-competitive reforms were implemented.⁴⁴ They found that hospitals were paying more attention to quality and making more disclosures of the quality indicators they use. The data covered both process and outcome indicators of quality, and the analysis showed that the change in process performance (but not outcome performance) could be explained by competition. In particular, the results suggested that competition between hospitals put pressure on profits margins, forcing hospitals to improve production efficiency. The authors concluded that “competition may provide hospitals incentives to improve on quality indicators that can easily be observed by patients and perceived as a signal of quality (such as the time the patient has to wait for a diagnosis and check-up frequency for chronic patients).”^{45, 46}

3.2.6.2 Studies on the effect of competition on quality in hospital markets without price regulation

Like their theoretical counterparts, empirical studies analysing the effect of competition on quality in hospital services markets when both quality and prices are variable reach ambiguous or mixed results. This section is mainly about the situation in the US because that is the geographic market on which most of the studies concentrate.

Figure 3 shows how that US hospital markets were substantially more concentrated in 2006 than in 1990:

Figure 3. HHI Values in 1990 and 2006 for US Hospital Markets.⁴⁷



⁴⁴ Michiel Bijlsma, Pierre Koning, Victoria Shestalova & Ali Aouragh, “The Effect of Competition on Process and Outcome Quality of Hospital Care – An Empirical Analysis for the Netherlands,” CPB discussion paper no. 157 (2010), available at www.cpb.nl/sites/default/files/publicaties/download/disc157.pdf.

⁴⁵ *Id.* at 35.

⁴⁶ For summaries of additional studies that are nearly all consistent with those mentioned here, see Gaynor, *supra* n.15 at 16-21.

⁴⁷ This figure is from Martin Gaynor & Robert Town, “Competition in Health Care Markets,” NBER Working Paper No. 17208 (2011).

Vogt and Town reviewed ten studies about the effect of consolidation on the quality of US hospital services and concluded that the overall results show quality declines when hospital market concentration increases.⁴⁸ For example, Sohn and Rathouz examined the risk-adjusted mortality rates for patients who received angioplasties in 116 California hospitals in 1995. They found that mortality was lower for patients who went to hospitals that faced more competition.⁴⁹

Many studies are laden with caveats, though, including that it is very difficult to draw firm conclusions about the effects of market concentration on quality when both price and quality are variables. The caveats are underscored by the contrary results reached by other studies. Maeda and LoSasso, for instance, found only slight incremental benefits from lower HHI values for inpatient heart-failure care. They concluded that “market competition might be a blunt instrument and it may not be the most suitable policy tool to drive hospital quality-improvement effects”.⁵⁰ In fact, Mukamel et al. found that competition was actually correlated with an increase in mortality in their study, which also focused on California patients. Unlike Sohn and Rathouz, though, Mukamel et al. compare results in 1982 and 1989, which are the years just before and after insurer selective contracting was implemented in California. The authors hypothesized that selective contracting would boost price competition and that hospitals would react by shifting resources from medically important clinical activities, where quality is hard to observe, to relatively unimportant (medically) “hotel” features (such as comfortable, attractive rooms, etc.), which are more easily observed. The results seem to confirm their suspicions, as competition had a positive relationship with mortality through reduced clinical expenditures on patients.⁵¹ Furthermore, Volpp, et al., compared changes in risk-adjusted heart attack mortality rates in New Jersey and New York hospitals before and after New Jersey deregulated hospital prices.⁵² They found that mortality increased in New Jersey relative to New York after the deregulation.⁵³

3.2.6.3 Conclusions on competition and quality in hospital markets

The empirical literature just summarized mostly reinforces theoretical predictions that competition can generate better quality where prices are regulated. Where both prices and quality are market-based, the results also support the theoretical literature in that they yield ambiguous or conflicting results on quality effects.

As the OECD has pointed out previously, though, the generally consistent finding that regulating hospital service prices leads to beneficial competition on quality is “rather crude.”⁵⁴ By itself, it ought not

⁴⁸ W. B. Vogt & R. Town, “How Has Hospital Consolidation Affected the Price and Quality of Hospital Care?,” Research Synthesis Report No.9, Robert Wood Johnson Foundation (2006).

⁴⁹ M.W. Sohn & P.J. Rathouz, “Competition among Hospitals and Quality of Care: Hospital-Level Analysis,” University of Chicago, unpublished paper (cited in Gaynor, *supra* n.15). Schneider reached the same results in her study of mortality rates in California hospitals from 1997-2002. Helen Schneider, “Incorporating Health Care Quality into Health Antitrust Law,” 8 *BMC Health Services Research* 89 (2008).

⁵⁰ Jared Maeda & Anthony LoSasso, “Effect of Market Competition on Hospital Performance for Heart Failure,” 17 *American Journal of Managed Care* 816, 821 (2011).

⁵¹ D. Mukamel, J. Zwanziger & A. Bamezai, “Hospital Competition, Resource Allocation and Quality of Care,” 2 *BMC Health Services Research* 10 (2002).

⁵² K. G. Volpp, S. V. Williams, J. Waldfogel, J.H. Silber, J.S. Schwartz & M.V. Pauly, “Market Reform in New Jersey and the Effect on Mortality from Acute Myocardial Infarction,” 38 *Health Services Research* 515 (2003).

⁵³ For summaries of additional studies, see Gaynor, *supra* n.15 at 21-27.

⁵⁴ OECD (2012), Competition in Hospital Services, Secretariat Background Note at 60, [DAF/COMP\(2012\)9](http://www.oecd.org/daf/competition/50527122.pdf), available at www.oecd.org/daf/competition/50527122.pdf.

to be taken as a recommendation that price regulation in the hospital sector is always a good idea. It puts the government in the position not only of having to select an appropriate price, but of having to select the optimal level of quality because the two necessarily go hand in hand when prices are regulated. It is quite possible that in some circumstances the market will arrive at more socially optimal price/quality pairings than governments will.

While it may be easy to see why too little quality in hospital services would be undesirable, it may not be so easy to conceive of how the opposite situation could ever be a problem. As Gaynor has noted, even suggesting the possibility that there can be such a thing as “too much” quality in health care services can be off-putting. The ultimate implication is that social welfare can be improved by allowing mortality rates to rise.

However, the same economic concepts apply here as to any other resource allocation problem. We want to devote resources to reducing patient mortality up until the point where the marginal benefit of reduced mortality is balanced by the marginal cost. This means that there will be a socially optimal mortality rate that will certainly be greater than zero. While this may seem repugnant, it is important to realize that there are competing uses for resources and if the value of reduction in patient mortality is not that great, then it may be better to devote those resources to finding a cure for cancer, school lunches, or battleships.⁵⁵

3.2.7 *The sectoral evidence presented in this section supports the theoretical work on competition and quality.*

While we do not suggest that the literature review in this section is broad enough to validate any firm conclusions, we do note that the findings are consistent with the main points from the theory section. That is to say, the empirical studies presented here conclude that competition increases quality in markets where prices are regulated, and the studies reach conflicting results about competition’s effect on quality in markets where prices are not regulated.

Next, we turn to an empirical sample of a different kind. We examine a number of decisions in several competition law contexts to see what kind of a role courts and competition authorities give to quality when it is relevant to their analyses.

4. Quality in a sample of competition law enforcement contexts

4.1 Mergers

Quality, though it is mentioned at least cursorily in most merger guidelines, does not figure prominently in many actual merger decisions. When it does, it sometimes arises because the merging parties have argued that their transaction will lead to improvements in quality. Alternatively, there may be a focus on quality if the competition authority believes that a proposed merger would cause quality to deteriorate in the relevant market. Our first case is a blend of both situations.

When Waterstone’s Booksellers Ltd (owned by HMV Group plc) proposed to acquire Ottakar’s plc, the UK’s Competition Commission had to determine whether the combination of these two book retailing businesses posed a substantial threat to competition.⁵⁶ Waterstone’s argued that the merger would allow it to compete more effectively with growing competition from major chains, supermarkets, and internet retailers.

⁵⁵ Gaynor, *supra* n.15 at at 3-4.

⁵⁶ Competition Commission (UK), *HMV Group plc and Ottakar’s plc*, 12 May 2006.

After concluding that the relevant market was the retail sale of new books, the Commission looked for competitive effects at the local, regional, and national levels. The parties both had primarily uniform national pricing policies, so a decline in price competition at the local and regional levels was not a significant concern. In fact, even at the national level price effects were not a concern because the Commission found no evidence of significant direct price competition between the parties.

Quality was an issue, though, because non-price competition focused on the range of titles in stock and the quality of in-store service. The parties argued that the Commission should have no worries about a decline in quality. In fact, they claimed that the acquisition would lead to *better* quality because Waterstone's would offer a greater range of book titles in the former Ottakar stores.

The Commission undertook a rather thorough examination of quality in the sector. They commissioned a survey to discover what factors were important to customers. They compared the range of titles available in various stores, the number of staff, the level of staff experience, store opening hours, refurbishments, and even book signings.

In the end, the Commission concluded that there was no systematic and substantial difference in the range or service quality in locations where stores from the two parties competed with each other versus locations where they did not compete with each other. That gave them no reason to believe that the level of quality in the stores was dependent on direct competition between Waterstone's and Ottakar's (where such competition existed in the first place). Indeed, the Commission found that the parties' argument that quality would improve as a result of the acquisition was credible. Therefore, the Commission cleared this transaction.

4.2 *Cartels*

4.2.1 *Cartels that conspire to reduce quality.*

Although the vast majority of detected cartels have involved agreements to eliminate price competition, firms occasionally conspire to reduce quality competition. Cartelists might agree not to introduce new products, for example, or they could agree not to offer certain services to their customers. Another possibility is that they could agree to restrict the hours during which their businesses are open. The next two cases feature that type of arrangement. In both cases, the agreements were deemed to be violations of the applicable competition law.

4.2.1.1 *Ordre des Pharmaciens*

The Belgian Pharmacists Association (BPA) maintained a set of rules with which its members were expected to comply. The rules included a schedule showing which pharmacies were to remain open (and therefore which ones were to be closed, as well) on any given weekend in various areas within Belgium. When several pharmacists were disciplined by the BPA for violating the rules by keeping their pharmacies open on weekends when they were not on weekend duty, the pharmacists complained to the Belgian Competition Council. The Council found that the rules limiting the hours of operation for pharmacies could cause a restriction of competition between pharmacists. The BPA argued that such limitations were necessary to ensure the security of supplies to customers because when a pharmacy is open even though it is not supposed to be on duty, it will create confusion in the mind of the public.⁵⁷ The Council, however, determined that the rules on operating hours disproportionately restricted competition relative to the goal of ensuring the security of pharmacy supplies. It therefore ordered the BPA to stop enforcing the relevant rules.

⁵⁷ Communication 43 of the BPA states that a pharmacist who is not supposed to be on duty compromises the proper functioning of the emergency pharmacy service by remaining open outside normal hours.

The BPA then brought the case to the Court of Appeal of Brussels, which upheld the Council's decision.⁵⁸ The court stressed that the Council had established the absence of a direct link between the "social purpose" of an organization like the BPA and its restriction on opening hours. Furthermore, because the BPA had failed to show that those restrictions improved drug distribution for consumers, the court rejected the BPA's argument that its rules should have been exempted from the Belgian Competition Act's provisions on anticompetitive agreements among competitors.

4.2.1.2 *Adanim Mortgage Bank, Ltd.*

In Israel, parties that want to have an arrangement that restricts competition can apply for an authorisation from the Antitrust Tribunal. In 1996, 26 banks requested an authorisation for an agreement to close their branches on Fridays. The Tribunal denied the request, and in doing so it made many insightful remarks on the role of quality in competition policy.⁵⁹

The main issue to be decided was whether the banks' arrangement served the public welfare. The Tribunal wasted no time in revealing its views, referring to it immediately as a request for "approval of a cartel arrangement . . . centering on [the banks'] collective decision to close their branches on Fridays and, thereby, to reduce the week of service to the public to five days." As if that were not a sufficiently clear signal of where it was going, the Tribunal added that "we are asked to consider an arrangement in which the Banks colluded to close their branches on Fridays and undertake not to compete with each other in serving the public by opening the branches on that day."⁶⁰

The court then methodically demolished the banks' arguments. First, the banks downplayed the harm to consumers of their proposal, arguing it was not serious and that in any event it was less severe than an agreement to fix prices. The Tribunal, however, found that the harm was severe. Citing multiple sources, including the late Robert Bork and decisions by the European Commission and a US court, the Tribunal reasoned that curtailing business hours could be just as harmful as raising prices because convenience has economic value to consumers. Furthermore, the harm was severe because the agreement was intended to encompass the entire retail banking industry, which was crucial to the economy and affects the economic activity of all citizens.⁶¹

Next, the banks argued that closing on Fridays would promote efficiency by steering customers to use ATMs and bank-by-phone services instead of live bank personnel. But the Tribunal noted that any such increase in efficiency would be achieved by interfering with consumers' preferences. Customers who wanted direct interactions with bank personnel would be forced to accept indirect banking services. "The basic premise in measuring consumer welfare is that this welfare is determined by the consumers themselves, and such a premise is inconsistent with intervention in consumers' tastes by forcing them to adopt services that they do not consider acceptable."⁶² In other words, consumer welfare and all it encompasses, including quality in the form of convenience and choice, is the priority under Israeli competition law. Pure cost-based efficiency is not. Furthermore, the correct way to persuade consumers to use new services is not to form cartels that reduce quality by forcing unwanted changes on consumers, but to promote the new service until it is accepted.

⁵⁸ *Ordre des Pharmaciens*, n° 2007/MR/5, Cour d'appel de Bruxelles, Dix-huitième Chambre, 7 avril 2009.

⁵⁹ *Adanim Mortgage Bank, Ltd. v. Israel Consumer Council*, Antitrust 1393/96 (January 27, 1997), available at <http://eng-archive.antitrust.gov.il/files/87/1393-96.pdf>.

⁶⁰ *Id.* at 1 (emphasis in original).

⁶¹ *Id.* at 2-3.

⁶² *Id.* at 6.

In this context, the concept of “enhancing efficiency” means meeting consumers’ true preferences in the best way and at the lowest price possible, as opposed to imposing preferences on consumer because they are less costly to provide. . . . When efficiency is enhanced, one should expect this to have the result of improving the quality of products, lowering their prices, or both. What, however, is gained by a price reduction that is achieved not by enhancing production efficiency but by compromising product quality? . . . Following the same line of argumentation, the banks may agree collusively to reduce their business days or hours even more, since this, too, will not lead to a meaningful change in the extent of banking service [demand] due to the inelasticity of the demand curve but will concurrently reduce the banks’ expenses.

Ostensibly, providers of other goods and services, such as grocers, could agree collusively to reduce their business hours, e.g., in the late evenings, and thereby reduce their expenses and even share some of the savings with the consumer. Airlines could agree to stop serving meals on flights, a change that would result in lower airfares, and so on. Such an argument, were it to be accepted, would allow unlimited cartelization in almost any market. After all, there is hardly a product in the economy that could not be offered at a lower price if manufacturers could mitigate its quality.⁶³

Of course, had any individual bank had the courage to close on Fridays without first obtaining a promise from its competitors that they would do the same, then that bank would have been free to do so unilaterally. The fact that none of them did suggests that the banks believed their customers placed considerable value on the availability of Friday banking hours.

4.2.2 *Quality concerns as a justification for cartels.*

While quality is a highly subjective concept, there is no doubt that in some markets consumers are willing to pay a higher price for higher quality. Firms in such markets sometimes establish voluntary consortia to help ensure that high quality products are reaching customers – and that customers are able to differentiate high quality from lower quality. This has happened, for example, in the agricultural sector. However, since such consortia require some degree of coordination between members who may compete with one another, a question arises about the extent to which the members can cooperate without violating competition laws.

One of the cases analysed by Italy’s competition authority, the AGCM, illustrates this type of problem.⁶⁴ In November 1995, AGCM launched a proceeding against the Consortia for the Protection of Grana Padano and Parmigiano Reggiano⁶⁵ to investigate whether the Consortia had restricted competition through market sharing agreements and quota systems. A critical fact was that the consortia specified the

⁶³ *Id.* The Tribunal, by the way, was aware of the possibility that if the harm to consumer welfare that would be caused by this arrangement could be measured, it might be outweighed by the cost savings achieved by the banks. The banks’ representatives failed to present relevant data (on customer service usage patterns) requested by the Tribunal, though, and the burden was on them to show that benefits outweighed costs. *Id.* at 14-15.

⁶⁴ AGCM, Provvedimento No. 4352 (I168), Consorzio Parmigiano Reggiano (1996). *See also National Society of Professional Engineers v. United States*, 435 U.S. 679 (1978) (in which the US Supreme Court rejected an argument by an association of professional engineers that one of its ethical rules, which prohibited members from submitting competitive bids for engineering services, did not violate the Sherman Act because the rule minimized the risk that the pressure of competition would lead to inferior work and thereby endanger public safety).

⁶⁵ The Parmigiano Reggiano Consortium associates approximately 600 cheese dairies, while the Grana Padano Consortium associates around 300 producers. In both cases the producers must be located in specific provinces. Over 90% of the grana cheese consumed in Italy comes from dairies that are members of the two Consortia.

total quantity of cheese to be produced each year, as well as individual quotas for member firms. Moreover, each consortium had a system for imposing fines on overproducing dairies. However, even though the Consortia sought to enforce their respective production plans by sending monitoring letters and threatening non-complying dairies with fines, no fine had ever been imposed.

Both consortia argued that their quota systems were lawful and, in any event, necessary to maintain quality standards, which directly benefit consumers. Thus, the defendants asserted, the quotas should be exempted even if they were otherwise deemed to violate competition law. However, AGCM noted that both the European Court of Justice⁶⁶ and the European Commission⁶⁷ had already confirmed that even if an organization composed of many firms has been entrusted with duties such as monitoring product quality, it remains subject to competition law whenever its activities restrict competition.

In the alternative, the Parmigiano Reggiano Consortium requested a derogation on the basis that the quota system allowed it to supervise the quality of production more effectively and at an acceptable cost, thus helping to improve the quality of cheese. The consortium argued that it was less expensive to reach its quality objective by relying on the quota system rather than by controlling the quality of the milk used. The consortium also contended that its system also supported the competitiveness of Italian companies abroad, as it contributed to the maintenance and improvement of a high reputation.

The Grana Padano Consortium likewise emphasized the link between quotas and quality, asserting that quotas were the only tool that could ensure the quality and good reputation of Grana Padano cheese. It explained that the amount of cheese that could be produced by each dairy was based solely on each dairy's capacity, *i.e.* the amount of the quality raw material⁶⁸ it had available and its ability to fully respect the consortium rules.

Finally, the consortium argued that an industry-specific business cycle made the quota system necessary. Contending that the relevant market was subject to roughly five-year cycles of expanding and shrinking demand, the Consortium said that producers do not take into account the time lag between production and placing the cheese on the market. They therefore tend to expand production in the early stages of a cycle when price increases. Because producers may seek to boost production when prices rise by buying milk outside of the usual channels, there is a risk that low-quality cheese would be placed on the market. According to the consortium, quotas eliminated that risk.

AGCM found that neither consortium's production plans were mandatory under any national or Community legislative provisions and that the plans restricted competition. AGCM pointed out that rules concerning dairy products as well as recent regulations on production from protected origins favoured more effective supervision of quality rather than restrictions on quantity.

AGCM ruled that the quota systems constituted agreements that had the object of restricting competition among the members. The authority stressed that its investigation revealed that the quota systems had been implemented on the basis of historical information, and that references to the amount of high quality raw material available had turned out to be irrelevant. The consortia's argument that granting quota increases was subject to a verification of milk quality was rejected because the evidence showed that the consortium had not systematically taken the quality of milk available into account.

⁶⁶ Joined Cases 96-102, 104, 105, 108 and 110/82, *NV IAZ International Belgium and others v Commission*, [1983] ECR 03369, para. 20.

⁶⁷ Commission Decision of 26 July 1976 relating to a proceeding under Article 85 of the EEC Treaty, Case IV/28.980 - Pabst & Richarz/BNIA.

⁶⁸ The production of the cheese in question requires that also milk possesses specific characteristics and is produced according to the standards set by the Consortium. To protect the quality of the product, the Consortium is therefore required to verify in advance the quality of the raw material and its origin.

The consortia eventually agreed to limit themselves to recording information submitted by the individual cheese dairies, after having ascertained their capacity to produce quality cheese and to set indicative, rather than enforceable, consortium-wide production targets. Individual producers, moreover, would no longer be limited by their historical production levels.

4.3 *Quality concerns as a justification for tying*

Concerns about quality have occasionally been asserted as justifications for tying inputs or aftermarket services to a good. The usual argument is that the tie is necessary for quality control because third party providers' products or services are inferior and might impair the performance – and therefore the reputation – of the tying product, especially if buyers are unable to determine whether poor performance would be caused by the tying good or the secondary good/service.

This argument is quite old, and it does not always fare very well in court. In *IBM v. United States*, for example, IBM argued that tying sales of its paper punch cards to rentals of its tabulating machines was lawful because cards from independent suppliers could not be trusted to conform to the size and cleanliness standards necessary for the machines to perform properly. Customers could not necessarily trace the cause of poor performance to faulty punch cards, though. The objective of the tie was therefore to preserve customers' goodwill toward IBM, the company argued, rather than to harm competition. The Supreme Court easily rejected that argument. It simply quoted the relevant text of the Clayton Act, which makes it unlawful to lease machinery on the condition that lessees do not use a competitor's supplies where the effect of that condition may be to substantially lessen competition or tend to create a monopoly. The Court then concluded that IBM's tie operated in the manner forbidden by the Act, noting that IBM did not even argue that other suppliers would be unable to meet the necessary specifications, and that in any event IBM could have conditioned its leases on the use of cards that conform to IBM's specifications.⁶⁹

Another possible quality-based justification for tying is that the use of inferior third-party goods or services would impose financial costs on the seller of the tying good. This could happen, for example, if poor performance due to the use of low quality complementary goods or services would trigger a warranty provided by the seller of the tying good. Iacobucci argues that the following conditions must exist for this justification to make sense:

- The tying and tied goods are used in conjunction with each other
- The quality of the tying and tied goods affects their joint performance
- The tying good seller bears at least some of the costs of poor joint performance (e.g. there is a warranty)
- Buyers would be able (but for the tie) to choose a competitor's product instead of the tying good seller's tied product⁷⁰

Under these circumstances, Iacobucci reasons, buyers are more likely to buy sub-optimal-quality complementary goods because the performance-related risk of doing so is at least partially borne by the tied good seller. Rational primary good sellers will react by charging a higher fee for guaranteeing performance

⁶⁹ *IBM Corp. v. United States*, 298 U.S. 131 (1936); cf. *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451 (1992) (aftermarket services tying case in which there was evidence that some customers found an independent provider's service to be better than Kodak's).

⁷⁰ Edward Iacobucci, "Tying as Quality Control: A Legal and Economic Analysis," 32 *Journal of Legal Studies* 435, 447-48 (2003).

than they otherwise would. “Because the higher price results from an inefficient choice of low-quality tied goods, it may be preferable for the buyer to commit to purchase only high-quality tied goods.”⁷¹

“Inefficient” is a rather loaded word, though, because Iacobucci seems to be assuming that if the primary good seller is permitted to tie its complementary products, then it will charge a lower price that is related to an “efficient” choice of high-quality complementary goods. But what if it does not do that? Indeed, what if it charges a monopoly-level price for its complementary goods only because it is allowed to tie them to the primary good?

Furthermore, Iacobucci contends that this cost-imposition justification differs from the first one mentioned above because only the earlier justification depends on buyers being unable to determine whether poor performance is due to the primary good or the complementary good. But if that is true, and if customers can determine that poor performance is the complementary good’s fault, then to avoid the imposition of costs due to the use of low quality complementary goods, the primary good seller need only condition its warranty on the use of complementary goods that meet its specifications. That is the same alternative to tying that the Supreme Court mentioned 77 years ago when finding *IBM* liable for tying.

On the other hand, not only does the “buyer confusion” justification sometimes work, but Iacobucci’s distinction between that rationale and the “cost imposition” rationale sometimes matters. That was the case in *United States v. Jerrold Electronics*, a decision that was affirmed by the Supreme Court.⁷² In *Jerrold*, the trial court accepted the buyer confusion argument in ruling that the defendant’s tying conduct was temporarily justified because customers could not determine whether poor performance would be due to Jerrold’s product or the inferior aftermarket goods and services of independent providers. However, the cost imposition justification could have been applicable, as well, and that arguably should have made a difference in the outcome.

Jerrold was a pioneer in the development and installation of television antennae in the early 1950s. It required antenna buyers to purchase complementary Jerrold equipment and five-year service contracts, as well. The government alleged that Jerrold’s tying conduct violated Section 1 of the Sherman Act and Section 3 of the Clayton Act.

Jerrold argued that its experience in selling other goods had shown that independent service providers tended to give inferior service. The antenna industry was nascent and therefore unproven, though. Furthermore, customers would not know whether malfunctioning antennae were performing poorly because of the antennae themselves or because of low quality installation and maintenance services or low quality complementary equipment. The tie was therefore necessary to protect both Jerrold’s reputation and the development of the antennae and television broadcast markets. In this case, the court accepted these arguments, at least for the years when the market was still young.

Iacobucci notes that buyer confusion may not have been the only valid justification in *Jerrold*, though. The decision is unclear on this point, but Jerrold may have borne some of the costs of inferior service and complementary equipment. Inferior service may have triggered warranty provisions associated with the antenna, while inferior third-party equipment may have triggered either the warranty provisions or Jerrold’s obligations under its service contract. One would think that the inferior equipment problem could have been solved by conditioning Jerrold’s warranty and service obligations on the use of specification-compliant independent goods. But adequate third-party service would not necessarily be easy to describe comprehensively in a list of specifications. Therefore, the cost-imposition justification may have had merit.

⁷¹ *Id.* at 448.

⁷² *United States v. Jerrold Electronics Corp.*, 187 F. Supp. 545 (E.D. Pa. 1960), *affirmed per curiam*, 365 U.S. 567 (1961).

This matters because the buyer confusion and cost-imposition justifications have different durations of validity. The buyer confusion rationale would have less and less merit as time went by and Jerrold's reputation solidified. But the cost-imposition rationale's merit (with respect to third party installation and maintenance services) would not diminish over time, as long as Jerrold continued to support antenna purchases with warranties.

4.4 *Vertically Integrated Firms: Sabotaging the Quality of Downstream Competitors' Services*

In some markets, such as fixed line telecommunications services, there is often a large incumbent upon whom downstream rivals depend for access to network capacity. That situation creates the possibility for vertically integrated incumbents to harm their downstream competitors by degrading the quality of the services those competitors can offer. In such situations, a regulator or a competition authority must determine whether quality has actually been degraded or not.

For example, in December 2007 the Polish Office of Competition and Consumer Protection (UOKiK) imposed a PLN 75 million fine on Telekomunikacja Polska (TPSA) for discriminating against competitors in the Internet services market. UOKiK found that TPSA had decreased the quality of some downstream competitors' services and, in some cases, that it had completely disabled their ability to transfer data.⁷³

The proceedings were launched on the basis of numerous complaints UOKiK received in 2004 from Polish telecommunications operators. TPSA's objective, the operators argued, was to make it impossible for end-users to access information stored in the networks of operators who acquired network access services from foreign operators rather than from TPSA.⁷⁴ To check the validity of such assertions, UOKiK carried out controls at the premises of the incumbent, which confirmed that the alleged practice could have taken place.

The relevant market was defined as the market for access to Internet end-users connected to public telecommunications networks. To provide retail services on the relevant market, Polish telecommunications operators could procure access service either directly from TPSA or indirectly through from foreign operators that already had access agreements with TPSA, namely France Telecom or Telia. The Polish competition authority found that TPSA selectively degraded the IP traffic coming from Polish operators' networks that reached TPSA's network through connections with foreign operators. Upon detecting such traffic, the TPSA's router would either reduce the quality of traffic or completely prevent data transmission.

Contracting with foreign operators was commercially very attractive for Polish operators because the prices France Telecom and Telia charged were much lower than those charged by the Polish incumbent. In principle, the service they obtained should have been the same as the one offered by TPSA. However, because of TPSA's discrimination, to offer their customers the expected quality of access to the Internet, the Polish operators were forced to terminate agreements with foreign operators and contract the same services

⁷³ Prezes Urzędu Ochrony Konkurencji i Konsumentów, Decision No DOK-98/07 (20 December 2007).

⁷⁴ To understand the nature of TPSA's practice it is first necessary to understand the architecture of the network. The Internet functions as a web of many telecommunications networks connected to each other and administered by different network operators, who are operating on different levels. On the lowest level there are small networks administered by local Internet service providers (ISPs). To provide the users of these networks access to data in networks from other regions, countries, and continents, the local networks have to be connected to larger networks. This connectivity is provided by so-called second level Internet providers, which administer regional networks (such as TPSA, France Telecom, or Telia). Finally, the regional networks have to connect with each other to provide global connectivity.

from TPSA for much higher fees.⁷⁵ Consequently, those Polish operators who sought to increase their efficiency and offer their customers the same quality at lower prices by contracting with France Telecom or Telia, were unable to compete with either TPSA or other Polish operators who stayed with TPSA.

While the degradation of quality of service lies at the heart of the anti-competitive behaviour identified by UOKiK, the decision does not specify what quality of traffic means or how it is measured. It may have been the case that it was enough for the authority to prove the existence of discrimination. It is clear that UOKiK needed specialized information, which it obtained from an appointed expert. The expert was asked to determine whether the configuration of TPSA's routers could degrade foreign IP traffic. However, it is unclear how much degradation there was and what the minimum amount of degradation was that UOKiK would have deemed necessary to constitute a competition violation.

4.5 *Quality concerns in market investigations*

Competition authorities in some jurisdictions occasionally conduct market investigations, in which they analyse sectors having particular features that could be impeding competition. Such investigations typically focus on industry-wide characteristics and practices rather than on the conduct of a specific firm. Sometimes the quality of the products or services in a market turns out to be a significant concern in these investigations.

The UK's Competition Commission undertook one such investigation of the retail groceries sector in 2006,⁷⁶ after the Office of Fair Trading decided to refer an investigation of the supply of groceries by retailers.⁷⁷ The OFT's decision was based on evidence suggesting that even though overall consumers had benefited in recent years from falling prices, a greater variety of products, and better services, they may have been harmed by other market developments that could constitute a distortion of competition.

When considering the impact that those market developments had on consumers, the OFT looked at price, quality, range and service. It noted "evidence that consumers may increasingly value quality of product over pure competition on price", which "appears to be having benefits for some niche players, including independent stores".⁷⁸ The OFT also pointed out that "some respondents argued that the OFT should take account of wider issues such as the quality and healthiness of food sold in supermarkets. The OFT has not attempted to measure this. In general, provided competition gives consumers a choice of types of food, the OFT would view issues of diet and healthiness of food to be outside its remit as a competition authority".⁷⁹ This highlights one of the difficulties with examining quality in antitrust cases. It may well be the case that a holistic approach to quality would require a competition authority to take into account non-competition concerns. Drawing a line between quality aspects that do and do not belong among competition concerns adds to the initial difficulty caused by the subjectivity of what quality means for a given product/service.

⁷⁵ The extent of the disparities between the fees charged by TPSA and those charged by France Telecom and Telia, which were deemed significant by UOKiK, is not known because UOKiK treated price-related information confidentially. Prezes Urzędu Ochrony, *supra* n.74 at paras. 168-178.

⁷⁶ Competition Commission (2008), The supply of groceries in the UK market investigation, available at: http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2008/fulltext/538.pdf.

⁷⁷ OFT (2006), The Grocery Market: The OFT's reasons for making a reference to the Competition Commission, OFT 845, available at: http://www.of.gov.uk/shared_of/reports/comp_policy/of845.pdf

⁷⁸ *Id.* at para. 4.6.

⁷⁹ *Id.* at para. 4.8.

In its report, the Competition Commission observed that according to the Enterprise Act, it must consider price, quality, choice and innovation. It then explained that in grocery retailing, choice can mean the choice of product range within a store as well as the choice between shops.⁸⁰ No such explanation was given for quality. When discussing its methodology for defining the relevant market, though, the Commission explained that in grocery retailing, demand-side substitution may occur in response to a change in price or a change in the non-price elements on which stores compete, such as product variety, quality and service. While the Commission stated that it takes both price and non-price factors into account when considering demand- and supply-side substitution, it acknowledged that applying the hypothetical monopolist test to non-price factors is not straightforward. In particular, it noted that “although a change in non-price factors sheds light on demand-side substitution and thus the extent of competition between firms, it is more difficult to assess the impact of a change in non-price factors on supplier profitability”.⁸¹

The Commission found that many factors differentiate grocery stores. Rather than analyzing changes in every single aspect of the entire retail offer, though, the Commission quite reasonably limited its examination to changes in price, quality, range and service.⁸² The Report, however, refers to both the quality of products (*e.g.* freshness) as well as store service quality, without providing a systematic framework for the assessment of quality. In his study, Matsa, for instance, specified that retail product quality includes a store’s cleanliness, checkout speed, the courteousness of its staff, and the depth of its product assortment.⁸³

4.6 *Vertical restraints*

Vertical restraints such as RPM and exclusive territorial allocations may cause prices to be higher than they would otherwise be, but an argument made in their favour is that they also lead to better quality for consumers. Higher prices alone therefore may not tell the whole story. Should claims of quality improvement justify vertical restraints?

The Competition Committee has covered this debate in roundtables that were devoted specifically to vertical restraints. There is no need to go over it again in detail here.⁸⁴ The main point is that considerations about vertical restraints’ effect on quality have led to a relaxation of the applicable legal standard in several OECD countries. That is to say, it has led to a shift from *per se* illegality to the rule of reason in some jurisdictions.

⁸⁰ Competition Commission, *supra* n. 77 at para. 2.17.

⁸¹ *Id.* at p. 48 n.2.

⁸² To assess the extent to which individual aspects of the store-level retail offer vary across local markets in response to competitive conditions, the Commission reviewed two studies: one submitted by Tesco, the other by a market research firm – the GfK. The study submitted by the GfK assessed variation in 18 individual aspects of the retail offer at stores larger than 1,400 sq metres. Quality, for example, was assessed on the basis of the number of shopping basket items on display that were damaged (*e.g.* split packaging) or that were past (or close to) the sell-by date. The Commission, however, had concerns about the premise of both of these studies because “many aspect of the store-specific retail offer are intangible and have no identifiable metric with which to measure variation from store to store”. (Para. 6.51.) It also acknowledged that “it is extremely difficult to measure quality and service adequately”. (p. 116 n.1.)

⁸³ Matsa, *supra* n. 38.

⁸⁴ See OECD, Vertical Restraints for On-line Sales (forthcoming 2013) (will be available at www.oecd.org/daf/competition/roundtables.htm); OECD, Resale Price Maintenance (2008), available at <http://www.oecd.org/daf/competition/43835526.pdf>.

5. Conclusion

This paper reveals that although quality is a substantial concern of competition policy, it is a difficult concept to pin down or measure. It means different things to different people and cannot always be quantified, unlike prices and costs.

Microeconomic theory does not offer enforcers or judges much help with understanding how changes in the level of competition in a market are likely to affect quality. Apart from price-regulated markets with multiple competitors, one cannot confidently predict how quality will change if competition weakens or intensifies. Therefore, to understand the effect of competition on quality, one must usually turn to empirical studies tailored to individual markets.

The empirical studies we reviewed support the main points from the theory section. That is to say, the studies find that competition increases quality in markets where prices are regulated, whereas they reach conflicting results about competition's effect on quality in markets where prices are not regulated.

It was not easy to find decisions by competition authorities and courts in which quality considerations played a prominent role. That is probably a reflection of how difficult it is to define and measure a multidimensional and subjective variable like quality. It may also signify that authorities and courts are satisfied that focusing on price effects is adequate in almost every case. Where we did locate decisions that dwell on quality, we found qualitative treatments rather than quantitative ones. That should not be taken as an indication that quality is a less important concern than prices and costs. Many decisions that focus on price effects, after all, do not contain any quantitative analysis, either. And as Israel's Antitrust Tribunal noted in *Adanim Mortgage*, lower quality can be just as detrimental to consumer welfare as higher prices.

If competition authorities wish to place a greater focus on quality, they must be prepared to do market-specific empirical work. Theories about competition and quality alone will not provide sufficient insights about quality effects in most markets. If they are willing to do the empirical work, though, they may find that analysing competitive effects on quality is a valuable option when price effects analysis is irrelevant or inconclusive.

AUSTRALIA

Introduction

Firms compete on multiple platforms including price, service, innovation and quality. Maintaining and improving the quality of goods and services for consumers is an important objective of competition policy. However, the more important goal is to deliver the level of quality that consumers desire for a given price.

Where competition is healthy, changes in quality can be viewed as a response to changes in demand, production costs and innovation. Where competition is not as effective, changes in quality may well be signs of an exercise of market power – for example, where consumers only have access to high priced, high quality products, when they are seeking low cost, low quality products, or where the quality of products is reduced with no compensating reduction in price.

This submission explores the benefits and complexities of including quality as a part of competition analysis in two parts. Some perspectives on defining quality are provided first as context for the issues canvassed in this paper. Part I then considers quality as a policy goal, and how competition mechanisms can be used to achieve it. Part II of the paper considers quality assessment as an element of competition law enforcement.

Defining quality

Quality is a multifaceted concept with several dimensions, including product variety, horizontal product differentiation and vertical product differentiation.¹

In defining quality, the durability or reliability of a product can provide a fairly objective indication of the basic quality of that product.² However, consumers' perceptions of quality might not always be limited to a product's durability or whether the product simply meets its basic intended purpose.

Horizontal differentiation reflects the notion that consumers' preferences for particular product attributes (colour, flavour etc.) vary. This heterogeneity of consumer preferences provides an incentive for firms to compete by offering a range of similar products differentiated on the basis of the particular attribute. This means that if prices are the same, demand for each good, and each supplier's market share, will depend on consumers' preferences for the particular characteristic or attribute; for example, Coke and Pepsi as slightly differentiated colas.

In contrast, vertical differentiation is based on consumers' objective assessments of quality, which enables similar products to be ranked according to their quality. Thus, if prices are the same, all consumers would prefer to buy the highest quality product because it embodies more of a particular desirable product attribute than products that have less of the desirable attribute. For example, the durability or reliability of a

¹ In this context, references to products include both goods and services unless otherwise indicated.

² Hirshliefer, 2005, *Price Theory and Applications*, Cambridge University Press, New York, p. 274

product can provide a fairly objective indication of the basic quality of a product.³ However, as higher quality products generally cost more to produce, there is typically a positive relationship between price and quality. In well-informed and effectively competitive markets, price plays an important role in signalling quality differences to consumers and enabling them to make rational decisions about the trade-off between higher price and higher quality.

Consumers' perceptions of, and preferences for, quality may also depend on the quality of the services that are complementary to a particular product. This is of particular importance for consumer products where the overall quality of a product, and a consumer's decision where to purchase a product, can extend to the quality of associated services offered by the retailer including its exchange policy, delivery times and customer service. In this regard, retail competition can have both horizontal and vertical quality dimensions.

Finally, product variety refers to the extent of both horizontal and vertical differentiation and, therefore, the breadth and depth of choices available to consumers.

1. Policy perspectives on quality

Ensuring an appropriate quality in a good or service is a common policy objective. Mostly, this goal is to ensure a minimum standard is reached, but it can also be to guarantee that quality fits within a band, in order to meet consumer needs within parameters. Commonly, governments seek to achieve quality goals through regulation, even though changes in quality routinely result from competition.

Quality regulation has often been driven by concerns that unrestricted competition or the free functioning of a monopoly market cannot deliver the requisite level of quality to meet the welfare needs of the Australian public. These instances generally involve market failure, natural monopolies, or the presence of strong information asymmetries. In such cases, regulation may be necessary to provide incentives for firms, which are not exposed to strong competitive constraints, to provide products and services of an appropriate standard, and to develop new products and services in a timely manner.

Most often, standards or licencing requirements are used by governments or industry bodies to regulate a minimum acceptable level of quality. This occurs in sectors such as electricity and in the medical and legal professions. Basic quality also tends to be regulated to ensure public health and safety. While there are often clear public benefit reasons to regulate quality, mechanisms to 'set' quality can sometimes have negative implications for competition as they can have the effect of creating barriers to entry or discouraging innovation, which have flow on impacts on consumers. Potential impacts include restricting choice for consumers and/or distorting prices upwards beyond a level that consumers are willing to pay, often bringing into play the associated question of government subsidies in the case of essential goods and services.

Australia has a number of examples of previously-regulated markets where the introduction of competition has been reported to have produced benefits for consumers, including tangible improvements in the quality of goods and services. Given the potential for competition to generate improvements in quality, consideration should therefore be given to policy options that can enhance competition and ensure the efficient and optimal level of quality is supplied by a market.

³ Hirshliefer, 2005, *Price Theory and Applications*, Cambridge University Press, New York, p. 274

1.1 *Australian examples of competition having positive quality outcomes*

Australia's experience over the past decades, including the reduction of tariff barriers and implementation of the National Competition Policy, has demonstrated that the introduction of competition to a market—either through deregulation, regulatory reform or significant structural change in the economy—has positive implications for the quality of goods and services supplied by that market. The Productivity Commission has played an important role in drawing attention to the positive outcomes of these reforms, including quality outcomes. The following case studies provide some insights into structural change in grocery retailing sector and past reforms of government-regulated sectors that have delivered quality improvements through competition.

1.1.1 *Private label products*

In the Australian supermarket sector, private label groceries have been subject to substantial quality improvements in recent years, which have been partially attributed to increased competition resulting from the entry of ALDI to the Australian market in 2001. ALDI has been estimated to stock private labels across approximately 95 per cent of its product range.⁴

According to industry analysis, Australian consumers have traditionally displayed reluctance to purchase private label products, due to the perception of poor quality and bland packaging.⁵ However, the introduction of ALDI appears to have contributed to a significant shift in public perception, due to the high quality of its mainly private label product range. It is interesting to note that ALDI has been formally recognised in Australia for the quality of its products.⁶

As a competitive response to ALDI, the major supermarket chains have since heavily invested in their private label brands, with the quality and packaging of many private label products being significantly improved.⁷ As a result, private label penetration in Australia has been reported to have grown significantly, from around 15 per cent of total supermarket sales in 2003 to around 25 per cent in 2010.⁸ Competition has thus driven improvements in quality that has benefited price-sensitive consumers.

It should be noted that, notwithstanding these benefits for consumers, concerns about the competitive impacts of private labels are currently the subject of consideration by the ACCC, which is examining whether the major Australian supermarket chains are engaging in misuse of market power by discriminating in favour of their private label products to deter or prevent the suppliers of proprietary brands from engaging in competitive conduct.

1.1.2 *Reductions in automotive industry assistance*

There have been significant improvements in the quality of the outputs of Australia's automotive industry over the past 30 years, a significant portion of which is attributable to reforms that began in the 1980s.

Throughout the twentieth century, Australia has provided assistance to the domestic car manufacturing industry, primarily through the imposition of high tariffs on imported cars. By the late 1970s, tariffs on passenger motor vehicles peaked at nearly 60 per cent, which was further supported by

⁴ IBIS World, March 2013, *Supermarkets and Other Grocery Stores in Australia*, p. 12

⁵ *Ibid.*, p. 7

⁶ <http://www.sydneymail.com.au/33.htm>

⁷ IBIS World, March 2013, *Supermarkets and Other Grocery Stores in Australia*, p. 7

⁸ Australian Food and Grocery Council, 2020: *Industry at a Crossroads*, November 2011

import-restricting quotas and local content rules for the use of domestic components.⁹ However, by the 1980s, industry policy had begun to shift towards opening up the industry to import competition. This was followed by gradual and steady reductions in assistance over the subsequent decades.

In a comprehensive review in 2002 of the impacts of government assistance on the automotive industry, the Productivity Commission made a number of findings in relation to government assistance and quality performance. The Productivity Commission reported that the reductions in government assistance and increased exposure to competition had played a direct and significant role in stimulating productivity and quality improvements in the automotive industry.¹⁰ The Productivity Commission noted that indicators of quality improvements included a substantial decline in vehicle defect rates and international recognition of the standard of Australia's tooling and automotive design services.¹¹ Interestingly, the Productivity Commission also found that although average prices of locally-produced vehicles had remained largely static over the previous decade, significant improvements in quality during those years effectively meant that consumers were receiving 'better value for money'.¹² This example lends support to the theory that firms can respond to increased competition by adjusting quality rather than reducing price.

Another automotive example of quality outcomes from competition can be found in the publication of car safety results. In Australia, Europe and other jurisdictions, a consumer can compare car crash safety results and decide how they value safety relative to other features, including price. This demonstrates that once safety becomes a key factor in the competitive process, companies will compete with each other to incorporate safety innovations in products that consumers value. Government regulation of safety standards could then potentially become less relevant, although some level of regulation is likely to always be necessary as the markets for cheap lower-quality goods are unlikely to disappear.

1.1.3 *Deregulation of the dairy industry*

The dairy industry in Australia also witnessed substantial improvements in product range and quality following industry deregulation in 2000, which involved the phasing out of government support and assistance regimes provided to the domestic dairy industry. Reports by the Productivity Commission and the ACCC¹³ found that deregulation, despite the transition costs involved, had overall benefited consumers in the form of lower prices and increased choice.

More specifically, the Productivity Commission noted that the range of milk products available to consumers had broadened with the introduction of new products to meet various dietary, convenience and health needs.¹⁴ A report by Australia's National Competition Council also found that the growth in innovative products to meet various dietary and convenience needs was linked to industry deregulation which had created strong incentives for dairy companies to expand their income bases by engaging in product innovation.¹⁵ This expansion in the types of sophisticated products available to consumers could well be considered an improvement in product quality arising from the effects of increased competition.

⁹ Productivity Commission 2002, *Review of Automotive Assistance*, Report No. 25, Canberra., p. 115

¹⁰ *Ibid.*, p.3

¹¹ *Ibid.*, p.29

¹² *Ibid.*, p. 22

¹³ Australian Competition and Consumer Commission, *Impact of Farm Gate Deregulation in the Australian Milk Industry: Study of Prices, Costs and Profits*, 2001, <http://transition.accc.gov.au/content/index.phtml/itemId/306304>

¹⁴ Productivity Commission, 2005, *Review of NCP Reforms*, p. 81

¹⁵ National Competition Council, 2004, *Dairy – Now and Then: The Australian Dairy Industry Since Deregulation*, p. 6

1.2 *Quality outcomes from deregulation of government monopolies*

Australia's utility markets were traditionally government-owned monopolies. Over recent decades, however, governments have deregulated utility markets and opened them up to limited or full competition. Improvements in quality have frequently resulted.

Historically, telecommunications services in Australia were delivered through a government-regulated monopoly. In a report on telecommunications competition regulation, the Productivity Commission noted that price regulation can provide incentives to firms to compromise quality, which then also creates the need to regulate quality.¹⁶ In the late 1990s, following considerable debate about reform of monopoly market structures, Australia's telecommunications sector was fully deregulated and opened up to competition. Caps on the number of licensed players were removed and telecommunications regulation was aligned with general competition law, with the sector brought under the regulatory oversight of the ACCC.¹⁷ While this resulted in overall pricing improvements for consumers, deregulation was also reported to have delivered benefits to consumers in terms of choice and service quality.

1.3 *Quality as a policy objective in regulated markets*

Where a sector cannot be subject to competition due to structural or other reasons, governments often play a role in ensuring - through regulation - that acceptable quality is still delivered to consumers without the driving force of competition. This imperative to regulate quality can often occur in markets where there is strong asymmetric information and where consumers are unable to make an informed assessment of quality, and the consequences of a wrong decision are severe: notably in relation to health and safety.

Minimum quality standards are a commonly-used approach to regulate quality. For example, Standards Australia is a non-government peak body that promotes the adoption and use of harmonised standards for a range of products and services. In addition, very narrow prescriptions of quality can also be justified in order to protect the public from significant health and safety risks, such as in the case of medical drugs. Another relevant example is the Australian Consumer Law, which applies a rigorous product safety law to all consumer goods (and product-related services) supplied in Australia. Under the Australian Consumer Law, Australian consumer agencies are able to monitor the market to detect unsafe goods and work out ways address any hazards or encourage safe practices. This can be through consumer awareness campaigns, product bans or product standards.

However, caution is needed, as mandatory standards can have the effect of discouraging investment in innovation, which may have detrimental effects for consumer surplus in terms of preventing the long-term development of quality and variety in products.¹⁸ Mandatory standards can also create barriers to entry, where prescriptive requirements can prevent new entrants from qualifying to operate in the market.

Fixing the level of quality may not accurately reflect the equilibrium market level of quality demanded by consumers, for a given equilibrium price and quantity supplied. For example, consumers may demand different levels of quality subject to their individual willingness to pay. Consumer choice will be affected where the fixed level of quality means that cheaper, lower-quality goods are not supplied by the market.¹⁹ A related issue is that when quality and supply are fixed, price is the only variable that can freely

¹⁶ Productivity Commission, 2001, *Telecommunications Competition Regulation report*, p.41

¹⁷ Australian Bureau of Statistics, *History of Communications in Australia*, Communications Research Unit, Department of Communications, Information Technology and the Arts, 2001

¹⁸ Landsburg, S. E., 1992, *Price Theory and Application*, Dreydon Press, United States, p. 402

¹⁹ *Ibid.*, pp. 401-402

adjust, thus leading to potentially inflated prices. Some of these concerns have been raised in relation to industry sectors in Australia including taxis, health services, and electricity, which are explored further in the following case studies.

1.3.1 *Taxi industry*

Quality has been an ongoing concern in relation to taxi services in Australia. Historically, taxis have been highly-regulated with restrictions on the number of taxi licences that can be issued, and on the prices that can be charged. It is the view of many commentators that the quality of taxi services could improve significantly with the introduction of greater competition.

A recent review in 2012²⁰ by the State Government of Victoria, Australia, reported that barriers to competition through capped licence numbers and price controls were linked to poor performance by the Victorian taxi industry. According to the report, poor performance related to aspects of taxi services including supply shortages at peak times; unreliable taxi booking services; and lack of driver knowledge and customer service. The quality of drivers was also a stakeholder concern explored in the review, which could be noted as an example of quality suffering when supply and price are fixed. The review recommended a number of reforms in relation to licensing arrangements for the industry that would encourage improvements in the quality of taxi services through the entry of new competition.

1.3.2 *Professional health services*

Professional standards are another area of quality regulation where concerns have been raised that quality standards act as a barrier to entry and hence limit supply of a professional workforce and drive up prices. Professional sectors pose particular challenges from a competition perspective, as consumers are often unable to evaluate the quality of services received: there is strong asymmetric information. For example, in medical services, many consumers/patients can face a situation of imperfect information as they are generally unable to accurately assess the quality of their health diagnosis and treatments. As a result, consumers/patients often need to rely on the quality standards that are administered by government and professional bodies.

In 2006, the Productivity Commission examined licensing arrangements in the health services sector and made a number of observations about the relationship between quality standards and work performance outcomes. The Productivity Commission noted concerns that entry rules and conduct codes administered by some professional bodies, which are designed to protect quality and safety standards, can involve an element of income protection and workload/’patch’ protection.²¹ The Productivity Commission, however, caveated this statement by acknowledging the need for regulation in the health sector to promote appropriate clinical standards as well as safety and quality objectives. Nonetheless, some aspects of the accreditation and funding and payment arrangements for health services were still found to be unnecessarily rigid, with the Productivity Commission expressing concern that this may have the effect of obstructing the development of a more efficient and effective health workforce.²²

The Australian Government has invested significant resources to address the key areas of reform identified in the Productivity Commission’s 2006 report, including the establishment of a National Registration and Accreditation Scheme and a national workforce planning agency, Health Workforce

²⁰ Taxi Services Commission, *Taxi Industry Inquiry: Consumers First: Service, Safety, Choice*, 2012

²¹ Productivity Commission, 2005, *Australia’s Health Workforce*, Canberra, p. 30
<http://www.pc.gov.au/projects/study/health-workforce/docs/finalreport>

²² *Ibid.* pp. 28-29

Australia. Health Workforce Australia has also been tasked with improving and expanding access to quality clinical training for health professionals.

For health services markets, the combination of asymmetric information, limited supply of service, and the essential nature of that service indicate that such markets are unlikely to be fully efficient. In general, therefore, there are likely to be benefits to productivity and consumer welfare in regularly reviewing the mechanisms by which quality is assured, and questioning whether there are viable opportunities to introduce competitive pressures to some segments of the market. However, where the introduction of competition is not feasible for public policy reasons, there are likely to be significant benefits for consumers where regulators can use market incentives to deliver quality services.

As a relevant example, the Australian Government has introduced a new national system of funding for public hospitals, Activity Based Funding, which is a performance-based model of funding hospitals according to the number and type of services that they deliver. The implementation of Activity Based Funding provides incentives for efficiency and increases transparency in the delivery and funding of public hospital services across Australia. Quality is supported through public reporting of hospital performance, which is measured by various indicators including number of admissions, waiting times for emergency departments and elective surgery, time spent in emergency department, Staphylococcus aureus bacteraemia infections, hand hygiene and cancer surgery waiting times. This performance-based model is designed to ensure that a balance is achieved between funding efficiency and safety, quality and patient access. This also represents an interesting example of governments moving towards regulatory systems that involve replicating market-based mechanisms to deliver better quality outcomes for consumers.

It should also be noted that the OECD has explored the potential benefits of competition in health and hospital services, including as a policy lever to ensure quality provision and control costs.²³

1.3.3 *Electricity markets*

Quality in Australia's electricity markets, which mainly relates to the reliability of electricity supply to consumers, is another subject of current public discussion in Australia, as the regulation of reliability has placed upward pressure on prices.

While the revenues or prices of electricity distribution businesses in Australia's National Electricity Market are regulated by the Australian Energy Regulator (AER) under the National Electricity Law and Rules, State (regional) governments also subject distribution networks to rigorous quality regulation in the form of reliability standards. The policy basis for regulation of quality standards is that consumers require and value a very reliable supply of electricity, including during 'peak use' times, without the risk of power shortages and blackouts.

However, this policy rationale is currently the focus of public discussion in Australia, including the potential trade-offs that need to be made between reliability and price.

Electricity distribution networks in Australia are regulated natural monopolies, where it is not economically viable to duplicate networks in a single geographic area. In order to regulate prices in a monopoly market the AER uses incentive regulation to reward efficient network businesses that reduce their costs, with greater profits. Yet this form of regulation could create incentives for businesses to lower their costs in a way that compromises quality or reliability. To counter these adverse incentives, state governments regulate supply reliability through reliability standards for the average number and duration

²³ Best Practice Roundtables on Competition Policy, 2013, *Competition in Hospital Services* <http://www.oecd.org/competition/roundtables.htm>

of unplanned outages that each electricity distribution network should not exceed each year. However, these standards have often been set without reference to the value that consumers are willing to pay for reliability. In addition, some states also impose planning criteria which prescribe how networks must meet their reliability targets. Prescriptive standards of this type may rule out more innovative and cost effective solutions.

The Productivity Commission²⁴ has recently noted that these regulatory arrangements have meant that some consumers are forced to pay for higher reliability than they value. In view of this, the Productivity Commission has suggested that reliability settings should be based more closely on the level of reliability that consumers demand, rather than being set through prescriptive standards. Consistent with this, Australian Governments have agreed in principle to adopt a new best-practice framework for electricity network reliability standards, and to transfer responsibility for applying the framework to the AER. The Australian Energy Market Commission is developing the framework.

1.4 Conclusions

Australia is well placed to identify opportunities to use competition to achieve quality goals. Reviews and independent studies by Australia's policy advisory body, the Productivity Commission, are alive to competition as a policy solution to quality problems.

Similarly, Australia's approach to Regulation Impact Analysis, which is administered by the Office of Best Practice Regulation, encourages agencies proposing new regulation to consider low-impact regulatory options and market-based solutions in order to minimise the potential distortions to the market.

While governments often pursue regulatory means of delivering quality as an important policy objective, Australia's past experiences of competition reform has well illustrated the benefits to quality that can be obtained through competition. Enlisting the market incentives for quality available through competition will generally provide lower-cost, efficient and potentially more effective solutions.

2. Quality in competition law enforcement

Quality is a relevant and frequent non-price consideration in competition analysis in Australia. The Australian Competition and Consumer Commission (ACCC), Australian Competition Tribunal and Courts take non-price effects of conduct into consideration as part of their analysis of competition issues, both in considering whether conduct is anti-competitive and in applying public benefits tests to consider whether to exempt particular conduct from Australia's *Competition and Consumer Act 2010*.

The ACCC's *Merger Guidelines 2008* recognise that firms compete in many dimensions including price, service, technology and quality. Market power can be exercised by a firm(s) raising the price of its products, lowering the quality of its product without a compensating reduction in price (a reduction in vertical differentiation), reducing the range or variety of its products (reduction in horizontal differentiation), lowering customer service standards and/or changing other relevant non-price parameters. In relation to vertical mergers or conduct, a firm may have the ability and incentive to use its market power in one market to anti-competitively foreclose rivals in another market. The particular anti-competitive foreclosure strategies that a firm might adopt will depend on the circumstances of each case but may include attempts to reduce the quality of important inputs supplied to downstream competitors (or raising the price of such inputs without a commensurate increase in quality) so as to force the rival to use more expensive or inferior quality alternatives, thus reducing its competitiveness in downstream markets.

²⁴ Productivity Commission 2012, *Electricity Network Regulatory Frameworks*, Draft Report, Canberra

The exact nature of competitive detriment caused by an increase in market power will vary depending on the particular circumstances of the matter. Thus, in the ACCC's experience, an assessment of non-price competitive effects must be conducted on a case-by-case basis.

The authorisation provisions of the CCA recognise that competitive markets sometimes fail to achieve the efficiencies that are necessary to maximise welfare, including delivering the quality and variety of products or services that consumers desire. Where this is the case, the ACCC can exempt potentially anti-competitive conduct from the application of some of the competition provisions of the CCA if the conduct is likely to result in a net public benefit.

2.1 *Static versus dynamic efficiencies and competitive effects*

Competition is not an end in itself. Rather, competition between firms to supply goods and services is desirable as it is usually the best way to enhance welfare by promoting economic efficiency. Thus, competition analysis focuses on the competitive effects of a merger or potentially anticompetitive conduct in a market, as reductions in competition may reduce economic efficiency and welfare.

Efficiency has both static and dynamic dimensions. Static efficiencies (allocative and cost) arise if resources are directed to their most efficient use to produce goods and services that consumers want at the lowest possible cost. Dynamic efficiencies relate to the ability and incentives of a firm to introduce new products or processes in a timely manner, or improve existing ones. Dynamic efficiencies are linked to innovation and research and development activity and are realised over the longer term.

Innovation and dynamic efficiencies play a crucial role in overall economic growth and in enhancing the competitiveness of industries. Similarly, technical change and innovation are key requirements for improvements in product quality and variety in particular sectors. However, while it is well recognised that competition is generally the best way to ensure that static efficiencies are promoted, the issue of whether competition promotes innovation and thus dynamic efficiencies can be less clear.

This may create some perceived tensions between competition policy enforcement and the facilitation of collaboration that may promote innovation and technical change, and thus improvements in dynamic efficiency and welfare.

For example, there may be sectors where competition mainly occurs through races to innovate ('creative destruction' or Schumpeterian competition²⁵). In these circumstances, innovation may be promoted if firms have the potential to acquire a monopoly position, at least temporarily, by winning the race and thus having the ability to raise prices during the monopoly period. In these types of market conduct allowing coordination between rivals may promote innovation by facilitating the pooling of complementary skills and assets, and avoiding the duplication of research and development efforts. On the other hand, under certain conditions, incumbent firms with market power will have less incentive to innovate, where those innovations will cannibalise existing profits and induce the obsolescence of existing products.²⁶ However, where these conditions do not hold, monopolists may have greater incentives to invest in research and development.²⁷

²⁵ Schumpeter J (1942), *Capitalism, Socialism and Democracy*.

²⁶ Arrow K J (1962), "Economic Welfare and the Allocation of Resources to Invention" in *The Rate and Direction of Inventive Activity*, National Bureau of Economic Research.

²⁷ For example, where property rights are imperfect a larger market share may facilitate the appropriation of a greater share of the value of innovation; or if a firm's position of market power is vulnerable to entry through other innovating firms they may have more to lose as well as less to gain from innovation.

Of necessity, the ACCC takes a case-by-case approach to considering the effects of potentially anti-competitive conduct on incentives to innovate, including incentives to introduce new products and maintain existing ones. Where the conduct is likely to provide incentives for firms to reduce existing product variety close attention would be paid to whether this represents efficient rationalisation of product variety which offers little value to consumers. If not, the loss of product variety may represent a significant harm to consumers if sufficient consumers have a strong preference for the withdrawn product compared with remaining products. The ACCC's focus in s. 50 merger analysis is the effect of the merger on competition, competitive constraints and the competitiveness of markets, rather than the competitiveness of individual firms. A merger that removes or weakens competitive constraints to the extent that a substantial lessening of competition results, will (unless authorised) contravene s. 50—even if the merger results in a more efficient firm with a lower cost structure.

In circumstances, where it may be necessary to trade-off the loss of short run static efficiencies through a reduction in competition with the potential for longer term benefits of dynamic efficiencies that may enhance total welfare, the authorisation provisions of the CCA provide the necessary flexibility to enable such trade-offs to be made. However, in practice, such trade-offs can be difficult to make. This is because the short-term static detriments of a lessening of competition leading to allocative and cost inefficiencies are immediate and tangible, whereas the benefits of dynamic efficiencies (including improvements in productive processes, and enhanced product variety and/or quality) are only realised over time and can be difficult to substantiate and assign an appropriate weight to.

The ACCC's approach to such trade-offs is demonstrated by its consideration of airline alliances; for example, its recent authorisation of an alliance between Qantas and Emirates (discussed below).

Australia is aware of the debate around the use of so-called 'innovation' markets to assist with the competition analysis of conduct that may have an effect on innovation.²⁸ The ACCC is aware that numerous overseas commentators have raised various practical, legal and theoretical criticisms of the concept.

The ACCC does not routinely seek to define innovation markets. Instead, the ACCC generally considers the effects of conduct in more traditional product and technology markets, including actual and future markets. For example, conduct may weaken or eliminate a significant current or potential competitor that constrains the behaviour of firms already in the market. The weakening of competitive constraints may enable prices to be raised as a result of the conduct. Alternatively, conduct may eliminate a likely future competitor which may have implications for the speed and amount of innovation, including improvements in product quality and variety. Potential future competition was a particular issue in the Foxtel/Austar merger. That merger was approved subject to an undertaking that was intended to ensure potential rival pay TV providers (including those on emerging technology platforms) would have access to the quality programming that is essential to successful entry into Australia's pay TV markets, as discussed in more detail below.

2.2 *Case Studies*

This section provides a number of case studies on how the ACCC approaches enforcement of the CCA in relation to mergers, authorisations and cartels that raise concerns about the effect of proposed conduct on quality and/or innovation in relevant markets.

²⁸ Innovation markets have been defined as “the research and development directed to particular new or improved goods or processes, and the close substitutes for that research and development.” See Department of Justice and Federal Trade Commission (1995), “Antitrust Guidelines for the Licensing of Intellectual Property”, April 6.

2.2.1 Supermarket mergers

Concerns about the effects of mergers on product variety and service quality are always important considerations in retail mergers in local markets. In Australia, these concerns are particularly likely to arise in the grocery sector where there are public concerns about existing high market concentration and the expansion of the two major supermarket chains, Coles and Woolworths.

Two ongoing merger investigations highlight the ACCC's approach to such mergers.

- In relation to Woolworths' proposed acquisition of a supermarket site at Glenmore Ridge, an outer suburb of Sydney, the ACCC expressed a preliminary view in the Statement of Issues²⁹ that the proposed acquisition would be likely to result in a substantial lessening of competition in the local Glenmore Park retail grocery market. Woolworths already has a significant presence in that market and the target site is the only site in Glenmore Park that would be suitable for an alternative supermarket operator to enter the market. The ACCC considers that the proposed acquisition would be likely to have the effect of preventing or hindering competition that may otherwise have been brought to the local market by an alternative supermarket operator. This competition is unlikely to be otherwise introduced into the local market because of the lack of other available suitable sites for supermarket development.
- In relation to Woolworths proposed acquisition of the Hawker Supa IGA, the ACCC expressed a preliminary view in the Statement of Issues³⁰ that the proposed acquisition may result in a substantial lessening of competition in the local retail supermarket market by removing Hawker Supa IGA as an independent rival in the market and replacing it with the standardised offer of Woolworths, which is already available in the local market. The Hawker Supa IGA's differentiated product range and service offering is unique to the local market and represents a competitive response to the offer of rival supermarket chains, providing additional choice to consumers. The ACCC's market inquiries have indicated that the Hawker Supa IGA provides an extensive delicatessen, local and specialty products that are not stocked by the major chains, and brands supplied exclusively by its wholesale supplier, Metcash. Given the market is characterised by high barriers to entry, new entry at a sufficient scale to replace the lost competitive tension is unlikely.

Both reviews are continuing.

Key issues in both of these merger investigations are the identification and measurement of the extent to which the proposed acquisitions will lessen actual or potential competition including in terms of the 'quality' offering in this market - broadly defined as reductions in horizontal and vertical product differentiation, product variety and customer service – and the extent to which any such loss would lessen competition by reducing the responsiveness of local markets to heterogeneous consumer preferences for both products and customer service.

2.2.2 The proposed NAB / AXA Merger

On 19 April 2010, the ACCC announced its decision to oppose the proposed acquisition of AXA Asia Pacific Holdings Limited's Australian and New Zealand businesses (AXA) by National Australia Bank Ltd

²⁹ See Statement of Issues, 20 September 2012, *Woolworths Limited - proposed acquisition of supermarket site at Glenmore Ridge Village Centre* for more details.

³⁰ See Statement of Issues, 6 December 2012, *Woolworths Limited – proposed acquisition of the Hawker Supa IGA* for more details.

(NAB) (**NAB proposed acquisition**). The ACCC canvassed a range of potential competition issues in relation to the NAB proposed acquisition. The ACCC's review of the NAB proposed acquisition focused on the wealth management sector, where both NAB and AXA are competitors. In particular, NAB and AXA competed in the supply of retail investment platforms for investors with complex investment needs. Retail investment platforms provide a central link between investment product providers, financial planners and investors. To access a broad range of wealth management products and services, retail investors rely on the network of financial planners operating across Australia. In turn, financial planners rely heavily upon retail investment platforms to provide services to retail investors. The market for retail investment platforms for investors with complex investment needs is substantial, with many billions of dollars in funds invested through these platforms.

The ACCC's investigation indicated that demand for retail investment platforms is primarily driven by financial planners. In particular, retail platform providers compete to attract financial planners to use their platforms by investing in innovation. Accordingly, the ACCC formed the view that non-price elements driven by platform functionality (including service) were a key driver of competition in attracting new fund inflows.

The ACCC formed the view that AXA was likely to provide vigorous and effective competition to the existing key players as a result of its implementation and development of a next generation full service wrap platform. The ACCC concluded that the NAB proposed acquisition would impact upon vigorous and effective competition from AXA in the following ways:

- removal of expected strong competitive tension between AXA's next generation full service wrap platform and NAB's Navigator platform;
- reduced incentives for other competitors to invest in platform innovation; and
- reduced prospect of price competition.³¹

2.2.3 *The Foxtel/Austar Merger*

On 10 April 2012, the ACCC announced its decision not to oppose the proposed acquisition of pay television provider Austar United Communications Limited (Austar) by rival FOXTEL Management Pty Ltd (FOXTEL), subject to undertakings accepted by the ACCC on 9 April 2012 (the undertakings).

FOXTEL is Australia's largest subscription television provider who at the time of the acquisition delivered audiovisual content to more than 1.6 million residential subscribers in metropolitan Australia. Austar had more than 750,000 subscribers. Austar's coverage area was approximately 2.4 million homes in regional and rural Australia. At the time of the acquisition, FOXTEL was owned by Telstra Corporation Ltd (50%), News Corporation Ltd (25%), and Consolidated Media Holdings Limited (25%). Telstra is the major wholesale and retail supplier of telecommunications services in Australia.

The ACCC considered that while the infrastructure barriers to entry in the subscription television market were previously very high, particularly over traditional networks, they were reducing over time and

³¹ The merger parties subsequently offered a remedy aimed at addressing the ACCC concerns. The ACCC considered the proposed undertakings and consulted extensively with a range of industry participants, including financial planners, dealer groups, investment product providers, and other market participants. The ACCC concluded that the remedy offered by the parties would not provide sufficient certainty that the ACCC's competition concerns would be addressed. Further, the remedy involved complex and long term behavioural obligations that presented risks and uncertainty. The ACCC subsequently decided to reject the proposed undertakings.

would continue to break down in line with technological developments. Instead, the ACCC viewed the most significant barrier to entry in the market for the supply of subscription television to consumers as exclusive rights to attractive audiovisual content controlled by incumbents.

The ACCC considered that without the proposed acquisition, there would have been greater potential for competition between Austar and FOXTEL and Telstra in the subscription television and telecommunications markets. That potential competition could have unfolded in a number of ways. The ACCC considered that the two most likely scenarios were:

- Austar independently entering into telecommunications markets by offering consumers bundles comprising subscription television content and telecommunications services or entering alliances with ISPs to offer such bundles; and/or
- breaking down historical geographic broadcast rights demarcation between FOXTEL and Austar, particularly through the emergence of national content delivery competition using IPTV.

In this context, the ACCC was concerned that the proposed acquisition would have:

- foreclosed potential future competition between FOXTEL and Austar in the supply of subscription television services, particularly by way of IPTV delivery;
- foreclosed potential future competition between Telstra and Austar in the supply of telecommunications services; and
- allowed the merged entity to leverage its substantial customer base in the national market for the retail supply of subscription television services to acquire IPTV rights on an exclusive basis and consequently constrain competitive entry or expansion by other parties.

On 9 April 2012, the ACCC accepted a court enforceable undertaking from FOXTEL to address these concerns. The core element of the undertaking is an obligation on FOXTEL not to acquire certain distribution rights to certain independent content on an exclusive basis. These distribution rights include IPTV and some mobile distribution rights, but exclude most satellite and cable distribution rights. The undertaking also prevents FOXTEL from acquiring those same rights from anyone if an ultimate shareholder, or related entity of an ultimate shareholder, acquires those rights on an exclusive basis.³²

2.2.4 *Adjudication – airline alliances*

Aviation agreements have the potential to deliver efficiencies through economies of scale and scope, improved scheduling, reduction of wingtip to wingtip flying and the reduction or elimination of double marginalisation on complementary services. However, these benefits can often only be achieved through highly restrictive agreements involving revenue sharing and agreements over prices, capacity and scheduling. If there is sufficient remaining competition in a market, these efficiencies are likely to be pro-competitive. However, where competition is limited there is often a difficult trade-off to be made.

The ACCC has authorised a number of airline alliances in recent years and recognised a range of public benefits arising from them, including enhanced products and services for consumers and efficiency improvements. Whether or not public benefits arise in relation to a particular alliance, however, must be determined on a case by case basis. For example, in some previous alliances the ACCC accepted that the

³² As the ACCC's competition concerns primarily related to competition using IPTV technology, FOXTEL will retain the ability to acquire exclusive rights for the distribution of content by cable, satellite and mobile networks to mobile devices (other than 'companion' mobile rights).

additional passenger traffic stimulated by an alliance can lead to the introduction of new frequencies, new direct services and/or new destinations which give rise to public benefits.

In considering public benefits, the ACCC considers the extent to which the benefit has an impact on members of the community and the weight that should be given to it, having regard to its nature, characterisation and the identity of the beneficiaries.

2.2.4.1 *Qantas/Emirates Airline Alliance*

On 7 September 2012, Qantas and Emirates applied for authorisation to coordinate their operations pursuant to a Master Coordination Agreement for an initial period of ten years. On 27 March 2013 the ACCC issued a determination granting conditional authorisation for a period of five years.

Consideration of quality of service issues was an important aspect of the ACCC's consideration of this alliance. The ACCC considered that public benefits would be likely to arise from increased access to a large number of existing frequencies and destinations (under a single airline code) for the significant number of consumers who prefer to fly with Qantas or Emirates and value the increased flexibility associated with the greater number of frequencies; likely improvements in connectivity and better scheduling through increased online connections and synchronising of schedules; and access by Qantas and Emirates customers to each alliance partner's frequent flyer programs and related benefits. These public benefits would accrue for those consumers who value the ability to earn or use frequent flyer points.³³

In attempting to measure the public benefit associated with increased access to existing frequencies and destinations, the ACCC noted that Qantas and Emirates accounted for around 35% of international passenger movements to and from Australia in the year ended August 2012. An unknown number of those passengers are likely to have based their decision to fly with Qantas or Emirates on criteria other than a strong preference for one of these carriers. Notwithstanding this, the ACCC accepted that a significant proportion of the passengers who choose to fly Qantas or Emirates likely do so because they have a preference for them.

2.2.5 *Exclusive dealing*

On 11 June 2008 Co-operative Bulk Handling Limited (CBH) lodged a notification³⁴ with the ACCC. The notification involved the offer to supply grain storage and handling facilities and services on the condition that growers or marketers of grain also acquire supply chain co-ordination services and transport services from CBH.

CBH is a co-operative of growers. Its two main business activities are the supply of grain at its receival sites and the delivery of the grain to ports or for domestic purposes. The second is grain trading and marketing, which is conducted by a subsidiary of CBH, CBH Grain. CBH owns all of the grain terminals in Western Australia.

The ACCC did not issue a notice revoking the immunity at the time of the lodgement of the notification. However, in June 2010 the ACCC commenced a review of the notification and on 29 June 2011 gave its final notice to revoke the statutory protection afforded by the notification.

³³ The ACCC also considered that the alliance would result in public benefits from improved operating efficiencies.

³⁴ A notification provides statutory protection for exclusive dealing conduct that, apart from the notification, may contravene the exclusive dealing provisions of Australia's *Competition and Consumer Act 2010*.

The ACCC found that the arrangement allowed CBH to leverage its substantial market power in up-country grain storage to insulate it from any competition in the supply of grain transport services. As a result, not only were growers denied the opportunity to explore potentially cheaper transport options but farmers and grain traders received a ‘one size fits all’ grain transport service. The ACCC found that the arrangement insulated CBH from competitive pressures to innovate its transport service offering to better suit the needs of individual growers and marketers (e.g. in terms of timeliness and risk sharing options).

In July 2011, CBH filed an application in the Australian Competition Tribunal (the Tribunal) seeking a review of the ACCC’s notice. In May 2013, the Tribunal determined that it should affirm the notice.³⁵

2.2.6 *Cartels*

That quality drives competition is also exemplified by mechanisms used to give effect to market sharing arrangements.

In Australia’s express freight cartel, three of Australia’s transport companies and their senior executives colluded for approximately 20 years to fix prices and share the Australian express freight market.³⁶ Among other things, the participants agreed not to approach each other’s customers. To maintain this arrangement for such an extended period of time, there had to be mechanisms for ensuring customers who switched providers would return to their original provider. One means of doing this was to deliberately lose or damage freight to encourage that customer to return to their original carrier.³⁷

2.3 *Conclusions*

Non-price competition, including in relation to quality, raise important and sometimes complex issues for enforcement of Australia’s competition laws, including in relation to mergers, authorisations and cartel enforcement.

While quality should be a frequent consideration in competition law enforcement, care should be taken not to seek to quantify the intangible as a means of addressing whether increased or decreased competition may impact quality. Where it is possible to clearly demonstrate an increase or reduction in price, but not a tangible increase or reduction in quality, price should usually be preferred as a guide. Equally, this does not imply that econometric price tests based on questionable assumptions or data should supersede high standard, qualitative evidence of the likely consequence of this conduct quality. In every case, evidence of the facts and likely consequences should guide decision making as to assessing the overall competitive consequences of conduct.

³⁵ Application by Co-operative Bulk Handling Limited (No 3) [2013] ACompT 3

³⁶ TNT Australia Pty Limited, Ansett Transport Industries (Operations) Proprietary Limited, Mayne Nickless Limited

³⁷ Justice Burchett described this “... arrangement to maintain a cartel by deliberately providing poor service in order to compel customers to turn or to return to a supplier with whom they might be dissatisfied, must be particularly pernicious.” *Trade Practices Commission v Tnt Australia Pty Limited, Ansett Transport Industries (Operations) Proprietary Limited, Mayne Nickless Limited and Others* [1995] FCA 1046; (1995) Atp 41-3 (31 January 1995) at paragraph 10.

CANADA

1. Introduction

Canada's Competition Bureau (the "Bureau") is pleased to provide this submission to the OECD Competition Committee's June 2013 roundtable on "The Role and Measurement of Quality in Competition Analysis". The Bureau, headed by the Commissioner of Competition (the "Commissioner"),¹ is an independent law enforcement agency responsible for the administration and enforcement of the *Competition Act* (the "Act")² and certain other statutes. In carrying out its mandate, the Bureau strives to ensure that Canadian businesses and consumers have the opportunity to prosper in a competitive and innovative marketplace.

This submission discusses the role of quality considerations in several competition law enforcement areas including merger analysis and abuse of dominance and cartel investigations.³ Admittedly, quality can be a subjective concept; however, for the purposes of this submission, it will be viewed as product attributes that enhance the consumer's utility from consuming a product holding prices and consumer preferences constant.

It may not always be possible to draw clear distinctions between product quality and other dimensions of competition such as product service and innovation. For the discussion that follows, competition in the provision of a service will be considered within a broader notion of competition in the product quality dimension. This submission does not consider competition in innovation, which can loosely be defined as the rate of development of entirely new products and services.

In merger review, an antitrust agency may, among other things, consider product quality issues when determining whether a merger is likely to give rise to competitive effects.⁴ Evaluating the effects of a transaction on product quality may include cases where a merger could affect the variety of products available to consumers when products are differentiated according to different quality tiers.⁵ In cases involving allegations of abuse of dominance, product quality issues may arise when evaluating possible business justifications for the alleged anti-competitive behaviour of a dominant firm. Finally, product

¹ The Commissioner is responsible for the administration and enforcement of the *Competition Act*.

² R.S.C., c. C-34.

³ This submission does not consider product quality as a justification for self-regulated professions imposing restrictions on members. The Bureau has, however, considered the impact of such restrictions on competition generally. For further information, please see: <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02523.html> and <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03407.html>.

⁴ Product quality could also play a role when assessing efficiency claims; however, this will not be explored in this submission.

⁵ In many cases, firms produce many products that are functionally interchangeable but differ in terms of quality (e.g., an automobile manufacturer producing compact, mid-level and luxury cars). If a merger results in the elimination of a particular product or product line, this will affect the overall product quality mix available to consumers.

quality could be an issue within cartel investigations, where, for example, there is an agreement among competitors to reduce the quality of components used in a product. Product quality issues could also arise in the context of the ancillary restraints defence.

2. Merger analysis

To challenge a merger under section 92 of the Act, the Bureau is required to provide evidence before the Competition Tribunal (the “Tribunal”) that the merger or proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially. In doing this, the Bureau has regard to the various factors specified in section 93 of the Act including, but not limited to (i) the extent to which acceptable substitutes are available for the products of the merging firms; (ii) barriers to entry into the market; and (iii) the extent to which effective competition remains.

When investigating the potential competitive effects of a merger, the Bureau does not limit its analysis to an examination of potential price effects. Rather, the Bureau’s *Merger Enforcement Guidelines* (“MEGs”) state that:

*In general, when evaluating the competitive effects of a merger, the Bureau’s primary concerns are price and output. The Bureau also assesses the effects of the merger on other dimensions of competition, such as quality, product choice, service, innovation and advertising—especially in markets in which there is significant non-price competition.*⁶

The OECD⁷ raises the idea of defining a relevant market based on product quality by replacing the customary SSNIP test (small but significant non-transitory increase in price) with a SSNDQ test (small but significant non-transitory decrease in product quality). The implementation of such an approach could present numerous challenges. For example, the components of product quality may be difficult to observe or measure in certain cases; even when a component of product quality is quantifiable, consumers may have varied tastes, and may not agree as to what features of a product constitute better or worse quality; the quality of a product is often measured along multiple dimensions, making it difficult for consumers to rank products whose attributes may contain a mixture of good and bad quality components; and in response to survey or market contact questions, consumers may find it difficult to conceptualize small relative changes in product quality, especially if it requires them to consider a quality level that does not exist in the market.

To date, the Bureau has not defined a relevant market based on a SSNDQ type test. Rather, the Bureau has defined relevant markets in the traditional manner using the standard hypothetical monopolist test based on the concept of a SSNIP above levels that would likely exist in the absence of the merger. The Bureau typically considers a five percent price increase to be significant and a one-year period to be non-transitory.⁸ Importantly, the Bureau recognizes that market definition is not necessarily the initial step, or a required step in merger review. The ultimate inquiry is not about market definition, but rather about whether a merger prevents or lessens competition. Given this, the difficulties of defining a relevant market in terms of quality do not prevent the Bureau from focusing on whether a merger is likely to create competitive effects, in either a price or a non-price dimension.

Canadian case law does not require anti-competitive effects, whether price or non-price, to be quantified in order to be considered when assessing competitive harm from a merger. However, the Federal Court of Appeal has expressed a preference for quantification ‘whenever it is reasonably possible to do so’

⁶ *Merger Enforcement Guidelines*, Competition Bureau (2011), para. 2.2, page 6.

⁷ April 4, 2013, letter from the Chairman of the Competition Committee.

⁸ *Merger Enforcement Guidelines*, *supra* note 6 at para. 4.3, page 11.

and that ‘any weight given to the remaining unquantifiable qualitative effects must be reasonable, *i.e.*, it must be supported by the evidence’.⁹ The focus, therefore, is an objective, evidence-based analysis.

In that regard, when reviewing a transaction to determine whether it could create a competition issue with respect to product quality, the Bureau generally considers the following:

1. The views of customers, competitors and other third parties gathered from market interviews; and
2. Documents from the merging firms that indicate the important dimensions of competition and the importance of product quality to customers.

If this initial step indicates that product quality plays an important role in the competitive process, then additional analysis could be undertaken to assess and, if reasonably possible, quantify the potential competitive harm from the merger arising along the quality dimension. Such analysis may involve examining the nature of the products that comprise the relevant product market to determine whether there is a substantial amount of variation among the products in terms of attributes, customer perceptions or characteristics. If products are relatively homogeneous in terms of quality, an investigation may focus on determining whether a merger is likely to result in a general reduction in the quality of the products of the merging firms.¹⁰ If there are a variety of products with each being a perceived distinct quality level and produced by a separate firm, analysis could be undertaken to determine whether the merger would result in either a product being discontinued or whether the merger results in products becoming more homogeneous, such that the overall level of quality available to consumers is reduced. To date, the Bureau has not blocked a merger on quality considerations alone.

2.1 Products of similar quality

To be able to assess a merger’s potential effects on product quality, there is a need to first identify the key components that define product quality for the products comprising the relevant market and the metrics that could be used to evaluate the components of product quality. Once these have been identified, a search for evidence could be undertaken to determine whether the quality of any market participant’s product has changed over time. If product quality has been observed to change over an appreciable period of time due to changing market conditions (such as the entry/exit of competitors), this would indicate that quality change is possible and may be a competitive element that could change as a result of the merger. If not, then quality effects may be less susceptible to quantification.¹¹

To determine whether it would be practical or feasible for the merged entity to change one or more components of product quality post-merger, a merger examination may explore questions such as the following:

⁹ *Tervita Corp. v. Canada (Commissioner of Competition)* [2013], F.C.J. No. 557 at para. 148.

¹⁰ It may be the case involving a merger in an industry with homogeneous products that the competitive concern is that the merger will prevent or slow the rate of development of new products. Such a case, however, should be examined using an approach suited to assess a merger’s effect on the rate of innovation.

¹¹ If the products comprising the relevant market have shown a gradual increase in quality over time and if the newer products tend to displace older more obsolete versions, then the changes in quality reflect an ongoing process of innovation. In this type of scenario, the primary non-price concern with the merger may be that it would reduce the rate of innovation.

- a. What are the likely costs of changing one or more components of quality?

If quality is costly to change relative to the ultimate cost savings that could be realized, change is less likely (*e.g.*, a shift to cheaper, lower quality inputs could involve retooling/retraining costs).

- b. Prior to purchase, how easily can the consumer discern product quality?

If quality cannot be easily observed, the merged entity may have an incentive to reduce quality knowing that consumers may not detect the change and substitute with alternative products.

- c. How frequently is the product purchased?

If it is purchased infrequently, a firm may be better able to decrease quality, particularly if product quality is also difficult to discern prior to purchase.

- d. Is the product an input that is used to produce a final product?

If the demand for the input product is derived from the demand of another downstream product, then this may give less scope for a firm to reduce product quality. That is, a certain level of quality of the input product may be necessary in order for the final downstream product to meet particular quality standards or a level of acceptability.

If it is determined that it is practical and feasible for quality to be changed, a further assessment could be undertaken to determine if the merger is likely to reduce product quality and create a substantial lessening or prevention of competition.¹² When price and product quality can both be changed through the exercise of market power, this requires information as to how consumers' valuations for quality vary with their willingness to pay. That is, it would be necessary to determine whether consumers with higher willingness to pay for the good (holding product attributes constant) value quality more or less than consumers with lower willingness to pay. If consumers with high willingness to pay value quality more than other consumers, a firm that has acquired market power and raises price would also have an incentive to increase product quality. In general, the results of empirical studies or simulations may be useful in order to predict how a merger would affect prices when the underlying quality components of products can and do change but can be quantified in a meaningful way. Therefore, when undertaking a merger review it may be worthwhile to consider doing the following:

- a. Determine whether any empirical studies exist involving the products and industry in question that examine how changes in concentration affect prices that reflect product quality differences and, if not available, determine whether such studies are possible given data availability and market conditions.
- b. In cases where the market has a history of changes in concentration, review a firm's historical strategic documents after such changes in regard to product quality metrics were made and evaluate the reason for such changes.
- c. In cases where the market has a history of changes in concentration, review relevant trade journals, consumers' views and other third party assessments of how product quality may have changed.

¹² Economic theory suggests that not all profit-maximizing firms have an incentive to change quality, and those that do may even have an incentive to increase quality with an increase in market power.

2.2 *Products of varying levels of quality*

When considering the possibility that a merged entity may adversely change product quality post-merger, the possibility that the entity may discontinue or change one or several of the products in the relevant market may also be considered. If the merging firms each produce a product of differing quality pre-merger, the acquisition of market power could provide the merged entity with the incentive to stop producing one of the products of the merging firms or make the products less differentiated. In this way, the average quality of products available to consumers post-merger could be reduced. To determine whether a merger would result in a reduction in product quality through a loss of product variety, an analysis posing the same questions and seeking the same information as described above could also be relevant. In addition, economic models of vertical product differentiation (*i.e.*, oligopoly models where competing products are of different qualities) could also be useful tools in this context to predict whether firms would have the incentive to discontinue products and, if so, to determine the effects in terms of prices and quality levels of the products that would continue to be supplied.

3. **Quality improvements as a justification for vertical restraints**

When dominant firms impose vertical restraints, their conduct may be reviewed under the abuse of dominance provision of the Act (section 79).¹³ This provision requires the Bureau to prove three elements: (i) that the firm engaging in the conduct is dominant in the sense that it has market power in one or more relevant markets; (ii) that the firm is, or has, engaged in a practice of anti-competitive acts; and (iii) that the conduct has resulted, is resulting, or will result in a substantial lessening or prevention of competition.

Similar to its MEGs, the Bureau's *Enforcement Guidelines on the Abuse of Dominance Provisions* take a broad view of the term "price":

Unless otherwise indicated, the term "price" in these Guidelines refers to all aspects of firms' actions that affect the interest of buyers. References to an increase in price encompass an increase in the nominal price, but may also refer to a reduction in product quality, choice, service, innovation or other dimension of competition that buyers value.¹⁴

The test of whether the conduct has substantially lessened or prevented competition under section 79 is substantively the same as the competitive effects test used in the context of merger review. In both circumstances, evidence of price and non-price effects are relevant when assessing whether a firm has preserved or enhanced its market power.

The Act's abuse of dominance provision provides for business justifications to be considered when determining whether a firm engaged in a practice of anti-competitive acts. As stated by the Federal Court of Appeal, possible business justifications are relevant for identifying the overall purpose of the firm's conduct:

...a valid business justification can, in appropriate circumstances, overcome the deemed intention arising from the actual or foreseeable negative effects of the conduct on competitors, by demonstrating that such anti-competitive effects are not in fact the overriding purpose of the

¹³ There are also specific provisions in the Act concerning particular restraints including refusal to deal (section 75), price maintenance (section 76), and exclusive dealing, tied selling and market restriction (section 77). These provisions have elements similar to section 79. In particular, they require evidence that the conduct has harmed competition.

¹⁴ *Enforcement Guidelines on the Abuse of Dominance Provisions*, Competition Bureau (2012), page 1, footnote 5.

conduct in question. In this way, a valid business justification essentially provides an alternative explanation as to why the impugned act was performed, which in the right circumstances might be sufficient to counterbalance the evidence of negative effects on competitors or subjective intent in this vein.

The valid business justification doctrine is not an absolute defence ... Rather, a business justification is properly employed to counterbalance or neutralize other evidence of an anti-competitive purpose...

A valid business justification must provide a credible efficiency or pro-competitive explanation, unrelated to an anti-competitive purpose, for why the dominant firm engaged in the conduct alleged to be anti-competitive. The business justification must therefore be attributable to the respondent, for it is the latter's allegedly anti-competitive conduct which is sought to be explained.¹⁵

The Bureau considers a valid business justification as an action undertaken by a firm that goes beyond its mere self-interest (e.g., raising price, reducing output or maintaining dominance), such actions that lower costs or improve the firm's product offerings.¹⁶

Below are a couple examples of cases relating to quality issues.

3.1 Canada (Director of investigation and research) v. Nutrasweet Co.¹⁷

On June 1, 1989, the Bureau filed an application with the Tribunal against the NutraSweet Company ("NSC") alleging that many of NSC's provisions in its contracts with customers excluded rivals; thereby, substantially lessening and preventing competition. One of the contract terms at issue included a trademark display allowance or logo display allowance, which provided a substantial discount from the gross price of aspartame to the customer if the customer displayed the NutraSweet name and logo on its packaging and in print and television advertising featuring the product containing NutraSweet brand aspartame. The allowance was fixed at a certain amount per pound calculated on the total number of pounds of aspartame the customer purchased and not on the number of uses made of the trademark. NSC dictated what had to appear on the packaging (the "NutraSweet/NutraSuc" brand name and NSC's swirl logo) and in what colours and sizes.

Witnesses for NSC stated that the purpose of promoting NutraSweet brand aspartame was to dispel consumers' concerns regarding the safety of aspartame. At the time, consumers were expected to have concerns given the adverse publicity associated with high-intensity sweeteners, such as cyclamates and saccharin. Surveys conducted on behalf of NSC had indicated that at least some customers believed that the presence of NutraSweet brand aspartame in products was a positive thing.

¹⁵ *Canada (Commissioner of Competition) v. Canada Pipe Co.* (2006), 49 CPR (4th) 286 at paras. 87, 88 and 90 (FCA).

¹⁶ Subsection 76(9) of the Act specifies that no order may be made against a firm who refuses to supply or otherwise discriminates against any person engaged in business in Canada because of the low pricing policy of that other person where the person engages in certain types of conduct, such as selling the product as a loss leader or misleading advertising. Such conduct could be viewed as negatively impacting the perceived quality of the product, with the result that subsection 76(9) of the Act could be viewed as providing a general product quality justification for the selling firm's conduct.

¹⁷ (1990) 32 CPR (3d) 1 (Comp. Trib.).

The Tribunal found that the fact that some customers reacted positively to the NutraSweet brand is an outcome for which any company engaging in extensive promotion of its product hopes to achieve and did not affect the Tribunal's conclusion that the overall purpose of NSC's contractual terms was to pursue exclusivity.

3.2 *Canada (Commissioner of Competition) v. Canada Pipe Co.*¹⁸

On October 31, 2002, the Bureau filed an application with the Tribunal against Canada Pipe Company Ltd./Tuyauteries Canada Ltee ("Canada Pipe") alleging that the respondent's Stocking Distributor Program ("SDP") foreclosed potential competitors and existing rivals. The SDP provided rebates to customers depending on the share of their requirements of cast iron pipe, fittings and couplings that they purchased from Canada Pipe. The respondent argued that the program was needed to enhance its reputation to customers as an important and reliable supplier that would be able to fill any order for cast iron pipe and fittings. To do this, Canada Pipe argued that the SDP facilitated high volumes of high margin products that allowed it to maintain production of less frequently sold items, such as pipe and fittings of unusual sizes but nevertheless used as essential components in any building. Witnesses testified that Canada Pipe was, in fact, an important and reliable supplier that could fill any order for cast iron pipe and fittings.

The Tribunal accepted Canada Pipe's argument as valid, recognizing that there were advantages for customers in having a reliable source able to manufacture and supply a full line of cast iron pipe products for the Canadian market. However, the Federal Court of Appeal rejected the Tribunal's approach on the basis that Canada Pipe did not provide a credible efficiency or pro-competitive explanation attributable to itself, unrelated to an anti-competitive purpose, for the SDP.

4. Cartels and the ancillary restraints defence

Section 45 of the Act is a criminal provision that treats agreements among competitors that are so likely to harm competition and to have no pro-competitive benefits as *per se* offences that do not require a detailed inquiry into their actual competitive effects.¹⁹ In particular, subsection 45(1) of the Act proscribes agreements among competitors to:

- a. fix, maintain, increase or control the price for the supply of a product;
- b. allocate sales, territories, customers or markets for the production or supply of a product; and
- c. fix, maintain, control, prevent, lessen or eliminate the production or supply of a product.

The third category of agreements described above captures all forms of output restriction, including those intended to reduce product quality. On this point, the *Competitor Collaboration Guidelines*, which set out the Bureau's enforcement policies with respect to collaboration between competitors, state as follows:

Paragraph 45(1)(c) of the Act ... prohibits all forms of output restriction agreements between competitors, including agreements between competitors to limit the quantity or quality of products supplied, reduce the quantity or quality of products supplied to specific customers or groups of customers, limit increases in the quantity of products supplied by a set amount or discontinue supplying products to specific customers or groups of customers... Accordingly,

¹⁸ (2005), 40 CPR (4th) 453 (Comp. Trib.)_rev'd (2006), 49 CPR (4th) 286 (FCA).

¹⁹ Section 45 of the Act was amended on March 12, 2010 and, to date, there has been no judicial interpretation of the new provision.

agreements between competitors to impose production quotas, permanently or temporarily close manufacturing facilities, reduce the quality of components used in a product, or other agreements to reduce the quantity or quality of products that are produced can violate paragraph 45(1)(c).²⁰

Section 45 includes a provision that provides a defence for ancillary restraints. An ancillary restraint is an agreement or term of an agreement that contravenes the prohibitions in subsection 45(1) of the Act, but which is directly related to, and reasonably necessary for giving effect to, a broader and lawful agreement. It is possible that firms that enter an agreement to reduce product quality could claim that the agreement is an ancillary restraint which is reasonably necessary to support a broader or separate agreement, or that an agreement to fix prices is reasonably necessary to support a broader agreement to enhance product quality. However, because of the likely serious competitive harm caused from cartels, the Bureau would review such claims carefully. The onus would be on the parties to the agreement to establish on a balance of probabilities that the challenged restraint is ancillary to a broader or separate agreement, and that the restraint is directly related to, and reasonably necessary for giving effect to, the objective of the broader or separate agreement.²¹ To date, there is no jurisprudence regarding an agreement to change product quality either as an ancillary agreement or otherwise.²²

5. Conclusion

This submission has provided an overview of Canada's competition law framework for addressing quality considerations in merger review, when evaluating legitimate business justifications for dominant firm conduct, and when considering possible cartel conduct. In the Bureau's experience, the Act provides the Bureau with the tools to examine the issue of product quality, and other non-price dimensions of competition, in the same manner that it does for the examination of traditional pricing issues. Although not many of the Bureau's past enforcement matters have raised issues with respect to product quality, the Bureau will not hesitate to use its enforcement tools under the Act, where appropriate, to preserve and enhance competition along this important dimension.

²⁰ *Competitor Collaboration Guidelines*, Competition Bureau, 2009, page 12.

²¹ In the event that the ancillary restraints defence is applicable, the restraint could nevertheless be subject to review under civil provisions of the Act.

²² There is also no jurisprudence regarding an agreement to change product quality under the former section 45 of the Act.

CHILE

1. Introductory remarks

1.1. *Towards a conceptual framework*

Although economic theory traditionally has explained allocative efficiency problems in terms of price effects, it also acknowledges that businesses may compete on variables other than price. The traditional approach does not mean that competition on other variables is less relevant for competition analysis.

Reducing the analysis to the price variable is a way of making the presentation and understanding of economic models simpler. In most cases, the conclusions may be extrapolated to other variables.

For instance, oligopoly models usually assume that firms maximize profits by taking into account that demand is inversely dependent on prices. However, it is perfectly possible to conceive, in a competition model, situations in which product demand is a function of quality,¹ besides price. These quality attributes will be associated with specific production costs, which are chosen by the firms. Maximization of benefits by the firm could then be achieved through the selection of product quality and price.²⁻³

Thus, the economic analysis of cartel, dominance and merger cases -which usually considers product prices, and price increases- in most instances could be extrapolated to the effects on quality beyond prices.

1.2 *Markets in which products' quality is a relevant competitive variable*

In many markets, product quality can have significant effects on demand and on consumer welfare.⁴ Indeed, in many cases, a firm's "product" is the very experience provided to customers. This is particularly

¹ Unless specified, 'quality' is understood here as those products' attributes valuable for consumers and that cannot be subsumed under price, commonly appreciated under a static framework.

² The aforementioned could be expressed as follows. In a typical oligopoly model, a firm's profits are expressed as: $(p-c) \cdot Q(p)$, where "p" is the product price, "c" are variable costs and "Q(p)" is product demand. In the context of price and quality competition, the profit function just expressed could be transformed to the following: $(p-x-c) \cdot Q(p,x)$, where "x" is a cost related with product quality.

³ Notwithstanding the aforementioned, it is worth pointing out that demand reaction is not necessarily the same when facing different competitive attributes, thus it is not clear whether facing a given reduction in quality-associated-production-costs would be equivalent to a price increase in the same magnitude. Either way, consumer welfare effects from either quality impoverishment or price raise would reduce the number of transactions relatively to a competitive scenario.

⁴ See Chamberlin, Edward H. (1933). *The Theory of Monopolistic Competition*. Cambridge Mass: Harvard Univ. Press; Robinson, Joan (1933) *The economics of imperfect competition*. London: Mc Millan and Company.

the case with service firms (restaurants, banks, cinemas, telecommunications, healthcare providers, airlines, etc.)⁵ and with retail firms, where the service is the distribution of goods.⁶

Similarly, quality turns out to be a relevant competitive attribute in markets with differentiated product, where the brand is an important asset for companies. In most of these cases, part of the competitive intensity is expressed in ‘vertical differentiation’ (*i.e.*, offering different levels of quality at different prices).

1.3 *Role of quality in competition analysis*

Taking as an example, in market definition, the traditional hypothetical monopolist test could in principle be applied similarly if the crucial variable was quality, mildly altering the test: could a hypothetical monopolist reduce quality-associated-production-costs by 5-10% in a profitable and non-transitory way?

Likewise, the approach of the direct competitor in assessing market effects, particularly the use of the *upward pricing pressure* (UPP) test could also be implemented if diversion ratios that result from marginal changes in product quality could be estimated. Similarly, in conduct cases, lessening of products’ quality could be a basis for a theory of competitive harm.

The FNE’s internal guideline on horizontal merger analysis follows the insights above when stating that “[i]t is possible for the merged entity ... either alternatively or together, to increase prices, to reduce output, **quality** or variety of products, or to alter some other competitive variable...” This statement is complemented in a footnote, which expressing that “[i]n what follows, when the expression ‘capacity to raise prices’ is used, the capacity to alter any of the competitive variables mentioned must be considered included”.⁷

2. **Relevant cases**

Competition authorities in Chile have some experience with markets in which product quality is a relevant competitive variable that factors in the substantive analysis, including health care services, advertisement agencies, telecommunications and media, and aftermarket or follow-on services. Some of these considerations have been raised in enforcement cases, and others in market studies. However, with the exception of a merger case in the cinemas industry (discussed below), in which the FNE was able to quantify merger effects on service quality, most references to quality in substantive analysis of competition cases are incidental.

2.1 *Cinemundo/CineHoyts merger case*

In 2011, Chilefilms, a holding company that owned the Cinemundo cinema chain, which was the third largest actor in the national markets (with a 17% market share), took over CineHoyts, the nation’s second largest chain (with a 30% market share). The combined Cinemundo/CineHoyts became the market leader with a 47% share, surpassing the former leader, Cinemark, which had a 38% market share. A third national

⁵ See Douglas, Georges and Miller, James (1974). Quality Competition, Industry Equilibrium, and Efficiency in the Price-Constrained Airline Market. *The American Economic Review*, Vol. 64, No. 4 (Sep., 1974), pp. 657-669.

⁶ See Ellickson, Paul B (2006). “Quality Competition in Retailing: A Structural Analysis,” *International Journal of Industrial Organization*, 24(3): 521-40.

⁷ The FNE’s merger guideline is available here: <http://www.fne.gob.cl/english/wp-content/uploads/2013/01/Guia-fusiones-traducida-final-2.pdf>, p. 7

chain, Movieland, had a 9% market share, while the remaining 6% is comprised of small independent chains, none of which holds over 1.5% market share.

The FNE learned about the Cinemundo/CineHoyts transaction after its consummation. Since competition among different cinemas is local, the FNE analyzed the transaction's risks to competition in each of the geographic markets in which Cinemundo and CineHoyts cinemas were overlapping, with a focus primarily on unilateral effects. The economic assessment involved several econometric tests aimed at evaluating the transaction's effects on prices and quality. Quantitative analysis showed that the most significant unilateral effect involved harms to service quality, a conclusion that was consistent with the qualitative data collected in the investigation.⁸

In order to assess impact on quality, the FNE focused its inquiry on operational costs, assuming that at least some of these are strongly linked to the cinemas' efforts aimed at providing better service. During the investigation, industry executives had identified the following as some of the differentiating factors of cinemas chains: duration of waiting periods in queues for buying an entry ticket or concessions stands; theater cleanliness; availability of air conditioning; sound and image quality; screen size; and availability of additional services, among others.

On the basis of the aforementioned, the FNE used the level of expenses in human resources in each cinema complex on the grounds that this cost was (i) comparable among cinemas chains, (ii) directly linked to the quality of customer services, (iii) a highly variable cost, as showed by the data, (iv) consistently identified by industry executives in the interviews as a competitive variable.

The main identification strategy used for the estimation of the regressions was comparing the competitive variables (ticket prices and actual expenses in costs) with the distance to the nearest competitor. Since, in three geographic areas, the transaction resulted in the suppression of the nearest competitor, the distance to the nearest competitor increased, thus allowing the merging firm to augment ticket prices and/or reduce expenses in costs.

The definition of geographic relevant market was not crucial for performing the analysis, since a direct analysis on the basis of the distance to the nearest competitor and the impact of the change in this distance on the concerning competitive variables could be performed.

The second identification strategy was a natural experiment, examining the effects of a past structural change in a local area. In December 2008, a cinema complex Cinemundo entered into the Estación Central neighborhood in Santiago, locating its facilities 300 meters from the incumbent, CineHoyts. This event provided information on the intensity of competition from Cinemundo for CineHoyts. A 'difference in differences' method was followed⁹, using as a control variable the others cinema complexes of the sample. A virtue of this approach was that it allowed assessing the intensity of competition on a market specifically affected by the transaction, and not just the average effect expected by a distance to the nearest rival increase, as in the first approach. Time dummy variables and fixed effects were also used in this approach.

⁸ In using quantitative analysis, the FNE aimed at supporting its effect-based approach in merger analysis, and followed best practices that had been discussed in the context of the OECD and ICN conferences and workshops.

⁹ This method is a technique used for quantifying impacts of a given policy or event taking place at some point in time. By and large, the technique compares the change on a defined variable of interest, before and after the policy or event under analysis, for two samplers: a group on which a 'treatment' is applied and a control group without that 'treatment'. The aim of the analysis is to identify the differences in changes between the treated group vs. the control group.

The outcomes of the regressions, regarding the price variable, consistently showed that ticket prices were affected by competition. However, the magnitude of the intensity of competition on prices was quite low. In what follows, the analysis regarding the quality variable is detailed.

2.1.1 Quality competition

The basic model for assessing effects on quality used as a dependent variable the actual expenses in salaries in each cinema complex (in the natural logarithm), and as explanatory variables, the distance to the nearest rival in kilometers. The model is also controlled by the number of people attending each complex (in the natural logarithm)¹⁰ and fixed effects are included for each complex (aimed at controlling by the features specific to the complexes during the entire period), as well as time effects (in order to isolate all the variables affecting all the complexes at the same time).¹¹

In column 2, the variable of interest used in the econometric analysis is the distance to the nearest complex divided by its number of screens. Thus, this variable considers as a significant competitive pressure not only the distance to the nearest rival but the number of theaters in the nearest complex as well.¹²

The next chart shows the estimated parameter of interest with each of the above described models. In the interest of length, parameters associated with attendance, fixed effects, and transitory effects are not showed. In all the specifications below, robust standard errors are used.

Effect of distance to rivals over the expenses in salaries

	Variable of Interest	
	(1) Distance to the nearest rival	(2) Distance/screens
Coefficient	-0.0172***	-0.0529**
Standard Deviation	-0.00443	-0.0214
Obs.	1.079	1.079
R ²	0.918	0.918

(*) Robust Standard Errors, in parenthesis *** p<0.01, ** p<0.05, * p<0.1

(**) Data of the companies, monthly frequency, from January 2005 to March 2012

¹⁰ In order to solve a potential endogeneity problem (*i.e.* a rise in the wages of the workers should produce a rise in the attendance to the cinemas, but an increase of the cinema attendance could produce a rise in the expenses in wages), the method of instrumental variables was used. The attendance variable, delayed in 12 months, was considered a good instrument because it had a high correlation with the dependent variable and it was not related with the error term.

¹¹ In order to check robustness of results we tried alternative mechanisms for measuring monthly attendance which are not presented in this document, but are available under request. The results of these alternative specifications were consistent with original results presented in this document.

¹² A rise in the wages of the workers should produce a rise in the attendance to the cinemas, but an increase of the cinema attendance could produce a rise in the expenses in wages. Therefore, there is an endogeneity problem because of the reverse causality.

As shown in the chart above, regressions indicate that for each additional kilometer of distance to the nearest competitor, expenditures on salaries declines on average between 1.6-1.8%, these parameters are statistical significant at 99% of statistical confidence in all the specifications performed. Coefficients shown in column 2 are statistically significant on at least 95% of statistical confidence and of the expected sign.

In order to predict the effect of the transaction on salary expenses and with the aim of providing a range of magnitude regarding the reduction on this expense a simulation was performed. Using as a basis all the parameters that were statistically significant with 99% confidence, each variable associated with these parameters was evaluated, in the number of average monthly attendants in 2011 for each complex where the elimination of the nearest competitor takes place due to the transaction.

Effect of distance to competitors on salary expenses

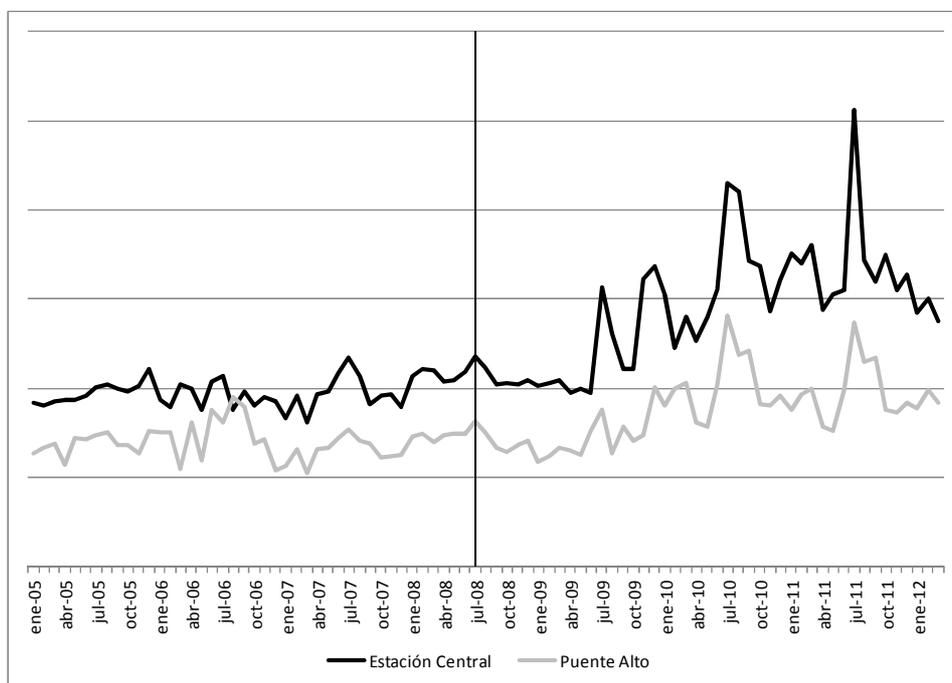
Complex	Monthly average of attendants 2011 (thousands of people)	Δ (kms.) distance after the transaction	Estimation on Δ of expenses on salaries (service quality) (%) after the transaction
Cinemundo Plaza Alameda	23,3	6,8	-11%
Cine Hoyts Paseo Estación	56,6	6,9	-11%
Cine Hoyts La Reina	139	2,6	-7%

In the cases of Cinemundo Plaza Alameda and CineHoyts Estación Central, it was illustrative to review the consistency between the analysis described above and the assessment of the effects of the 2008 entry of Cinemundo in Estación Central. The ‘difference in differences’ method was used with fixed and time effects. The basic model used as a dependent variable used in the econometric analysis is the current expense on salaries in each complex (the natural logarithm) and as an explanatory variable, in order to identify the effect of Cinemundo’s entry, the dummy variable “Plaza Alameda”, which takes a value 1 for Hoyts Estación Central complex, in the period after the entry of its rival in mall center Plaza Alameda.

All the coefficients associated with variable ‘Plaza Alameda’ are statistically significant with 95% statistical confidence. The observed effect of the entry was an increase in expenditures on salaries between 13% and 22%.

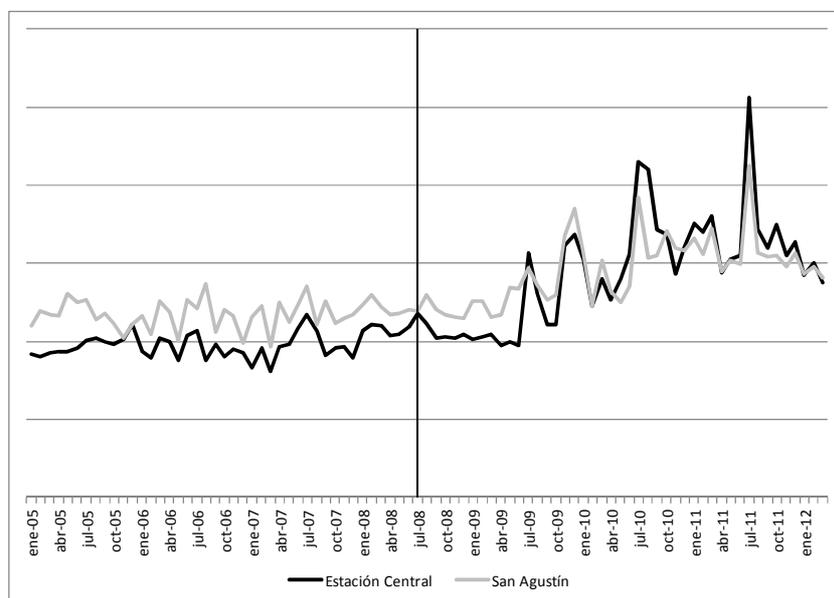
It is informative to graphically illustrate the effect of Cinemundo’s entry into Plaza Alameda on (Estación Central) CineHoyts’ operational costs, excluding film rental, concession stands, location rental, advertising, and costs of commercial activities independent of film exhibition. The behavior of this complex is compared with other CineHoyts complexes (San Agustín and Puente Alto), which operation costs, excluding those costs not linked with the service quality, are equivalent and comparable. The increase in CineHoyts Estación Central’s operational costs over the comparable costs, according to this complex’s CEO, was explained as a business strategy aimed at increasing service quality and thus attracting higher audience.

Actual operational costs, excluding costs not associated with service quality in CineHoyts Estación Central and Puente Alto complexes



Source: Company

Actual operational costs, excluding costs not associated with service quality in CineHoyts Estación Central and San Agustín complexes



Source: Company

As shown in both cases, Cinemundo's entry produced an increase in expenditures associated with service quality in Hoyts Estación Central, higher than those identified in comparable complexes, a conclusion consistent with the econometric analysis and the statement of Hoyts' CEO.

2.1.2 *Conclusions on the merger case*

The analyses performed showed consistently strong effects on the service quality, a conclusion also consistent with the qualitative information collected during the investigation.

This experience of measuring quality as a competitive variable was interesting mainly, i) due to the certainty on which costs were quality related: this association provided an excellent proxy for measuring quality; and ii) due to the use of a direct competitor approach we were freed of accurately determining the geographic relevant market.

By the end of June 2012, the FNE submitted a complaint before the TDLC requesting, as a remedy, divestitures of three cinema complexes where risks on competition were identified. This was the first time that the FNE challenged an already consummated merger that had not been ex – ante reviewed by the competition authorities.¹³ The case was settled and the settlement approved by the TDLC in January 2013.¹⁴ Under the settlement, the merged entity committed to divest two cinemas complexes in locations where the FNE found the most significant unilateral risks.

2.2 *Market study on private healthcare suppliers*

In 2012, the FNE outsourced to Universidad Católica de Valparaíso the performance of a market study in the private healthcare industry. Based on the OECD documents on ‘Competition in Hospital Services’ (2012) and the empirical and theoretical research made on the subject, the study was aimed at introducing competition among private hospitals and private health insurers, as a means to increase quality and reduce prices in the provision of health services.

In order to promote competition, the study proposed several measures that might help consumers or doctors in making informed decisions in the purchase of healthcare. The creation of public quality indicators could increase consumer tendency to shop-around, which would increase competition among hospitals. Competitive pressure, on the other hand, may encourage hospitals to produce better information on quality aspects, and make it available to doctors, regulators and consumers alike.

The study also warned about the particularities of healthcare due to its ‘credence good’ nature, which means that consumers are usually unable to measure their need for healthcare (quantity) and the quality of the healthcare they are receiving, even after the performance of the specific procedure they purchased. Neither previous research nor frequent purchases increase consumer information in a significant amount: in sum, consumers are generally unable to take good healthcare decisions on their own. Those decisions are normally taken with the assistance of a professional doctor or motivated by the insurance company through the use of discounts. Both doctors and insurance companies have the capacity to evaluate hospital quality, and therefore play a crucial agency role on behalf of the patient.

According to the market study, one of the main features of the Chilean healthcare market is the ubiquity of vertical integration among private hospitals and insurers. This may be specially problematic considering the agency role insurance companies are expected to play due to the scarce number of general practitioners in Chile (general practitioners usually play the role of main gate-keepers in other health systems). Vertical integration is normally defended on grounds of its suitability as a tool to control ‘moral hazard’ problems. This would lower the insurance companies’ costs and, therefore, consumer prices, but

¹³ In Chile pre-merger notification is not mandatory, however, the FNE may initiate ex–officio investigations against prospective or closed transactions, if risks or actual or potential harm to competition are at stake.

¹⁴ Records of this case are available, here: <http://www.tdlc.cl/Portal.Base/Web/VerContenido.aspx?ID=3963&GUID=>

may nevertheless affect consumers who are being channeled to the companies' own facilities, instead of being directed to the most cost-effective hospital (*i.e.*, the hospital with the best quality, measured in relation to the price the consumer is paying). Moreover, the constant flow of patients the insurance company may guarantee to the private hospitals may soften competitive rivalry in this market, since hospitals won't have to bid against each other in order to obtain clients reducing, therefore, the incentives to reveal quality information and invest in quality improvement.

The study is not conclusive about the final effects on vertical integration, warning that further study and empirical work must be done before the FNE can reach a final judgment about this issue. Nevertheless, some tension between lower prices and quality competition has been *prima facie* detected. The study suggests other possible means of reducing costs in private healthcare that may be less restrictive of quality competition. The creation of diagnose related groups and pay-for-performance standards may produce better results. Notwithstanding, all these instruments have risks that must be considered and controlled before any general reform is pursued.

2.3 *Other incidental references to quality as a competitive variable*

In a bid rigging case in the advertisement agencies market which the FNE brought before the Competition Tribunal, part of the discussion was whether a reduction in the number of bidders increased or decreased the quality of the offers. The FNE argued that the defendants conspired to reduce the number of participants in private bidding processes thus affecting the expected outcome of the contest and artificially reducing competition among them. The FNE also argued that the organizer of the contest —instead of bidders— is the most suited to weigh expected quality of the different submitted offers. In turn, the defendants argued that a reduction in the number of bidders would improve the quality of the offers since the probability of winning the contract would increase. The Competition Tribunal did not decide on the quality argument but sanctioned the defendants for collective boycott.¹⁵

In a merger case in media markets, the FNE claimed that risks associated with the lack of information diversity and pluralism had an impact on another relevant competitive variable: service quality and variety. The TDLC, however, concluded that a 2009 legal amendment had eliminated from the functions of competition authorities any direct judgment regarding information pluralism and diversity. Nevertheless, the TDLC also noted that these values may be protected or promoted indirectly by means of defending or promoting economic competition in media industries.¹⁶

In a dominance case in VoIP telephony¹⁷ a plaintiff claiming exclusionary effects argued with respect to the quality of services in the following terms: *'in VoIP communications, customers chose to pay a much lower price than the one they would currently pay according to fixed landline communications, and are willing to tolerate a service quality relatively inferior to landline communications. But since this quality will improve in the next years, customers will tend to favor VoIP communications'*.¹⁸ The TDLC used the quality parameter, among others, to support its holding that providing VoIP services did not require a

¹⁵ Records of this case are available in the link below, including TDLC's ruling. An appeal before the Supreme Court is still pending. <http://www.tdlc.cl/Portal.Base/Web/VerContenido.aspx?ID=1759>

¹⁶ TDLC's decision on this merger case known as Radiodifusión SPA/Horizonte, is available here: <http://www.tdlc.cl/Portal.Base/Web/VerContenido.aspx?ID=3894&GUID=>

¹⁷ Telephony services through voice over internet protocol

¹⁸ Free translation from the original in Spanish.

concession. Indeed, incumbents, such as the defendant, had a regulated quality standard to comply with while, regarding VoIP services, *'service quality is not guaranteed'*.¹⁹

Finally, we briefly refer to considerations regarding services quality in aftermarket cases. It is worth mentioning that a specific quality standard is usually used by product suppliers as an efficiency which justifies limiting the available alternatives regarding services associated with the sold product, such as follow-on repair and maintenance services. Commonly restrained through exclusivity clauses, competition is very limited in these 'aftermarkets'.²⁰ The FNE has recently faced cases in the automotive and imaging equipment markets. In both cases, it has closed the investigations without further action, but obtained the suppliers' commitments of increasing transparency of ex-ante information for facilitating customers' choices. Indeed, the FNE has held that information such as the likely need for repair, and the frequency of required maintenance services, the costs of replacement parts and the costs of repair, maintenance, and installation of part replacements services and the alternative suppliers of these services, should be known in advance by customers and that, consequently, companies should make this information available.²¹

As the Chilean experience described above illustrates, product quality can have significant effects on consumer welfare, particularly in those instances in which a firm's "product" is the very experience provided to customers. With respect to service firms like cinemas, business strategies may be aimed at attracting consumers first and foremost by providing higher quality experiences, and protecting competition will ensure that firms continue to supply goods and services at quality levels demanded by consumers. While the cinemas case is the only instance to date in which the FNE has been able to quantify merger effects on service quality, the other cases described above make clear—even if only in passing reference—that quality considerations are also important in many other service industries as well, such as telecommunications, advertising, health care, and retail, among others. Thus, enforcement agencies should be sensitive to the importance of quality considerations and the harm that may result to consumers when diminished competition results in lower quality goods or services.

¹⁹ TDLC, October 26th, 2006, Ruling 45/2006, Voissnet I, Rc. 30°, upheld by SC. Available here: http://www.fne.gob.cl/wp-content/uploads/2011/03/sent_0045_2006.pdf

²⁰ These situations refer to any market where the customers who purchase one product or service are likely to purchase a related, follow-on product.

²¹ FNE's investigations docket N° 1681-10 and N° 1700-10.

EUROPEAN UNION

1. Introduction

EU competition law aims at protecting competition and consumer welfare by preventing anti-competitive market outcomes. The benchmarks that are relied upon in that regard are parameters of competition such as price, output, innovation, product variety, and, product quality.

Whilst price effects may be the most common benchmark, quality also plays a role in EU competition analysis. It does so in a number of respects in the context of various competition enforcement instruments. Quality is a factor both in antitrust and mergers analyses.¹ It is relevant not only for the assessment of competitive harm and in the examination of efficiencies, but also for market definition.

In the area of antitrust, Article 101 of the Treaty on the Functioning of the European Union ('TFEU') foresees that agreements that have as their object or effect a restriction of competition are prohibited unless the restriction of competition is, *inter alia*, offset by efficiencies that are to a sufficient degree passed on to the consumers harmed by the agreement. Agreements that limit the quality of products or services fall within the prohibition of anti-competitive agreements. At the same time, otherwise anti-competitive agreements may fall outside that prohibition, where they, *inter alia*, give rise to quality improvements that offset the anti-competitive effects. The burden of proof that agreements deteriorate product quality and therefore restrict competition is on the Commission, while the burden of proof that quality improvements offset any restriction of competition is on the parties.

Quality can also be a relevant factor in the context of Article 102 TFEU, which prohibits abuses of a dominant position. Conduct may be considered abusive where it is likely to negatively affect product quality. Even though the wording of Article 102 TFEU does not contain an efficiency defence, the Court of Justice of the European has recently confirmed that dominant companies are entitled to raise efficiency arguments in order to justify conduct that may otherwise be regarded as abusive.² Quality improvements are among those types of efficiencies that – if proven to the requisite standard by the dominant company, and provided all conditions of the efficiency defence are fulfilled – can be taken into account under Article 102 TFEU.

Quality considerations may also be part of the examination of a merger. In its competitive assessment of mergers, the Commission conducts an analysis whether a notified transaction would significantly impede effective competition. In so doing, the Commission carries out a comprehensive analysis in order

¹ See also speech "Competition policy for consumers' and citizens' welfare" by Director-General Alexander Italianer, European Competition and Consumer Day, Dublin, 24 May 2013: *"Let me first stress that competition control is not only about prices. Of course, when we investigate a suspected cartel or abuse of dominant position, we look at the monetary impact of the infringement with extreme care. This means that we look at the higher prices that the companies involved impose on consumers and business partners. But this is only part of the story. Apart from keeping down prices, healthy competition in a given market generally improves quality; stimulates the search for innovative goods and services; and broadens choice."* Available at: http://ec.europa.eu/competition/speeches/text/sp2013_04_en.pdf.

² Case C-209/10 *Post Danmark* [2012] ECR I-not yet reported, paragraphs 41 et seq.

to assess whether mergers would deprive customers of the benefits of competition on a market by significantly increasing the market power of firms. Increased market power describes the ability of one or more firms to profitably increase prices, reduce output, choice or quality of goods and services, diminish innovation or otherwise influence the parameters of competition. Consequently, likely negative effects on the quality of products or services may be a decisive factor for declaring a transaction incompatible with the internal market absent any remedies offered by the parties. On the other hand, efficiencies such as quality improvements may play a role in the assessment of transactions as well and may ultimately lead to the conclusion that intervention against the transaction is not required. That being said, the conditions for taking efficiencies into account in a merger analysis are strict and well defined in the Commission's merger guidelines.

The Commission takes into account quality characteristics of the products or services in determining the level of competition between firms, or the outer boundaries of the market itself. If the quality of products differs to such an extent that consumers do not regard them as substitutes, the products of different quality levels may be found to be in distinct product markets. Similarly, the degree to which products of different suppliers compete within a given product market may also be influenced by how closely the qualities of their products converge.

Guidance from the Commission on the assessment of agreements, unilateral conduct or mergers under the EU competition rules – including the notion of quality as a factor of the competitive analysis – is given in various guidelines and notices. For example, the Horizontal Guidelines³ set out how various types of cooperation agreements between actual or potential competitors can have negative or positive effects on product quality; the Vertical Guidelines⁴ contain similar guidance with regard to distribution agreements; the General Guidelines⁵ concerning agreements contain guidance on how to assess quality improvements in an efficiencies analysis; the Horizontal Merger Guidelines⁶ include the mergers' effects on quality amongst the key factors in a merger analysis; and the Market Definition Notice⁷ provides information on how quality considerations may be relevant for the definition of the relevant product market.

The Commission has in its decisional practice adopted a number of decisions which take quality into account in the competitive assessment both in the field of antitrust and mergers. Quality degradation has been assessed as a factor of anti-competitive harm, and the extent of possible quality improvements of a merger or agreement have been analysed in the context of efficiencies. Moreover, quality considerations played an important role in many cases to determine the boundaries within which firms compete against each other, and how closely they compete.

2. Challenges in defining and measuring quality

Making a precise definition of quality for a given product is a complex task in competition investigations given the many subjective features that may contribute to a perception of quality by customers, the multi-dimensional nature of quality, and the absence of measurable variables. A given product may display several features which contribute to the perception of its quality by customers and

³ Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, OJ C11, 14.1.2011, p. 1.

⁴ Guidelines on Vertical Restraints, OJ C130, 19.5.2010, p. 1.

⁵ Guidelines on the application of Article 81(3) of the Treaty, OJ C101, 27.4.2004, p. 97.

⁶ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C31, 5.2.2004, p. 5.

⁷ Notice on the definition of relevant market for the purposes of Community competition law, OJ C372, 9.12.1997, p. 5.

distinguish it from other products, and the features are immeasurable in objective terms. For example, luxury watches may have the very same technical functions as 'regular' watches, but features such as brand image, reputation or the level of craftsmanship make them more valuable to some customers.

Moreover, even if some quality-related features are measurable, the overall perception of the products' quality is often based on a combination of several features. If one were to take cars as an example, the number of measurable variables at which customers may look when assessing the quality is immense and very complex, ranging from speed, acceleration, emissions, consumption to precise parameters of the individual components. The assessment of quality is thus often a complex and imprecise exercise in itself, and involves the balancing of evidence which is often of subjective nature such as different perception of customers.

In some cases, the (perceived) quality correlates with price positioning of a given product or service. The more customers perceive the products as being of high quality (by way of its proper characteristics or by marketing), the more they are willing to pay for it and the more the observed prices of the given products differ. Such vertical differentiation may help to define a group of products which are positioned at a similar level and which compete against each other, and which customers still regard as substitutes. For example, price levels can be indicative of the (perceived) quality positioning of brands (in the watches example, luxury watches are several times more expensive than technically comparable 'regular' watch brands). Apart from vertical differentiation, products may also be differentiated horizontally, meaning that they simply display different quality features without necessarily being considered of higher or lower quality. In those cases, the price positioning may not be a good indicator for quality, as products simply have different characteristics to fit different needs.

As quality is often difficult to define and to measure, quality considerations are in practice often assessed by means of customers' and competitors' views collected during market investigations or documentary evidence (such as internal analysis or surveys conducted by the firms). The possibility to use more exact quantitative tools is – contrary to an assessment focused on prices - more limited.

3. Quality as a feature of product differentiation helps to determine relevant markets, closeness of competition between firms and entry barriers

Quality can be one of the factors delimitating the outer boundaries of a relevant market. If products of too different qualities are not an alternative for customers and are not substitutable with each other, those products are positioned outside of the relevant market. To name a few examples from Commission's decisions – *Unilever/Sara Lee*⁸ (deodorants for male users vs. non-male), *UPS/TNT*⁹ (express vs. standard parcel services) or *Ahlstrom/Munskjö*¹⁰ (heavy weight vs. light weight abrasive paper backings) all concerned products with different qualities which lead to conclusion of a separate market. Quality requirements can also play an important role for the suppliers' ability to switch their production to a product with different quality features, hence representing a barrier to entry or expansion. For example, in the Commission's merger case *Amtcor/Alcan*¹¹, the flexible packaging products had different quality requirements for different types of uses, whereas for pharmaceutical applications it had to meet more stringent quality requirements requiring a high level of hygiene and corresponding lengthy regulatory and clients' approvals. Given the limited supply-side substitution and high barriers to entry created by strict

⁸ Commission Decision of 17 November 2010 in Case No COMP/M.5658 – *Unilever/Sara Lee Body Care*.

⁹ Commission Decision of 30 January 2013 in Case No COMP/M.6570 – *UPS / TNT Express*.

¹⁰ Commission Decision of 24 May 2013 in Case No COMP/M.6576-*Munskjö / Ahlstrom*.

¹¹ Commission Decision of 14 December 2009 in Case No COMP/M.5599 – *Amtcor/ Alcan*.

quality requirements, the markets were defined more narrowly for such high-quality pharmaceutical packaging.

Quality considerations also play a role in assessing the level of competitive interaction between different firms or products within a given market - their quality characteristics of the firms' products or services may be indicative of how closely these products compete. To take the *Unilever/Sara Lee* case as example – within the non-male deodorants market, the merging parties' brands *Dove* and *Sanex* were found to be particularly close competitors as they both proposed similarly positioned skin-caring quality features.

Although quality considerations play an important role in the definition of relevant markets or closeness of competition, the difficulties with a precise definition and quantification of quality do not speak in favour of using quality parameters instead of price in economic-driven tools such as the SSNIP test. A SSNIP test essentially answers the question whether it would be profitable for firms to increase prices of certain products, taking into account the loss of sales resulting from customers' substitution to other sets of products. It would be difficult to replace hypothetical price increases in the test by hypothetical reductions of quality and that for two reasons. First, the absence of a precise measurement of quality would make it very challenging to come close to an equivalent to a 5-10% price increase. Second, even if this were possible, the other challenge would be to quantify the effects of the quality degradation on the firm's revenues in order to determine whether such degradation would be profitable. Price increases can immediately be translated into the evaluation of profits, while a very complex assessment would be needed for profits derived from quality degradation (such as calculations of cost savings). It is submitted that this approach would not be practicable.

4. Effects of competition on quality

In the context of analysing the effects of a merger or an agreement on competition, the exact boundaries between the product quality, product variety and innovation are not always entirely clear. Indeed, innovation is a process inherently linked to enhancing product quality. Similarly, product variety may mean that several products of different qualities are present on the market, and consumers can choose from these varieties. The harmful effect of an anti-competitive agreement or a merger may comprise the reduction of choice or the reduction of innovation or both, which can inherently be translated into a reduction of quality.

However, irrespective of how the exact boundaries between product quality, product variety and innovation are defined, all three form part of a wider category of dynamic effects on competition – effects that are recognised as relevant for the analysis of competitive effects under EU competition law. It is therefore of lesser importance to exactly delineate those potential subcategories of dynamic effects, bearing in mind that the subcategories of product quality, product variety and innovation are all recognised as relevant for the application of the EU competition rules.

Despite these challenges in defining and measuring quality as well as in the exact delineation of the subcategories of dynamic effects, the applicable tests to assess those effects are well defined in the Commission's policy documents and decisional practice. For example, whether a cooperation agreement is likely to lead to negative effects on the quality of products or services will depend on the nature and content of the agreement at issue and on whether the parties have market power. Only in the presence of market power will the parties have the ability to profitably lower the quality of their products or services without being constrained by actual or potential competitors or customers. In addition, the nature and content of the parties' agreement must be liable to affect quality, that is to say support a theory of harm alleging quality deterioration. Similarly, the negative effects on quality resulting from a merger must be result of an increased market power of firms.

4.1 *Commission's policy and practice in antitrust*

In its Horizontal Guidelines the Commission recognises that cooperation agreements can have negative effects on quality in a number of ways. For instance, even though most R&D agreements are pro-competitive and do not give rise to restrictive effects on competition, a joint R&D agreement between the only two companies engaged in the development of a new product can give rise to negative effects on quality where the companies start cooperating at a very late stage where they are independently rather near the launch of their products. This could in particular be the case where the parties agreed to only launch one product instead of two and they choose the (arguably) technically inferior one.¹² Joint production agreements may lead to a direct limitation of competition between the parties by directly aligning quality levels below a level they would have produced individually. They may also result in the coordination of the parties' competitive conduct as suppliers leading to reduced product quality.¹³ Last, standardisation agreements – even though they usually produce significant positive economic effects – may under certain circumstances lead to a reduction of product quality, notably where standards set detailed technical specifications which certain, arguably technologically superior, products do not fulfil and whose access to the market is thereby made more difficult or excluded.¹⁴

With regard to distribution agreements, the Commission considers in its Vertical Guidelines that vertical restraints can have negative effects on the quality of the distributed products or on distribution services, for example by anti-competitively foreclosing other suppliers or other buyers by raising barriers to entry or expansion, or by softening of competition and/or facilitation of collusion between suppliers or buyers and their competitors.¹⁵

However, an agreements' positive impact on the quality of products or services can offset its otherwise negative effects on competition with the consequence that the agreement does not infringe EU competition law. The Commission recognises that agreements may generate various efficiencies of a qualitative nature. In some instances the main efficiency enhancing potential of an agreement is not cost reduction but rather quality improvements or other efficiencies of a qualitative nature. Such efficiencies constitute an important source of economic benefits that are relevant in the Commission's competition analysis. They are often generated where the parties to an agreement contribute complimentary skills, assets or activities, thereby creating synergies.¹⁶

The balancing of competitive harm in terms of increased prices and quality improvements necessarily requires a value judgment. Where quality improvements are claimed by the parties to offset higher prices, the Commission will make an overall assessment of the impact of the agreement on the market and will, *inter alia*, analyse whether the claimed efficiencies create real value for consumers so as to compensate them for any adverse effects of the restriction of competition that the agreement also entails.¹⁷

In its guidelines, the Commission acknowledges various types of quality improvements that agreements may bring about. For example, R&D agreements may lead to new or improved products and/or a quicker launch on the market.¹⁸ Joint production agreements can lead to better production technologies.

¹² Horizontal Guidelines, para. 138.

¹³ Horizontal Guidelines, paras. 157 et seq.

¹⁴ Horizontal Guidelines, para. 266.

¹⁵ Vertical Guidelines, paras. 100 et seq.

¹⁶ General Guidelines, paras. 69 et seq.

¹⁷ General Guidelines, paras. 100 et seq.

¹⁸ Horizontal Guidelines, para. 141.

They can also help companies to improve product quality if they put together their complementary skills and know-how.¹⁹ Standardisation agreements frequently give rise to efficiency gains. For instance, standards on the quality aspects of a product can lead to increased product quality.²⁰

Vertical restraints may also improve the quality of distribution services to an extent that eventual concerns of restrictions of price competition are set aside. For example, purely qualitative selective distribution systems are not considered to restrict competition at all where the nature of the product in question necessitates a selective distribution system in order to preserve its quality and ensure its proper use; resellers are chosen on the basis of objective criteria of a qualitative nature which are laid down uniformly for all and made available to all potential resellers and are applied in a non-discriminatory manner; and the criteria do not go beyond what is necessary.²¹

That said, the Commission will not simply accept quality improvement claims without further assessment. Parties that successfully want to rely on such claims must substantiate them in a way that allows the Commission to verify, *inter alia*, the causal link between the agreement and the quality improvements; their likelihood and magnitude; how and when the quality improvements would be achieved. To this end, the parties must bring forward convincing arguments and evidence. This was, for example done in *Star Alliance*, where the Commission accepted the link between the joint venture agreement and the generated quality improvements in the form of increased frequencies of flights, although ultimately the efficiencies were found to be insufficient to outweigh the competitive harm on one route.²²

However, there are occasions where the Commission had to reject the parties' claims that their agreements or unilateral practices would not fall foul of the EU competition rules as they would increase the quality of their products or services. For example, in *Trans-Atlantic Conference Agreement*, a case concerning a cooperation agreement in the maritime sector including elements of price-fixing, the Commission considered that "*there was no evidence that the charging of a collectively agreed price for the provision of the carrier haulage services contributes to improving the quality of inland transport services.*"²³ In *OneWorld*, the Commission rejected the parties' claims that their joint venture agreement would allow them to offer higher quality services in terms of improved flight schedules. It did so, however, not because the claimed efficiencies, including quality improvements were as such implausible but rather because the parties had not provided sufficient evidence that would have put the Commission in a position to verify those claims.²⁴

4.2 Commission's policy and practice in mergers

The Commission's substantive test for assessing mergers as embedded in the Merger Regulation²⁵ is based on significant impediment of effective competition (SIEC). The SIEC test is covering all aspects of a

¹⁹ Horizontal Guidelines, para. 183.

²⁰ Horizontal Guidelines, para. 308.

²¹ Vertical Guidelines, para. 175.

²² Commission Decision of 23 May 2013 in Case No AT.39595, *Star Alliance*, not yet published; see press release IP/13/456 of 23 May 2013, available at: http://europa.eu/rapid/press-release_IP-13-456_en.htm.

²³ Commission Decision of 16 September 1998 in Case No IV/35.134, *Trans-Atlantic Conference Agreement*, OJ L95, 9.4.1999, p. 1., para. 410.

²⁴ Commission Decision of 14 July 2010 in Case No 39.596, *OneWorld*, OJ C278, 15.10.2010, p. 14, paras. 77 et seq.

²⁵ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, OJ L24, 29.1.2004, p. 1.

loss of competition such as an increase in price, reduction of output, reduction of innovation or choice, including harm to competition resulting from reduction of quality. The test also enables to take into account efficiencies which bring positive effects on quality. The role of quality is expressly recognised in both the Horizontal and the Non-Horizontal Merger Guidelines²⁶.

The Horizontal Merger Guidelines expressly state that one of the effects to be analysed in merger control is the effect on quality, putting the competitive harm caused by a reduction of quality on an equal footing with an increase of prices, or a reduction of output, choice of goods and services. According to these guidelines, the aim of the Commission's merger control is to prevent mergers that would be likely to deprive customers of these benefits.

The Commission has analysed possible quality reduction effects in a number of horizontal merger cases. For example, in the prohibition decision relating to the proposed takeover of Aer Lingus by the Irish low-cost carrier Ryanair in 2007²⁷, a reduction of service quality was one of the elements in the theory of harm. The Commission found that post-merger, Ryanair would not only have the ability to increase price, but that it could keep the current price levels and degrade quality of Aer Lingus' services, meaning that the price/quality ratio would be worsened for consumers. The two parameters – quality and price - were inherently linked.

Another example is the *Microsoft/Yahoo! search business* case²⁸, where the Commission examined whether the merger would lead to reduction of the quality of searches. The investigation resulted in a finding that the search quality will likely not be reduced post-merger, notably as Google, by far the largest competitor in the field of internet search with market shares over 80%, would exert significant competitive pressure on quality. The Commission concluded that the merger could even bring more quality in searches via the larger scale of Microsoft's and Yahoo!'s combined operations.

The mergers' effects on innovation, as an inherent aspect of improving product quality, was also analysed in a number of cases. For example, the *Syngenta/Monsanto* transaction²⁹ brought together two companies active in the development of sunflower seeds, resulting in a combination of two leading rivals on the same innovation market. The loss of competition in innovation between merging parties was at the heart of the theory of harm, as there were very high entry barriers due to the lengthy period needed for the development of sunflower hybrids. The outcome of the case was a clearance subject to a remedy involving in particular the partial divestiture of the parties' R & D activities, ensuring that innovation-driven competition could be continued by the purchaser. This would ensure a continuation of the products' quality improvements in the future.

In *Universal/EMI*³⁰, the Commission has concluded that the proposed merger of two major recording companies would harm consumers by increasing Universal's bargaining power and ability to impose onerous licensing terms on digital platforms, in particular small and emerging innovative music platforms. This would likely result not only in retail price increases for consumers, but also in a reduction in

²⁶ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C265, 18.10.2008, p. 6.

²⁷ Commission decision of 27 June 2007 in Case No COMP/M.4439 – *Ryanair / Aer Lingus I*.

²⁸ Commission decision of 18 February 2010 in Case No COMP/M.5727 – *Microsoft/ Yahoo! Search Business*.

²⁹ Commission decision of 17 November 2010 in Case No COMP/M. 5675 – *Syngenta/Monsanto's Seed Business*.

³⁰ Commission decision of 21 September 2012 in Case No COMP/M.6458 - *Universal Music Group / EMI Music*.

innovation and consumer choice. The Commission was concerned that new digital platforms could be hampered in their ability to launch or expand their services, which would reduce consumer choice for music and innovation.

In the context of vertical or conglomerate mergers, the Non-Horizontal Merger Guidelines provide a similar framework for the assessment of innovation, acknowledging that one of the effects to be analysed in merger control is the effect on quality. Loss of innovation is thus embedded in the analysis of potential anti-competitive effects.

An example of a vertical/conglomerate is *Intel/McAfee*³¹ involving a combination of anti-virus software with Intel chips. A key competition concern was the possible foreclosure of rival providers of anti-virus software by Intel embedding the acquired McAfee security solutions into its chips. If competing anti-virus software would not be able to fully operate on Intel chips, this would have a negative effect in this market, reducing the choice, innovation and quality of anti-virus software. The case was cleared subject to a remedy which was designed to preserve the beneficial effects of the merger (allowing for a combination of chips with security software), while ensuring that Intel cannot block other security software providers from being fully operational on its chips and from bringing competing solutions to the market.

Both the Horizontal and Non-Horizontal Merger Guidelines also specifically acknowledge that a merger may bring positive effects to quality. These can generally be assessed in the context of efficiencies put forward by the parties. The guidelines specify that consumers may benefit from new or improved products or services, for instance resulting from efficiency gains in the sphere of R & D and innovation. The parties have to demonstrate that (i) the efficiencies indeed bringing positive effects which will be passed-on to consumers, (ii) these efficiencies are verifiable, and (iii) they are merger-specific, *i.e.* they can only be attained through the merger (and for example not via a cooperation agreement). The guidelines acknowledge that such efficiencies may outweigh the possible anti-competitive effects of a merger.³²

The *TomTom/TeleAtlas* case³³ was a vertical merger concerning a combination of a digital maps developer and a main producer of navigation systems. Innovation/quality efficiencies were claimed to be the main deal rationale: information obtained from TomTom's large installed base of devices could be used to improve Tele Atlas maps. The efficiency claims were examined and it was found that the alleged removal of double marginalisation was plausible and merger-specific. As regards the quality efficiencies which would allow the merged entity to make better maps in less time, the Commission acknowledged that these innovation efficiencies would at least partly be merger-specific and bring consumer benefits.

5. Conclusion

Under EU competition law, quality considerations are an inherent part of the competition analysis both in antitrust and in mergers. While it is not easy to precisely define and measure product quality in many markets, an assessment of product quality is often helpful to determine the degree of competitive interaction between different products, and can help delineating the markets' boundaries. While the assessment of anti-competitive effects and positive efficiency benefits is often focused on price, effects on quality can be of similar relevance and have been analysed in a number of the Commission's merger and antitrust cases.

³¹ Commission decision of 26 January 2011 in Case No COMP/M.5984 – Intel/McAfee.

³² For guidance relating to efficiencies see paragraphs 76-88 of the Horizontal Merger Guidelines and paragraphs 13, 52-57, 77 and 115-118 of the Non-horizontal Merger Guidelines.

³³ Commission decision of 14 May 2008 in Case No COMP/M.4854 - *TomTom/TeleAtlas*.

INDONESIA *

1. Definition of quality

There is no exact definition of quality, since it can be defined in various ways. Quality can be different depending on the type of product or service in question. Quality is sometimes measured in the form of timeliness, cost suitability, and the like. For a product, quality can be measured by performance, features possessed, reliability, appropriateness to product standards, durability, easy maintenance, aesthetic, and the like. For service, quality can be measured by reliability, responsiveness, certainty, and empathy. Such differences lead to the definition of quality as “the conformity of products or services to consumer specifications”.

In the context of business competition law, quality is one of the producer’s strategies to increase their competitiveness, which eventually makes them controlling a certain market. It is more likely to be so when other business actors have not been able to reach such level of quality. Competition should be intended to create the improvement of quality of products and services provided for the consumers or society. Competition leading to the deterioration of quality of products and services in the market can be interpreted into two things. The first is that there is a low standard set and or a lack of supervision and law enforcement over the standards.

Indonesia had gone through such period, particularly in the aviation sector. After the reform of such sector in 2002, the advocacy undertaken by a competition agency continues. The competition policy-based reform had increased the number of market actors in the aviation sector. However, years after, the aviation sector began to suffer from many aircraft accidents. The blame was once put on competition as the cause of such accidents. It appears that during such period the consumers or society had not been able to clearly understand the importance of quality standards.

2. Between standard and quality

People sometimes confuse quality with standard. In fact, standard should be used as the minimum rule for a product or service to enter the market and compete with products or services of the same kind in such market. Standard should be related to the attribute of product or service in the context of licensing. Unlike standard, quality will convey the best things expected by consumers from a product or service. It will be much related to consumer comfort. The higher the quality of an item or service above the standard set, the level of consumer or public comfort will be higher.

What becomes an issue is that Indonesia seems to be still in the phase of the creation of product or service to conform the standard set. Indonesian National Standard is created to guarantee various products and services provided with the existing standard, either health standard, safety standard, comfort standard, or the like. The National Standardization Agency is established to set the standards. Law enforcement for the compliance of standard is performed by various institutions according to the industry in which the products or services compete. Therefore, it is often found that the behavior of consumers in Indonesia

* The submission is prepared by the Research Bureau and Foreign Cooperation Division of KPPU. For further information or clarification, please kindly contact us at international@kppu.go.id or visit our website at <http://eng.kppu.go.id/>.

mostly tends towards the purchase of goods or services in accordance with the national standard. Price serves as the main determining factor for consumers when the goods have met the existing standard. Thus, quality is the second determining factor.

3. The behavior of consumers in Indonesia and competition pattern

In a competition market, consumer is a factor influencing the strategy and behavior of business actors in the market. The consumer is influenced by its own characteristics.

Consumers in Indonesia have quite unique characteristics because the majority of consumers in Indonesia are oriented to short term goal. Quality is one of many important aspects that consumers enjoy. However, only certain consumers really concern about the quality issue. Many consumers in Indonesia have a low level of income and education and are influenced by cultural and family values as well as other strong society systems, thus quality has not become the main priority in terms of the purchase of goods or services. The affordability of price remains to be the main priority with the absence of high quality.

A market dominated by short-term oriented consumers is actually unfavorable for the market leader because it will be difficult for the market leader to improve the loyalty of consumers. The consumers are easily tempted by offers, advertisement/gimmick, or discounts from the competitor. As a result, the action often taken by the business actors as the solution is by reducing the price of the product. The consumers are not very much aware of a deterioration of quality of a product as long as the price is affordable. For example, a pack of instant noodle of a renowned brand in Indonesia in 2005 has a weight of 125 gram with the price at IDR1,200, and in 2012 the weight of a pack is reduced to 85 gram, but the price is almost equal to the price seven years before, namely IDR1,450. In fact, during such period, the accumulative change of input goods and inflation is relatively significant.

Other characteristics often found are impulse buying and unresponsive to technology. They cause the quality to be put in second place in terms of goods purchase.

4. Business competition law and quality aspect

Indonesian business competition law, Law No. 5 year 1999 concerning the prohibition of monopolistic practices and unfair business competition does not merely cover the consumer protection measures. Consumer protection in Indonesia is specifically regulated in Law No. 8 year 1999 concerning Consumer Protection and implemented by a separate institution in carrying out various measures to protect consumers, including quality issue. This is because one of the purposes of such law is to improve the quality of goods and/or services as a guarantee for the sustainability of goods and/or services production business, consumer's health, comfort, security, and safety. So far, there has been no case jointly handled by KPPU and consumer protection institution. The quality of service is usually monitored by the regulator or consumer protection agency, but still limited to the compliance of standard set.

In business competition law, quality has not served as a parameter in determining the definition of the relevant market or the scope of the market share. The improvement of quality resulting from a violation of business competition law is not a factor granting a relief to the business actor in a decision. Price remains to be the main parameter in the analysis of business competition because it is specifically regulated in many articles in business competition law. As a consequence, until now there is no decision of the commission discussing such matter, or specifically referring to the quality side in the analysis process.

The analysis in the context of the enforcement of business competition law in competition cases, either cartel, merger, or resale price maintenance cases, still prioritizes price and consumer affordability. In terms of defining market, quality has not been taken into consideration. It cannot also be applied because under the law a market share of a business actor is determined based on its price, sale, and capacity.

In the current phase, it appears that Indonesia has not been adopting quality in the analysis process of business competition case. A lack of appropriate method for quantifying the extent of quality and the use of quality as an aspect for defining a market will certainly overlap with the application of law.

Quality is used more to measure the impact of various measures of competition agency (law enforcement or advocacy) on various sectors or industries. It is so performed by the commission in measuring business competition index in many certain sectors, namely aviation and telecommunication. The index has been developed by KPPU since 2008 by using perception and quantity. Given that the unreliable data are available in quantifying various analysis criteria.

The aspects of impact analyzed in such research are quality, total business actors, and price. Quality is measured by indexing the consumer's perception of various qualitative answers given by the commission. The perception is taken from hundreds of consumers in the aviation and telecommunication sectors in many geographical areas. Such research yields a conclusion that the quality index of products or services in the telecommunication increases until 2010, but decreases in 2011. The aviation sector presents a more positive conclusion. The quality perception index is constantly increasing every year, although the percentage of difference in such increases tends to be lowering and the quality index reaches its maximum point in 2011.

5. Conclusion

Quality in the analysis of business competition is a new thing in Indonesia. The relatively subjective definition of quality can present an obstacle in the adoption of such principle. Moreover, the law for implementing quality as a tool for measuring a market share or defining geographical area also provides a minimum support. As a result, the adoption would likely encounter hard challenges.

Currently, consumers in Indonesia are still oriented towards a short term goal and reduce the incentive for the market actors to improve consumer's loyalty. Since the consumers are easily tempted by various offers, advertisement/gimmick, or discounts from the competitor, price reduction remains the solution frequently adopted by business actors.

The only utilization of quality taken by the commission is for measuring the impact of measures of the competition agency on the condition of competition in certain sectors, namely aviation and telecommunication. In such analysis, quality serves as one of the aspects for measuring business competition, in addition to total business actors and price. The index of quality is measured by the consumer's perception (through questionnaires), rather than the extent or proxy of quality on a quantitative basis. With the limitation of such methodology, the perception index still can serve as a tool for the competition agency in analyzing its performance and also can be used as a tool for advocacy to the public and various relevant stakeholders.

JAPAN

Alongside prices, quality or, more broadly speaking, product attributes, have been at the center of economic analyses. Yet, the difficulty of measurement and its subjective nature have posed serious difficulties to empiricists and policy makers; consequently, it has not been the issue in competition policy as often as pricing. Still, changing commercial practices (e.g. the spread of e-commerce) and accelerating speed of innovation are increasingly forcing competition authorities worldwide to deal with the issue of quality. It is indeed apt that the Roundtable has chosen this issue as its main theme of discussion for this meeting.

1. Meaning of ‘quality’

First, we should clarify the meaning of ‘quality’. Economists have long distinguished between ‘horizontal differentiation’ and ‘vertical differentiation’. Horizontal differentiation concerns product variety and/or product positioning. Consumers have different tastes and rank various products differently. For instance, some consumers prefer desktop PCs while others prefer notebook PCs. Or, some prefer red shirts while others prefer blue shirts. In this situation of horizontal differentiation, consumers need to decide which combination of product attributes is most suitable for their own needs or taste. Producers have to decide what combination they should apply in their products, which is the issue of product positioning.

Vertical differentiation is an issue of (narrowly defined) quality. All consumers agree in their ranking of products. *Ceteris paribus* everyone prefers PCs with more power and memory. The word ‘quality’ is sometimes used only in this context but sometimes used to refer to a broader issue of product characteristics including horizontal as well as vertical differentiation. In fact, many products are differentiated both horizontally and vertically, making the distinction impractical. Thus, in the following, both of the issues will be discussed.

2. Measurement of quality

Consumers decide which product (or brand), or which combination of products/brands, to buy depending on both the quality (positively) and the price (negatively) of the product. This simple fact leads to two important implications. First, in so far as they have complete information on the quality and price of every product/brand, they can make right decisions and, as long as producers behave competitively, there should be no worry for resource misallocation or consumer exploitation. That is, there is no market failure. Often, however, information is incomplete and this fact creates competition policy concerns as will be discussed presently.

Second, the monetary equivalent of quality can be measured using a basic principle. If brand A is priced at p_A and brand B at p_B ($<p_A$), and if both brands are selling equally well, then we may assume that the quality premium of brand A over B is worth $p_A - p_B$. This reasonable conjecture is used as the basis of an empirical model called the hedonic model.

Suppose that the quality of a brand is based on measurable characteristics. Again consider PCs. The quality of a particular model may be considered as a function of its attributes, such as processor capacity, memory size, storage size, display size, the number of USB ports, whether it has wireless connection, and

so forth. This is the hedonic model. Using the sample of various models, the coefficient of these attributes can be estimated. Then, by applying these estimated coefficients, one can predict what the price should be were a certain attribute inferior than the actual one. The difference between this predicted price and the actual price is the value of the increased level of the attribute.

This method has been used in the calculation of consumer price index (CPI) in many countries. For products like PCs, the quality (i.e. the level of attributes just mentioned) improves every year. Thus, even if the price stays the same, the real price, that is, the quality-adjusted price, should be considered to have decreased during the year. To calculate CPI changes based on real prices, many statistical offices now use hedonic models.

Whether the model can be directly used in competition analyses is not obvious. Suppose, for instance, that a competition authority suspects that anticompetitive behavior has caused a discrepancy between the market price and the quality-adjusted price (that is, too high a price for the quality). One may want to calculate the quality-adjusted price using the hedonic model. For this purpose, however, it is necessary to estimate the coefficients using the data of, say, other countries in which anticompetitive behavior is not taking place. Unfortunately, such data is rarely easy to obtain.

3. Imperfect information

In reality information is imperfect. And this imperfectness is likely more serious with quality than prices. Also, it is usually more serious with vertical differentiation than horizontal differentiation because, while the memory size of a PC can be reliably known from the catalogue, the ease of use is not. Besides, such quality can be subjective and consumer-specific. Thus, understandably, consumers will not trust the statement on quality in advertisements, such as “this PC is easy to use” or “this PC is durable”. The consequence of this information imperfectness is that consumers may choose a “low price, low quality” product over a “high price, high quality” product even if the latter in truth brings a higher level of utility.

This fact suggests that seemingly anticompetitive practices may actually benefit consumers if as a consequence the information on quality and product attributes becomes more available and more reliable to consumers. Such a situation can occur both in relation to horizontal restraints and vertical restraints.

4. Horizontal restraints

Cooperation among competitors may help them guarantee quality and/or provide more accurate information. With such cooperation, for instance, they may avoid the prisoners’-dilemma situation in which everyone sells substandard products at low prices. Cooperation is often managed through trade associations, because consumers most likely believe that the information and product guarantees offered by trade associations are more trustworthy than those offered by individual producers. The situation is similar to that of product standardization, in which consumers take the approval by trade association or consortium as guaranteeing the quality and the connectivity to complementary products.

Of course, one needs to consider the fact that such activity by trade associations or consortia may have a negative impact on entry, price competition, or innovation. The Japan Fair Trade Commission (JFTC) thus published “Guidelines Concerning the Activities of Trade Associations under the Antimonopoly Act” (hereinafter referred to as “the Trade Associations Guideline”) in 1995 (revised in 2010).

The Trade Associations Guideline refers to “Quality” of goods or services relating to horizontal restraint. Article 8 of the Antimonopoly Act prohibits activities which restrain or impede competition by trade associations. The Trade Associations Guideline explains the outlook on the activities of trade associations in light of the Antimonopoly Act through examples of their specific activities.

The Trade Associations Guideline, on the one hand, states that cartels restraining the price or production quantity are not justified by purposes such as ensuring the quality of goods or services. On the other hand, in relation to the variety, quality, standards, and other aspects of goods and services, in many cases, activities of trade associations may not raise concerns with regard to the Antimonopoly Act. For example, when quality-related self-regulation, self-imposed certification or authorization would be established based on the necessity for socially beneficial purposes such as preserving the environment or ensuring safety, those activities would not raise concerns with regard to the Antimonopoly Act. However, depending on their content or the manner of their activities, such activities can restrain or impede competition in terms of the development or supply of diverse goods or services, and thereby might violate the Antimonopoly Act.

There is a case of a medical doctors' association in which its activity was considered anticompetitive and in violation of the Antimonopoly Act.

- Case A: Mitoyo&Kanonji Medical Association case (Decision at the Tokyo High Court, February 16, 2001)¹

Because the JFTC found that the following activities violated the Antimonopoly Act respectively, the JFTC issued a hearing decision against Medical Association X ordering to cease and desist their activities; (i) setting restrictions on the opening of medical institutions; (ii) setting restrictions on the adding of medical facilities' respective clinical departments, enhancement and refurbishment of beds/hospital bed rooms and opening rehabilitation facilities for the elderly. Medical Association X claimed that its conduct was not unfair because the activities were justified by the will to create better local medical services. Then, Medical Association X took action to have the hearing decision rescinded.

The Tokyo High Court (hereinafter "the court") expressed their views on Medical Association X's complaint as follows. While the purpose of Medical Service Law is to secure infrastructures to provide medical services and contribute to sustaining the health of the people, a medical association is nothing more than a private organization which does not have the power to impose legal regulations. Therefore, a medical association is only allowed to provide information relating to medical service status, to advise, to exercise supervisions and to express opinions within a reasonable range without pressuring member physicians or compelling them against their will. Thereafter, the court concluded that because the conduct of Medical Association X was considered to be harmonizing the internal interest of existing member physicians for their own benefit, and through unreasonable restraints, those activities restrained competition. Consequently, the court dismissed the case with prejudice on the merits.

5. Vertical restraints

As is well known, vertical restraints, such as resale price maintenance and exclusive clauses, may contribute to consumer welfare if they encourage the retailers to provide more services to consumers². In a similar vein, they may give producers and retailers an incentive to maintain quality, provide services, and provide accurate information. Therefore, in 1991 the JFTC published "Guidelines Concerning Distribution Systems and Business Practices under The Antimonopoly Act" (hereinafter referred to as "the Distribution Guideline").

¹ Yokkaichi Medical Association case (JFTC recommendation decision, 2004) is similar to this case.

² Patrick Ray and Thibaud Vergé "Economics of Vertical Restraints" in Paolo Buccirossi [ed.] *Handbook of Antitrust Economics*, The MIT Press, 2008, 353-390.

The Distribution Guideline explains the outlook on retailer's restriction on sales prices etc. (vertical restraint). With respect to "Restrictions on Retailers' Sales Methods", the call for the demonstration in sales of products is given as a specific example of restriction. Thereafter, the Distribution Guideline points out that there may be some cases where the restriction on the sales method of retailers can be permitted for the purpose of ensuring quality. "In cases where restrictions on the retailers' sales methods (excluding those on sales price, sales territory and customers) are recognized to have rational reasons for the purpose of ensuring proper sales of the product, such as related to assuring the safety of the product, preservation of its qualities, maintenance of credit of its trademark, and so on, and if the same restrictions are applied to other retailers -customers on equal terms, such restrictions in themselves do not present a problem under the Antimonopoly Act."

There are even cases in which consumers have wrong knowledge, so that the sellers have to find out what the consumers' real needs are or what combination of product attributes are most suitable to them. In such cases, only with certain consulting services, the seller may be able to recommend the most suitable product to each consumer so that the consumer would be satisfied with the product, thereby protecting its brand reputation. Also, the seller may be willing to provide such consulting services and train sales staff only when it is protected with exclusive manufacturer-retailer relationship. The following cosmetics case gives such an example.

- Case B: Fujiki vs Shiseido case (Appeal court decision at the Supreme Court, December 18, 1998)

Company X, a cosmetics manufacturer, had a special agency contract with the retailers, which obliged them face-to-face selling to the customers. X stopped forwarding their cosmetics to retailer Y on the grounds that it breached the special agency contract. In response to this action by X, Y claimed that the special agency contract was invalid because it fell under "Trading on Restrictive Terms" and violated Article 19 of the Antimonopoly Act.

The Supreme Court found that X obliges face-to-face selling under the special agency contract in order to meet customers' needs to enhance the beauty effects of using X's cosmetics by using them in the best possible conditions, because customers would be satisfied with X's products and would continue to trust them (i.e., brand images). Therefore, the Supreme Court held that it was obvious that keeping customers' trust would have an impact on competition in the cosmetics market, considering the nature of cosmetics. Thus, the Supreme Court stated that there was a certain rational in X's choice to adopt a face-to-face selling system and concluded that the special agency contract in question did not fall under Trading on Restrictive Terms that unfairly restrains retailer's business activities.

Recently, a few cases appeared involving e-commerce. Manufacturers want to restrict e-sales of their products on the ground that the necessary services cannot be provided by the e-retailers. Of course, since such restrictions may have anticompetitive effects by restricting price competition from e-retailers, the competition authority needs to assess the cost and benefits gained from the proposed restrictive clause. The following two cases in which JFTC gave opposite answers to prior consultation from the manufacturers will show the difficulty of this assessment.

- Case C: Case No.1 of the JFTC consultation case book 2011 (Prohibition set by medical device manufacturer on its trade partners to sell to customers through internet-order services)

Medical device manufacturer X consulted with the JFTC concerning its plan to prohibit its trade partners from selling to internet retailers X's product (medical device P) that requires adjustments which cannot be made through internet-order services. In response to their consultation, the JFTC

answered as follows: Based on the three reasons, - (i) if the medical device P is put on the market without necessary adjustments, it would significantly decrease its capacity to be correctly used, and the degree of potential disadvantage this may cause to customers is deemed high ; (ii) adjustment to the device P cannot be made through internet-order services; (iii) the restriction is minimal - , X's prohibition in question has rational grounds. Thus, the JFTC answered that X's imposed prohibition on trade partners would not unreasonably restrain X's trading partners' business activities and was not deemed as problematic under the Antimonopoly Act.

- Case D: Case No.2 of the JFTC consultation case book 2011(obligation of face-to-face selling set by a medical pharmaceuticals manufacturer)

Medical pharmaceuticals manufacturer Y consulted with the JFTC as to its plan to set an obligation on its trade partners to proactively provide full explanations in a face-to-face environment regarding Y's medical pharmaceuticals B. In response to their consultation, the JFTC answered as follows: Based on two reasons, - (i) B is not legally prohibited to sell through internet-order services, (ii) it is considered that explanations on the feature of B can be sufficiently provided through internet-order services - , there are no grounds to justify such a restriction. Therefore, the JFTC responded to Y that because setting such obligation on trading partners would unreasonably restrain Y's trading partners' business activities, the proposed contract may be problematic in terms of the Antimonopoly Act.

The two cases are different in several respects but the most important point is that while the cost of failing to provide necessary services (adjustment to the product by the seller) was considered significant in Case C, such a cost is limited in Case D because all the products (medicines) are subject to the safety regulations of the Ministry of Health, Labour and Welfare and the fact that the product in question was approved for over-the-counter sales implies that the cost of not receiving the service is minimal. Generally speaking, the competition authority needs to evaluate the merit and cost of the proposed services carefully, as well as the possible cost from the restriction of retail activities. Such evaluation is rarely easy and sometimes may be subject to errors. Still, it has to be done because the prohibition of all vertical restraint on a per-se illegal basis may actually hurt consumer welfare by depriving them of valuable services.

6. Mergers

As the consumers make the choice of price-quality combinations to decide which products they buy, producers determine the p-q combinations of the products they sell. Mergers likely affect this decision. We may separate short-run effects, the effects on prices given quality, and long-run effects, the effects on quality. Since such effects are more likely to occur with horizontal differentiation, we will consider the effects on product attributes; that is, the effects on the product positioning strategy of firms.

Suppose that two firms of substitutable products, that is, differentiated products in a market (as defined in competition policy analyses), are combined; say, firm X selling product A and firm Y selling B. The combined firm, say XY, will want to minimize the cannibalization effect, that is, the possibility that former buyers of A now buy B instead of A (or vice versa). Instead, XY will want to attract former buyers of rival products (say, C) to buy A or B. For this purpose, XY will try to pull the price-attribute combinations of A and B further apart in the price-attribute space. The following case suggests that this has in fact happened.

- Case E: Acquisition in a seasoning market

JFTC's Competition Policy Research Center (CPRC) conducted a study of post-merger price changes of household flavor seasonings (hereafter, seasonings) using the point-of-sales data of

about 3,000 items (products of different brands, different packages, etc.)³. In 2007, the largest producer (X) acquired 33.4 percent of the share of the third largest (Y). The study showed that the prices of X's products increased after the acquisition whereas those of Y's declined. A likely interpretation of this contrasting result is that the combined firm reorganized its product positioning strategy so as to sell X's products as high-end ones and Y's as low-end ones. In fact, before the acquisition, the average price of X's products was higher than that of Y's, implying that the consumers evaluated X's brands more highly than Y's. After the acquisition, the firm apparently decided to exploit this consumer evaluation to its advantage, by widening the price differential, suggesting that, in a market with differentiated products, a merger affects not only the price in general, it also affects the price structure of the firm's various products.

No study has been made on the long-run effect, that is, the effects of merger on product characteristics and product introductions⁴. However, it seems likely that, as an analogy to the short-run effect, the firm will set the attributes of their multiple products further apart from each other. Simply speaking, they will try to sell two products of distinctly differentiated products; for instance, red shirts and blue shirts instead of light blue shirts and dark blue shirts, so that they can sell to a wider spectrum of consumers. They may also try introducing a greater variety of products so as to fill the niche and utilize the complementary R&D and marketing assets of the merger partners. However, empirical studies are yet to be made.

The implications of these studies on competition policy are unclear. As long as the average price level is not increased, consumer welfare is unlikely to be hurt on average. However, if the prices of certain products are increased while those of others are decreased as in Case E, there must be a distributional effect because the consumers of X's high-end products now have to pay higher prices even though those of Y's low-end products now benefit from lower prices. We hardly know how to incorporate such distributional effects of mergers in merger regulation. Besides, it is usually very difficult to predict the effects of mergers on quality or product positioning, both in the short run and long run.

7. Conclusion

Considerations on quality (including product attributes) have to be an essential part of competition policy. Undoubtedly, quality is more difficult to measure than prices, the evaluation of quality is rarely the same for all consumers, and the effect of quality on competition is difficult to predict. Still, every competition authority is frequently obliged to evaluate the effects on quality of both horizontal restriction and vertical restriction. In this evaluation, one needs to take into account the fact that information imperfectness is more serious when assessing quality than when assessing prices and, consequently, a seemingly anticompetitive behavior may benefit consumers if it serves them with more accurate information. In this paper, guidelines and a few cases that JFTC dealt with were discussed. We are eager to learn from the experience of other countries and look forward to the exchange of ideas and views.

³ Hiroyuki Odagiri, et al., "The Impact of Mergers on Profits, Share Value, Innovation, and Product Prices in Japan in the 2000s," Competition Policy Research Center Discussion Paper, CPDP-51-E, 2011, available at www.jftc.go.jp/en/cprc/discussionpapers/index.html. In the other two markets studied in this paper, sugar and instant noodles, no similar effects across producers were observed.

⁴ An exception is Andrew Sweeting "The Effects of Mergers on Product Positioning: Evidence from the Music Radio Industry," *RAND Journal of Economics*, 41, 2010, 372-397. For a theoretical study on the effect of merger on product positioning, see Amit Gandhi, Luke Froeb, Steven Tschantz, and Gregory J. Werden "Post-Merger Product Repositioning," *Journal of Industrial Economics*, 56(1), 2008, 49-67

MEXICO

1. Defining quality

Quality is a dimension along which consumers can rank similar products from better to worst according to their preferences for consumption (assuming the same price for those products). Consumers agree that a product has higher quality than another similar product when it is preferred by all of them because it has superior or desirable characteristics. All customers have a higher willingness to pay for goods they perceive as of higher quality.

Higher quality products or services are more desirable by all consumers *ceteris paribus*. Products or services that are ranked according to quality perceived are “vertically” differentiated. In contrast, products or services for which consumers do not agree on the superiority of one over the other are “horizontally” differentiated.

Customers will not necessarily buy higher quality products, because those products usually have higher prices. Each customer will choose to buy a product based on their personal price-quality trade-off, which means that some will buy the expensive high-quality product, while others will choose the cheaper low-quality product. For example, some people gain little extra utility from having “designer” clothes even if they accept that those clothes are better (quality wise) than regular clothes, and would have chosen them at equal prices.

When goods are being provided in a competitive market, higher quality generally corresponds to higher price. On the contrary, in non-competitive markets, the tradeoff between quality and price may not be efficiently determined; therefore quality and price may be analyzed jointly. In this sense, by increasing competition price or quality may change or be expected to change in different ways or magnitudes.

On the other hand, variety is not necessarily the same as quality. Quality depends on vertically differentiated characteristics of products, while variety describes the set of products offered by firms. A wider range of vertically or horizontally differentiated products may be a more efficient provision of variety. However, in competitive markets, more variety may imply that some products will have lower quality given that customers with low incomes or low willingness to pay may benefit from cheap low quality products.

In practice, consumers are heterogeneous and make decisions individually by trading off quality for other characteristics, particularly price. Variety is a characteristic of supply aimed at covering different tastes and improving price discrimination. Variety may target consumer tastes in a horizontal or vertical way. Nevertheless, in a competitive market the different tradeoffs between price, cost, quality, variety and other characteristics must be efficiently determined.

Quality, quantity, variety and other margins have to be at their efficient levels. It is not the role of competition authorities to seek high quality or variety levels *per se*, except when they are the result of competition. Competition could produce a set of goods vertically or horizontally differentiated, so that firms and customers can attain efficient trade-offs between costs, prices and product characteristics.

In general quality is difficult to measure in most cases, and estimations could be obtained only by making strong assumptions. However, this sometimes is also the case for other dimensions in competition cases such as cost, prices or the effects of abuse of dominance on prices.

In some cases we can choose to focus on prices because quality may be less relevant. For example, when goods traded are homogeneous and delivered or marketed in simple ways, the focus may be exclusively on prices. In other cases, quality may be an important and intrinsic part of the product as complementary or marketing services. For instance, cable or satellite providers of pay TV in Mexico offer plans with a set of channels, which may vary in number or popularity among costumers. In this case, price, number of channels, and their popularity must be analyzed together.

In another Mexican example, broadband internet access may appear to be competitively provided because prices by advertised capacity appear to be comparable to other OECD countries in which competition is strong. However, poor quality in Mexico may be the rule because real capacities are often below advertised levels and the service is frequently interrupted or congested¹. These failures of quality are mainly due to contractual failures, lack of enforcement of truth-in-advertising laws, or weak consumer protection regulations and agencies. In these cases, the competition agency could, for example, in a dominance case or in advocacy opinion; take into account the effects in the quality dimension.

2. Measuring quality

In some cases, quality or proxies for quality may be measured by directly observing characteristics of products or services or by surveys among costumers, which may be regularly conducted by sectorial regulators. For instance, quality or the lack of it, of cable or satellite TV plans may be deduced from the number of channels and their audience levels by comparing prices with markets in other places or times.

Sectorial regulators, consumer agencies and private institutions may publish studies or reports on quality of products or services. Airlines may exhibit low quality through the percentage of late arrivals or departures, or the amount of complaints by costumers. Telecom regulators may measure interruptions of service or effective capacity of bandwidth connections. Some consumer agencies measure characteristics of products and make comparative assessments across firms. In some cases suboptimal quality levels may be deduced from international comparisons of indicators.

It is generally difficult to estimate impact of suboptimal quality on welfare: consumer preferences may be heterogeneous in horizontal and vertical dimensions; the tradeoffs between quality, quantity, cost, variety, and other outcomes are difficult to estimate and may be not be clearly understood. This is a problem when measuring quality, but it is also to a lesser extent, essentially the same problem of measuring welfare, costs, efficiencies and prices traditionally analyzed by competition agencies.

In some cases, quality can take a secondary role in the analysis because there may be evidence that quality is unlikely to change because it is determined or fixed by technical reasons. Sometimes firms may have plant capacity or technological constraints that prevent them from changing quality instead of raising prices. This may happen when producing lower quality may imply only modest savings to the firm in the short run. For instance, in the sale of advertising for television, prices will be the variable to analyze, because quality may be difficult to change or degrade.

Anticompetitive harm for consumers can take the form of reduced product quality, lack of innovation, or low variety. In most cases, levels of quality are difficult to estimate quantitatively. Suboptimal quality

¹ Often broadband speeds are advertised as “up to” a given amount of Mbps, and no actual performance information or index of real broadband speed is publicly available.

levels are also difficult to observe because we don't know which quality levels would exist in a competitive market. However, competition cases generally pay closer attention to prices and cost efficiencies. This limitation is not as serious as it may appear, because excessive prices are always relative to efficient cost, which are greater for high quality products.

Telecom regulators have established some methodology to measure quality of services, such as internet effective capacity, voice quality, reliability, interruption rates, and congestion, among others. Energy regulators have developed some methodologies to measure quality of service at the retail level. By sampling of the electricity service, surveys may reveal low quality aspects such as irregular provision or variable voltage levels.

In Mexico, efforts by regulators and consumer protection agencies to impose quality standards are probably not as successful as expected. In particular, the Telecom regulator has struggled to enforce quality standards for broadband internet and mobile phone quality. This may be due to the inherent weakness of the sectorial regulator under Mexican law. Operators have the right to contest almost any decision of the regulator, suspend the regulator's act, and litigate for years.

3. The effects of competition on quality

Starting from less than perfect competition, more competition generally implies higher quality. Under strong competition, prices, quantities, quality, variety, costs, and innovation should be at their efficient levels, reflecting efficient tradeoffs. Market failure or a non-competitive market structure may imply that those parameters are not necessarily at their efficient levels. The strategic variables, and the ways firms react to each other in the industry will have an important effect on the observed market outcomes.

A dominant firm that uses its market power to price above cost and/or possibly produce below efficient levels of quality will distort several margins to extract rents: price, quality, quantity, variety, and others. In some cases, quality will be difficult to degrade and prices may be the main instrument to extract rents. For example, in the pharmaceutical industry quality may be subject to firm regulatory restrictions. In other cases, degrading quality will not lead to significant savings in costs and will not tend to be used as the monopolist tool to extract rents or foreclose markets. This may happen clearly in some wholesale markets, markets for homogeneous goods, or markets for products that are jointly produced with other products for which no incentive to degrade quality exists.

More competition will generally increase quality for a given price or reduce price for a given level of quality. In theory, it is also possible to have an increase in both quality and price and the allocation will still be efficient. The same tradeoffs may be found with quality versus variety, etc. In particular, the move to a more competitive market may give rise to dispersion in quality and prices; not necessarily an overall increase in quality. In some cases, we may have to think about competition as leading mainly to higher innovation or investment.

Higher quality is generally achieved by incurring in higher costs when the equilibrium is already efficient. However, starting from a non-competitive equilibrium, the introduction of competition may reduce prices, increase quality, increase variety, increase innovation, or a combination of them. Evidently, every case must be analyzed individually.

4. Market definition

When we define the relevant market, we are attempting to find a set of products that impose constraints on each firm's pricing or the product in several dimensions of competition (quality, service, innovation). In theory, a conceptual tool to define relevant market such as the SSNDQ test may be employed. However, some limitations may make it difficult to use. For instance, qualities are hard to

observe and quantify; qualities are less foreseeable, or less likely to be observed in the future; prices are more responsive in the short run as they change more rapidly and adapt to short run changes.

On the other hand, the SSNIP framework may be used even in most cases where quality considerations are important or quality is more sensitive to competitive pressure than prices. It may be still possible to think in terms of hypothetical price increments and substitution for a certain level of average or common level of quality.

In México, gas stations only sell gasoline provided by the state monopoly, Pemex. Prices and margins are identical and regulated all over the country. There are no strong barriers to entry by new owners of gas stations in most places. In this case, gas station cannot compete by lowering price, but only through geographic dispersion and improvements in quality of service. In these cases, it is not difficult to use the SSNIP framework as if prices could be increased for a certain level of quality, instead of increasing quality itself.

Hypothetical prices may still be used instead of quality for determining the relevant market, in some cases. In other markets, we could estimate a “price of quality” or “hedonic price” to quantify quality. However, if we have already quantified quality, we could use the SSNIP test and think about quality as a variable to add to price. For these reason, it is not clear at this moment that the SSNDQ framework would be necessary to determine the relevant market.

5. Cartels

Mexican law prohibits agreements among competitors with the intent or effect of fixing prices, dividing territories, or reducing supply. Agreements on fixing or degrading quality among competitors are not explicitly prohibited in the law. However, for a cartel to work and extract rents, degrading quality has to be accompanied with price fixing. Agreeing to degrade quality alone does not make sense unless they fixed also prices and prevent prices from falling to compensate for the drop in quality. This is why, it is not necessary to take into consideration the possibility of agreeing to degrade quality while keeping prices, because the law prohibits agents from fixing prices in the first place.

Agreements to reduce quality may be illegal when they are achieved by restricting the supply. For instance, an agreement between competing pay TV operators to reduce the number of channels or to take out certain popular channels, will reduce the quality of the service and will likely be illegal due to restrictions in the supply; agreements among airlines to reduce frequency of flights between two cities will reduce quality and be likely illegal for the same reason.

In principle, an agreement to establish minimum quality standards may not be a cartel under Mexican law if it does not have the purpose or the effect of fixing or manipulating prices or segment markets or reduce supply. It should also have a purpose of solving some efficiency problem: preventing a risk; or solving a coordination, externality or market failure problem. The agreement is generally legal if it is motivated by solving a problem to establish necessary standards of safety², compatibility, information, or other pro-competitive purpose.

² Mexican law on the creation of mandatory (and also voluntary) technical standards promotes the participation of private associations of firms. Though this sort of participation may often be used as a formal mechanism to lobby for reduction of variety or consumer’s choices in available quality of goods or services, it may not constitute a violation of the competition act. Other laws broaden the forms in which the private sector may associate or coordinate to lobby for reduction of variety or consumer’s choices in available quality of goods, however, as it was mentioned, those actions may be legal under the competition act as long as they do not have the intent or effect of fixing or manipulating prices, segment markets, or restrict supply.

For instance, agreements among competitors that would not be illegal probably include: a code of ethics among competitors for preventing improper advertising for children; an association of merchants that keep record of debts of its members for creditworthiness purposes.

6. Procurement

In addition to its enforcement actions and as part of its advocacy activities the Commission reviews public procurement proceedings, upon request of the calling entity. The Commission comments on legal and design issues of the calls for tenders in several types of proceedings: open or restricted public auctions and framework agreements.

Regarding auction design, the Commission has made emphasis on the criteria for awarding contracts in public auctions, with the aim of promoting competition in these proceedings to warrant the best procurement conditions for the government. The legal framework establishes three awarding criteria: lowest price bid (called binary criterion in the law), “points and percentages” and reverse auctions.

On the one hand, the Commission has considered that whenever goods or services to be procured are homogeneous (such as generic medicines), lowest price should be the main awarding criterion, once bidders have shown that their offers comply with the technical requirements, including quality features. On the other hand, the Commission has noted risks from using the points and percentages criterion as a rule, especially in cases where goods and services have historically been awarded by a binary criterion and the contract to be procured is not to be modified-quality wise- with the migration of criterion³ or when the public servants in charge of buying have not been trained to migrate from the binary criterion. These points and percentages criterion ponders qualitative elements (and other issues such as experience, trademark, and technical assistance) along with price and thus allows its discrete use by procurement entities. It is also likely to generate non-objective advantages to bidders that allow them to bid above their best price, thereby affecting competitive bidding and outcomes to the detriment of government resources. In the opinion of the Commission the adequate use of this criterion requires much more training of the officials than the binary criterion.

7. Mergers

When a merger reduces the probability of coordinated and unilateral affects, it is likely to end up reducing costs, lowering prices and improving quality, among others. The merger, to be procompetitive ex post, has to avoid the formation of a dominant agent and of cartels among post-merger competitors.

In analyzing a possible merger, the Commission may consider evidence of efficiencies that include: efficiencies from producing a certain amount of product at lower cost; efficiencies of producing more product for the same cost; efficiencies such as economies of scale, economies of scope and network economies; efficiencies due to technology and know-how transfers; among others. The law does not mention explicitly efficiencies from quality improvements, but it does not exclude them either.

8. Quality improvement as a justification for vertical restraints

Vertical restrictions are very common even in markets where no dominant firm exists. Econometric evidence of welfare effects of vertical restriction is scarce and is rarely used by competition agencies, especially in unilateral conduct cases. Such econometric techniques have yet to be applied routinely to vertical restraints.

³ In fact the criterion is changed more by outside pressure to the buyer than by an evaluation that assesses whether the he will make gains in the goods and services to be procured.

It is difficult to estimate gains in consumer welfare from the introduction of vertical restraints. The treatment of these cases has largely relied on the analysis of the circumstances and characteristics of the markets and the particular restrictions. High prices may certainly be due to anticompetitive conduct, but sometimes qualitative evidence may favor or weaken one hypothesis or the other.

Exclusive dealing may give incentives to distributors to promote the brand of the manufacturer. The quality-adjusted price to the consumer (where quality includes the information and other services that dealers render to their customers) may be lower with exclusive dealing than without it. On the other hand, territorial restrictions may reduce competition among distributors of a same manufacturer. In this way, retailers may invest in service quality without suffering from free riding from other distributors.

Likewise, refusals to deal may be motivated by firms that want to control the quality of their chain of production or distribution. Some providers or distributors may not be able to provide the required quality standard. Refusal may be due to a producer that doesn't want to mix its product with lower quality products and ultimate, hurt the reputation of the manufacturer. Similarly, tying of machinery and supplies in aftermarket are difficult to justify in terms of quality, but we cannot rule out a case in those circumstances. Tying may be justified on efficiencies, other than quality, such as price discrimination or manufactures reputation.

In summary, there are many efficiency reasons for tying, bundling, and refusal to deal, price discrimination, and resale price maintenance, among other vertical restrictions. However, there is no general recipe for analyzing all cases and the existence and measurements of quality I still a difficult enterprise.

9. Other restraints on trade

Professional certifications, standards and other barriers to entry are often motivated by quality or security concerns, but may also been the result of excessive or unjustified regulation aimed at protecting the interests of “insiders” against entrants or against competition. In Mexico these restrictions are generally imposed by the government which means that the competition⁴ authority can only express opinions or recommend regulatory reforms. As a matter of regulation, these restrictions have to be analyzed on a case by case basis. They may be justified in insuring certain minimum levels of quality when there are problems of asymmetric information. The Commission recognizes that this restriction may have a useful purpose, but also recognizes that it may be the result of aggressive lobbying to restricting entry.

10. Agency experience

In most cases before the Commission, the principal variables under scrutiny for mergers, cartels, and dominance cases, are prices and quantities. Quality plays an explicit and very important role on the analysis of dominance conducts.

On the contrary, as we have seen, in cartel cases it is not generally necessary to analyze quality because of the *per se* prohibition on price fixing and the impossibility of two competitors to agree on quality degradation without price fixing.

Finally, the Federal Law of Economic Competition does not mention clearly the importance of quality for mergers, but given that quality is in general a type of efficiency and that mergers are at the end dependent on competition conditions post-merger, quality, directly or indirectly, is relevant even for mergers.

⁴ The Commission has an especial mandate to order a project of regulation to change, but this mandate is seldom used. It has been used once since 2006 when this especial mandate was established in the competition act.

PORTUGAL

This note, which is a non-technical abridged version of Pereira et al. (2013), argues that the quantitative analysis of market delineation and the unilateral effects of mergers can be extended to contexts where firms compete simultaneously in many variables, namely in price and quality.

Usually firms compete in several variables, *e.g.*, price, quality, research and development, variety, etc. However, the analysis of both market delineation and the unilateral effects of mergers usually focuses on competition in prices. This happens for a number of reasons of which we single-out the following three. First, although firms compete in many variables, price is the single most important variable, and price variations are enough to capture most of the impact on welfare. Second, although firms compete in many variables and all of them are important for welfare, during the time horizon considered by Competition Authorities for their analysis, firms are only likely to change prices. Third, although firms compete in many variables and all of them are important for welfare and likely to change during the time horizon considered by Competition Authorities for their analysis, price is much easier to observe and measure than other variables, such as quality.

Increasingly, Competition Authorities are being confronted with cases that conform to none of the three scenarios presented above, *i.e.*, cases where firms compete in other variables other than price, these other variables are important for welfare and likely to change during the relevant time horizon, and furthermore these other variables and their impact can be quantified. Some of these cases originate from, *e.g.*, the healthcare industry, the air-transportation industry, roadway transportation industry or the pharmaceutical industry.

When Competition Authorities are confronted with cases where variables other than price, namely quality, are deemed important, usually the analysis of the impact of the operation on these variables is done only in qualitative terms and as a complement to the analysis of the impact on price.

The Portuguese Competition Authority (PCA) has already assessed some mergers where the impact on variables other than price was taken into account, although only in qualitative terms. For example, in the merger between TAP and Portugália, two airway companies, the PCA considered that after the merger the new entity would have incentives to re-adjust its strategies concerning the frequency, punctuality and capacity of flights in the routes where the two firms previously overlapped. Hence, to guarantee a minimum quality standard after the merger on those routes, it was proposed as a remedy the guarantee of a minimum daily frequency and a minimum capacity per week.

However, the quantitative analysis of market delineation and the unilateral effects of mergers can be extended to contexts where firms compete simultaneously in many variables, or where price is not the relevant variable in which firms compete, perhaps because price is regulated.

Next we describe how the quantitative analysis of market delineation and the unilateral effects of mergers could be conducted in the case where firms compete in quality, a uni-dimensional observable

variable, and prices are fixed, perhaps because they are regulated.¹ This case was chosen merely for illustrative purposes. Later we indicate how the analysis could be generalized.

First, convert observed nominal prices of the products under analysis into hedonic prices. Hedonic prices correspond to nominal prices corrected for quality. See Foss et al. (1993), Nesheim (2008) and Rosen (1974). Note that although nominal prices are fixed, hedonic prices are not. For example a decrease in quality raises hedonic prices. Then, redefine the demand system for the products under analysis in terms of hedonic prices as in Trajtenberg (1989).

Second, estimate econometrically the demand parameter. Depending on the data available, various modeling and estimation options are available. Berry et al. (1995) represents a currently popular approach.

Third, estimate the marginal cost parameters. Assuming an equilibrium condition, e.g., firms play a Nash equilibrium in qualities, the demand parameters can be used to recover marginal costs as in Nevo (2000).

Fourth, given the estimated demand and cost parameters and the equilibrium condition one can then conduct the analysis. Performing a SSNIP test, as in Ivaldi and Lörincz (2009) and Pereira et al. (2003), would involve evaluating the ability of a hypothetical monopolist exercising market power in terms of hedonic prices. Similarly, performing simulation of the unilateral effects of a merger, as in Nevo (2000) and Pereira and Ribeiro (2011), would involve evaluating the post-merger increase in hedonic prices. Profit variations can be computed using the usual expression and consumer surplus variations can be computed using the demand function defined in terms of hedonic prices as in Trajtenberg (1989).

The methodology described above can be extended to the cases where: **(i)** firms compete in several variables, among which quality, and quality is an observable uni-dimensional or multi-dimensional variable, and **(ii)** firms compete in several variables, among which quality, and quality is a non-observable variable. Extension **(i)** is straightforward. Extension **(ii)** is technically more challenging. We refer the reader to Pereira et al. (2013) for details.

References

- Berry, S., Levinsohn, J. and A. Pakes, 1995, "Automobile prices in market equilibrium", *Econometrica*, 63, 841–90.
- Foss, M., Manser, M. and A. Young, 1993, "Price Measurements and Their Uses", University of Chicago Press.
- Ivaldi, M and S. Lörincz, 2011, "Implementation Relevant Market Tests in Antitrust Policy: Application to Computer Servers", *Review of Law and Economics*, 7(1), 31-73.
- Nesheim, L., 2008, "Hedonic Price Functions," in the *New Palgrave Dictionary of Economics, 2nd Edition*, New York: Palgrave Macmillan.
- Nevo, A., 2000, "Mergers with Differentiated Products: The Case of the Ready-to-Eat Cereal Industry", *The RAND Journal of Economics*, 31(3), 395-421.
- Pereira, P. and T. Ribeiro, 2011, "The Impact on Broadband Access to the Internet of the Dual Ownership of Telephone and Cable Networks", *International Journal of Industrial Organization*, 29(2), 283-93.
- Pereira, P., Ribeiro, T. and J. Vareda, *forthcoming*, "Delineating Markets for Bundles with Consumer Level Data: The Case of Triple-Play", *International Journal of Industrial Organization*.
- Pereira, P., Ribeiro, T. and J. Vareda, 2013, "Market Delineation and the Unilateral Effects of Mergers when Firms compete in Several Variables", mimeo.
- Rosen, S., 1974, "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition", *Journal of Political Economy*, 82(1), 34-55.
- Trajtenberg, M., 1989, "The Welfare Analysis of Product Innovations, with An Application to Computed Tomography Scanners", *Journal of Political Economy*, 97(2), 444-479.

¹ Observable by the econometrician.

UNITED KINGDOM

Summary

The paper is submitted jointly by the Office of Fair Trading and the Competition Commission (together, the Authorities), with contributions from Monitor, which is the sector regulator of healthcare. The paper summarises the circumstances in which the Authorities may take account of quality competition in merger and market investigations under the Enterprise Act 2002. It also illustrates the experiences of the Authorities and Monitor in relation to a selection of recent and current cases in which quality competition has been taken into account.

In the UK quality competition is potentially relevant in the assessment of three types of competition case:

- Mergers investigations under the Enterprise Act 2002 (EA02);
- Market investigations under the EA02; and
- Antitrust cases under the Competition Act 1998 (CA 98).

The Office of Fair Trading (OFT) is the relevant authority for phase 1 of merger and market investigations and also CA98 antitrust cases. The Competition Commission (CC) is the relevant authority for phase 2 merger and market investigations. Monitor has concurrent powers under CA98 as the sector regulator for healthcare and has functions with regard to mergers in the health sector. It is also responsible for enforcement of health and social care provider licence conditions that mirror the Chapter I (Article 101) and Chapter II (Article 102) competition law prohibitions.

The Authorities often receive submissions from parties regarding quality competition in merger and market investigations. The OFT has had limited experience to date of considering quality, as opposed to price, competition in its antitrust cases and this submission therefore focuses on the Authorities' experiences from mergers and markets investigations.

The Authorities have developed approaches to assess the nature and extent of non-price competition where products are differentiated. Typically, the starting point is to identify the product characteristics that matter to consumers and that are the focus of competitive interactions between firms. Where the dimensions of quality are not readily measurable, the Authorities have a variety of quantitative techniques that enable them to assess the impact of quality competition on consumer welfare. When firms compete on quality, markets may not work well for consumers where they are not fully informed as to the quality of the product or service. Such information asymmetries have been the focus of a number of recent market investigations.

This submission draws on a number of documents published by the Authorities and Monitor, including merger and market investigation decisions, guidelines and a commentary on retail markets. These documents are available on the Authorities' websites.

The submission is structured as follows: First, we set out what we mean by quality competition and how we define quality competition for the purposes of competition enforcement. We then review a number

of issues that, in our experience, commonly arise in the assessment of quality competition. These include: identification and assessment of quality; market definition and competitive assessment; quantitative techniques for the assessment of the relationship between quality and competition; and, the role of consumer information, particularly the effects of information asymmetries on the effectiveness of competition.

1. Quality competition for the purposes of competition enforcement

The Authorities' joint Merger Assessment Guidelines (Merger Guidelines) note that competition creates incentives for firms to improve quality as well as to cut price, increase output, enhance efficiency, or introduce new and better products.¹ The CC's Guidelines for Market Investigations note that firms with significant market power may be able to maintain quality below competitive levels without the consequent loss of sales becoming unprofitable.²

Unlike price, there are typically many different dimensions to quality and these may depend on the market in question. For example, in a retailing setting quality may include considerations of the quality of goods on sale, the available range or products, levels of services such as product information or length of time queuing at the checkout.

Products can be thought of as being a bundle of characteristics, including price, quality, location, time etc. When these characteristics vary between products (ie they are differentiated), consumers derive utility from non-price dimensions of product attributes. For example, stores within the same retail chain typically differ from one another not just in terms of location, but also in terms of quality, range and service. This is often described as "the retail offer".

Each consumer is assumed to have a ranking over the mix of these attributes. This creates incentives for firms to compete on these attributes as well as on price and so soften price competition. Branding, quality, product characteristics or geographical location will have effects on the extent to which a product competes with another; one high-end product, for example, may compete more directly with another high-end product than with a low-end product. In merger control, where products are differentiated, for example by branding or quality, unilateral effects are more likely where the merger firms' products compete closely.

As a generalisation it is usually quicker to adjust price than quality or product characteristics, so it is usually assumed that firms compete on price having chosen their product attributes. However, some aspects of quality can be varied in the short run.

In some markets, competition may take place predominantly on aspects of quality. This may arise in markets where prices are regulated or where demand is not very responsive to price. Examples of such markets include casinos, where until very recently the odds on games have been regulated, and NHS-funded hospitals, where prices for individual treatments are set centrally.

2. Issues that arise in competition enforcement in markets that feature quality competition

In the following section we examine a number of issues that, in our experience, commonly arise in competition enforcement in markets that feature quality competition. We discuss the Authorities' approaches to these issues and illustrate with examples from recent and current cases.

¹ Merger Assessment Guidelines (Sept. 2010) CC2(revised) OFT 1254, paragraph 4.2.3

² Guidelines for Market Investigations, (April 2013) CC3 (revised), paragraph 9

2.1 *Identification and assessment*

Although prices and costs are among the more observable and measurable outcomes the other, less quantifiable factors, including quality, are no less important to customers. There are typically many different dimensions to quality. This gives rise to the question as to which dimensions are relevant and how they should be identified and assessed.

In some cases quality is directly identifiable so that the relevant question is which dimensions of quality matter to consumers and may be affected by the extent of competition. An assessment of the important dimensions of quality starts from an understanding of the product (or service) attributes that matter to consumers. The next consideration is which measures of quality do firms monitor as these are likely to be good proxies or measures for the quality attributes on which they compete.

In the Merger Guidelines the Authorities describe the formulation of theories of harm, which may set out those aspects of the merger firms' competitive offers to customers over which firms compete and which could worsen as a result of the merger, whether in terms of price or non-price aspects such as the quantity sold, service quality, product range, product quality and innovation. The ability of firms to adjust these aspects, and also the time within which they can do so, will depend upon the market concerned.³

In other cases, quality is not directly identifiable and this gives rise to the problem of assessment. The Authorities use a number of empirical techniques to assess the effect of quality on competition, which can be used where quality is not directly measurable to infer the impact of quality on consumer welfare. For example, in some retail mergers where prices are determined centrally, the CC has assessed the relationship between store margins and concentration, where a lack of local competitive constraint would tend to lower a given store's costs and therefore increase its margins.⁴ Quantitative techniques commonly employed by the Authorities for assessing the relationship between quality and competition are discussed in paragraphs 56 to 70.

2.1.1 *Identification and assessment of quality in recent cases*

Evidence that enables the identification and assessment of the relevant quality dimensions tends to be qualitative, coming particularly from surveys, questionnaires or discussions with customers, investors, or other market observers. For example, such analysis has provided evidence for the identification and assessment of the non-price factors relevant to an assessment of competition in several past market investigations:-

2.1.2 *Personal current account services in Northern Ireland market investigation (2005)*

In its investigation into Northern Irish personal banking, the CC chose a range of indicators on which information was readily obtainable and readily comparable and, analysing responses to questionnaires, made a comparison between banks within Northern Ireland and some of the large banks based in Great Britain. This evidence indicated several non-price indicators of a lack of competition between Northern Irish banks in relation to branch opening hours, functionality of Internet banking and product innovation.⁵

³ Merger Assessment Guidelines, paragraph 4.2.3

⁴ See for example, the Groceries market investigation <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/groceries-market-investigation-and-remittal>

⁵ Personal Current Account Services in Northern Ireland market investigation http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2007/fulltext/527.pdf

2.1.3 *Private healthcare market investigation (Ongoing)(CC)*

The CC is currently investigating the supply of private healthcare services in the United Kingdom. Earlier this year, the CC published its annotated issues statement, outlining the ‘theories of harm’ that it will be developing and testing throughout the course of its investigation.⁶ A number of the CC’s theories of harm involve considerations of quality.

In the context of private healthcare, the CC has defined quality to refer to ‘all attributes of the product/service which may provide value to the consumer, including but not limited to: clinical outcomes, speed and convenience of treatment, comfort of accommodation, standards of customer service, etc.’

In order to assess these attributes the CC has undertaken a consumer survey, which demonstrates that people consider clinical expertise important and try to choose consultants on these grounds. The single most important reason for choosing a consultant was ‘clinical expertise’ (cited by 38 per cent of respondents).

2.1.4 *Investigations in the healthcare sector (Monitor)*

In the healthcare sector, there are a number of different dimensions to quality. These may not always be correlated with one another, and are in any case likely to be weighed differently by different patients. These include: clinical quality, the quality of the patient experience, and the ease of access to services.

In measuring these dimensions the NHS uses a range of variables which indicate performance against an aspect of quality. These measures include, but are not limited to: the quality of outcomes for patients (eg mortality rates, rates of 28 day re-admission following discharge, and patient reported outcome measures); the quality of inputs and processes (eg staffing ratios, use of pre- and post-operation surgical checklists); patient safety risks (eg the number of infections); registration with the quality regulator); feedback from staff/patients; and waiting times.

NHS providers are required to provide comparable data across a wide variety of quality indicators, Monitor uses this data to assess the different aspects of quality.

2.2 ***Market definition and competitive assessment in markets with non-price attributes***

In this section we set out the Authorities’ approaches to market definition and competitive assessment in markets that are characterised by competition on quality and non-price factors.

The relevant product market is a set of products that customers consider to be close substitutes, for example in terms of utility, brand or quality. There are a number of circumstances where non-price attributes may be relevant to the assessment of the relevant product or geographic market.

One example arises in the investigation of mergers that involve chains of retail outlets, which may have local or national effects (or both). Some retail chains have a national pricing policy. Other key aspects of the retail offer may also be set nationally. In this context, parties to a merger have sometimes argued that the merger would not have an impact on prices and the service to customers at a local level because many of the important aspects of their offer to consumers are determined at a national level and they would not change their national policy to a local one as a result of the merger.

⁶ Private Healthcare market investigation http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/private-healthcare-market-investigation/130228_final_ais.pdf. The CC must publish its final report by 3 April 2014.

In recent retail mergers the Authorities have examined whether non-price attributes respond to local competition. These variables have included: promotions, vouchers, offers; local advertising; quality of management and staff training; product range, availability and quality; amount of pre and after sale service; store aspect: layout, size, maintenance, decisions to refurbish and facilities at the store; and, store opening hours.

In assessing the importance of these variables, the Authorities typically gather a wide range of evidence from internal strategy documents, business plans for refurbishments or store openings/closings to more quantitative evidence such as the empirical relationship between store margin and local competition.

The following are examples of investigations where non-price factors have been relevant to the Authorities' analysis.

2.2.1 *Somerfield Plc/William Morrison Supermarkets Plc merger inquiry (2005):*

William Morrison Supermarkets plc ('Morrisons') and Somerfield plc ('Somerfield') were the fourth and fifth largest grocery retailers in the United Kingdom. Following Morrison's purchase of grocery retailer Safeway plc, Morrisons was required by the CC to divest 52 Safeway stores, though it ultimately decided to sell 115 stores to Somerfield, prompting a further reference to the CC.⁷

In its analysis, the CC considered that the quality of offerings from various supermarkets spoke to their substitutability and consequently the correct market definition. The CC also considered the factors on which supermarkets compete, using the acronym PQRS (price, quality, range, and service) to denote those criteria.

The CC noted that the SSNIP test would include not only the scope to increase prices profitably, but also to reduce the quality, range and service provided in a store—price, quality, range and service, by which we also abbreviate price, quality, range and service below) being among the main ways in which stores compete once location is fixed.⁸

Somerfield contended that the CC's analysis was flawed because the determinants of the PQRS criteria (such as prices) were calibrated nationally, so even in markets characterised by less intense rivalry, there would be no attempt to take advantage and lower the quality of service offered. The CC rejected this analysis, noting that: 1) customer feedback suggested the contrary (e.g. customer complaints about shorter opening hours at one of the stores listed as problematic); 2) even if deteriorations in quality were not intentional, they might occur (consciously or otherwise); 3) margin-concentration analysis demonstrated that rural areas with lower competition exhibited higher margins, which might be due to either higher prices or due to reduced range; and 4) the theoretical link between a loss of rivalry and adverse effects for consumers is very straightforward. Once a loss of rivalry has been established, the CC will presume that consumers will be adversely affected unless strong evidence to the contrary is presented.

The CC used SSNIP and margin-concentration analysis as methods of establishing those stores which were able to resist competitive pressure on the PQRS criteria due to strong market share in local markets.

⁷ The CC concluded that Somerfield would be required to sell 12 of the newly-acquired stores due to the presence of SLCs in the relevant local grocery markets.

⁸ http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2005/fulltext/501.pdf

2.2.2 *Groceries market investigation (2008)(CC)*

In 2006, the OFT made a market investigation reference to the CC in relation to the retail supply of groceries in the United Kingdom.⁹

As with the merger between Somerfield and Morrisons (considered above), the CC used the SSNIP analysis in order to determine the strength of supply and demand side substitution in various local markets. In areas where substitutes were weak and the monopoly power of certain retailers was strong, the CC reasoned that adverse effects were likely to be found in price, quality, and other factors.

The CC acknowledged that there was difficulty in measuring service quality across stores, so most of its analysis which considered quality was conducted by drawing inferences about the likely behaviour of stores, with high market concentration and high profits margins tending to indicate that service quality was likely to suffer. As with the acquisition of Morrison's stores by Somerfield, the CC found that particularly high margins in areas where a particular retailer enjoyed a strong position would allow a retailer to get away with offering a poorer range of products and a generally inferior standard of service provision (for example employing fewer staff).

The CC also considered the responses of interested parties and other retailers when considering the strength of competition on matters of quality. For example, Whole Foods Market contended that the opening of its Kensington branch forced nearby retailers to improve the range, quality, and service of their own offerings.

The CC considered the extent to which a profit-maximizing hypothetical monopolist controlling grocery stores in a candidate market will be able to impose a SSNIP will be determined by the scope for demand- and supply-side substitution. In the context of grocery retailing, demand-side substitution occurs when consumers switch either all or part of their grocery expenditure to another store. This might be in response to a change in price, but may also be in response to a change in one or more of the other non-price aspects on which stores compete such as product range, quality or service. As a result, the CC took into account possible changes in both price and non-price factors when considering demand- and supply-side substitution.

2.2.3 *The Rank Group Plc/Gala Coral Group merger (2013)(CC)*

The Rank Group Plc (Rank) is a casino operator which acquired Gala Casinos Limited (Gala), another casino owner and operator, in 2012. The CC located seventeen areas of potential concern before reducing that list to five areas where a substantial lessening in competition was likely to result. The CC's remedy was to mandate a partial divestment of four of the problematic casinos and to require that Rank sell one of its 'cold licenses' to operate a casino in Edinburgh.

The merger concerned two firms whose main competitive focus was (broadly construed) the quality of the gambling experience that they offered. The CC analysed pre-merger competition and assessed the extent to which casinos compete on a number of dimensions including short and long term and price and non-price factors. In its assessment the CC used survey evidence to determine what mattered to customers when they choose a casino. The CC then assessed what elements of their offer on which casinos focus, using the parties' internal strategic documents and performance monitoring reports. The CC's view was

⁹ The Final report was published on 30 April 2008: <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/groceries-market-investigation-and-remittal>

that non-price features seemed more important overall than price.¹⁰ Both merger parties were concerned to ensure that they offered a comfortable and exciting place for gamers to spend time and both offered promotions and events in order to attract custom.

2.2.4 *NHS hospital mergers (2011-2013)(Monitor)*

In its reviews of hospital mergers, Monitor uses the framework of a ‘small but significant non-transitory decrease in quality’ to define product markets.¹¹ This reflected the fact that the SSNIP test should in any case involve a small but significant non-transitory increase in quality-adjusted price, and that in these cases, prices were set at a fixed tariff in order to remove the scope for price competition.¹²

It considered demand side substitution possibilities and observed that a patient’s diagnosis will determine the treatment that is required. For example, the patient is unable to opt to have a replacement knee if he is unsatisfied with the quality of the surgery that a provider of ankle surgery is offering.

On the supply side it considered that an alternative supplier of the same specialty (for example, orthopaedics) would have the ability and incentive to switch capacity easily and in a timely fashion into the provision of a service or procedure within that specialty in the event of a small but significant worsening in the quality of provision of the service in question by a hypothetical monopolist supplier. This was based on consultant staff being trained and registered at a specialty level which means that providers who offer a given specialty will be able to use their resources to provide any standard treatment within that specialty.

2.2.5 *OFT’s review of NHS hospital mergers*

The OFT has assessed two mergers involving NHS trusts¹³. The OFT referred the merger between The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust and Poole Hospital NHS Foundation Trust to the Competition Commission for an in-depth investigation, since the OFT concluded that the merger raised a realistic prospect of a significant lessening of competition. The OFT was specifically concerned that the merger could result in harm to patient and commissioner interests in relation to (a) routine elective and (b) non-elective services.

As part of its assessment, the OFT also considered whether the merger was likely to reduce competitive pressures on the merging parties, such that their incentives to maintain quality and efficiency would be reduced. The relevant theory of harm was that the merged party may not be prepared to incur the same level of expenditure and/or maintain the same level of quality above, for example, prescribed minimum regulatory standards.

In assessing the closeness of competition between the merging parties, amongst other aspects, the OFT considered the extent to which the quality of services at the merging parties’ hospitals was similar. For example, the OFT considered whether the parties’ hospitals met all the relevant minimum regulatory standards.

¹⁰ Rank/Gala merger investigation http://www.competition-commission.org.uk/assets/competitioncommission/docs/2012/rank-gala/rank_gala_final_report_excised.pdf

¹¹ Prior to 1 April 2013 the Cooperation and Competition Panel (CCP) provided advice to Monitor or the Secretary of State regarding the competitive effect of mergers involving public healthcare providers. On 1 April 2013 the CCP became the Cooperation and Competition Directorate of Monitor.

¹² Note that it is the change in quality, rather than the change in investment, that is relevant here since it is this that potentially provokes a demand response.

¹³ NHS Foundation Trusts merger investigation http://www.of.gov.uk/shared_of/mergers_ea02/2013/NHS-foundation-trusts.pdf and http://www.of.gov.uk/shared_of/mergers_ea02/2013/UCLH.pdf

The OFT also considered the impact of the merger on the quality of hospital services in relation to relevant customer benefits. The parties' submissions centred on the ability of the merged organisation to provide improved services as a result of increased scale and improvements to operations of a poor performing hospital trust, for example, sustaining higher staff to patient ratios, or improved clinical outcomes, such as improved mortality, readmission and complication rates.

These examples show how the Authorities have approached market definition and competitive assessment where competition takes place on quality, or more broadly, on non-price factors. In a number of cases the Authorities have used quantitative techniques to understand the relationship between quality and competition. These techniques are explored in the following section.

2.3 *Quantitative techniques for assessing the relationship between quality and competition*

The Authorities are often interested to understand the relationship between competition and the competitive or strategic variables that are the outcome of competition. Where firms compete mainly on price, the analysis is relatively straightforward and focuses on the relationship between prices charged by a firm and the structure of the local market as a proxy for competition.

The CC uses a variety of techniques to assess the relationship between market structure and outcomes where firms compete locally on non-price (ie quality) variables. The OFT/CC joint commentary on retail mergers sets out some examples of the most commonly used techniques.¹⁴

2.3.1 *Margin concentration analysis*

In catchment areas where the merging parties' stores face only one other competitor, the merging parties may offer a worse service than if they were facing a larger number of competitors. Even with uniform national pricing, a reduction in other aspects of the retail offer in response to a lack of local competitive constraint would tend to lower a given store's costs and therefore increase its margins at store level.

In Somerfield/Morrisons (supermarkets), the CC found that although both parties had national pricing policies, Somerfield's policy had tiered pricing, leading to variation in local prices. The CC's margin concentration analysis showed a statistically significant relationship between Somerfield's margins and the degree of market concentration in rural areas.

In Sports Direct/JJB Sports (sports retail), the CC carried out a local margin concentration analysis to examine whether Sports Direct varied any aspects of its retail offer on a local basis, and if so, whether these variations were related to the presence of a nearby JJB store.¹⁵ Since Sports Direct had a national pricing policy, the CC considered other aspects of the retail offer that might vary on a local basis, such as store staffing levels, stock deliveries, store opening hours, store maintenance and refurbishment, and stock shortages. The CC did not find a relationship between the degree of competition and local variation of the retail offer.

2.3.2 *Entry analysis*

When conducting entry analysis the CC has considered whether entry into a local market by a variety of competitors had an impact on the parties' revenues. This method relies on the fact that if a competing

¹⁴ http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/corporate_documents/other_guidance/commentary_on_retail_mergers_v1a.pdf

¹⁵ Sports Direct/JJB Sports merger investigation <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/sportsdirect-jjb-sports>

store opens near an incumbent store at least some of the incumbent's custom will be diverted to the new store for a sustained period.

The CC conducted entry analysis in a number of cases. For instance, in Waterstone's/Ottakar's (books)¹⁶, Holland & Barrett/Julian Graves¹⁷ (nuts, seeds and dried fruits (NSF)), and Sports Direct/JJB Sports (sports retail), the CC found that entry by one of the merging parties in an area where the other had been incumbent had a stronger impact on the incumbent store's revenues than entry by any other competitor.

2.3.3 *Other econometric techniques*

The CC has also used other econometric techniques based on regression analysis to assess the extent to which the different characteristics of a retailer's local offering was related to the extent of local competition pre-merger. For instance, in Waterstone's/Ottakar's, the CC found that prices and book quality were set nationally and did not vary by location. However, the CC found that many other variables did vary by location, such as the range of books offered, the number of staff and length of staff experience, the number of book signings, decisions to refurbish and opening hours. To examine if these local variables responded to the amount of local competition, the CC conducted a regression analysis which analysed whether these variables depended on whether the store was in an overlap area or not, taking into account store size and characteristics of local population. The CC found that range, staff size and length of staff experience did not depend on whether a store was in an overlap area, but it did find that book signings and general refurbishments responded to local competition.

In Rank/Gala, a merger of two casino chains where competition focuses mainly on various aspects of quality, the CC analysed a panel of data on Rank's casinos. For each casino and each month the CC looked at data on: (a) opening hours—both opening and closing times; (b) payout ratios for individual games—namely American roulette, blackjack, three-card poker, casino stud poker, electronic gaming and other games; and (c) betting limits for individual games—again American roulette, blackjack, three-card poker, casino stud poker, electronic gaming and other games.

Casinos offer a range of table games and gaming machines as well as food and drink services. The services offered have both price elements (eg payout ratio of gaming machines, price of food) and non-price elements (eg service standards, gaming quality). Some of the price and non-price elements of these services, ie price, quality, range and service level (PQRS), can be altered relatively easily in the short run. Any change of these variables contributes to a casino attracting or losing customers. The CC expected that the greater the competition that a casino faces, the higher the PQRS offered to its customers.

The CC used quantitative techniques to investigate whether the merger would result in a deterioration of the PQRS offered by casinos in particular areas. This is because the removal of a competitor may allow casinos profitably to raise their price or reduce their quality, range or service due to the reduction in the number of competitors to which their customers could switch their business.

The CC examined historical data on the effect of local competition on the parties' casinos. In particular, it tested whether: casinos' variable profit margins are related to the number of competitors (ie casino fascias) in a local area; whether casinos' salary costs are related to the number of casino competitors

¹⁶ HMV Waterstones/Ottakars merger investigation <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/hmv-group-plc-waterstones-plc-ottakars-plc>

¹⁷ NBTY Europe/Julian Graves merger investigation <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/nbty-europe-julian-graves>

in a local area; casinos' spending on promotions (relative to their turnover) is related to the number of casino competitors in a local area.

The CC found the following: there is some evidence that increased local competition reduces casinos' margins; it did not find evidence that local competition affects casinos' salary costs relative to their turnover; there is evidence that local competition increases casinos' spending on pro-motions, relative to their turnover, and that the size of this effect depends on how many existing casino competitors there are.

Monitor has conducted a quantitative analysis of the relationship between quality and concentration for primary care (GP) services in England.¹⁸ It found that both the clinical quality of primary care and the quality of patient experience varied significantly across local markets and that they each depended, in part, on the degree of competition in the local area.

These examples from past cases describe some of the quantitative techniques that the Authorities and Monitor have used to assess the relationship between quality and competition. In the following paragraphs we set out how the Authorities have assessed this issue in past vertical mergers.

2.4 Vertical mergers

The OFT has considered whether vertical mergers could lead to the foreclosure of the merging parties' downstream competitors through degrading the quality of the inputs they supply to these competitors. Most recently, this issue arose in London Stock Exchange Group (LSEG) / LCH.Clearnet.¹⁹ LCH.Clearnet supports trading on venues such as the London Stock by providing clearing services, which involves insuring against losses if one side of a trade defaults.

The OFT considered whether LCH.Clearnet would reduce service levels to LSE's rivals, deprioritise their development needs, or create delays in responding to access requests to make use of LCH.Clearnet services. Following an assessment of the merging parties' ability and incentive to engage in foreclosure, the OFT concluded that there was no realistic prospect of competition concerns arising.

This example illustrates the role that quality competition may play in the assessment of the competitive effects of vertical mergers. In the following section we set out the role of information asymmetries in the assessment of markets that feature quality competition.

2.5 Quality competition and the role of information asymmetries

Experience goods are those where quality is learned after the good is bought and consumed. Credence goods are those where aspects of quality are rarely learned, even after consumption. For experience goods, the issue arises as to how consumers learn the quality and what incentives firms have to supply it. Repeated purchases may help consumers to overcome the information asymmetries that they face. This is rarely the case for credence goods, which may require some form of regulation.

Information asymmetries may result in market failure and this has been the focus of a number of OFT and CC market investigations. As long as quality is costly, firms that are unable to offer warranties and who sell products to one-time consumers may have the incentive to cut quality to the lowest possible level.

¹⁸ An Empirical Analysis of the Effects of GP Competition
http://www.ccpanel.org.uk/content/100819_GP%20paper_full_paper.pdf

¹⁹ London Stock Exchange Group/LCH Clearnet merger investigation
<http://www.of.gov.uk/OFTwork/mergers/decisions/2012/LSEG>

The CC's Market Investigation Guidelines note that the reasons why buyers—in particular end-consumers—may have difficulty acquiring knowledge of substitutes or of the quality and prices of goods on offer might include²⁰:

- information may vary in availability or may become dated;
- customers' knowledge about their requirements may be imprecise;
- customers may have limited capabilities to search for products and compare alternatives, for example they can remember and readily recall only a limited amount of information; and
- customers may be sensitive or embarrassed about the product for which they are searching.

Information asymmetries between suppliers and customers might have adverse effects on competition, particularly in markets for goods or services where customers are not able to gauge the quality of a service when acquiring it.

Buyers may not know, for example, how quality varies across brands. Markets where customers may be unsure about quality include those for professional services, used goods and complex mechanical or electronic products. When, as a result of information asymmetries, customers are unable to form an accurate assessment of product quality (eg if they consistently underestimate the probability of product failure), a market may operate inefficiently. Imperfect information about quality can be a particularly severe problem for infrequently purchased goods or goods the quality of which cannot be verified even after purchase—so-called 'credence' goods.

In extreme cases, asymmetric information about quality may lead to only the lowest quality product being offered, effectively meaning that a true market may not exist. This could arise where sellers of low-quality products are able to make their products appear indistinguishable from higher-quality products, and consequently sellers of the higher-quality products are unable to convince customers of their products' worth. In this situation, customers are only willing to pay the price of the average quality product, which is not enough to cover the cost of the higher quality products, leading to these products not being supplied. Even if information asymmetries do not lead to all higher-quality products being forced out of the market, quality levels are lower than they would be in the absence of any asymmetry.

2.5.1 *Information asymmetries in recent cases*

2.5.1.1 *Payment Protection Insurance (PPI)*

In February 2007 the OFT referred the supply of all PPI (except store card PPI)¹ to non-business customers in the UK to the CC for investigation. The reference followed the receipt of a super-complaint about PPI from Citizens Advice. PPI covers repayments on the insured credit product if the borrower suffers an insured event.²¹

The CC saw evidence that indicated that PPI distributors and intermediaries do not compete with one another based on the price of PPI and noted that it did not find compelling evidence of competition on non-price factors.

²⁰ Market Investigation Guidelines, paragraph 304

²¹ Payment Protection Insurance market investigation <http://www.competition-commission.org.uk/our-work/directory-of-all-inquiries/ppi-market-investigation-and-remittal>

The CC identified five significant barriers to effective search. These included: that it is time-consuming to obtain accurate quotes; that it is difficult to make comparisons with the information currently available; the complexity of PPI policies; that significant numbers of consumers perceive either that PPI take-up will have a positive influence on their credit application process or that it is a condition for taking the credit; and, the relatively low level of stand-alone provision, which restricts consumers' ability to search for PPI on a stand-alone basis.

The CC concluded that the effect of these barriers to search is to impede the ability of consumers to make comparisons, and therefore effective choices between PPI policies. They also, therefore, act as barriers to expansion for other PPI providers, in particular providers of stand-alone PPI.

The CC's remedies included several requirements to provide specified information in marketing materials, at the points of sale of credit and PPI, and each year after the PPI policy has entered into force.

2.5.1.2 Healthcare

In Monitor's experience, asymmetric information is a particular issue in healthcare markets in which patients have limited information on their need for treatment, the type of treatment required, and the quality of the different providers of treatment. Clinical advisors (GPs) play a key role in helping to bridge this information gap. However, this can create principal/agent issues where the interest of the patient and clinician do not coincide. Information is now increasingly being provided directly to patients (for example, through the NHS Choices website) in order to help patients to make their own choices where possible.

3. Conclusion

There are many markets that are characterised by non-price, or quality, competition and some where these factors are the main focus of competitive interactions. The Authorities have extensive experience of assessing competition in these markets. Techniques for assessing quality and the relationship with competition range from the assessment of internal strategy documents and surveys to more empirical analyses that have shown that specific non-price factors, such as refurbishments, may be associated with the degree of rivalry. Quality competition has been a particular feature of the Authorities' assessment of vertical mergers and of investigations into the functioning of markets that feature information asymmetries.

UKRAINE

1. Defining quality

Quality characterizes goods by their ability to satisfy people's needs. The wider the range of needs that can be satisfied by a given product, without creating additional needs, the higher is its quality. In practice, determining the quality of a particular product or service is done within certain technical regulations, which provides a description of the product, its properties, means of production and formal ways of its use. In Ukraine, these technical regulations are provided by state standards and technical regulations (developed by the state), and in cases when the abovementioned do not exist, or when it is necessary to specify, add or increase the requirements of these standards – they are provided by technical specifications (developed by business entities and authorized by the state).

As for the price of the goods, it reflects its ability to be exchanged for money or other goods, that is, it reflects characteristics different from those reflected by the quality. As the price of goods depends on the costs of production and cost of sales, on the other hand, enabling a product to meet additional needs of the consumer requires additional costs. Ideally, the price is directly proportional to quality. However, in market conditions the price of a product is determined not only by the cost of its production. Also, the relationship between the cost of goods and the provision of consumer characteristics is complex and nonlinear, and at last, even if there is a direct correlation between the cost of production of goods and its consumer characteristics, the price is definitely affected only if consumer possesses perfect knowledge of the properties of consumer goods, which usually does not happen. Consequently, the quality can not be unequivocally and objectively expressed in terms of the price of goods (goods with the same price may have different quality, in fact, a price increase may be accompanied by a decrease in quality). In the same way, availability of choice is not the same as quality and is not one of the aspects of quality, in fact, the choice may be limited to equally low-quality goods.

2. Measuring quality

Within the approach according to which parameters of quality are determined through a formal description of an ideal model of a product or its production (use), quality measurement is carried out by comparison with the model of a particular product (service) that is the subject of research. Thus, the usual form of this comparison is the examination with the involvement of experts. Antimonopoly Committee of Ukraine uses the findings of the competent public authorities, the opinion polls conducted by independent institutions, certificates of compliance, the results of clinical trials and more. The subject of examination in most cases is the presence or absence of the desired effect from the use of products (receiving services), presence / absence of the product's expected specific properties, discrepancy between the real characteristics of the products (services) and those stated in the advertisement.

3. The effects of competition on quality

Usually competition improves quality, because the latter serves as a major way of attracting consumers. However, this effect can be neutralized as a result of informational specifics of the markets. On the one hand, higher quality does not attract consumers under the conditions of significant information asymmetry between the seller and the buyer in respect of consumer properties of the goods. Under these

conditions, the seller will not try to attract the buyers by improving the quality of goods, but instead will attract them through the distribution of information that creates the impression of his or her product as having extraordinary consumer properties, which tends to require less costs than the actual improvement of product quality, thus providing additional competitive advantage. The cases related to misleading information regarding the quality of products / services are often faced by the Antimonopoly Committee of Ukraine. They may be divided into three main categories:

1. Unreasonable dissemination of statements about the quality of products / services such as "the best", "best quality", "unique", etc. through the use of advertising, labels or other means of information.
2. Dissemination of statements about a certain product/service such as having unique, costly and valuable features or ingredients, while in fact it does not.
3. Unreasonable use of product names that are generally used for high quality goods; spreading allegations of naturalness of the products, or other positive consumer characteristics that are actually void (not present).

Thus the producers / service providers gain an unlawful competitive advantage and receive unjustified profits at the expense of the consumer, who starts / continues to acquire their products and services because he/she perceives these products / services as ones of higher quality.

When addressing the first type of violations, the Committee takes measures to identify and determine the validity of allegations of extraordinary quality. For example, the Committee discontinued violations committed by a German company, through the dissemination of false information "ABC - a unique drug from Germany." As shown by the investigation, the main active ingredient of the drug - "simethicone" - is also found in 12 other drugs that affect the digestive system and metabolism. Therefore, the information contained in the advertisement, in particular the uniqueness of the drug, was an exaggeration of consumer characteristics and product characteristics.

Among the main ways of countering these practices is the use of legal mechanisms to combat the spreading of misleading information by the sellers. Prohibition of arbitrary use of such markings leads to revival of competition in the relevant markets, as entities are forced to either improve quality or change the product range of products, replacing the names that can be confusing or misleading with the other product names that allow consumers to choose products for themselves more objectively. One positive example is the measures taken by the Antimonopoly Committee of Ukraine in connection with the use of the marking "For kids" on cooked sausages and frankfurters by their manufacturers. Due to the Committee's recommendations, one company discontinued production of such products, while others brought the ingredients and the markings in line with the legislation on protection from unfair competition, and received conclusions of the State Sanitary-Epidemiological Service that their products with the markings "For kids" were allowed for consumption by preschool children (3 years and older) and children of school age.

On the other hand, given a high degree of market transparency and a highly competitive market, the manufacturers tend to use parallel decrease of product quality as a way of decreasing their costs, thereby increasing their competitiveness. If direct evidence that a parallel decrease of quality is the result of business entities' concerted actions is available, competition authorities have to react. In other cases of a parallel reduction of quality in competitive markets it is more appropriate, in our view, to use of tools of technical regulation.

4. Market definition

Approaches to market definition adopted in Ukraine take into consideration the qualitative characteristics of goods in determining the boundaries of a market. Thus, the determination method of monopoly (dominant) position of business entities on the market implies that the definition of a product (product group) is based on the similarities, particularly of consumer characteristics (functionality, physical characteristics, technical and operating characteristics, degree of novelty of the goods).

In practice, this approach was applied, for example, during the proceedings for abuse of dominance in the market of pharmaceuticals used in the treatment of certain diseases. More expensive drugs with moderate side effects were singled out in a product group different from cheaper ones with more severe side effects. Similarly, the product quality parameters were taken into account when determining the market of certain types of equipment for catering. Quality of goods was also taken into account during the consideration of an application for a merger in the market of household chemical goods, where the individual product groups have been singled out on the basis of quality of detergents.

The Antimonopoly Committee of Ukraine does not use SSNDQ tests in its practice.

5. Quality in the context of specific types of competition matters

The Antimonopoly Committee of Ukraine repeatedly had to deal with cases of business entities' abuse of their market power in the markets where prices are regulated by the state, through a decline in the quality of goods (services). The legal basis that allows the Antimonopoly Committee to intervene in cases like this is Article 13 of the Law of Ukraine "On Protection of Competition", under which a business entities' inaction that leads or may lead to infringement of the interests of consumers, which would be impossible under the conditions of existence of significant competition in the market, is recognized as the abuse of monopoly (dominant) position. In practice, we are talking about inaction of monopolies (primarily energy providers, utilities, public transport) in terms of lack of good quality. Thus, the Antimonopoly Committee repeatedly held the company "A" (the monopoly supplier of electricity in one of the regions of Ukraine) accountable for systematically not taking any measures to ensure proper maintenance of power lines, so that there have been numerous and widespread power outages, which caused significant damage to both individuals and industrial consumers. In another case, in the early 2000s the Antimonopoly Committee of Ukraine has taken a number of measures to implement compensation by the heating and water supply companies to consumers in case of low-quality heating and water supplying services. Charging a full payment for services that did not meet the predetermined quality parameters (heat carrier temperature did not correspond with the ambient temperature, the hot water was supplied part-day or its temperature was not appropriate) were considered as abuse of monopoly (dominant) position.

According to the Ukrainian competition legislation concerted action may be permitted by the Antimonopoly Committee of Ukraine, if participants prove that these actions contribute to:

- Improvements in production, acquisition or sale of goods;
- technical, technological and economic development;
- development of small and medium enterprises;
- optimization of the export or import of goods;
- elaboration and application of uniform standards for products;
- rationalization of production.

However, concerted action cannot be permitted by the Antimonopoly Committee of Ukraine if competition is significantly restricted on the whole market or in a substantial part of it. Also, the government may allow concerted action to which the Antimonopoly Committee of Ukraine has not granted permission, if the parties prove that the positive effect in the public interest outweighs the negative consequences of restricting competition.

At the same time, the Government will not permit concerted action if:

- participants of concerted actions apply restrictions which are not necessary for the implementation of concerted actions;
- restriction of competition threatens the system of market economy.

Concerted actions are prohibited until the permission of the Antimonopoly Committee of Ukraine or of the Government has been acquired.

Law of Ukraine "On Insurance" provides the commission of concerted action by creating associations of insurers for certain types of insurance services.

The purpose of these methods of state regulation is primarily to ensure the solvency of market participants by combining the responsibility of the insurance companies who want to work in this market. Membership of the insurance company in this association is a prerequisite for market entry.

From time to time, trends arise in the insurance market toward mergers of insurance companies in certain types of insurance services, including the creation of insurance pools, in order to improve the quality of such services, taking into account best international experience, the introduction of high standards of provision of such services, and division of responsibility in the insurance event and, accordingly, premiums between insurance companies etc.

Moreover, among the factors in favor of competition authority's possible permission to create such insurance pools for a certain type of insurance services is the capitalization of insurance companies for insurance of large risks (when each individual insurer that provides insurance based on the acquired license is unable to provide the required insurance coverage).

However, the participants of concerted actions did not provide sufficient reasoning for the notion that the non-payment of insurance compensation for certain insured event is the result of fact that the insurance company was not a member of an insurance pool.

At the same time the issue of improving the quality of services, as the purpose of committing concerted action, was considered by the Antimonopoly Committee of Ukraine when granting permission for concerted actions in the form:

- The creation of the Nuclear Insurance Pool;
- The conclusion of the Rules of cooperation between banks and insurance companies involved in lending. These rules were aimed at establishing transparent, non-discriminatory rules of conduct for banks, insurers and other stakeholders in the process of bank loans, and the conclusion and the further implementation of insurance contracts by the borrower and the insurer. In these contracts, a bank is the beneficiary, and these contracts set the rules and mechanisms for establishing effective cooperation between banks and insurers.

In order to prevent cartel collusions in the markets, the Committee uses measures to resolve possible issues, particularly those related to product quality, through the signing of codes of conduct in certain markets with the involvement of respective associations, which then allows for effective self-regulation of such issues.

UNITED STATES

This paper responds to the Chair’s letter of April 4, 2013, calling for submissions for the roundtable on The Role and Measurement of Quality in Competition Analysis. The letter poses a series of questions about the consideration of quality in competition analysis.

It has long been recognized under U.S. antitrust law that quality is among the attributes of a product or service that typically benefits from competition:

The Sherman Act reflects a legislative judgment that ultimately competition will produce not only lower prices, but also better goods and services. “The heart of our national economic policy long has been faith in the value of competition.” Standard Oil Co. v. FTC, 340 U.S. 231, 248 [1951].... The assumption that competition is the best method of allocating resources in a free market recognizes that all elements of a bargain—quality, service, safety, and durability—and not just the immediate cost, are favorably affected by the free opportunity to select among alternative offers.

National Society of Professional Engineers. v. U.S., 435 U.S. 679, 695 (1978).¹ Indeed, for purposes of antitrust analysis, the U.S. Supreme Court has further observed that there is no meaningful distinction between effects on non-price, such as quality, and price competition.²

Quality effects can be relevant to antitrust analysis, therefore, in several ways. First, just as reduced output and increased prices can be deemed anticompetitive, depending on the circumstances, so too can reductions in quality. Second, beneficial effects on quality can be deemed procompetitive, justifying some restraints. However, courts have routinely rejected the assertion that restraints can be justified on the ground that competition itself might lead to decreased quality, viewing the arguments as a “frontal assault on the basic policy of the Sherman Act.” *Id.* at 695.³

Quality issues have regularly arisen in investigations by the Federal Trade Commission and the Antitrust Division of the U.S. Department of Justice (collectively, “the Agencies”) and in litigated cases in the courts across many industries, especially cases involving professions and health care. Anticompetitive

¹ See also *Nat’l Collegiate Athletic Ass’n v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 104 n.27 (1984), quoting *N. Pac. Ry. Co. v. U.S.*, 356 U.S. 1, 4–5 (1958) (The Sherman Act “rests on the premise that the unrestrained interaction of competitive forces will yield the best allocation of our economic resources, the lowest prices, the highest quality and the greatest material progress....”).

² Referring to claims of increased price and decreased quality, the Court has observed: “for antitrust purposes, there is no reason to distinguish between price and nonprice components of a transaction.” *Pac. Bell Tel. Co. v. Linkline Commc’ns, Inc.*, 555 U.S. 438, 450 (2009).

³ See also *FTC v. Superior Court Trial Lawyers Ass’n*, 493 U.S. 411, 423–24 (1990) (rejecting assertion that collective effort to raise prices through a concerted refusal to deal could be justified through claims that higher prices would improve quality of legal services); *Patrick v. Burget*, 486 U.S. 94, 105 (1988) (rejecting physicians’ contention “that effective peer review is essential to the provision of quality medical care and that any threat of antitrust liability will prevent physicians from participating openly and actively in peer-review proceedings”; it “essentially challenges the wisdom of applying the antitrust laws to the sphere of medical care, and as such is properly directed to the legislative branch.”).

reductions of quality have been found in cases involving mergers (discussed below), single firm conduct,⁴ and concerted behavior by rivals.⁵ The agencies and the courts also have recognized that improvements in product or service quality may justify certain restraints on competition, especially vertical restraints,⁶ but such claims have been rejected when unsupported by evidence.⁷ As noted below, third, differences in quality also may be relevant to market definition for purposes of antitrust analysis.

The Agencies often analyze quality as a key feature of the competitive process. As noted in the Agencies' Horizontal Merger Guidelines⁸ and discussed below, quality can be an important aspect of competition that the Agencies consider in analyzing a merger. For example, the Department of Justice successfully argued in court that the loss in competition caused by the acquisition of one manufacturer of tax preparation software (TaxACT) by another (H&R Block) was likely to harm consumers via higher prices and/or lower quality.⁹ In the same way, analysis of quality issues can be important in reviewing civil non-merger conduct. For instance, the FTC's recent investigation of Google's search practices focused on the question of whether Google's search results were tailored primarily to provide high quality results, or were designed to disadvantage Google's rivals. The Commission observed that Google's primary goal was to provide useful search results.¹⁰

This paper starts with a conceptual framework of quality and its measurement drawn from the economic literature, and then discusses some theoretical issues that distinguish competition via quality

⁴ See, e.g., *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605-07 (1985) (concluding that consumers were adversely affected by elimination of superior product); *U.S. v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (rejecting Microsoft's assertions that various of its product design choices improved the quality of its software).

⁵ See, e.g., *F.T.C. v. Indiana Fed'n of Dentists*, 476 U.S. 447, 462-64 (1986) (upholding FTC's conclusion that refusal by dentists to provide x-rays to insurers was anticompetitive and not justified on grounds of increased quality of care).

⁶ "The antitrust laws do not require manufacturers to produce generic goods that consumers do not know about or want. The manufacturer strives to improve its product quality or to promote its brand because it believes this conduct will lead to increased demand despite higher prices. The same can hold true for resale price maintenance." *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 897 (2007); see also *Cont'l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 55 (1977).

⁷ See, e.g., *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 483-84 (1992) (rejecting manufacturer's claim that its vertical restraints limiting third-party service organizations' access to replacement parts were justified to maintain quality of post-sale service in light of evidence that third parties were providing superior quality service).

⁸ U.S. DEPT. OF JUSTICE & FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES (2010), available at www.ftc.gov/opa/2010/08/hmg.shtm [hereinafter "2010 HORIZONTAL MERGER GUIDELINES"].

⁹ See *United States v. H&R Block, Inc.*, No. 11-00948, 2011 WL 5438955, at *69 (D.D.C. Nov. 10, 2011) ("Even if TaxACT's list price remains the same, the merged firm could accomplish what amounts to a price increase through other means. For example, instead of raising TaxACT's prices, it could limit the functionality of TaxACT's products, reserving special features or innovations for higher priced, HRB-branded products."), available at www.justice.gov/atr/cases/f277200/277287.pdf.

¹⁰ The following passage from the Statement of the Federal Trade Commission Regarding Google's Search Practices explicitly recognizes the role of quality in the competitive process: "The totality of the evidence indicates that, in the main, Google adopted the design changes that the Commission investigated to improve the quality of its search results, and that any negative impact on actual or potential competitors was incidental to that purpose. While some of Google's rivals may have lost sales due to an improvement in Google's product, these types of adverse effects on particular competitors from vigorous rivalry are a common byproduct of 'competition on the merits' and the competitive process that the law encourages." *In the Matter of Google Inc.*, FTC File No. 111-0163 (Jan. 3, 2013), available at www.ftc.gov/os/2013/01/130103googlesearchstmtocomm.pdf.

from the more familiar price competition. The paper then focuses on the analysis of quality in mergers, specifically in market definition and assessment of competitive effects. Finally, the paper discusses the important role quality analysis plays in the FTC's antitrust enforcement in hospital markets.

1. Defining quality

One way to conceptualize products and services is as collections of attributes that consumers evaluate in making their purchasing decisions. A common economic definition of a quality attribute is one where all consumers would agree that the product or service would be improved with higher levels of the attribute, all else held equal.

The processing speed of a computer is one example of this. Keeping constant the price, reliability, electricity usage, heat output, and all other factors, it seems likely that virtually all consumers would have a preference for a faster computer.¹¹ On the other hand, the physical size of a notebook computer would not be classified as a quality attribute. Some consumers prefer a smaller computer that is easy to carry, while others like large screens and large keyboards.

2. Measuring quality

Whether or how quality can be measured in a particular setting depends on the nature of the quality attributes. A first step for a competition authority is to determine how market participants define, measure, and assess quality in the ordinary course of business, via interviews and document review. A systematic review of the academic and popular economics literature may also reveal useful measures of quality.

With some products, like computer central processing units, the important quality attributes such as processing speed, reliability, power consumption, and heat generation, may all be measurable. In these instances, direct measurements or estimates of these attributes will likely be available in company documents or trade publications.

On the other hand, some quality attributes may be difficult to measure with any objective technique. For instance, drivers of automobiles may unanimously prefer automobiles with a more "solid feel." This attribute would be difficult to measure, but could potentially be approximated using surveys of consumers.

The measurement of quality typically will prove most useful when it can be weighed against other important changes in a market, such as prices, for instance. This calculus is straightforward when it is determined that consumers are harmed in both price and non-price dimensions, such as in the DOJ's investigation of Microsemi's 2008 acquisition of Semicoa. Not only did the prices for high-reliability transistors and diodes increase, but the reliability of delivery times—an aspect of quality critically important to aerospace customers—had declined.¹²

However, price and quality will often be in tension, as when increased quality, either of a product or service, comes in concert with increased price. In these circumstances, when the conduct involves agreements between rivals, the courts have consistently held that the trade-off should be done by consumers, and not by the suppliers, *ex ante*, through restraints on trade.¹³ Whereas when vertical restraints are involved, as with

¹¹ In practice, the strict unanimity condition may need to be relaxed somewhat for this to be a useful concept. But it seems unlikely that in any given instance the presence of a few outliers who would not agree that more of an attribute is better would impede an analysis that treated the attribute as a quality attribute.

¹² See *Economic Evidence in Merger Analysis*, Paper submitted to OECD by United States, at 2 (Feb. 9, 2011) ("Economic Evidence").

¹³ See, e.g., *Nat'l Soc'y of Prof'l Eng'rs. v. U.S.*, 435 U.S. 679, 694 (1978) (noting that any trade-off between price and quality is a consumer choice, not one to be made by rivals in the market).

resale price maintenance, the courts have been more supportive of ex ante restraints adopted by suppliers to promote high quality point-of-sale consumer services, despite possible increases in price.¹⁴

3. The effects of competition on quality

The economics literature supports the view that, when analyzing markets in which quality is an important component of competition, competition authorities should consider whether the characteristics of a market and a change in the competitive environment would likely cause firms to provide higher or lower quality. In the theoretical economics literature, models where firms set prices and quality show that the impact on quality of a change in the level of competition, all else held equal (including the cost of producing quality), is indeterminate.¹⁵ That is, quality can either rise or fall as a market becomes more competitive.

Reviews of the empirical evidence on this relationship between competition and quality (holding all else fixed) often find an increase in quality with increased competition, but some studies have found the opposite result.¹⁶ In sum, the results from the theoretical and empirical economic literature support the notion that a competition agency needs to tailor the quality analysis to the particular market under consideration when it believes quality is an important factor in the investigation.¹⁷

4. Market definition

The U.S. DOJ/FTC Horizontal Merger Guidelines explicitly state that changes in quality may provide information about demand substitution relevant to market definition analysis, which is requisite information in order to perform a Hypothetical Monopolist Test on a candidate product market. “Market definition focuses solely on demand substitution factors, i.e., on customers’ ability and willingness to substitute away from one product to another in response to a price increase or a corresponding non-price change such as a reduction in product quality or service.”¹⁸

In addition to using variations in product quality to reveal substitution patterns between products, quality attributes may also serve as observable characteristics that can be used to distinguish between products that will be included in a candidate product market and those that will not. To the extent that higher degrees of substitutability are expected among relatively similar products, measures of quality may prove useful for distinguishing between similar and dissimilar products. For instance, in 2003, the FTC

¹⁴ See, e.g., *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 897 (2007); see also *Cont'l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 55 (1977).

¹⁵ See Brekke, Kurt R., Luigi Siciliani, and Odd Rune Straume. “Price and quality in spatial competition.” *REG’L SCIENCE AND URBAN ECON.* 40, no. 6 (2010): 471-80.

¹⁶ *Id.* at 478. (“Although there are some mixed results, the main picture painted from the above-referred empirical studies of quality in spatial competition is that increased competition generally leads to a higher supply of quality.”) See also Gaynor, M., & Town, R. (2012). “The impact of hospital consolidation—Update.” *THE SYNTHESIS PROJECT, POLICY BRIEF NO. 9*. Princeton, NJ: Robert Wood Johnson Foundation, 2012. (“All of the [nine] U.S. studies except for one find that competition improves quality, while the English studies uniformly find negative effects.”)

¹⁷ In instances where firms are thought to be unable or unlikely to change quality much, or when quality is difficult to measure, it may be the case that the most informative analysis is a careful study of how a loss in competition affects prices. Kaplow and Shapiro note that “[a] price increase often serves as a proxy for other possible anticompetitive effects, such as a reduction in product quality or service or a decrease in the pace of innovation.” A. Mitchell Polinsky and Steven Shavell, *HANDBOOK OF LAW AND ECONOMICS* at 1073-1225 (2007), available at <http://EconPapers.repec.org/RePEc:eee:lawchp:2-15>.

¹⁸ 2010 HORIZONTAL MERGER GUIDELINES at 7.

alleged a relevant product market for “super-premium ice cream,” which was differentiated from other types of ice cream based on a number of observable characteristics, many of which would roughly be considered quality attributes, such as using pure vanilla rather than imitation vanilla flavoring. The “super-premium” classification was commonly used by market participants to refer to a small number of ice cream products that generally were considered to be high-end offerings.¹⁹

However, being able to distinguish between groups of products based on quality measures or other observable characteristics does not necessarily address the central question of market definition, which is whether a hypothetical monopolist controlling all products in the candidate market would be able to significantly increase prices as indicated by estimates of demand substitution. Support for the candidate super-premium ice cream market definition came from FTC staff’s estimation of cross-price elasticities between various brands of ice cream using observed variations in prices.²⁰

5. Discussion of quality analysis in the competitive effects analysis of mergers

In textbook economic models of price competition, firms set the prices that maximize their own profits given the prices charged by all rival firms.²¹ In this framework, non-price attributes of the products are fixed, rather than being chosen by the firms. This framework has become such an important part of antitrust analysis because it illustrates a fundamental principle of merger analysis, which is that mergers can change the pricing incentives of the merging firms. The incentives change via two important mechanisms: reductions in competition tend to cause firms to increase prices; and firms that realize marginal cost efficiencies tend to decrease them. The effect of the merger depends on the relative magnitudes of these incentives. This textbook framework does not specifically include merger-induced changes in product attributes, such as quality.

Insofar as the attributes are not fixed but are chosen by the firms, they may also change as the result of a merger, just like price. Indeed, like price, a merger may affect quality choices through two broad categories of effects: a reduction in the competitive incentive to provide quality superior to a rival’s, and an efficiency in the costs associated with producing higher quality. A “quality efficiency” would tend to cause the firms to have the incentive to increase quality levels, all else equal.²² Quality efficiencies are distinct from conventional efficiencies, which are changes in the cost of producing a unit of output. As with prices, the net effect of the merger on quality may be negative or positive depending on how the quality efficiency compares to the effect of the loss in competitive incentives. Parties may argue that the facts of a particular case suggest that the claimed efficiencies for quality production outweigh competitive effects, but efficiencies, including quality efficiencies, will most likely make a difference when likely adverse effects are not large.²³

¹⁹ Although “super-premium” may sound as if it is a quality measurement, a non-trivial number of consumers prefer lighter, less rich ice creams.

²⁰ 2010 HORIZONTAL MERGER GUIDELINES at 6.

²¹ There are also well-established models of quantity competition, but these generally are applied to homogeneous products where quality is not a major issue, and so are not further considered in this submission.

²² The DOJ and the FTC recognize the importance of consideration of quality efficiencies in the Commentary on the Horizontal Merger Guidelines, *available at www.ftc.gov/os/2006/03/CommentaryontheHorizontalMergerGuidelinesMarch2006*, at 49 (“Efficiencies in the form of quality improvements also may be sufficient to offset anticompetitive price increases following a merger. Because a quality improvement involves a change in product attributes, a simple comparison of pre- and post-merger prices could be misleading. A careful analysis of the effects of changes in product attributes and prices on consumer welfare is likely to be necessary.”).

²³ *See* 2010 HORIZONTAL MERGER GUIDELINES at Section 10. In a decision granting a preliminary injunction to prevent the merger of two hospitals, and after significant testimony by the FTC’s expert witness on

6. Application of quality analysis in the evaluation of hospital mergers

Quality issues frequently arise in the health care industry, particularly in cases involving physician cooperation, scope of practice of professionals, and hospital mergers, which will be the focus of the remainder of this paper (though many of the points are applicable to other industries as well).²⁴ Most of the FTC's recent hospital merger cases involved claims by the merging parties that the merger would improve clinical quality. In several such cases, expert witnesses on both sides performed analyses regarding clinical quality issues.²⁵

As discussed in Romano & Balan (2011),²⁶ such claims can be plausible, and are valid subjects of merger analysis. The paper develops a conceptual framework for evaluating such claims, and points out that plausible efficiency claims are characterized by reductions in the cost of producing quality.²⁷ That is, the evaluation of possible quality improvements from a hospital merger is justified when there is a significant possibility that the merger will generate cognizable quality efficiencies.

Fortunately, certain aspects of clinical quality, at least in hospitals, lend themselves to measurement in a way that other kinds of quality often do not. In general, the development of quantitative metrics for measuring different aspects of hospital quality (e.g., mortality, complications) is now a well-developed discipline. Many of the analyses discussed in Romano & Balan, which make use of these metrics, can be performed with readily available data.

In recent years, the FTC has brought or prepared to bring a number of hospital merger cases. An analysis of the likely effects of the merger on clinical quality has figured prominently in all of them. Here we discuss two of those cases, which were selected because they both involve public proceedings with public records to which we can cite.

The quality claims made by the merging parties in the Evanston case are discussed in detail in the Romano & Balan paper. Unlike most merger cases, the Evanston case was brought retrospectively, some years after the merger was consummated. This made evaluating the effects of the merger easier than in most prospective cases, which must rely on the sometimes more difficult task of making predictions about probable future effects.

A central assertion by the merged parties in the Evanston case was that the merger had increased quality at the independent Highland Park Hospital in a number of areas, including: cardiac surgery and

quality, the judge stated that “the court is unable to declare that these [quality improving] goals would be realized with, and only with, the proposed merger, or that these claimed benefits are sufficient to overcome the FTC’s compelling prima facie case.” *FTC v. OSF Healthcare System and Rockford Health System*, No. 3:11-cv-50344 at 42 (N.D. Ill. April 5, 2012), available at www.ftc.gov/os/caselist/1110102/120505rockfordmemo.pdf.

²⁴ In these cases, clinical quality was distinguished from non-clinical “amenities,” which in principle are also valid elements of quality, but which in practice did not receive much attention.

²⁵ These include *FTC v. Evanston Nw. Healthcare Corp.* (see Opinion of the Commission, available at www.ftc.gov/os/adjpro/d9315/070806opinion.pdf) and *FTC v. OSF Healthcare Sys. and Rockford Health Sys.*, *ibid* 22.

²⁶ Patrick S. Romano and David J. Balan, “A retrospective analysis of the clinical quality effects of the acquisition of Highland Park hospital by Evanston Northwestern healthcare,” *INT’L JOURNAL OF THE ECON. OF BUSINESS* 18, no. 1 (2011): 45-64.

²⁷ “The above discussion suggests that a hospital merger is unlikely to result in improved quality absent a cost change. But a merger can result in higher quality if it reduces the cost of producing quality.” *Id.* at 46-47.

interventional cardiology; the purported benefits to Highland Park of being affiliated with a teaching hospital (Evanston Hospital); improved nursing care; and obstetrics.²⁸ The FTC's quality expert, Dr. Patrick Romano, addressed these claims by linking them to well-established quality metrics, which could then be analyzed quantitatively.²⁹ That is, he took each claimed quality improvement, and identified which metrics would be expected to show improvement if the claim was true. Then, using a statistical technique known as difference-in-differences analysis, he analyzed whether those metrics had in fact improved (relative to a group of control hospitals) following the merger. He found little evidence of quality improvements and even some limited evidence of quality deterioration.

In the Evanston case, the Administrative Law Judge and the Commission both rejected substantially all of the parties' clinical quality claims.³⁰ Regarding the quantitative analysis described above, the Commission said: "We recognize that assessing the impact on quality of ENH's [Evanston Northwestern Healthcare, the acquiring hospital system] changes at Highland Park [the acquired hospital] is not a simple matter and that, as Dr. Chassin [ENH's clinical quality expert] testified, outcome measures are not always valid measures of quality. TR 5143-45, 5148 (Chassin)." However, the Commission went on to find that "as is the case with claimed economic efficiencies, difficulties of proof do not relieve ENH of its burden to produce verifiable evidence. Given the particular circumstances of this case – the fact that the merger has already been consummated, many of the claimed improvements were implemented years ago, and ENH routinely tracks numerous quality indicators – ENH could have produced more concrete evidence than it did to substantiate its claims that the changes it made at Highland Park improved the quality of care."³¹

In the Rockford case, which was a prospective challenge, the merging parties similarly made a number of clinical quality claims, of which we mention two. First they asserted that, following the merger, the merging hospitals would consolidate some services at a single location increasing the volume for certain procedures, which would purportedly lead to improvements in patient outcomes. Second, they also asserted that the acquisition would help the hospitals achieve greater clinical integration, a major goal of healthcare reforms underway in the U.S.³² The FTC's quality expert argued that there was doubt as to whether the proposed consolidation of services would take place. In addition, he argued, based on a large body of research literature, that a positive relationship between procedure volumes and patient outcomes only exists for some procedures, and that these were not the procedures that the merging parties had claimed they would consolidate post-merger.³³ He also argued that the kinds of organizational changes that promote clinical integration mostly involve combinations of *complementary* providers, meaning different kinds of providers, such as physicians from different specialties, joining together to coordinate care. The proposed merger, in contrast, was a combination of *substitute* providers, meaning two full-service hospitals

²⁸ Pretrial Brief of Respondent at 31, *In Re Evanston Nw. Healthcare Corp.*, No. 9315 (Oct. 20, 2005) (initial decision), available at www.ftc.gov/os/adjpro/d9315/050127respptrialbrief.pdf; Post-Trial Brief of Respondent at 74, *In Re Evanston Nw. Healthcare Corp.*, No. 9315 (Oct. 20, 2005) (initial decision), available at www.ftc.gov/os/adjpro/d9315/050527respptrialbrief.pdf; and Respondents' Corrected Appeal Brief at 68, *In Re Evanston Nw. Healthcare Corp.*, No. 9315 (Aug. 6, 2007) (opinion of the Commission), available at www.ftc.gov/os/adjpro/d9315/060112enhappealbriefcorrected.pdf.

²⁹ A number of quality metrics were analyzed. The most important were the Inpatient Quality Indicators and the Patient Safety Indicators developed by the Agency for Healthcare Research and Quality.

³⁰ Opinion of the Commission, *In the matter of Evanston Nw. Healthcare Corp.*, FTC Docket No. 9315 at 85 (Aug. 6, 2007), available at www.ftc.gov/os/adjpro/d9315/070806opinion.pdf.

³¹ *Id.*

³² *FTC v. OSF Healthcare Sys. and Rockford Health Sys.*, No. 3:11-cv-50344 at 31 (N.D. Ill. Apr. 5, 2012), available at www.ftc.gov/os/caselist/1110102/120505rockfordmemo.pdf.

³³ *Id.* at 41.

that do substantially the same things. This undermined the assertion that valuable clinical integration would result from the merger³⁴

The district court rejected the parties' quality claims.³⁵ As to their first assertion, the court expressed doubt that the merger would result in increased procedure volumes, and also that the procedures in question were of the type for which a volume/outcome relationship had been established in the research literature.³⁶ The court also rejected the second assertion, concluding that the parties' assertions about clinical integration were "contradicted by [the] defendants' own financial projections, which show that defendants expect to remain profitable even as healthcare reforms begin to take effect."³⁷

As the above examples indicate, the quality claims made by merging hospitals in the FTC's litigated cases have not been found to be convincing. That is, the parties have not succeeded in showing that the mergers were likely to result in a merger-specific net increase in clinical quality,³⁸ and so there has been no need to weigh quality improvements against price increases. This is largely a product of the FTC's exercise of its prosecutorial discretion; cases in which there were credible claims of a likely quality benefit were less likely to be taken to court.

However, it is possible that at some point there will be hospital merger cases that reduce price competition where the evidence will more persuasively support the assertion that they will cause a net increase in quality. As such, the agencies and courts may be faced with the need to evaluate those quality increases against the price effects of the merger.

7. Conclusion

Just as consumers can benefit from lower prices produced by vigorous competition, so too can they reap the rewards of enjoying higher quality products and services. Conversely, they can be harmed by reductions in quality or increases in quality-adjusted prices. Prices frequently receive more of the attention of competition law enforcers and courts in discussions of the competitive environment. Quality can be manifested in a variety of ways across markets, and it is not always as easy to quantify as prices, but it is no less important. This paper identified a number of instances where the Agencies and courts have explicitly considered the impact of various kinds of conduct on quality-related competition.

³⁴ Some healthcare mergers do involve some degree of combination of complementary providers. It is important to note that such mergers will not necessarily result in quality efficiencies, and any such efficiencies may not be merger-specific.

³⁵ The Rockford case did not advance beyond the Preliminary Injunction (PI) stage, and a PI proceeding is not the same as a full trial on the merits. A PI proceeding is intended to determine whether the plaintiff's case is strong enough to warrant enjoining the merger pending a full trial on the merits. The court's findings in such a proceeding therefore do not have the same significance as findings following a full trial. However, the parties abandoned the transaction following the PI decision, and so that decision was the only judicial decision in the matter.

³⁶ *FTC v. OSF Healthcare Sys. and Rockford Health Sys.*, No. 3:11-cv-50344 at 31 (N.D. Ill. Apr. 5, 2012), available at www.ftc.gov/os/caselist/1110102/120505rockfordmemo.pdf.

³⁷ *Id.* at 45.

³⁸ Recall that the *net* effect on quality, which is what matters for the antitrust analysis, is the sum of the quality effect of the lost competition, plus the effect of any quality efficiencies.

BIAC

The Business and Industry Advisory Committee ("**BIAC**") to the OECD appreciates the opportunity to submit these comments to the OECD Competition Committee for its roundtable on the "Role and Measurement of Quality in Competition Analysis" on 19 June 2013.

1. Background

This is an important but somewhat elusive topic. Businesses invest substantial amounts of money, intellectual capital, time and effort to improve quality and thereby achieve greater competitiveness. Competition agencies should take proper account of this important parameter of competition. Undoubtedly quality issues are often relevant to market analysis and to understanding competitive effects within markets, particularly in the case of markets involving differentiated products or services. In some cases, multiple quality factors may be relevant to a proper understanding of the actual functioning of a particular market.

BIAC appreciates that quality and quality competition, in addition to price-competition, can be an important variable in certain specific settings, whilst in others it is much less so. There is thus in general little room for quality competition in markets where products are homogeneous. In contrast, quality competition is likely to be more important in differentiated product or service markets.

So as to respond most effectively to this wide ranging topic within the compass of a relatively short paper such as this, BIAC sets out below its general responses to the key issues raised in the Request for Contributions. However, in an effort to get beyond the headline points, we also provide in the Attachment a more detailed commentary on how quality issues have been applied by regulators in the Telecommunications Industry by way of empirical example. BIAC offers this example mainly for illustrative purposes though we believe it provides useful guidance in response to a number of the questions raised in the context of this Roundtable.

2. Definition of quality

BIAC does not believe that any single definition of quality would be meaningful or useful in the context of a competition law analysis. Its relevance will vary according to the nature of the particular market concerned. Most commonly, but not in every case, it will be factored into the price of the relevant product or service. This is particularly true in the case of consumer markets for differentiated products or services. Quality can, however, influence other factors, such as:

- longevity (durability) maintaining dimensions or appearance for longer periods;
- reliability - lower failure or defect rates;
- design - style, aesthetics, appearance;
- performance - quicker, quieter, more effective etc;
- location - availability, convenience, spread;
- safety - increased margins above minimum safety requirements.

BIAC does not believe that choice should necessarily be treated as an element of quality since it is not an element of the intrinsic quality of the products themselves. Indeed, whether consumers have and can exercise sufficient choice depends first and foremost on the nature of the product (differentiated or homogeneous), the market structure, the decision of existing and new suppliers to offer a variety of products, and the information made available to consumers. Assuming that the notion of quality implies that suppliers may vary the quality of their products by enhancing their attractiveness for consumers, the notion of choice is a separate albeit related concept in that respect. BIAC notes that at the distribution level offering a broad range of choice may be a factor by which businesses such as supermarkets or the shoe retailer referred to in the Secretariat paper strive to distinguish themselves but choice remains an element which is separate from the intrinsic quality of the products themselves.

BIAC also takes the view that a possible (observed) reduction of choice in a particular setting is not in and of itself indicative of an antitrust concern, let alone a violation. Indeed, in cases where consumers are faced with less choice as a result of a particular business conduct, traditional price-based analysis is likely to suffice to identify the existence of an antitrust violation. For instance, if a dominant firm would engage in anticompetitive foreclosure strategies and, as a consequence, eliminate an important competitor that offers consumers additional choice, agencies would ordinarily be able to conclude that the excluding firm has acted anticompetitively by looking at the price effects that the exclusion of the competitor has brought about. Whether the conduct has, in addition, also led to reduced consumer choice, is in this setting irrelevant. By the same token, a reduction of choice offered may, for example, enhance production efficiency to the benefit of consumers and so BIAC takes the firm view that a mere reduction of choice without any price-based evidence, would be an insufficient basis for antitrust intervention.

3. Measurement of quality

In competitive markets, particularly in the case of differentiated products or services, firms compete on both quality and price, eventually reaching an equilibrium in which the differential in quality is expressed as a function of price. Goods of different qualities are related on the demand side because consumers can substitute among them, making a trade-off between quality and price.¹ In the hypothetical case involving a monopolist of multiple grades of products, the producer must take into account not only the quantities to be produced, but also the issue of demand substitution among grades of goods. The monopolist therefore must decide on the quality of each product along the spectrum based on the demand interrelationships among the goods it offers for sale.² Relatedly, in the case of a competitive market, each producer must set its price based on the perceived quality of its product relative to its competitors' offerings. Only where the price of the product is fixed, for example in a regulated market, is quality likely to become the main dimension of competition among suppliers.³

The most fundamental form of qualitative analysis is the consideration of the cross-elasticity of demand among competing products, which measures the change in demand for one product resulting from the change in price of another. Whilst cross-elasticity (and indeed own-elasticity) of demand is difficult to quantify, recent economic theory has introduced the evaluation of sales diversion among products as a substitute for evaluating cross-price elasticity of demand. Techniques which permit the assessment of vast quantities of sales data, typically "scanner data" from retail transactions, allow economists to estimate the rate at which consumers shift sales from one product to another in light of relative price changes.⁴ This reflects the assessment of the degree to which consumers are likely to make a trade-off between (perceived) quality and price.

¹ D. Carlton and J. Perloff, *Modern Industrial Organisation*, 4th Ed. (2005) at 336.

² *Idem*.

³ *Idem*, citing Mussa and Rosen (1978).

⁴ Sec S. Villas-Boras, *Using Retail Data for Upstream Merger Analysis*, *Journal of Competition Law and Economics* 689 (2007), available at <http://jcle.oxfordjournals.org/content/3/4/689.short>.

The US Horizontal Merger Guidelines ("**the US Guidelines**")⁵ also note that it may be possible to quantify these factors:

"In some cases, the Agencies may seek to quantify the extent of direct competition between a product sold by one merging firm and a second product sold by the other merging firm by estimating the diversion ratio from the first product to the second product. The diversion ratio is the fraction of unit sales lost by the first product due to an increase in its price that would be diverted to the second product."

Measuring competition can be particularly challenging and is the main reason why quality considerations/qualitative efficiencies are rarely taken into account. Thus, the European Commission in its *Intel*⁶ prohibition decision explained that:

"909.[...]the concept of 'quality adjusted' price is a very subjective notion [...] they are particularly difficult to measure in high technology industries: 'it has been very difficult to estimate the value of improvements or deteriorations in products, such as computers, semiconductors, and so forth manufactured by companies included in "high-tech" industries. These industries may frequently develop new products that are technologically superior and cost less' [...]"

1691. [...] There is no single parameter which defines the quality of a product, in particular such a complex product as a x86 CPU. Shortfalls in certain characteristics can be made good by performance in other fields, for instance price [...]"

BIAC acknowledges that accurately defining and quantifying quality is in and of itself a complicated task carrying with it the inherent risk of inaccurate measurement which, in turn, brings into question the reliability of the analytical conclusions which might be reached. Moreover, the quality of a product or service is a subjective factor; agencies and consumers may disagree on the importance these quality-related factors should play in any assessment. Accordingly, if and to the extent competition agencies would find it necessary to explicitly rely on quality-related factors, BIAC submits that the application of competition law would benefit from a clear definition of the quality attributes of the products or services at hand that the agency would consider important in the analysis. In those particular cases, the analysis should, in BIAC's view, make clear why conventional antitrust analyses based on quality-adjusted prices would not suffice. In addition, any such analysis should clearly distinguish between the quality-attributes of the products themselves, and extraneous factors, such as choice, variety and the circumstances in which the products are offered to consumers. Indeed, these latter factors do not determine the intrinsic quality of the products at hand.

As a result of the complexities involved in defining the notion of quality and measuring its importance, it can be difficult to accurately, reliably and consistently factor quality-related considerations into the analysis of business transactions under competition law. In most cases, however, there is little or no need to do so, as prices will reflect the varying qualities of the products in a given market. BIAC believes that in the vast majority of cases, prices will reflect consumers' preferences and will, as such, reflect the value that consumers attach to the quality of products. This implies that in most cases the

⁵ U.S. Department of Justice and Fed. Trade Comm'n, Horizontal Merger Guidelines (2010), available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>. The Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5.2.2004, p. 5–18 (the "**EU Horizontal Merger Guidelines**"), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:031:0005:0018:EN:PDF>, refer more opaquely to "*the development of technical and economic progress*".

⁶ European Commission Decision of 13 May 2009, COMP/37.990 - *Intel*, available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/37990/37990_3581_18.pdf

antitrust analysis can be based on a rigorous analysis of the competitive interaction between products with different quality attributes. Indeed, an analysis of the closeness of competition between differentiated products in - for instance the market for meat, sports drinks, medical instruments - will enable competition agencies to arrive at accurate predictions of how competition has been or will be affected by a particular business transaction. Thus, in many cases, conventional econometric analyses are likely to result in reliable and useful outcomes.

The OECD Secretariat Paper on this topic identifies a few examples of markets which might be considered exceptional in justifying a quality factor lead in assessing the impact of a proposed transaction on competition and BIAAC is aware of a small number of cases in various jurisdictions in which such issues have arisen. BIAAC notes that in a number of such cases the market in question lacks transparency to consumers (*e.g.*, for medical services where the consumer is not in a position to evaluate the relative quality of the services or drugs provided). BIAAC does not believe that the existence of such cases justifies any significant change in competition analysis techniques and has concerns that the unintended consequence of the search for increased accuracy and "analytical sophistication" in such cases may be increased uncertainty and predictability of competition regulatory outcomes. Equally, for similar reasons, BIAAC has reservations about the application of quality factors in actually defining markets even in cases of rapid technological change.

4. Quality in various competition law enforcement contexts

As regards collusion, it is generally accepted that when factors other than price influence consumer choices - non-price attributes (*e.g.*, quality, service, information, features, *etc*) not only complicate collusive schemes that do arise⁷, but also may make collusion less attractive from the outset.⁸ Non-price elements may thus make the avoidance of price coordination both feasible and attractive and consumer welfare enhancing. However, the implications of this phenomenon should not be over-stated and so, for example, mergers that reduce non-price competition may make price competition more intense and for that reason should be welcomed and not treated with suspicion because they may also, theoretically, make collusion more likely.

The US Guidelines address the extent to which non-price factors can complicate coordination indirectly, though in a relatively way, stating that:

*"A market typically is more vulnerable to coordinated conduct if each competitively important firm's significant competitive initiatives can be promptly and confidently observed by that firm's rivals. This is more likely to be the case if the terms offered to customers are relatively transparent. Price transparency can be greater for relatively homogeneous products".*⁹

⁷ G. Stigler, *Price and non-price competition*. 76(1) J. of Political Econ. 149-154 (1968); D. Ginsberg, *Nonprice competition*, 38 Antitrust Bull. 83-112 (1993).

⁸ K. Judd, *Credible spatial pre-emption*, 16 RAND J. of Econ. 153-166 (1985). Judd reacted to the anticompetitive "product proliferation" theory advocated during the *RTE Cereals* case by the FTC's expert, Richard Schmalensee. Judd noted that when entry occurs in a packed space, multiproduct incumbents may find it most profitable to withdraw from the segment that has been entered, making a product-proliferation strategy non-credible. In essence, firms with the ability to differentiate may soften price-competition by doing so and, so, have less reason to collude on price, given both the greater complexity of doing so in a differentiated product space and the costs they will bear upon detection and punishment (public and/or private). An extension of Tirole's observation is the more recent "escape competition" explanation for R&D investments.

⁹ US Guidelines at §7.2

The US Guidelines expressly identify improved product quality as a cognizable form of efficiency in competitive effects analysis:

"Efficiencies also may lead to new or improved products, even if they do not immediately and directly affect price".¹⁰

The US Agencies recognize that:

"'efficiencies' in the form of quality improvements also may be sufficient to offset anticompetitive price increases following a merger. Because a quality improvement involves a change in the product attributes, a simple comparison of pre- and post-merger prices could be misleading".¹¹

By the same token, the US Guidelines note that the opposite effect may occur:

"purported efficiencies claims based on lower prices can be undermined if they rest on reductions in product quality or variety that customers value".¹²

BIAC is nevertheless concerned that quality considerations are ill-defined in merger control law and may potentially lead to false positive findings of anticompetitive mergers. In particular, merger control efficiencies - especially qualitative efficiencies - are rarely accepted and have rarely resulted in a merger presenting anti-competitive effects being cleared. Moreover, in practice, the European Commission appears to only rely on quality considerations in order to support findings of lessening of competition (see for instance *Nokia/Navteq* where the European Commission considered that the proposed transaction may not only lead to an increase in price but also to a degradation in the quality of the maps provided to third parties).¹³

One case in which quality related efficiencies were properly recognised by the US FTC was the merger between Genzyme and Ilex Oncology in 2004.¹⁴ Ilex had an FDA-approved oncology product called Campath that was also used off-label in the solid organ transplant field. Genzyme did not compete with Campath in oncology but had the next-closest substitute product for solid organ transplant. The Commission staff investigated the parties' efficiency claims and concluded that the merger would likely improve Campath's quality and breadth of treatment in oncology.¹⁵ The Merger was approved, with remedies tailored to allow the company to achieve these quality-related efficiencies whilst alleviating other competitive concerns.

¹⁰ US Guidelines at §10.

¹¹ U.S. Department of Justice and Fed. Trade Comm'n, Commentary on the Horizontal Merger Guidelines (2006), available at <http://www.ftc.gov/os/2006/03/CommentaryontheHorizontalMergerGuidelinesMarch2006.pdf>, at §49.

¹² Idem.

¹³ European Commission Decision of 2 July 2008, COMP/M.4942 - Nokia / Navteq, available at http://ec.europa.eu/competition/mergers/cases/decisions/m4942_20080702_20682_en.pdf.

¹⁴ Genzyme Corp. and Ilex Oncology, Inc., FTC Docket No. C-4128, Decision and Order (Feb. 4, 2005), available at <http://www.ftc.gov/os/caselist/0410083/050204do0410083.pdf>

¹⁵ U.S. Department of Justice and Fed. Trade Comm'n, Commentary on the Horizontal Merger Guidelines (2006), available at <http://www.ftc.gov/os/2006/03/CommentaryontheHorizontalMergerGuidelinesMarch2006.pdf>, at §56.

In its Article 101(3) Notice,¹⁶ the European Commission expressly refers to improving the quality of a product and creating a new product as examples of efficiencies capable of countering a finding of infringement and these are commonly referred to as "*qualitative efficiencies*" as opposed to "*cost efficiencies*". The European Commission further explains in its Article 101(3) Notice that:

in the case of claimed efficiencies in the form of new or improved products and other non-cost based efficiencies, the undertakings claiming the benefit of Article [101(3)] must describe and explain in detail what is the nature of the efficiencies and how and why they constitute an objective economic benefit".¹⁷

Despite this apparently open door, qualitative efficiencies are rarely successfully relied upon *inter alia* due to the high burden of proof set by the European Commission and national agencies as well as the lack of detailed guidelines.

BIAC notes that as a welcome exception to this general scepticism certain vertical restraints are more regularly recognised as having a positive effect on quality. Indeed, this effect has been clearly identified in relation to restraints that limit intrabrand competition, including territorial restraints, selection distribution and minimum RPM: by lessening intrabrand competition, a supplier will encourage dealers to compete on quality. BIAC is in favour of a policy that supports these types of restraints subject to the proviso that interbrand competition is safeguarded.

As regards cases involving unilateral conduct, regulatory agencies are sometimes tempted to attach importance to the quality of products, particularly of potentially foreclosed competitors as an aggravating factor. For instance, In the *Microsoft* case, the European Commission examined how Microsoft's Windows Media Player compared in terms of quality to other media players on the market.¹⁸ Yet quality is seldom accepted as a justification for unilateral conduct. Thus in *Intel*, the Commission rejected Intel's claim that it could not have foreclosed AMD as the latter was unable to satisfy customer needs and went on to assess the quality of AMD's products (see paras. 1693 to 1716)¹⁹. In its prohibition decision, the European Commission also made reference to the fact:

"end-customers were artificially prevented from choosing other products on the merits (price and quality of the respective x86 CPUs) ... As such, Intel's exclusionary practices had a direct and immediate negative impact on those customers who would have had a wider price and quality choice if they had also been offered the product of their favourite OEM and/or retailer with x86 CPUs from Intel's competitors."

¹⁶ Communication from the Commission — Notice — Guidelines on the application of Article 81(3) of the Treaty, OJ C 101, 27.4.2004, p. 97–118, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:101:0097:0118:EN:PDF> ("**Article 101(3) Notice**").

¹⁷ Article 101(3) Notice, at §57.

¹⁸ European Commission Decision of 24 March 2004, COMP/C-3/37.792 - *Microsoft*, available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/37792/37792_4177_1.pdf.

¹⁹ European Commission Decision of 13 May 2009, COMP/37.990 - *Intel*, available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/37990/37990_3581_18.pdf. In the Hilti case quality concerns were raised with the European Commission to justify tying of Hilti's own safe nails to its nail guns to avoid accidents but rejected on the basis that safety authorities could enforce the law to avoid marketing of any dangerous products by third parties.

5. Conclusions

The evaluation of quality arises organically in several aspects of competition law. It is or at least should be an important aspect of any competition law review. In some cases, qualitative techniques have been developed to allow competition authorities to quantify the significance of quality differences. Applying economic analysis is crucial; the assessment of quality in competition cases would otherwise be at risk of subjective assessment by the reviewing authority. The application of subjective assessment of quality creates a significant risk of arbitrary decision-making and must be avoided. Rather, economic and fact-based evidence should be designed to make predictable judgments about the impacts of quality.

While BIAAC acknowledges that firms may compete on price and quality, it is in principle opposed to the use of quality considerations as a method to define markets more narrowly than would be the case under conventional, price-based methodologies. One main reason is that, as stated above, save in exceptional circumstances, one may assume that varying quality attributes are reflected in the prices of products. There are a multitude of economic methods available to measure the closeness of competition between the products potentially affected by a business transaction.

To the extent that regulatory agencies have sought to apply quality factors in competition cases, the outcomes have been patchy and inconsistent notwithstanding the existence in many jurisdictions of an efficiency defence that should (at least in theory) allow quality considerations to be factored in. This is not, by itself, surprising given the inherent difficulties in measuring quality accurately in most cases. A more complete approach to quality issues would seem to necessitate the development of empirical studies of the relevant markets but the time and resources required may not be available for such exercises.

Recognising this need for empirical evidence we attach a paper which describes "*Experiences in the Telecommunications Industry*". This is provided by way of illustration of the quality issues which can arise in the context of competition reviews. It is not suggested, of course, that there are particular lessons of general application which arise from the experience of this particular industry other than that each industry, and not just important industries such as Telecommunications, needs to be assessed in light of its own particular circumstances on a case-by-case basis.

ANNEX. THE ROLE AND MEASUREMENT OF QUALITY IN COMPETITION ANALYSIS: EXPERIENCES IN THE TELECOMMUNICATIONS INDUSTRY

1. Introduction

Quality competition constitutes an important characteristic of many markets, in addition to price competition. A decrease in quality (with constant prices) can harm consumer welfare as much as an increase in price (with constant quality). However, it is not yet fully understood how to incorporate quality considerations into competition analysis. This draft paper provides examples for quality considerations in the application of competition law in the telecommunications sector through different authorities, namely DG Competition and both the German and French Competition Authorities. Furthermore, the paper makes some suggestions on how to change the approach of these authorities to better reflect the impact of quality parameters in the competition analysis.

2. Case law

The traditional approach of the DG Competition has short to medium term price competition in focus, whereas quality aspects are more or less disregarded. This is reflected in recent EU decisions, particularly in the field of merger control in the telecommunication sector. So far, the EU COM does not comprehensively evaluate merger-induced quality improvements, such as better network coverage and better service-performance (like reduced interruptions, package loss, higher speed, and better service).

2.1 Merger Control

- 2012: Case no M.6497 - Hutchison 3G Austria / Orange Austria

EU COM approved the proposed acquisition of Orange's mobile telephony business in Austria by Hutchison 3 G. Since EU COM had concerns that the elimination of one out of four mobile network operators in Austria could have led to less competition and higher prices, the approval was tied to the implementation of remedies (divestment of radio spectrum, provision of wholesale access) that would facilitate the entry of a new player.

A structural analysis was conducted by EU COM. The closeness of competition (diversion ratios) and price pressure indices (prediction of potential price increases resulting from the transaction) were investigated including a basic UPP test but the potential positive (dynamic) effects on quality were not evaluated. EU COM dismissed the parties' arguments that the merger would strengthen the combined entity's ability to roll out a more economically viable network by combining two weak networks.

- 2010: Case no. M.5650 - T-Mobile/ Orange

EU COM approved the proposed merger of T-Mobile UK and Orange UK under the condition of an amendment of an existing network sharing agreement with Hutchison 3 UK and the divestment of a quarter of the combined spectrum in the 1800Mhz band.

It was acknowledged by EU COM that the new entity would be able to offer next-generation mobile data services through LTE technology at the best possible speeds within the medium term but this

performance outlook was rather seen as a threat to competition so that the new entity was ordered to divest a part of its spectrum.

Turning to a recent national merger decision of the German competition authority (Bundeskartellamt), it can be seen that there are first approaches to incorporate a merger's effect on network quality in the decision:

- B7-70/2012: Kabel Deutschland/ Telecolumbus

The German competition authority did not approve the merger of two German cable companies due to the overall detrimental effect on competition.

Nevertheless, the authority acknowledged that the merger would have had a positive effect on network quality. In geographic areas in which both companies have their own networks, the integration of their sub-networks would have been possible and likely. The combined network would then have had the critical size to allow for investment in broadband network expansion. Furthermore, narrowband sub-networks could have been improved by connecting them to other broadband-capable sub networks.

2.2 *Network Sharing Agreements*

With regard to network sharing agreements involving varying degrees of independence retained by the operators, the beneficial effects resulting from significant cost savings have gradually been acknowledged by EU COM. In 2003, EU COM set the standard of what was permitted under EU law.

- 2003: Case COMP/38.369 - COMP/38.370

EU COM approved 3G network sharing agreements concerning site infrastructure between T-Mobile and M2M in the UK and Germany and gave a provisional exemption for national roaming arrangements.

O2 appealed successfully before the European Court of First Instance striking down a part of the EU COM's decision stating that national roaming arrangements in Germany had a negative effect on competition.

A more flexible approach was adopted in subsequent network sharing agreements which have not been challenged by EU COM or national competition authorities, *e.g.*:

- In 2007, T-Mobile UK and 3UK announced to pool their 3G network infrastructure in a 50:50 joint venture company, Mobile Broadband Network Ltd. In 2010, the integration of the 3G networks was completed.
- In 2009, Vodafone and Telefónica agreed to share networks and to work on joint builds of new sites in four European countries covering Britain, Germany, Ireland and Spain. The details of the deal were presented to the respective national authorities. In 2012, the UK telecoms regulator Ofcom approved Vodafone's and Telefónica's plans to strengthen their co-operation by pooling their respective mobile networks infrastructure to create one national grid.
- In 2011, T-Mobile and Orange Poland agreed to share access to each others networks via a 50:50 joint venture labelled "NetWorkS!".

The French Competition Authority (FCA) on the other hand has issued a more sceptical opinion on network sharing and national roaming in 2013. While confirming the possible positive effects of network sharing, FCA has developed a three criteria test in order to examine such agreements on a case by case basis. The FCA supports network sharing only in sparsely populated areas. Concerning roaming, the FCA has proactively announced that it would be opposed to an extension of the roaming agreement between France Telecom and the new French low-cost mobile carrier Iliad ending in 2018.

3. **Quality and competition**

In contrast to homogeneous electricity services quality competition is of particular importance for telecommunication services. Many different services based on different technologies with different quality are present in specific regions.

Quality improvements in the telecommunication sector can mainly be achieved through network investments. The telecommunications industry is characterised by **high long-term investment needs**. Up to date, the explosion in the use of data-intensive mobile devices and the roll out of next generation technologies (fixed and mobile) constitutes the greatest challenge to telcom operators, especially in the light of strong competition in the European telcoms market.

Analysts draw conclusions from the comparison of the respective price and quality level in the European and the US market:

“Europe already has some of the cheapest telecoms services seen in the global developed peer group; the problem is rather that it is falling behind in terms of network capability. And having the cheapest telecoms service is not necessarily any more advantageous than having the cheapest health or education services. To put this another way, Europe is missing out on ‘dynamic efficiency’ gains. While Americans may pay more for their services, they have access to an increasingly superior platform. US prices might be higher, but this does not necessarily indicate that consumers there receive worse value for money - and meanwhile the American economy benefits from having a lead in terms of the other advantages a world-beating telecoms infrastructure can confer, with respect to productivity, innovation and so on.” (HSBC 2012, European Mobile, A proposal for progressive consolidation, p. 5)

4. **Definition and measurement of quality**

4.1 **Definition**

Quality of Service (QoS) is a well-established concept in telecoms markets. Various key performance indicators have already been defined and are generally accepted.

The evaluation of QoS is relatively straightforward because it refers primarily to network quality which constitutes the most important factor of consumer preferences as the transmission and retrieval of information is the core telecommunications service.

Nevertheless, there are many attributes of telecoms networks which have to be fulfilled in order to satisfy consumer expectations and cannot be offset against each other so there is a collection of characteristics which has to be met by a network operator.

BEREC, the Body of European Regulators of Electronic Communications, has published guidelines for the quality of service in the context of net neutrality in November 2012. While the focus lies in the

prevention of targeted traffic management (e.g. throttling), the publication sets out how BEREC understands and defines different concepts.

- Following the ITU (International Telecommunication Union), QoS is defined as the “totality of characteristics of a telecommunications service that bear on its ability to satisfy stated and implied needs of the user of the service”.
- Quality of experience (QoE) additionally takes into account user expectation and context, and is defined as the overall acceptability of an application or service, as perceived subjectively by the end-user.

Overall, there are at least three dimensions to the definition of quality:

- the availability , *i.e.* coverage of networks, and the take up of usage (penetration),
- the technical parameters of the network (e.g. throughput, latency), and
- the network performance as perceived by the end-users (e.g. interruptions).

Most of these key performance indicators can be influenced by the telco operators themselves. Nevertheless, budget restraints and tough price competition limit the ability to choose the optimum quality level (at the given market price level).

The penetration rate is also influenced by external factors not imminent to the price and quality of telco offerings. For instance, country characteristics (GDP, urbanization etc.) and socio-economic conditions such as age, income, education etc are important.

For a detailed list of key performance indicators see Annex I.

4.2 Concrete examples of measurements

EU Digital Agenda Scoreboard: It describes progress with respect to the targets set out in the Digital Agenda. In addition, it provides analysis and detailed data on all the policy areas covered by the Digital Agenda. EU COM commissioned a comprehensive survey covering all the 27 countries of the EU as well as Norway and Iceland and measuring the broadband coverage (by technology and combinations of technologies).

OECD Broadband Portal: The portal provides access to a range of broadband related statistics gathered by the OECD. It identifies five main categories of broadband characteristics: Penetration, usage, coverage, prices, and service and speeds.

Saïd Business School (Oxford) Broadband Quality Score: Broadband quality in 72 countries and 239 cities using data from the Internet speed testing site speedtest.net is assessed. It evaluates quality by combining scores for download and upload bandwidth as well as latency capabilities of a connection.

Bundesnetzagentur, Germany: The German NRA commissioned a network quality study comparing advertised and actual data transmission rates of fixed broadband connections in Germany. From June to December 2012, internet users were invited to test their actual data transmission rates (achieved download speed) on the web site of the study in order to obtain an accurate picture of the overall German broadband market.

”Connect” Mobile Network Test: Once a year, the German telecoms journal “Connect” conducts a study measuring the network quality in the German mobile telephony sector concerning voice and data of the four network operators as perceived by users.

5. Implications for Competition policy

Since quality is an important parameter for the telecoms industry as well as for other industries and there are already established key performance indicators, a way for an adequate integration of quality indicators in the future competition law analysis has to be found:

- Market Definition
- Product Market
 - It is evident that quality characteristics play a role in the context of market definitions. The grade of substitutability between different technologies (often quantified by price elasticities) derives fundamentally from similar quality characteristics.
 - The evaluation of substitutability has to take place on the basis of the quality as perceived by the end-users, *i.e.* from a demand-side perspective. As stated in the note of EU COM on the definition of the relevant market (97/ C 372/ 03), all products and services are comprised “*which are regarded as interchangeable or substitutable by the consumer [...]*”.
 - With regard to internet access, households can choose between DSL, cable modem, fibre, WiFi and mobile. EU Com has traditionally defined mobile internet access to belong to a separate mobile market which may not necessarily reflect the relevance of mobile broadband services in many European countries. In particular, in Central and Eastern Europe fixed technologies tend to be less developed and therefore are often viewed as interchangeable with mobile broadband services. In those countries the question arises whether mobile and fixed technologies are directly substitutable.
 - Services based on different technologies are part of the same relevant market, even if the service quality is not considered as equal by all consumers. It is only important that the services are close substitutes for that many customers that the supplier is sufficiently disciplined (due to switching activities). That a minority of heavy internet users does not regard mobile broadband as a substitute is not relevant for the market definition.
 - It is sufficient that mobile broadband is a good substitute for basic fixed broadband products while it can probably not compete equally well with high-end broadband products. The quality characteristics have to be perceived as comparable from the point of view of the customers. Not only the technical parameters (*e.g.* bandwidth) of mobile and fixed broadband are decisive but primarily user experience and service performance as perceived by the customers (*e.g.* web browsing time taken to send and retrieve emails, and the capabilities to replay a YouTube video.)
 - Last but not least, the potential customer takes a combination of quality and prices into account when taking the final purchasing decision (so called quality-adjusted prices).
 - The example of mobile and fixed broadband shows how the evaluation of quality characteristics as perceived by the customers can contribute to the definition of the relevant product market.

- Merger Control
 - Quality issues have an even greater relevance in merger control as mergers can induce positive investment incentives and create synergies regarding the efficient usage of spectrum, network coverage and overall network performance.
 - The flaw of the traditional approach to merger control lies in solely focussing on short-term price-side effects while the positive effect on quality gets completely neglected. The missing analysis of network synergies leads to an overestimation of the potential adverse effects on competition and to a too rigid restriction of mergers. Consumer satisfaction is likely to suffer since network quality constitutes an important part of consumer preferences and consumers highly value the long term evolution of the network infrastructure.
 - What is needed is thus a more comprehensive review that weighs up investment-related synergies and upward price pressure. In other words, the effect of a merger on the price/quality ratio should be systematically evaluated at each individual transaction.
 - Since 2004, the EU merger regulation states at least that efficiencies can be taken into account, if proven by the parties themselves: *“In order to determine the impact of a concentration on competition in the common market, it is appropriate to take account of any substantiated and likely efficiencies put forward by the undertakings concerned.”* (recital 29).
 - Arguing with efficiency effects, the advantages of mergers in the telecoms industry can be described as follows:
 - Static efficiencies: The combination of two networks may lead to the establishment of a high quality one including a reduction in costs while improving the coverage.
 - Dynamic efficiencies: There are economies of scale concerning the required networks investments as these are lower than for the two pre-merger networks. A more concentrated industry is also likely to be capable to deliver higher investments.
 - In the mobile telephony market, the trade-off between a great number of competitors and the scarcity of frequencies (having an effect on quality and requiring an efficient usage) has to be considered.
 - As the quality and the price level are equally important characteristics of competition, these factors should also be equally treated in competition policy. Consequently, they should, in principle, be evaluated simultaneously and with the same intensity. The current system, where price effects are comprehensively assessed while efficiency effects have to be proven by the parties themselves, is no longer acceptable.

ANNEX I – KEY PERFORMANCE INDICATORS

TELCOS MARKET

Availability of connectivity opportunities

BB Coverage (%) (fixed/ mobile) % of population/households reached by wired (*e.g.* DSL, cable), wireless (*e.g.* Wifi, Wimax, Satellite) or mobile (*e.g.* UMTS) broadband access (by region).

High-speed BB Coverage (%) (fixed/ mobile) % of population/households reached by wired (*e.g.* xDSL, Docsis 3 cable, fiber) or mobile (*e.g.* HSDPA, LTE) high-speed broadband access (by region).

Take-up / usage (can only partly be seen as KPI as consumer behaviour is also influenced by external factors.)

BB Penetration (%) (fixed/ mobile) % of population/households actively using the wired (*e.g.* DSL, cable), wireless (*e.g.* Wifi, Wimax, Satellite) or mobile (*e.g.* UMTS) broadband access (by region).

High-speed BB Penetration (%) (fixed/ mobile) % of population/households actively using the wired (*e.g.* xDSL, Docsis 3 cable, fiber) or mobile (*e.g.* HSDPA, LTE) high-speed broadband access (by region).

Price level

Price (in EUR) Price for a specific quantity of minutes or quantity of data at a specific speed per user per specific time period based on available offers and consumer profiles (quality-adjusted).

TECHNICAL PARAMETERS

Advertised Download Speed (Mbps) Maximum amount of download data than can pass through the line per second (capacity of bandwidth).

Advertised Upload Speed (Mbps) Maximum amount of upload data that can pass through the line per second (capacity of bandwidth).

Achieved Download Speed (Mbps) Actual download throughput, e. g. the average rate of successful data transmission.

Achieved Upload Speed (Mbps) Actual upload throughput, e. g. the average rate of successful data transmission.

Latency Round trip time: a signal's travel and processing time.

EXPERIENCED PERFORMANCE

Performance Level Voice - fixed or mobile

Call Set-up Success Rate (%) Fraction of attempts to make a call that results in a connection.

Call Set-up Time (s.) The overall length of time to establish a call between users (summation of call request time, call selection time and post-selection time).

Voice Standards Quality *Mean Opinion Score*: derived by having people rate the quality of test sequences.
Perceptual Evaluation of Speech Quality: automated assessment of the speech quality as experienced by the user.
Perceptual Objective Listening Quality Analysis: advanced level of benchmarking accuracy suited for next generation networks.

Performance Level Internet (Web page) – fixed or mobile

Service Accessibility (s.) Start: First [SYN] sent.
 Stop: Reception of the first data package containing content.

Session Completion Ratio (s.) Start: First [SYN] sent.
 Stop: Reception of the last data package containing content.

Session Time (s.) Start: Pressing button to request a certain web page.
 Stop: Reception of the last data package containing content.

Performance Level Internet (Email retrieve) – fixed or mobile

Service Accessibility (s.) Start: Socket connect.
 Stop: List Inbox.

Session Time (s.) Start: List inbox.
 Stop: Reception of last header data packet.

Attachment Session Time (s.) Start: Button press to load email (fetch).
 Stop: Reception of last data package.

Performance Level Internet (Streaming, e. g. YouTube) – fixed or mobile

Service Accessibility (s.) Start: First [SYN] sent.
 Stop: YouTube Playback Start.

Session Completion Ratio (s.) Start: First [SYN] sent.
 Stop: Reception of the last data package containing content.

Session time (s.) Start: First [SYN] sent.
 Stop: YouTube Playback End.

Interruptions (%) Portion of play-outs that could be finished without any interruptions.

This paper has been prepared on the basis of the following sources:

Literature

Audretsch, David/ Baumol, William/ Andrew, Burke (2001): Competition policy in dynamic markets. International journal of industrial organization, 19 (2001), 613-634.

Bavasso, Antonio/ Long, Dominic (2012): H3G/ Orange Austria – Mobile Consolidation and Regulatory Reaction. Competition Policy International.

BEREC (2012): BEREC Guidelines for quality of service in the scope of net neutrality. URL: http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/?doc=1101.

Charles River Associates (2012): The Competition/ Investment Trade-Off Revisited? Lessons from Hutchison 3G/ Orange Austria. CRA Competition Memo.

EU Commission (1997): Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 0005 – 0013. URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209%2801%29:EN:HTML>.

EU Commission (2004): COUNCIL REGULATION (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation). URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0139:EN:NOT>.

EU Commission (2009): Benchmarking Digital Europe 2010 /2015 – Conceptual framework. URL: <https://ec.europa.eu/digital-agenda/node/30065>.

EU Commission (2012a): Enhancing the broadband investment environment – policy statement by Vice President Kroes. URL: http://europa.eu/rapid/press-release_MEMO-12-554_en.htm.

EU Commission (2012b): Introductory remarks on Hutchison 3G Austria/ Orange Austria merger decision. URL: http://europa.eu/rapid/press-release_SPEECH-12-946_en.htm?locale=en.

European Group of Regulators (2008): Geographic Aspects of Market Definition.

Financial Times (2013): Telecoms look at pan-European network. URL: <http://www.ft.com/cms/s/0/cb19bee8-5986-11e2-ae03-00144feab49a.html#axzz2RSS49752>.

Hary, William (2011): QoS. Measurement and Evaluation of Telecommunications Quality of Service. John Wiley & Sons, Ltd.

HSBC Global Research (2012): Telecom, Media & Technology. European Mobile. A proposal for progressive consolidation.

HSBC Global Research (2013): Telecom, Media & Technology European Telecoms. A singular vision for the sector.

International Telecommunication Union (2012): Overview of Quality of Service:

Pleatiskas, Christian/ Teece, David (2001): The analysis of market definition and market power in the context of rapid innovation. International Journal of Industrial Organization, 19 (2001), 665-693.

Point Topic (2012): Broadband coverage in Europe in 2011. Mapping progress towards the coverage objectives of the Digital Agenda. URL:
http://ec.europa.eu/information_society/newsroom/cf/dae/itemdetail.cfm?item_id=8907.

Reuters (2012): M&A could help telcos close Europe's network gap: Kroes. URL:
<http://uk.reuters.com/article/2012/06/11/us-media-tech-summit-kroes-idUKBRE85A12A20120611>.

Concrete Examples of Measurement

Bundesnetzagentur
http://www.bundesnetzagentur.de/DE/Sachgebiete/Telekommunikation/RegulierungTelekommunikation/Qualitaetsstudie/Qualitaetsstudie_node.html.

Connect: Netztest 2012 <http://www.connect.de/ratgeber/mobilfunk-netztest-2012-1427666.html>.

EU Digital Score Board <http://ec.europa.eu/digital-agenda/en/scoreboard>.

OECD Broadband Portal <http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm>.

Saaid Business School http://newsroom.cisco.com/dlls/2010/prod_101710.html.

Decisions

- EU COM

M.6497 Hutchison 3G Austria/ Orange Austria
http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=2_M_6497.

M.5650 T-Mobile/ Orange
http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=2_M_5650.

COMP.38369 O2/ T-Mobile/ Viag Interkom
http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_38369.

COMP.38370 Network Sharing UK
http://ec.europa.eu/competition/elojade/isef/index.cfm?fuseaction=dsp_result&policy_area_id=1,2,3&case_number=38370.

- Bundeskartellamt

B7-70 Kabel Deutschland/ Telecolumbus
<http://www.bundeskartellamt.de/wDeutsch/entscheidungen/fusionskontrolle/EntschFusionW3DnavidW2690.php>.

- French Competition Authority

Mobile Telephony: network sharing and roaming
http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=483&id_article=2062

**THE ROLE AND MEASUREMENT OF QUALITY FACTORS IN COMPETITION ANALYSIS:
THE INCOMPLETE CASE OF HOW VERTICAL PRICE RESTRAINTS ARE HANDLED
UNDER THE RULE OF REASON IN UNITED STATES LITIGATION**

*By Theodore Voorhees, Jr.**

The topic of this session is the role, measurement and ultimate assessment of quality factors in competition analysis. By “quality,” I mean the array of factors other than price that are associated with competitive success in a manufacturer’s efforts to increase sales of its product. I have chosen to focus my contribution for this topic on the question how quality factors are handled under U.S. law in the litigated assessment of the competitive effects of resale price maintenance (RPM). One finds only incomplete answers to this question, however, even though it has been 15 years since the U.S. Supreme Court determined that the antitrust rule of reason should govern the assessment of maximum RPM,¹ and 6 years since the Court extended this doctrine to minimum RPM.²

1. GTE Sylvania background

Before addressing the litigation record for vertical *price* restraints specifically, however, it is helpful to begin with the U.S. Supreme Court’s 1977 decision in the milestone case of *Continental TV, Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36 (1977), where the Court provided its first major statement of the predominant role economics analysis plays in the competitive assessment of vertical restraints. That case involved a manufacturer’s restrictions on the geographic scope of distributor operations – a kind of restraint that the Court had long treated as per se unlawful. In rejecting the per se rule for vertical *nonprice* restraints and substituting the antitrust rule of reason, the *GTE Sylvania* decision drew a critical distinction between the competitive effects of vertical restraints on distributors of the manufacturer’s own brand (so-called “intra-brand competition”), and the effects of such restraints on competition with rival manufacturers (so-called “inter-brand competition”). Faced with a territorial restraint that tended to diminish intra-brand competition but nevertheless stood to enhance inter-brand competition, the Court ruled in *GTE Sylvania* that inter-brand competition is “the primary concern of antitrust law.”³

With increased inter-brand competition as the critical endpoint, the Court then emphasized that modern antitrust economics has identified numerous ways that a manufacturer can use vertical territorial restraints on its distributors to achieve certain quality and service advantages that can make the manufacturer’s product more competitive against rival products. The *GTE Sylvania* ruling focused specifically on two categories of these quality advantages that are distinct from the product’s price:

* Theodore Voorhees, Jr. is Chair of the Section of Antitrust Law of the American Bar Association. Mr. Voorhees is a partner in the law firm of Covington & Burling, LLP. The views set forth in this paper are those of Mr. Voorhees alone and do not necessarily represent the views of the Section of Antitrust Law or the American Bar Association.

¹ See *State Oil Co. v. Kahn*, 522 U.S. 3 (1997).

² See *Leegin Creative Leather Prods. Inc. v. PSKS, Inc.*, 551 U.S. 877 (2007).

³ 433 U.S. at 52 n.19.

1.1 Encouragement of retailer investment in distribution of the manufacturer's brands

For example, new manufacturers and manufacturers entering new markets can use the restrictions in order to induce competent and aggressive retailers to make the kind of investment of capital and labor that is often required in the distribution of products unknown to the consumer.⁴

1.2 Encouragement of retailer promotional activity, service and repair facilities

Established manufacturers can use them to induce retailers to engage in promotional activities or to provide service and repair facilities necessary to the efficient marketing of their products. Service and repair are vital for many products, such as automobiles and major household appliances. The availability and quality of such services affect a manufacturer's goodwill and the competitiveness of his product. Because of market imperfections such as the so-called 'free rider' effect, these services might not be provided by retailers in a purely competitive situation, despite the fact that each retailer's benefit would be greater if all provided the services than if none did.⁵

In the succeeding years the Supreme Court has applied the same basic economic tenets of the *GTE Sylvania* ruling to vertical *price* restraints, first in its 1997 *Kahn* decision (involving restraints on maximum RPM) and then in its 2007 *Leegin* decision (involving restraints on minimum RPM). In each instance the Court grounded its ruling on the application of modern antitrust economics analysis, the predominant importance of the restraint's effects on interbrand rather than intrabrand competition, and the significant role played by quality/service factors in enhancing interbrand competition. In *Leegin*, the Court added a further quality component specific to RPM and a service rationale untethered to free-riding:

1.3 Expansion of retailer options

Resale price maintenance also has the potential to give consumers more options so that they can choose among low-price, low-service brands; high-price, high-service brands; and brands that fall in between.⁶

1.4 Increased services regardless of free-riding

Resale price maintenance can also increase interbrand competition by encouraging retailer services that would not be provided even absent free riding. It may be difficult and inefficient for a manufacturer to make and enforce a contract with a retailer specifying the different services the retailer must perform.

⁴ *GTE Sylvania*, 433 U.S. at 55.

⁵ *Id.* The Supreme Court explained the free-rider effect most recently in its *Leegin* decision as follows: *Absent vertical price restraints, the retail services that enhance interbrand competition might be underprovided. This is because discounting retailers can free ride on retailers who furnish services and then capture some of the increased demand those services generate. Consumers might learn, for example, about the benefits of a manufacturer's product from a retailer that invests in fine showrooms, offers product demonstrations, or hires and trains knowledgeable employees. Or consumers might decide to buy the product because they see it in a retail establishment that has a reputation for selling high-quality merchandise. If the consumer can then buy the product from a retailer that discounts because it has not spent capital providing services or developing a quality reputation, the high-service retailer will lose sales to the discounter, forcing it to cut back its services to a level lower than consumers would otherwise prefer. Minimum resale price maintenance alleviates the problem because it prevents the discounter from undercutting the service provider. With price competition decreased, the manufacturer's retailers compete among themselves over services.* *Leegin*, 551 U.S. at 890-91 (internal citations omitted).

⁶ *Leegin*, 551 U.S. at 890.

Offering the retailer a guaranteed margin and threatening termination if it does not live up to expectations may be the most efficient way to expand the manufacturer's market share by inducing the retailer's performance and allowing it to use its own initiative and experience in providing valuable services.⁷

The Court went on to note that although manufacturers might be able to achieve many of the same quality/service advantages by vertically integrating, this might not be as efficient as working through independent distributors:

[D]epending on the type of product it sells, a manufacturer might be able to achieve the procompetitive benefits of resale price maintenance by integrating downstream and selling its products directly to consumers. . . . This . . . might lead to inefficient integration that would not otherwise take place, so that consumers must again suffer the consequences of the suboptimal distribution strategy. And integration, unlike vertical price restraints, eliminates all intrabrand competition.⁸

On the strength of these economics rationales, the Court in *Leegin* concluded that agreements setting minimum resale prices no longer should be unlawful per se – a category that under U.S. law is confined to restraints “that would always or almost always tend to restrict competition and decrease output.”⁹ That did not mean RPM would always be deemed lawful, however, and indeed the Court mentioned several contexts involving horizontal concerted conduct or dominance in which that practice could still be found unlawful. Thus, RPM could have significant anticompetitive effects where it is (a) the product of a conspiracy among suppliers to elevate prices market-wide; (b) imposed by collusion among dealers insisting that the supplier eliminate discounters; (c) imposed by a dominant retailer to impede smaller retailers; or (d) imposed by a dominant supplier in order to encourage retailers not to carry the products of other suppliers.¹⁰

2. How has the rule of reason actually worked in litigation over RPM

The combination of the Court's three seminal rulings in *GTE Sylvania*, *Kahn* and *Leegin* set the stage for determining how particular vertical price restraints aimed at securing quality and service enhancements would fare under the antitrust rule of reason in actual litigated cases. So then, how has the rule of reason actually worked in assessing quality/service enhancements, and what actually has happened when particular vertical price restraints used in real world interbrand rivalries were tested in litigation under the antitrust rule of reason? The disappointing answer to both questions is that it is still hard to say, since there is an insufficient track record of vertical price restraint cases litigated through full rule of reason assessment to conclude how quality/service factors are actually measured and how they could or should be balanced against arguably negative competitive effects on price or output. This is so for a number of reasons that will be summarized below after a brief discussion of how the rule of reason is supposed to work.

⁷ *Id.* at 891-92.

⁸ *Id.* at 903.

⁹ *Leegin*, 551 U.S. at 886 (quoting *Bus. Elec. Corp. v. Sharp Elec. Corp.*, 485 U.S. 717, 723 (1988)).

¹⁰ *Leegin*, 551 U.S. at 892-99. *See, e.g., Toledo Mack Sales & Serv., Inc. v. Mack Trucks, Inc.*, 530 F.3d 208 (3d Cir. 2008) (reversing judgment in favor of defendant and finding that plaintiff should have been allowed to present its case to a jury based on evidence supporting allegations of horizontal agreements among dealers not to compete on price, dealer pressure on the manufacturer, and the manufacturer's possession of market power in two relevant product markets).

The Supreme Court has characterized in several ways how the rule of reason is to be applied when assessing a restraint's asserted pro- and anti-competitive effects. For example the Court has said that all relevant circumstances are to be "weighed":

- *GTE Sylvania* – "Under this rule the factfinder weighs all of the circumstances of a case in deciding whether a restrictive practice should be prohibited as imposing an unreasonable restraint on competition."¹¹

The Court has also referred to the utility of examining "countervailing" factors that could possibly enhance competition in the face of restraints that might impede it:

- *Federation of Dentists* - "Absent some countervailing procompetitive virtue—such as, for example, the creation of efficiencies in the operation of a market or the provision of goods and services—such an agreement limiting consumer choice by impeding the 'ordinary give and take of the market place,' cannot be sustained under the Rule of Reason."¹²

Along the same lines, Justice Scalia later noted in dictum in a dissenting opinion that the competing pro- and anti-competitive effects are to be "balanced":

- *Eastman Kodak* – "Per se rules of antitrust illegality are reserved for those situations where logic and experience show that the risk of injury to competition from the defendant's behavior is so pronounced that it is needless and wasteful to conduct the usual judicial inquiry into the balance between the behavior's procompetitive benefits and its anticompetitive costs."¹³

The Court has also indicated that the various competitive tendencies are to be combined in some way, not specifically delineated, in order to reveal their ultimate net or preponderant directional effect:

National Society of Professional Engineers – "[T]he inquiry mandated by the Rule of Reason is whether the challenged agreement is one that promotes competition or one that suppresses competition."¹⁴

¹¹ 433 U.S. at 49; *see also Monsanto Co. v. Spray-Rite Serv. Corp.*, 465 U.S. 752, 761 (1984) (rule of reason "requires a weighing of the relevant circumstances of a case"). The ABA has prepared model jury instructions to be used by courts in guiding juries in the application of the antitrust rule of reason. In the latest version of these model jury instructions, published in 2005, the ABA adopted the Supreme Court's "weighing" formulation and added the notion that a restraint will be deemed unreasonable only if it produces a "substantial" excess of harm over benefit:

If the competitive harm substantially outweighs the competitive benefits, then the challenged restraint is unreasonable. If the competitive harm does not substantially outweigh the competitive benefits, then the challenged restraint is not unreasonable.

ABA Section of Antitrust Law, MODEL JURY INSTRUCTIONS IN CIVIL ANTITRUST CASES, 2005 Edition Instruction 3D at A-12 (2005).

¹² *FTC v. Ind. Fed'n of Dentists*, 476 U.S. 447, 459 (1986) (citations omitted).

¹³ *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 486-487 (1992) (Scalia, J., dissenting).

¹⁴ *National Soc'y of Prof'l. Eng'rs v. United States*, 435 U.S. 679, 691 (1978); *see also NCAA v. Bd. of Regents of the Univ. of Okla.*, 468 U.S. 85, 104 & n. 26 (1984) ("the essential inquiry remains the same - whether or not the challenged restraint enhances competition.")

Most recently in its *Leegin* ruling, the Court did repeat the word “weighs” in its quotation of a statement in *GTE Sylvania*,¹⁵ but it went on to invite lower courts to develop an appropriate “litigation structure” for deciding rule of reason cases involving vertical price restraints:

*As courts gain experience considering the effects of these restraints by applying the rule of reason over the course of decisions, they can establish the litigation structure to ensure the rule operates to eliminate anticompetitive restraints from the market and to provide more guidance to businesses. Courts can, for example, devise rules over time for offering proof, or even presumptions where justified, to make the rule of reason a fair and efficient way to prohibit anticompetitive restraints and to promote procompetitive ones.*¹⁶

The post-*Leegin* case law has not yet developed a robust body of analysis demonstrating how the rule of reason will or should be applied in RPM litigation. As will be seen below, most post-*Leegin* RPM cases in federal courts have been dismissed at an early stage.¹⁷ In the meantime, a number of commentators have sought to provide guidance. Most have focused on a structured approach that mainly emphasizes shifting burdens of proof rather than explicit “weighing,” “balancing,” or “netting” out of “countervailing” tendencies, though the latter notions do not disappear altogether.

A good example of the structured approach is provided in a paper still in manuscript prepared by Gregory Werden, who serves as a Senior Economic Counsel in the Antitrust Division of the Department of Justice.¹⁸ Werden categorizes RPM and other vertical restraint cases as “non-suspect,” noting that “we think we know that vertical restraints ‘hold promise of increasing a firm’s efficiency and enabling it to compete more effectively,’ and thus they normally do not harm the competitive process.”¹⁹ Here is a distilled summary of Werden’s proposed three-stage, structured, burden-shifting approach to rule of reason analysis in a non-suspect vertical case:

- Stage 1 - Plaintiff’s Initial Burden

To carry its initial burden, a plaintiff challenging a non-suspect restraint must demonstrate, *inter alia*, the potential for a significant anticompetitive effect. For this, the courts generally require a threshold showing of market power.... [Alternatively] The plaintiff instead may demonstrate the potential for a restraint to have a significant anticompetitive effect by showing its actual marketplace impact.²⁰

- Stage 2 - Defendant’s Burden

For non-suspect restraints, the defendant can rebut any showing the plaintiff makes on the potential for significant anticompetitive effects. Market delineation is often a major area of

¹⁵ *Leegin* 551 U.S. at 885. Justice Breyer also referred to weighing in his dissent: “How easily can courts identify instances in which the benefits are likely to outweigh potential harms? My own answer is, *not very easily*.” *Id.* at 916 (Breyer, J. dissenting, italics in original).

¹⁶ *Id.* at 898-99.

¹⁷ See discussion at pp. 10-11, *infra*.

¹⁸ Gregory J. Werden, Senior Economic Counsel, Antitrust Division, U.S. Dep’t of Justice, *Antitrust’s Rule of Reason: Only Competition Matters* 16-28 (Mar. 1, 2013) (unpublished manuscript), available at SSRN: <http://ssrn.com/abstract=2227097> or <http://dx.doi.org/10.2139/ssrn.2227097>. The paper expresses Mr. Werden’s views and not necessarily those of the Department of Justice.

¹⁹ *Id.* at p. 21 (quoting *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 768 (1984)).

²⁰ *Id.* at 22 (footnote omitted).

dispute, as are other factors relevant to market power. . . . The defendant can dispute not only the factual basis for the plaintiff's argument but also the economics relied upon In cases not involving cartel activity, justifications can be important. . . .²¹

- Stage 3 - The Plaintiff's Ultimate Burden

The plaintiff might discredit the justification by showing that the restraint could not accomplish what is claimed of it. The plaintiff might negate the justification by showing that a less restrictive alternative would have accomplished what the restraint accomplishes as well or better. The plaintiff also might show that the restraint nevertheless harms competition. . . . In the close cases, the plaintiff almost surely will fail to carry its burden because no analytic apparatus offers the precision necessary for making close calls.²²

Academic and other commentators have offered their own somewhat similar proposals for a structured rule of reason analysis,²³ and case law analyzing nonprice vertical restraints has provided additional articulations of the burden-shifting approach.²⁴

As might be expected, generalities about “weighing” or “balancing” or discerning ultimate “net” directional effect, or even providing a “structured” approach using burden-shifting do not provide highly specific guidance on how the assessment process is actually to be performed in real cases involving countervailing factors that are not easily reduced to quantifiable metrics. And in fact, the U.S. courts have not produced many rulings that offer practical instruction. As the ABA's most recent edition of *Antitrust Law Developments* summarized the current situation:

*The Supreme Court has provided little guidance about how this balancing process should be conducted, and lower courts have questioned the feasibility of any explicit balancing because offsetting competitive effects often do not lend themselves to easy measurement.*²⁵

After all, how does one find a common denominator that allows fair comparisons among such disparate concepts as increase in price, increase in output, greater product choice, lower product inventory, better customer service, decline in marketing effort, strengthening of incentives to innovate, increase in distributor investment, reduction in product quality, etc.? Numerous leading commentators have identified the same fundamental fallacy in rule of reason “balancing/weighing” methodology:

Herbert Hovenkamp – “[t]he set of rough judgments we make in antitrust litigation does not even come close to this ‘balancing’ metaphor.”²⁶

²¹ *Id.* at 24.

²² *Id.* at 26-27.

²³ See, e.g., Maurice E. Stucke, *Does the Rule of Reason Violate the Rule of Law*, 42 U.C. DAVIS L. REV. 1375, 1485-87 (June, 2009); Thomas A. Lambert, *Dr. Miles Is Dead. Now What?: Structuring A Rule of Reason For Evaluating Minimum Resale Price Maintenance*, 50 WM & MARY L. REV. 1937, 1997-2005 (May, 2009).; Christine A. Varney, *A Post-Leegin Approach to Resale Price Maintenance Using a Structured Rule of Reason*, 24 ANTITRUST No. 1, 2009 at 22. (2009).

²⁴ See, e.g., *Care Heating & Cooling, Inc. v. Am. Standard, Inc.*, 427 F.3d 1008, 1012 (6th Cir. 2005); *CDC Techs., Inc. v. IDEXX Labs., Inc.* 186 F.3d 74, 80 (2d Cir. 1999).

²⁵ 1 ANTITRUST LAW DEVELOPMENTS (SEVENTH) at 80 (7th ed. 2012) (footnotes omitted) [hereinafter *ALD*].

²⁶ 11 HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1912i, at 371 (3d ed. 2011). See also Department of Justice and Federal Trade Commission *Antitrust Guidelines for Collaborations Among Competitors* (Apr 2000),

Thomas A. Lambert – “The fact-finder thus would have to decide whether the post-RPM outcome of higher prices with more or better services is more or less desirable than the pre-RPM outcome of lower prices with fewer or inferior services. Absent some entirely arbitrary presumption that a low price is better than a high level of service (or vice versa), there is simply no way to make that decision.”²⁷

Michael A. Carrier – “How can courts do it? Doesn’t it require the comparing of apples (e.g., an increase in interbrand competition) and oranges (e.g., a decrease in intrabrand competition)?”²⁸

A review of the case law in *Antitrust Law Developments* finds that U.S. courts have more often than not studiously avoided reaching the point of having to clarify this obscure area of the law:

*The case law, moreover, provides few examples of attempts to balance because most rule of reason cases do not proceed that far: they usually are resolved when the plaintiff fails to prove a substantial anticompetitive effect or the defendant fails to provide evidence that the restraint is reasonably necessary to achieve a substantial procompetitive effect.*²⁹

Professor Michael Carrier performed a comprehensive survey of post-*Sylvania* rule-of-reason case law in 1999 that assessed the ways federal courts had conducted rule of reason balancing during the nearly quarter century that had elapsed since that decision.³⁰ Carrier concluded that “in an astonishing 96% of Rule of Reason cases, courts do not balance anything.”³¹ He noted that an important part of the problem was the hard fact that the sheer diversity and heterogeneity of competitive effects, both pro- and anti-, defies simple comparisons via mathematical or other systematic measurement:

*Can courts balance anticompetitive and procompetitive effects? The odds are against them. For courts rarely will be able to sum up a restraint’s net effect on output or price. By no stretch can we be assured of the results of balancing with mathematical exactitude.*³²

Carrier published a subsequent survey of rule-of-reason cases decided between February 2, 1999 and May 5, 2009. He found that of 222 decisions that reached a final determination, 215 (96.8%) “were resolved on the grounds that the plaintiff did not prove an anticompetitive effect” and only 5 cases (2.2%) performed balancing.³³ The plaintiff won in only one of the 5 cases that went through a balancing analysis.³⁴

available at <http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf> (noting at sec. 3.37 in the context of rule of reason analysis of horizontal restraints that “The Agencies’ comparison of cognizable efficiencies and anticompetitive harms is necessarily an approximate judgment.”)

²⁷ Thomas A. Lambert, *Dr. Miles is Dead. Now What?: Structuring A Rule of Reason For Evaluating Minimum Resale Price Maintenance*, 50 WM & MARY LAW REV. 1937, 1962 (2009).

²⁸ Michael A. Carrier, *The Real Rule of Reason: Bridging the Disconnect*, 1999 B.Y.U. L. REV. 1265, 1347 (1999).

²⁹ *ALD* at 80.

³⁰ Carrier, *The Real Rule of Reason: Bridging the Disconnect*, 1999 B.Y.U. L. REV. 1265 (1999).

³¹ *Id.* at 1267-68.

³² *Id.* at 1346.

³³ Michael A. Carrier, *The Rule of Reason: An Empirical Update for the 21st Century*, 16 Geo. Mason L. Rev. 827, 829 (2009).

³⁴ See *United States v. Visa U.S.A., Inc.*, 344 F.3d 229 (2d Cir. 2003).

Even the deceptively simple net- or preponderant-directional-effect test suggested by the Supreme Court in *National Society of Professional Engineers* retains the same computational difficulties posed by balancing and weighing individual effects. As Professor Carrier noted in 1999:

*A narrower test than the current balancing, for example, may look only to the net effect of the restraint on output. But such an approach will not solve most cases since the competitive effects of restraints do not usually manifest themselves so clearly as to lead to a “net result.”*³⁵

Hence, there is an inescapable methodological difficulty for any court or jury that wishes to weigh, balance or “net out” all the relevant competitive effects of RPM or other vertical restraints. In these circumstances, Carrier notes that many post-*GTE Sylvania* courts found ways to avoid full rule of reason analysis. One of the most popular was by finding that the plaintiff had failed at the threshold stage to demonstrate any anticompetitive effect of the restraint. In territorial and customer restraint cases surveyed by Carrier in 1999, for example: “The courts found that the plaintiff failed to demonstrate a significant anticompetitive effect in 105 out of 118 cases (89%) involving vertical restraints.”³⁶

Few courts have attempted full rule of reason analysis for territorial restraints after *GTE Sylvania* or for RPM after *Kahn* and *Leegin*. Several reasons seem apparent.

2.1 Territorial restraints – Defendants always win and most win early

Following the Supreme Court’s *GTE Sylvania* decision, defendants have won a nearly uninterrupted string of victories in cases challenging territorial restrictions, virtually all at the motion to dismiss or summary judgment stage. The result has been that a whole category of antitrust litigation, previously robust, has virtually disappeared. As noted in the latest edition of the ABA’s antitrust treatise *Antitrust Law Developments* (7th ed. 2012):

*Most post-Sylvania decisions have upheld vertical territorial and customer restrictions under the rule of reason, even if imposed by a manufacturer with a dominant market position. In a few cases, courts have found territorial and customer restrictions unreasonable, though no court has done so in the last 25 years.*³⁷

2.2 Vertical restraints setting maximum prices – No cases

As noted in the latest edition of *Antitrust Law Developments*:

*Since State Oil Co., no court has addressed a claim challenging a maximum resale price maintenance agreement under the rule of reason.*³⁸

2.3 Vertical restraints setting minimum prices – Few cases, many ways to avoid rule of reason balancing

Although the rule of reason has been applicable to Sherman Act minimum resale price maintenance cases for 6 years, there are few, if any, instances where courts have conducted weighing, balancing, net effect measurements of pro- and anti-competitive effects, or even burden-shifting. Why is this so?

³⁵ Carrier, *The Real Rule of Reason: Bridging the Disconnect*, 1999 B.Y.U. L. REV. at 1348-49.

³⁶ *Id.* at 1275.

³⁷ *ALD* at 159 (footnotes omitted).

³⁸ *Id.* at 143.

First, there simply do not appear to have been many instances of contested cases involving minimum RPM. The *Leegin* decision does not appear to have unleashed any great rush among manufacturers to institute mandatory minimum price programs, most likely because they would still face potentially serious claims under the antitrust laws of several states like California and Maryland that still treat minimum resale price maintenance as per se illegal.

Second, in the few post-*Leegin* cases involving minimum RPM that have been contested, none has reached the weighing or balancing stage. This is because courts have found ways to dispose of most such cases before having to conduct burden-shifting, far less full rule of reason analysis. Thus, some courts have followed the approach noted by Professor Carrier as being most common when earlier courts sought to avoid full rule of reason treatment of territorial restraints: namely, a finding that the plaintiff had failed to show any underlying anticompetitive effect to begin with. For example, in *Bel Canto Design, Ltd. v. MSS HiFi, Inc.*, 11 Civ. 6353, 2012 U.S. Dist. LEXIS 86628, at *4, *25, *33-34 (S.D.N.Y. June 20, 2012), the court granted the defendant's motion to dismiss on multiple grounds, including the plaintiff's failure to plead either the defendant's possession of market power in a proper relevant market or harm to interbrand competition.

In other instances, courts have found ways to avoid full rule of reason analysis by dismissing the plaintiffs' claims on elemental grounds, such as failure to meet the threshold requirement of defining a bona fide relevant market. *See, e.g., Bel Canto Design*, 2012 U.S. Dist. LEXIS 86628; *Jacobs v. Tempur-Pedic Int'l, Inc.*, 626 F.3d 1327 (11th Cir. 2010) (affirming dismissal for failure to allege a valid product market); *PSKS, Inc. v. Leegin Creative Leather Prods., Inc.*, 615 F.3d 412 (5th Cir. 2010) (affirming dismissal of amended complaint following remand from the Supreme Court), *cert. denied*, 131 S. Ct. 1476 (2011).³⁹

In the *PSKS* case, the Court of Appeals for the Fifth Circuit observed that even if the plaintiff had alleged a valid relevant market there, plaintiff's theory of harm failed to "recognize that retailers will cease carrying [the manufacturer's] goods if [the manufacturer] imposes onerous requirement that make [its] products difficult to sell" while "robust competition can exist even in the absence of price competition." However, this did not amount to a balancing of evidence of price and quality effects because no such evidence was placed on the judicial scales.

Similarly, in *In re Nine West Group Inc.*, Docket No. C-3937, 2008 WL 2061410 (FTC May 6, 2008), the U.S. Federal Trade Commission modified a prior consent decree, which had prohibited minimum RPM, on the grounds that the manufacturer lacked market power and that the impetus for adopting minimum RPM came from the manufacturer alone, not from the retailers; however, the Commission explicitly rejected the manufacturer's assertion that implementing minimum RPM would "increase consumer demand for its products and thereby enhance competition," and therefore no weighing of price and quality effects occurred in that matter either.

3. Prediction for future RPM litigation

As seen above, U.S. federal courts in most cases have not reached the difficult – perhaps insoluble – challenge of weighing and balancing all the possible pro- and anti-competitive features that might be presented in vertical restraint cases, including RPM cases, but that are not amenable to systematic comparison pursuant to standard metrics. Cases have therefore been disposed of in the vast majority of instances by other means that preempt the need for full rule-of-reason assessment. Courts in the few recent RPM cases that have been contested have generally ruled for defendants without engaging in rule-of-

³⁹ *See also New York v. Tempur-Pedic Int'l, Inc.*, 916 N.Y.S.2d 900, 908-09 (N.Y. Sup. Ct. 2011). (dismissal for failure to prove agreement), *aff'd*, 944 N.Y.S.2d 518, 519 (2012).

reason balancing where they could rule out the main categories of concern related to RPM as noted in the *Leegin* ruling, *i.e.*:

- where the court could rule out dominance concerns, as where the plaintiff failed to show a relevant market in which the defendant exercised market power harmful to competition,⁴⁰
- where the plaintiff failed to show an anti-competitive effect on interbrand competition,⁴¹
- where the court could rule out concerns about concerted horizontal conduct at the supplier and retailer levels.⁴²

Conversely, in three instances where a federal court has allowed the plaintiff's RPM claim to proceed (yet without engaging in rule-of-reason balancing), the courts were persuaded by claims that the RPM policy arose due to pressure from a dominant retailer or a possible retailer cartel rather than from the interest of the manufacturer.⁴³

I predict that this pattern in RPM case outcomes will persist in U.S. litigation for the foreseeable future. It seems likely that the courts will not attempt to weigh or balance distinct pro- and anti-competitive effects against one another in any specific computational sense, but rather will gradually settle on a structured rule of reason analysis as they were invited to do by the *Leegin* majority opinion. They are likely to choose a simplified structured approach similar to the burden-shifting system articulated by Werden and other contemporary commentators. Under this structured analysis there will likely be a relatively simple three-stage test in most cases:

The first stage involves a determination whether the plaintiff can demonstrate the existence of a significant harmful effect on competition in the market, which in practical terms will require a showing of harm to interbrand competition. This might occur, for example, if RPM were being practiced by a manufacturer who possesses significant market power in the relevant market. The requisite harmful effects might also be shown by evidence that RPM was introduced as the result of horizontal concerted action at either the distributor or manufacturer level. If the plaintiff is unable to show these or other comparable harmful encroachments on interbrand competition, however, his case would be dismissed at this first stage.

If the plaintiff can show specific potential harm to interbrand competition in a defined market, however, then the analysis moves to the second stage where the defendant would be required to demonstrate that RPM is justified by actual pro-competitive benefit (*i.e.*, not merely theoretical benefit) in its particular case. The pro-competitive benefit would likely have to be demonstrated in accordance with a kind of sliding scale to a level of probity commensurate with the strength of the plaintiff's proof of the factors imposing potential jeopardy to interbrand competition. It would be harder, for example, for a

⁴⁰ See, e.g., *Jacobs v. Tempur-Pedic Int'l, Inc.*, 626 F.3d 1327, 1339-40 (11th Cir. 2010) (complaint is "bereft of the critical allegations linking TPX's market power to harm to competition").

⁴¹ See, e.g., *Bel Canto Design*, 2012 U.S. Dist. LEXIS 86628.

⁴² See, e.g., *Spahr v. Leegin Creative Leather Prods., Inc.* No. 2:07-CV-187, 2008 WL 3914461, at *12 (E.D. Tenn. Aug. 20, 2008) (no allegation that "retailers have agreed to fix prices and then compelled the manufacturer, Leegin, to utilize resale price maintenance.")

⁴³ See, e.g., *Toledo Mack Sales & Serv. v. Mack Trucks, Inc.*, 530 F.3d 204, 225 (3d Cir. 2008) (involving evidence "that the restraint facilitates a retailer cartel") (citation and internal quotation marks omitted); *McDonough v. Toys "R" Us*, 638 F. Supp. 2d 461 (E.D. Pa. 2009); *BabyAge.Com, Inc. v. Toys "R" Us*, 558 F. Supp. 2d 575 (E.D. Pa. 2008) (motion to dismiss denied based on claims RPM was at behest of dominant retailer).

defendant to justify RPM if the case involves a commodity product for which user instructions or other conventional retail-level services and promotional activities are relatively less important.

A third stage would allow the plaintiff to attempt to show that the defendant's justifications are either irrelevant, lacking in merit or pretextual, or that the defendant could have achieved its objectives through significantly less restrictive and readily available means.

The foregoing burden-shifting would not necessarily require mathematical weighing or balancing of any individual pro- and anti-competitive effects at any stage. Rather, the defendant could prevail, at least in theory, simply by demonstrating both the bona fides of its objectives in utilizing RPM and that RPM was a reasonable tool for achieving those objectives in the particular market situation. Thus, for example, if the plaintiff were able to demonstrate that the defendant already possessed market power in the relevant market, that would tend to undermine the plausibility of many of the pro-competitive benefits that are usually cited in favor of RPM, regardless of any further weighing. Similarly, the arguable role of concerted action among distributors or rival manufacturers leading to imposition of RPM would call into question the credibility of any argument that RPM was designed to spur distributors to make greater distributional efforts in support of the manufacturer's brands against rival brands. On the other hand, if the plaintiff were unable to identify any specific harm to interbrand competition posed by the defendant's RPM, as occurred in the *Bel Canto Design* case, then any plausible basis for using RPM to motivate distributors to provide enhanced marketing, sales and service effort on behalf of the defendant's product would seem to suffice.

It thus seems likely that an ad hoc convergence between the lower courts' pattern of avoiding rule-of-reason balancing and the apparent practicality of a structured rule of reason approach based on burden shifting will progress over the years to come. Perhaps during that interval the Supreme Court will find an opportunity to confront the anomalous situation of its weighing/balancing signals being largely ignored, and further refine the rule of reason test so that it conforms more closely to both economics and realities on the ground.

SUMMARY OF DISCUSSION

By the Secretariat

The Chairman (Frédéric Jenny) introduced the Roundtable on the Role and Measurement of Quality in Competition Analysis by noting both the difficulty and the novelty of the topic under discussion. While quality is often a key component of competition, many authorities lack a general framework by which to assess the impact of quality as a factor within competition analysis. The relative dearth of such practical experiences was reflected in the relatively small number of written contributions that were received from Roundtable participants. Thus, a key purpose of the Roundtable was to assist competition authorities in identifying a feasible and appropriate framework by which to address quality issues in competition enforcement, through a combination of expert presentations and oral contributions from Member countries.

The discussion opened with a summary, provided by Jeremy West (OECD), of the Background Note prepared by the OECD Secretariat, which was co-authored with Anna Pisarkiewicz. Concerns about quality arise frequently in the context of competition policy because, at least in principle, a decrease in product quality (unaccompanied by an adequate adjustment of price) can be as harmful to consumer welfare as an increase in price. Quality is a multidimensional and often subjective element, however, and so it is considerably more difficult to factor quality into a competition analysis than it is to take price into account. When measuring the quality of chemotherapy drugs, for example, certain patients may prioritise the efficacy of a drug whereas others may place greater value on the type of impact that taking the drug will have on their quality of life. “Vertical differentiation” refers to those attributes of a product that all consumers will consider to be desirable characteristics, whereas “horizontal differentiation” refers to quality features that not all consumers would view as desirable. This distinction, though useful, is not absolute, however. For example, different consumers may rank vertical differentiation factors in dissimilar orders, while consumers may disagree as to whether horizontal differentiation factors actually constitute quality components of a product. These ambiguities make the task of measuring and analysing quality within a competition assessment very difficult in practice.

One interesting aspect of the quality debate concerns the role that product quality should play within the task of market definition. Hartman *et al.*,¹ for example, have suggested the adoption of a “SSNDQ” test—a small but significant *non-transitory decrease* in quality—in markets with rapid technological change, in lieu of the established SSNIP test which focuses on price. It is important to remember that the SSNIP test itself is often applied in a more holistic rather than mechanistic manner, and so a SSNDQ test could be applied similarly to provide competition agencies with a type of informal guidance on the role of quality in a market.

The impact of competition on quality is another highly relevant, but also somewhat contentious, issue. Economic theory provides few definitive answers, although economists generally agree that, if prices are regulated and set above marginal costs, market participants will compete away these profits by raising quality and/or increasing marketing. This points to the probable link between the setting of regulated prices and levels of quality, as well as the possible desirability of maintaining various quality levels at various

¹ Raymond Hartman, David Teece, Will Mitchell & Thomas Jorde, “Assessing Market Power in Regimes of Rapid Technological Change” 2 *Industrial and Corporate Change* 317 (1993).

price points within a market. It also raises the question of whether there can be “too much” quality as such. The empirical evidence that is available suggests that increasing competition can have both positive and negative effects on quality, depending on the particular market circumstances. The Background Note also addresses specific instances where quality-related arguments may arise, including in the context of cartels and mergers. One interesting example, from Israel, involved an agreement between competitors to degrade service quality by agreeing not to open their businesses on the same day each week, which was subsequently held by the court to be harmful to consumers.

The Chairman explained that the Roundtable discussion would adopt a similar approach to that of the background note, by focusing first on general considerations relating to quality and then examining specific issues that can arise. The next speaker was Professor Marc Ivaldi, of the Toulouse School of Economics, who began his presentation by noting the significant progress that has been achieved in recent years in the area of econometrics in terms of measuring quality. While such techniques remain at the frontiers of academia at present, these models and ideas are likely to be of practical application in the future. Professor Ivaldi argued that it is essentially impossible to define a product without defining its quality attributes, and, *vice versa*, that it is equally difficult to define quality without first defining the relevant product. In this regard, quality might be defined as the value(s) or flow of service that a consumer takes from a product. While, for example, electricity appears to be a homogeneous product, it can be differentiated in terms of capacity, reliability of service, the number of distributors and the tariff terms available. Although it is usual, in economic analysis, to distinguish between vertical and horizontal differentiation, it may be more useful instead to distinguish between those goods or service characteristics that can be physically measured (such as weight or speed) and those that involve the subjective perceptions of customers. Moreover, certain aspects of a product (such as the degree of risk involved in financial products) may be very difficult to measure in practice from observed characteristics (for example, because this would depend upon the degree of risk aversion of customers).

All of these aspects of quality can feed into the task of market definition. However, there is a risk in conventional competition analysis that market definition may effectively define the relevant price, which can in turn impact upon the definition of the product. In this regard, Professor Ivaldi made reference to a study of the household PC market in the late 1990s, which demonstrated the extent to which product characteristics can change and adapt to differing market circumstances and demands. Accordingly, economic analysis must take account of a firm’s product design strategy in addition to the price strategy of the firm, because quality is an endogenous feature of products that is determined by the market. Professor Ivaldi then described a simple equation to explain the effects of a change in quality on consumer demand and profitability, in which the value of the decrease in quality is treated as equivalent in an increase in price. Such an analysis is essentially a SSNIP test, but where any changes in quality are taken into account. In order to do so, it is necessary to know the structure of demand, the structure of costs and the behaviour of customers with respect to changes in quality. Where customers continue to purchase a product following a decrease in quality, those purchasers may not have actually perceived the change in quality. Moreover, Professor Ivaldi suggested, the SSNDQ test itself may become an increasingly accepted and even necessary technique within competition policy.

Finally, Professor Ivaldi discussed the issue of static versus dynamic efficiencies within the context of quality analysis. He gave the example of a railway network, where price competition between shippers over the existing tracks may generate static efficiencies in the short term. In the longer term, however, dynamic efficiencies would result from investment in and upgrading of the network. In this scenario, where there is a proposal to merge two competing shipping companies to monopoly, there is a likelihood that prices will rise and consumer surplus will fall in the short term. If, however, these greater profits lead to increased investment in the rail network in the future, the quality of the network will improve and consumer surplus will rise similarly. Thus, there is a trade-off between issues of static and dynamic efficiency, which is frequently the case when quality issues arise in competition analysis. A conflict of this

sort arose in the *Tetra Laval/Sidel* merger, which was prohibited initially by the European Commission, but was subsequently permitted by the European Court of Justice on the basis, *inter alia*, of dynamic efficiencies that would result from technological innovation by the merged firm.

In response, the Chairman remarked that Professor Ivaldi's presentation had underlined the complexity of the issues at stake. He then invited Professor Hiroyuki Odagiri, who is both an academic competition economist and a Commissioner with the Japan Fair Trade Commission (JFTC), to provide his views on quality issues in competition enforcement. Professor Odagiri began by reiterating the distinction between vertical and horizontal differentiation of quality attributes. Whereas the former relates to quality as narrowly defined, the latter is essentially a question of product variety and product positioning. Nonetheless, the word "quality" is used frequently in both these narrower and broader senses. It can be very difficult to separate vertical from horizontal differentiation, however, and so this conceptual distinction, although convenient, is not particularly helpful in practice. Moreover, imperfect information is an important consideration in relation to quality, particularly in the context of vertical differentiation.

In order to measure quality, economists typically use hedonic models that view a product's price as a function of its attributes. While this is far easier to calculate with respect to objective rather than subjective quality attributes, hedonic models have been used successfully in a variety of contexts, perhaps most notably in the calculation of consumer price indexes. If, for example, the price of a product stays the same from year to year but its quality increases, then we can say that the real price of the product has decreased. In theory, hedonic models can be used to estimate quality-adjusted prices in a competitive market, in order to identify markets where anticompetitive behaviour may have resulted in a discrepancy between predicted and actual prices. In practice, however, it can be very difficult to find the necessary data to perform such calculations, unless, for example, you have two very similar markets with very different prices in each.

This relative absence of data—imperfect market information—can also create difficulties for consumers who need to choose between ostensibly similar products that actually have rather different quality attributes. Certain forms of horizontal and vertical co-operation between firms can help to ameliorate such information imperfections. For example, trade associations may provide consumers with reliable product information and quality guarantees, while vertical restraints like resale price maintenance (RPM) may encourage retailers to provide higher quality customer services. This creates problems for competition authorities, however, which seek to proscribe anticompetitive co-ordination between firms while, at the same time, permitting pro-competitive behaviour.

Professor Odagiri then described two sets of guidelines on co-operation agreements that have been published by the JFTC. The first relates to trade associations, and the guidelines make clear that any trade association activities that amount to a hard-core cartel are *per se* illegal. Non-hard-core restraints are permitted provided that such activities do not restrain or impede competition. In one case, the JFTC found that the activities of an association of medical doctors violated the competition rules, insofar as market entry was unnecessarily restricted. This ruling was upheld by the Tokyo High Court, which concluded that the trade association's activities benefitted only its members, rather than the broader interests of consumers. The second set of guidelines issued by the JFTC relates to distribution agreement. In general, vertical restraints are permitted, provided that (i) such agreements do not relate to prices, sales territory or customer allocation; (ii) there are objective justifications for any restrictions relating to the need to ensure product quality; and (iii) such restraints are applied on a non-discriminatory basis to all customers in the market. Two contrasting cases relating to medical products illustrate the approach of the JFTC under these guidelines. In the first, a medical devices firm sought to prohibit sales of its products over the Internet, on the basis that its devices required necessary adjustments at the point of sale that could not be guaranteed in the context of online sales. These arguments were verified and accepted by the JFTC. In the second case, however, a pharmaceutical company sought to prohibit Internet sales of a medicinal product that required no additional input from retailers, and where sufficient safety information could be provided online. In

those circumstances, the JFTC took the view that the restrictions went beyond what was permissible, and the pharmaceutical company subsequently abandoned its restrictive distribution plan.

In the case of mergers and acquisitions, Professor Odagiri expressed the view that, post-merger, firms are likely to position their products further apart in order to avoid cannibalisation between the two merged entities. He discussed the example of a merger between two Japanese firms that were active in the seasoning market. Following the merger, the company raised the prices of its high end products but actually lowered the prices of its low end products. Accordingly, in merger analysis it is important to take into account the effects of product positioning and possible quality improvements, although it can be difficult to predict such effects beforehand. In addition, mergers may have effects that are essentially distributional rather than allocative, insofar as prices for some consumers may rise whereas prices for others fall.

Finally, Professor Odagiri raised the possibility that the growth of e-commerce, with its focus on aggressive price competition in some markets, may increasingly bring issues of product quality to the fore. In response to a question from the Chairman regarding circumstances in which an increase in quality should take priority over an increase in price in the context of competition analysis, Professor Odagiri expressed the view that any increase in price would probably need to be very modest, whereas the associated quality benefits would have to be substantial. The Chairman noted that this raised the question of whether and how quality can be measured quantitatively, and he invited Professor Ivaldi to speak further on this topic.

Professor Ivaldi began by discussing a simple example of an econometric model that aims to evaluate the quality of a product, restating the definition of quality as the flow of service that a consumer gets from a product. He described a hypothetical market with two firms, each producing a single product, where the quality of one product is known whereas the other quality is unknown. The net value of a product is defined as quality minus price. Assuming that the ratio of net values is equivalent to the ratio of market shares, it is possible to calculate the unknown quality figure by means of a simple calculus. In this manner, econometrics attempts to use observable elements—prices and market shares—to derive the more elusive element of quality.

There are two key aspects to the measuring of quality. First, quality is a relative concept, meaning that the quality of one product is defined with respect to the quality of other products. This explains why, for example, a more expensive product may have a higher market share: it is almost certainly of higher quality as well. Second, it is very important in this regard to know the consumer preferences, because the assumption that the ratio of net values equals the value of market shares only holds true for certain very particular types of preferences. Thus, it is necessary to know the factors that inform the demand function for the product.

It ought to be borne in mind, however, that the quality of a product can have many different dimensions, some of which are observed and some of which are subjective or perceived. Thus, quality levels for the same product can vary between different consumers, due to unobserved factors. It is the role of the econometrician to try to measure these unobserved factors from the available data. However, Professor Ivaldi expressed his view that these subjective factors make it extremely difficult to perform a SSNIP test where quality issues are at stake, which, moreover, add to the many existing obstacles to the application of the SSNIP test formulation in practice.

The delegate from the United Kingdom explained that the most common quality measure that the UK competition agencies consider is location, which is used most frequently in relation to the task of market definition. When defining markets, catchment areas are calculated, which are based on customers' implicit valuations of location. In addition, a number of recent merger cases in the UK have involved markets where prices are regulated, meaning that any competition that exists occurs at the level of quality. The UK agencies use a variety of techniques to assess quality aspects in such cases. First, the internal documents of

the merging parties are scrutinised, in order, *inter alia*, to identify what the parties themselves consider to be important quality factors, as well as what they perceive as the opinion of consumers. Second, consumer surveys are conducted in order to determine the views of consumers about quality as well as price issues, which may include rather sophisticated revealed preference analysis. While surveys are unlikely to provide robust quantitative results, nevertheless they can provide valuable insights into market dynamics.

Where relevant quality dimensions have been identified for a market, it is usually possible to gather sufficient data to analyse the functioning of competition, particularly in local markets. In this regard, the UK agencies will typically conduct a price-concentration or quality-concentration analysis, as well as case studies of the competitive impact of individual market events. For example, the large retail grocery chains tend to follow a national pricing policy, but, when local markets become more competitive, non-price variations frequently occur such as increased staffing levels or branch refurbishment. This suggests that quality is also an important factor in these markets. Where the necessary data is available it may be possible to use econometric techniques to determine the impact of concentration on margins and quality; where such data is unavailable, proxies are used where possible. In any event, all of this information feeds into a larger and more holistic determination of whether there are competition problems in a particular market.

The delegate from Chile described the competition agency's *ex post* investigation of a completed merger in the cinema screening market, a sector where service quality is a particularly important aspect of competition between rival exhibitor chains. The agency's investigation revealed, amongst other things, that the number of employees that worked in a cinema was associated with perceptions of service quality. Accordingly, one measure of quality it analysed during the investigation was the cost of salaries. This metric had the additional virtue of being relatively straightforward to assess accurately. The competition analysis indicated that, in markets where the merging entities faced competition from each, their salary costs were markedly higher. This finding bolstered the agency's view that the merger had had negative effects on competition. The case was ultimately settled when the merged entity agreed to a number of divestments to address competition concerns.

The delegate from the European Union noted the frequent difficulties of obtaining sufficient data to conduct quantitative analyses of quality aspects. This is due, in large part, to the multidimensional and subjective nature of product quality itself. Accordingly, DG Competition tends to rely more heavily on qualitative evidence of quality, including evidence gathered during sector investigations, customer and competitor surveys and internal documents of the firm(s) under investigation. Often, DG Competition will focus on any potential negative impacts on future innovation. In this manner, it has successfully challenged anticompetitive firm behaviour and proposed mergers, even without recourse to sophisticated quantitative evidence as to effects on product quality. Moreover, in vertically differentiated markets differences in price may provide a proxy for quality differences. Nonetheless, to the extent that practical quantitative techniques for measuring quality are or become available and would be suitable to use in a particular case, DG Competition would be fully prepared to incorporate such techniques into its enforcement practices.

The Chairman made reference to the contribution to the Roundtable provided by Canada, which suggested that product choice or diversity could be treated as a quality attribute. The delegate from Canada confirmed this as the view of the Canadian Competition Bureau, insofar as a reduction in the range of choices that are available may force the consumer to buy a product that he or she values less, or even to purchase nothing at all. In either instance, the consumer is worse off, so that a reduction in product quality is synonymous with a reduction in average product quality of goods on the market. Even in circumstances where the relevant products are not clearly differentiated on the basis of quality, consumers are disadvantaged by a reduction in product line, insofar as consumer typically value having a wide range of choices. Thus, the level of quality depends upon the extent of the product range that is offered to consumers.

The delegate then described two cases taken by the Competition Bureau in which product choice issues had arisen. The first, brought against the Canada Pipe Company, challenged a loyalty rebates programme. The defendant firm claimed that the programme allowed it to develop its reputation as a reliable supplier of a comprehensive range of pipes and fittings, and that the high sales volumes of popular products enabled it to subsidise the production of less popular items. While the Canadian Competition Tribunal recognised these claimed efficiencies as valid business justifications, the Federal Court ultimately held that the purported benefits could not be dissociated from the underlying anticompetitive purpose of the loyalty programme. The second case was a merger review involving two pharmaceutical companies, Pfizer Inc. and Wyeth. Both firms produced a female hormone replacement therapy (HRT) drug, and a third product by a different manufacturer was also available on the Canadian market. The Competition Bureau's investigation revealed that consumers of HRT drugs tended to have very strong product preferences, and that a reduction in the number of products available in Canada from three to two would result in significant consumer harm. In order to clear the merger, therefore, the Bureau subsequently entered into a consent agreement with Pfizer Inc. and Wyeth to ensure the continuing availability of both drugs produced by the merged entity.

The delegate concluded by noting that, while the Canadian competition framework provides the Competition Bureau with the necessary tools to examine non-price issues in a manner similar to price issues, few litigated cases have raised issues of product quality.

The delegate from BIAC explained that its contribution to the Roundtable did not contain a concrete definition of quality because it had been unable to identify such a single, comprehensive definition of this concept. However, BIAC had suggested that choice should not be viewed as an aspect of quality insofar as choice can be unbundled from quality, because it is not an intrinsic element of any product. In the case of the telecommunications industry, for example, service quality factors are generally treated separately to service choice options. Moreover, many jurisdictions, including the United Kingdom in its contribution, would treat quality and choice as separate non-price aspects of a product.

The Chairman remarked that the use of expert witnesses to assess quality can provide a neat alternative to other qualitative or quantitative techniques for quality measurement. The delegate from the United States explained that quality issues have arisen regularly in the work of both the Federal Trade Commission and the Department of Justice. Indeed, the Horizontal Merger Guidelines state explicitly that quality attributes and changes may be relevant in market analysis. However, the use of dedicated quality experts in the US has been confined, generally, to hospital merger cases, where experts have been used extensively. In these cases, such experts typically explain the framework for evaluating quality claims in the hospitals context and then analyse the evidence at hand in this manner. Where possible, such analysis is quantitative in nature, although qualitative factors can also be taken into account. The focus of assessment is upon quality efficiencies, that is, whether and how a merger may reduce the cost of providing quality. In general, however, the efficiency claims advanced by the parties in such cases have been rejected on the basis of this expert evidence.

The second delegate from the United States then discussed a recently litigated merger challenge that involved do-it-yourself tax preparation software, the *H&R Block/TaxACT* case. One key finding in this case was that the merger was likely to reduce the quality of free DIY tax preparation software available on the market. Whereas TaxACT offered free software with high levels of functionality, H&R Block and its main competitor, Intuit, had little incentive to offer high functionality free products insofar as this might threaten their existing high margin paid products. The expert witness in this case found that the proposed merger would increase the likelihood that H&R Block and Intuit would each find in it their mutual interests to offer lower quality free software in order to increase sales of paid products. Unlike in the hospital merger cases, where concentration may lead to an increase in quality, in this instance the merger was likely to have an anticompetitive detrimental impact on product quality. The Chairman noted that the role of

quality experts is less straightforward where the attributes to be measured are more subjective and thus less easily quantifiable than, for example, mortality rates at a given hospital. The delegate from the United States agreed that consumer preferences are a complicating factor within this analysis, but that fortunately this had not been a problem in the context of its hospital merger investigations.

The delegate from Malta described a study of the market for school uniforms, where quality had been a relevant consideration. In Malta, uniforms are compulsory for school children, and each school has its own specific uniform for which, typically, the school enters into an exclusive supply arrangement with a particular supplier. The competition agency received a number of complaints from parents regarding high prices, low quality and a lack of choice, and so it decided to conduct a survey of the functioning of competition in this market. The agency's preliminary findings highlighted very significant variations in prices between different uniforms, in response to which the suppliers argued that these differences in price are attributable to differences in quality. The final report therefore also took account of the quality of uniforms, which, it determined, actually had little impact on the prices that were charged. In some instances, similar prices were charged for items of very different quality, whereas, in others, items of equivalent quality were priced differently. The actual determinant of prices in this market, the agency concluded, was the market power that each individual supplier enjoyed as a result of the exclusive supply arrangements. Thus, in circumstances where market power exists the relationship between price and quality may be limited.

The delegate from Portugal then spoke about the potential use of hedonic models in the tasks of market definition and merger assessment. To date, although the Portuguese competition agency has taken account of quality effects in its merger appraisals, for example, it has generally done so on the basis of an empirical analysis rather than a theory-focused approach. The agency has attempted to develop a methodology by which normal prices can be converted to hedonic prices, in a manner similar to the adjustment of normal prices to real prices to account for inflation. Demand and cost figures based on these hedonic prices can then be estimated, and it is possible to conduct a SSNIP test to determine the impact of a decrease in quality that results in a 5% increase in hedonic prices. The agency's proposed methodology builds upon the existing econometric literature in this area, and it hopes to implement these analytical methods in its enforcement work in the future.

The delegate further noted the pragmatic and sensible nature of the conclusions reached in the Background Note prepared by the OECD Secretariat, and remarked upon the continuing ambiguities to be found in economic theory with respect to quality issues. While, in certain markets, low prices are the overriding factor for consumers, in other markets quality is an important aspect of competition, and so it is vital that quality attributes are factored into the competition analysis for such sectors.

The Chairman remarked upon the apparent disagreement between different competition jurisdictions as to whether it is possible to conduct a SSNDQ test or modified SSNIP test based on hedonic prices. The delegate from the United Kingdom emphasised that, while the UK competition agencies may conduct SSNIP tests (and, implicitly, SSNDQ tests where quality is a relevant competition consideration), the information obtained from these assessments is simply one factor to be taken into account within a broader consideration of the functioning of competition within a sector. The task of market definition is, of course, inextricably linked to the question of how competition actually works within a particular market.

The delegate from the European Union noted that the Roundtable discussion raised interesting questions about the potential use of hedonic prices to include quality attributes within a quantitative market analysis. Nonetheless, even without using such techniques, DG Competition frequently takes quality issues into account, for example when defining markets. If the differing qualities of ostensibly similar products mean that these items are no longer substitutable, for instance, then these products may constitute separate markets. In the *Unilever/Sara Lee* merger, separate product markets were defined for male and female

deodorants even though the physical attributes of these products are very similar, on the basis that customer demand for such products is highly differentiated based on perceived quality differences driven by marketing campaigns. In that merger, there was a large amount of market data available due to the nature of the products at issue (consumer goods), and so it was possible to conduct a fairly rigorous SSNIP test and to estimate the effects of the proposed transaction.

In practical terms, however, the delegate expressed the view that it would be rather challenging to replace the SSNIP test with a SSNDQ test, insofar as the latter relies heavily on market data that is inherently difficult to measure. It would be particularly problematic to assess the impact upon firm profitability of cost savings realised through a decrease in product quality, in comparison with the impact of charging higher prices. Moreover, the conventional SSNIP test itself involves rather complex economic analyses. In a sense, the delegate suggested, the existing SSNIP test already incorporates a quality assessment, because customers will take into account the quality attributes of potential substitutes when deciding whether to switch in response to a price rise.

The delegate also noted that quality issues can impact upon supply-side considerations in merger cases, if quality requirements create high barriers to entering a new product market. This was the case in the *Amcors/Alcan* merger, where the Commission was concerned about entry barriers and limited supply side substitution in the market for flexible packaging of pharmaceutical products, for which quality requirements are particularly high.

Next, the Vice President of the French Autorité de la Concurrence Emmanuel Combe, made a presentation, reflecting his experience as a professor of industrial economics, on the subject of the so called “low cost” phenomenon, which demonstrates the complex relationship between quality and competition. Mr. Combe focused on a case study of the airline industry, and the impact of market entry by low-cost, low quality carriers. Notably, the business model of these airlines does not adhere to the conventional distinction between vertical and horizontal product differentiation. Instead, low cost carriers typically strip away almost every quality attribute in order to offer the lowest possible ticket prices, which results in a decidedly “no frills” travel experience. Thus, this whole business model is premised upon the distinction between what is necessary and what is merely incidental with respect to product quality. An airline ticket provides consumers with a package of quality attributes, not all of which they will each value to the same extent. Elements such as end-to-end ticketing, frequent flyer programmes, in-flight meals, a comprehensive schedule of flights, larger seats within the plane and/or checked baggage are valuable to some but not all passengers. Others would simply prefer to have the cheapest possible ticket prices. The only quality attributes that passengers as a whole will not compromise upon are flight safety and punctuality.

Contrary to the viewpoint that a reduction in choice amounts to a reduction in consumer utility, hard discounters would argue that their limited product ranges result in time savings for consumers and remove the temptation to buy unnecessary items. While some might argue that the low cost model results in poor quality, it is more accurate to describe such product offerings as being of basic quality. For example, empirical studies demonstrate that low cost airlines are, on average, more punctual than full service airlines. This suggests that low cost carriers focus on delivering essential quality attributes, and that they provide non-essential attributes only in the form of discretionary optional extras for an additional cost.

In response to the entry of the low cost carriers, incumbent airlines adopted a number of different strategies. First, some airlines engaged in tariff mimicry, that is, they reduced their own fares in an attempt to match the prices charged by the new entrants. The “Southwest effect,” named for the first low cost airline that emerged in the United States in the 1970s, demonstrates the severe impact of low cost carrier entry on the fares charged by established operators. Second, some full service airlines focused upon improving the quality, and in particular the punctuality, of their own offerings. This is similar to the effects seen in the retail groceries sector, where entry by an aggressive price competitor tends to result in an

improvement in stock levels in neighbouring rival stores. In France, for example, some retail grocery chains have chosen to reposition themselves as higher service outlets in response to market entry by deep discounters such as Lidl and Aldi. The reason why most established airlines did not respond to increased competition only by raising quality standards is because most customers have a strong preference for low airfares over high quality, at least in the short to medium haul segments. In order to be viable in the longer term, therefore, many formerly full service airlines have chosen to reduce production costs by adopting certain low cost business practices, for example charging for luggage. Third and finally, the aviation market has seen a number of mergers between full service and low cost airlines in recent years, although there is an inherent tension in the coexistence of high cost and low cost segments within a single entity.

Professor Ivaldi added that there is a need to incorporate sufficient flexibility within existing economic models to account for the introduction of new products. In a sense, a low cost airline can be viewed as providing a new product, and thus the question is how this product should be described. Many products incorporate non-essential quality attributes—for example, where a complimentary drink is provided on a flight—and so the question is whether these attributes ought to be included in the description of the product itself. Professor Ivaldi gave the example of the market for transport between Cologne and Berlin, a journey that can be travelled by car, by flight using either a full service or low cost airline, or by train using either the incumbent rail operator or a new rail entrant that provides only one service per day at a low cost. With sufficiently robust economic models, however, it is possible to analyse and define the various relevant markets at issue here. The delegate from the United States added that, when the US airline sector was regulated and thus price competition was impossible, airlines competed much more vigorously in respect of the quality of their product offerings, for example by providing passengers with very high quality food and beverages.

The delegates from Australia then described two case examples from that jurisdiction that further illustrate the complexity of the relationship between competition and product quality. The first was the impact of the entry by Aldi, a deep discounting grocery retailer that sells mainly private label goods, into the Australian market in 2001. While private label goods are generally perceived as being of lower quality, Aldi is known for selling own label products that are of a relatively high standard. As a result, other major Australian retailers also improved the quality of their own label grocery offerings to a significant extent.

The second example was an airline alliance between two international carriers, Qantas and Emirates. Authorisation for the alliance was sought under a provision of the Australian competition rules that enables potentially anticompetitive co-operation to be exempted from antitrust scrutiny where it generates sufficient public benefits, which usually means efficiencies. Airline alliances can generate such efficiencies through, *inter alia*, reductions in wingtip-to-wingtip flying, improved scheduling, reductions in double marginalisation on complementary sectors and the introduction of new routes, as well as economies of scale and network economies more generally. Yet such alliances also require extensive co-operation on issues like capacity, prices and scheduling and potentially revenue sharing, which raises the potential for anticompetitive impacts. The greater the level of integration, the larger the benefits are likely to be. This is not a problem where there is sufficient remaining competition, but where competition in the market is limited as a result of the alliance, the decision to authorise may require a balancing of the benefits of improved service against the potential for higher prices. In the case of the Qantas-Emirates alliance, on most routes the proposed alliance would have minimal if any negative impacts on competition, and would generate measurable benefits. In one sector, however—the Trans-Tasman overlap air-routes—the alliance had the potential to create competition problems, and so capacity requirements for these routes were imposed as a condition of granting authorisation.

Developing the theme of the impact of market concentration on quality, the delegate from the United Kingdom described an in-depth analysis into a proposed merger of two casino chains that was conducted by the UK's Competition Commission (CC) the preceding year. At the time of the merger, these firms held

the numbers two and three market positions. The gambling market in the UK is heavily regulated, and until recently, casinos were effectively subject to price regulation. Accordingly, competition in this market is motivated, in large part, by non-price factors.

The CC's analysis focused on local markets where the merging parties both had outlets. It gathered survey evidence from customers, and thereby determined that the principle factor that informs demand is the quality of the gambling experience, including the appeal of the casino environment and the friendliness of staff. The CC also gathered supply-side evidence in the form of internal documents of the merging parties, which indicated that casino companies are broadly focused on trying to attract the maximum number of customers, to keep them at the venue as long as possible, and to get them to spend as much as possible. In order to do so, casinos focus on the quality of their premises and on service standards, including employing the most experienced staff available. Further useful evidence was obtained from weekly performance reports that were prepared by the local casino managers, which detailed the organisational and promotional strategies to be pursued. In analysing the available evidence, the CC was able to exploit the existence of different market structures in different local areas, in order to test empirically the relationship between concentration and quality. It determined, *inter alia*, that profit margins were higher in more concentrated markets, and that promotional costs were lower in these areas. Taking into account the survey evidence, the internal documentary material and the results of the empirical analysis, the CC concluded that the merger should be permitted, apart from in four local areas where there were significant overlaps.

The Chairman observed that the various contributions demonstrated that the relationship between quality and price competition varies greatly from market to market. It would appear, therefore, that this issue must be addressed by means of a case-by-case assessment, rather than on the basis of any *a priori* generalisations. He introduced Theodore Voorhees Jr. to discuss how this balancing exercise is conducted in respect of vertical restraints within the US legal system. Mr Voorhees began by noting that he had selected RPM as a case study as it presents a particularly clear example of circumstances in which a trade-off is often required between an arguable quantitative anticompetitive effect on price, on the one hand, and an arguable pro-competitive qualitative effect on product quality, on the other hand. RPM typically leads to increased retail prices, the justification for which is the need to provide additional valuable services to consumers at the retail level. Where RPM is imposed by a monopolist, or in furtherance of a cartel at the supplier or retailer level, any claimed efficiency justifications are usually irrelevant. In the paradigm example of RPM, however, there is generally a need to balance price and quality considerations.

Mr Voorhees then provided a brief overview of the treatment of RPM within US antitrust law. In *Dr. Miles*, from 1911, the Supreme Court held that RPM amounts a *per se* breach of §1 of the Sherman Act. To reach this conclusion, the Court relied upon the common law rule against alienation. In *Colgate*, however, the Supreme Court clarified that §1 applies only to agreements in restraint of trade. Accordingly, where prices are recommended by the supplier but not in fact agreed with the retailer, §1 is not breached. While the *GTE Sylvania* judgment, in 1977, dealt with non-price restrictions, it nonetheless signalled a significant and more general shift in the Supreme Court's approach to vertical restraints. First, the Court emphasised that antitrust law is concerned primarily with economic effects rather than formalistic restrictions, and second, it prioritised inter-brand competition over intra-brand competition. In *Monsanto*, the Supreme Court held that where there are pro-competitive justifications for the defendants' behaviour, there must be sufficiently robust and non-ambiguous evidence of the existence of an agreement for any case to proceed to trial. In *State Oil v Kahn*, the Supreme Court held that maximum RPM should no longer be treated as a *per se* violation, but should be assessed instead under the rule of reason. Finally, in *Leegin* in 2007, the Supreme Court concluded that minimum RPM should also be analysed by means of a rule of reason analysis.

In practice, the changes introduced by the *Leegin* ruling are relatively modest. First, the decision does not create a safe harbour for RPM, but rather requires that the legality of any such restraints must be analysed under the rule of reason. Second, many states—including California—have maintained in place state antitrust laws that render RPM per se illegal, and there have also been some legislative efforts to overturn the ruling at a federal level. The more controversial question is what a rule of reason analysis actually requires in the context of RPM. The Supreme Court has outlined a variety of somewhat vague approaches to this task; it talks in terms of a “weighing” or “balancing” of pro-competitive and anticompetitive effects, of an assessment of whether there are “countervailing” competitive impacts, or, most recently, whether there are significant unjustified anticompetitive consequences. There has been a noticeable lack of case law addressing RPM restraints following the *Leegin* decision. However, a number of studies examining the application of the rule of reason since the *Sylvania* ruling have concluded that, in those cases, defendants have prevailed in more than 95% of cases. The major obstacle to success in such circumstances is the need to establish an anticompetitive impact upon inter-brand competition, and not simply upon intra-brand competition. As a result, in most cases the courts are not required to engage in any sort of balancing exercise because the plaintiffs have failed to establish the threshold showing of harm. Thus, in four of the five cases that have examined RPM since the *Leegin* decision, the court did not reach the balancing stage due to the absence of inter-brand effects. Moreover, Mr Voorhees predicted that this trend would continue as a result, amongst other factors, of the continuing prioritisation of inter-brand over intra-brand competitive effects.

The delegate from BIAC welcomed the greater willingness of competition agencies to take into account potential efficiency justifications when assessing the legality of business behaviour. However, the delegate expressed some scepticism as to whether agencies give sufficiently detailed and nuanced consideration to potential dynamic efficiencies, which includes quality factors such as product innovation. While the question of dynamic efficiencies raises some complex issues, if such efficiency claims are raised there is a need to consider these thoroughly. The Chairman questioned the delegate from BIAC regarding its view of the role of efficiencies in the enforcement practice of the European Commission. The delegate responded that its perception was that effects on quality are rarely if ever accepted as pro-competitive justifications by the Commission, but that such factors are not infrequently invoked to establish a lessening of competition. The delegate from the European Union argued that this was not in fact the case, and pointed to the completed *TomTom/Tele Atlas* merger as an instance where plausible pro-competitive impacts on innovation and quality improvement were accepted as efficiencies.

The delegate from Ireland praised the Roundtable as an interesting and insightful event. The delegate noted that some issues with respect to quality appear to be relatively uncontroversial, such as the place of quality considerations in assessing the legality of vertical restraints, the distinction between cartel and non-cartel type horizontal restrictions, and the use of qualitative tools to assess quality. Other aspects of the debate, however, remain more contentious, such as the potential justificatory role of quality considerations in horizontal mergers, and the development of new quantitative tools by which to measure quality. The topic of quality in competition assessments is therefore an issue that perhaps deserves further attention and effort.

The Chairman approved of the delegate’s synthesis of the relevant concerns that had emerged from the Roundtable. There was considerable agreement amongst the participants that quality attributes constitute an important dimension of competition in many markets. While the treatment of quality in the context of vertical and horizontal restraints is fairly straightforward, mergers in particular have presented complex problems in terms of the potential trade-off between price and quality effects. The Chairman thanked the participants for their contributions to the Roundtable, and noted that it represented possibly the first dedicated effort of the OECD to focus upon quality in a competition context. The wide variety of cases that were discussed served to illustrate the broad applicability of this topic, and thus confirmed the value of giving more detailed consideration to these issues. The Roundtable then came to a conclusion.

SYNTHÈSE

*Par le Secrétariat**

- (1) *La qualité associée à un produit par les consommateurs est un aspect essentiel de la concurrence sur de nombreux marchés. La qualité représente peut-être le principal élément indépendant des prix qui détermine si le consommateur achètera ou non un produit. Qui plus est, les critères de qualité stimulent souvent l'innovation au sein d'un marché, améliorant ainsi l'efficacité dynamique. Cela étant, il est difficile de mesurer avec exactitude les aspects qualitatifs et de déterminer l'incidence de facteurs qualitatifs dans le contexte plus général de l'application du droit de la concurrence. Ainsi, bien que la plupart des autorités de la concurrence soient prêtes à reconnaître le rôle central que peut jouer la qualité dans le cadre de leurs activités de mise en œuvre du droit de la concurrence, peu d'entre elles ont jusqu'à présent réussi à incorporer de manière systématique une évaluation de la qualité à leurs processus d'analyse de la concurrence.*

La qualité du produit est, avec le prix, un déterminant essentiel de la concurrence sur de nombreux marchés, si ce n'est sur la majorité d'entre eux. L'importance de la concurrence par la qualité sur un marché donné peut dépendre du degré d'homogénéité des biens, mais aussi de la sensibilité des consommateurs aux prix. Au moins en principe, une baisse de la qualité du produit (lorsque le prix n'est pas ajusté correctement) peut s'avérer aussi préjudiciable au bien-être du consommateur qu'une baisse de prix (lorsque la qualité n'est pas ajustée correctement). Par ailleurs, les efforts déployés par les entreprises pour améliorer la qualité de leurs produits sont liés à l'innovation et, par là-même, à la croissance économique en général.

Toutefois, alors que la plupart des experts de la concurrence conviennent de l'importance de la qualité comme facteur de la concurrence en théorie, en pratique il s'est révélé assez difficile de tenir compte des aspects qualitatifs dans le cadre d'une analyse classique de la concurrence. Ainsi, la qualité a été décrite dans l'une des contributions à la table ronde comme une « thématique importante mais quelque peu difficile à appréhender »¹. Cette description pertinente reflète à la fois un consensus sur l'idée selon laquelle les facteurs de qualité gagneraient à être incorporés à toute analyse globale de la concurrence du marché et au fait qu'en réalité, seules quelques autorités de la concurrence ont mis au point un moyen de faire cela systématiquement à l'heure actuelle.

- (2) *Si l'importance de la qualité est incontestée, fournir une définition globale de la qualité s'avère nettement plus complexe. Au sens large, la qualité fait référence au flux de services ou au niveau de valeur que les consommateurs tirent d'un produit. Elle est de nature multidimensionnelle et recouvre un large éventail de facteurs. Qui plus est, la qualité est une notion subjective dans la mesure où la perception qu'ont différents consommateurs de certains aspects qualitatifs et la*

* Ce résumé ne représente pas nécessairement le point de vue unanime du Comité de la concurrence. Il présente néanmoins les principaux points soulevés lors des débats de la table ronde, dans les contributions écrites des délégués ainsi que dans la note de synthèse du Secrétariat.

¹ Voir la table ronde sur le rôle et la mesure de la qualité dans l'analyse de la concurrence : note du BIAC, [DAF/COMP/WD\(2013\)57](#).

valeur qu'ils leurs accordent peuvent varier. La distinction conceptuelle qui existe entre différenciation verticale et différenciation horizontale des produits est un moyen (quelque peu imprécis) qui permet de faire une distinction entre les aspects qualitatifs objectifs et universels et les éléments subjectifs qui reflètent les perceptions individuelles des consommateurs.

Trouver une définition unique et exhaustive de la qualité est un réel défi. La qualité est une notion multidimensionnelle qui recouvre, entre autres, la durabilité, la fiabilité, l'emplacement, la conception et l'attrait esthétique, la performance et la sécurité d'un produit. L'offre de produits peut aussi être traitée comme un aspect qualitatif, bien qu'elle reste dissociable du produit lui-même. La qualité est par nature un concept relatif dans la mesure où le niveau de qualité de tout produit est défini en référence aux niveaux de qualité d'autres produits. Elle fait intervenir une part non négligeable de subjectivité du fait que certains aspects qualitatifs peuvent n'avoir de valeur que pour certains consommateurs, ou avoir une valeur plus importante pour certains que pour d'autres. Les consommateurs peuvent également ne pas être d'accord sur la hiérarchie selon laquelle sont classées les caractéristiques d'un produit qu'ils jugent toutes souhaitables dans une certaine mesure. Par conséquent, alors que certains aspects qualitatifs sont bien définis, objectifs et observables (comme la puissance du moteur d'une voiture, par exemple), d'autres sont subjectifs, invisibles et dépendent de la perception des consommateurs (comme le prestige associé à une marque de voiture). En raison du caractère pluridimensionnel et indéfinissable de ce qu'est la qualité, il est donc ardu de parvenir à une définition irréfutable de cette notion.

Pour tenter de préciser cette notion jusqu'à un certain point, les économistes font une distinction entre différenciation verticale et différenciation horizontale des produits. La différenciation verticale se rapporte aux caractéristiques du produit auxquelles tous les consommateurs accordent de la valeur et qui sont par conséquent des aspects qualitatifs. La différenciation horizontale se réfère aux caractéristiques du produit qui ne sont considérées comme désirables que par certains consommateurs, et non par tous. Cela étant, dans la pratique, cette distinction peut s'avérer par trop simpliste. Si l'on applique une différenciation verticale donnée, les consommateurs peuvent encore ne pas être d'accord sur la hiérarchie selon laquelle sont classés les aspects qualitatifs, tandis que dans le contexte d'une différenciation horizontale, les consommateurs peuvent ne pas être d'accord lorsqu'il s'agit de décider si certaines caractéristiques du produit peuvent être considérées comme des aspects « qualitatifs » en tant que tels.

- (3) *Le caractère intrinsèquement imprécis et subjectif de la qualité peut susciter des difficultés lors de l'évaluation des facteurs qualitatifs, notamment lorsque des mesures sont prises pour procéder à une évaluation quantitative des niveaux de qualité. À l'heure actuelle, les autorités de la concurrence utilisent avant tout des outils qualitatifs, comme les sondages et les entretiens auprès des consommateurs, afin d'évaluer la qualité lorsque cela est nécessaire. L'expérience en termes de mise en œuvre de techniques économétriques quantitatives employées pour mesurer la qualité est assez limitée. À l'avenir, ces techniques pourraient cependant devenir plus faciles à appliquer et être largement utilisées. Par ailleurs, sur certains marchés il pourrait être indiqué de faire appel à des experts du secteur concerné pour évaluer les niveaux de qualité.*

La notion de qualité est en partie subjective et dépend de la perception des consommateurs, ce qui rend difficile l'identification et l'évaluation des facteurs de qualité pertinents dans l'optique de l'analyse de la concurrence. Même si certains paramètres qualitatifs peuvent être mesurés et comparés sans trop de difficultés, d'autres varient selon la perception qu'en ont les consommateurs et sont conditionnés par des facteurs de préférence subjectifs qui ne peuvent être mesurés. Par conséquent, bien qu'il soit possible de *décrire* ces préférences en s'appuyant sur l'analyse empirique du marché, il est nettement plus difficile de *quantifier* et de comparer les niveaux de qualité du produit dans de telles circonstances.

En conséquence, pour l'heure, les autorités de la concurrence utilisent généralement des méthodes qualitatives pour évaluer la qualité du produit, si besoin est. Au nombre de ces méthodes figurent

l'utilisation de données obtenues dans le cadre d'études de marché antérieures ou en cours, d'entretiens ou d'enquêtes auprès des consommateurs, ainsi que l'examen de documents internes et des pratiques commerciales des entreprises considérées. Les informations sur le marché ainsi collectées peuvent ensuite constituer le socle de l'analyse des préférences identifiées, ou être à la base d'autres techniques analytiques permettant d'étudier la dynamique de marché. En revanche, le recours à des mécanismes économétriques solides pour quantifier les niveaux de qualité sur un marché est beaucoup moins répandu dans le cadre des activités d'application du droit de la concurrence. La mise au point de ces techniques a néanmoins fait l'objet de nombreux travaux universitaires récents et il est fort probable que l'application de ces outils soit plus répandue à l'avenir. L'utilisation de modèles de prix hédonistes qui convertissent les prix nominaux en prix réels en prenant en compte l'incidence de la qualité sur la valeur d'un produit a reçu une attention particulière lors de la table ronde et est considérée comme une technique qui pourrait permettre aux autorités de la concurrence de se lancer dans une analyse quantitative précise de la qualité. Certains participants ont toutefois exprimé un certain scepticisme sachant que, dans la plupart des cas, les données de marché nécessaires pour effectuer ces calculs risquent de ne pas être disponibles. La table ronde a également examiné une autre technique sur l'analyse de variables qui pourraient donner une indication sur les niveaux de qualité, comme par exemple les dépenses des entreprises occasionnées par les salaires payés au personnel chargé du service après-vente.

Il est également possible de remplacer les analyses qualitatives ou quantitatives de la qualité menées par l'autorité de la concurrence en faisant appel à un expert de la qualité d'un secteur donné. Cette approche a par exemple été adoptée par les autorités américaines, notamment pour une série de fusions hospitalières. Cela étant, tout expert témoin crédible devra également faire appel à des techniques qualitatives et/ou quantitatives pour évaluer la qualité du produit sur le marché, ce qui signifie que le recours à des experts de la qualité pourrait ne faire que reporter les limites et/ou les difficultés engendrées par ces techniques sur un tiers.

- (4) *Du point de vue de la politique de la concurrence, l'aspect le plus complexe de la qualité considérée comme facteur d'analyse de la concurrence est peut être sa relation quelque peu équivoque au phénomène de concentration du marché. Selon la théorie économique, la concurrence peut, selon la situation, soit améliorer la qualité du produit, soit la détériorer. Le seul éclairage non controversé est peut être que, sur les marchés où les prix réglementés sont fixés à un niveau supérieur à celui du coût marginal, les entreprises absorbent généralement ces bénéfices excédentaires notamment en améliorant la qualité de leurs produits. Cela risque fort de se traduire par des niveaux de qualité excessifs (sous-optimaux) sur ces marchés. D'après les données empiriques disponibles, une concurrence accrue peut se traduire par des effets positifs ou négatifs sur le niveau de qualité, selon la situation du marché examiné. Pour des raisons du même ordre, la relation entre la qualité et les prix est également assez ambiguë. Ces résultats soulignent le fait que l'évaluation de la qualité dans le domaine de la concurrence doit être menée sur du cas par cas.*

La relation qui existe entre la qualité et le degré de concurrence au sein d'un marché est mal définie et équivoque en théorie comme en pratique, ce qui a tendance à compliquer l'intégration des facteurs qualitatifs à l'analyse de la concurrence. Contrairement aux prix, qui enregistrent généralement une baisse lorsque la concurrence s'accroît, une concurrence plus importante peut se traduire soit par une amélioration des niveaux de qualité, si les entreprises renforcent la concurrence qu'elles se livrent sur les aspects qualitatifs, soit par une détérioration de la qualité, si le besoin de réduire les prix entraîne une baisse de qualité parallèlement à une réduction des coûts de production. Par conséquent, la relation entre la qualité et le prix est également quelque peu incertaine et dépendante des mécanismes du marché qui sont en jeu.

Bien que de nombreux travaux économiques aient examiné la relation qui existe entre concurrence et qualité, les conclusions générales tirées par la théorie économique reflètent cette ambiguïté : il n'existe pas

de réponse simple. Les théoriciens s'accordent toutefois sur un aspect. Lorsque les prix sont réglementés et fixés à un niveau supérieur à celui du coût marginal, les entreprises absorbent généralement les bénéfices excédentaires soit en intensifiant leurs activités promotionnelles, soit en améliorant la qualité. Cette seconde possibilité illustre l'interaction qui existe entre le prix et le niveau de qualité. Qui plus est, cela laisse entendre que, dans certaines circonstances, les niveaux de qualité risquent d'être « trop élevés », c'est-à-dire de gaspiller les ressources sociales.

Les données empiriques se conforment à la théorie. Ainsi, une concentration accrue du marché ne se traduit pas forcément par une baisse de qualité du produit ou par une restriction du choix. De plus, l'entrée sur le marché des compagnies aériennes à bas coûts repose expressément sur une qualité de service plus faible (ou plus élémentaire) en contrepartie d'un prix moins élevé du billet. Et pourtant, il semblerait que la ponctualité soit une prestation que les compagnies à bas coûts réussissent généralement mieux à assurer, et s'avère être un aspect qualitatif que les passagers peuvent considérer comme indispensable. Les recherches empiriques indiquent donc que, selon le marché concerné, une évolution du niveau de concurrence peut avoir des effets positifs ou négatifs sur la qualité.

Les répercussions sur la mise en œuvre du droit de la concurrence sont simples à décrire même si elles peuvent s'avérer assez contraignantes en pratique : toute évaluation de l'incidence des mécanismes concurrentiels ou de l'évolution de la concentration du marché sur la qualité du produit doit être menée au cas par cas plutôt que sur la base d'hypothèses a priori sur la relation qui existe entre ces éléments.

(5) *Au niveau de la mise en œuvre du droit de la concurrence, le rôle de la qualité comme facteur de l'évaluation de la légalité des restrictions horizontales et verticales est bien établi. Une coordination des comportements entre les concurrents visant à limiter les améliorations qualitatives ou à diminuer la qualité existante est généralement considérée à raison comme équivalant à une entente. Il existe cependant certaines formes de coopération horizontale qui peuvent renforcer le bien-être, par exemple lorsque cette coopération sert l'intérêt des consommateurs, en réduisant l'asymétrie de l'information. De la même manière, l'évaluation des restrictions verticales en application du droit de la concurrence peut également nécessiter de mettre en balance les effets d'une augmentation de prix sur le bien-être du consommateur et les améliorations probables de la qualité du produit.*

Dans certains domaines d'application du droit de la concurrence, les autorités sont déjà habituées à tenir compte des répercussions potentielles des pratiques des entreprises sur la qualité. Les niveaux de qualité constituent ainsi un élément essentiel pris en compte lors de nombreuses enquêtes sur le marché. Généralement, les accords horizontaux visant à restreindre l'innovation, limiter l'offre de produits, ou détériorer la qualité existante sont considérés comme des ententes injustifiables, assimilables à une entente sur les prix ou à un accord de partage du marché. À l'inverse, il peut être admis que certains types de coopération horizontale entre des entreprises concurrentes, qui semblent moins clairement restrictifs, génèrent des gains d'efficacité sous forme de retombées positives sur la qualité du produit. Cela peut notamment être le cas lorsqu'une coopération est censée compenser l'asymétrie de l'information qui expose les consommateurs à une information imparfaite, ou encore lorsqu'elle favorise l'innovation ou renforce la performance du produit et améliore le choix du consommateur.

Des problèmes similaires se posent en ce qui concerne le recours à des restrictions verticales, comme la pratique dite de maintien du prix de revente (MPR). Les fournisseurs imposent souvent des restrictions verticales pour garantir la qualité élevée de leurs produits au niveau de la vente au détail et pourtant, en général, les prix plus élevés qui en résultent se traduisent par un désavantage collatéral pour les consommateurs. De plus en plus, les autorités de la concurrence et les tribunaux commencent à reconnaître les gains d'efficacité potentiels qui découlent d'une amélioration de la qualité du produit. Pourtant, les restrictions verticales n'ont finalement pas toutes des effets anodins ou proconcurrentiels. Par conséquent,

dans certains cas il peut s'avérer nécessaire de trouver un compromis ou de soupeser les intérêts pour le bien-être du consommateur liés à une baisse de prix par rapport à une amélioration de la qualité du produit.

- (6) *L'utilisation d'aspects qualitatifs pour affiner la définition du marché a fait ses preuves dans une certaine mesure. La préférence accordée par les consommateurs à la qualité du produit est un élément clé de la définition du marché et un facteur important pour l'application du test SSNIP. La question plus controversée est de savoir si, quand les circonstances le permettent, les marchés peuvent et doivent être définis au moyen d'une évaluation quantitative relative à la qualité et à son incidence sur la concurrence. Cela pourrait impliquer de recourir à un test SSNDQ pour évaluer l'impact d'une « baisse limitée mais significative et non transitoire de la qualité ».*

La pratique actuelle en matière de définition du marché insiste particulièrement sur les aspects qualitatifs du produit. L'emplacement est ainsi un aspect qualitatif qui est souvent pris en compte par les autorités de la concurrence. Les préférences des consommateurs et la détermination de la valeur des différents aspects qualitatifs d'un produit éclairent également le processus de définition du marché et, en particulier, l'application du test SSNIP. Dans certains cas, le fait de ne pas prendre en compte les aspects qualitatifs et de s'intéresser uniquement aux prix ne peut déboucher que sur une définition trop étroite du marché. Dans d'autres cas, lorsque les aspects qualitatifs de deux produits sont si différents que les consommateurs ne remplaceraient pas l'un par l'autre, même en cas d'augmentation du prix, les autorités de la concurrence peuvent arriver à la conclusion qu'il est nécessaire de définir des marchés de produits distincts.

L'application d'outils quantitatifs pour définir les marchés qui s'intéressent en premier lieu aux effets sur la qualité est cependant une question plus controversée. Le test SSNDQ est présenté comme un moyen quantitatif qui permettrait de mettre l'accent sur la qualité pour définir le marché. Ce test mesure l'incidence d'une « baisse limitée mais significative et non transitoire de la qualité », de même manière que le test SSNIP évalue l'augmentation des prix. Le test SSNDQ fait cependant l'objet de critiques lui reprochant d'être irréalisable dans la pratique en raison des difficultés intrinsèques liées à la mesure de la qualité qui viennent s'ajouter aux complications que pose déjà l'application du test SSNIP à des situations réelles de marché.

- (7) *Les participants à la table ronde ont reconnu que la question des effets sur la qualité lors des procédures de contrôle des fusions est l'un des aspects les plus contrariants – et insolubles – de la thématique examinée. Trouver un compromis entre les effets de ces opérations sur la qualité et leurs effets sur les prix soulève notamment des questions particulières.*

Dans les affaires de fusion, les entreprises avancent souvent que les effets positifs potentiels de l'opération sur la qualité constituent un gain d'efficacité, qui justifie tout effet anticoncurrentiel indirect sur les prix. Il est ainsi notamment possible que l'entité issue de la fusion se lance davantage dans l'innovation grâce aux synergies de recherche et de conception réalisées, par exemple, ou encore grâce à l'amélioration des bénéfices générés par les économies d'échelle, même si la relation entre concentration du marché et innovation restent quelque peu ambiguë. À l'inverse, les éventuels effets préjudiciables d'un projet de fusion sur la qualité et sur le choix des produits peut amener l'autorité de la concurrence à l'interdire, ou à tenter de faire annuler l'opération par la suite.

Dans certaines affaires de fusion, les autorités de la concurrence peuvent ainsi être tenues de mettre en balance les effets proconcurrentiels potentiels de l'opération sur la qualité du produit et sur l'innovation et les effets négatifs qu'elle est susceptible d'avoir sur les prix. L'analyse de ces affaires peut tirer profit de méthodes fiables et suffisamment opérationnelles d'évaluation de la qualité aux fins de l'analyse de la concurrence.

NOTE DE RÉFÉRENCE

Par le Secrétariat *

1. Introduction

En principe, les problèmes de qualité sont tout aussi omniprésents que les problèmes de prix dans la politique de la concurrence. Après tout, une baisse de qualité (à prix constant) peut être tout aussi préjudiciable au bien-être des consommateurs qu'une hausse de prix (à qualité constante), et les entreprises rivalisent autant par la qualité que par les prix. Les lignes directrices sur les fusions évoquent couramment la hausse des prix mais aussi la baisse de qualité comme des conséquences potentielles susceptibles de soulever des problèmes de concurrence. De même, les monopoles inamovibles ne sont pas souhaitables du point de vue de la concurrence, d'une part parce qu'ils donnent lieu à des inefficiences et réduisent le bien-être des consommateurs par des prix supraconcurrentiels, d'autre part parce qu'ils ont tendance à se reposer sur leurs lauriers et à s'accommoder d'une baisse de la qualité de leurs produits et services. Les autorités de la concurrence répriment les ententes parce que leurs membres se concertent pour gonfler artificiellement les prix, mais aussi parce qu'ils s'entendent parfois pour réduire la qualité. En outre, les mesures correctives de nature comportementale adoptées contre les infractions au droit de la concurrence exigent parfois des sociétés qu'elles assurent des niveaux de performance minimum, qui pourraient être qualifiés de conditions de « qualité ».

Il est pourtant difficile de savoir comment intégrer des critères de qualité à une analyse de la concurrence. Il est bien plus aisé d'intégrer les critères de prix. Le prix est un facteur unique et objectif. Tout consommateur privilégiera un prix moindre pour un niveau de qualité donné. La qualité, toutefois, est un facteur multidimensionnel et subjectif. Les consommateurs peuvent avoir des approches différentes de la notion de « meilleure qualité » pour un produit donné, *quel que soit le prix*. Et à supposer qu'ils s'accordent sur les composantes pertinentes de la qualité, ils peuvent ne pas se retrouver sur l'importance à accorder à chacune de ces composantes.

Par exemple, plusieurs clients d'un service de livraison de pizzas s'entendent peut-être pour dire que tant la rapidité de livraison que la diversité de la carte sont des facteurs importants, mais certains pourront estimer que la rapidité de livraison est le facteur le plus important, tandis que les autres privilégieront la disponibilité de certains types de pizzas. Ou, pour prendre un exemple plus délicat, supposons que nous analysions le marché des médicaments de chimiothérapie. De prime abord, on pourrait penser qu'il s'agit du contre-exemple parfait, à l'appui de l'argument selon lequel il existe assurément des produits pour lesquels la qualité est une notion évidente et universelle. Après tout, tout le monde conviendra que la caractéristique la plus importante d'un médicament de chimiothérapie sur le plan de la qualité est son efficacité à combattre le cancer. En est-on sûr ? On pourrait découvrir, en comparant les avis de jeunes et d'octogénaires, que l'on peut avoir un point de vue très différent sur la qualité, même lorsqu'il s'agit de patients souffrant du cancer qui parlent de médicaments contre le cancer. En effet, un jeune pourra accorder une priorité absolue à l'efficacité du médicament, indépendamment de ses autres caractéristiques. Mais une personne âgée, qui a peut-être été déjà connu traité une ou deux fois pour un cancer, préférera peut-être un médicament dont les effets secondaires sont moins prononcés, même s'il est moins efficace.

* La présente note a été rédigée par Anna Pisarkiewicz et Jeremy West, de la Division de la concurrence de l'OCDE.

Ou encore, la personne âgée se souciera peut-être davantage du mode d'administration du médicament, par voie orale ou intraveineuse, ou de la fréquence de ses visites chez le médecin pendant le traitement.

Ces différences de point de vue des consommateurs peuvent rendre la mesure de la qualité et son intégration à une analyse de la concurrence plus difficile que celles des prix. C'est probablement la raison pour laquelle les tribunaux et les autorités de la concurrence examinent rarement les problèmes de qualité de manière aussi approfondie que les problèmes de prix.

Nous débuterons la présente note en précisant certaines définitions associées à la qualité. Qu'entendons-nous exactement par ce terme de « qualité » ? Le choix est-il un aspect de la qualité ? La qualité peut-elle servir à définir des marchés ? Nous nous intéresserons ensuite à la façon dont l'évolution du niveau de concurrence influe sur la qualité. Nous aborderons cette question sous l'angle d'études microéconomiques théoriques et empiriques. Ensuite, nous examinerons la façon dont les problèmes de qualité ont été analysés par les tribunaux et les autorités de la concurrence dans différents contextes d'application du droit de la concurrence.

2. Questions de définition

2.1 Définir la qualité

Comme le suggère l'introduction, tenter de définir la qualité est une mission quasi-impossible. Il s'agit d'une notion insaisissable et fluctuante, car chacun a souvent une idée personnelle de ce qu'elle recouvre, à la fois en général et pour des produits ou services particuliers. Pourtant, nous partageons tous certaines idées sur ce qu'est la qualité. Certes, nous aurons peut-être du mal à arrêter une définition étroite et uniforme qui conviendrait à tous sur un marché donné, mais nous pouvons en identifier les principaux critères. La qualité se rapporte à des choses comme le savoir-faire, les matériaux, la conception, la fiabilité, la durabilité, l'esthétique, le lieu et la performance.

Nous ne parlons pas ici des caractéristiques des produits ou services aisément convertibles en prix ou en coûts. Par exemple, si nous vous proposons 500 grammes de sucre pour 3 euros mais que notre concurrent vend 1 kilo de sucre pour le même prix, on pourrait dire que le concurrent propose une offre de meilleure qualité uniquement parce que l'acheteur obtiendra davantage de sucre pour un prix identique. Mais il serait simpliste de comparer ces offres uniquement sous l'angle du prix : notre prix est de 6 euros par kilo et le prix de notre rival est de 3 euros par kilo. Qui ne voudrait pas avoir deux fois plus de sucre pour le même prix ? C'est une décision facile à prendre. Mais ce n'est pas du tout l'objet de la présente note. De même, notre propos n'est pas de comparer la durée de vie d'une ampoule par rapport à une autre. Il y a peu d'intérêt à comparer une ampoule de 70 watts qui dure un an et coûte 3 euros à une ampoule de 70 watts qui dure dix ans et coûte 10 euros. Encore une fois, il s'agit juste d'une différence de quantité par euro.

Nous voulons ici parler des caractéristiques du produit en lui-même, de sa *qualité* intrinsèque et non de sa quantité. Le sucre est un produit de base. D'une manière générale, tous les sucres ont le même goût, se dissolvent de la même manière, se versent de la même manière, etc. Par conséquent, la qualité ne varie pas beaucoup d'une marque à l'autre. Les clients fondent leur décision d'achat presque exclusivement, sinon exclusivement, sur le prix. Mais qu'en est-il d'une voiture ? D'un voyage organisé ? De services comptables ? Pour ce type de produits ou de services, de nombreux éléments, autres que le couple prix/quantité, entrent en ligne de compte. Pour une voiture, des critères comme la capacité de transport, la ligne, le maniement et la consommation de carburant sont importants. Mais certains clients accorderont énormément d'importance à l'aspect et la puissance d'une voiture et beaucoup moins à sa capacité de transport. D'autres conviendront que l'aspect et la puissance sont importants, mais ne s'entendront pas sur le facteur primordial à leurs yeux. Pour un voyage organisé, la destination a, à l'évidence, beaucoup d'importance. Mais comment décider de manière objective et universelle si Rome ou Phuket est la meilleure destination pour des vacances ? Il est bien plus ardu de répondre à ces questions que de dire s'il vaut mieux payer 3 euros pour 500 grammes de sucre que 3 euros pour 1 kilo .

Les économistes ont eu recours à la sémantique pour distinguer les caractéristiques qui font l'unanimité parmi les consommateurs de celles que seuls certains consommateurs estiment souhaitables. Les premières caractéristiques sont regroupées sous l'intitulé « différenciation verticale des produits », tandis que les deuxièmes relèvent de la « différenciation horizontale des produits ». Cette distinction terminologique est utile, mais elle ne change rien au fait que, pour certains consommateurs, une différenciation horizontale d'un produit relèvera de la « qualité » tandis que pour d'autres ce ne sera pas le cas, et que même parmi les différenciations verticales, les consommateurs ne s'accordent pas toujours sur l'importance à donner à certaines caractéristiques par rapport à d'autres.

Dans ce contexte, des analystes cherchant à étudier la qualité sur un marché pourraient tenter d'identifier et de mesurer la plupart, voire la totalité des variables qui comptent aux yeux des consommateurs. L'encadré 1 illustre cette approche, adoptée par un régulateur irlandais après avoir examiné 13 éléments de service fournis par une autorité aéroportuaire. On pourrait également envisager de s'appuyer sur la théorie de la révélation des préférences, selon laquelle les préférences des consommateurs sont révélées par leurs habitudes de consommation. En observant les produits et quantités achetés par les consommateurs, on peut savoir ce qu'est la qualité et qui la fournit.

**Box 1. Comment les régulateurs sectoriels évaluent-ils la qualité ?
Illustration avec l'autorité aéroportuaire de Dublin**

Conformément à la dernière décision prise par la Commission de réglementation du transport aérien (Commission for Aviation Regulation) en ce qui concerne le niveau maximum de redevances aéroportuaires*, l'autorité aéroportuaire de Dublin (Dublin Airport Authority, DAA) doit veiller à ce que le niveau de recettes perçues sur les redevances aéroportuaires ne dépasse pas le plafond de recettes autorisé par passager.

Le plafond de recettes est fixé par une formule spécifique dans laquelle la Commission a introduit un critère de qualité, créant ainsi un lien direct entre le prix plafond et la qualité de service offerte.

Par exemple, pour la période de réglementation couvrant l'année 2010, la formule prévoyait que le plafond de recettes par passager soit de $[8,93\text{€} + T_{2010}] * QS_{2010}$ où

T_{2010} représente une hausse du plafond de recettes autorisé par passager si le terminal 2 (T2) devenait opérationnel en 2010, tandis que QS_{2010} représente un ajustement de la qualité de service (QS) d'une valeur comprise entre 0,965 et 1, suivant le nombre d'objectifs de qualité de service atteints par la DAA.

Si la DAA atteignait tous les objectifs, la valeur serait de 1. Si, en revanche, elle n'atteignait aucun des objectifs, la valeur serait de 0,965, de sorte que le plafond de recettes autorisé diminuerait de 3,5 % (et de 4,5 % les années suivantes).

Treize mesures de service ont été utilisées pour suivre la qualité de service, mais seules douze d'entre elles pouvaient avoir une incidence sur les redevances aéroportuaires, à savoir :

- la durée de la fouille des passagers, supérieure ou non à 30 minutes
- la durée, en pourcentage, d'indisponibilité supérieure à 30 minutes du système de gestion des bagages sortants pendant les heures d'ouverture
- la durée, en pourcentage, de disponibilité du système de gestion des bagages entrants pendant les heures d'ouverture
- la facilité à s'orienter dans l'aéroport
- les écrans affichant les informations sur les vols
- la propreté du terminal de l'aéroport
- la propreté des toilettes
- le confort dans les zones d'attente/salles d'embarquement
- la courtoisie/disponibilité du personnel de l'aéroport (à l'exception du personnel chargé de l'enregistrement et de la sécurité)
- la courtoisie/disponibilité du personnel chargé de la sécurité
- le niveau de satisfaction global (de tous les passagers)
- les équipements de communication/télécommunication/moyens électroniques
- le sentiment de sûreté et de sécurité

Neuf de ces mesures sont calculées d'après les résultats d'enquêtes réalisées auprès des passagers, qui sont actuellement réalisées chaque trimestre par le Conseil international des aéroports (Airports Council International, ACI). Les trois autres mesures, qui concernent le temps de fouille des passagers et la disponibilité des systèmes de gestion des bagages sortants et entrants, sont évaluées par la DAA.

Avant de communiquer sa décision, la Commission a publié des documents de consultation où était examinée la question du traitement devant être réservé à la qualité de service. Si le système actuel de qualité de service a été élaboré après consultation de toutes les parties intéressées et que la plupart des personnes sondées ont accueilli favorablement l'introduction d'un système de suivi de la qualité de service à l'aéroport de Dublin, une partie (Ryanair) a fait valoir que la Commission n'avait pas identifié ce que l'on entendait par « bonne qualité de service ».

Naturellement, bien que le régulateur intègre un critère de qualité dans sa formule, les parties peuvent ne jamais totalement s'entendre sur ce que constitue une bonne qualité de service. En effet, les réponses données à la Commission par les diverses parties prenantes ont montré l'existence d'avis parfois très contrastés sur le périmètre précis d'un système adéquat de suivi de la qualité et sur la manière de mesurer les différents indicateurs. Pour garantir la solidité du système de suivi et refléter la diversité des avis exprimés, la Commission a opté pour la combinaison de plusieurs mesures, qu'elle considérait comme suffisamment larges.

* Disponible à l'adresse suivante : http://www.aviationreg.ie/fileupload/2009_CP4_Final_Determination.pdf.

2.2 *Le choix : un élément de la qualité ou tout autre chose ?*

Le choix offert, par exemple la possibilité de choisir parmi des centaines de styles de chaussures, est-il l'un des aspects de la qualité ? Ou bien le choix est-il un facteur bien distinct de la qualité ? Étant donné que les choix offerts sur un marché peuvent eux-mêmes se distinguer par leur qualité respective (par exemple, des chaussures d'une marque de luxe par opposition à des chaussures de marque inconnue fabriquées avec des matériaux bon marché), il semblerait que le choix soit un élément distinct de la qualité. En outre, le choix est à l'évidence nécessaire pour que la concurrence puisse stimuler des améliorations qualitatives, car les clients doivent avoir le choix avant de pouvoir effectivement « voter », au travers de l'acte d'achat, pour les produits ou services de meilleure qualité. Encore une fois, si l'on compare les détaillants en chaussures plutôt que les magasins vendant une marque unique, le choix devient, outre un élément de qualité, un élément de grande importance. Les clients peuvent préférer fréquenter des magasins de chaussures qui offrent une grande diversité de marques plutôt qu'une gamme de produits plus limitée. Ils percevraient alors un large choix de chaussures comme un élément de qualité pour les détaillants en chaussures. Comme l'a révélé un récent rapport de l'Office of Fair Trading (OFT), les gens semblent apprécier le choix en tant que tel, indépendamment de son effet sur la qualité d'un service ou produit donné.¹ Le choix et la qualité ont donc, de par leur définition, une relation quelque peu fluctuante. Dans la présente note, nous considérerons le choix comme un élément de qualité.

2.3 *Utiliser la qualité pour définir des marchés*

La qualité peut-elle servir à définir des marchés ? Par exemple, le célèbre test de l'élasticité croisée (critère de l'augmentation limitée mais significative et non transitoire du prix, dit aussi test SSNIP) pourrait-il être remplacé par un test SSNDQ (critère de la baisse limitée mais significative et non transitoire de la qualité) ? À supposer que cela soit possible, voudrions-nous réellement procéder à un tel remplacement ? En d'autres termes, y a-t-il des situations dans lesquelles le test SSNIP donnerait un résultat incomplet ou inexact parce qu'il privilégie le prix, et des situations dans lesquelles le test SSNDQ donnerait un résultat plus précis ?

Hartman, Teece, Mitchell et Jorde ont avancé qu'un test SSNDQ est non seulement envisageable, mais surtout nécessaire pour définir les marchés et évaluer le pouvoir de marché dans les secteurs soumis à des évolutions technologiques rapides.² Partant du postulat de Schumpeter selon lequel l'analyse de la concurrence se focalise trop souvent sur les structures de marché existantes plutôt que sur la façon dont ces

¹ Office of Fair Trading (Royaume-Uni), « Choice and Competition in Public Services: A Guide for Policy Makers », OFT1214, p. 28 (2010).

² Raymond Hartman, David Teece, Will Mitchell et Thomas Jorde, « Assessing Market Power in Regimes of Rapid Technological Change », p. 2, *Industrial and Corporate Change*, p. 317 (1993).

structures sont créées et détruites, Hartman et al. ont établi un scénario pour compléter le test SSNIP statique par un test SSNDQ dynamique. Ils insistent sur le fait que les entreprises ne se font pas uniquement concurrence par les prix, mais aussi par l'innovation et la qualité. Cela est tout particulièrement vrai sur les marchés qui connaissent des progrès technologiques rapides. Sur ces marchés, les clients peuvent accorder bien plus d'importance aux caractéristiques du produit qu'à son prix. Les auteurs font valoir que l'hypothèse selon laquelle deux produits de ces marchés ne peuvent se concurrencer que si les clients sont à ce point soucieux du prix qu'une hausse hypothétique de 5 % du prix de l'un les incitera à opter pour l'autre produit revient à définir les marchés de manière trop étroite. Par conséquent, certains marchés ne doivent pas être définis selon une méthode fondée exclusivement sur le prix.

Hartman et al. font remarquer à juste titre que la concurrence ne repose pas toujours uniquement sur le prix. Ainsi, à titre d'illustration, ce n'est pas pour des raisons de concurrence des prix que Google a fait trébucher Yahoo sur le marché de la recherche sur l'Internet et que Facebook a écrasé MySpace dans le domaine des réseaux sociaux. Il s'agissait d'une concurrence par la qualité.

Les auteurs prennent pour exemple le secteur des appareils de diagnostic médical, qui utilise des technologies comme les rayons X, l'imagerie nucléaire, les ultra-sons et l'imagerie par résonance magnétique. Ils font valoir qu'avec un test SSNIP, chacune de ces technologies aurait été considérée comme relevant de marchés de produits distincts car les élasticités-prix croisées entre eux étaient très peu élevées alors que les écarts de prix étaient considérables. Hartman et al. montrent, toutefois, que la concurrence dans le secteur des appareils de diagnostic médical se fonde davantage sur la performance (qualité) que sur le prix. Ils montrent également que le test SSNIP aurait suggéré que le pouvoir de marché était en fait fluctuant, au mieux, en raison de la rivalité entre des technologies affichant des prix-repères très différents mais des caractéristiques concurrentes.

Les instances habituées à faire respecter les règles de la concurrence ne devraient pas s'inquiéter outre mesure de cet argument. Il est purement hypothétique, au sens où il suppose que les autorités de la concurrence et/ou les tribunaux appliqueront et suivront aveuglément le test SSNIP. En réalité, ces instances auraient probablement remarqué l'existence d'une concurrence entre les différents types d'appareils en interrogeant les dirigeants des sociétés, les clients et les concurrents et en examinant les documents d'entreprise. Le test SSNIP ne donne au final qu'une orientation. Si des clients indiquaient que les clichés des scanners sont bien plus clairs que ceux des rayons X et de l'imagerie médicale et qu'à ce titre ils sont en concurrence avec les rayons X et l'imagerie médicale, malgré le coût bien plus élevé des scanners, par exemple, alors une enquête efficace sur la concurrence aurait révélé cette situation sans qu'il soit nécessaire de recourir à un test SSNDQ formel.

Néanmoins, Hartman et al. exposent dans les grandes lignes à quoi ressemblerait ce test. La première question à se poser, selon eux, est de savoir si « une évolution des caractéristiques de performance de l'un des produits inciterait à une substitution avec un autre. Si la réponse est oui, alors les produits différenciés, même s'ils reposent sur des technologies différentes, devraient être inclus dans le marché de produits en cause. »³ Plutôt que la hausse de prix de 5 % habituellement utilisée dans le test SSNIP, les auteurs proposent pour leur test SSNDQ une baisse de 25 % d'une caractéristique majeure de performance. Ainsi, l'idée est que si un fabricant existant vient à réduire la qualité dans cette mesure, toutes choses étant égales par ailleurs, et qu'aucune substitution n'a lieu au profit d'autres produits, le premier type de produits constitue un marché pertinent. S'il y a substitution, alors les autres produits font également partie du marché pertinent.

³ Hartman et al., supra, note 3, p. 334.

Toutefois, dans ce type d'exercice, les différences inhérentes à la nature du prix et de la qualité ont une incidence considérable, ce qui rend assez difficile la mise en œuvre de la proposition des auteurs. Comme ils le reconnaissent,

*les évolutions de performance sont plus difficiles à quantifier que les évolutions de prix car la performance est une notion multidimensionnelle. Dès lors, sa quantification exige de mesurer tant l'évolution d'une caractéristique particulière que son importance relative. Contrairement aux évolutions de prix qui impliquent de modifier la valeur d'une unité de base commune [la devise], les évolutions de performance exigent souvent de modifier les unités qui servent à mesurer la performance.*⁴

L'idée d'Hartman et al. est donc probablement plus utile en tant que guide théorique informel qu'en tant qu'outil précis que les tribunaux et autorités de la concurrence devraient s'efforcer d'appliquer.

3. Dans quelle mesure la concurrence influe-t-elle sur la qualité ?

L'un des principes fondamentaux de la microéconomie est que la concurrence conduit à une baisse du prix du marché jusqu'à ce que celui-ci soit égal au coût marginal d'une entreprise efficiente. Y a-t-il un principe économique semblable pour les effets de la concurrence par la qualité ? Surtout, une intensification de la concurrence conduit-elle à une hausse de la qualité ? Et un affaiblissement de la concurrence entraîne-t-il une détérioration de la qualité ? Intuitivement, il semblerait raisonnable penser que l'évolution de la concurrence a, sur la qualité, un effet opposé à celui qu'elle a sur le prix. En réalité, tout dépend du contexte. La seule théorie économique est incapable de prédire les effets de la concurrence par la qualité sur la plupart des marchés. Dès lors, nous devons en règle générale nous appuyer sur des travaux empiriques pour déterminer la mesure dans laquelle la concurrence influe sur la qualité.

3.1 Connaissances théoriques

La théorie microéconomique suppose habituellement que les produits sont homogènes ou standardisés, fabriqués dans des usines identiques qui utilisent des technologies identiques et fonctionnent à l'échelle optimale minimale. De même, elle prend pour hypothèse habituelle que la qualité est constante et que les acheteurs sont parfaitement conscients de la qualité qu'ils obtiennent pour le prix payé. Faire abstraction des différences de qualité, de l'évolution de la qualité et des comparaisons en la matière simplifie l'analyse d'équilibre. Les économistes peuvent ainsi se concentrer sur deux variables essentielles : le prix et la production. Par conséquent, dans l'analyse d'équilibre microéconomique, l'accent est souvent mis sur la concurrence par les prix et non sur la concurrence non liée aux prix. L'analyse de la concurrence, fortement influencée par l'analyse économique, privilégie également la concurrence par les prix.

Or, la plupart des marchés dans le monde ne correspondent pas à ces hypothèses. Il y a près d'un siècle, J. M. Clark observait qu'« il arrive si souvent qu'une différence entre les produits proposés par les différents fabricants soit l'une des caractéristiques essentielles de la concurrence acharnée que c'est généralement plus souvent la règle que l'exception ».⁵ Les clients passent du temps à comparer la qualité de produits concurrents, tandis que les vendeurs consacrent des ressources à améliorer leurs produits et persuader les clients que ces produits offrent des caractéristiques supérieures.

De plus, les clients ne sont pas nécessairement en quête du prix le plus bas possible si cela doit signifier que leur choix se limitera à un seul produit. Par exemple, une société pourrait réaliser des économies d'échelle très importantes si chaque consommateur se contentait d'acheter exactement le même article, le

⁴ Ibid., p. 339.

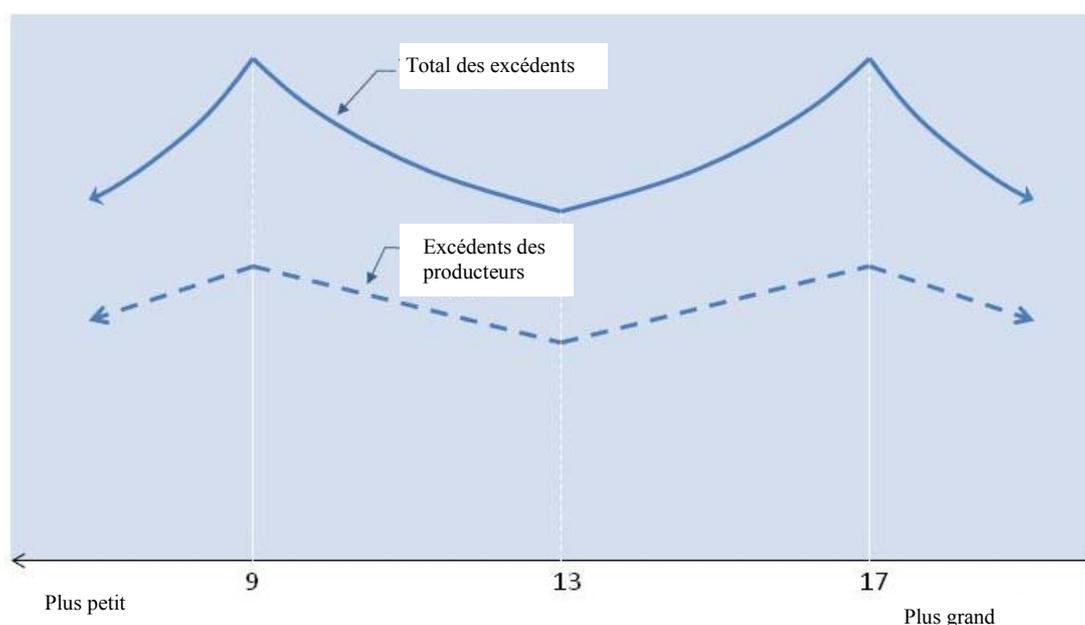
⁵ John Maurice Clark, « Economics and Modern Psychology », p. 26, *Journal of Political Economy*, p. 1, (1918).

fabricant pouvant alors proposer un prix bien plus bas que s'il offrait plusieurs choix (rappelons le célèbre modèle de voiture T produit en série par Henry Ford⁶). Toutefois, les consommateurs ne préfèrent pas toujours, voire en aucun cas pas, avoir un choix aussi restreint. S'il est probable que la concurrence pour des produits de première nécessité comme le sel de table repose quasi exclusivement sur le prix, les consommateurs aiment à l'évidence avoir le choix entre plusieurs milliers de vins, des dizaines de voitures et plusieurs options pour chaque modèle, un choix illimité d'objets d'art, etc. Sans compter qu'ils sont souvent prêts à payer plus cher pour obtenir le produit qui répond au plus près à leurs attentes ou tout simplement pour avoir quelque chose de différent, pour une fois. « Il serait ridicule, par exemple, d'imaginer que l'industrie du jouet décide de fabriquer un seul jouet « standardisé » ou même un nombre donné de jouets de ce type. »⁷

3.1.1 Comment la concurrence influence la gamme des produits ou des services proposés

Il est possible d'étudier, de manière un peu plus formelle, les effets probables des différents niveaux de concurrence sur les choix offerts aux clients, ainsi que les conséquences de cette offre sur les excédents des producteurs et des consommateurs. La figure 1 est une représentation hypothétique des excédents associé aux différentes tailles d'écran disponibles pour des ordinateurs portables.⁸ Nous partons du postulat que seules deux tailles d'écran sont disponibles, à savoir 9 pouces pour les petits écrans et 17 pouces pour les grands écrans. Bien entendu, d'autres paramètres que la taille de l'écran auront également leur importance. On peut néanmoins formuler quelques remarques théoriques utiles sans s'attarder sur toutes les autres caractéristiques que les utilisateurs d'ordinateurs portables associent à la qualité.

Figure 1. Conséquences pour les excédents du choix possible entre deux tailles d'écran d'ordinateur



⁶ Ford a poussé à l'extrême sa philosophie d'absence de choix. Il a un jour dit à son équipe de direction : « Un client peut demander cette voiture en n'importe quelle couleur, pourvu qu'elle soit noire ». Henry Ford et Samuel Crowther, « My Life and Work » (Garden City Publishing Co. : 1922).

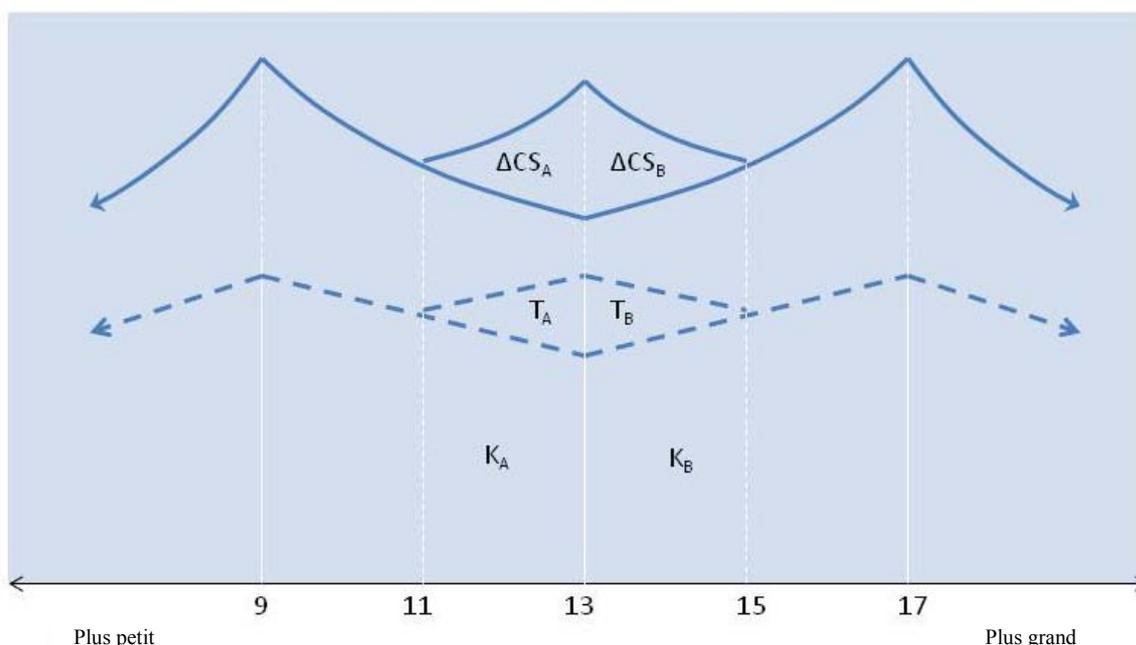
⁷ Lawrence Abbott, « Quality and Competition: An Essay in Economic Theory », p. 16 (Columbia University Press : 1955).

⁸ Cette figure est adaptée, avec de légères modifications, de F.M. Scherer, « Industrial Market Structure and Economic Performance », p. 395 (Houghton Mifflin : 1980). Le texte qui l'accompagne s'inspire également de l'analyse de Scherer.

L'axe horizontal indique la taille de l'écran, tandis que l'axe vertical exprime les excédents associés à chaque taille. Les clients qui préfèrent un écran plus large sont à droite, tandis que ceux privilégiant un écran plus petit se trouvent à gauche. Dans un souci de simplification, nous avons pris pour hypothèse une répartition et une intensité uniformes des préférences. Le total des excédents et les excédents des producteurs culminent au niveau de l'offre des deux tailles d'écran, reflétant les bénéfices des ventes réalisées auprès des clients dont les préférences coïncident exactement avec ces deux dimensions d'écran. Toutefois, nous sommes partis de l'hypothèse d'une répartition uniforme des préférences des consommateurs, de sorte que les autres consommateurs devront soit accepter un écran de 9 pouces ou 17 pouces, soit acheter un produit de substitution, comme un PC de type tour ou une tablette. Ces autres consommateurs retirent moins d'excédents du marché des ordinateurs portables qu'ils n'en auraient obtenu si des tailles d'écran correspondant parfaitement à leurs préférences avaient existé. En conséquence, ils seront moins exigeants que les clients dont la préférence coïncide exactement avec un écran de 9 ou 17 pouces. Plus l'écart est grand entre la taille préférée et la taille effectivement disponible, moins cette dernière est demandée par les clients ayant une autre préférence.

Supposons à présent qu'une troisième taille d'écran soit proposée à mi-chemin entre les tailles existantes. Cet écran 13 pouces attirera les clients qui préfèrent une taille d'écran moyenne, ce qui entraînera une hausse de la consommation sur ce point de l'axe horizontal. Certains de ces clients s'éloigneront des produits de 9 et 17 pouces. D'autres seront des consommateurs qui avaient auparavant renoncé à acheter un ordinateur portable parce qu'ils ne voulaient aucune des tailles d'écran disponibles. Un nouveau pic apparaît au-dessus du point de l'écran 13 pouces sur notre graphique des excédents, comme l'illustre la figure 2, pour représenter l'excédent supplémentaire retiré de ces nouvelles ventes par les consommateurs et les producteurs.⁹ Si l'on suppose également que les prix et les autres caractéristiques des ordinateurs portables sont identiques pour les trois tailles d'écran, le marché se répartit désormais à parts égales entre les trois tailles d'écran.

Figure 2. Conséquences pour les excédents du choix possible entre trois tailles d'écran d'ordinateur



⁹ La figure 2 et le texte qui l'accompagne sont adaptées de *ibid.*, p. 396-398.

La question qu'il faut se poser ici est la suivante : « Dans quelles circonstances l'écran 13 pouces sera-t-il proposé ? ». La réponse dépend naturellement dans une certaine mesure du coût associé à la fourniture de cet écran par rapport aux recettes qu'il génèrera. Mais elle dépend également de la structure du marché et de la nature de la concurrence sur le marché. Si le marché fait l'objet d'un monopole et que l'entrée d'autres fabricants d'ordinateurs portables au point de l'écran 13 pouces n'est pas possible pour une raison ou une autre, alors l'entreprise en place considèrera que l'avantage qu'elle est susceptible de retirer de l'introduction d'un écran 13 pouces se situe dans la zone T_A plus T_B . Si la zone T_A plus T_B représente une valeur supérieure au coût fixe lié à l'offre d'une nouvelle taille d'écran, alors le monopoleur proposera cette nouvelle taille d'écran dans son offre. Dans le cas contraire, l'écran 13 pouces ne sera pas proposé.

Si une nouvelle entrée sur le marché est possible, le nouvel entrant potentiel au point de l'écran 13 pouces considèrera que son avantage réside dans la zone T_A plus T_B mais aussi dans la zone K_A plus K_B . (Nous partons du postulat, à la manière de Nash, que les prix des ordinateurs portables dotés de l'une de ces trois tailles d'écran se valent et que les prix des modèles à 9 et 17 pouces ne subissent aucun changement du fait de la nouvelle entrée sur le marché). Les zones K_A et K_B constituaient auparavant l'excédent du producteur en situation de monopole, mais avec l'entrée d'une entreprise extérieure au point de l'écran 13 pouces, ces zones sont transférées à l'entrant. Dès lors, la proposition d'un écran 13 pouces est beaucoup plus attrayante pour un entrant qu'elle ne l'est pour l'entreprise en place. Si la seule zone T_A plus T_B doit avoir une valeur supérieure au coût fixe de fourniture de l'écran 13 pouces pour que l'entreprise en place le propose, un entrant pourra quant à lui proposer cet écran dès lors que l'équation $T_A + T_B + K_A + K_B$ est supérieure au coût fixe. C'est la raison pour laquelle Scherer et de nombreux autres économistes sont parvenus à la conclusion qu'un marché caractérisé par une concurrence monopolistique et un libre accès apportera probablement davantage de variété aux consommateurs qu'un marché monopolisé offrant peu de possibilités, voire aucune possibilité d'entrée.¹⁰

Comme toujours, toutefois, de nombreux éléments dépendent de la forme des courbes et des hypothèses formulées dans ces graphiques. Par exemple, nous avons supposé que tous les fabricants d'ordinateurs portables ont les mêmes coûts fixes et variables pour chaque taille d'écran. Si l'on modère cette hypothèse, il est possible qu'avec l'entrée du vendeur concurrent au point de l'écran 13 pouces et la perte des zones K_A et K_B qui en résulte pour l'entreprise en place, le coût fixe de fourniture du modèle de 9 ou 17 pouces dépasse l'excédent des producteurs qui continuent à proposer cette taille d'écran. Si tel est le cas, l'entreprise en place peut retirer du marché le ou les modèles qui lui font désormais perdre de l'argent, les consommateurs ne retirant alors globalement aucun avantage de l'introduction du modèle d'écran de 13 pouces.

Si l'entrée est possible, il y a également la possibilité que l'entreprise en place, dans le souci de tenir ses rivaux à bonne distance, rende l'entrée moins attrayante en proposant elle-même un modèle à 13 pouces. De la sorte, elle peut conserver la zone K_A plus K_B , même si elle cela lui coûtera davantage. Autrement dit, une entreprise en situation de monopole qui décourage l'entrée sur le marché peut offrir autant de choix aux consommateurs que des entreprises en situation de concurrence monopolistique, toutes choses étant égales par ailleurs.

Si nous acceptons leurs hypothèses, les figures 1 et 2 montrent qu'une plus large gamme peut à elle seule améliorer le bien-être des consommateurs. En d'autres termes, les consommateurs ont tout à gagner d'un plus large choix, même si les prix ne baissent pas (en fait, suivant leurs préférences, ils auraient tout à

¹⁰ Ibid., p. 397 (citant, par exemple, Michael Spence, « Product Selection, Fixed Costs, and Monopolistic Competition », p. 43, *Review of Economic Studies*, p. 217 (1976); Michael Lovell, « Product Differentiation and Market Structure », p. 8, *Western Economic Journal*, p. 137 (1970).

gagner même en cas de hausse des prix, en raison du plus large choix possible). En outre, un marché ouvert et concurrentiel est susceptible d'offrir davantage d'options qu'un marché fermé et monopolisé.¹¹

En revanche, la figure 2 montre également que l'on peut aussi se trouver face à une trop grande variété. D'un point de vue sociétal général, il ne faudrait introduire un nouveau produit que si sa contribution nette à l'excédent est supérieure au coût fixe de son introduction. La contribution nette à l'excédent est égale aux zones ΔCS_A et ΔCS_B . La figure 2 est ainsi faite que $\Delta CS_A + \Delta CS_B$ est bien moindre que $T_A + T_B + K_A + K_B$. Cela peut donc vouloir dire que l'entrée au point de l'écran 13 pouces sera intéressante pour un fabricant extérieur même si le coût fixe de l'entrée est supérieur à la contribution nette à l'excédent qui résulte de la fourniture du nouveau modèle. En d'autres termes, le marché pourrait encourager une trop grande variété par rapport au niveau auquel le bien-être social serait optimisé.¹²

3.1.2 *Qualité et variété : trop ou trop peu ?*

Intuitivement, il est plausible qu'il puisse exister une trop grande variété. Si des types de produits sont disponibles en trop grande quantité sur un marché, il devient alors plus difficile pour l'ensemble des producteurs de tirer parti des économies d'échelle, et l'inefficience qui en résulte donne lieu à des produits bien trop chers. Les consommateurs confrontés à ce genre de situation seraient disposés à renoncer à une partie du choix qui leur est offert contre des prix plus bas.¹³ Le marché doit donc trouver un compromis implicite entre le choix, le prix et le coût.

Il peut également y avoir une trop grande qualité et pourtant, pas assez de variété. Si les travaux théoriques sur les effets de la concurrence s'agissant de la qualité comportent de nombreuses incertitudes, une conclusion s'impose : lorsque les prix de marchés concurrentiels sont réglementés et fixés à un niveau supérieur à celui du coût marginal, les dépenses relatives à la qualité et au marketing augmentent jusqu'à ce que les bénéfices économiques soient absorbés (c'est-à-dire, jusqu'à ce que le coût marginal soit à la hauteur du prix réglementé). Lawrence White l'a démontré en 1972.¹⁴ Partant de l'hypothèse simplificatrice que chaque consommateur perçoit un certain niveau de qualité comme souhaitable mais tout aussi important que d'autres paramètres, le modèle de White prévoit parfaitement la dissipation des profits qui en résulte.

¹¹ C'est du moins le cas lorsque les prix ne sont pas réglementés. Voir note 15 infra et le texte y afférent concernant les effets sur la variété des marchés concurrentiels par opposition aux marchés monopolistiques dans un contexte de réglementation des prix.

¹² Si l'on pousse ce raisonnement à l'extrême, on peut comprendre plus aisément qu'il serait irréaliste et inefficace que les fabricants proposent, par exemple, 25 tailles d'écran dont chacune n'aurait qu'un millimètre de différence avec la précédente. Certes, même les acheteurs les plus exigeants verraient leur préférence comblée, mais il faudrait sacrifier les économies d'échelle.

¹³ Les psychologues ont également travaillé sur un point très différent, à savoir que le fait d'avoir beaucoup de choix peut nuire aux consommateurs en ce qu'il peut faire naître de l'anxiété, du mécontentement et du regret. Par exemple, Barry Schwartz, « The Paradox of Choice » (Harper : 2005).

¹⁴ Lawrence White, « Quality Variation When Prices are Regulated », p. 3, *Bell Journal of Economics and Management Science*, p. 425 (1972). Voir également Martin Gaynor, « What Do We Know about Competition and Quality in Health Care Markets? », NBER Working Paper No. 12301, p. 10 (2006) (relevant que « les ouvrages théoriques sur la concurrence et la qualité dans le contexte d'une réglementation des prix sont très clairs » et que « [l]orsque le prix est supérieur au coût marginal, la concurrence entraîne une amélioration de la qualité »). En outre, comme nous le verrons dans la partie 3.2, les travaux théoriques de White sont corroborés par des résultats empiriques. Pour une analyse plus mathématique de la théorie économique sur la différenciation des produits, voir Paul Belleflamme et Martin Peitz, « Industrial Organization », p. 113-125 (Cambridge University Press : 2010).

Le modèle de White fait également quatre prédictions liées :

1. des secteurs concurrentiels non réglementés produiront toute une gamme d'offres de qualité, tandis que des secteurs concurrentiels soumis à une réglementation des prix produiront des offres de qualité plus uniformes ;
2. la qualité des offres des entreprises concurrentielles varie directement selon le prix réglementé. Dès lors, le régulateur fixe tant le prix que le niveau de qualité ;
3. les consommateurs, dans leur quasi-totalité, perdent au change lorsqu'un contrôle des prix est mis en place dans un secteur concurrentiel, car le choix qui leur est offert en termes de prix/qualité se rétrécit considérablement ; et
4. les entreprises soumises à une réglementation des prix dans un secteur concurrentiel offrent une meilleure qualité par unité de production que ne le ferait une entreprise en situation de monopole soumise à la même réglementation.

La première prédiction exprime l'idée selon laquelle des entreprises concurrentes qui ne sont pas soumises à un contrôle des prix proposeront plusieurs couples prix/qualité pour satisfaire les attentes et les préférences des différents consommateurs. Par exemple, certains consommateurs pourront être plus sensibles au prix que d'autres et privilégieront donc un niveau de prix/qualité inférieur. Mais en cas de contrôle des prix, la seule façon pour les entreprises d'être concurrentielles sera d'améliorer la qualité, ce qu'elles feront jusqu'à ce que leur marge bénéficiaire disparaisse (de la même manière qu'elles auraient diminué leur prix jusqu'à supprimer leur marge si la concurrence par les prix était autorisée à qualité constante). La qualité augmentera jusqu'à ce que les entreprises les plus efficaces ne perçoivent aucune rente ; les entreprises relativement inefficaces qui n'ont pas les moyens d'égaliser ce niveau de qualité seront éliminées.

La deuxième prédiction découle du principe fondamental (la dissipation des profits) et de la première prédiction. Plus le prix réglementé est élevé, plus haute sera la qualité produite par le marché. C'est précisément cet effet qui crée la possibilité d'un « excès » ou d'un « gaspillage » de qualité par la mise en place d'un contrôle des prix sur des marchés concurrentiels. Si les régulateurs optent pour un couple prix/qualité supérieur à celui souhaité par la plupart des consommateurs, le secteur ne fonctionnera pas de manière efficace.

La troisième prédiction illustre le fait que lorsque le nouvel équilibre prix/qualité est atteint dans un contexte de réglementation des prix, les seuls consommateurs qui ne perdront pas au change sont ceux qui privilégient précisément ce couple. Tous les autres consommateurs y perdront en bien-être parce qu'ils ont tous privilégié un couple prix/qualité que le marché ne propose plus.

White n'a pas été en mesure de faire une prédiction ferme quant à ce qu'il adviendrait du bien-être des consommateurs si un secteur monopolistique était soudainement soumis à un contrôle des prix. Cela s'explique par le fait que les consommateurs perdent en choix (on peut supposer que l'entreprise en situation de monopole a pu exercer une discrimination par les prix) mais bénéficient d'un prix plus bas (du moins en théorie).

La quatrième prédiction illustre le fait qu'une entreprise en situation de monopole ne serait pas incitée à améliorer la qualité pour prendre des parts de marché à ses concurrents puisque, par définition, elle n'a pas de concurrents. Sa seule considération s'agissant de la qualité sera la sensibilité du marché tout entier à la qualité obtenue au prix réglementé. Elle fixera la qualité à un niveau qui maximise ses bénéfices, de sorte que ses coûts marginaux égalent ses recettes marginales, comme elle aurait fixé son prix de façon à ce que ses recettes marginales égalent ses coûts marginaux si elle avait évolué sur un marché non soumis à un

contrôle des prix, à qualité constante. La seule différence est que dans le premier cas, elle choisit le niveau de qualité, tandis que dans le second cas, elle fixe le niveau de prix. En outre, dans les deux cas, l'entreprise en situation de monopole produira et vendra moins que les entreprises concurrentes ne le feraient de manière collective, d'où une perte économique.

Il convient de noter que la principale conclusion de White vaut également pour les marchés soumis à des prix de revente imposés ou à des ententes sur les prix. Il ne serait pas surprenant que la qualité augmente sur des marchés concurrentiels soumis à des prix de revente imposés minimaux. Le but des prix de revente imposés minimaux est précisément d'inciter les détaillants à fournir un meilleur service.¹⁵ Il serait en revanche être plus surprenant que la qualité augmente dans le cadre d'une entente sur les prix, mais cela reste toutefois possible, notamment si le produit concerné est hétérogène et si les membres de l'entente manquent de discipline. Contraints par l'entente de s'abstenir de toute concurrence par les prix, les membres de l'entente pourraient se rabattre sur une concurrence par la qualité afin d'accroître leurs ventes aux dépens de leurs homologues de l'entente. En théorie du moins, une entreprise disposée à tricher pourrait agir de la sorte en investissant dans l'amélioration de la qualité jusqu'à absorber sa marge bénéficiaire. Dès lors, à l'instar d'un régulateur qui imposerait un plafonnement des prix, un fabricant qui impose des prix de revente ou même une entente qui fixe un prix détermine de fait le prix, mais aussi le niveau de qualité.

D'un point de vue sociétal, il n'est pas souhaitable de fixer artificiellement un niveau de qualité donné puisque, comme le dit Scherer, « il vaut presque toujours mieux, pour la société, que les consommateurs bénéficient d'un large choix parmi différentes solutions de qualité à prix élevé ou différentes solutions de faible qualité à bas prix plutôt qu'ils soient confrontés à un choix fortement restreint ». ¹⁶ Hammer et Sage sont du même avis et relèvent que « [l]es marchés qui fonctionnent bien satisfont aux différentes préférences des consommateurs en proposant une gamme de produits ou de services adaptés. Les actions entreprises par des opérateurs expérimentés du marché pour restreindre de manière artificielle la gamme de solutions offertes sont par nature suspectes du point de vue de la lutte contre les pratiques anticoncurrentielles. » ¹⁷

Vus sous cet angle, les prix de revente imposés sont moins préoccupants que les prix réglementés ou les ententes, car ils maintiennent la possibilité d'une concurrence inter-marques, de sorte que le marché peut malgré tout proposer différentes qualités (et différents prix) selon les marques. On pourrait aussi tout à fait envisager que ces mêmes marchés soumis à des prix de revente imposés offrent un choix aussi restreint qu'en l'absence de prix imposés, sauf qu'au lieu de proposer uniquement des solutions de qualité à prix élevés, leur offre se limiterait à des solutions de faible qualité, à bas prix. À moins que les fabricants aient recours aux prix de revente imposés uniquement pour mettre en œuvre le mécanisme d'entente, ils n'auraient que peu de raisons, voire aucune, d'imposer des prix, sauf si les clients ont tendance à préférer le couple prix élevé/qualité élevée.

¹⁵ Il pourrait y avoir exception si le véritable but des prix de revente imposés est de faciliter une entente, mais dans ce cas soit le marché ne peut être qualifié de concurrentiel, soit les entreprises qui participent à l'entente opteront pour une concurrence qui n'est pas fondée sur les prix et absorberont leur marge, comme le prédit White.

¹⁶ Scherer, *supra*, note 9, p. 394.

¹⁷ Peter Hammer et William Sage, « Antitrust, Health Care Quality, and the Courts », p. 102, *Columbia Law Review*, p. 545, 624 (2002).

3.1.3 Résultats imprévisibles lorsque les prix comme la qualité sont variables

Hors d'un contexte concurrentiel soumis à une réglementation des prix, les prédictions théoriques en ce qui concerne les effets de la concurrence par la qualité sont plus floues.¹⁸ Comme indiqué dans le manuel de microéconomie de Belleflamme et Peitz, « les modèles de concurrence imparfaite dans le cadre desquels les entreprises choisissent les caractéristiques des produits [et où les prix ne sont pas réglementés] ne donnent pas nécessairement lieu à des prédictions sur les prix et l'offre de produits ».¹⁹

Les concentrations horizontales, par exemple, ont divers effets potentiellement contradictoires sur la qualité. Pour éviter la cannibalisation, l'entreprise absorbante peut modifier des produits similaires de sa nouvelle gamme de produits afin de les rendre moins similaires. La concentration peut également créer des efficacités rendant l'introduction de nouveaux produits plus rentable. Ces résultats amélioreraient la variété. En revanche, après la concentration, l'entreprise absorbante pourrait décider de retirer complètement un produit du marché s'il est similaire à un autre produit de son portefeuille. Elle pourrait également décider de rapprocher davantage ses produits en rendant leurs caractéristiques plus similaires. Cela pourrait avoir pour effet de dissuader l'entrée d'autres entreprises par une réduction de l'écart entre les divers produits proposés dont les entrants potentiels pourraient autrement tirer avantage. L'une ou l'autre de ces actions réduirait la variété.

Les autorités de la concurrence peuvent de fait approuver une concentration horizontale au motif qu'elle renforcera le bien-être des consommateurs en intensifiant la concurrence par les prix, même si l'effet de cette concentration sur le choix réduira le bien-être des consommateurs, peut-être même jusqu'à dissiper l'effet sur les prix. Prenons l'exemple théorique²⁰ d'une ville où sont installés deux supermarchés : l'un est un magasin haut de gamme d'épicerie fine et l'autre un magasin discount. Supposons maintenant qu'une chaîne de supermarchés, qui évolue également dans le domaine du discount, fasse l'acquisition du magasin haut de gamme et le convertisse en magasin discount parce qu'elle estime qu'il est plus rentable que tous ses magasins adoptent un tel format. Si l'on suppose que la réglementation en matière d'occupation des sols ou une demande insuffisante interdit toute nouvelle entrée sur le marché, la ville se retrouve désormais avec deux supermarchés discount. Ses habitants bénéficieront d'une concurrence tarifaire accrue entre ces magasins, mais leur choix aura été réduit. Auparavant, certains consommateurs s'approvisionnaient uniquement auprès du magasin haut de gamme, tandis que beaucoup d'autres faisaient probablement leurs courses dans les deux magasins. Tous ces clients perdent une part de bien-être du fait de l'acquisition. Mais en raison d'une concurrence plus forte par les prix, il est peu probable qu'une autorité de la concurrence contesterait cette opération.

En général, lorsque les prix comme la qualité sont variables, la littérature théorique n'offre que peu d'informations utiles, car les résultats dépendront essentiellement des forces relatives de l'élasticité de la demande par rapport aux prix et de l'élasticité de la demande par rapport à la qualité. En d'autres termes, les vendeurs chercheront avant tout à combler les attentes des acheteurs. Sur certains marchés, les acheteurs donneront la priorité aux prix bas. Sur d'autres, ils accorderont plus d'importance à une qualité élevée. Les préférences des acheteurs dépendront quant à elles, dans une certaine mesure, de la transparence des prix et de la qualité. Les acheteurs ont tendance à se soucier davantage des caractéristiques qu'ils sont à même de percevoir, la qualité étant parfois plus difficilement visible que le prix.

¹⁸ Les lecteurs intéressés par les modèles théoriques permettant d'obtenir ces résultats ambigus en trouveront plusieurs dans Gaynor, supra, note 15, p. 4-10 et dans Belleflamme et Peitz, supra, note 15, p. 113-125.

¹⁹ Ibid., p. 118.

²⁰ Maurice Stucke, « Is Competition Always Good? », *Journal of Antitrust Enforcement*, p. 4, note 17 (à paraître en 2013) (citant un exemple donné par Davies).

On voit aisément à quel point cette situation pourrait donner une place insuffisante, socialement non optimale, à la qualité sur certains marchés.²¹ Les entreprises réagissent peut-être tout simplement à une élasticité de la demande relativement forte par rapport aux prix. Dans le même ordre d'idées, lorsque la demande sur le marché est bien plus sensible à la qualité qu'au prix (par exemple, sur les marchés des soins de santé où les patients choisissent leur prestataire mais ne paient rien eux-mêmes), le marché peut accorder une place excessive, socialement non optimale, à la qualité.

Le bien-être des consommateurs peut être amélioré tant par la concurrence par la qualité que la concurrence par les prix, mais dans certaines situations, cette dernière se révèle insuffisante. Cet effet est plus susceptible de se produire lorsque la qualité est difficilement visible par les clients. Dans ce cas, une concurrence par les prix peut entraîner une détérioration de la qualité, étant donné que les sociétés seront davantage assurées de pouvoir financer une baisse des prix par une baisse de la qualité, afin de réduire leurs coûts. Il est vrai que la concurrence par la qualité peut également entraîner une hausse des prix. Or, les clients ont généralement parfaitement conscience de ce qu'il paient. Ils seront donc généralement en mesure d'évaluer précisément le couple prix/qualité qui leur est proposé.

3.2 *Effets réels*

3.2.1 *Expérience dans le secteur des médias*

Plusieurs études empiriques s'intéressent aux effets que les acquisitions horizontales sur les marchés de la radiodiffusion et de la presse ont sur la variété des formats offerts aux auditeurs et aux lecteurs. Elles constatent invariablement une hausse de la variété des produits consécutive aux concentrations horizontales.

Par exemple, Berry et Waldfogel ont étudié les effets sur la variété d'une vague d'acquisitions horizontales intervenues sur le marché américain de la radiodiffusion entre 1993 et 1997.²² Au cours de cette période, l'indice de Herfindahl-Hirschman moyen de 243 marchés de médias importants a augmenté de près de 65 %, passant de 1272 à 2096. Si une plus forte concentration du marché a eu pour corolaire une diminution de l'arrivée de nouvelles stations de radio, elle s'est aussi accompagnée d'une plus grande variété par station, à effectifs constants.²³ En d'autres termes, l'étude a révélé que le nombre de stations restait inchangé, mais que celles-ci appartenaient désormais à un plus petit nombre d'entreprises, qui ont ainsi pu étoffer l'offre de programmes de chaque station. De fait, même dans le cadre d'un effectif de stations variable, les auteurs ont établi que la consolidation du secteur augmentait la variété offerte aux auditeurs d'une manière générale.²⁴

²¹ Il s'agit du célèbre problème du « marché des épaves » d'Akerlof, selon lequel la qualité se détériore parce que les consommateurs ne prennent leur décision qu'en se fondant sur la caractéristique du produit qu'ils perçoivent le mieux : le prix.

²² Steven Berry et Joel Waldfogel, « Do Mergers Increase Product Variety? Evidence from Radio Broadcasting », p. 116, *Quarterly Journal of Economics*, p. 1009 (2001).

²³ Par « plus grande variété », on entend ici davantage de formats de programmation, par exemple du jazz, de l'actualité, du sport, etc.

²⁴ Il est également prouvé que les auditeurs apprécient la variété. Les enquêtes montrent que davantage de personnes écoutent la radio lorsque la programmation est plus variée. Berry et Waldfogel, supra, note 23, p. 1019 (citant Steven Berry et Joel Waldfogel, « Public Radio in the United States: Does It Correct Market Failure or Cannibalize Commercial Stations? », p. 71, *Journal of Public Economics*, p. 189 (1999) ; Robert Rogers et John Woodbury, « Market Structure, Program Diversity, and Radio Audience Size », p. 14, *Contemporary Economic Policy*, p. 81 (1996)).

Nous avons indiqué dans la section précédente que les concentrations peuvent avoir des effets contradictoires sur la qualité et qu'il est donc difficile de prévoir, d'un point de vue purement théorique, quelle sera leur incidence globale. L'étude de Berry et Waldfogel soutient l'idée que l'effet le plus fort résulte probablement de ce que les entreprises absorbantes sont incitées à disperser leurs produits pour éviter la cannibalisation. Pour les auteurs, les autorités de la concurrence doivent retenir essentiellement de leur étude qu'une plus forte concentration réduit une utilisation potentiellement excessive des ressources affectées à l'entrée de nouvelles stations sans pour autant nuire aux auditeurs.

Lisa George a mené une étude similaire sur le marché américain des quotidiens et obtenu des résultats semblables. Elle a observé les effets d'un pic de concentration de journaux intervenu dans les années 1990 en recensant les sujets attribués à 25 000 journalistes ou rédacteurs en chef en 1993, 1994 et 2004. Son étude montre que la diminution du nombre de propriétaires de journaux a entraîné une plus grande différenciation entre les titres, mais également permis de couvrir un plus grand nombre de sujets par marché. George conclut que les politiques américaines antitrust et de communication à l'égard des concentrations dans le secteur des médias partent du postulat erroné que limiter le phénomène de concentration est un gage de plus grande variété.

Toutefois, le problème de l'étude de Berry et Waldfogel comme celle de George tient au fait que ces auteurs présupposent tous que la multiplication des formats de contenus proposée par une seule entreprise a tout autant de valeur que celle proposée par de multiples entreprises. Cette hypothèse néglige le fait qu'il peut être important pour une société d'éviter toute concentration de ses marchés des médias pour permettre l'expression d'une diversité de points de vue et de partis pris. En d'autres termes, la variété et le choix ne se limitent pas à la possibilité pour les auditeurs d'écouter de la musique classique, des débats ou des programmes sportifs, ou pour les lecteurs de lire des articles sur 20 sujets différents au lieu de 15. La diversité politique, démographique et culturelle des personnes et des entreprises qui contrôlent les médias peut également constituer un aspect important du choix. George admet cette nuance²⁵, contrairement à Berry et Waldfogel. Nous ne prétendons pas qu'il devrait incomber aux autorités de la concurrence de prendre en compte les préoccupations sociétales en matière de diversité culturelle lorsqu'elles examinent les concentrations. Les problèmes liés à la concentration des idées ou des points de vue culturels relèvent certainement davantage de la politique de la communication que de la politique de la concurrence. Il se trouve simplement que le choix et la variété sur les marchés des médias ne se limitent pas aux formats offerts.

3.2.2 *Expérience dans le secteur du transport aérien*

L'expérience de la réglementation dans le secteur américain du transport aérien démontre de manière empirique la validité de la conclusion de White selon laquelle le fait d'imposer un contrôle des prix sur un marché concurrentiel engendre une hausse de la qualité au point que le profit économique disparaît, voire que l'on assiste à un « excès » de qualité. Aux États-Unis, le prix des billets d'avion était réglementé dans les années 1960 et 1970. Les prix étaient fixés à un niveau bien plus élevé que celui qu'une compagnie aérienne à bas coût aurait proposé, de sorte que les compagnies aériennes disposaient de ressources pour s'affronter sur certains éléments de qualité, tels que l'adoption d'horaires de vol pratiques (sans que ces vols soient nécessairement pleins), les repas, l'offre de films, etc. Par conséquent, le marché négligeait les clients qui auraient préféré une commodité moindre mais des prix plus bas.²⁶

²⁵ Lisa George, « What's Fit to Print: The Effect of Ownership Concentration on Product Variety in Daily Newspaper Markets », p. 19, *Information Economics and Policy*, p. 285-290 (2007).

²⁶ Lawrence White, « Quality, Competition, and Regulation: Evidence from the Airline Industry », in Richard Caves et Marc Roberts, éditeurs, « Regulating the Product: Quality and Variety », p. 17 (Harvard University Press : 1975).

Douglas et Miller ont étudié les données recueillies par les compagnies aériennes américaines pendant cette période de réglementation des prix.²⁷ Les bénéficiaires déclarés ont confirmé que les compagnies aériennes négligeaient les profits potentiels. D'autres données montrent que la plupart de ces profits potentiels étaient consacrés à la concurrence sur les horaires, c'est-à-dire à proposer davantage de vols aux heures souhaitées par les clients. Les compagnies aériennes proposaient un si grand nombre de vols qu'en général, elles ne faisaient que parvenir à l'équilibre, quel que soit l'itinéraire. Les résultats ont également montré que les coefficients de remplissage moyens (et donc les profits) avaient tendance à augmenter avec la diminution du nombre de concurrents sur une liaison. Pour finir, à chaque variation des niveaux de rentabilité, les coefficients de remplissage avaient tendance à suivre la même courbe pour les rejoindre. Les auteurs ont conclu que

*sur un marché où la concurrence sur les horaires efface tous les profits, le régulateur, en fixant les prix, détermine implicitement le nombre de voyageurs nécessaires pour parvenir à l'équilibre et l'horaire souhaité par chaque passager [commodité]. Dès lors, le rôle du régulateur est de se substituer aux consommateurs pour choisir la bonne combinaison de qualité de service et de prix parmi les variables offertes.*²⁸

Une autre étude sur la qualité et la concurrence dans le secteur américain du transport aérien s'est intéressée à la période qui a suivi la déréglementation. En analysant des données du Bureau of Transportation pour l'année 2000, Michael Mazzeo a constaté que la fréquence et l'ampleur des retards de vols étaient bien moins importantes sur les lignes desservies par plusieurs compagnies aériennes assurant une liaison directe (sans escale).²⁹ Mazzeo, qui a publié son étude en 2003, regrettait que les autorités antitrust américaines n'aient pas davantage prêté attention aux effets de la qualité dans leur analyse de deux affaires survenues au cours de cette période dans le secteur du transport aérien. L'une de ces affaires concernait la pratique de prix d'éviction par American Airlines, tandis que l'autre portait sur une proposition de concentration entre United Airlines et US Air. Dans ces affaires, l'auteur ne s'attendait pas nécessairement à ce que les effets sur la qualité supplantent les effets sur les prix et deviennent la préoccupation principale. Néanmoins, compte tenu du lien entre la concentration et les retards, et également du fait que les annulations et les retards étaient devenus un problème récurrent à l'époque, il a jugé utile de considérer le préjudice porté à la qualité comme un problème de concurrence.

3.2.3 *Expérience de l'interdiction de publicité par des associations professionnelles*

Il arrive que des associations professionnelles limitent la capacité de leurs membres à faire de la publicité. Les raisons généralement invoquées pour ces restrictions sont qu'elles éliminent toute publicité mensongère et entravent la capacité des prestataires qui cassent les prix et proposent une qualité moindre à gagner des clients, empêchant ainsi un « nivellement par le bas ». En 1980, la Federal Trade Commission (FTC) américaine a publié un rapport sur une étude qui essayait de vérifier ces affirmations dans le secteur de l'optométrie.³⁰ Le rapport montrait que le fait de faire de la publicité sur les prix pour les lunettes et les examens de la vue faisait baisser les prix, sans pour autant réduire sensiblement la qualité moyenne.

²⁷ George Douglas et James Miller III, « Quality Competition, Industry Equilibrium, and Efficiency in the Price-Constrained Airline Market », p. 64, *American Economic Review*, p. 657 (1974).

²⁸ Ibid., p. 663.

²⁹ Michael Mazzeo, « Competition and Service Quality in the U.S. Airline Industry », p. 22, *Review of Industrial Organisation*, p. 275 (2003). Du reste, cette étude est tout à fait représentative des études empiriques sur la concurrence et la qualité au sens où elle n'utilise qu'un aspect (assez évident) de la qualité au lieu de tenter de répondre à la véritable question, qui est de recenser la totalité des composantes de la qualité pour un marché donné. L'absence de ponctualité des vols était l'un des motifs de plainte les plus fréquents des clients vis-à-vis des compagnies aériennes. Ibid., p. 276.

³⁰ Ronald Bond, John Kwoka, John Phelan et Ira Whitten, « Staff Report on Effects of Restrictions on Advertising and Commercial Practice in the Professions: The Case of Optometry », US Federal Trade Commission, Bureau of Economics (1980).

Ces recherches sont parties du fait que la publicité pour les services d'optométrie et les lunettes est autorisée dans certaines régions des États-Unis et limitée dans d'autres. Les résultats indiquaient que les prix moyens étaient bien plus bas dans les villes appliquant les restrictions les plus légères en matière de publicité, tandis que la qualité de service moyenne était à peu près la même dans les villes appliquant les restrictions les plus fortes, ce qui a eu pour effet de semer le doute sur l'une des excuses préférées invoquées par les associations professionnelles pour justifier le recours à des règles anticoncurrentielles contre la publicité. La concurrence sur les marchés de services professionnels, ou du moins sur les marchés de services d'optométrie, ne semble pas nuire à la qualité.

Des spécialistes des études réalisées au moyen d'enquêtes (« testeurs ») travaillant pour la FTC se sont soumis à 434 examens de la vue et ont acheté 280 paires de lunettes dans différentes villes des États-Unis. Des optométristes expérimentés et des écoles d'optométrie ont aidé la FTC à définir des mesures de qualité adaptées sur le plan médical, à concevoir l'enquête et à évaluer les résultats. Il a été demandé aux testeurs d'acheter, si possible, un type de monture donné afin de minimiser les variations de coût. Les résultats ont montré que les prix moyens des examens de la vue et des lunettes dans les villes soumises aux restrictions les plus fortes étaient 33,6 % plus élevés que dans les villes moins restrictives.

Pour mesurer la qualité, les testeurs ont répondu à un questionnaire type sur le déroulement de chaque examen. La qualité des lunettes qu'ils avaient achetées a ensuite été évaluée. Les testeurs ont également été examinés par deux écoles d'optométrie pour déterminer la prescription la mieux adaptée à leur cas, celle-ci étant ensuite comparée aux prescriptions réalisées sur le terrain. L'étude comprenait plusieurs mesures de la qualité, notamment : (1) la précision de l'examen de la vue, (2) la justesse de la prescription et (3) la fiabilité et la qualité des lunettes fabriquées. Les résultats ont mis à mal les arguments de certains professionnels, qui prétendent qu'une simple comparaison des prix ne peut tenir compte des différences de qualité et que l'on aurait tort de penser que la qualité est la même dans les villes restrictives et les villes non restrictives. Les résultats ont également remis en cause les affirmations selon lesquelles si les professionnels font de la publicité, ils diminueront la qualité de leur service et que, en réponse, même les professionnels ne faisant pas de publicité leur emboîteront le pas.

Il a été constaté que la précision des examens de la vue réalisés par des optométristes dans des villes restrictives et non restrictives était, en moyenne, à peu près égale. En outre, les examens réalisés par des optométristes ne faisant pas de publicité dans des villes non restrictives étaient, en moyenne, *plus* précis que ceux effectués par des optométristes ne faisant pas de publicité dans des villes restrictives. Il est faux de dire que les optométristes qui effectuaient des examens précis ont été évincés du marché sur lequel la publicité n'était soumise à aucune restriction. Environ 55 % des optométristes des villes non restrictives ne faisaient pas de publicité. Les résultats en ce qui concerne la justesse des prescriptions ainsi que la fiabilité et la qualité des lunettes fabriquées ont montré que les consommateurs étaient mieux lotis dans les villes non restrictives.

3.2.4 *Expérience sur le marché du contrôle des émissions des véhicules*

Stucke constate que dans certaines circonstances, la concurrence entraîne un nivellement par le bas, dont la société pâtit. Il relève, en particulier, que les clients de marchés d'informations intermédiaires réussissent parfois à faire pression sur les vendeurs et pour qu'ils modifient leurs rapports en leur faveur. Plus ce type de marché est concurrentiel, plus les vendeurs sont disposés à être malhonnêtes, conclut-il.³¹

Tel est le cas du marché du contrôle des émissions des véhicules. Stucke évoque une étude empirique sur le contrôle des émissions dans l'État de New York. Il a examiné si l'intensification de la concurrence permettait aux entreprises de contrôle technique d'attirer des clients en certifiant, à tort, que leurs véhicules

³¹ Stucke, *supra*, note 21, p. 29-35.

respectaient les normes d'émissions fixées par l'État.³² Dans le système de contrôle technique de l'État de New York, les propriétaires de véhicules doivent périodiquement se soumettre, dans un centre privé, à un contrôle payant des émissions. Le prix des services de contrôle a été fixé par les autorités de l'État.

Comme le prédit la théorie économique pour les marchés concurrentiels soumis à un contrôle des prix³³, les centres de contrôle concurrents, parce qu'ils ne peuvent s'affronter sur les prix, concentrent leurs efforts sur des facteurs autres que les prix. L'une des stratégies pour s'attirer les bonnes grâces des clients consiste à mentir, en validant le contrôle de voitures qui devraient être refusées. L'étude a constaté qu'à mesure que le nombre de centres de contrôle concurrents augmentait sur les marchés locaux, le taux de certification des véhicules augmentait également. L'auteur en conclut que la concurrence entre les centres de contrôle « peut inciter les entreprises à accroître la qualité pour leurs clients de manière illégale mais aussi coûteuse sur le plan social ».³⁴

Les termes employés sont tout à fait exacts. Du point de vue des centres de contrôle, ce sont les clients qui sont les propriétaires des véhicules, pas l'État de New York. Après tout, ce sont bien eux qui sélectionnent et rémunèrent les centres. La concurrence a effectivement permis d'améliorer la qualité, de l'avis général des clients. Dans cet exemple, le problème n'est pas que, pour d'obscures raisons, la concurrence ait conduit à un effet inverse de ce qui est habituel et qu'elle ait entraîné une baisse de la qualité. La concurrence a eu l'effet exact qu'elle aurait dû avoir lorsque les prix sont fixés, c'est-à-dire une amélioration de la qualité *telle que perçue par les clients qui choisissent le prestataire*. Dans cette affaire, le véritable problème est que pour atteindre l'objectif visé, le système de contrôle des émissions aurait dû être conçu de manière à ce que les autorités, et non les propriétaires des véhicules, choisissent les centres de contrôle. Si tel avait été le cas, les centres de contrôle auraient eu tout intérêt à fournir les informations les plus exactes possibles.

Reprocher à la concurrence d'avoir faussé le programme de contrôle des émissions conçu par l'État de New York, c'est un peu comme reprocher à un piano de jouer effectivement les touches actionnées par le musicien. Effectivement, un compositeur peut par erreur insérer une fausse note et gâcher ainsi un morceau, mais cela ne veut pas dire que la faute en revient au piano.

Certes, la concurrence pousse les entreprises à des efforts supplémentaires pour remplir le carnet de commandes et pour cela, les centres de contrôle de l'état de New York ont été jusqu'à mentir. Toutefois, s'ils ont agi de la sorte, c'est que le mensonge était dans l'intérêt de leurs clients. Il est fort peu probable qu'ils auraient menti si leur client avait été l'État de New York, l'entité qui avait le plus intérêt à recevoir des informations fiables. Ce système de contrôle des émissions a souffert d'un défaut de conception, pas d'un excès de concurrence.

La même conclusion vaut pour l'autre exemple fourni par Stucke à propos d'un marché d'informations intermédiaires, dans le secteur de la notation des obligations, pour lequel la concurrence aurait été à l'origine d'inexactitudes.³⁵ Comme le programme de contrôle des émissions de l'État de New York, le secteur de la notation souffre d'un modèle de rémunération vicié. Au lieu que les agences de notation soient sélectionnées et rémunérées par les personnes qui ont réellement besoin de s'appuyer sur

³² Ibid., p. 33 (citant Victor Bennett, Lamar Pierce, Jason Snyder et Michael Toffel, « Customer-Driven Misconduct: How Competition Corrupts Business Practices », *Management Science* (à paraître en 2013), disponible à l'adresse suivante : http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2005779).

³³ Voir discussion de White (1972), supra, note 15 et le texte l'accompagnant.

³⁴ Bennett et al., supra, note 33, p. 2.

³⁵ Stucke, supra, note 21, p. 31-33.

des rapports fiables, ce sont les sociétés de crédit qui les sélectionnent et les rémunèrent.³⁶ L'un des enseignements de la crise financière de 2008 est que les sociétés de crédit n'ont pas nécessairement un grand intérêt pour la précision en matière de notation. Les agences de notation évoluent dans un contexte de concurrence, elles s'efforcent donc d'être toujours plus en adéquation avec les besoins de leurs clients. Dans certains cas, les clients souhaitent gonfler leurs notes. S'ils étaient demandeurs de rapports exacts, la concurrence se chargerait de leur fournir de tels rapports.

3.2.5 *Expérience dans le secteur des supermarchés*

David Matsa a récemment publié une étude empirique sur l'effet de la concurrence sur les ruptures de stock dans les supermarchés des États-Unis.³⁷ La fréquence des ruptures de stock et la faible variété de produits constituent les principales causes de mécontentement des clients vis-à-vis des supermarchés. Les ruptures de stock sont donc un bon indicateur de qualité. L'expansion de Wal-Mart dans le secteur de la grande distribution, que Matsa décrit comme « le coup le plus important porté à la structure de marché du secteur depuis un demi-siècle », a fait évoluer la concurrence, ce qui a rendu possible cette étude.³⁸ Wal-Mart est devenu le premier distributeur de produits alimentaires aux États-Unis quatorze ans après l'ouverture de son premier magasin d'alimentation en 1988. Le groupe est également devenu la première chaîne véritablement nationale, de sorte que son entrée a effectivement porté un coup au secteur. Matsa a constaté que l'entrée de Wal-Mart, a non seulement eu pour corollaire une baisse de 33 % des ruptures de stock dans les grandes chaînes de supermarchés, mais est l'origine même de cette baisse.

Matsa a étudié la manière dont les entreprises en place ont ajusté leurs stocks en réponse à l'entrée de Wal-Mart. Il a constaté que les magasins n'ont pas tous réagi de la même manière. Wal-Mart est connu pour sa concurrence par les prix bas, en partie rendus possibles par des niveaux de service relativement faibles. Matsa a établi que les magasins faisant partie d'une chaîne ont eu tendance à répondre à l'entrée de Wal-Mart en améliorant leur qualité. Il semble qu'ils aient compris qu'ils n'avaient aucune chance d'être compétitifs sur les prix face aux économies d'échelle et à la puissance d'achat de Wal-Mart. Ils ont donc amélioré la disponibilité de leurs produits dans leurs magasins. Les ruptures de stock ont été diminuées d'un tiers. De leur côté, les magasins indépendants ont tenté de maintenir des prix bas. Nombre d'entre eux ont échoué, de sorte qu'ils n'ont collectivement pas aussi bien résisté à l'entrée de Wal-Mart que les chaînes.

Matsa a également constaté que les taux peu élevés de ruptures de stock s'étaient accompagnés de bons résultats pour d'autres critères de mesure de la qualité, comme la propreté, la courtoisie du personnel et le temps d'attente moyen en caisse. Les chaînes de supermarchés qui ont réussi à réduire les ruptures de stock semblaient avoir également progressé dans ces catégories, de même que pour la fraîcheur de leur viande, de leurs fruits et de leurs légumes ainsi que pour la variété de leur offre. Cela laisse à penser que pour les consommateurs, l'entrée de Wal-Mart a été finalement plus intéressante que l'on a pu le penser. Ces derniers n'ont pas seulement trouvé en Wal-Mart une nouvelle source d'approvisionnement aux prix bas mais ont également bénéficié d'une forte amélioration de la qualité de la part des chaînes en place.

³⁶ Voir OCDE, « Competition and Credit Rating Agencies » (2010), disponible à l'adresse suivante : www.oecd.org/daf/competition/sectors/46825342.pdf.

³⁷ David Matsa, « Competition and Product Quality in the Supermarket Industry », p. 126, *Quarterly Journal of Economics*, p. 1539 (2010).

³⁸ Ibid., p. 1539.

3.2.6 *Expérience dans le secteur des services hospitaliers*

Le secteur des services hospitaliers, comme celui des soins de santé en général, présente certaines caractéristiques qui perturbent la capacité de la concurrence à stimuler des améliorations de la qualité. On évoquera en premier lieu le fait que les patients ne disposent pas toujours d'un accès aisé aux informations permettant de comparer la qualité médicale des médecins, des infirmières, des médicaments et des équipements hospitaliers, que ce soit avant ou après le traitement. Pire encore, les hôpitaux rivalisent parfois en privilégiant davantage les aspects des soins de santé qui sont les plus transparents pour les patients, comme l'attrait esthétique de leurs chambres, au détriment de réels bénéfices sur le plan médical. Par conséquent, les choix opérés par les patients ne reflètent pas nécessairement la qualité médicale des soins de santé qu'ils reçoivent. En d'autres termes, la concurrence sur le plan de la qualité ne fonctionne généralement pas aussi bien sur les marchés des soins de santé que sur les marchés dont les éléments qualitatifs sont plus transparents.

Dans le droit fil des conclusions théoriques relatives à l'effet de la concurrence par la qualité, les preuves empiriques issues des marchés des services hospitaliers montrent généralement que lorsque les prix sont réglementés, la concurrence améliore la qualité (mesurée par le taux de mortalité). Lorsque les prix ne sont pas réglementés, les indices sont alors contradictoires.

Par ailleurs, ce n'est pas un hasard si la plupart des études empiriques sur les services hospitaliers se concentrent sur un seul facteur qualitatif (le taux de mortalité). Or, elles pourraient se pencher sur de nombreux autres facteurs, du moins en principe, parmi lesquels le niveau général de satisfaction du patient/de la famille, l'adéquation des informations fournies aux patients et à leurs familles et la mesure dans laquelle le séjour à l'hôpital a amélioré l'état du patient (par opposition à la variable binaire décès/survie). Ces facteurs sont néanmoins tous soumis à un certain degré de subjectivité, contrairement aux taux de mortalité. Dès lors, en se concentrant sur la mortalité, les études gagnent en objectivité, mais perdent en exhaustivité.³⁹

3.2.6.1 *Effet de la concurrence par la qualité, sur les marchés hospitaliers dont les prix sont réglementés*⁴⁰

Kessler et McClellan ont réalisé l'une des premières études empiriques sur les effets de la concurrence par la qualité des services hospitaliers.⁴¹ Ils ont examiné l'incidence de la concentration des marchés (en utilisant l'indice de Herfindahl) sur la qualité des services hospitaliers fournis aux États-Unis aux bénéficiaires de Medicare, telle qu'elle est mesurée par le nombre de décès par crise cardiaque sur une période d'une année, ajusté en fonction du risque. Les résultats sont saisissants, car ils montrent que la qualité est sensiblement inférieure sur les marchés qui sont plus concentrés. Les patients sur les marchés les plus concentrés enregistraient des taux de mortalité qui étaient plus élevés de 4,4 % que les patients sur les marchés les moins concentrés. Cela se traduisait par une différence de plus de 2 000 décès entre les parties les moins concentrées et les parties les plus concentrées de la série de données.

³⁹ Pour plus d'informations sur la mesure de la qualité dans le secteur des soins de santé, voir la publication occasionnelle d'Arik Mordoh du 11.5.2011 intitulée « Critical Review of the Quality and Competition Measures and Identification Strategies Used in Health Care Studies », Office of Health Economics (Royaume-Uni).

⁴⁰ Cette sous-partie s'inspire partiellement de la note d'information du secrétariat de l'OCDE (2012) sur la concurrence dans les services hospitaliers, points 47 à 55, [DAF/COMP\(2012\)9](http://www.oecd.org/daf/competition/50527122.pdf), disponible à l'adresse suivante : www.oecd.org/daf/competition/50527122.pdf.

⁴¹ Daniel Kessler et Mark McClellan, « Is Hospital Competition Socially Wasteful ? » 115 *Quarterly Journal of Economics* 577 (2000).

Cooper et al. ont essayé de savoir si, dans les hôpitaux confrontés à une concurrence accrue, les taux de mortalité par crise cardiaque diminuaient plus rapidement que dans les hôpitaux évoluant sur des marchés monopolistiques après l'introduction au Royaume-Uni en 2006 de la concurrence dans le système des soins de santé.⁴² Les auteurs de l'étude ont utilisé quatre méthodes différentes pour définir les marchés des services hospitaliers, et deux critères distincts pour mesurer la concurrence. Ils ont invariablement constaté que les hôpitaux confrontés à une concurrence accrue avaient diminué leur taux de mortalité par crise cardiaque d'environ un tiers de point de pourcentage plus rapidement que les prestataires monopolistiques. Avec un taux de mortalité de 12 %, cette différence était significative. Les auteurs ont émis l'hypothèse que le rôle joué par les médecins généralistes dans le système britannique avait un rapport avec ce résultat. L'expertise et l'expérience acquise par les médecins généralistes semblent avoir fait de la qualité un facteur plus important pour les hôpitaux en concurrence pour attirer les patients.

Dans une étude très justement intitulée « Death by Market Power », Gaynor et al. ont démontré de manière probante que dans le cadre d'un régime des prix réglementés, les hôpitaux se livrent une concurrence par la qualité.⁴³ Les auteurs ont observé d'importantes améliorations au niveau de la mortalité et de la réduction des durées moyennes d'hospitalisation, sans aucune répercussion sur les dépenses totales ni augmentation des dépenses par patient dans les deux années qui ont suivi l'introduction de la concurrence dans le système des soins de santé au Royaume-Uni. Ils ont également conclu que si le Royaume-Uni prenait des dispositions visant à déconcentrer les marchés hospitaliers, les bénéfices pourraient atteindre plus de 276 millions GBP.

Bijlsma et al. se sont concentrés sur le rapport entre la concurrence et la qualité dans le secteur hospitalier néerlandais après la mise en œuvre des réformes visant à renforcer la concurrence.⁴⁴ Ils ont constaté que les hôpitaux accordaient davantage d'attention à la qualité et révélaient plus volontiers les indicateurs de qualité qu'ils utilisent. Les données couvraient à la fois les indicateurs de qualité liés aux processus et ceux liés aux résultats, et ont montré que la modification de la performance des processus (contrairement à celle des résultats) pouvait s'expliquer par la concurrence. En particulier, les résultats laissaient entendre que la concurrence entre les hôpitaux exerçait une pression sur les marges bénéficiaires, contraignant les hôpitaux à améliorer leur rendement. Les auteurs ont conclu que « la concurrence est susceptible d'inciter les hôpitaux à améliorer les indicateurs de qualité qui peuvent être facilement observés par les patients et perçus comme un signe de qualité (comme le temps d'attente avant d'obtenir un diagnostic et la fréquence de contrôle pour les patients atteints de maladies chroniques) ». ^{45 46}

3.2.6.2 *Effet de la concurrence par la qualité sur les marchés hospitaliers dont les prix ne sont pas réglementés*

Comme leurs homologues théoriques, les études empiriques qui analysent l'effet de la concurrence par la qualité des marchés des services hospitaliers lorsque la qualité et les prix sont variables donnent lieu à

⁴² Zack Cooper, Stephen Gibbons, Simon Jones et Alistair McGuire, « Does Hospital Competition Save Lives ? Evidence from the English NHS Patient Choice Reforms », 121 *Economic Journal* 228 (2011).

⁴³ Martin Gaynor, Rodrigo Moreno-Serra et Carol Propper, « Death by Market Power: Reform, Competition and Patient Outcomes in the National Health Service », document de travail n° 10/242 (2011) du CMPO.

⁴⁴ Michiel Bijlsma, Pierre Koning, Victoria Shestalova et Ali Aouragh, « The Effect of Competition on Process and Outcome Quality of Hospital Care – An Empirical Analysis for the Netherlands », document de travail n° 157 (2010) du CPB, disponible à l'adresse suivante : www.cpb.nl/sites/default/files/publicaties/download/disc157.pdf.

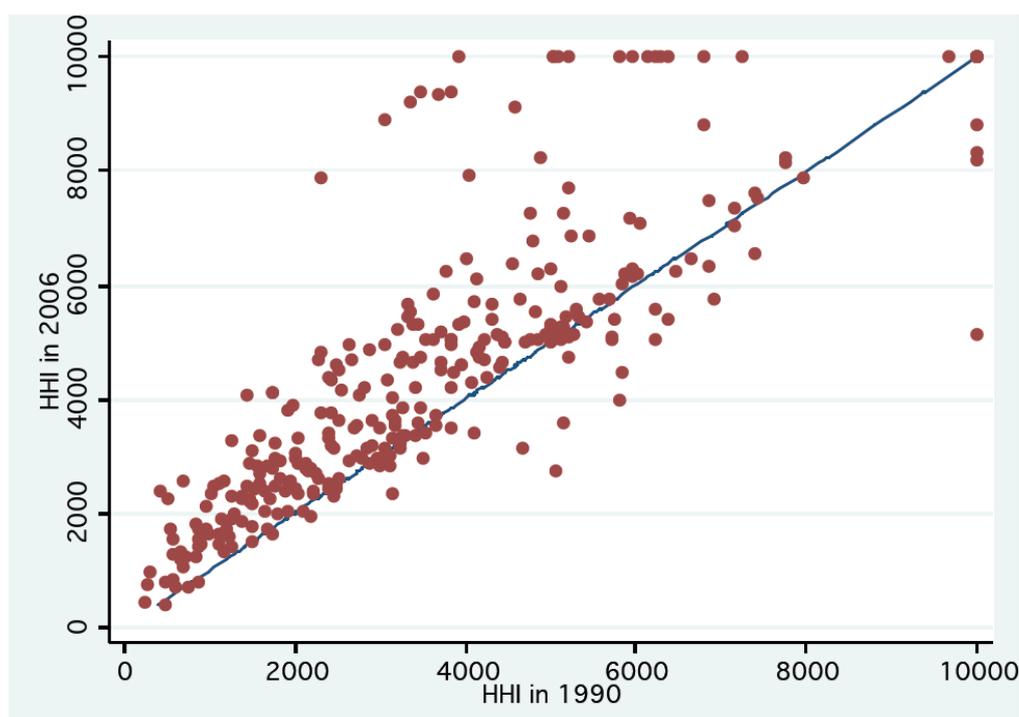
⁴⁵ Ibid. p. 35.

⁴⁶ Pour les résumés d'autres études qui abondent presque toutes dans le sens de celles mentionnées dans la présente note, voir Gaynor, supra, n. 15, pages 16 à 21.

des résultats ambigus ou mitigés. La présente section traite essentiellement de la situation aux États-Unis, ce marché géographique ayant fait l'objet de la plupart des études.

La figure 3 montre que les marchés hospitaliers américains étaient sensiblement plus concentrés en 1990 qu'en 2006 :

Figure 3. Indices HHI en 1990 et en 2006 pour les marchés hospitaliers américains⁴⁷



Vogt et Town ont examiné dix études sur l'effet de la consolidation sur la qualité des services hospitaliers américains et sont parvenus à la conclusion que les résultats globaux révèlent des baisses de qualité lorsque la concentration du marché hospitalier augmente.⁴⁸ Par exemple, Sohn et Rathouz se sont penchés sur les taux de mortalité ajustés en fonction du risque des patients qui ont subi une angioplastie dans 116 hôpitaux californiens en 1995. Ils ont constaté que la mortalité était plus faible dans le cas des patients qui s'étaient rendus dans les hôpitaux confrontés à une concurrence accrue.⁴⁹

Toutefois, de nombreuses études s'accompagnent de mises en garde et précisent notamment qu'il est très difficile de tirer des conclusions définitives quant aux effets de la concentration du marché sur la qualité lorsque les prix et la qualité sont des variables. Ces mises en garde sont illustrées par les résultats contraires auxquels d'autres études sont parvenues. Maeda et LoSasso, par exemple, ont constaté que des

⁴⁷ Cette illustration est tirée du document de travail n° 17208 (2011) du NBER « Competition in Health Care Markets » de Martin Gaynor et Robert Town.

⁴⁸ W. B. Vogt et R. Town, « How Has Hospital Consolidation Affected the Price and Quality of Hospital Care ? », rapport de synthèse de la recherche n° 19, Robert Wood Johnson Foundation (2006).

⁴⁹ M.W. Sohn et P.J. Rathouz, « Competition among Hospitals and Quality of Care: Hospital-Level Analysis », université de Chicago, document non publié (cité dans Gaynor, supra, n. 15). Schneider est parvenu à la même conclusion dans son étude sur les taux de mortalité dans les hôpitaux californiens entre 1997 et 2002. Helen Schneider, « Incorporating Health Care Quality into Health Antitrust Law », 8 BMC Health Services Research 89 (2008).

indices HHI inférieurs n'apportaient que peu d'avantages supplémentaires concernant les soins pour insuffisance cardiaque prodigués à l'hôpital. Ils ont conclu que « la concurrence sur le marché pourrait être un instrument imprécis et pourrait ne pas être l'outil stratégique le mieux adapté pour améliorer la qualité dans les hôpitaux ». ⁵⁰ En effet, Mukamel et al. ont constaté dans leur étude, qui portait également sur des patients californiens, que la concurrence était en réalité corrélée avec une hausse de la mortalité. Contrairement à Sohn et Rathouz, Mukamel et al. comparent les résultats de 1982 et 1989, qui sont les années ayant précédé et suivi l'entrée en vigueur de la contractualisation sélective par les assureurs en Californie. Les auteurs ont émis l'hypothèse que cette contractualisation sélective renforcerait la concurrence par les prix et que les hôpitaux réagiraient en déplaçant des ressources d'activités cliniques importantes sur le plan médical, dont la qualité est difficile à observer, vers des caractéristiques « hôtelières » relativement négligeables (sur le plan médical) (telles que des chambres confortables et attrayantes, etc.), qui sont plus faciles à observer. Les résultats semblent confirmer leurs soupçons, la concurrence étant assurément liée à la mortalité, au travers de la réduction des dépenses cliniques supportées pour les patients. ⁵¹ En outre, Volpp et al. ont comparé les changements enregistrés au niveau des taux de mortalité par crise cardiaque, ajustés en fonction du risque, dans les hôpitaux du New Jersey et de New York avant et après la déréglementation des prix des soins hospitaliers adoptée par le New Jersey. ⁵² Ils ont constaté que la mortalité avait augmenté dans le New Jersey par rapport à New York après la déréglementation. ⁵³

3.2.6.3 Conclusions sur la concurrence et la qualité sur les marchés hospitaliers

Les études empiriques que nous venons de résumer renforcent pour la plupart les prédictions théoriques selon lesquelles la concurrence peut conduire à une meilleure qualité lorsque les prix sont réglementés. Lorsque les prix et la qualité sont déterminés par les marchés, les résultats vont également dans le sens des études théoriques en ce qu'ils sont ambigus ou contradictoires s'agissant des effets sur la qualité.

Comme l'a souligné précédemment l'OCDE, la constatation généralement cohérente selon laquelle la réglementation des prix des services hospitaliers profite à la concurrence par la qualité est toutefois « assez sommaire ». ⁵⁴ Pour autant, nous ne considérons pas que la réglementation des prix dans le secteur hospitalier soit toujours une bonne idée. Elle confie au gouvernement la tâche non seulement de ne pas devoir choisir un prix approprié, mais également de devoir choisir le niveau de qualité optimal, car ces deux facteurs vont nécessairement de pair lorsque les prix sont réglementés. Il est tout à fait possible que, dans certaines circonstances, le marché établisse un rapport qualité/prix sur le plan social plus intéressant que les pouvoirs publics.

S'il ne fait aucun doute qu'une mauvaise qualité des services hospitaliers est peu souhaitable, il est peut-être plus difficile de comprendre comment la situation contraire pourrait poser problème. Comme

⁵⁰ Jared Maeda et Anthony LoSasso, « Effect of Market Competition on Hospital Performance for Heart Failure », 17 *American Journal of Managed Care* 816, 821 (2011).

⁵¹ D. Mukamel, J. Zwanziger et A. Bamezai, « Hospital Competition, Resource Allocation and Quality of Care », 2 *BMC Health Services Research* 10 (2002).

⁵² K. G. Volpp, S. V. Williams, J. Waldfogel, J.H. Silber, J.S. Schwartz & M.V. Pauly, « Market Reform in New Jersey and the Effect on Mortality from Acute Myocardial Infarction », 38 *Health Services Research* 515 (2003).

⁵³ Pour les résumés d'autres études, voir Gaynor, supra, n. 15, p. 21 à 27.

⁵⁴ Note d'information du Secrétariat de l'OCDE (2012) sur la concurrence dans les services hospitaliers, point 60, [DAF/COMP\(2012\)9](http://www.oecd.org/daf/competition/50527122.pdf), disponible à l'adresse suivante : www.oecd.org/daf/competition/50527122.pdf.

l'observe Gaynor, le simple fait de suggérer que les services de soins de santé puissent être de « trop bonne » qualité peut être décourageant. Cela impliquerait, en définitive, que le bien-être social puisse être amélioré en permettant l'augmentation des taux de mortalité.

Or, les concepts économiques qui s'appliquent à cette question valent également pour tout autre problème de répartition des ressources. Nous entendons consacrer des ressources à la réduction de la mortalité des patients jusqu'au point où le bénéfice marginal tiré de la réduction de la mortalité sera compensé par le coût marginal. Cela veut dire que le taux de mortalité optimal sur le plan social, qui sera certainement supérieur à zéro, sera alors atteint. Si cela peut sembler répugnant, il est important de reconnaître que les ressources sont utilisées pour des usages concurrents. Si l'ampleur de la réduction du taux de mortalité chez les patients n'est pas si importante, il vaudrait peut-être mieux consacrer ces ressources à la recherche d'un remède contre le cancer, aux repas scolaires ou à la Marine nationale.⁵⁵

3.2.7 *Les expériences par secteur présentées dans cette section corroborent les études théoriques sur la concurrence et la qualité.*

Sans vouloir laisser entendre que les études examinées dans la présente section sont suffisamment générales pour tirer des conclusions définitives, nous observons que ces études abondent dans le sens des principales observations tirées de la section consacrée aux études théoriques. En d'autres termes, les études empiriques présentées ici parviennent à la conclusion que la concurrence améliore la qualité sur les marchés dont les prix sont réglementés, tout en présentant des résultats contradictoires en ce qui concerne l'effet de la concurrence par la qualité des marchés dont les prix ne sont pas réglementés.

Nous examinons ci-après un exemple empirique d'un autre genre, dans le cadre de plusieurs décisions rendues en vertu du droit de la concurrence pour voir quel rôle les tribunaux et les autorités de concurrence accordent à la qualité lorsqu'elle sert leurs analyses.

4. La qualité dans un exemple d'application du droit de la concurrence

4.1 Les concentrations

Bien qu'il en soit question, au moins brièvement, dans la plupart des lignes directrices relatives aux concentrations, la qualité n'occupe pas une place prépondérante dans la plupart des décisions rendues dans ce domaine. Lorsque tel est cas, c'est que les parties à l'opération envisagée affirment que leur concentration entraînera une amélioration de la qualité. Par ailleurs, la qualité peut être privilégiée si l'autorité de la concurrence estime que la concentration envisagée entraînerait une détérioration de la qualité sur le marché en cause. Le premier cas dont nous faisons état combine les deux situations.

Lorsque Waterstone's Booksellers Ltd (détenue par HMV Group plc) s'est proposée d'acquérir Ottakar's plc, la Commission de la concurrence britannique a dû établir si la fusion de ces deux sociétés de vente au détail de livres constituait une menace grave pour la concurrence.⁵⁶ Waterstone's a fait valoir que la concentration lui permettrait d'être plus compétitive face à la concurrence croissante des grandes chaînes, des supermarchés et des détaillants sur Internet.

Après avoir conclu que le marché pertinent était celui de la vente au détail de livres neufs, la Commission s'est penchée sur les effets de la concurrence aux niveaux local, régional et national. Les parties appliquant toutes deux des politiques tarifaires uniformes au niveau national, la concurrence

⁵⁵ Gaynor, supra, n. 15, p. 3 et 4.

⁵⁶ Commission de la concurrence (Royaume-Uni), HMV Group plc et Ottakar's plc, 12 mai 2006.

moindre par les prix aux niveaux régional et local ne posait pas de problème majeur. De fait, même au niveau national, les effets sur les prix n'étaient pas préoccupants, la Commission ayant constaté que les deux parties se livraient une forte concurrence directe par les prix.

La qualité en revanche posait problème, car la concurrence sur des éléments autres que le prix portait essentiellement sur le catalogue de titres en stock et sur la qualité du service offert en magasin. Les parties ont soutenu que la Commission ne devait pas craindre une baisse de la qualité. Elles ont fait valoir que l'acquisition permettrait d'améliorer la qualité car Waterstone's pourrait ainsi étoffer son catalogue de titres dans les anciens magasins Ottakar.

La Commission a entrepris un examen assez approfondi de la qualité dans le secteur. Elle a commandé une étude pour identifier les facteurs qui revêtaient de l'importance pour les consommateurs. Elle a comparé le catalogue des titres proposés dans différents magasins, les effectifs, le niveau d'expérience du personnel, les heures d'ouverture des magasins, les aménagements et même les séances de dédicaces.

Au final, la Commission est parvenue à la conclusion qu'il n'existait aucune différence systématique et substantielle s'agissant du catalogue de titres ou de la qualité du service entre les points de vente concurrents des deux parties et les points de vente non concurrents. Elle n'avait donc aucune raison de penser que la qualité dans les magasins dépendait de la concurrence directe entre Waterstone's et Ottakar's (lorsque cette concurrence existait déjà). Au final, la Commission a conclu que l'argument des parties selon lequel la qualité se trouverait améliorée du fait de l'acquisition était crédible. Elle a donc validé cette opération.

4.2 Les ententes

4.2.1 Les ententes qui visent à réduire la qualité

Bien que l'immense majorité des ententes identifiées portent sur des accords qui visent à éliminer la concurrence par les prix, les entreprises s'entendent parfois pour réduire la concurrence au niveau de la qualité. Ainsi, les membres d'une entente pourraient convenir de ne pas introduire de nouveaux produits sur le marché ou de ne pas proposer certains services à leurs clients. Autre possibilité, ils pourraient se mettre d'accord pour réduire les horaires d'ouverture de leurs établissements. Les deux exemples ci-après illustrent ce type d'arrangement. Dans les deux cas, les accords ont été jugés contraires au droit de la concurrence en vigueur.

4.2.1.1 Ordre des pharmaciens

L'association pharmaceutique belge (APB) a mis en place une série de règles que ses membres sont supposés respecter, notamment un calendrier indiquant les pharmacies qui devaient rester ouvertes (et, partant, celles qui devaient être fermées) certaines fins de semaine dans différentes régions de Belgique. Après avoir été sanctionnés par l'APB parce qu'ils avaient enfreint les règles en ouvrant leurs officines pendant les fins de semaine où ils n'étaient pas de garde, plusieurs pharmaciens ont déposé plainte auprès du Conseil de la concurrence belge. Le Conseil a estimé que les règles limitant les horaires d'ouverture des pharmacies étaient susceptibles de restreindre la concurrence entre les pharmaciens. L'APB a fait valoir que ces restrictions étaient nécessaires pour garantir la sécurité de l'approvisionnement des clients, car lorsqu'une pharmacie reste ouverte alors qu'elle n'est pas censée être de garde, cela peut susciter une confusion dans l'esprit du public.⁵⁷ Toutefois, le Conseil a établi que les règles relatives aux horaires

⁵⁷ Selon la communication 43 de l'APB, un pharmacien qui n'est pas censé être de garde compromet le bon fonctionnement du service de pharmacie d'urgence en restant ouvert en dehors des horaires d'ouverture normaux.

d'ouverture avaient restreint de manière disproportionnée la concurrence visant à garantir la sécurité de l'approvisionnement des pharmacies. Par conséquent, il a ordonné à l'APB de mettre un terme à l'application des règles en question.

L'APB a introduit un recours auprès de la Cour d'appel de Bruxelles, qui a confirmé la décision du Conseil.⁵⁸ La Cour a souligné que le Conseil avait établi l'absence d'un lien direct entre la « finalité sociale » d'une organisation telle que l'APB et la restriction des horaires d'ouverture. En outre, l'APB n'ayant pas démontré que ces restrictions amélioreraient la distribution des médicaments aux consommateurs, la Cour a rejeté l'argument de l'APB selon lequel ses règles auraient dû déroger aux dispositions, prévues par la loi belge sur la concurrence, relatives aux accords anticoncurrentiels entre concurrents.

4.2.1.2 *Adanim Mortgage Bank, Ltd.*

En Israël, les parties désirant conclure un accord qui restreint la concurrence peuvent soumettre une demande d'autorisation au tribunal antitrust. En 1996, 26 banques ont demandé une autorisation aux fins d'un accord visant à fermer leurs succursales le vendredi. Le tribunal a rejeté la demande en émettant de nombreuses remarques instructives sur le rôle de la qualité dans la politique de concurrence.⁵⁹

La principale question consistait à savoir si l'accord entre les banques relevait de l'intérêt public. Le tribunal a rapidement fait connaître son point de vue, qualifiant cet accord de demande d'« approbation d'une entente ... centrée sur la décision collective (des banques) de fermer leurs succursales le vendredi et donc de réduire la semaine de service au public à cinq jours ». Comme si ce signal n'était pas suffisamment clair, le tribunal a ajouté qu'« il nous est demandé d'examiner un accord en vertu duquel les banques se sont entendues pour fermer leurs succursales le vendredi et ont entrepris de ne pas se faire concurrence pour servir le public en ouvrant les succursales ce jour-là ».⁶⁰

Le tribunal a ensuite démonté méthodiquement les arguments des banques. Tout d'abord, les banques ont minimisé le préjudice de leur proposition pour les consommateurs, en affirmant qu'il n'était pas grave et qu'en tout état de cause, il l'était moins qu'un accord de fixation des prix. Le tribunal a au contraire estimé que le préjudice était grave. Citant de multiples sources, dont Robert Bork et des décisions rendues par la Commission européenne et par les juridictions américaines, le tribunal a expliqué que le fait d'écourter les heures d'ouverture pouvait s'avérer tout aussi préjudiciable qu'une hausse des prix, car les clients considèrent que la commodité d'un service présente une valeur économique. En outre, le préjudice était grave, car l'accord visait à inclure l'intégralité du secteur bancaire, un secteur crucial pour l'économie et qui affecte l'activité économique de tous les citoyens.⁶¹

Les banques ont ensuite avancé que la fermeture du vendredi permettrait d'améliorer l'efficacité en incitant les clients à utiliser les distributeurs automatiques et les services de banque par téléphone au lieu de se tourner vers le personnel des agences bancaires. Le tribunal a néanmoins observé qu'une telle hausse de l'efficacité se ferait au détriment des préférences des consommateurs. Les clients souhaitant entrer en contact direct avec le personnel des agences seraient contraints d'accepter des services bancaires indirects. « La prémisse essentielle pour mesurer le bien-être des consommateurs est que ce bien-être est déterminé par les consommateurs eux-mêmes. Or une telle prémisse ne cadre pas avec une intervention dans les

⁵⁸ *Ordre des Pharmaciens*, décision n° 2007/MR/5, Cour d'appel de Bruxelles, Dix-huitième Chambre, 7 avril 2009.

⁵⁹ *Adanim Mortgage Bank, Ltd. c. Israel Consumer Council*, Antitrust 1393/96 (27 janvier 1997), disponible à l'adresse suivante : <http://eng-archive.antitrust.gov.il/files/87/1393-96.pdf>.

⁶⁰ Ibid. point 1 (soulignement dans l'original).

⁶¹ Ibid. p. 2 et 3.

préférences des consommateurs qui les pousserait à adopter des services qu'ils ne jugent pas acceptables.»⁶² En d'autres termes, le bien-être des consommateurs et tout ce qu'il englobe, y compris la qualité, en termes de commodité et de choix, est prioritaire dans le droit de la concurrence israélien, contrairement à une efficacité fondée exclusivement sur les coûts. En outre, la meilleure façon de persuader les consommateurs d'utiliser de nouveaux services n'est pas de constituer des ententes qui réduisent la qualité en leur imposant des changements non désirés, mais bien de promouvoir les nouveaux services en question jusqu'à leur acceptation.

Dans ce contexte, le concept d'« amélioration de la qualité » signifie satisfaire les véritables préférences des consommateurs, de la manière la plus appropriée et au meilleur prix possible, et non leur imposer des préférences au motif qu'elles seraient moins onéreuses à mettre en œuvre ... L'amélioration de l'efficacité doit s'accompagner d'une amélioration de la qualité des produits, d'une diminution des prix, voire des deux. On pourrait s'interroger sur l'intérêt d'une diminution des prix obtenue sans améliorer l'efficacité de la production, mais en sacrifiant la qualité du produit ... Dans la même veine, les banques peuvent s'entendre pour réduire les jours ou même les horaires d'ouverture dans la mesure où cela ne bouleverserait pas non plus l'étendue du service bancaire (demande) en raison de l'inélasticité de la courbe de la demande, mais réduirait en même temps leurs dépenses.

À l'évidence, les fournisseurs d'autres produits et services, tels que les épiceries, pourraient s'entendre pour réduire leurs horaires d'ouverture, par exemple le soir, et diminuer ainsi leurs dépenses, ce qui leur permettrait même de partager une partie des économies réalisées avec le consommateur. Les compagnies aériennes pourraient décider d'arrêter de servir des repas lors des vols, ce qui leur permettrait de baisser les tarifs, etc. Un tel argument, s'il était accepté, permettrait de créer, de manière illimitée, des ententes sur quasiment tous les marchés. De fait, presque tous les produits actuellement en vente pourraient être meilleur marché si les fabricants pouvaient réduire la qualité.⁶³

Naturellement, si une seule banque avait eu le courage de fermer le vendredi sans obtenir d'abord la promesse de ses concurrents qu'ils feraient de même, elle aurait alors été libre de mettre unilatéralement en œuvre cette décision. Le fait qu'aucune d'entre elles ne se soit engagée dans cette voie laisse supposer que les banques estiment que leurs clients accordent une importance considérable à l'ouverture le vendredi.

4.2.2 *L'argument de la qualité pour justifier les ententes*

Si la qualité est un concept extrêmement subjectif, nul doute que, sur certains marchés, les consommateurs sont prêts à payer plus cher pour une meilleure qualité de service. Les entreprises présentes sur ces marchés créent parfois volontairement des consortiums pour garantir aux clients des produits de qualité - et s'assurer qu'ils sont capable de faire la distinction entre un produit de qualité et un autre de moindre qualité. C'est notamment ce qui s'est produit dans le secteur agricole. Toutefois, dans la mesure où ces consortiums nécessitent un certain degré de coordination entre des membres amenés par ailleurs à se faire concurrence, on peut s'interroger sur l'étendue d'une coopération susceptible d'être mise en œuvre sans infraction à la réglementation sur la concurrence.

⁶² Ibid. p 6.

⁶³ Ibid. D'ailleurs, le tribunal n'ignorait pas que si le préjudice causé au bien-être des consommateurs par cet accord pouvait être mesuré, il pouvait être largement compensé par les économies réalisées par les banques. Les représentants des banques n'ont toutefois pas présenté les données pertinentes (sur les modèles d'utilisation du service bancaire par les clients) demandées par le tribunal et il leur incombait de prouver que les bénéfices compensaient les coûts. Ibid. p. 14 et 15.

Ce type de problème est parfaitement illustré par l'une des affaires analysées par l'AGCM, l'autorité de la concurrence italienne.⁶⁴ En novembre 1995, l'AGCM a engagé une action contre les consortiums pour la protection du Grana Padano et du Parmigiano Reggiano⁶⁵ dans le but de déterminer s'ils avaient restreint la concurrence au moyen d'accords de répartition des marchés et de systèmes de quotas. Fait essentiel dans cette affaire, les consortiums fixaient la quantité totale de fromage à produire chaque année, ainsi que des quotas individuels pour chaque entreprise membre. En outre, chaque consortium appliquait un système imposant des amendes aux fromageries en excédent de production. Pourtant, même si les consortiums ont cherché à mettre en œuvre leurs plans de production respectifs en envoyant des lettres de suivi et en menaçant d'amendes les fromageries qui ne respectaient pas les accords, aucune amende n'a jamais été infligée.

Les deux consortiums ont fait valoir que leurs systèmes de quotas étaient licites et, en tout état de cause, nécessaires pour maintenir les normes de qualité, dont les consommateurs bénéficient directement. Les parties défenderesses ont ainsi soutenu que les quotas devaient bénéficier d'une exemption même s'ils étaient par ailleurs réputés contraires au droit de la concurrence. L'AGCM a toutefois observé que la Cour européenne de justice⁶⁶ et la Commission européenne⁶⁷ avaient déjà confirmé que même si une organisation composée de nombreuses entreprises se voit confier des missions telles que le suivi de la qualité des produits, elle reste soumise au droit de la concurrence lorsque ses activités ont pour objet de restreindre la concurrence.

À titre subsidiaire, le consortium du Parmigiano Reggiano a demandé une dérogation au motif que le système de quotas lui permettait de contrôler la qualité de la production plus efficacement et pour un coût acceptable, contribuant ainsi à améliorer la qualité du fromage. Le consortium a soutenu que l'objectif de qualité était moins onéreux à atteindre en s'appuyant sur le système des quotas qu'en contrôlant la qualité du lait utilisé. Il a également fait valoir que son système favorisait aussi la compétitivité des sociétés italiennes à l'étranger, en contribuant à maintenir et à améliorer un haut niveau de réputation.

De même, le consortium pour la protection du Grana Padano a souligné le lien entre les quotas et la qualité, affirmant que les quotas étaient le seul outil capable de garantir la qualité et la bonne réputation du fromage Grana Padano. Il a expliqué que la quantité de fromage pouvant être produite par chaque fromagerie reposait exclusivement sur la capacité de chacune d'entre elles, c'est-à-dire sur la quantité de matière première⁶⁸ disponible et sur sa capacité à respecter pleinement les règles du consortium.

⁶⁴ AGCM, Provvedimento n° 4352 (I168), Consorzio Parmigiano Reggiano (1996). Voir également *National Society of Professional Engineers/United States*, 435 U.S. 679 (1978) (où la Cour suprême des États-Unis a rejeté l'argument invoqué par une association d'ingénieurs professionnels selon lequel l'une de ses règles éthiques interdisant à ses membres de présenter des offres concurrentes pour des services d'ingénierie n'était pas contraire au Sherman Act, au motif que cette règle minimisait le risque que la pression exercée par la concurrence conduise à un ouvrage de moindre qualité, menaçant de fait la sécurité publique).

⁶⁵ Le Consortium du Parmigiano Reggiano regroupe environ 600 fromageries, tandis que celui du Grana Padano compte environ 300 producteurs. Dans les deux cas, les producteurs doivent être installés dans des provinces bien spécifiques. Plus de 90 % du fromage « grana » consommé en Italie provient de laiteries qui sont membres de ces deux consortiums.

⁶⁶ Affaires jointes 96/102, 96/104, 96/105, 96/108 et 110/82, *NV IAZ International Belgique et autres/Commission*, Rec. 1983, p. 03369, point 20.

⁶⁷ Décision de la Commission du 26 juillet 1976 relative à une procédure au titre de l'article 85 du traité CEE, Affaire IV/28.980, Pabst et Richarz/BNIA.

⁶⁸ La production du fromage en question nécessite que le lait possède également des caractéristiques spécifiques et soit produit conformément aux normes établies par le consortium. Pour protéger la qualité du

Pour finir, le consortium a affirmé qu'un cycle économique propre à ce secteur avait rendu le système des quotas nécessaire. Soutenant que le marché en cause était soumis à des cycles d'environ cinq ans d'expansion puis de contraction de la demande, le consortium a fait valoir que les producteurs ne tiennent pas compte du délai entre la production et la mise sur le marché du fromage. Ils ont dès lors tendance à augmenter la production durant les premières phases du cycle, lorsque les prix sont à la hausse. Étant donné que les producteurs peuvent chercher à stimuler la production lorsque les prix augmentent en s'approvisionnant en lait en dehors des canaux habituels, il existe un risque qu'un fromage de moins bonne qualité soit mis sur le marché. Selon le consortium, les quotas ont éliminé ce risque.

L'AGCM a constaté que les plans de production des deux consortiums n'étaient pas obligatoires au titre des dispositions législatives nationales ou communautaires et qu'ils restreignaient la concurrence. Elle a souligné que les règles applicables aux produits laitiers ainsi que les récentes réglementations sur les appellations d'origine protégées favorisaient une meilleure surveillance de la qualité que les restrictions quantitatives.

L'AGCM a estimé que les systèmes de quotas constituaient des accords ayant pour objet de restreindre la concurrence entre les membres. L'autorité a précisé que son enquête avait révélé que les systèmes de quotas avaient été mis en œuvre sur la base de données historiques, et que les références à la quantité de matière première de qualité disponible étaient dénuées de pertinence. L'argument des consortiums selon lequel l'octroi de quotas plus élevés était soumis à la vérification de la qualité du lait a été rejeté, les preuves recueillies ayant démontré qu'ils n'avaient pas systématiquement tenu compte de la qualité du lait disponible.

Les consortiums ont finalement convenu de se contenter d'enregistrer les informations envoyées par les différentes fromageries, après avoir établi leur capacité à produire du fromage de qualité, et de fixer des objectifs de production indicatifs non obligatoires. En outre, chaque producteur ne serait plus limité par ses niveaux historiques de production.

4.3 L'argument de la qualité pour justifier le recours aux ventes liées

Plusieurs arguments liés à la qualité ont été invoqués pour justifier la vente de produits ou de services après-vente liée à un autre produit. L'argument habituel est que la vente liée est nécessaire afin de contrôler la qualité, au motif que les produits ou services de fournisseurs tiers seraient de qualité inférieure et pourraient nuire au fonctionnement - et donc ternir l'image - du produit liant, en particulier si les acheteurs sont incapables de déterminer si ce mauvais fonctionnement est causé par le produit liant ou par le produit/service secondaire.

C'est là un vieil argument qui tient rarement devant un tribunal. Dans l'affaire *IBM contre États-Unis* par exemple, IBM a soutenu que le fait de lier la vente de ses cartes perforées à la location de ses tabulatrices n'était pas illégal, car on ne pouvait pas avoir la certitude que les cartes de fournisseurs indépendants seraient conformes aux normes de taille et de propreté indispensables au bon fonctionnement des machines. Pour autant, les clients ne pouvaient pas nécessairement attribuer le mauvais fonctionnement de la machine à des cartes perforées défectueuses. Par conséquent, selon la société, l'objectif de la vente liée était de fidéliser la clientèle d'IBM et non de nuire à la concurrence. La Cour suprême a rejeté sommairement cet argument, en se contentant de citer le texte pertinent de la loi Clayton, qui interdit la location de machines à la condition que les preneurs n'utilisent pas les fournitures d'un concurrent, lorsque cette condition peut avoir pour effet de réduire sensiblement la concurrence ou tend à créer un monopole. La Cour a ensuite conclu que la vente liée imposée par IBM était conforme à l'interdiction prévue par la

produit, le consortium est dès lors tenu de vérifier au préalable la qualité de la matière première et son origine.

loi, observant qu'IBM n'avait pas même fait valoir que d'autres fournisseurs ne seraient pas en mesure de satisfaire aux spécifications nécessaires et qu'en tout état de cause, elle aurait pu conditionner la location de ses machines à l'utilisation de cartes conformes à ses spécifications.⁶⁹

Une autre justification qualitative possible de la vente liée est le recours à des produits ou services tiers de moindre qualité, qui imposerait des coûts financiers au vendeur du produit liant. Tel serait le cas, par exemple, si un piètre rendement, dû à l'utilisation de produits ou de services complémentaires médiocres, déclençait une prise en charge sous garantie auprès du vendeur du produit liant. Selon Iacobucci, les conditions suivantes doivent être réunies pour qu'une telle démarche soit justifiée :

- les produits liants et liés sont utilisés conjointement. ;
- la qualité des produits liants et liés affecte leur rendement conjoint ;
- le vendeur du produit liant supporte au moins une partie des coûts liés au faible rendement conjoint du produit (par exemple en cas de garantie) ;
- les acheteurs seraient en mesure (pour la vente liée) de choisir un produit concurrent à la place du produit lié imposé par le vendeur du produit liant⁷⁰.

Dès lors, selon Iacobucci, les acheteurs sont plus susceptibles d'acheter des produits complémentaires de qualité sous-optimale car le risque lié au rendement serait ainsi, au moins partiellement, supporté par le vendeur du produit lié. Les vendeurs sensés de produits primaires réagiront en majorant leurs prix pour garantir un rendement suffisant. « Étant donné que la hausse des prix résulte d'un choix inefficace de produits liés de piètre qualité, l'acheteur a peut-être tout intérêt à n'acheter que des produits liés de qualité ». ⁷¹

Le mot « inefficace » est toutefois lourd de sens, car Iacobucci semble supposer que si le vendeur du bien primaire est autorisé à lier ses produits complémentaires, il augmentera ses prix en raison d'un choix « efficace » de produits complémentaires de bonne qualité. Mais que se passera-t-il dans le cas contraire ? De fait, que se passera-t-il s'il porte le prix de ses produits complémentaires à un niveau monopolistique uniquement parce qu'il a la possibilité de les lier au bien primaire ?

En outre, Iacobucci soutient que cette justification imposée par les coûts diffère de la première susmentionnée, celle-ci dépendant de l'incapacité des acheteurs à déterminer si le faible rendement est dû au produit primaire ou au produit complémentaire. Néanmoins, si tel est le cas et si les clients peuvent déterminer que le faible rendement provient du produit complémentaire, pour éviter les coûts liés à l'utilisation de produits complémentaires de piètre qualité, le vendeur du produit primaire devra simplement conditionner sa garantie à l'utilisation de produits complémentaires conformes à ses propres spécifications. C'est là la même solution alternative à la vente liée relevée par la Cour suprême il y a 77 ans lorsqu'elle a tenu *IBM* pour responsable d'une vente liée.

⁶⁹ *IBM Corp/États-Unis*, 298 U.S. 131 (1936) ; cf. *Eastman Kodak Co./Image Technical Services, Inc.*, 504 U.S. 451 (1992) (affaire de vente liée de services après-vente dans laquelle il a été prouvé que certains clients avaient trouvé un service de prestataire indépendant de meilleure qualité que celui de Kodak).

⁷⁰ Edward Iacobucci, « Tying as Quality Control: A Legal and Economic Analysis », 32 *Journal of Legal Studies* 435, 447-48 (2003).

⁷¹ Ibid. p. 448.

Par ailleurs, si la justification liée à la « confusion de l'acheteur » fonctionne parfois, la distinction opérée par Iacobucci entre cette logique et la logique des « coûts imposés » prend parfois tout son sens. Cela a été le cas dans l'affaire *États-Unis contre Jerrold Electronics*, dans une décision confirmée par la Cour suprême.⁷² Dans cette affaire, le tribunal a accepté l'argument de la confusion de l'acheteur en jugeant que la vente liée effectuée par la partie défenderesse se justifiait temporairement par le fait que les clients ne pouvaient pas établir si le faible rendement était dû au produit de Jerrold ou aux produits et services après-vente de piètre qualité de fournisseurs indépendants. Néanmoins, la justification liée aux coûts imposés aurait pu s'appliquer également, ce qui aurait sans aucun doute changé l'issue du procès.

Jerrold était une entreprise pionnière dans le développement et l'installation d'antennes de télévision au début des années 1950. Elle imposait aux acheteurs d'antennes d'acquiescer des équipements complémentaires à sa marque et de signer des contrats d'entretien de cinq ans. Les autorités ont considéré que la pratique de vente liée de Jerrold était contraire à l'article premier du Sherman Act et à l'article 3 du Clayton Act.

S'appuyant sur son expérience dans la vente d'autres produits, Jerrold a soutenu que les fournisseurs de services indépendants avaient tendance à proposer des services de piètre qualité. Or, le secteur des antennes n'en était alors qu'à ses débuts et cette affirmation restait par conséquent à démontrer. En outre, les clients ne pouvaient pas savoir si les dysfonctionnements étaient dus aux antennes elles-mêmes ou à la mauvaise qualité des services d'installation et d'entretien ou des équipements complémentaires. La vente liée était par conséquent nécessaire pour protéger à la fois la réputation de Jerrold et le développement des marchés des antennes et de la télédiffusion. Dans cette affaire, le tribunal a fait droit à ces arguments, du moins pour les premières années d'existence du marché.

Iacobucci observe que la confusion de l'acheteur pourrait toutefois ne pas avoir été la seule justification valable dans cette affaire. La décision reste vague sur ce point, mais Jerrold pourrait avoir supporté une partie des coûts des services et des équipements complémentaires de piètre qualité. Le service de piètre qualité pourrait avoir déclenché les clauses de garantie associées à l'antenne, tandis que les équipements défectueux pourraient avoir activé les clauses de garanties ou les obligations qui s'imposent à Jerrold dans le cadre de son contrat d'entretien. On pourrait penser que ce problème d'équipements de piètre qualité aurait pu être résolu en conditionnant la garantie et les obligations de service de Jerrold à l'utilisation de produits indépendants conformes aux spécifications fixées par cette société. Or, il est parfois malaisé de décrire de manière détaillée dans un cahier des charges les caractéristiques d'un service tiers correct. Par conséquent, la justification des coûts imposés aurait pu prendre tout son sens dans cette affaire.

Cette distinction est importante car la confusion de l'acheteur et les coûts imposés constituent deux justifications aux durées de validité différentes. La logique de la confusion de l'acheteur perd progressivement de sa légitimité au fil du temps et à mesure que se renforce la réputation de Jerrold. En revanche, la logique des coûts imposés conserve toute sa validité (en ce qui concerne les services d'installation et d'entretien assurés par des tiers) au fil du temps, tant que Jerrold continue à assortir l'achat d'antennes de garanties.

4.4 *Comment les entreprises intégrées verticalement minent la qualité des services proposés par les concurrents en aval*

Certains marchés, comme celui des services de télécommunications fixes, se caractérisent par la présence d'un opérateur historique dont dépendent les concurrents en aval pour accéder au réseau. Cette situation offre la possibilité à ces opérateurs historiques intégrés verticalement de nuire à leurs concurrents

⁷² *États-Unis/Jerrold Electronics Corp.*, 187 F. Supp. 545 (E.D. Pa. 1960), décision rendue per curiam, 365 U.S. 567 (1961).

en aval en dégradant la qualité des services que ces concurrents peuvent proposer. Dès lors, il revient à un régulateur ou à une autorité de la concurrence de déterminer si la qualité a effectivement été dégradée ou non.

Par exemple, en décembre 2007, l'autorité polonaise de concurrence et de protection des consommateurs (l'UOKiK) a infligé une amende de 75 millions PLN à Telekomunikacja Polska (TPSA) pour avoir adopté un comportement discriminatoire à l'égard ses concurrents sur le marché des services d'accès à Internet. L'UOKiK a constaté que TPSA avait réduit la qualité de certains services de concurrents en aval et, dans certains cas, les avait privés de leur capacité à transférer les données.⁷³

La procédure a été déclenchée à la suite de nombreuses plaintes déposées en 2004 auprès de l'UOKiK par des opérateurs de télécommunications polonais. D'après ces derniers, TPSA cherchait à priver les utilisateurs finals de l'accès aux informations stockées sur les réseaux d'opérateurs ayant acquis des services d'accès au réseau auprès d'opérateurs étrangers et non auprès de TPSA.⁷⁴ Pour vérifier le bien-fondé de telles affirmations, l'UOKiK a procédé à des contrôles dans les locaux de l'opérateur historique qui ont confirmé que la pratique alléguée pouvait avoir eu lieu.

Le marché en cause a été défini comme celui de l'accès à Internet par les utilisateurs finals connectés aux réseaux de télécommunications publics. Pour fournir des services de détail sur le marché en cause, les opérateurs de télécommunications polonais avaient la possibilité de se procurer un accès directement auprès de TPSA ou indirectement par l'intermédiaire d'opérateurs étrangers qui avaient déjà conclu des accords d'accès avec TPSA, à savoir France Telecom ou Telia. L'autorité de concurrence polonaise a constaté que TPSA avait dégradé de façon sélective le trafic IP émanant des réseaux d'opérateurs polonais accédant à son réseau par le biais d'une liaison avec des opérateurs étrangers. Lorsqu'il détectait un tel trafic, le routeur de TPSA réduisait la qualité du trafic ou empêchait totalement la transmission de données.

La conclusion de contrats avec des opérateurs étrangers était très intéressante sur le plan commercial pour les opérateurs polonais, car les prix facturés par France Telecom et Telia étaient bien inférieurs à ceux de l'opérateur historique polonais. En principe, le service obtenu aurait dû être identique à celui offert par TPSA. Or, en raison du comportement discriminatoire de TPSA, pour offrir à leurs clients la qualité d'accès à Internet attendue, les opérateurs polonais ont été contraints de résilier leurs contrats avec les opérateurs étrangers et de contracter les mêmes services auprès de TPSA à des tarifs bien plus élevés.⁷⁵ Par conséquent, les opérateurs polonais qui cherchaient à améliorer leur efficacité et à offrir à leurs clients la même qualité de service à des tarifs inférieurs en concluant des contrats avec France Telecom ou Telia n'ont pas été en mesure de rivaliser avec TPSA ou avec d'autres opérateurs polonais restés fidèles à TPSA.

⁷³ Prezes Urzędu Ochrony Konkurencji i Konsumentów, décision n° DOK-98/07 (20 décembre 2007).

⁷⁴ Pour comprendre la nature de la pratique de TPSA, il faut tout d'abord comprendre l'architecture du réseau. L'internet fonctionne comme un maillage de nombreux réseaux de télécommunications interconnectés et gérés par différents opérateurs de réseau intervenant à différents niveaux. Au niveau inférieur se trouvent des réseaux de petite taille administrés par des fournisseurs d'accès internet (FAI) locaux. Pour fournir aux utilisateurs l'accès aux données contenues dans les réseaux d'autres régions, pays et continents, les réseaux locaux doivent être connectés à des réseaux de plus grande taille. Cet accès est assuré par des fournisseurs de services Internet dits « de niveau 2 », qui administrent les réseaux régionaux (tels que TPSA, France Telecom ou Telia). Enfin, les réseaux régionaux doivent se connecter les uns aux autres pour offrir un accès mondial.

⁷⁵ Le différentiel entre les prix pratiqués par TPSA et ceux pratiqués par France Telecom et Telia, jugé important par l'UOKiK, est inconnu, ce dernier appliquant aux informations tarifaires un traitement confidentiel. Prezes Urzędu Ochrony, supra, n. 74, points 168-178.

Si la dégradation de la qualité de service est au cœur du comportement anticoncurrentiel identifié par l'UOKiK, la décision ne précise pas ce qu'on entend par qualité du trafic, ni comment celle-ci est mesurée. Il est possible que l'autorité se soit contentée de prouver l'existence d'une discrimination. À l'évidence, l'UOKiK avait besoin d'informations spécifiques, qu'elle a obtenues auprès d'un expert désigné. L'expert a été invité à déterminer si la configuration des routeurs de TPSA pouvait dégrader le trafic IP. Néanmoins, l'ampleur de cette dégradation n'est pas clairement connue, de même que le niveau minimal de dégradation réputé nécessaire par l'UOKiK pour constituer une infraction à la concurrence.

4.5 *La question de la qualité dans les enquêtes de marché*

Dans certains pays, les autorités de concurrence mènent parfois des enquêtes de marché au cours desquelles elles analysent les secteurs dont certaines caractéristiques peuvent entraver la concurrence. Ces enquêtes se concentrent habituellement sur des caractéristiques et des pratiques qui ont cours dans l'ensemble du secteur et non sur le comportement d'une entreprise en particulier. Parfois, la question de la qualité des produits ou des services sur un marché devient un élément essentiel de ces enquêtes.

La Commission de la concurrence du Royaume-Uni a mené une enquête de ce genre dans le secteur des épicerie de détail en 2006⁷⁶, après que l'Office of Fair Trading (OFT) a décidé de diligenter une enquête sur la vente de produits alimentaires par les détaillants.⁷⁷ La décision de l'OFT s'appuyait sur des indices selon lesquels même si les consommateurs avaient dans l'ensemble bénéficié ces dernières années de prix en baisse, d'un plus large choix de produits et de meilleurs services, il est possible qu'ils aient été lésés par d'autres évolutions du marché susceptibles d'avoir faussé la concurrence.

Aux fins d'apprécier l'incidence de ces évolutions du marché sur les consommateurs, l'OFT a analysé les prix, la qualité, l'offre et les services. L'Office a relevé des « indices démontrant que les consommateurs pourraient de plus en plus privilégier la qualité du produit à la seule concurrence par les prix », qui « semblent avoir bénéficié à certains acteurs de niche, notamment les magasins indépendants ».⁷⁸ L'OFT a également souligné que « certaines personnes ayant répondu à l'enquête estiment que l'OFT devrait tenir compte de questions plus vastes comme la qualité et l'intérêt sur le plan de la santé des produits alimentaires vendus dans les supermarchés ». L'OFT n'a pas cherché à mesurer ces éléments. De manière générale, tant que la concurrence offre aux consommateurs le choix entre différents types de produits alimentaires, l'OFT considère que les questions liées à la qualité nutritionnelle et sanitaire des aliments ne relèvent pas de sa compétence d'autorité chargée de la concurrence.⁷⁹ Une telle position souligne l'une des difficultés inhérentes à l'examen de la qualité dans les affaires touchant à des pratiques restrictives. Il est parfaitement possible qu'une analyse globale de la qualité obligerait l'autorité de concurrence à prendre en compte des problèmes qui n'ont rien à voir avec la concurrence. Faire la distinction entre les aspects qualitatifs qui relèvent de la concurrence et ceux qui n'en relèvent pas complique un peu plus la difficulté initiale que l'on associe à la subjectivité de la notion de qualité pour un produit/service donné.

⁷⁶ Competition Commission (2008), « The supply of groceries in the UK market investigation », disponible à l'adresse suivante : http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/rep_pub/reports/2008/fulltext/538.pdf.

⁷⁷ OFT (2006), « The Grocery Market: The OFT's reasons for making a reference to the Competition Commission », OFT 845, disponible à l'adresse suivante : http://www.of.gov.uk/shared_of/reports/comp_policy/oft845.pdf

⁷⁸ Ibid. p. 4.6.

⁷⁹ Ibid. p. 4.8.

Dans son rapport, la Commission de la concurrence observe qu'elle est tenue, en vertu de la loi sur l'entreprise, de prendre en compte le prix, la qualité, le choix et l'innovation. Elle explique ensuite que dans le commerce des produits alimentaires, le choix peut aussi bien désigner le choix d'une gamme de produits dans un magasin que le choix entre plusieurs points de vente.⁸⁰ Aucune explication de ce type n'a été fournie en ce qui concerne la qualité. Toutefois, lorsqu'elle aborde sa méthode de définition du marché en cause, la Commission explique que dans le commerce de produits alimentaires, une substitution du côté de la demande peut avoir lieu à la suite d'une modification de prix ou de facteurs autres que le prix qui font l'objet d'une concurrence entre les magasins, comme la variété des produits, la qualité et le service. Tout en affirmant tenir compte à la fois des prix et d'autres facteurs dans son analyse de la substitution du côté de la demande et de l'offre, la Commission reconnaît que l'application d'un critère monopolistique hypothétique à des facteurs autres que le prix n'est pas chose aisée. En particulier, elle relève que « même si la modification de facteurs extérieurs aux prix met en évidence la substitution du côté de la demande et, partant, le niveau de concurrence entre les entreprises, il est plus difficile d'apprécier l'incidence d'une modification de facteurs non liés aux prix sur la rentabilité du fournisseur ».⁸¹

La Commission a conclu que les épiceries se distinguaient par de nombreux facteurs. Plutôt que d'analyser les changements intervenus pour chaque aspect de la totalité de l'offre commerciale, elle a raisonnablement limité son examen aux modifications de prix, de gamme et de service.⁸² Le rapport renvoie néanmoins à la qualité des produits (par exemple à leur fraîcheur), mais également à la qualité du service en magasin, sans fournir une grille systématique d'évaluation de la qualité. Dans son étude, Matsa, par exemple, indique que la qualité des produits de détail englobe la propreté du magasin, le temps d'attente en caisse, la courtoisie du personnel et la richesse de l'assortiment de produits.⁸³

4.6 *Restrictions verticales*

Les restrictions verticales, telles que les prix de revente imposés et l'attribution de territoires exclusifs, peuvent conduire à des hausses de prix inhabituelles, mais présentent également l'avantage d'améliorer la qualité pour le consommateur. Par conséquent, la seule hausse des prix ne rend pas toujours compte de la complexité de la situation. L'argument d'une amélioration de la qualité peut-il justifier des restrictions verticales?

Le Comité de la concurrence a déjà eu ce débat lors de tables rondes consacrées spécifiquement aux restrictions verticales. Il est donc inutile d'y revenir une fois de plus.⁸⁴ L'essentiel est que les considérations

⁸⁰ Commission de la concurrence, supra, n. 77, point 2.17.

⁸¹ Ibid. p. 48 n.2.

⁸² Pour évaluer la mesure dans laquelle certains aspects de l'offre en magasin varient selon les marchés locaux, du fait des conditions de concurrence, la Commission a examiné deux études : l'une soumise par Tesco, l'autre par GfK, une société d'études de marché. L'étude présentée par GfK a mesuré les variations de 18 éléments individuels de l'offre au détail dans des magasins d'une superficie supérieure à 1 400 mètres carrés. La qualité, par exemple, a été appréciée en fonction du nombre d'articles abîmés (par exemple un emballage ouvert) ou ayant dépassé (ou étant proche de) la date de péremption. La Commission a toutefois émis des réserves sur le postulat des deux études, au motif que « de nombreux aspects de l'offre au détail spécifique à un magasin sont immatériels et sont dépourvus de critères de mesure identifiables permettant d'apprécier leur variation d'un magasin à un autre » (point 6.51.). Elle a également reconnu qu'« il est extrêmement difficile de mesurer correctement la qualité et le service » (p. 116, n°1.)

⁸³ Matsa, supra, n. 38.

⁸⁴ Voir OCDE, Restrictions verticales en matière de vente en ligne (à paraître 2013) (sera disponible à l'adresse suivante : www.oecd.org/daf/competition/roundtables.htm) ; OCDE, Resale Price Maintenance (2008), disponible à l'adresse suivante : <http://www.oecd.org/daf/competition/43835526.pdf>.

relatives à l'effet des restrictions verticales sur la qualité ont conduit à un assouplissement de la norme juridique applicable dans plusieurs pays de l'OCDE. En d'autres termes, elles ont permis, dans certains pays, d'évoluer d'une situation d'illégalité vers la règle de raison.

5. Conclusion

La présente note montre que si la qualité constitue une préoccupation majeure de la politique de concurrence, elle reste un concept difficile à cerner et à mesurer. Elle recouvre différentes notions selon les personnes et n'est pas toujours quantifiable, contrairement aux prix et aux coûts.

La théorie microéconomique n'aide guère les pouvoirs publics ou les juges à comprendre comment les variations de niveau de concurrence sur un marché peuvent affecter la qualité. À l'exception des marchés aux prix réglementés et aux multiples acteurs, on ne saurait prédire en toute confiance quelle sera l'évolution de la qualité en cas d'affaiblissement ou d'intensification de la concurrence. Par conséquent, pour comprendre l'effet de la concurrence par la qualité, il est généralement nécessaire de recourir à des études empiriques conçues pour chaque marché.

Les études empiriques que nous avons examinées corroborent les principales conclusions tirées de la partie théorique. Autrement dit, il ressort de ces études que la concurrence améliore la qualité sur les marchés dont les prix sont réglementés, tout en produisant des résultats contradictoires en ce qui concerne l'effet de la concurrence par la qualité au sein de marchés dont les prix ne sont pas réglementés.

Trouver des décisions d'autorités de la concurrence et de justice qui accordent à la question de la qualité un rôle prédominant n'a pas été chose facile. Cela reflète probablement la difficulté à définir et à mesurer une variable aussi multidimensionnelle et subjective. Cela signifie peut-être également que les pouvoirs publics et les tribunaux estiment suffisant de privilégier, dans la quasi-totalité des cas, les effets sur les prix. Pour les rares décisions qui examinent la qualité de manière approfondie, nous avons pu mettre en évidence un traitement qualitatif et non quantitatif. Pour autant, il ne faudrait pas en déduire que la qualité est moins importante que les prix et les coûts. De fait, de nombreuses décisions qui s'intéressent aux effets sur les prix ne contiennent pas non plus d'analyse quantitative. Et comme l'a observé le tribunal antitrust d'Israël dans *Adanim Mortgage*, une baisse de la qualité peut être tout aussi préjudiciable au bien-être des consommateurs qu'une hausse des prix.

Pour mettre davantage l'accent sur la qualité, les autorités de la concurrence doivent être prêtes à mener un travail empirique spécifique aux marchés. Les théories sur la concurrence et la qualité ne suffiront pas à donner une vision complète des effets de la qualité sur la plupart des marchés. Si elles sont toutefois prêtes à mener ce travail empirique, lesdites autorités découvriront peut-être que l'analyse des effets concurrentiels sur la qualité est une solution intéressante lorsque l'analyse des effets sur les prix n'est pas pertinente ou peu concluante.

COMPTE RENDU DE LA DISCUSSION

Par le Secrétariat

Le Président (M. Frédéric Jenny) ouvre la table ronde sur le rôle et la mesure de la qualité dans le cadre de l'analyse de la concurrence en soulignant la difficulté et la nouveauté de ce thème. Bien que la qualité soit souvent un aspect déterminant de la concurrence, nombre d'autorités ne disposent pas d'un cadre général qui permettrait d'évaluer l'impact de la qualité comme facteur à prendre en compte lors de l'analyse de la concurrence. L'insuffisance relative des expériences pratiques en la matière transparaît dans le nombre relativement faible de contributions écrites soumises par les participants à la table ronde. Ainsi, l'un des principaux objectifs de la table ronde est d'aider les autorités de la concurrence à définir un cadre applicable et approprié au moyen duquel il serait possible de traiter les questions de qualité dans le cadre des activités de mise en œuvre du droit de la concurrence, à la fois grâce aux exposés présentés par des experts et aux contributions orales des délégués des pays membres.

Le débat s'ouvre sur une synthèse de la note de synthèse préparée par le Secrétariat de l'OCDE, communiquée par M. Jeremy West (OCDE) et qu'il a rédigée en collaboration avec Mme Anna Pisarkiewicz. Les préoccupations liées à la qualité sont souvent soulevées dans le cadre de la politique de la concurrence du fait qu'en principe tout au moins, une baisse de qualité du produit (sans ajustement adéquat des prix) peut s'avérer tout aussi préjudiciable qu'une augmentation des prix pour le bien-être des consommateurs. La qualité est cependant un élément pluridimensionnel et souvent subjectif ; il est par conséquent beaucoup plus difficile de tenir compte de ce facteur que des prix lors d'une analyse de la concurrence. Ainsi, pour mesurer la qualité des traitements de chimiothérapie, certains patients privilégieront peut-être l'efficacité d'un médicament tandis que d'autres accorderont plus d'importance au type d'effets qu'aura le médicament sur leur qualité de vie. La « différenciation verticale » correspond aux caractéristiques d'un produit qui sont souhaitables selon l'ensemble des consommateurs, tandis que la « différenciation horizontale » désigne les critères de qualité qui ne sont pas recherchés par tous les consommateurs. Pour utile qu'elle soit, cette distinction n'est pas pour autant irréfutable. Ainsi, les facteurs de différenciation verticale seront classés différemment selon les consommateurs, tandis que ces derniers peuvent ne pas être d'accord avec l'idée selon laquelle les facteurs de différenciation horizontale sont des éléments qualitatifs constitutifs d'un produit. En pratique, ces ambiguïtés compliquent fortement la mesure et l'analyse de la qualité lors d'une évaluation d'impact sur la concurrence.

Le rôle que devrait jouer la qualité des produits lors de la définition du marché constitue un aspect intéressant du débat sur la qualité. Ainsi, Hartman *et al*¹ ont proposé l'adoption d'un test SSNDQ (*small but significant non-transitory decrease in quality*) – critère de la baisse limitée mais significative et non transitoire de la qualité – sur les marchés où se produit une évolution technologique rapide, au lieu du test SSNIP généralement utilisé qui se concentre sur les prix. Il importe de se rappeler que le test SSNIP est souvent appliqué de manière globale plutôt que mécanique et, par conséquent, un test SSNDQ pourrait être appliqué de la même manière pour fournir aux autorités de la concurrence un certain type d'indications informelles sur le rôle que joue la qualité sur un marché.

¹ Raymond Hartman, David Teece, Will Mitchell et Thomas Jorde, « Assessing Market Power in Regimes of Rapid Technological Change » *2 Industrial and Corporate Change* 317 (1993).

L'incidence de la concurrence sur la qualité est une question qui est également à la fois très pertinente, mais aussi quelque peu épineuse. La théorie économique n'apporte que peu de réponses catégoriques, même si les économistes s'accordent généralement à dire que, si les prix sont réglementés et fixés à un niveau supérieur à celui du coût marginal, les participants au marché augmenteront les dépenses relatives à la qualité et au marketing jusqu'à ce que leurs bénéfices excédentaires soient absorbés. Cela met en évidence le lien qui existe probablement entre la fixation des prix réglementés et les niveaux de qualité, ainsi que le bien-fondé potentiel du maintien de plusieurs niveaux de qualité à différents prix-repères sur le marché. Cela soulève également la question de savoir s'il peut y avoir « trop » de qualité en tant que telle. Les données empiriques disponibles montrent que, selon les conditions spécifiques du marché, le renforcement de la concurrence peut avoir des effets aussi bien positifs que négatifs sur la qualité. La note de synthèse évoque également des types d'affaires spécifiques, notamment des affaires d'entente et de fusion, dans lesquelles des arguments portant sur la qualité sont parfois être soulevés. Un exemple intéressant venu d'Israël concerne une entente visant à détériorer la qualité des services conclue entre des concurrents qui s'étaient mis d'accord pour ne pas ouvrir leurs commerces un jour donné de la semaine, ce qu'un tribunal a jugé préjudiciable pour les consommateurs.

Le Président indique que les débats de la table ronde adopteront une approche similaire à celle de la note de synthèse, en se concentrant dans un premier temps sur des considérations d'ordre général liées à la qualité et en examinant dans un second temps des questions spécifiques qui peuvent se poser. La parole est ensuite donnée à M. Marc Ivaldi, de la Toulouse School of Economics, qui commence par faire remarquer les progrès non négligeables qui ont été accomplis ces dernières années dans le domaine de l'économétrie pour mesurer la qualité. Ces techniques demeurent pour l'heure cantonnées à la recherche universitaire, mais il est probable que ces modèles et ces idées auront une application pratique à l'avenir. M. Ivaldi estime qu'il est à peu près impossible de définir un produit sans déterminer ses aspects qualitatifs et, réciproquement, qu'il est tout aussi compliqué d'identifier ces aspects sans définir en premier lieu le produit concerné. À cet égard, on pourrait définir la qualité comme la/les valeur(s) ou flux de services que les consommateurs tirent d'un produit. Ainsi, alors que l'électricité semble être un produit homogène, il existe des différences en termes de capacité, de fiabilité du service, du nombre de distributeurs et des conditions tarifaires disponibles. Bien qu'il soit courant en analyse économique de faire une distinction entre différenciation verticale et différenciation horizontale, il serait peut-être plus adapté de faire la part entre les caractéristiques de biens et services qui peuvent être mesurées physiquement (comme le poids et la vitesse) et celles qui relèvent des perceptions subjectives des consommateurs. Qui plus est, certains aspects d'un produit (tel que le risque inhérent à un produit financier donné) peuvent s'avérer très difficiles à mesurer en pratique d'après des caractéristiques observées (dans l'exemple du produit financier, du fait cela dépendrait du degré d'aversion au risque des consommateurs).

Tous ces aspects qualitatifs peuvent se répercuter sur la définition du marché. Néanmoins, dans une analyse classique de la concurrence, il y a un risque que la définition du marché détermine le prix de référence, ce qui peut avoir des répercussions sur la définition du produit. Sur ce point, M. Ivaldi évoque une étude consacrée au marché des ordinateurs familiaux à la fin des années 90 qui a fait ressortir dans quelle mesure les caractéristiques d'un produit peuvent évoluer et s'adapter aux circonstances et aux exigences divergentes du marché. En conséquence, l'analyse économique doit tenir compte de la stratégie de conception des produits suivie par les entreprises, en plus de leur stratégie de prix, car la qualité est une caractéristique endogène déterminée par le marché. Pour expliquer les effets d'un changement qualitatif sur la demande des consommateurs et la rentabilité, M. Ivaldi décrit ensuite une équation simple dans laquelle la valeur de la baisse de qualité est traitée comme équivalente à la valeur d'une hausse des prix. Une telle analyse constitue, dans son principe même, un test SSNIP pour lequel toute évolution qualitative est prise en compte. Pour ce faire, il est nécessaire de connaître la structure de la demande, la structure des coûts et le comportement des consommateurs en cas de modification de la qualité. Lorsque les consommateurs continuent à acheter un produit après une baisse de qualité, c'est peut-être parce qu'ils ne se sont pas aperçus de cette dégradation. Qui plus est, M. Ivaldi estime que le test SSNDQ pourrait devenir une technique de plus en plus reconnue et même nécessaire dans le cadre de la politique de la concurrence.

Enfin, M. Ivaldi présente la question des gains d'efficacité statiques et dynamiques dans le contexte de l'analyse de qualité. Il prend l'exemple d'un réseau ferroviaire sur lequel la concurrence par les prix qui s'exerce entre les opérateurs sur les voies existantes pourrait entraîner des gains d'efficacité statiques à court terme. Toutefois, à plus long terme, les gains d'efficacité dynamiques résulteraient des investissements et de la modernisation du réseau. Dans ce cas de figure, lorsqu'il existe un projet de fusion de deux opérateurs en vue de constituer un monopole, il est probable que les prix augmenteront et que le surplus du consommateur diminuera à court terme. Toutefois, si cette hausse des bénéfices se traduisait par un investissement plus important dans le réseau ferroviaire à l'avenir, on observerait une amélioration de la qualité du réseau parallèlement à une augmentation du surplus du consommateur. Il y a ainsi un compromis à trouver entre gains d'efficacité statiques et gains d'efficacité dynamiques, ce qui est souvent le cas quand se posent des questions de qualité lors d'une analyse de la concurrence. Un tel conflit est survenu dans l'affaire de la fusion *Tetra Laval/Sidel* qui avait été initialement interdite par la Commission européenne avant d'être autorisée par la Cour européenne de justice en raison, entre autres, des gains d'efficacité dynamiques qui découleraient de l'innovation technologique faisant suite à la formation de la nouvelle entité.

Suite à cela, le Président fait remarquer que l'intervention de M. Ivaldi a mis en lumière la complexité des enjeux. Il invite ensuite M. Hiroyuki Odagiri, économiste en droit de la concurrence et membre de la Japan Fair Trade Commission (JFTC), à apporter son point de vue sur les questions de qualité dans le cadre de la mise en œuvre du droit de la concurrence. M. Odagiri rappelle la distinction qui existe entre différenciation verticale et horizontale des aspects qualitatifs. La première se réfère à la qualité au sens strict tandis que la seconde est avant tout une question de diversité et de positionnement du produit. Cela étant, on emploie souvent le terme de « qualité » à la fois au sens restreint et au sens large. Il peut en réalité s'avérer très difficile de départager la différenciation verticale de la différenciation horizontale, ce qui rend cette distinction conceptuelle certes pratique, mais peu utile dans les faits. Qui plus est, l'imperfection de l'information est un facteur non négligeable lorsqu'il s'agit de la qualité, surtout concernant la différenciation verticale.

Pour mesurer la qualité, les économistes ont généralement recours à des modèles hédonistes qui considèrent le prix d'un produit comme fonction de ses caractéristiques. Il est certes nettement plus simple de faire ce calcul pour des aspects qualitatifs objectifs que pour des aspects subjectifs, mais les modèles hédonistes ont été utilisés avec succès dans divers contextes, et principalement pour le calcul des indices de prix à la consommation. Si, par exemple, le prix d'un produit reste inchangé d'une année sur l'autre mais que la qualité de ce produit s'améliore, on peut alors dire que le prix réel du produit a baissé. En théorie, les modèles hédonistes peuvent être utilisés pour estimer les prix corrigés de la qualité sur un marché concurrentiel, dans le but d'identifier les marchés sur lesquels des comportements anticoncurrentiels ont pu se traduire par une différence entre le prix prévu et le prix du marché. En pratique, il peut toutefois être très difficile de trouver les données nécessaires pour effectuer de tels calculs, à moins d'être en présence de deux marchés très similaires sur lesquels les prix sont tout à fait différents, par exemple.

Cette absence relative de données – autrement dit l'imperfection des informations fournies par le marché – peut également entraîner des difficultés pour les consommateurs qui doivent choisir entre des produits sensiblement identiques dont les aspects qualitatifs sont en réalité assez différents. Certaines formes de coopération horizontale et verticale entre les entreprises peuvent contribuer à améliorer ces imperfections. Ainsi, des associations professionnelles pourraient fournir aux consommateurs des informations fiables et des garanties de qualité, tandis que les restrictions verticales, comme la pratique des prix imposés, pourraient encourager les détaillants à proposer un service après-vente de meilleure qualité. Cela entraîne des difficultés pour les autorités de la concurrence qui tentent d'interdire les comportements coordonnés entre les entreprises qui sont préjudiciables à la concurrence, tout en autorisant ceux qui favorisent la concurrence.

M. Odagiri présente ensuite deux ensembles de lignes directrices sur les accords de coopération publiés par la JFTC. Le premier ensemble a trait aux associations professionnelles et les lignes directrices indiquent explicitement que toute activité qui se traduit par une entente injustifiable est illégale en soi. Les restrictions justifiables sont autorisées à condition que ces activités n'entraînent pas de limitation ou de ralentissement de la concurrence. La JFTC a constaté dans une affaire que les activités d'une association de médecins avaient enfreint les règles de concurrence dans la mesure où elles restreignaient inutilement l'entrée sur le marché. Cette décision a été confirmée par la Cour supérieure de Tokyo qui a estimé que seuls les membres de l'association professionnelle tiraient profit de ces activités qui ne servaient pas l'intérêt général des consommateurs. Le second ensemble de lignes directrices diffusées par la JFTC porte sur les accords de distribution. En règle générale, les restrictions verticales sont autorisées à condition que (i) de tels accords ne sont pas liés aux prix, au territoire de vente ou à la répartition des clients ; (ii) il existe des justifications objectives pour toute restriction liée au besoin d'assurer la qualité du produit et (iii) de telles restrictions sont appliquées sans discrimination à tous les consommateurs sur le marché. La JFTC a ainsi rendu des décisions opposées dans deux affaires apparemment comparables relatives à la vente de produits médicaux, illustrant de ce fait qu'elle suit une démarche conforme aux lignes directrices. Dans la première, une société d'équipement médical a tenté d'interdire la vente de ses produits sur Internet au motif que les appareils concernés nécessitaient un réglage sur le lieu de vente qui ne pouvait être garanti dans le contexte de la vente en ligne. Ces arguments ont été vérifiés et admis par la JFTC. En revanche dans le second cas, un laboratoire pharmaceutique a essayé d'interdire la vente en ligne d'un médicament qui ne nécessitait aucune manipulation supplémentaire par les revendeurs et pour lequel des instructions de sécurité suffisantes pouvaient être mises à disposition sur Internet. Dans ces circonstances, la JFTC a considéré que les restrictions appliquées outrepassaient ce qui était autorisé, à la suite de quoi le laboratoire pharmaceutique a renoncé à son programme de distribution restreinte.

En ce qui concerne les fusions et acquisitions, M. Odagiri est de l'avis que, suite à une fusion, les deux entreprises qui y sont parties ont tendance à éloigner encore davantage le positionnement de leurs produits afin d'éviter un phénomène de cannibalisation mutuelle. Il examine l'exemple d'une fusion entre deux entreprises japonaises exerçant sur le marché de l'assaisonnement. Suite à la fusion, l'entité a pratiqué une hausse des prix de ses produits haut de gamme, mais aussi une baisse des prix de ses produits bas de gamme. Il est donc important de prendre en compte les effets du positionnement des produits et l'amélioration éventuelle de la qualité lors de l'analyse des fusions, même si ces effets sont difficiles à prédire en amont. En outre, les fusions peuvent avoir des effets distributifs plutôt qu'allocationnels, dans la mesure où les prix augmenteront pour certains consommateurs tandis qu'ils baisseront pour d'autres.

Pour terminer, M. Odagiri évoque la possibilité que l'essor du commerce électronique, qui repose principalement sur une concurrence féroce par les prix sur certains marchés, mette progressivement la qualité des produits sur le devant de la scène. Suite à une question du Président portant sur les circonstances dans lesquelles une amélioration de la qualité primerait sur une hausse du prix dans le contexte de l'analyse de la concurrence, M. Odagiri répond que, pour cela, l'augmentation de prix devrait probablement être assez modeste alors que les avantages qualitatifs associés devraient être importants. Le Président fait remarquer que cela soulève la question de savoir comment la qualité peut être mesurée de manière quantitative et il invite M. Ivaldi à s'exprimer sur ce point.

M. Ivaldi commence par présenter un exemple simple de modèle économétrique visant à évaluer la qualité d'un produit en redéfinissant la qualité comme le flux de services que les consommateurs tirent du produit. Il décrit un marché hypothétique sur lequel deux entreprises produisent chacune un seul produit, la qualité de l'un des produits étant connue tandis que celle de l'autre ne l'est pas. La valeur nette du produit est définie par la qualité moins le prix. Si l'on imagine que le coefficient des valeurs nettes équivaut au coefficient des parts de marché, il est possible de calculer la qualité qui n'est pas connue en effectuant une opération mathématique simple. De cette manière, l'économétrie tente d'avoir recours à des éléments observables – ici, les prix et les parts de marché – pour en déduire les éléments qualitatifs les plus difficiles à définir.

Il existe deux aspects essentiels qui doivent être pris en compte pour mesurer la qualité. Tout d'abord, la qualité est une notion relative, ce qui signifie que la qualité d'un produit est définie par rapport à la qualité d'autres produits. Cela explique pourquoi, par exemple, un produit plus cher peut avoir une part de marché plus importante : le produit en question est très certainement aussi de meilleure qualité. Ensuite, il est essentiel de connaître dans ce domaine les préférences des consommateurs, parce que la théorie selon laquelle la part de valeurs nettes est égale à la part de la valeur du marché ne se vérifie que pour certains types de préférences spécifiques. Il est donc nécessaire de connaître les facteurs qui déterminent la fonction de demande du produit.

Il est toutefois important de garder à l'esprit le fait que la qualité d'un produit peut prendre des formes bien différentes, certaines étant observées, d'autres étant subjectives ou perçues. Par conséquent, les niveaux de qualité pour un même produit peuvent varier selon les consommateurs du fait de facteurs inobservés. L'économétricien doit donc s'efforcer de mesurer ces facteurs inobservés à l'aide des données dont il dispose. Cela étant, selon M. Ivaldi, ces facteurs subjectifs rendent extrêmement ardue la réalisation d'un test SSNIP lorsque des questions relatives à la qualité sont en jeu, ce qui, en pratique, constitue un écueil venant s'ajouter aux complications que suscite déjà l'application du test SSNIP dans la pratique.

Le délégué du Royaume-Uni explique que l'emplacement est la principale mesure qualitative que les autorités britanniques de la concurrence prennent en compte, et qui est le plus souvent utilisée lors de la définition du marché. Lorsque l'on définit un marché, la zone de chalandise est calculée à partir de la manière dont les consommateurs apprécient implicitement cet emplacement. En outre, au Royaume-Uni, plusieurs récentes affaires de fusion ont concerné des marchés sur lesquels les prix sont réglementés, ce qui signifie que la concurrence qui s'y exerce sur le plan de la qualité. Dans de telles affaires, les autorités britanniques ont recours à une panoplie de techniques pour évaluer les aspects qualitatifs. En premier lieu, les documents internes des parties à la fusion sont passés au crible, afin de distinguer, entre autres, les facteurs qualitatifs que les parties considèrent comme importants de ce qui relève, selon elles, de l'avis des consommateurs. En second lieu, des enquêtes réalisées auprès des consommateurs pour connaître leurs avis sur les questions de qualité et de prix peuvent comporter une analyse assez pointue des préférences déclarées. S'il y a peu de chances que ces enquêtes fournissent des résultats quantitatifs solides, elles peuvent néanmoins apporter un éclairage précieux sur la dynamique du marché.

Lorsque les critères pertinents de qualité sur un marché ont été identifiés, il est d'ordinaire possible de rassembler suffisamment de données pour analyser le fonctionnement de la concurrence, en particulier sur les marchés locaux. À cet égard, les autorités britanniques réalisent généralement des analyses prix-concentration ou qualité-concentration et mènent des études de cas sur les répercussions de certains événements de marché sur la concurrence. Ainsi, les grandes chaînes de supermarchés observent généralement une politique nationale de prix, mais lorsque les marchés locaux deviennent plus concurrentiels, des variations indépendantes du prix interviennent souvent, telles que l'augmentation des effectifs ou la rénovation d'une succursale. Cela laisse supposer que la qualité est aussi un facteur important sur ces marchés. Lorsque les données nécessaires sont disponibles, le recours à des techniques économétriques peut être une possibilité pour déterminer l'incidence de la concentration sur les marges et sur la qualité ; dans le cas contraire, des solutions de remplacement sont utilisées dans la mesure du possible. Quoi qu'il en soit, toutes ces informations sont intégrées dans une démarche à plus grande échelle et plus globale visant à déterminer s'il existe des problèmes de concurrence sur un marché spécifique.

Le délégué du Chili décrit l'enquête ex post conduite par l'autorité de la concurrence sur une opération de fusion finalisée qui a eu lieu sur le marché de la diffusion cinématographique, secteur dans lequel la qualité du service constitue un aspect particulièrement important de la concurrence entre les exploitants concernés. Cette enquête a notamment mis en lumière le fait que le nombre d'employés qui travaillent dans un cinéma était associé à une impression de qualité du service proposé. En conséquence, les coûts salariaux constituaient l'une des mesures de qualité analysées au cours de l'étude. Cet aspect

présentait par ailleurs l'avantage d'être relativement simple à évaluer précisément. Il ressort de l'analyse de la concurrence que les coûts salariaux des parties à la fusion étaient nettement plus élevés sur les marchés sur lesquels elles avaient été en concurrence. Ce résultat a conforté l'autorité dans l'idée que la fusion a eu des effets négatifs sur la concurrence. L'affaire a finalement été réglée lorsque l'entité fusionnée a accepté plusieurs désengagements pour répondre aux préoccupations relatives à la concurrence.

Le délégué de l'Union Européenne fait remarquer qu'il est souvent difficile d'obtenir suffisamment de données pour mener des analyses quantitatives d'aspects qualitatifs. Cela tient en grande partie à la nature pluridimensionnelle et subjective de la qualité des produits. Aussi, la DG Concurrence a tendance à s'appuyer davantage sur des éléments qualitatifs relatifs à la qualité, y compris sur des données rassemblées à l'occasion d'enquêtes sectorielles, de sondages réalisés auprès des consommateurs et des concurrents, ainsi que de documents internes de l'entreprise ou des entreprises qui font l'objet d'une enquête. La DG Concurrence se concentre souvent sur tout effet négatif potentiel qui pourrait avoir une incidence sur l'innovation future. Elle s'est ainsi opposée, avec succès, à des comportements et à des projets de fusion anticoncurrentiels, même sans avoir recours à des éléments quantitatifs complexes concernant les effets sur la qualité des produits. Qui plus est, les différences de prix sur les marchés verticalement différenciés peuvent donner une indication des différences de qualité. Néanmoins, à mesure que des méthodes quantitatives concrètes permettant de mesurer la qualité sont disponibles ou le deviennent, dans la mesure où il serait approprié de les utiliser le cas échéant, la DG Concurrence sera tout à fait disposée à les intégrer dans ses activités d'application du droit de la concurrence.

Le Président évoque la contribution du Canada qui, lors de la table ronde, estimait que le choix et la diversité des produits pouvaient être considérés comme des facteurs de qualité. Le délégué du Canada confirme que c'est bien le point de vue adopté par le Bureau de la concurrence canadien dans la mesure où une réduction de l'éventail des choix possibles peut forcer le consommateur à acheter un produit auquel il attribue moins de valeur, ou encore à ne rien acheter du tout. Dans un cas comme dans l'autre, le consommateur s'en trouve moins bien loti, de sorte qu'une baisse de qualité des produits équivaut à un affaiblissement de la qualité moyenne des produits disponibles sur le marché. Même dans le cas de figure où les produits concernés ne se différencient pas clairement selon des critères de qualité, les consommateurs sont pénalisés par une réduction de la gamme de produits disponibles du fait qu'ils attachent généralement de l'importance à un large éventail de choix. Ainsi, le niveau de qualité va dépendre de l'étendue de la gamme de produits proposée aux consommateurs.

Le délégué présente ensuite deux affaires étudiées par le Bureau de la concurrence dans lesquelles la question du choix des produits s'est posée. Dans la première, l'action visant l'entreprise Canada Pipe a remis en cause un programme de rabais de fidélité. Le défendeur affirmait que ce programme lui permettait d'asseoir sa réputation de fournisseur fiable d'une vaste gamme de tuyauterie et de raccords, et que les gros volumes de vente des produits qui se vendaient le mieux lui permettaient de subventionner la production d'articles moins populaires. Le Tribunal de la concurrence canadien a admis que les gains d'efficacité allégués étaient une justification commerciale valable, mais la Cour fédérale a finalement jugé que les bénéfices présumés ne pouvaient être dissociés de la raison d'être anticoncurrentielle sous-jacente du programme de fidélité. Dans le second cas, il s'agissait d'une procédure de contrôle d'une fusion faisant intervenir deux laboratoires pharmaceutiques, Pfizer Inc. et Wyeth. Chaque laboratoire produisait un traitement hormonal substitutif (THS) contre la ménopause et un troisième fabricant proposait un traitement similaire sur le marché canadien. L'enquête du Bureau de la concurrence a fait ressortir que les femmes prenant un tel traitement avaient de fortes préférences en faveur des médicaments qu'elles utilisaient et que le passage de trois à deux produits disponibles sur le marché canadien se serait traduit par un grave préjudice pour les elles. Pour pouvoir autoriser la fusion, le Bureau a donc conclu un accord consensuel avec Pfizer Inc. et Wyeth afin de garantir la disponibilité des deux traitements produits par l'entité fusionnée.

Enfin, le délégué fait remarquer que, bien que le cadre réglementaire canadien de la concurrence fournisse au Bureau de la concurrence les outils nécessaires pour étudier à peu près de la même manière les questions touchant ou non à la tarification, peu d'affaires judiciaires soulèvent des questions relatives à la qualité des produits.

Le délégué du BIAC indique que sa contribution à la table ronde ne proposait pas de définition concrète de la qualité car le BIAC n'a pu retenir de définition unique et exhaustive de cette notion. Cela étant, le BIAC a proposé que le choix ne fasse pas partie des aspects qualitatifs dans la mesure où il peut être différencié de la qualité puisqu'il ne s'agit pas d'un élément intrinsèque du produit. Dans le cas du secteur des télécommunications, les facteurs de qualité du service sont généralement traités séparément des options de choix du service. Qui plus est, et comme le montre sa contribution, de nombreux pays dont le Royaume-Uni examinent séparément la qualité et le choix en tant que critères hors prix.

Le Président fait remarquer que le recours à des témoins experts pour évaluer la qualité peut procurer une bonne solution de rechange aux autres techniques qualitatives ou quantitatives de mesure de la qualité. Le délégué des États-Unis indique que les questions de qualité ont souvent été soulevées dans les travaux de la *Federal Trade Commission* et du Ministère de la Justice. Ainsi, les lignes directrices concernant les concentrations horizontales indiquent expressément que les aspects qualitatifs et les modifications de la qualité peuvent s'avérer utiles pour analyser un marché. Cela étant, le recours à des spécialistes de la qualité aux États-Unis s'est généralement limité aux affaires de fusions hospitalières pour lesquelles il est très souvent fait appel à des experts. Dans ces affaires, ces experts expliquent généralement le cadre utilisé pour évaluer les allégations de qualité dans le cadre hospitalier puis analysent les données disponibles dans l'affaire concernée. Une telle analyse est, dans la mesure du possible, de nature quantitative, bien qu'il soit possible de prendre en compte des facteurs qualitatifs. L'évaluation porte essentiellement sur l'efficacité qualitative, c'est à dire sur la façon dont une fusion peut réduire les coûts engendrés par la qualité du service. Cela étant, les arguments relatifs aux gains d'efficacité avancés par les parties dans de telles affaires sont généralement rejetés sur la base de ces rapports d'expertise.

Le second délégué des États-Unis présente ensuite une affaire de fusion récemment réglée qui concernait un logiciel de préparation des déclarations de revenus dans l'affaire *H&R Block/TaxACT*. L'une des principales conclusions de cette affaire était que la fusion aurait eu pour conséquence de réduire la qualité des logiciels gratuits du même type disponible sur le marché. Alors que TaxACT proposait un logiciel gratuit doté d'une grande fonctionnalité, H&R Block et Intuit, son principal concurrent, n'avaient guère de raisons de proposer, pour leur part, des produits gratuits très fonctionnels dans la mesure où cela aurait menacé la vente de leurs produits les plus chers. Le témoin expert a estimé que la fusion proposée renforcerait la probabilité que H&R Block et Intuit concluent l'un et l'autre qu'ils auraient mutuellement intérêt à proposer des logiciels gratuits de qualité inférieure afin d'augmenter les ventes de leurs produits payants. Contrairement aux affaires de fusions hospitalières dans lesquels une telle opération peut se traduire par une amélioration de la qualité, la fusion en question aurait probablement eu, en l'occurrence, des effets anticoncurrentiels préjudiciables à la qualité des produits. Le Président fait remarquer que le rôle joué par les spécialistes de la qualité est plus flou lorsque les aspects qui doivent être mesurés sont plus subjectifs et par conséquent moins facile à quantifier que le taux de mortalité dans un hôpital, par exemple. Le délégué des États-Unis convient que les préférences des consommateurs viennent compliquer cette analyse mais que, par chance, ce facteur n'a pas posé de problème lors des enquêtes portant sur des fusions hospitalières qu'il a menées.

Le délégué de Malte décrit une étude du marché des uniformes scolaires au cours de laquelle la qualité a été un facteur pertinent. À Malte, les uniformes sont obligatoires pour les écoliers et chaque école possède son propre uniforme pour lequel un accord d'approvisionnement exclusif est généralement conclu avec un fournisseur donné. L'autorité de la concurrence a reçu de nombreuses plaintes des parents à cause des tarifs élevés, de la mauvaise qualité et du manque de choix et a par conséquent décidé d'étudier le

fonctionnement de la concurrence sur ce marché. Les conclusions préliminaires de l'autorité ont mis en lumière des variations de prix très importantes d'un uniforme à l'autre, dont les fournisseurs ont soutenu qu'elles étaient liées à une différence de qualité. De ce fait, le rapport final a également pris en compte la qualité des uniformes qui s'est avérée n'avoir qu'une faible incidence sur les prix pratiqués. Dans certains cas, des prix comparables étaient demandés pour des articles de qualité très variable, tandis que dans d'autres, des produits de qualité identique étaient proposés à des prix différents. L'autorité est arrivée à la conclusion que le réel déterminant des prix sur ce marché dépendait du pouvoir de marché détenu par chaque fournisseur à la suite de l'accord d'approvisionnement exclusif. Cela met donc en évidence le fait que, lorsqu'il existe un pouvoir de marché, la relation entre le prix et la qualité peut se révéler limitée.

Le délégué du Portugal aborde ensuite la question de l'utilisation potentielle de modèles hédonistes dans la définition du marché et dans l'évaluation des fusions. Jusqu'à présent, bien que l'autorité de la concurrence portugaise ait pris en compte les effets sur la qualité lors de l'examen des fusions par exemple, cela s'est fait dans le cadre d'une analyse empirique plutôt que d'une approche reposant sur la théorie. L'autorité a tenté de mettre au point une méthodologie selon laquelle des prix normaux peuvent être convertis en prix hédonistes, de la même manière que les prix normaux peuvent être ajustés en prix réels pour tenir compte de l'inflation. Il est ensuite possible d'estimer les coûts et les chiffres de la demande qui reposent sur ces prix hédonistes et d'effectuer un test SSNIP afin de déterminer l'impact d'une baisse de qualité qui se traduit par une hausse de 5 % des prix hédonistes. L'autorité propose une méthodologie qui s'appuie sur les travaux d'économétrie publiés dans ce domaine et espère pouvoir appliquer ces méthodes analytiques à ces activités de mise en œuvre du droit de la concurrence à l'avenir.

Le délégué signale ensuite la nature pragmatique et sensée des conclusions de la note de synthèse du Secrétariat de l'OCDE et fait remarquer que la théorie économique présente encore des ambiguïtés lorsqu'il s'agit des questions de qualité. Alors que sur certains marchés les prix bas sont le facteur décisif pour les consommateurs, sur d'autres la qualité est un aspect important de la concurrence et il est par conséquent essentiel que les éléments qualitatifs soient pris en compte dans l'analyse de la concurrence pour ces secteurs.

Le Président fait observer qu'il semble y avoir un désaccord entre les différentes autorités de la concurrence à propos de la possibilité d'effectuer un test SSNDQ ou un test SSNIP modifié qui reposerait sur les prix hédonistes. Le délégué du Royaume-Uni souligne que, bien que les autorités britanniques effectuent des tests SSNIP (et, par là-même, des tests SSNDQ pour lesquels la qualité est un aspect pertinent à examiner concernant la concurrence), les informations tirées de ces évaluations ne constituent qu'un des facteurs qui doit être pris en compte lorsque l'on considère plus généralement le fonctionnement de la concurrence au sein d'un secteur donné. La définition du marché est bien entendu indissociable de la question du fonctionnement réel de la concurrence sur un marché donné.

Le délégué de l'Union européenne fait remarquer que les débats de la table ronde ont soulevé des questions importantes relatives à l'utilisation potentielle des prix hédonistes pour incorporer des aspects qualitatifs à une analyse de marché quantitative. Cela étant, la DG Concurrence prend souvent en compte les aspects qualitatifs, sans pour autant utiliser de telles techniques, dans le cadre de la définition du marché par exemple. S'il s'avère que des différences de qualité de produits sensiblement identiques impliquent que ces produits ne peuvent plus être substitués les uns aux autres par exemple, alors il serait utile de constituer des marchés différents pour ces produits. Dans l'affaire de la fusion *Unilever/Sara Lee*, des marchés de produits séparés ont été définis pour les déodorants masculins et féminins, même si l'aspect extérieur de ces produits est très similaire, en raison d'une demande différenciée des consommateurs de ces produits résultant des campagnes marketing. Un grand nombre de données du marché étaient disponibles dans cette affaire du fait de la nature des produits en jeu (biens de consommation) et il a donc été possible de mener un test SSNIP relativement rigoureux et d'estimer les effets qu'aurait la fusion proposée.

Cependant, le délégué émet l'avis qu'il ne serait pas facile de remplacer le test SSNIP par un test SSNDQ sur le plan pratique, dans la mesure où ce dernier repose avant tout sur des données du marché qui sont par nature difficiles à mesurer. Il serait particulièrement délicat d'évaluer les effets qu'auraient des économies de coûts liées à une baisse de qualité du produit sur la rentabilité de l'entreprise par rapport à une augmentation des prix pratiqués. Qui plus est, le test SSNIP implique en lui-même des analyses économiques assez complexes. Le délégué pense que, dans un sens, le test SSNIP existant comprend déjà une évaluation de la qualité car les consommateurs tiennent déjà compte des aspects qualitatifs des produits de remplacement lorsqu'ils prennent la décision de changer ou non de produit suite à une augmentation du prix.

Le délégué fait également remarquer que les questions de qualité peuvent avoir une incidence sur l'offre dans les affaires de fusion, si les critères de qualité entravent l'entrée sur un nouveau marché de produits. Cela a notamment été le cas de la fusion *Amcors/Alcan* dans lequel la Commission s'est soucié des barrières à l'entrée et du faible nombre de produits de substitution du côté de l'offre sur le marché des emballages de produits pharmaceutiques souples pour lesquels les exigences en termes de qualité sont particulièrement élevées.

Le Vice-Président de l'Autorité française de la concurrence, M. Emmanuel Combe, prend ensuite la parole et, en s'appuyant sur son expérience en tant que professeur d'économie industrielle, présente un exposé sur le phénomène du « *low cost* » qui démontre la relation complexe qui existe entre la qualité et la concurrence. M. Combe se concentre sur une étude de cas de l'industrie du transport aérien et sur l'incidence qu'a eue l'entrée sur le marché de compagnies à bas coûts et de faible qualité. On remarquera que le modèle économique de ces compagnies aériennes ne se conforme pas à la distinction traditionnelle entre différenciation verticale et différenciation horizontale des produits. Les compagnies à bas coûts préfèrent généralement supprimer tout ce qui relève de la qualité afin de proposer des billets au prix le plus faible possible, ce qui se traduit par une expérience de vol « sans fioritures ». Ainsi, l'intégralité du modèle d'entreprise repose sur la distinction entre ce qui est nécessaire et ce qui est accessoire en termes de qualité du produit. Un billet d'avion s'accompagne pour les voyageurs d'une série d'aspects qualitatifs auxquels ils n'accorderont pas tous la même valeur. Ainsi, la billetterie de bout en bout, les programmes de fidélisation, les repas à bord, un programme de vols fréquents, la disponibilité de sièges plus larges à bord et/ou l'enregistrement des bagages sont des éléments prisés par certains passagers, mais pas par tous. Les seuls facteurs qualitatifs sur lesquels les passagers sont intransigeants sont la sécurité aérienne et la ponctualité.

Contrairement à l'idée selon laquelle un choix réduit équivaut à une utilité réduite pour le consommateur, les entreprises de « *hard discount* » font valoir que les gammes réduites de produits qu'ils proposent entraînent un gain de temps pour les consommateurs et leur ôtent la tentation d'acheter des produits inutiles. D'aucuns estimeront peut-être que le modèle « *low cost* » débouche sur une mauvaise qualité, mais il est plus juste de décrire ces offres de produits comme étant d'une qualité de base. Des études empiriques démontrent ainsi que les compagnies aériennes à bas coûts sont en moyenne plus ponctuelles que les compagnies traditionnelles. Cela semble indiquer qu'elles mettent l'accent sur l'offre d'éléments qualitatifs de base et proposent des prestations secondaires sous forme d'options facultatives moyennant un coût supplémentaire.

À la suite de l'entrée sur le marché des compagnies aériennes à bas coûts, les compagnies historiques ont adopté différentes stratégies. Tout d'abord, certaines d'entre elles ont imité les pratiques tarifaires de ces nouveaux concurrents en réduisant leurs prix pour tenter de s'aligner sur ceux appliqués par les entrants. L'« effet Southwest », qui doit son nom à la première compagnie aérienne à bas coûts qui a vu le jour aux États-Unis dans les années 1970, témoigne de l'effet radical qu'a eu l'entrée de ces transporteurs sur les tarifs pratiqués par les compagnies historiques. Par ailleurs, certaines compagnies aériennes traditionnelles ont concentré leurs efforts sur une amélioration de la qualité et surtout de la ponctualité de leurs propres services. Ces réactions sont comparables à celles que l'on a pu observer dans le secteur de la grande distribution où l'entrée sur le marché d'un concurrent pratiquant une politique de prix agressive se

traduit généralement par une montée en gamme des stocks des enseignes voisines concurrentes. Ainsi, en France, certaines chaînes de supermarchés ont choisi de se repositionner en tant que magasins plus haut de gamme en réaction à l'entrée sur le marché de magasins de « *hard discount* » comme Lidl et Aldi. Si la plupart des compagnies aériennes historiques ne se sont pas contentées d'améliorer la qualité de leurs services pour faire face à l'accroissement de la concurrence, c'est que la majorité des consommateurs préfèrent acheter leurs billets moins chers plutôt que bénéficier d'un service de meilleure qualité, tout du moins dans le segment des courts et moyens courriers. Par conséquent, pour assurer leur viabilité à long terme, beaucoup d'anciennes compagnies traditionnelles ont choisi de réduire leurs coûts de production en adoptant certaines pratiques commerciales de leurs concurrentes à bas coûts, en faisant payer l'enregistrement des bagages, par exemple. Enfin, le marché de l'aviation a connu de nombreuses concentrations entre compagnies traditionnelles et compagnies à bas coûts ces dernières années, même s'il s'en est suivi une tension interne liée à la coexistence de segments à coût élevé et à bas coût au sein de la même entité.

M. Ivaldi ajoute qu'il est nécessaire d'introduire une flexibilité suffisante dans les modèles économiques existants pour tenir compte de l'apparition de nouveaux produits. D'une certaine manière, une compagnie aérienne à bas coûts met en quelque sorte à disposition un nouveau produit et la question qui se pose est donc de savoir comment décrire ce produit. De nombreux produits possèdent des aspects qualitatifs accessoires – comme par exemple une boisson offerte au cours d'un vol – et il s'agit donc de déterminer si ces aspects doivent faire partie intégrante de la description du produit proprement dit. M. Ivaldi donne l'exemple du marché des transports entre Cologne et Berlin, un trajet qui peut être effectué en voiture, en avion avec une compagnie traditionnelle ou à bas coûts, ou en train, avec l'opérateur ferroviaire historique ou le nouvel arrivant, qui ne propose qu'un créneau horaire quotidien unique à bas prix. Avec des modèles économiques suffisamment solides, il est toutefois possible d'analyser et de définir les différents marchés pertinents qui sont concernés. Le délégué des États-Unis ajoute que, lorsque secteur aérien de son pays était encore réglementé et que la concurrence sur les prix était donc impossible, les compagnies aériennes se livraient alors principalement concurrence sur la qualité de leurs offres de produits, en proposant par exemple aux passagers des repas et des boissons de grande qualité.

Les délégués de l'Australie présentent ensuite deux exemples d'affaires qui illustrent plus en détail la complexité de la relation existant entre la concurrence et la qualité des produits. Le premier exemple est celui de l'impact qu'a eu l'entrée sur le marché australien d'Aldi en 2001, une enseigne de « *hard discount* » qui vend en priorité des produits sous marque de distributeur (MDD). Même si les produits sous MDD sont généralement considérés comme étant de moindre qualité, Aldi est réputé pour vendre sous sa propre marque des produits de relativement bonne qualité. De ce fait, d'autres grandes enseignes australiennes ont considérablement amélioré la qualité des produits commercialisés sous leurs propres marques.

Le second exemple est celui de l'alliance aérienne conclue entre les compagnies aériennes internationales Qantas et Emirates. Ces entreprises ont demandé l'autorisation de former une alliance en invoquant une disposition des règles australiennes de la concurrence en vertu de laquelle une coopération potentiellement anticoncurrentielle peut être dispensée des contrôles antitrust lorsqu'elle suscite un avantage suffisant pour les consommateurs, qui est généralement synonyme de gains d'efficacité. Les alliances aériennes peuvent généralement engendrer de tels gains en proposant, entre autres, une réduction des vols rapprochés, une meilleure programmation des vols, une réduction des doubles marginalisations dans les secteurs complémentaires et la mise en place de nouvelles destinations et, plus généralement, des économies d'échelle et des économies de réseaux. Pourtant, de telles alliances nécessitent également une coopération poussée sur les questions de capacité, de tarification et d'horaires et potentiellement un partage de recettes, ce qui accroît le risque d'apparition d'effets anticoncurrentiels. Plus le niveau d'intégration est élevé, plus les bénéfices sont susceptibles de l'être, par contre lorsqu'une alliance limite la concurrence sur le marché, la décision de l'autoriser peut nécessiter de sopeser les avantages liés à une amélioration du service par rapport à une éventuelle augmentation des prix. Dans le cas de Qantas et Emirates, l'alliance

proposée n'aurait que peu voire pas d'effets négatifs sur la concurrence pour la majorité des destinations desservies et serait à l'origine d'avantages mesurables. Cela étant, l'alliance pourrait engendrer des problèmes de concurrence dans le cas de la liaison aérienne traversant la mer de trans-Tasmanie et des exigences en matière de capacité ont été imposées sur cette liaison comme condition à la délivrance de l'autorisation de l'alliance.

Poursuivant sur le thème de l'incidence de la concentration du marché sur la qualité, le délégué britannique décrit une analyse approfondie d'une proposition de fusion de deux chaînes de casinos qui a été menée par la Competition Commission (CC) britannique l'an passé. À l'époque de la fusion, ces entreprises occupaient la deuxième et la troisième position de leur secteur. Le marché des jeux d'argent fait l'objet d'une réglementation stricte et jusqu'à récemment, les casinos étaient soumis à une réglementation des prix. Par conséquent, la concurrence sur ce marché est avant tout motivée par des facteurs ne relevant pas des prix.

L'analyse de la CC reposait sur les marchés locaux sur lesquels les deux chaînes avaient des points de vente. Des données ont été collectées auprès des consommateurs sous forme de sondage et ont permis de déterminer que le facteur principal sur lequel repose la demande est la qualité de l'expérience de jeu, y compris l'attrait du lieu et l'amabilité du personnel. La CC a également rassemblé des données du côté de l'offre sous forme de documents internes sur les parties à la fusion qui indiquaient que les casinos cherchent avant tout à attirer le plus de clients possible, à les garder le plus longtemps possible sur place et à leur faire dépenser le plus d'argent possible. Pour ce faire, les casinos mettent l'accent sur la qualité de leurs locaux et sur des normes de service, en employant notamment le personnel le plus expérimenté possible. D'autres données utiles ont été obtenues à partir de rapports hebdomadaires de performances établis par les gérants des casinos qui détaillent les stratégies organisationnelles et promotionnelles à mettre en œuvre. En analysant les données disponibles, la CC a pu mettre à profit le fait qu'il existe différentes structures de marché sur plusieurs marchés locaux, afin de tester de manière empirique la relation qui existe entre la concentration et la qualité. Elle a constaté, entre autres choses, que les marges bénéficiaires étaient plus élevées sur les marchés peu concurrentiels, tandis que les coûts promotionnels y étaient moins élevés. En prenant en compte les éléments ressortant de ce sondage, la documentation interne et les résultats de l'analyse empirique, la CC a conclu que la concentration devrait être autorisée, sauf sur quatre marchés locaux, du fait qu'ils se chevauchaient largement.

Le Président constate qu'il ressort des différentes contributions que la relation existant entre la qualité et la concurrence par les prix varie énormément d'un marché à l'autre. Il semblerait par conséquent que cette question doive être abordée au moyen d'une évaluation au cas par cas, et non pas à partir de généralisations a priori. Il présente ensuite M. Theodore Voorhees qui se propose d'examiner la manière dont le système juridique américain tient compte de ce lien pour traiter les restrictions verticales. M. Voorhees fait tout d'abord remarquer qu'il a choisi la pratique des prix imposés comme étude de cas parce qu'elle illustre très clairement les circonstances dans quel cas il faut généralement trouver un compromis entre un effet quantitatif anticoncurrentiel discutable sur les prix d'une part, et de l'autre un effet qualitatif pro concurrentiel discutable sur la qualité des produits. La pratique des prix imposés entraîne généralement une hausse des prix au détail qui est souvent justifiée par le besoin de fournir des services supplémentaires aux consommateurs. Lorsque cette pratique est imposée par une entreprise en situation de monopole, ou dans le cadre d'une entente au niveau du fournisseur ou du détaillant, les éventuelles allégations de gains d'efficacité sont en général hors de propos. Dans l'exemple parfait que constitue la pratique des prix imposés, il est cependant généralement nécessaire de mettre en balance les considérations de prix et celles relatives à la qualité.

M. Voorhees donne ensuite un aperçu du traitement appliqué à la pratique des prix imposés dans le droit de la concurrence américain. Dans l'affaire *Dr Miles* de 1911, la Cour suprême a estimé que cette pratique constituait en soi une violation de l'article 1 de la loi Sherman. Pour parvenir à cette conclusion, la Cour a invoqué la règle de *common law* contre l'aliénation. En revanche, la Cour suprême a précisé dans

l'affaire *Colgate* que l'article 1 ne s'applique qu'aux accords restreignant la concurrence. En conséquence, lorsque les prix sont recommandés par le fournisseur sans être pour autant convenus avec le détaillant, il n'y a pas d'infraction à l'article 1. Alors que la décision rendue dans l'affaire *GTE Sylvania* de 1977 portait sur les restrictions non tarifaires, elle annonce néanmoins une évolution marquée et plus générale de l'approche de la Cour suprême vis-à-vis des restrictions verticales. Tout d'abord, la Cour a souligné que le droit de la concurrence porte avant tout sur les effets économiques plutôt que sur les restrictions en tant que telles, et privilégie par ailleurs la concurrence intermarques, plutôt que la concurrence intramarque. Dans l'affaire *Monsanto*, la Cour suprême a jugé que, lorsqu'il existe des motifs proconcurrentiels qui justifient le comportement de la partie défenderesse, des éléments de preuve irréfutables et non équivoques de l'existence d'un accord sont nécessaires pour qu'un cas débouche sur un procès. Dans l'affaire *State Oil vs Kahn*, la Cour suprême a jugé que les prix imposés maximum ne devaient plus être traités comme une infraction en soi, mais au cas par cas (en vertu de la « règle de raison »). Enfin, dans l'affaire *Leegin* de 2007, la Cour suprême a conclu que les prix imposés minimum devaient également être analysés au cas par cas.

En pratique, les modifications apportées par la décision rendue dans l'affaire *Leegin* sont relativement modestes. Tout d'abord, cette décision ne fixe pas de seuil de sécurité pour les prix imposés, mais exige que la légalité de ces restrictions fasse l'objet d'une analyse au cas par cas. De plus, beaucoup d'États, y compris la Californie, ont conservé, à leur niveau, des lois antitrust qui rendent illégal en soi la pratique des prix imposés et des démarches législatives ont été entreprises dans le but d'infirmer le jugement au niveau fédéral. Une question plus controversée est de savoir ce que suppose une analyse au cas par cas concernant la pratique des prix imposés. La Cour suprême a défini différentes approches plus ou moins vagues pour ce faire : il est question de « soupeser » et de « mettre en balance » les effets proconcurrentiels ou anticoncurrentiels, de déterminer s'il existe des impacts « compensateurs » sur la concurrence ou encore, plus récemment, s'il existe des conséquences anticoncurrentielles importantes qui ne sont pas justifiées. Il y a un vide jurisprudentiel concernant les restrictions applicables à la pratique des prix imposés depuis l'affaire *Leegin*. Toutefois, de nombreuses études portant sur l'application de la règle de raison depuis la décision rendue dans l'affaire *Sylvania* concluent que les défendeurs ont obtenu gain de cause dans 95 % des cas. Le principal obstacle dans de telles circonstances est le besoin de constater l'existence d'un effet anticoncurrentiel sur la concurrence intermarques et non pas uniquement sur la concurrence intramarque. De ce fait, les tribunaux ne sont pas tenus, dans la plupart des cas, de se livrer à un exercice de mise en balance si les plaignants n'ont pas pu établir le seuil attestant de l'existence d'un préjudice. Par conséquent, dans quatre affaires sur les cinq qui ont porté sur la pratique des prix de vente imposés, les tribunaux ne sont pas parvenus jusqu'à l'étape de la mise en balance en raison de l'absence d'effets intermarques. Qui plus est, selon M. Voorhees, cette tendance devrait se poursuivre, du fait notamment que les tribunaux ne cessent d'accorder plus d'importance aux effets sur la concurrence intermarques qu'aux effets sur la concurrence intramarque.

Le délégué du BIAC se félicite d'apprendre que les autorités de la concurrence souhaitent davantage prendre en compte les éventuelles justifications relatives aux gains d'efficacité lorsqu'elles évaluent la légalité des comportements des entreprises. Cela étant, le délégué fait part de ses doutes sur la question de savoir si les autorités prennent en compte, de manière suffisamment détaillée et nuancée, les gains d'efficacité dynamiques potentiels, qui englobent des facteurs qualitatifs comme l'innovation des produits. Bien que la question des gains d'efficacité dynamiques soulève des problèmes complexes, si de telles allégations de gains d'efficacité sont avancées, il est nécessaire de les examiner en détail. Le Président demande au délégué du BIAC son avis concernant l'importance des gains d'efficacité dans la pratique de mise en œuvre du droit de la concurrence de la Commission européenne. Le délégué du BIAC répond que les effets sur la qualité ne sont que rarement, voire jamais, admis par la Commission comme justifications proconcurrentielles, mais que ces facteurs sont régulièrement invoqués pour établir un amoindrissement de la concurrence. Selon le délégué de l'Union européenne, ces propos ne reflètent pas la réalité, et il prend comme exemple l'affaire de la fusion *TomTom/Tele Atlas*, qui a été finalisée, dans lequel des effets

proconcurrentiels plausibles sur l'innovation et l'amélioration de la qualité ont été admis comme constituant des gains d'efficacité.

Le délégué de l'Irlande loue les mérites de la table ronde qui s'est avérée être un événement intéressant qui donne à réfléchir. Le délégué fait remarquer que certains aspects relatifs à la qualité ne semblent guère prêter à controverse, comme notamment la place accordée à la prise en compte de qualité lors de l'évaluation de la légalité des contraintes verticales, la distinction entre les restrictions horizontales liées ou non à des ententes, ainsi que le recours à des outils qualitatifs pour évaluer la qualité. D'autres aspects du débat restent toutefois plus controversés, comme le fait que la prise en compte de la qualité lors de l'évaluation des fusions horizontales puisse éventuellement servir de justification et la mise au point de nouveaux outils quantitatifs pour mesurer la qualité. La thématique du rôle de la qualité lors des évaluations d'impact sur la concurrence est par conséquent une question à laquelle il convient peut-être de consacrer davantage de temps et d'efforts.

Le Président souscrit au récapitulatif qu'a fait le délégué irlandais des préoccupations soulevées pendant la table ronde. Les participants sont largement tombés d'accord sur le fait que les aspects qualitatifs constituent une composante importante de la concurrence sur de nombreux marchés. Alors que le traitement de la qualité dans le contexte des restrictions verticales et horizontales est relativement simple, les fusions en particulier ont présenté des problèmes complexes s'agissant de l'éventuel compromis à trouver entre le prix et les effets qualitatifs. Le Président remercie les participants pour leurs contributions à la table ronde et fait remarquer que celle-ci représente sans doute la première initiative consacrée, par l'OCDE, à la question de la qualité dans le contexte de la concurrence. La grande variété des affaires examinées a permis d'illustrer le large spectre de cette thématique, confirmant qu'il importe de se pencher plus en détail sur cette question. La table ronde est ensuite clôturée.

OTHER TITLES**SERIES ROUNDTABLES ON COMPETITION POLICY**

1	Competition Policy and Environment	OCDE/GD(96)22
2	Failing Firm Defence	OCDE/GD(96)23
3	Competition Policy and Film Distribution	OCDE/GD(96)60
4	Efficiency Claims in Mergers and Other Horizontal Agreements	OCDE/GD(96)65
5	The Essential Facilities Concept	OCDE/GD(96)113
6	Competition in Telecommunications	OCDE/GD(96)114
7	The Reform of International Satellite Organisations	OCDE/GD(96)123
8	Abuse of Dominance and Monopolisation	OCDE/GD(96)131
9	Application of Competition Policy to High Tech Markets	OCDE/GD(97)44
10	General Cartel Bans: Criteria for Exemption for Small and Medium-sized Enterprises	OCDE/GD(97)53
11	Competition Issues related to Sports	OCDE/GD(97)128
12	Application of Competition Policy to the Electricity Sector	OCDE/GD(97)132
13	Judicial Enforcement of Competition Law	OCDE/GD(97)200
14	Resale Price Maintenance	OCDE/GD(97)229
15	Railways: Structure, Regulation and Competition Policy	DAFFE/CLP(98)1
16	Competition Policy and International Airport Services	DAFFE/CLP(98)3
17	Enhancing the Role of Competition in the Regulation of Banks	DAFFE/CLP(98)16
18	Competition Policy and Intellectual Property Rights	DAFFE/CLP(98)18
19	Competition and Related Regulation Issues in the Insurance Industry	DAFFE/CLP(98)20
20	Competition Policy and Procurement Markets	DAFFE/CLP(99)3
21	Competition and Regulation in Broadcasting in the Light of Convergence	DAFFE/CLP(99)1
22	Relations between Regulators and Competition Authorities	DAFFE/CLP(99)8
23	Buying Power of Multiproduct Retailers	DAFFE/CLP(99)21
24	Promoting Competition in Postal Services	DAFFE/CLP(99)22
25	Oligopoly	DAFFE/CLP(99)25
26	Airline Mergers and Alliances	DAFFE/CLP(2000)1
27	Competition in Professional Services	DAFFE/CLP(2000)2

28	Competition in Local Services: Solid Waste Management	DAFFE/CLP(2000)13
29	Mergers in Financial Services	DAFFE/CLP(2000)17
30	Promoting Competition in the Natural Gas Industry	DAFFE/CLP(2000)18
31	Competition Issues in Electronic Commerce	DAFFE/CLP(2000)32
32	Competition in the Pharmaceutical Industry	DAFFE/CLP(2000)29
33	Competition Issues in Joint Ventures	DAFFE/CLP(2000)33
34	Competition Issues in Road Transport	DAFFE/CLP(2001)10
35	Price Transparency	DAFFE/CLP(2001)22
36	Competition Policy in Subsidies and State Aid	DAFFE/CLP(2001)24
37	Portfolio Effects in Conglomerate Mergers	DAFFE/COMP(2002)5
38	Competition and Regulation Issues in Telecommunications	DAFFE/COMP(2002)6
39	Merger Review in Emerging High Innovation Markets	DAFFE/COMP(2002)20
40	Loyalty and Fidelity Discounts and Rebates	DAFFE/COMP(2002)21
41	Communication by Competition Authorities	DAFFE/COMP(2003)4
42	Substantive Criteria Used for the Assessment of Mergers	DAFFE/COMP(2003)5
43	Competition Issues in the Electricity Sector	DAFFE/COMP(2003)14
44	Media Mergers	DAFFE/COMP(2003)16
45	Universal Service Obligations	DAF/COMP(2010)13
46	Competition and Regulation in the Water Sector	DAFFE/COMP(2004)20
47	Regulating Market Activities by Public Sector	DAF/COMP(2004)36
48	Merger Remedies	DAF/COMP(2004)21
49	Cartels: Sanctions Against Individuals	DAF/COMP(2004)39
50	Intellectual Property Rights	DAF/COMP(2004)24
51	Predatory Foreclosure	DAF/COMP(2005)14
52	Competition and Regulation in Agriculture: Monopsony Buying and Joint Selling	DAF/COMP(2005)44
53	Enhancing Beneficial Competition in the Health Professions	DAF/COMP(2005)45
54	Evaluation of the Actions and Resources of Competition Authorities	DAF/COMP(2005)30
55	Structural Reform in the Rail Industry	DAF/COMP(2005)46
56	Competition on the Merits	DAF/COMP(2005)27
57	Resale Below Cost Laws and Regulations	DAF/COMP(2005)43
58	Barriers to Entry	DAF/COMP(2005)42
59	Prosecuting Cartels Without Direct Evidence of Agreement	DAF/COMP/GF(2006)7
60	The Impact of Substitute Services on Regulation	DAF/COMP(2006)18
61	Competition in the Provision of Hospital Services	DAF/COMP(2006)20

62	Access to Key Transport Facilities	DAF/COMP(2006)29
63	Environmental Regulation and Competition	DAF/COMP(2006)30
64	Concessions	DAF/COMP/GF(2006)6
65	Remedies and Sanctions in Abuse of Dominance Cases	DAF/COMP(2006)19
66	Competition in Bidding Markets	DAF/COMP(2006)31
67	Competition and Efficient Usage of Payment Cards	DAF/COMP(2006)32
68	Vertical Mergers	DAF/COMP(2007)21
69	Competition and Regulation in Retail Banking	DAF/COMP(2006)33
70	Improving Competition in Real Estate Transactions	DAF/COMP(2007)36
71	Public Procurement - The Role of Competition Authorities in Promoting Competition	DAF/COMP(2007)34
72	Competition, Patents and Innovation	DAF/COMP(2007)40
73	Private Remedies	DAF/COMP(2006)34
74	Energy Security and Competition Policy	DAF/COMP(2007)35
75	Plea Bargaining/Settlement of Cartel Cases	DAF/COMP(2007)38
76	Competitive Restrictions in Legal Professions	DAF/COMP(2007)39
77	Dynamic Efficiencies in Merger Analysis	DAF/COMP(2007)41
78	Guidance to Business on Monopolisation and Abuse of Dominance	DAF/COMP(2007)43
79	The Interface between Competition and Consumer Policies	DAF/COMP/GF(2008)10
80	Facilitating Practices in Oligopolies	DAF/COMP(2008)24
81	Taxi Services Regulation and Competition	DAF/COMP(2007)42
82	Techniques and Evidentiary Issues in Proving Dominance/Monopoly Power	DAF/COMP(2006)35
83	Managing Complex Mergers	DAF/COMP(2007)44
84	Potential Pro-Competitive and Anti-Competitive Aspects of Trade/Business Associations	DAF/COMP(2007)45
85	Market Studies	DAF/COMP(2008)34
86	Land Use Restrictions as Barriers to Entry	DAF/COMP(2008)25
87	Construction Industry	DAF/COMP(2008)36
88	Antitrust Issues Involving Minority Shareholdings and Interlocking Directorates	DAF/COMP(2008)30
89	Fidelity and Bundled Rebates and Discounts	DAF/COMP(2008)29
90	Presenting Complex Economic Theories to Judges	DAF/COMP(2008)31
91	Competition Policy for Vertical Relations in Gasoline Retailing	DAF/COMP(2008)35
92	Competition and Financial Markets	DAF/COMP(2009)11
93	Refusals to Deal	DAF/COMP(2007)46

94	Resale Price Maintenance	DAF/COMP(2008)37
95	Experience with Direct Settlements in Cartel Cases	DAF/COMP(2008)32
96	Competition Policy, Industrial Policy and National Champions	DAF/COMP/GF(2009)9
97	Two-Sided Markets	DAF/COMP(2009)20
98	Monopsony and Buyer Power	DAF/COMP(2008)38
99	Competition and Regulation in Auditing and Related Professions	DAF/COMP(2009)19
100	Competition Policy and the Informal Economy	DAF/COMP/GF(2009)10
101	Competition, Patents and Innovation II	DAF/COMP(2009)22
102	Standard for Merger Review	DAF/COMP(2009)21
103	Failing Firm Defence	DAF/COMP(2009)38
104	Competition, Concentration and Stability in the Banking Sector	DAF/COMP(2010)9
105	Margin Squeeze	DAF/COMP(2009)36
106	State-Owned Enterprises and the Principle of Competitive Neutrality	DAF/COMP(2009)37
107	Generic Pharmaceuticals	DAF/COMP(2009)39
108	Collusion and Corruption in Public Procurement	DAF/COMP/GF(2010)6
109	Electricity: Renewables and Smart Grids	DAF/COMP(2010)10
110	Exit Strategies	DAF/COMP(2010)32
111	Standard Setting	DAF/COMP(2010)33
112	Competition, State Aids and Subsidies	DAF/COMP/GF(2010)5
113	Emission Permits and Competition	DAF/COMP(2010)35
114	Pro-active Policies for Green Growth and the Market Economy	DAF/COMP(2010)34
115	Information Exchanges between Competitors under Competition Law	DAF/COMP(2010)37
116	The Regulated Conduct Defence	DAF/COMP(2011)3
117	Procedural Fairness: Transparency Issues in Civil and Administrative Enforcement Proceedings	DAF/COMP(2010)11
118	Competition in Ports and Port Services	DAF/COMP(2011)14
119	Crisis Cartels	DAF/COMP/GF(2011)11
120	Horizontal Agreements in the Environmental Context	DAF/COMP(2010)39
121	Excessive Prices	DAF/COMP(2011)18
122	Cross-border Merger Control: Challenges for Developing and Emerging Economies	DAF/COMP/GF(2011)13
123	Competition in Hospital Services	DAF/COMP(2012)9
124	Procedural Fairness: Competition Authorities, Courts and Recent Developments	DAF/COMP(2011)122
125	Remedies in Merger Cases	DAF/COMP(2011)13

126	Economic Evidence in Merger Analysis	DAF/COMP(2011)23
127	Unilateral Disclosure of Information with Anticompetitive Effects	DAF/COMP(2012)17
128	Promoting Compliance with Competition Law	DAF/COMP(2011)20
129	Impact Evaluation of Merger Decisions	DAF/COMP(2011)24
130	Market Definition	DAF/COMP(2012)19
131	Competition and Commodity Price Volatility	DAF/COMP/GF(2012)11
132	Quantification of Harm to Competition by National Courts and Competition Agencies	DAF/COMP(2011)25
133	Improving International Co-operation in Cartel Investigations	DAF/COMP/GF(2012)16
134	Leniency for Subsequent Applicants	DAF/COMP(2012)25
135	The Role of the Efficiency Claims in Antitrust Proceedings	DAF/COMP(2012)23
136	Competition and Payment Systems	DAF/COMP(2012)24
137	Methods for Allocating Contracts for the Provision of Regional and Local Transportation Services	DAF/COMP(2013)12
138	Vertical Restraints for On-line Sales	DAF/COMP(2013)13
139	Competition and Poverty Reduction	DAF/COMP/GF(2013)12
140	Competition Issues in Television and Broadcasting	DAF/COMP/GF(2013)13