This note by the Secretariat provides a summary of the information collected in 2012 regarding evaluation exercises by Competition Authorities. This stocktaking note, which is part of the Competition Committee’s Strategic Theme on the Evaluation of the Impact of Competition Intervention, is circulated FOR INFORMATION.

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1. **Introduction**

1. At its February 2012 meeting, the Competition Committee agreed to start working on the new strategic theme on the evaluation of the impact of competition interventions by performing a stocktaking exercise. The Secretariat prepared and circulated a questionnaire to all its members and observers.

2. The aim of this questionnaire was to understand what kind of evaluation exercises the competition authorities (“CAs”) have been undertaking, why they have been undertaking them and how they have been doing it. The questionnaire also asked what kind of difficulties are associated with carrying out these exercises, how the results of these exercises affect the CAs, and whether they expect to do, or be required to do more evaluation in the future. The questions referred to the period since the year 2000. A copy of the questionnaire is enclosed in Appendix A.

3. The questionnaire was answered by 46 CAs out of 52 and 44 jurisdictions out of 50 (88% response rate). In addition, many CAs submitted studies, reports and papers related to their evaluation activities. All this material has provided the Secretariat with a wealth of information that will be very helpful in developing this strategic theme and that should reduce the need for information-gathering ahead of subsequent roundtables. This paper provides an overview of the responses and of all the material received. It also aims to help the planning of future work within this strategic theme by highlighting a number of important issues.

4. This note provides a summary of the information collected in 2012 and gives an overview of the evaluation activities undertaken by the CAs.

1.1 **Types of evaluation exercises**

5. The evaluation of competition enforcement and advocacy activities refers to all those assessment exercises that CAs undertake to determine the effectiveness of their work, to provide transparency about their activities and to account for the use of their resources. Given the wide variety of forms that these evaluation exercises can take, the Secretariat has grouped them under three main categories:

1. **Evaluation for accountability**: this type of evaluation involves an assessment of all (or a subset of) the competition enforcement and advocacy activities of a CA over a limited period of time, generally a year. This type of evaluation is normally performed shortly after the interventions have been made; hence, even if done ex-post, it is based only on the information available when the activities were undertaken. It is usually performed to account for the resources received by the CA, sometimes as part of the authority’s target and budget-setting process. It ranges from annual reports to quantitative estimates of the benefits that consumers are likely to obtain from the CA’s activities.

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1 The CAs that have responded to the survey are those from: Australia, Austria, Belgium, Bulgaria, Canada, Chile, Colombia, Czech Republic, Denmark, Egypt, Estonia, European Union, Finland, France, Germany, Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Malta, Mexico, Netherlands, New Zealand, Norway, Peru, Poland, Romania, Russian Federation, Slovak Republic, South Africa, Spain, Sweden, Switzerland, Turkey, Chinese Taipei, Ukraine, United Kingdom (Office of Fair Trading and Competition Commission) and United States (Federal Trade Commission and Dept. of Justice).

2 By intervention we mean a decision by a CA on a merger, a cartel, on abuse of dominance or other competition law infringements, a competition advocacy opinion or intervention, or a market/sector study.
2. **Ex-post evaluation of specific interventions and of their impact on the affected market(s):** this type of evaluation involves the assessment of the impact on the relevant market(s) of specific interventions made by the CA. This type of evaluation is normally performed some time after the interventions have been made to determine their *actual* effect. These assessments are usually performed to verify the accuracy and appropriateness of the CA's interventions and to improve the CA’s decision-making process.

3. **Evaluation of the broader impact of competition policy:** this type of evaluation examines the links between competition enforcement and advocacy activities and one or more macro-level economic variables, such as productivity, innovation, growth, or employment, and assess the impact that the former have on the latter.

6. It is worth stressing that ex-post evaluations of specific interventions are usually undertaken a few years after these were made, whereas evaluations for accountability are performed soon after the interventions took place. Since competition and advocacy interventions require some time to produce their effects, this implies that ex-post evaluations can identify and assess the *actual* effects they generate, while the evaluations for accountability can only determine their *likely* effects on the basis of a number of assumptions.

7. The difference between detailed ex-post evaluations and evaluations of the broader impact of a CA’s activities, instead, lies in two factors. First, ex-post evaluations always concern one or a few interventions, whose effects are examined in detail, while evaluations of the broader impact concern a wide group of interventions (e.g. all merger decisions). Second, ex-post evaluations of specific interventions assess their impact on the relevant markets (e.g. on prices of the affected goods, on entry, on changes to quality and variety of available products), while the evaluations of the broader impact consider the effects of the interventions on more macro variables, such as productivity and growth, which are normally measured at country or industry level and not at market level. Clearly the boundaries are not always so easy to determine and some studies could satisfy both definitions, but in general the types of variables on which the effects of the interventions are assessed determine the difference.

8. Despite these differences these three types of evaluation overlap to some extent and the answers to the questionnaire have shown how grey the boundaries between them are.

### 1.2 Other types of evaluation not considered here

9. All the exercises discussed above relate to evaluations that are performed after the activities examined have been undertaken (e.g. after a cartel is discovered and fined or after a merger has been prohibited). Hence, they do not include the ex-ante assessments of the possible effects of proposed mergers, or the forecasts of the likely benefits of other types of interventions (typically presented in market and sectoral studies).

10. Studies that monitor compliance in general are not considered to be ex-post evaluations, because their aim is not to assess whether the analysis underpinning the decision was complete and accurate and if the decision had the effect envisaged, but only if the decision was complied with. In some cases these studies can be as detailed as ex-post evaluations and may also consider the impact of the decision, but not always and not necessarily. Moreover, many CAs are required to verify compliance with all their interventions, hence they cannot be undertaking a detailed ex-post assessment of each one. For these reasons we have excluded from our questionnaire the studies that monitor compliance.
1.3 Structure of this note

11. The remainder of this note summarises the key findings that have emerged from the answers to the questionnaire and highlights issues that the delegates may wish to explore further as part of the work undertaken for this strategic theme. This is done separately for each of the three types of evaluation exercises. Section 2 discusses evaluation for accountability, while Section 3 focuses on the ex-post evaluation of specific interventions, and Section 4 deals with the evaluation of the broader impact of competition policy.

2. Evaluation for accountability

2.1 Reporting obligations: the annual report

12. The questionnaire showed that 44 of the CAs surveyed (96% of those that replied) are required by law, or by statute, to report on their enforcement and advocacy activities. The periodicity of this obligation in general is annual, but there are some exceptions\(^3\).

13. As a result of this obligation these 44 CAs have to prepare a detailed account of their activities, which includes both a qualitative description of the investigations undertaken, the decisions reached, and the interventions made, and a set of quantitative indicators that measure their level of activity. These indicators usually comprise:

- the number of investigations opened and closed in the course of the year (by type of infringement),
- the percentage of decisions not overturned in appeal,
- the fines imposed,
- the number of mergers examined and their outcome, and
- the number and the type of advocacy interventions made.

14. Some CAs include additional quantitative measures, which range from measures of the benefits that will occur to consumers as a result of their activities, to performance indicators, such as the average duration of an investigation by type of infringement. From here on we shall refer to these accounts as annual reports, though they are called in a variety of ways in the various jurisdictions.

15. The two CAs that do not have any reporting obligations\(^4\) prepare an annual report of their own initiative.

\(^3\) For example, the Bundeskartellamt has to publish a report on its activities every two years.

\(^4\) These are: Indecopi in Peru and the FTC in Chinese Taipei.
16. All 46 CAs make these annual reports public by publishing them on their website.

17. When asked about the reasons for the obligation to prepare an annual report, a large number of the CAs just reported the details of the legal instrument that imposes it, while a few explained that this obligation is aimed at ensuring that the CAs are held accountable for their use of public funds and at guaranteeing transparency.

18. In general these annual reports, since they fulfil an obligation, are submitted to the scrutiny of the central government, i.e. the Parliament, the Government and/or a Ministry. However, from the answers provided it appears that five CAs\(^5\) are not required to do so. Out of the 38 CAs that do submit their annual reports to their central government, only 23 CAs have declared that they receive official feedback. Four CAs have noted that they also receive feedback in the form of an immediate revision of their budget\(^6\).

2.2. Other reporting obligations

19. In addition to preparing an annual report, all the CAs surveyed must prepare their annual accounts and have them approved by the national authority responsible for auditing the accounts of public bodies, by the Parliament, or by the Ministry of Finance.

20. Furthermore, at least 15 CAs have additional reporting obligations. Examples of these additional obligations are:

- quantifying the benefits that accrue to consumers as a result of their activities\(^7\);

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\(^5\) These five CAs are: l’Autorité in Belgium, the ICA in Iceland, the AA in Israel, the CA in Turkey and the Superintendence in Colombia.

\(^6\) These four CAs are: FNE in Chile, KPPU in Indonesia, the CC in Romania and the CC in South Africa.

\(^7\) These CAs are: the OFT in the UK, the FTC and DoJ in the US, and the FCC in Mexico.
• assessing the efficiency of their interventions by comparing the estimated consumer savings with the resources spent on enforcement\(^8\);
• undergoing a regular review by an independent body\(^9\);
• performing a stakeholder survey to assess how effective their activities are perceived to be\(^{10}\); and
• collecting data on the amount and the purpose of all the State Aid granted\(^{11}\).

21. In addition, four CAs expect their reporting obligations to be changed or expanded in the near future:

• the CA in Ireland will enter into a service level agreement with the relevant government department and hold it with regular reporting meetings,
• l’Autorité in Belgium will have to set and announce priorities for its work, and
• the CAs in the Netherlands and Spain are undergoing major structural changes that could have an impact on their reporting obligations.

2.3 **Voluntary assessments**

22. The questionnaire also enquired about other evaluation exercises that CAs may undertake of their own initiative. More than half of the CAs surveyed have reported that they either undertake, or will soon start to undertake, voluntary assessments of their activities. These assessments vary very much in nature. Below we provide some examples:

• the FTC in the US assesses every year the number and the type of advocacy activities performed and the resources employed;
• the CB in Canada regularly produces a performance review of its Mergers Branch;
• 17 CAs quantify, to some extent, the expected benefits of their activities (see more below);
• the CA in Ireland, the NCA in Norway, the FTC in Chinese Taipei and the KPPU in Indonesia try to gauge the effectiveness of their work through a stakeholder survey\(^{12}\);
• 24 CAs perform of their own initiative detailed ex-post evaluations of some of their interventions (see more in Section 3).

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\(^8\) The FTC in the US.
\(^9\) The NMA in the Netherlands.
\(^10\) The Konkurrensverket in Sweden.
\(^11\) DG Competition in the EU and the CNC in Spain.
\(^12\) Also the Konkurrensverket in Sweden undertakes one every year, but they are required to do it.
2.4 **Quantification of benefits generated by competition enforcement and advocacy activities**

23. An evaluation activity that is being undertaken by more and more CAs is the quantification of the benefits that are likely to arise as a consequence of their competition enforcement and advocacy activities. As mentioned before, this exercise is performed soon after the activities took place; hence, even though it happens “after”, this assessment cannot determine their actual effects, but only their likely effects on the basis of a number of assumptions. Hence, it differs from the ex-post evaluations we will discuss later.

24. Many CAs undertake this exercise because of the mounting pressure on CAs, as on all public agencies, to be more transparent and accountable. Sixteen CAs (35% of the 46 CAs surveyed) have reported that they regularly perform this exercise, while five\(^\text{13}\) (11%) have reported that they do so occasionally. Out of 16 CAs that quantify the benefits of their activities with regularity, four are required to perform this assessment and to include the resulting figures in their annual report. These are the OFT in the UK, the FTC and the DoJ in the US, and the FCC in Mexico\(^\text{14}\). The other 12 CAs\(^\text{15}\) perform this exercise voluntarily.

![Figure 2: CAs that currently quantify the benefits of their activities\(^\text{16}\)](image)

Note: includes all 46 CAs surveyed.

25. Further, the CC in South Africa and AGCM in Italy reported that they will soon start performing the quantification of the benefits of its activities, and the ACCC in Australia and the CC in Denmark are considering whether to begin this kind of assessment. This means that 21 of the CAs surveyed perform, to some degree, this type of assessment, and 2 will do so in the near future.

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\(^{13}\) The five CAs are: the FNE in Chile, l’Autorité in France, the AA in Israel, the KPPU in Indonesia and the CC in Romania.

\(^{14}\) In Mexico this obligation has just been introduced.

\(^{15}\) The 12 CAs are in: l’Autorité in Belgium, the CB Canada, DG Competition of the EU, the Bundeskartellamt in Germany, the GVH in Hungary, the ICA in Iceland, the JFTC in Japan, the KFTC in Korea, the NMa in the Netherlands, the CC in UK, the CC in Lithuania and the CA in Ukraine.

\(^{16}\) These figures include both those CAs that are required to undertake this quantification and those that do so voluntarily.
26. Very few CAs perform this quantification for all their enforcement and advocacy activities; the majority only considers some subsets. Table 1 and Table 2 below show, for each major set of activities, the number of CAs that perform this exercise regularly and occasionally (i.e. they have done only once or only for some interventions) and those that do not. These figures include both the CAs that are required to undertake this quantification and those that do so voluntarily.

Table 1: CAs that quantify benefits split by type of activity (number of CAs)

<table>
<thead>
<tr>
<th></th>
<th>Cartels</th>
<th>Other anticompetitive agreements</th>
<th>Abuses of dominance</th>
<th>Mergers</th>
<th>Competition advocacy</th>
<th>Other interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>11</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Occasionally</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
<td>33</td>
<td>35</td>
<td>32</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>Not applicable</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
<td><strong>46</strong></td>
</tr>
</tbody>
</table>

Table 2: CAs that quantify benefits split by type of activity (as % of total surveyed)

<table>
<thead>
<tr>
<th></th>
<th>Cartels</th>
<th>Other anticompetitive agreements</th>
<th>Abuses of dominance</th>
<th>Mergers</th>
<th>Competition advocacy</th>
<th>Other interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24%</td>
<td>22%</td>
<td>20%</td>
<td>24%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>9%</td>
<td>0</td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>No</td>
<td>63%</td>
<td>72%</td>
<td>76%</td>
<td>70%</td>
<td>78%</td>
<td>59%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>4%</td>
<td>7%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>30%</td>
</tr>
</tbody>
</table>
27. The two tables show that on average between 20% and 25% of the 46 CAs that responded to the questionnaire regularly quantify the benefits consumers derive from the detection of cartels and of other anticompetitive agreements, the appraisal of mergers and the investigation of abuses of dominance. The figure is much lower for advocacy and other types of interventions, though for the latter also the number of ‘not applicable’ is very high (which means that many CAs do not perform other interventions).

28. All the CAs that quantify the expected benefits of their activities appear to measure them in terms of the direct financial savings that are likely to accrue to consumers due to changes in prices. Most CAs assume a fixed percentage reduction of prices per type of infringement prosecuted, unless they are able to derive a different figure from case-specific information. Only the OFT and the CC in the UK have reported that they assess the impact of their activities on quality and product innovation; and even these CAs have clearly stated that they do so only occasionally, when such an impact is a very clear feature of the merger or infringement being assessed\(^\text{17}\).

29. No CA attempts to quantify the impact on growth or productivity. Two CAs, the Bundeskartellamt in Germany\(^\text{18}\) and the CC in Lithuania\(^\text{19}\), have included a measure of the impact of deterrence in their calculation. The GVH in Hungary is also considering how to take the deterrence effect into consideration, but they have not yet developed a methodology. Two other CAs, the OFT in the UK and the NMA in the Netherlands, have tried to assess the magnitude of the deterrent multiplier in their jurisdictions through surveys. However, so far they have not used this multiplier to adjust their assessment of the benefits they generate, having preferred to arrive at a conservative, but more reliable, estimate.

30. The CAs that quantify the benefits of their activities include both large CAs, which have more resources and a wider array of cases, and smaller ones, which have less staff and a more limited selection of cases.

2.5 Reasons for not quantifying benefits

31. The CAs that do not perform this exercise have been asked why. Their answers show that this choice is due to one or more of the following reasons:

- lack of human and financial resources;
- lack of the necessary data;
- lack of a valid methodology; and
- lack of suitable cases.

\(^\text{17}\) The OFT reported that where a merger is expected to primarily result in a change in quality rather than in prices, they proxy this as a price effect, i.e. they consider a 5% deterioration in quality to be the same as a 5% increase in prices.

\(^\text{18}\) The Bundeskartellamt has reported that in the assessment of the benefits of its enforcement activities concerning cartels they have employed the restrictive assumption that ‘one additional cartel in an economically important market would be deterred’. They have chosen this figure so as to ensure that it was reliable and conservative.

\(^\text{19}\) Since it was the first time the CC has conducted the impact assessment study, no country-specific deterrent effect survey has been conducted. Therefore, the CC has included in its calculations of the benefits consumers derive from their activities a measure of the deterrent effect derived by the OFT’s survey, conducted by Deloitte in 2007. The deterrent effect, however, is included as a comparison to the more conservative estimate that was more widely communicated to the public.
32. Lack of resources seems to be the biggest stumbling block, though also the lack of data is often mentioned. A few CAs also mention the lack of a valid methodology and the lack of suitable cases. The responses, however, vary depending of the type of activities considered. For example, lack of a methodology is more often cited with respect to the benefits of interventions concerning abuses of dominance.

2.6 Assessing the likely impact of specific interventions to set fines

33. The questionnaire also asked if the CAs had to quantify the likely impact of specific interventions for breaches of competition law in order to set fines. It has emerged that in 15 of the 44 jurisdictions that answered the survey fines are, or can be, based on the financial gains that are likely to result from the infringement, or on the damages that are caused by it. In all the other jurisdictions fines are proportional to the offending firm’s turnover and they depend on the gravity and the duration of the offence. In these jurisdictions assessing the gravity of the offence does not require quantifying the impact of the infringement on the affected markets, but relies on a more qualitative assessments of factors such as: the nature of the infringement, the type of product, the structure of the market, entry conditions, the market share(s) of the undertaking(s) involved, and the effect on competitors and third parties.

Figure 4: Fines can be based on financial gains/damages resulting from infringement (number of jurisdictions)

<table>
<thead>
<tr>
<th></th>
<th>Number of Jurisdictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>15</td>
</tr>
<tr>
<td>no</td>
<td>29</td>
</tr>
</tbody>
</table>

Note: includes all 44 jurisdictions surveyed.

2.7 Setting priorities

34. Most of the CAs set priorities in their work by identifying activities (e.g. fighting cartels) and sectors (e.g. construction) on which to concentrate their resources. Some CAs are under an obligation to do so, while others do it voluntarily. The choice of these priorities is based on different criteria and sources of information, but the aim is to allow CAs to organise their resources so as to focus on those interventions that are most needed and/or are likely to have the highest impact.

35. Only three CAs (7%), out of the 46 CAs surveyed, appear not to set priorities. These are: l’Autorité in Belgium, ECA in Egypt and the AO in the Slovak Republic. However, the situation will soon change as the Slovak Republic is working on the prioritisation of its activities and Belgium is planning to start setting priorities. The CC in the UK cannot set priorities, because its activities are all undertaken
following a reference by the OFT or other UK authorities. Further, the CA in Turkey and the GVH in Hungary have only limited scope for setting priorities, because they are required by law to examine all formal complaints. The remaining 40 CAs (87%) set priorities to organise their work and allocate their resources.

![Figure 5: Do you set priorities in your work?](image)

Note: includes all 46 CAs surveyed.

36. The way the priorities are set varies across jurisdictions. Some CAs just identify some areas on which to focus over a given period of time (which can range from one to five years), while others turn these priorities into specific, more measurable, objectives to be achieved or into specific actions to be undertaken.

37. Thirty out of the 40 CAs that set priorities make them public in their annual report, or in other publications, or through speeches and presentations.
Figure 6: Do you render your priorities public?

Note: includes all 46 CAs surveyed.

38. It is hard to say how many CAs actually assess the extent to which these priorities have been met, because a considerable number of CAs have not provided this information. Only 27 have clearly said that they do so. Table 3 below summarises these data.

Table 3: CAs performing an assessment of attainment of previous priorities

<table>
<thead>
<tr>
<th>Answer</th>
<th>Number of CAs</th>
<th>Share of CAs (over total surveyed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>27</td>
<td>58%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>9%</td>
</tr>
<tr>
<td>Not answered</td>
<td>13</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3. **Ex-post evaluation of specific interventions**

39. The second part of the questionnaire asked CAs about the detailed ex-post evaluations of specific enforcement decisions and advocacy interventions that they have undertaken since the year 2000. These exercises involve determining the impact on the relevant market(s) of specific interventions some time after they have been made to verify the accuracy and appropriateness of CAs’ decisions and of the analyses supporting it.

40. Not all CAs perform these assessments. As reported in Figure 7, the questionnaire shows that 27 (59%) of the 46 CAs surveyed have performed (one or more) ex-post assessments since the year 2000.
Figure 7: Number of CAs that have (or have not) performed ex-post assessments since 2000

0 5 10 15 20 25 30

Yes 27

No 19

Note: includes all 46 CAs surveyed.

However, the situation is changing and more CAs are starting to perform ex-post assessments. Three CAs\(^{20}\) are setting up, or have just set up, an evaluation unit that will perform ex-post assessments, and three CAs\(^{21}\) are considering whether they could start performing these exercises. Further, three CAs\(^{22}\) have expressed interest in learning more about other CAs’ experiences in this field.

### 3.1 Required and voluntary ex-post assessments

Some CAs perform these assessments because they are required by law or statute, while others undertake them of their own initiative. Figure 8 below shows that out of the 27 CAs that have performed ex-post assessments since the year 2000, 21 (78%) do so only voluntarily, while the other six (22%) are explicitly required to undertake them. Further it highlights that three of the latter\(^{23}\) perform additional ex-post assessments of their own initiative.

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\(^{20}\) These are: the CC in South Africa, the AGCM in Italy and the FCC in Mexico.

\(^{21}\) These are: the ACCC in Australia, the BWB in Austria and the FNE in Chile.

\(^{22}\) These are: the UOHS in Bulgaria, the CPC in Czech Republic and the AO in the Slovak Republic.

\(^{23}\) The OFT in the UK is required to undertake one independently audited ex-post evaluation each year of a competition policy or consumer policy intervention, l’Autorité in Belgium is required to perform one ex-post evaluation each year, and the JFTC in Japan is required to perform the assessments of key interventions.
It is worth highlighting that one of the CAs which was required to undertake ex-post assessments, the NCA in Norway, has recently had this obligation removed. The reason for this change is that it is a challenge for a relatively small CA to identify appropriate cases for which sufficient data are available.\footnote{Norway was required to undertake every year the ex-post assessment of: 1 merger decision, 1 unilateral conduct or cartel decision and 1 advocacy case.}

3.2 Reasons for performing ex-post assessments

The questionnaire asked CAs to explain why they undertake ex-post assessments. As shown in Figure 9 the majority appears to undertake these assessments to review and improve their internal decision-making process. There is an almost perfect overlap between the CAs that report this as their main objective and the ones that voluntarily perform ex-post studies. CAs also appear to find that demonstrating the effects of their activities helps to enhance the credibility of their institutions and to justify the use of their resources. Finally, ex-post assessments are also used to set priorities in the workload and allocate resources. (Please note that many CAs have cited more than one reason.)
3.3 Reasons for not performing ex-post assessments

45. The questionnaire also enquired about the reasons why CAs do not perform ex-post assessments. Figure 10 below shows the answers provided. Lack of resources and having other priorities, which could be interpreted as not having enough resources, appear to be the most important ones. Lack of technical skills which are necessary to perform quantitative ex-post assessments also appears to be an obstacle, as well as access to the necessary data. A few other reasons have also been reported, such as methodological difficulties and reliance on the presumption that a CA’s decisions will always bring about benefits to consumers. (Please note that most CAs have cited more than one reason).

Figure 9: Reasons for performing ex-post assessment

![Bar chart showing reasons for performing ex-post assessment]

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review decision-making process</td>
<td>19</td>
</tr>
<tr>
<td>Accountability</td>
<td>13</td>
</tr>
<tr>
<td>Determine priorities</td>
<td>6</td>
</tr>
</tbody>
</table>

Figure 10: Reasons for not performing ex-post assessments

![Bar chart showing reasons for not performing ex-post assessment]

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of economic resources</td>
<td>9</td>
</tr>
<tr>
<td>Lack of skills</td>
<td>4</td>
</tr>
<tr>
<td>Lack of reliable data</td>
<td>2</td>
</tr>
<tr>
<td>Other priorities</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>
3.4 Types of interventions assessed

46. The questionnaire also explored the nature of the activities and interventions that are assessed ex-post. Table 4 and Table 5 below show which types of enforcement activities are assessed by the CAs. These tables show that CAs tend to assess mostly merger and cartel decisions, and much less so abuses of dominance. The reason given by many CAs for not performing reviews of abuses of dominance is the methodological difficulties. Indeed, also in academia there is still lack of consensus on how to study the impact of this type of decisions. The two tables do not include details about other types of interventions there are assessed ex-post by CAs, because the data that we have managed to collect on them does not allow a precise quantification.

Table 4: Types of intervention assessed by the CAs (number of CAs)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Mergers</th>
<th>Cartels and other anticompetitive agreements</th>
<th>Abuses of dominance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>Not answered</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Not applicable</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>46</td>
<td>46</td>
</tr>
</tbody>
</table>

Table 5: Types of intervention assessed by the CAs (share of CAs)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Mergers</th>
<th>Cartels and other anticompetitive agreements</th>
<th>Abuses of dominance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>43%</td>
<td>41%</td>
<td>20%</td>
</tr>
<tr>
<td>No</td>
<td>48%</td>
<td>50%</td>
<td>70%</td>
</tr>
<tr>
<td>Not answered</td>
<td>4%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

47. The number of ex-post assessments that CAs have undertaken, or commissioned, since the year 2000 strongly varies across jurisdictions. Most of the authorities undertook such studies very occasionally or as a one-off exercise while a few have conducted a large number of studies. Table 6 below shows the frequency with which each CA has undertaken these exercises, split by type of activities. From the table it emerges that CAs have undertaken ex-post assessments of decisions concerning mergers both on an occasional and a regular basis, whereas decisions on cartels, other anticompetitive agreements and abuses of dominance tend to be reviewed less regularly.

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25 Not applicable refers to those CAs that cannot issue such decision because they have no responsibilities over these infringements or have no merger control regime (e.g. the CC in the UK cannot investigate cartels or abuses of dominance).
Table 6: How frequently CAs have performed ex-post assessments (share of CAs)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Mergers</th>
<th>Cartels and other anticompetitive agreements</th>
<th>Abuses of dominance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td>30%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>43%</td>
<td>70%</td>
<td>26%</td>
</tr>
<tr>
<td>Never</td>
<td>22%</td>
<td>22%</td>
<td>65%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Note: includes the 23 CAs that have provided information concerning the number of studies performed since 2000.

3.5 Who performs the studies?

48. Ex-post assessments can be performed using internal resources or can be outsourced to academics and consultants. The questionnaire did not ask how often studies are performed internally or externally, but inquired about factors considered when deciding who should undertake the study. The CAs have mentioned the following:

- how costly it is to outsource the study,
- the human resources necessary and whether these are available internally,
- if specific technical skills are required and whether these are available internally,
- if there are confidentiality issues regarding access to the files relative to the intervention(s) to be examined,
- whether external consultants may more easily obtain information from market players, and
- whether independence and impartiality in the evaluation may be better achieved by using external consultants.

3.6 Details on the studies

49. Appendix B contains a more detailed analysis of the ex-post studies that have been sent to us together with the questionnaire. These studies represent a large share of all those undertaken by the CAs surveyed between 2000 and today. Appendix C contains a list of these studies that are publicly available.

4. Evaluation of the broader impact of competition policy

4.1 The natures of these studies

50. This type of evaluation tries to assess the links between competition enforcement and advocacy activities and one or more macro-level economic variables, such as productivity, innovation, growth, or

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26 Often means that the CA has undertaken more than ten studies since the year 2000.

27 Occasionally means that the CA has undertaken between one and ten studies since the year 2000.
employment. These studies are undertaken for research purposes in order to understand more widely how effective CAs’ activities are, but they also help to increase awareness on the role of CAs in the economy.

51. In their answers 17 CAs (40%) reported having undertaken or commissioned studies of this nature. The variety of these studies brought to our attention is such that it is difficult to provide a simple categorisation. Some respondents have reported studies that appear to be more akin to sectoral reviews. A couple have completed reviews of the existing economic literature on the topic. Several CAs have conducted qualitative assessments of the importance of specific types of interventions (such as state aid, liberalisation of specific sectors, and removal of bureaucratic barriers to competition and not just competition enforcement activities) in promoting growth and increasing productivity, while a few CAs have commissioned quantitative (econometric) exercises to academics or consultants.
APPENDIX A

OVERVIEW OF THE EX-POST STUDIES SUBMITTED TO THE SECRETARIAT

52. The Secretariat received, together with the responses to the questionnaire, a large number of ex-post evaluations of specific interventions undertaken by CAs in the last ten years. This appendix provides an overview of these studies, focusing on the types of variables on which the effects are assessed, the methodologies employed, the data used, the problems and the difficulties encountered, and the lessons learnt. A list of the studies that are publicly available\(^1\) can be found in Appendix B.

53. We would like to recall that this appendix refers only to the full studies submitted to our attention, which only represent a subset of all the ex-post studies undertaken by CAs since the year 2000.

1. The aim of detailed ex-post assessments of specific interventions

54. As explained in the note, ex-post assessments try to determine what has been the actual impact on the relevant market(s) of a specific intervention made by a CA. They attempt to determine if the intervention had been appropriate and if the analysis supporting it was accurate and complete.

55. Generally speaking, the aim of a CA’s intervention is to ensure that consumer welfare is maximised.\(^2\) Hence, an ex-post assessment tries to ascertain what has been the impact of that intervention on the key market variables that affect consumer welfare relative to the value these would have had without the intervention. This requires two steps. The first one consists in identifying the appropriate counterfactual (i.e. the possible alternative intervention that the CA could have made), while the second consists in measuring the level of consumer welfare achieved by the decision relative to its counterfactual. The counterfactual scenario is not necessary the state of the market before the intervention, because other things may have changed in the meantime (e.g. a change in regulation, the introduction of a new technology, a macroeconomic shock, etc.).

2. The relevant variables

56. Consumer welfare in a market is measured as the difference between the maximum amount of money consumers would accept to pay for each unit of the good or service (usually referred to as the consumers’ willingness to pay) and what they actually pay for it. Figure A.1 below shows consumer welfare in a generic market. This is given by the area below the demand curve up to the quantity consumed \((q)\), less the expenditure incurred by the consumers to purchase that quantity \((q*p)\). Consumer welfare is marked as A, while the expenditure is marked as B.

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\(^1\) By the studies, we mean the entire study and not just a description of its content.

\(^2\) Most, but not all CAs, have as their objective the maximisation of consumer welfare.
57. From the figure one can easily determine that the level of consumer welfare depends on the following market variables:

- the prices at which the goods and services are exchanged,
- the volumes of these transactions, and
- the quality and variety of the goods and services and the consumers’ preferences (which determine the position of the demand curve).

58. Hence, to understand how consumer welfare has changed following an intervention by a CA it is necessary to analyse how these market variables evolved after the intervention took place and then to compare them with the values these variables would have had in the counterfactual scenario. In general consumer welfare increases when: the prices for the relevant goods or services decrease, total output raises, the quality of the goods or services improves and/or their variety increases.

59. The majority of the studies brought to our attention assess what has been the impact of the intervention under exam on the three key variables just listed, as well as on other variables that have an impact on the key ones (e.g. entry, innovation and deterrence). However, the studies differ with respect to the methodology they use and the level of detail they reach. Often, as we shall discuss more in details later, the analysis of the impact on the non-price variables is qualitative and the conclusions rather general,
whereas the analysis of the price effect is more detailed and most studies attempt to quantify it. The reason for this difference probably lies in the lack of detailed data on the non-price variables, but there may also be methodological problems.

3. The methodologies

60. The methodologies used for performing ex-post assessments can be grouped into 4 categories:

- surveys and interviews;
- comparator-based methods;
- market-structure-based methods; and
- financial-analysis-based methods.

61. Below we present these methods and provide some examples of their use in the studies submitted to us. It is worth highlighting that these methods are complementary and can reinforce each other. Indeed all the ex-post studies we have read employ more than one method simultaneously. In general they tend to include an analysis (either quantitative or qualitative or both) that relies on a comparator-based method, supported by surveys and interviews. The other two methodologies are used much more rarely.

3.1 Surveys and interviews

62. Surveys and interviews involve the collection of data from market players (such as customers, suppliers, competitors and the firms directly affected by the intervention) through a written questionnaire or a set of interviews. Surveys and interviews can be used to achieve two aims: 1) they can be an efficient and accurate means of obtaining qualitative and quantitative data about the actual and potential development of a market after CA’s intervention, and 2) they can also help to interpret the results obtained through other methods.

63. Examples of the use of surveys as data-gathering tools can be found in the studies undertaken to assess the impact of UK OFT’s market studies. To name a few: an assessment of a market study on the licensed taxis and private hire vehicles sector\(^3\), an assessment of a market study on car warranties\(^4\), an assessment of a market-study on the care home sector\(^5\), and an assessment of a market study on the retail pharmacies sectors\(^6\). The reason why these studies rely so heavily on the use of interviews and surveys probably lies in the fact that the OFT’s recommendations often concern non-price elements of the market.

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\(^3\) "Evaluating the impact of the taxis market study", a report prepared for the Office of Fair Trading by Europe Economics (October 2007).

\(^4\) “Evaluating the impact of the car warranties market study”, a report prepared for the Office of Fair Trading by Europe Economics (June 2006).


\(^6\) “Evaluating the impact of the 2003 OFT study on the Control of Entry regulations in the retail pharmacies market”, a report prepared for the Office of Fair Trading by DotEcon (March 2010).
(e.g. information availability, quality of the products, accessibility of services and so on) on which it is hard to obtain data from public or commercial sources.\(^7\)

64. Surveys and interviews are also often employed as a cross-check on the quantitative analysis. Numerous examples could be provided, we shall name just a couple. In the ex-post assessment of two mergers in retail market undertaken by a consultancy for the CC in the UK\(^8\), the quantitative assessments of the price changes caused by the two mergers are complemented by two surveys of the major competitors and suppliers. Similarly, in a study undertaken by a consultancy for the European Commission to evaluate the impact of a merger that involved two major producers of power cables\(^9\), the quantitative assessment of the impact on the merging firms’ profitability was followed by a survey and phone interviews of the main competitors and customers. In both cases the information thus collected confirmed the conclusions reached by the quantitative analysis.

65. Further, surveys can be used to support the outcome of not very robust analyses, such as before-and-after comparisons. A challenging aspect of any ex post evaluation is to determine whether a change in market outcome is caused by, or simply correlated with, the competition intervention. This is especially problematic when the analysis employed to determine the effects of the intervention does not allow to control for possible additional explanations for the observed changes (e.g. when only a graphical comparison is undertaken). Surveys help in these cases because they can be used to ask market players about causal links between the intervention and the changes observed. In the ex-post assessment of a market study on care homes in the UK\(^10\), most of the analysis is based on a simple comparison of market conditions before and after the recommendations were issued, as there were not enough data to perform a more sophisticated analysis. The consultants integrated these results with surveys of care homes, local authorities and care home users in which they asked about other factors that may have determined the changes observed and about their views on the links between the observed market changes and the OFT’s recommendations.

3.2 Comparator-based methods: before-and-after and differences-in-difference

66. Comparator-based methods use data from markets or time periods different from the one affected by the intervention to estimate the counterfactual and compare it with the actual market developments. Broadly these methods involve:

- cross-sectional comparisons (comparing the affected market with different geographic or product markets);
- time-series comparisons (analysing the affected market before, during and/or after the intervention, usually referred to as before-and-after); and

\(^7\) There are some exceptions, for example see the discussion on the ex-post assessment of a market study on the care home sector presented below.

\(^8\) “The ex-post evaluation of two merger decisions”, a report prepared by Lear for the UK Competition Commission (September 2011).

\(^9\) “Ex-post review of merger control decisions”, a study prepared for the European Commission by Lear (December 2006).

\(^10\) See above note 32.
• combining the above two in a ‘difference-in-differences’ approach (DiD) where the changes in
the affected market before and after the intervention are compared with the changes that took
place over the same time period in a comparable market not affected by the intervention\(^{11}\).

67. The techniques used to analyse this comparator data include comparisons of the values of the
variables and time-series, cross-sections and panel data regressions. Examples of how these techniques
have been used to assess price and non-price effects in ex-post studies are discussed in section 4.

3.3 Market-structure-based methods: structural models

68. Structural models are the most well known market-structure-based method. The central idea
behind these models is to empirically estimate the parameters of a set of structural equations that describe
the market(s) under exam. These equations are derived from models of competitive interaction developed
in industrial organisation theory and are typically used to estimate or simulate market outcomes in either
the factual or the counterfactual scenario. These models are increasingly employed to predict the effect of
proposed mergers, but are more rarely used for their ex-post assessments because of the large amount of
data they require. They are mostly applied to determine unilateral price effects, as they are less suitable for
the analysis of coordinated effects.

69. Among the studies brought to our attention, only one uses this approach. This study\(^{12}\) assesses
eight merger decisions taken in the UK and employs a simulation technique to determine the impact of four
of them (three which were unconditionally cleared and one which was prohibited). These four markets
were indeed suitable for such an analysis because they corresponded to a standard homogenous product
market setting in which price was the main focus of competition and unilateral effects were the main
concern. The approach used is a very simple one and the data employed were those available at the time of
the decision. Indeed, as the authors also stress, these exercises are mainly meant “to assess the implicit
modelling data collection by the authority and to ask whether this brings to light any issues or assumptions
that might have been overlooked or evaluated incorrectly”.\(^{13}\) For each merger, the simulation generates a
range of estimates of the price increase that largely supports the relevant decisions.

70. Another study\(^ {14}\), done by two economists from the Swedish Competition Authority, tries to check
the accuracy of the results of ex-ante simulations by considering a specific merger case in which this
approach was used. The study illustrates the simulation results obtained when the authority examined a
proposed merger between two companies in the Swedish fresh bread markets, and compares these
predictions with the actual effects that the merger had on prices, two years after this was cleared. The
authors rely on a simple before and after comparison of the prices of fresh bread to determine the precision
of the simulation, but they argue that this methodology can be relied upon because they have not found any
evidence of other factors that could explain the change. The study concludes that the simulation model
underestimated the negative impact that the merger had on prices, which increased considerably despite a
small deflation in the overall price level on food and non-alcoholic beverages. The poor predictions were
due to the assumptions made on the shape of the demand.

\(^{11}\) The basic idea is that the difference between the changes in the two markets is an estimate of the effect of
the intervention.

\(^{12}\) “Review of merger decision under the Enterprise Act 2002”, a report prepared for the Competition
Commission, Office of Fair Trading and Department of Business. Enterprise and Regulatory Reform by
Deloitte (March 2009).

\(^{13}\) Page 92 of the report mentioned above (note 39).

3.4 Financial-analysis-based methods: event studies

71. These methods use financial information to determine which firms have benefited from a competition authority’s intervention and hence what has been the impact on consumers. The most commonly used approach is event studies on share prices. Event studies rely on the assumption that financial markets are efficient and agents’ expectations are rational. If these assumptions are true, a firm’s stock price should always represent the discounted value of its flow of profits and, when an event that is expected to affect the firm’s profits happens, the stock price should adapt to reflect this change in expectations. Hence, by assessing the stock market’s reactions (i.e. the changes in the share prices of the affected firms and their competitors) to the announcement of a CA’s investigation into a merger or to the publication of a decision on a competition infringement (i.e. the event), it is possible to derive a view on the effect of this event on the relevant market(s). Clearly this approach can only be employed if the affected firms and their main competitors are listed on the stock market.

72. Event studies are mostly used to perform ex-post assessments in the academic literature, for example Duso, Neven and Röller (2006)\(^{15}\) and Duso, Gugler, and Yurtoglu (2006a\(^{16}\), 2006b)\(^{17}\). However, among the studies submitted to us we have found just one example: a study undertaken by a consultancy for the European Commission to evaluate the impact of a merger in the markets for power cables\(^{18}\). The consultants could not perform a DiD or before-and-after estimation due to the lack of data on prices and to the difficulty of finding a control group, given the peculiar characteristics of the two affected markets, which were undergoing considerable changes both on the demand and on the supply side around the time of the merger. Hence, they run an event study collecting data on share prices around three main events: when the merger was proposed, when the European Commission announced that it was going to undertake a Phase 2 investigation and when it cleared the merger. From this information they conclude that the financial markets anticipated that the merger would have increased the merging firms’ efficiency and would have led to an increase in competition and, thus, to a reduction in prices. This result is confirmed by a survey of market players.

4. Examples by type of variable assessed

73. In this section we shall provide some interesting examples of how the impact of competition interventions has been assessed on the various relevant variables. We start with the analysis of non-price variables and then moved on to prices. It is worth noting that most studies rely on qualitative analyses to assess the impact of an intervention on non-prices variables. Nevertheless, there are a few notable exceptions where a quantitative assessment has been attempted; we shall focus mostly on these. Instead most studies try to quantify the price effect of the intervention, though the analyses performed vary greatly in their precision and sophistication.


\(^{18}\) “Ex-post review of merger control decisions”, a study prepared for the European Commission by Lear (December 2006).
4.1 Quality of products and services

74. An interesting attempt to quantify the effect on quality has been performed in an ex-post study of the effects of a hospital merger in the US\textsuperscript{19}. There is considerable evidence that hospital mergers can cause substantial price increases, but these may be counterbalanced by other beneficial effects, the most important of which is improved clinical quality. Hence, a key element in the evaluation of this merger is whether it had actually resulted in improved clinical quality at the hospital that was acquired. The analysis the study employs consists in a series of difference-in-differences estimations that test whether changes in the clinical quality measures at the acquired hospital were different from the average changes experienced over the same period of time by four different control groups (composed of hospitals with similar characteristics but unaffected by the merger). The results do not provide much support for the merging parties’ claim that the merger had improved quality, though the authors caveat their conclusions\textsuperscript{20}. In its full ex-post analysis presented in court\textsuperscript{21}, the FTC considered quantitative measures of clinical quality, based on outcomes on patients, as well as “structural” quality measures, which focus on human resources and technical infrastructure, and “process” measures, which consider the specific diagnostic and therapeutic services provided\textsuperscript{22}. Instead, in the published study provided to us, the authors only describe the analysis performed using the measures of clinical quality based on patient outcomes, namely risk-adjusted mortality and complication rates for a number of clinical conditions, because the other measures relied on confidential data that could not be disclosed.

75. Another study that attempted a quantitative evaluation of the effect of a CA’s intervention on quality is the ex-post assessment of a market study on care homes in the UK\textsuperscript{23}. The original market study found that many users were poorly served by this market and made numerous recommendations on how to improve the service. The ex-post study tries to identify and quantify the benefits delivered to consumers as a result of these recommendations, by considering the changes occurred in a number of variables including prices, quality of services and availability of information. Due to a lack of data, most of the assessment is based on a simple before and after comparison of market conditions, which considers both the quantitative values of some variables, obtained from various sources including survey, and users’ and providers’ views on how the market had changed. However, the authors managed to collect some data on changes the quality of the services offered from a survey of UK care home, a survey of consumers, and the English care home regulator which allowed them to employ a methodology developed by the University of Kent for valuing outputs and quality changes associated with social services in a quantitative manner. They conclude that the benefits accrued to consumers as a consequence of the improvement in quality caused by the OFT’s recommendations could be valued between £6 and £10 million per year.

\textsuperscript{19} “A retrospective analysis of the clinical quality effect of the acquisition of Highland park hospital by Evanston North-western Healthcare”, FTC (November 2010).

\textsuperscript{20} They argue that their results must be interpreted with caution as the statistical significance of some findings may be overstated because they did not account for heterogeneity among control hospitals. They also cannot exclude the possibility of endogeneity, as a decision to merge may reflect hospital managers’ inside knowledge of emerging trends in quality, such that the experience of the control hospitals may not represent what would have happened at the merging hospitals absent the merger.

\textsuperscript{21} The merger was challenged in court.

\textsuperscript{22} Data limitations make it difficult to judge a hospital solely on its patient outcomes, though these are the most relevant ones for its users. This is partly because hospitals often have a relatively small number of patients of a given type, which makes outcomes a noisy measure of quality; and partly because there are many outcomes that cannot be measured at all with available data, such as post-hospitalization mortality, quality of life, and functional status. For this reason, hospital quality researchers also use “structural” quality measures and “process” measures.

\textsuperscript{23} See note 32.
4.2  Entry and exit

76.  A good example of an attempt to quantify the impact of a competition intervention on entry is the assessment of the changes in the entry regulation in the retail pharmacies market introduced in the UK following the OFT’s market study. In this ex-post study the consultants, who undertook the analysis, review the patterns of market entry and exit witnessed in the retail pharmacies market in England before and after the regulation was changed, against those that happened over the same time period in Wales where the reforms were not implemented. They find that the regulatory changes led to a net increase (around 9%) in the number of pharmacies. The consultants then try to monetise the impact of entry on consumer welfare by employing a bottom-up calculation that quantifies the value to consumers of their prescriptions demand being spread across a wider pharmacy base. They consider the impact on travel times and on waiting times, using data from a consumer survey and estimates of consumers’ value of time and obtain a figure of £24.7m-£32.8m per year. They complement this result with a 'holistic' measure based on a survey that elicited directly from the consumers a monetary measure of the benefit of the reforms. This holistic measure estimated the benefits between £21m and £68m per year.

77.  Another interesting example is the quantitative assessment of the impact on entry and product variety of a decision to clear a concentration in the commercial radio-broadcasting market in Canada. Canada’s Competition Bureau had cleared this merger, despite the large joint market share of the two stations in their local geographic markets because it had considered that competition would have remained effective and that entry was likely. The Competition Bureau had also noted that radio stations could change format (i.e. the nature of their programming) without need for a formal authorization, which could further generate competitive constraints.

78.  The ex-post assessment, performed by a consultancy, is based on data collected from market participants through interviews, from other academic and policy studies and from public sources. The core analysis is a DiD estimation based data on pre and post-merger conditions in a large number of local commercial radio broadcasting markets in Canada, only some of which had been affected by the merger. This is used to determine the impact of the merger on revenues per station (a proxy for advertising prices), entry of new stations and changes in formats (a proxy for the variety of programming). The conclusion is that the original analysis of the Bureau had been complete and correct, given the information available at the time. The study finds evidence of entry and reformatting in the relevant markets following the merger, which indeed kept revenue increases at bay.

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24  See note 33.

25  The higher figure is due to the fact that this method allows to include also those benefits that could not be quantify by the other approach due to a lack of data. Clearly this method has the limit of being based on subjective estimates.

26  “Ex Post Merger Review: An Evaluation of Three Competition Bureau Merger Assessments”, a study prepared by Mark Neumann and Margaret Sanderson of CRA International for the Competition Bureau (August 2007).

27  An example of a change in format is a radio that switches from transmitting classical music to country music.

28  The only negative conclusion reached by the consultants is that the Bureau had not considered two factors in its original analysis of the case: 1) the potential for price discrimination, whereby advertisers with inelastic may be more vulnerable to potential price increases as a result of the merger, and 2) the possible impact on radio station listeners whose entertainment value may be negatively affected by an increase in advertisements or a reduction in the quality and variety of the programming offered.
4.3 Innovation

79. The dynamic effects of a competition authority’s intervention are probably more important than the static ones. Hence, the impact on innovation should be taken into account. However, this is not an easy endeavour and it is rarely done. This is probably due to a combination of lack of data and of methodological difficulties. However, two ex-post studies have tried to assess the impact on innovation, as well as to develop a general methodology that could be used by others attempting a similar exercise.

80. The first of these studies tries to measure the impact of the abolition of a retail price maintenance agreement (the Net Book Agreement or NBA) on innovation, by measuring the impact of the intervention on productivity\(^\text{29}\). However, the authors note that by focusing on productivity they mostly capture process innovation, but not product innovation.

81. Since 1900, the NBA allowed publishers to prevent UK retailers from selling books below the publisher's chosen (net) price. The practice was forced to end in 1997, thus allowing booksellers to freely choose their prices. The ex-post study tries to assess whether this competition policy intervention has increased productivity in book retailing and in book publishing, as economic theory predicted. Indeed it was expected that the abolition of the NBA would facilitate the entry by low cost firms, such as supermarkets and internet retailers, which would gain market share by passing on their lower costs to the consumers. This would have a beneficial effect on industry productivity, as high productivity entrants would gain market share at the expense of low productivity incumbents (the so-called between firms effect). In addition, increased competition would lead traditional bricks and mortar incumbents to lower their own costs to be able to remain on the market and thus raise their productivity (the so-called within firm effect).

82. The study finds that in the retail sector the entry of the supermarkets and internet sellers has indeed made a positive contribution to industry productivity, but that, contrary to the expectations, incumbent retailers suffered from an aggregate productivity reduction. Hence, only the between firms effect went in the direction expected. The explanation provided is that short-to medium-term factor rigidities and adjustment costs caused the incumbent to downsize and consolidate only very slowly. Thus the beneficial within firm effect took a lot longer to materialise and this could not be captured by the study\(^\text{30}\). With respect to the publishing sector, they find that the competition intervention has led to productivity gains largely due to the within-firm effect spurred by the increase in downstream competition, as there was no major new entry in the market.

83. The two methodologies they use to obtain these results consist in:

1. assessing the changes that took place in the two markets before and after the intervention, and
2. comparing these changes\(^\text{31}\) with those that happened in two control markets, namely the retail book and publishing markets in Germany.

\(^{29}\) "An evaluation of the impact upon productivity of ending resale price maintenance on books", a report prepared for the OFT by the Centre for Competition Policy at University of East Anglia (February 2008).

\(^{30}\) They mentioned the 2005 Ottakar - Waterstones merger as an example of the much awaited cost-reducing consolidation in the brick and mortar segment of the market.

\(^{31}\) These changes are assessed both quantitatively (by calculating how productivity has evolved using firm level data) and qualitatively (by comparing changes in market structure).
84. They find the DiD approach (2) more reliable and more fruitful than the simple BEFORE-AND-AFTER one (1), because it allows to determine more clearly to what extent the changes in productivity are effectively due to the abolition of the NBA.

85. The second study that considers the impact of a competition intervention on innovation is the ex-post assessment of a merger in the pharmaceutical industry. The Swiss Competition Commission (COMCO) had approved the merger between two large pharmaceutical manufacturers on the ground that it would have not restricted competition nor raised barrier to potential competition. It also concluded that there were significant synergies in the field of R&D, as the research activities of the two companies would complement each other very well. However, to avoid any possible anticompetitive effect they imposed few remedies concerning the divestiture of some products and some IPRs. The study tries to assess if COMCO’s predictions were confirmed by the post-merger market developments.

86. One of the greatest concerns CAs have with respect to mergers in the pharmaceutical industry is innovation. First it is learned that in the short run some research projects are terminated and that products at the development stage are not pursued as the merging firms may already have a comparable product. Further in the medium to longer term, the incentives to innovate could be reduced, because one of the most important competitor in the development of new active substances ceases to exist (due to the merger), or because a consolidation of IPR portfolios creates a significant market entry barrier. Hence, this study focuses a lot on the impact of the merger on the incentives to innovate (proxied by the level of investment in R&D) of the merging parties and of their competitors.

87. Ideally the authors would have liked to quantify the impact of the merger on R&D, unfortunately they could not due to the lack of data and the scarce cooperation offered by Swiss pharmaceutical companies and associations. Therefore, the study is based on a simple before and after comparison of the available data on price, market shares, sales, investment behaviour and R&D expenditure of the merging firms and of their main competitors. The study thus finds that, as predicted by COMCO, the merged entity had not reduced its R&D expenditures following the merger and that innovation intensity - measured by the ratio of R&D to sales – had also not changed considerably. Talks with industry insiders also confirmed these findings.

4.4 Prices

88. As repeatedly mentioned above, almost of all the studies submitted to us try to quantify the price effect of the intervention, though the analyses performed vary greatly in their precision and sophistication. Many studies, due to the lack of data, rely mostly on before-and-after comparisons, but there are also examples of more sophisticated analysis that try not just to quantify the likely impact of the intervention, but also to prove the causal link between the two. Below we describe some of the most interesting examples we have come across.

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33 The COMCO approved the merger of Pfizer and Pharmacia in late 2002 subject to certain remedies. The EU also approved subject to certain commitments in early 2003. The US decision in favour of the Pfizer and Pharmacia merger was published later in 2003. Again, the merger was approved subject to particular remedies. The pronounced remedies vary between Switzerland, the EU and the US.

34 Exactly due to such fears, this merger has been approved subject to the imposition of remedies on some new products and on the IPR portfolio.
89. In a study\(^{35}\) on the impact of two hospital mergers that occurred in the US\(^{36}\), the FTC performs an in-depth quantitative analysis of the price effects using an econometric DiD analysis. As a first step they develop a simple theoretical model to explain how a merger of competing hospitals can lead to a price increase in the context of negotiation with managed care organizations (MCOs). They then estimate what has happened to the prices negotiated with MCOs using data on actual transactions prices before and after the concentration from the merged hospitals and from a set of control hospitals. For robustness they use data from multiple data sources, and they control for changes in factors that may vary over time across hospitals.

90. They find that one merger had actually led to a large and statistically significant increase in prices for all but one of the MCOs for which they had data. Whereas, with respect to the other, they obtain mixed results: one MCO had experienced a relative price increase, but three MCOs had faced a relative price decreases. All these results are robust across data sources, control groups, and case mix adjustment methods.

91. Another interesting study that employs a DiD approach to determine the price effects of a merger in the hospital sector is the ex-post analysis of six cleared mergers involving Dutch hospitals\(^{37}\). Given the large number of services offered by hospitals, the study focuses only on the price for hip surgery, because this is a common and fairly homogeneous treatment and it generates a large share of the total revenue in the competitive segment of hospital care. To capture the effect of the merger on this price, the study employs a DiD approach, using all the other Dutch hospitals as the control group and controlling for all those factors that may cause price change (such as hospital characteristics, technological development and regulatory changes). The study observes a significant average price increase in six of the twelve involved hospitals and a significant price decrease in three of them. The lack of data on quality does not allow to determine if the price rise could have been caused (at least partially) by an improvement in quality, rather than by an increase in market power. However, the authors provide a number of reasons why they think that price increases of the magnitude observed cannot be totally explained by quality improvements.

92. Another example of the use of a DiD approach to estimate the impact of an intervention on prices is the FTC’s ex-post assessment of two consummated mergers that significantly consolidated oil refinery control in the U.S. Northeast\(^{38}\). The study uses a DiD estimation to test whether these mergers were associated with post-merger increases in the prices of gasoline and of diesel both at the retail and at the wholesale levels. The findings indicate that the transactions were largely competitively neutral.

93. This study is especially interesting because it discusses in depth two issues that are key for the reliability of a DiD analysis: the choice of the control group and the selection of control variables. In the gasoline and diesel markets a major determinant of the variability in prices are the changes in crude oil prices, but since these are the same across the whole country they do not matter for the choice of the control area. Instead, other cost and demand shocks affecting refining and bulk transport, including outages, capacity constraints, and changes in transportation charges tend to have a more local dimension and hence need to be taken account when choosing the control group. This suggests that areas close to the treatment area are more likely to share these demand and costs shocks, but unfortunately their prices might also be impacted by the merger. Given these tradeoffs the study uses multiple control areas of varying proximity with respect to the affected areas to assess the robustness of the results. With regard to the

\(^{35}\) “Two hospital mergers on Chicago’s north shore: a retrospective study”, FTC (January 2009).

\(^{36}\) Both mergers had been investigated by the FTC two years after they took place and one of them had been successfully challenged in court.


importance of the control variables, the study highlights the importance of controlling for the effects of exogenous shocks. In this study the estimation window was affected by the hurricane Katrina that hit the southern US in 2005. To control for the impact of the hurricane on prices, the estimated equation included a week-specific dummy that marked the weeks from September to November 2005 as hurricane-affected.

94. It is also worth mentioning the ex-post assessment of a merger between two chains of book retailers performed by a consultancy for the UK Competition Commission (CC)\(^{39}\). This study addresses an issue which often comes in mergers affecting retail market, namely the geographic extent of competition. Given the uncertainty surrounding the market definition, the authors run two DiD analyses: one based on the assumption that the markets in which the chains operated were local and one based on the hypothesis there was a single geographic market.

95. To evaluate the impact of the merger assuming local competition, the consultants compared the changes in prices before and after the merger in the areas where shops from both retailers operated (treatment group) with the changes prices in the areas where only one had a shop (control group) over the same period. The DiD estimation was run using data on the prices of all book titles together and then separately for different books’ categories.

96. The choice of the control group for the implementation of a DiD analysis at a national level was more complex. Two strategies were used. First, the rival firms were used as the control group. This allowed them to disentangle the effect of the merger from any common factor affecting all book retailers. However, the price of rival firms as a control group might also have been affected by the merger. Hence, a second analysis was performed, where the control group was constituted by one category of books, the top-selling ones, because the sale of these books is usually characterised by the greatest level of competition. To further check the results of the DiD analysis and to account for any biases that may be due to the limited sample size of top-selling titles used, the authors also performed a before-and-after estimation, controlling for any factors that may have exogenously affected the market. The study concludes that results of the quantitative analyses do not support the hypothesis that merger produced a negative effect on prices.

97. The main limitation of this study is that no data could be found to determine the impact of the merger on the variety of books or on the facilities offered to buyers, hence the assessment remains partial. Indeed the survey, which was undertaken alongside the quantitative analyses, raises some concerns with respect to the impact of the merger on the range of books sold.

98. The OFT carried out an ex-post assessment of the impact of the abuse of dominance decision made against Napp Pharmaceutics in 2001 for its conduct in the sustained release morphine (SRM) market.

99. The OFT had found that Napp had used heavy discounting, often in excess of 90% of the list price, when bidding for hospital contracts to supply SRM against other competitors. This type of exclusionary behaviour in the hospital segment had enabled NAPP to charge excessive prices in the larger community segment and retain a very significant share of the market (well over 90%)\(^{40}\).

100. The ex-post assessment focuses mostly on the impact of the intervention on prices and market shares in the two segments of the SMR market, since these were the variables mostly affected by the

\(^{39}\) The ex-post evaluation of two merger decisions, a study performed by Lear for UK CC (September 2011).

\(^{40}\) A smaller proportion of SRM tablets were sold via the hospital segment (10-14%) than the community segment. However, this segment was considered ‘an important, or even indispensable, ‘gateway’ to community sales’. Any new entrant had to establish itself in the hospital segment before it could penetrate the much larger and profitable community segment, with doctors in primary care preferring patients to remain under the same drug regime once they leave the hospital.
Napp’s abusive behaviour. Due to data limitation, the core of the analysis consists in a comparison of data on prices and markets share before and after the intervention. This shows that in the years following the OFT’s intervention the discounts offered by Napp to the hospital segment fell to 40% of the list price, while the Napp’s list price in the community segment declined considerably. As such, Napp’s prices in the hospital and community segment moved closer together. Further, the analysis also shows a substantial change in Napp’s position in both segments, with its market share in the hospital segment falling from 95% to 50% and the one in the community segment decreasing from 95% to 65% between 2001 and 2010.

101. This study is interesting because, in order to overcome the limitation of such a simple before-and-after approach, the analysis is integrated by an econometric analysis of the relationship between Napp’s prices and its market shares in the community segment. This analysis shows that, after controlling for dosage and time effects, high market shares in the segment of the SMR market tend to be correlated with high prices, thus confirming the analysis conducted via the descriptive statistics. None of two approaches allows to make clear inferences about statistical significance and causality, but they support each other’s findings giving further strength to the conclusions.

4.5 Deterrence

102. All the studies submitted to us that consider specific interventions only consider the direct impact of competition interventions on consumer welfare. No consideration is given to the indirect impact that the intervention can have in other markets, as well as in that same market later in time, as a consequence of its deterrence effect on the anticompetitive behaviours. This clearly underestimates considerably the impact of these interventions, as deterrence is probably the most important objective (and consequence) of competition enforcement. The reason lies in the methodological difficulties posed by the quantification of this effect.

103. The OFT has tried to measure the size of the deterrence multiplier of their competition enforcement activities, but they have never used the figures thus obtained in the assessment of the benefits of specific interventions.

104. The OFT has also attempted a qualitative estimate of the deterrence impact of its interventions into bid rigging in the construction industry. The study compares the impact of a recent OFT intervention (2009) with the impact of earlier interventions. It relies on two surveys (one conducted in 2008 and the other in 2010) of construction companies and procurers of construction goods and services. The surveys examine the perception of the prevalence of bid rigging, the degree of knowledge of and compliance with UK competition law, the level of awareness of the OFT’s activities in the sector and perceived effectiveness of various factors in deterring bid rigging. Through this data the study shows that market players consider the use of bid rigging to have changed over time and which factors they believe have determined this change.

5. Quantify the impact on consumer welfare

105. Most of the studies that have been submitted to us derive qualitative conclusions on the impact of the changes in price and non-price variables due to the competition interventions on consumer welfare. However, there are some studies that have tried to quantify the variation in consumer welfare. This is true

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41 The OFT could not conduct a similar analysis for the hospital segment due to the lack of data.
for all the ex-post studies undertaken by, or on behalf of the OFT, which represent a useful guide on how one can arrive to a conservative ex-post estimate of the benefits derived by consumers from competition interventions.

106. Another study worth mentioning is the ex-post assessment of the impact of a decision on a cartel in the market for off-net text messaging services on consumer welfare in Indonesia44. The study, undertaken by the Institute for Economic and Social Research of the University of Indonesia for the KPPU, attempts to quantify the overall change in consumer welfare caused by a KPPU intervention using a compensating variation approach. Compensating variation (CV) is defined as the amount of income (positive or negative) that an agent would need to reach his or hers initial utility level after a change in the price or the quality of the product.

107. The study starts from the assumption that the KPPU’s intervention in late 2007 led to the considerable drop in the prices for off-net text messaging services of all the operators accused of participating to the cartel in the years 2008 and 2009. It then uses this price data, together with data on the number of customers, the price of outgoing mobile call, GDP, CPI, the number of base transceiver stations and advertising costs, to estimate the overall CV, as well as the CV for the customers of the different operators, using a panel data approach. Different specifications are used to ensure the robustness of the results. The study concludes that the intervention led a welfare gain ranging from 1.155 billion rupiah for Telkomsel users, to 73, 38 and 151 billion rupiah for Bakrie Telecom, Mobile 8 and Telkom Flexi users.

6. Conclusions

108. Many valuable lessons can be derived from the analysis of ex-post studies, which can help to further improve ex-post assessments, but also to strengthen the ex-ante analyses that lead to the competition interventions themselves.

109. This Appendix has also touched upon some methodological issues, such as the identification of the counterfactual, the selection of the appropriate control group, the importance of verifying the existence of a causal link between the changes observed in the market and the intervention under exam and the need for a well-rounded evaluation that considers all the determinants of consumer welfare.

110. Last but not least, we identified the main stumbling blocks that these studies face, since overcoming them would allow to improve their quality and, hence, the quality of the contributions these can bring to the work of the CAs. The most evident problem that seems to mar most of the studies herein described is the availability of data. Indeed the precision and the depth of the analyses that can be undertaken, and hence their quality and reliability, depend crucially on the data that can be employed. One main reason for the lack of data is due to the fact that most CAs do not have the power to request information from market players. This implies that data can be obtained only from public sources (when these exist), from commercial sources (which can be very expensive) and on the willingness of market players to participate to surveys and interviews (which varies considerably). For example the Swiss study on the merger in the pharmaceutical industry45 had to limit the analysis of the impact of the merger on innovation to a qualitative assessment, due to the very limited cooperation of firms and industry associations.

111. Further, the fact that these studies are undertaken a few years after the interventions under exam have taken place means that firms may no longer keep the relevant data. For example in the EU study on


45 See note 56.
the merger in power cable markets, market players had not kept historic price data, which meant that the only quantitative analysis possible was an event study.

112. This problem is especially evident for data concerning the non-price variables, as this data is rarely collected; and if it is, it is held by the firms originally affected by the intervention (e.g. the merging parties) that may not wish to share it with the CA. For example, in the ex-post analysis of the CC merger in the book retail market\(^{46}\), no analysis of the impact of the concentration on the quality of the services offered by the bookshops and on the variety of books stored was possible, because the merging parties had some data, but did not provide it to the consultants. However, also data on prices is not always available or can be very expensive to acquire (when is held by commercial data gatherers).

113. There are ways to overcome the issue of data availability that range from giving CAs the power to request data for ex-post studies, to imposing remedies on the affected firms that require the collection and provision of this data, and to making firms more aware of the importance of cooperating with CAs in this type of studies. Discussing if and how these solutions could be implemented might help to improve the quality of ex-post studies.

114. This appendix shows that CAs could benefit from sharing the experiences gained, the lessons learnt performing this kind of studies and the difficulties met in undertaking ex-post studies for the benefits of all the authorities that undertake them already and for those that are planning to start.

\(^{46}\) See note 35.
### Table 1: List of publicly available ex-post studies submitted to the Secretariat

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Title</th>
<th>Intervention assessed</th>
<th>Year of publication</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Description</td>
<td>Type</td>
<td>Year</td>
<td>Source</td>
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<tr>
<td>Netherlands</td>
<td>Reputational penalties to firms in antitrust investigations</td>
<td>Competition enforcement</td>
<td>2012</td>
<td><a href="http://jcle.oxfordjournals.org/content/early/2012/04/24/joclec.nhs008.abstract">http://jcle.oxfordjournals.org/content/early/2012/04/24/joclec.nhs008.abstract</a></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Price Effects of Dutch Hospital Mergers: an Ex-post Assessment of Hip Surgery</td>
<td>Merger</td>
<td>2012</td>
<td><a href="http://www.springerlink.com/content/001333q8388tr556/">http://www.springerlink.com/content/001333q8388tr556/</a></td>
</tr>
<tr>
<td>Switzerland</td>
<td>Assessing the Effects of a Road Surfacing Cartel in Switzerland</td>
<td>Cartel</td>
<td>2008</td>
<td><a href="http://jcle.oxfordjournals.org/content/6/2/335.short">http://jcle.oxfordjournals.org/content/6/2/335.short</a></td>
</tr>
<tr>
<td>Country (OFT)</td>
<td>Title</td>
<td>Type</td>
<td>Year</td>
<td>Study Link</td>
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</tr>
<tr>
<td>Country</td>
<td>Title Description</td>
<td>Year</td>
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<tr>
<td>UK (CC)</td>
<td>Evaluation of the Competition Commission's past cases</td>
<td>2008</td>
<td><a href="http://www.competition-commission.org.uk/assets/competitioncommission/docs/pdf/non-inquiry/our_role/analysis/evaluation_report.pdf">here</a></td>
<td></td>
</tr>
<tr>
<td>US (FTC)</td>
<td>Two Hospital Mergers on Chicago’s North Shore: A Retrospective Study</td>
<td>2009</td>
<td><a href="http://www.ftc.gov/be/workpapers/wp294.pdf">here</a></td>
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ADDENDUM

QUESTIONNAIRE ON THE EVALUATION OF COMPETITION ENFORCEMENT AND ADVOCACY ACTIVITIES

This questionnaire aims at getting a clear picture of the nature, the frequency and the purpose of the evaluation exercises undertaken by the CAs to measure the impact of their competition enforcement and advocacy activities.

The evaluation of the impact of competition enforcement and advocacy can take many forms. These can be grouped into three categories (which overlap to some extent):

- **Evaluation for accountability**: This type of evaluation covers the overall activities of the competition authority over a period of time, generally a year. It is usually performed to account for the resources given to the competition authority. It ranges from annual reports of the activities undertaken by the authority (e.g. number of cases investigated, relevance of these cases, coherence of the enforcement action with ex-ante priorities, etc.), to estimates of the benefits expected to result from the authority’s interventions measured with respect to its objectives (e.g. if the authority aims to maximise consumer welfare, these estimates usually refer to the savings accrued to consumers).

- **Ex-post evaluation of specific interventions**: This type of evaluation involves the qualitative and quantitative assessment of the impact of specific interventions by the competition authority (e.g. a merger decision). It is usually performed to verify the accuracy of the authority’s analysis and to improve its decision-making process. These assessment can be quantitative (e.g. estimating how market prices have changed as a result of the Authority’s decision), or more qualitative, seeking to ‘tell the story’ of what happened after an intervention or a decision not to intervene was made.

- **Evaluation of the broader impact of competition policy**: This type of evaluation resembles academic studies and is aimed at assessing the impact, at a wider level, of having a competition authority. These studies examine the links between the activities of the competition authority (antitrust enforcement and competition advocacy) and one or more high-level economic variables, such as productivity, innovation, growth, or employment, and assess the impact that the former has on the latter.

The questionnaire that follows is aimed at collecting information on all three types of evaluations. It is structured in four sections. The first section includes questions on any evaluation you may perform/have performed for accountability purposes. The second section asks for information on any ex-post assessments of the impact of specific interventions you may have undertaken. The third section contains 2 questions on any study you may have done or commissioned on the links between competition policy and one or more high-level economic variables. In addition, there is a fourth section where you can add any further information or insert any comment you may wish to make on the issues raised in the questionnaire.

Please note that:

- Some questions are closed, in which case read all the options listed and tick the box next to the most appropriate answer(s) - it is clearly stated when you should select only one option or when
you can tick all those that apply. These questions have a space where you can add any comments you may wish to make on the issues therein raised.

− Some questions are open and you can write your answer in the space provided.
− If you do not know the answer please answer “Do not know”.
− The questionnaire asks the same questions to everyone to ensure that we obtain a complete picture of the state of play on the various types of evaluation. Hence, some of the questions may not be applicable to your jurisdiction, in which case please answer “Not applicable”. If they are partially applicable please answer the best you can. Closed questions have space for any comments you may wish/need to make.

− You may have already provided information on some the topics dealt with in the questionnaire. If you have already answered a question in another submission to the Competition Committee please cross-refer to it1.
− An Excel spreadsheet accompanies this word questionnaire. In this spreadsheet you should provide the answers to questions 2.11 and 3.2.
− Answers to the questionnaire are due by 2 May 2012. All answers will be distributed over OLIS to the delegates invited to this roundtable, but they will not be published on the OECD website.

1 For example you may have already answered some of the questions in your submission to the June 2011 Roundtable on Impact Evaluation of Merger Decisions.
QUESTIONS

Section 1 - Evaluation for accountability

This section requests information on the qualitative and quantitative assessments of the impact of your competition enforcement and advocacy activities that you may undertake for reporting and accountability purposes. Such assessments range from the production of annual reports, to estimates of the benefits expected to result from the authority’s interventions measured with respect to the competition authority’s objectives (e.g. if the authority aims to maximise consumer welfare, these estimates may refer to the savings accrued to consumers from the authority’s prosecution of cartels).

Question No. 1.1

Are you subject to any kind of reporting obligations on your competition enforcement and advocacy activities?

TICK ONLY ONE ANSWER

YES

NO

Question No. 1.2

If you have such a reporting obligation, please provide some details on what it involves (e.g. a qualitative description of your competition enforcement and advocacy activities and their impact, or the provision of quantitative indicators of your activities, or the quantification of the benefits of your competition enforcement and advocacy activities, or other).

OPEN QUESTION

Question No. 1.3

What are the reasons for this reporting obligation (e.g. it is part of a general obligation for all public bodies to account for the use of their resources)?

OPEN QUESTION

Question No. 1.4

When was this reporting obligation first introduced?

OPEN QUESTION

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2 If you have more than one reporting obligation, e.g. you have different reporting obligations with respect to different stakeholders, please refer to all of them. This applies to question 1.2 to question 1.7.
<table>
<thead>
<tr>
<th>Question No. 1.5</th>
</tr>
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<tbody>
<tr>
<td>Are there plans to change this reporting obligation in the near future? If so, how will it change and why is it being changed? Is the change due to your own initiative or is it part of a broader change in reporting obligations?</td>
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<td>OPEN QUESTION</td>
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<tr>
<th>Question No. 1.6</th>
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<tbody>
<tr>
<td>Whom do you report the outcome of this assessment exercise to (e.g. the Parliament, the government, a specific department, the national audit office)? Are the results published?</td>
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<td>OPEN QUESTION</td>
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<tr>
<th>Question No. 1.7</th>
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<tr>
<td>Do you receive official feedback on the outcome of this assessment exercise? What impact does it have on your organisation?</td>
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<td>OPEN QUESTION</td>
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<tr>
<th>Question No. 1.8</th>
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<tbody>
<tr>
<td>If you do not have any reporting obligation, do you expect one to be introduced in the near future?</td>
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<tr>
<td>TICK ONLY ONE ANSWER</td>
</tr>
<tr>
<td>Not applicable, you already have such an obligation</td>
</tr>
<tr>
<td>YES</td>
</tr>
<tr>
<td>NO</td>
</tr>
<tr>
<td>Do not know</td>
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<tr>
<td>Space for comments:</td>
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<tr>
<th>Question No. 1.9</th>
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<tr>
<td>If you expect an obligation to be introduced in the near future (even an additional one on top of the one you already have), what do you think it will require and why do you think it is being introduced?</td>
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<td>OPEN QUESTION</td>
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<tr>
<th>Question No. 1.10</th>
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<tbody>
<tr>
<td>Do you set priorities in your work (e.g. to focus on specific sectors or types of infringements)? Do you render them public in some way (e.g. publication, inclusion in the previous year’s annual report)? Do you evaluate the extent to which these are met and provide reasons why they are not?</td>
</tr>
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<td>OPEN QUESTION</td>
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</table>
Question No. 1.11

If you undertake an assessment of your competition enforcement and advocacy activities (or of a subset of them) of your own initiative, what do you do (e.g. calculate quantitative indicators of your activities, or quantify the benefits of your competition enforcement and advocacy activities, or other)?

OPEN QUESTION

Question No. 1.12

Why do you undertake an assessment of your competition enforcement and advocacy activities of your own initiative (e.g. to improve your decision-making process, to ensure the transparency of your activities, for advocacy purposes, to justify how you have employed your resources, etc.)?

OPEN QUESTION

Question No. 1.13

Do you use the results of the assessment of your competition enforcement and advocacy activities in your strategic planning (e.g. to set priorities in your work)?

OPEN QUESTION

Question No. 1.14

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the benefits relative to your investigation and prosecution activities with respect to cartels:

Please note that we refer to the benefits accrued to consumers. If you use a different standard please answer the questions according to it.

Do you quantify the benefits of your investigation and prosecution activities with respect to cartels?

On which economic variables do you measure these benefits (e.g. prices, quality of the products, innovation)?

Over which period of time do you assess the benefits caused by these activities (e.g. do you consider that the cartels that you have stopped may have lasted another X number of years on average and calculated the impact caused by the break-up of the cartels over these X number of years)?

If you do not quantify the benefits of your activity with respect to cartels, can you please explain why?

Space for comments:

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3 This assessment could also be in addition to any reporting obligation you may have.
**Question No. 1.15**

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the benefits relative to your investigation and prosecution activities with respect to other anticompetitive agreements:

Please note that we refer to the benefits accrued to consumers. If you use a different standard please answer the questions according to it.

Do you quantify the benefits of your investigation and prosecution activities with respect to other anticompetitive agreements?

On which economic variables do you measure these benefits (e.g. prices, quality of the products, innovation)?

Over which period of time do you assess these benefits (e.g. do you consider that the anticompetitive agreements you have prohibited may have lasted X number of years on average and calculated the impact caused by their prohibitions over these X number of years)?

If you do not quantify the benefits of your activity with respect to these agreements, can you please explain why?

Space for comments:

**Question No. 1.16**

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the impact relative to your investigation and prosecution activities with respect to abuses of dominance:

Please note that we refer to the benefits accrued to consumers, unless you use a different standard for assessing the impact of your activities.

Do you quantify the benefits of your investigation and prosecution activities with respect to abuse of dominance?

On which economic variables do you measure these benefits (e.g. prices, quality of the products, innovation)?

Over which period of time do you assess these benefits (e.g. do you consider that the abuse you have stopped may have led to a price increase for X number of years)?

If you do not quantify the benefits of your activity with respect to abuses of dominance can you please explain why?

Space for comments:
**Question No. 1.17**

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the benefits relative to your activities with respect to mergers:

Please note that we refer to the benefits accrued to consumers. If you use a different standard please answer the questions according to it.

Do you quantify the benefits of your activities with respect to mergers?

On which economic variables do you measure these benefits (e.g. prices, quality of the products, innovation)?

Over which period of time do you assess these benefits (e.g. do you consider that the merger you have stopped may have led to a price increase for X number of years)?

If you do not quantify the benefits of your activity with respect to mergers can you please explain why?

Space for comments:

**Question No. 1.18**

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the benefits relative to your competition advocacy interventions (e.g. market studies):

Please note that we refer to the benefits accrued to consumers. If you use a different standard please answer the questions according to it.

Do you quantify the benefits associated with the acceptance of your competition advocacy suggestions?

Do you consider to what extent the suggestions made were taken up or at least what reactions they have led to and if so which time period do you consider?

Space for comments:

**Question No. 1.19**

If you quantify the overall impact of your competition enforcement and advocacy activities, please provide some further details on the assessment of the benefits relative to other interventions that do not fall in any of the categories above (e.g. UK market investigations or State Aid):

Please note that we refer to the benefits accrued to consumers. If you use a different standard please answer the questions according to it.

Do you quantify the benefits of other competition enforcement activities you may undertake?

On which economic variables do you measure these benefits (e.g. prices, quality of the products, innovation)?

Over which period of time do you assess the benefits of these activities?

Space for comments:
**Question No. 1.20**

If you quantify the overall impact of your competition enforcement and advocacy activities, do you adjust the result of the assessment of the direct benefits of all your interventions to include also their deterrence effect? If you take the deterrent effect into account please provide details on how you do so (e.g. do you use a “deterrence multiplier” and how did you calculate it)?

**Question No. 1.21**

Are you required to estimate the impact of an antitrust infringement on the relevant market in order to determine the level of the fine to impose?

TICK ONLY ONE ANSWER

- YES [ ]
- NO [ ]

Space for comments:

**Question No. 1.22**

If you are required to estimate the impact of a cartel on the relevant market in order to determine the level of the relevant fine, please provide some details on how you perform this assessment (e.g. which variables you consider, which methodology do you use, etc).

OPEN QUESTION

**Question No. 1.23**

If you are required to estimate the impact of an anticompetitive agreement (other than a cartel) on the relevant market in order to determine the level of the relevant fine, please provide some details on how you perform this assessment (e.g. which variables do you consider, which methodology do you use, etc.).

OPEN QUESTION

**Question No. 1.24**

If you are required to estimate the impact of an abuse of dominance on the relevant market in order to determine the level of the relevant fine, please provide some details on how you perform this assessment (e.g. which variables do you consider, which methodology do you use, etc.).

OPEN QUESTION

**Question No. 1.25**

If you wish to provide any document you may have referred to or which could be a useful example to look at, please use the space provided below to add the URL of these documents or attach them to your response and list here the names of these documents.
Section 2 - Ex-post evaluation of specific interventions
This section requests information on the ex-post assessments that you may have undertaken (either internally or commissioned to external experts) of the impact of specific competition policy interventions (i.e. related to mergers, cartels, other anticompetitive agreements, abuses of dominance and competition advocacy interventions).

Question No. 2.1
Have you ever undertaken internally (or commissioned) any ex-post assessments of the impact of specific competition policy interventions since the year 2000?
TICK ONLY ONE ANSWER
YES ☐
NO ☐
Do not know ☐
Space for comments:

Question No. 2.2
If you have never undertaken (or commissioned) any ex-post assessments of your competition policy interventions, or if you have not undertaken one since the year 2000, please explain why.
OPEN QUESTION

Question No. 2.3
If you have undertaken internally (or commissioned) ex-post assessments of your competition policy interventions please specify the main reason why you have performed these assessments.
TICK ALL APPLICABLE ANSWERS
Not applicable, we have not performed any ex-post assessments ☐
We are required to undertake them ☐
We have chosen, by our own initiative, to undertake one (or more) to identify how we could improve competition policy interventions ☐
Other ☐
    Please specify:
Space for comments:

Question No. 2.4
If you are required (e.g. by law or by your statute) to undertake such ex-post assessments please provide some further details:
What are you required to do (e.g. in terms of frequency of assessments, nature and number of the interventions to be assessed, etc.)?
When was the obligation imposed?
Why are you required to perform such ex-post assessments?
Space for comments:
**Question No. 2.5**

**What is the impact of the outcome of these ex-post assessments on your organisation** (e.g. you only perform them for transparency purposes, or afterwards you review your decision-making process, or your financial resources can be affected by the outcome of this exercise)?

OPEN QUESTION

**Question No. 2.6**

If you have performed the ex-post assessment of one or more merger decisions, have you only assessed the impact of mergers that have been allowed, or also of mergers that have been prohibited?

In the latter case, please provide some details on how you have evaluated the prohibition?

In the former case, please explain why.

OPEN QUESTION

**Question No. 2.7**

If you have performed the ex-post assessment of one or more merger decisions, have you assessed the impact of mergers that have been allowed with remedies?

If you have, please provide some details on how you have evaluated the impact of the remedies.

If you have not, please explain why.

OPEN QUESTION

**Question No. 2.8**

Have you ever performed the ex-post assessment of your interventions in alleged abuses of dominance?

If you have not, please explain why?

OPEN QUESTION

**Question No. 2.9**

How have you decided whether to undertake these ex-post assessments internally or to commission them externally?

OPEN QUESTION
**Question No. 2.10**

Roughly how many ex-post assessments have you undertaken or commissioned (please refer to the number of intervention assessed) *since the year 2000*?

**OPEN QUESTION**

- Number of merger decisions
- Number of cartels and other anticompetitive agreements
- Number of abuses of dominance
- Number of competition advocacy intervention (including market studies)
- Number of other interventions not covered by the categories above

**Question No. 2.11**

Please provide some details on any ex-post assessments you may have undertaken *since the year 2000*. For each one please indicate:

- The type of intervention(s) assessed (i.e. whether merger, cartel, other anticompetitive agreement, abuse of dominance, competition advocacy intervention or other)
- How/why that intervention was selected for an ex-post assessment
- The variables on which the impact has been assessed (e.g. prices, quality of products, innovation) and how/why you have chosen such variables
- The methodology used to assess the impact on prices (if you have assessed this at all)
- The methodology used to assess the impact on quality and variety of products on offer and on innovations (if you have assessed this at all)
- The source of the data/information used to perform the analysis

Please also attach a copy (in PDF or word format) of each one or provide a URL link to their published version.

**USE THE ATTACHED EXCEL SPREADSHEET (MARKED QUESTIONS 2.11) TO PROVIDE THE ANSWERS**

Space for comments:
Section 3 - Evaluation of the broader impact of competition policy

This short section requests information on any study that you may have undertaken internally or commissioned to external experts on the short and/or long term impact of competition policy\(^4\) on economic variables such as productivity, growth, employment, or innovation/R&D.

**Question No. 3.1**

Have you undertaken (or commissioned) since the year 2000 any qualitative or quantitative study on the impact of competition policy on the economy as a whole (e.g. studies that explore the link between competition policy and economic variables, such as productivity, growth, employment, or innovation/R&D)?

TICK ONLY ONE ANSWER

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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Space for comments:

**Question No. 3.2**

Please provide some details on any studies on the impact of competition policy on the economy as whole you have undertaken (or commissioned) since the year 2000. For each one please indicate:

- The variable(s) on which impact of the competition policy was assessed
- A brief description of content and conclusions
- The methodology employed
- The date of completion

Please also attach a copy (in PDF or word format) of each one or provide a URL link to their published version

USE THE ATTACHED EXCEL SPREADSHEET (MARKED QUESTIONS 3.2) TO PROVIDE THE ANSWERS

Space for comments:

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\(^4\) By competition policy we mean the competition enforcement and advocacy activities undertaken by a competition authority, but it could also include other types of competition enhancing policy interventions. Please note that we are only interested in studies that you have undertaken or commissioned.
Section 4 – Comments
In this section you can add any further information or insert any comment you may wish to make on the issues raised in the questionnaire.

Question No. 4.1

OPEN QUESTION
Please add any further information or insert any comment you may wish to make: