

Consumer Protection and Financial Innovation: A Few Basic Propositions

by

Stephen Lumpkin*

The issue of financial innovation and consumer protection is mostly about access and suitability. Access refers to a situation in which affordable, mainstream financial products are available to all segments of the population across the range of income levels and demographic characteristics. Suitability addresses the appropriateness of the products for particular consumer groups. Innovative products will tend generally to be either positive for access to finance or neutral. But products that actually result in increased access to finance may nonetheless still raise suitability issues. Innovative products can be particularly difficult for retail consumers to understand and better financial education is needed to help address financial illiteracy. In addition, service providers should have appropriate internal controls to minimise the chances that consumers take on inappropriate exposures. Even the best disclosures, alone, may not be adequate, so to avoid situations in which retail investors become involved with unsuitable products, institutions should be “encouraged” to develop sufficient measures for client protection as part of their product development activities. Stricter penalties should be used when needed to address mis-selling, fraud or firm misconduct.

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* Stephen Lumpkin is a Principal Administrator in the Financial Affairs Division of the OECD Directorate for Financial and Enterprise Affairs.

I. Introduction and overview

The financial crisis and the measures introduced to minimise or offset its effects on the broader economy have brought to the fore discussions on a range of somewhat contentious policy issues addressing the philosophy of regulation and the role of the state versus the role of markets in achieving desirable outcomes. Among the issues raised are the benefits of a proactive versus a reactive approach to policy and whether the appropriate policy response should entail behavioural versus structural remedies. A considerable amount of attention has been devoted to systemic or macro prudential issues, in most cases related to the too-big-to-fail problem of large complex financial institutions, but micro-prudential issues have also been discussed and in this context financial innovation has not escaped attention.

Previous discussions in the OECD Committee on Financial Markets touched on regulatory issues related to financial innovation and briefly explored some of the aspects of innovative activities in finance that may give rise to potential concerns. Measures that might be adopted to respond to those concerns were then considered. Taken together, the measures could be core elements of a broader regulatory framework that enables the system to accommodate financial innovation more readily; that is, without periodic upheavals.

If a conclusion is to be drawn from the arguments presented, it is that institutions should have appropriate governance and control procedures over new product development activities and, as all innovative products are not benign in their effects on consumers, markets, and the system as a whole, that supervisors should subject such activities to appropriate surveillance. These steps are part of a general approach to ensuring that the proper framework conditions are in place, with the understanding that these measures may vary across sectors.

This note looks at financial innovation in the context of consumer protection

The present paper places financial innovation in the much narrower context of financial consumer protection. Innovations do not necessarily create new problems, but they have a tendency to aggravate the existing challenges of asymmetric information, market power imbalances and other imperfections that typically characterise markets for retail financial products.

At the core of the issue are concerns about access and suitability

It is not a great oversimplification to suggest that the issue of financial innovation and consumer protection is mostly about access and suitability. Access refers to a situation in which affordable, mainstream financial products are available to all segments of the population across the range of income levels and demographic characteristics. Suitability addresses the appropriateness of the products for particular consumer groups. That is, what products may safely be sold to retail financial consumers? By whom? Who decides? And whose fault is it if something goes wrong?

Innovative products can be particularly difficult for retail

Innovative products can be particularly difficult for retail consumers to understand, especially when the innovative aspect results from variable maturities, contingent payouts, tiered risk exposures or other complexities. For

consumers to understand

products with embedded options, even a slight tweaking of the terms of can greatly alter the risk characteristics. The question is how apparent are the core features and risks of the product to consumers.

To address these concerns requires an understanding of what is the expected outcome of consumer protection

It is not possible to resolve the issue of suitability without having a clear view of the objectives. What exactly is the expected outcome of consumer protection? How do we know when the objective has been achieved? The present discussion begins there, with the traditional approach to protecting financial consumers. It takes into account key aspects of consumer behaviour, the products, and financial service providers to identify the challenges posed by new products. A consideration of suggested policy responses follows this analysis. The final section concludes.

The focus in the note is on the suitability aspect of consumer protection; innovative products may be positive or neutral for access to finance

The article does not address financial inclusion issues and financial literacy, or other topics in the full range of consumer protection challenges. Instead, relatively more emphasis is given herein to the suitability aspect of consumer protection. The rationale is that innovative products, the underlying focus of consideration in the report, will tend generally to be either positive for access to finance or neutral. But products that actually result in increased access to finance may nonetheless still raise suitability issues. The recent crisis makes this point abundantly clear. That's our point of departure.

I. The traditional approach to protecting financial consumers

The recent financial crisis and the link between financial innovation and consumer protection

The recent crisis is a useful starting point in the analysis, as the trigger for the crisis was a sub-component of the residential mortgage sector

The recent financial crisis shares with other crises of the past few decades a significant accumulation of debt and assets in an environment characterised by very low risk premia and high concentrations of risk. And as in other such episodes, financial innovation has played a role. In this particular case, structured credit products and the latest incarnation of the originate-and-distribute model of intermediation were at the epicentre of the crisis. What was different this time was the trigger – a sub-component of the residential mortgage sector. Many previous real estate crises were prompted instead by problems in the commercial mortgage segment and with corporate clients.

There were weaknesses all along the chain running from loan origination to distribution of securities backed by them

There were a number of important linkages running from higher-than-expected defaults on U.S. subprime mortgage loans, which marked the onset of the crisis, to the broader credit markets, the real economy and ultimately across borders. They reflected weaknesses on various fronts in the chain from loan origination to distribution of the securities backed by them. In particular, a long period of low nominal yields on traditional assets induced investors to move out the credit risk spectrum in search for higher yield. This search for yield was evident in many developments, including strong demand for new and higher risk assets such as collateralised debt obligations and other structured finance products. In turn, this strong demand for higher yielding assets supported the “originate-to-distribute” model of credit intermediation and the use of various off-balance sheet vehicles.

Reputational intermediaries played major supporting roles and investors performed little due diligence of their own

Bond insurers and credit rating agencies played major supporting roles, in effect obscuring the disconnect between what would prove to be the true credit quality of the underlying loan collateral and the promised performance of the securities backed by them. Investors, meanwhile, performed little if any due diligence of their own and relied solely on credit ratings they failed to understand fully.

Strong demand for high-yielding assets supported the development of new loan products aimed at lower income segments of the housing market

Originators responded to the strong appetite for high-yielding assets by developing a range of new loan products, many aimed at lower-income segments. To facilitate the process underwriting criteria were relaxed, in some cases quite appreciably. On the plus side of these developments, borrowers who previously had faced limited prospects for homeownership gained access to credit. On the negative side, credit was extended to borrowers who were either insufficiently informed about or had insufficient income for the liabilities they assumed. In the end they defaulted, in record numbers.

In many cases, the lender, the borrower or both should have known that the property was not affordable under most likely states of the world

Hindsight suggests that in most cases the lender, the borrower, or both should have known that the property in question, and hence the loan, was not affordable in most likely states of the world. And either one or the other, or both again, bear some responsibility for the outcome. But it is a fair question to ask whether the lender should be held to a higher standard of conduct. In either case, the outcome makes clear that the assumptions that underlie new products are important factors in assessing suitability. If the rosier assumptions of future states of the economy are needed to make the product work, it probably isn't appropriate for the borrower in question.

But in many cases, underwriting standards were poor, leading to the eventual payment problems, defaults, and eventually feeding back to credit rationing

The problem of high default rates is the traditional one with underwriting standards that are too lax – they can encourage borrowers to take on too much debt, which they may have difficulty servicing or repaying subsequently. In the case of serious payment difficulties banks eventually begin to extend fewer new credits or actually cut their balance sheets by calling in outstanding loans. These steps can touch off another round of problems and a vicious circle can develop, with substantial macroeconomic consequences.

A better alternative for borrowers and lenders is for appropriate underwriting to be maintained throughout the credit cycle

In the end, neither borrowers nor lenders benefit from such outcomes. Clearly, the better alternative is to maintain appropriate underwriting standards throughout the credit cycle. What happens in practice, however, is a tendency for excess liquidity or over-capacity in the banking sector to lead banks to do the opposite – relax their underwriting standards to boost or preserve market share, or cut their lending rates to unprofitable levels and attempt to rely instead on fees from ancillary business from the customer to fill the gap.

The problems with underwriting spilled over to the secondary market, which historically had been

In the recent debacle, these weaknesses spilled over to the secondary market, which had become a major source of funds. Historically, off-balance sheet securitisation was reserved for assets for which the costs of acquiring and distributing information to rating agencies and investors about loans and borrowers were low. The low costs were largely a result of standardised loan

reserved for assets subject to standardised underwriting criteria

underwriting criteria and also advances in information technology, which facilitated the estimation of default probabilities and payment patterns under a variety of economic conditions.

The process of pooling standardised products into homogeneous groups allowed third-parties to review and validate the lender's initial credit underwriting decisions

Underwriting criteria for assets such as mortgages and consumer receivables were sufficiently standardised that the loans could be 'insured' at relatively low cost. The process of pooling such assets into large homogeneous groups facilitates an actuarial analysis of their risks, which enables credit rating agencies and, in some cases, third-party credit enhancers, to review and validate the lender's initial credit underwriting decisions. Most of the assurance of payment was inherent in the quality of the underlying collateral itself and the ability of mortgage insurers to successfully guarantee the ultimate payment of interest and principal.

In the recent spate of innovations, these disciplines were forgotten, which enabled various types of non-standardised loans to be included in off-balance sheet securitisations

In the more recent incarnation of originate-and-distribute, participants became inclined toward the view that innovations in risk management and modelling techniques enabled the same approach to be applied to a host of different types of collateral and to support increasingly complex structures. This view proved eventually to be overly optimistic, an outcome that seems not to be so rare in practice. Rather, there tends, in fact, to be a bit of a time inconsistency between the introduction of a new product and the emergence of problems, either for the service providers or for consumers. In particular, financial innovations have often been implicated in periods of instability, lending these episodes many of their more idiosyncratic elements.

That innovations have often been involved in such episodes suggests a need for more flexible policy regimes or better foresight on the part of policymakers

Against that backdrop, policy makers must either devise flexible regimes that can readily accommodate change or become more adept at identifying beforehand where problems are likely to arise in the future and then act pre-emptively. Unfortunately, there is no known mechanism to ensure perfect foresight and while regulators and supervisors may not be less skilled than market participants and consumers at foretelling the future, there is no compelling evidence in support of their being superior at it. That means it may not be feasible for authorities to be very pro-active in identifying and blocking the introduction of innovations they perceive to be potentially harmful. That determination does not, however, eliminate the need to spot emerging problems quickly in order to shield consumers from the vagaries of institutions' mistakes.

The objective of consumer protection is not well defined

If regulation is correctly designed and properly enforced, it sustains consumer and investor confidence

If regulation is correctly designed and properly enforced, it sustains consumer and investor confidence, which is necessary if the financial system is to attract capital and function efficiently. Market confidence and consumer protection are undermined if the financial system is not adequately protected from abuses. Economic exchange, in general, and financial transactions in particular rely importantly on trust and confidence. Financial transactors must have some assurance that financial markets and institutions are safe and sound, and operate according to rules and procedures that are *fair, transparent, and free from conflicts of interest* and other agency problems.

But it is difficult to say exactly when consumers are adequately protected in any given context

A difficulty with the attainment of this goal is that regulatory objectives such as consumer/investor protection cannot easily be measured, which means that it is difficult to say exactly when investors are adequately protected in any given context. Often, the determination is based on a subjective evaluation as to when they have been achieved.

What is meant by “fair”?

Normative concepts like “fairness” are prominent in consumer protection efforts, but tend to vary across different categories of consumers

A prime example is the notion of fairness, which features prominently in policy objectives like protecting consumers. Perfect markets are “fair” in the sense yielding outcomes from which it is not possible to deviate in ways that make some individuals better off without making at least some others worse off. In reality, notions of fairness typically vary across cultures, but can also differ across demographic groups or other socio-economic groups within them. What might be considered fair for one demographic group of consumers might be less so for others.

Various notions of fairness are relevant for financial consumers, including open access and control of various agency problems and information asymmetries

Among the many notions of fairness that are relevant for financial consumers are:

- **Control of information asymmetries:** consumers and investors are given complete, accurate and accessible information on which to base their decisions; there is no fraud; there is no unfair trading by insiders or market manipulation;
- **Control of agency problems:** conflicts of interest are controlled; markets are characterised by proper execution of fiduciary responsibilities and contractual obligations;
- **Access:** there are no institutional barriers that inhibit financial inclusion;
- **Unbiased treatment:** there is no discriminatory treatment between different categories of financial consumers, such as between domestic versus foreign residents

What is meant by “transparent”?

The default option for addressing all these concerns appears to be disclosure

Among alternative policy instruments (table 1), *the default option for consumer protection concerns appears to be disclosure*.¹ Among the conditions under which markets may be inefficient or fail are when marked differences exist in information endowments and when new information is poorly distributed. A key purpose of disclosure requirements is to correct such market failures caused by incomplete or asymmetric information to ensure that end-users of financial products receive the information they would require under reasonable circumstances to make informed decisions.

Table 1 Hierarchy of regulatory policy approaches

Broad instruments of regulatory policy:
Reliance on private contracts (default rule, used most often when there are no retail investors)
Disclosure strategies
General standards of conduct ¹
Portfolio restrictions ²
Guarantees and government ownership ³

1. Simpler arrangements tend to be disclosure oriented as opposed to involving prudential standards. Open-ended standards less important as intermediation process increases in complexity; there, portfolio restrictions apply.

2. These rules are formal and explicit (e.g. capital regulations, activity restrictions, lending limits, affiliated transaction rules). They are used where more flexible regulations (i.e. disclosure-based consent or bilateral contracting) are deemed less effective.

3. These are used where the scope of the market failure (and possible systemic risk) is deemed extremely high.

In theory, properly informed consumers are an important component of market discipline

In a perfect capital market, financial consumers would have ready access to complete and accurate information, for example, regarding the risks their particular service provider was incurring.² Armed with this information they would be in a position to demand a return appropriate for the level of risk observed. That risk premium would provide incentives for managers of the institution to behave more prudently. If not, the consumers could take their funds elsewhere. For example, depositors and other creditors of a bank could leave if they were concerned about the risk profile of the institution or were dissatisfied with the performance of its products and services. This behaviour serves as a check on the discretion of the bank's managers.

But in practice, the hypothesised behaviour is not what is commonly observed

In principle, the same type of market disciplining mechanism should also operate in the case of insurance policyholders and other consumer relationships. In practice, however, the hypothesised behaviour is not what is observed. Some of the reasons why relate to the nature of the consumers themselves, while others are related to the products.

But consumer behaviour differs across demographic and socio-economic groups

In finance, as in other product markets, there are many classes of consumers. Even within the retail market segment, consumer financial behaviour can be distinguished across such demographic characteristics as age and gender, and also income levels, while culture and related social factors are also relevant in some contexts. At a micro level, *consumers of financial products have idiosyncratic information endowments (i.e. what they know) and therefore needs (i.e. what they should know), reflecting their individual circumstances and risk preferences.*

Nonetheless, many consumers have difficulty identifying even the most important characteristics of financial products

A frequently encountered situation *in retail financial services is that consumers have difficulty identifying the important characteristics of financial products.* OECD work on financial literacy and education suggests in fact, that a majority of individuals in the network of surveyed countries lack sufficient knowledge and understanding of financial concepts. Moreover, some don't seem to know that they don't know.

Examples of common information problems faced by retail consumers of financial products and services are shown in table 2.

Table 2. Information problems facing retail financial consumers

<i>Type of information problem</i>	<i>Characteristics of the problem</i>
Product complexity	Financial products are often complex. They may have embedded contingent claims that result in nonlinear payout dynamics. There may also be differences in tax treatment for otherwise similar products that aggravate consumers' perceptions of complexity.
Long duration	Some financial products are of indeterminate length while others are of long duration. With long-term products, not all of the relevant information will be available at the time the contract is signed. For example, products based on market instruments may turn out to yield lower-than-expected returns, but this outcome could not be known in advance.
Unknown quality	Even after the financial results have, in fact, been realised, there may still be a problem of asymmetric information in evaluating financial services. It can be difficult to establish conclusively whether an unfavourable outcome was the result of incompetence or dishonesty on the part of a service provider, or simply a case of bad luck, even though good service was competently and honestly rendered.
Opaque pricing	The pricing of many financial products is not transparent for the typical consumer. This lack of transparency relates to the fact that the "price" may include fees for research or advice, rather than reflect the cost of the product alone. Many financial products are complex and thus tend to have non-linear pricing structures.
Complex disclosures	Retail consumers may be imperfectly informed about product characteristics and prices, but disclosed information may not always permit easy comparisons. Consumers may be unable to process large amounts of complex information. Excessive and overly complex disclosures tend to exacerbate matters.
Financial illiteracy	Consumers may simply not have adequate understanding of basic financial concepts.

Source: OECD Secretariat

A major difficulty consumers face is that the assessment of quality of many financial products often cannot be accomplished at the time of purchase

A difficulty with inter-temporal choice decisions such as savings and investment options is that the assessment of quality often cannot be accomplished at the time of purchase. A given financial instrument's payout can depend importantly of the interplay of various financial risks, such as the risk of default, inflation risk, etc. Even for some short-dated financial instruments, the financial consumer faces a non-trivial probability of becoming an unfortunate victim of poor timing, in the sense of having to sell or redeem a product during a "down" market. For retail consumers especially, the consequences of adverse market outcomes can be dire and life changing.

The difficulty in determining the quality of financial products makes consumers vulnerable to misconduct on the part of service providers

The fact that retail consumers cannot readily discern the quality of financial products has a number of implications. Importantly, it makes them vulnerable to misconduct on the part of financial service providers. There is the risk of adverse selection, the possibility that they will choose an incompetent or dishonest institution as their counterpart in a financial transaction. They are also vulnerable to conflicts of interest, the possibility that an institution or its agents will put their own interests or those of affiliated parties or even another customer above those of the client in question. Even worse, service providers might engage in outright fraud.

Complexity aggravates these information problems

As noted before, innovative products are often innovative in ways that make these existing challenges that much more difficult. It is a question of degree rather than one of existence. Complexity aggravates information problems.

Service providers can exacerbate the information asymmetry in various ways

Financial service providers can exacerbate the information asymmetry by increasing the amount and complexity of the information about their products, such as by obscuring key product characteristics through advertising/marketing or product differentiation. Such steps make it more difficult for consumers to compare products.

Where products or structures are highly complex, disclosure may not be sufficient for consumers to make proper choices

Where the financial products themselves are sufficiently complex, or the institution offering them does so through a complex structure, it may be the case that disclosure alone may simply not suffice to enable consumers to make choices, no matter how much information is provided. This problem – product complexity – is a common concern in the area of retail financial services. The confusion retail investors had with the so-called Lehman Brothers mini-bonds is one such example.

Consumer protection versus safety and soundness

One of the main reasons for regulation of financial services is to ensure financial market disruptions do not spill over to the real economy

The potential for large economic and social costs from financial instability provides one of the principal motivations for financial regulation – to ensure that financial market disruptions do not have a significant impact on aggregate real economic activity. Such events can disrupt the normal functioning of financial markets and institutions by destroying the mutual trust required for most financial transactions to be concluded.

Stability of the financial system depends to a large extent on preserving confidence

Maintaining the stability of the financial system depends in some large measure on preserving confidence. Episodes of widespread financial distress have often been sparked by a contagious loss of confidence in the integrity of major institutions or the system as a whole.

And a second goal of regulation is to protect consumers to ensure that confidence in the system is maintained

A second, but closely related objective is to protect consumers. Absent some form of assurance that their rights will be fully protected, consumers will not have confidence in the financial services system and the products and services it provides.

Prudential regulation serves both goals: maintaining system integrity and stability and protecting consumers of financial products

Prudential regulation, thus, serves the dual objective of maintaining the integrity and stability of the financial system and protecting consumers of financial services. Safety and soundness regulation is the primary instrument. Safety and soundness regulation is principally concerned with solvency and, thus, tends to focus on matters that affect the financial condition of the service provider. It can be argued that safety and soundness regulation serves mainly to minimise the risk of loss to consumers from the failure of financial service providers. Of course, by promoting the ongoing health of financial service

and services

providers, safety and soundness regulation also contributes to the objective of minimising systemic risk.

Consumer protection is also served by measures to ensure proper conduct on the part of service providers

But consumer protection does not stop with safety and soundness regulation. There are also measures that focus on the interface between service providers and consumers and the potential risk that the interests of the providers of financial services may not be sufficiently aligned with those of the consumers of the products. Various norms of behavior work in this context to prevent fraud, malpractices, and other forms of mis-conduct by which service providers put their own interests or those of affiliates ahead of consumers' or take unfair advantage of consumers' lack of sophistication, their limited access to market alternatives, and their limited economic resources.

And conduct of business regulation also seeks to ensure a proper working of competitive market forces

Conduct of business regulation also aims to ensure a proper working of competitive market forces. The goal of promoting competition in the financial sector is an explicit component of the regulator's mandate in some jurisdictions, while in others it is a consideration to be taken into account in pursuit of the primary goal of maintaining confidence in the financial system.

It can be difficult to strike a proper balance between these goals

Regulators sometimes have a difficult time striking a proper balance between these objectives. In some instances, there appear to be outright conflicts between protecting consumers and ensuring safety and soundness.

It is not clear, for example, whether increased competition is beneficial or not for the objectives of consumer protection

For instance, it might be supposed that financial consumers' interests would be best served under competitive conditions, given the implied optimality of resource allocation and marginal cost pricing for products. But some academic research suggests that greater competition intensifies the problems of asymmetric information and incomplete markets that characterise many financial services segments. In banking, for example, some studies suggest that too much competition impairs relationship lending and aggravates adverse selection and moral hazard problems.

Too much competition may in some circumstances lead to credit rationing, which could harm the interests of retail consumers

The argument holds that too much competition may lead banks to ration credit to borrowers such as small firms that lack a proven track record. Banks have incentives to invest in such borrowers only if they are able to develop long-term relationships with them that enable the banks to recoup the costs involved in nurturing the firms along. This incentive to fund the potentially unprofitable early stages of such businesses, when monitoring and other costs are large, is diminished if rival banks can readily poach the customer later on after the business becomes profitable. Less intensive competition and increased market power for individual banks could reduce the free-rider problem and result in expanded access to credit for such borrowers by decreasing the degree of credit rationing.

And some studies imply that increased market power might be good for stability

A few theoretical models imply that less competition might also be good for stability. The models show that banks in a more concentrated banking system are more likely to limit their risk exposure, because relationship lending under such conditions generates informational rents and leads to higher profits.

But other models draw the opposite conclusions and therein lies the dilemma for regulators

But other models draw the opposite conclusions regarding both investment in relationships and stability. The conflicting academic evidence helps explain why regulators sometimes have a difficult time deciding how best to protect consumers without unduly limiting institutions' profitability and thereby their safety.

Which way to proceed is a function of the nature of the interaction between service providers and individual consumers

The nature of the interaction between service providers and the individual consumer is a key determinant of the required approach. For instance, if the underlying promise being made is of an insurance nature, the activity should be regulated as such. Relevant questions to ask in this regard include:

- What is the nature of the promise being made to consumers? Is there a fiduciary duty of loyalty? Of care?
- What are the consequences of a failure to perform according to the terms of the contract? Are there contract design problems?
- What is needed to achieve desired outcomes? What is the underlying market failure? Does it relate to the product, to market structure, or to the participants?
- What is the nature of the risk-reward outcome?
- Is there any cost efficiency associated with the provision of the product? What is the source of the differential?

The ideal approach entails proper incentives for both consumers and service providers

It seems clear that *the ideal arrangement is to establish a set of principles to ensure that the incentives of financial intermediaries are consistent with the objective of safeguarding the interests of the consumers that hold their obligations and that consumers, in turn, have the incentives to make the correct choices and the relevant information on which those decisions can be based.*

Disclosure of relevant information is an important factor, but consumers may not always understand the information that is disclosed

But consumers only have incentives to take proper account of the information that is disclosed by service providers in situations in which they bear some risk of loss, such as when they are not fully insured. Full protection of consumers comes at a cost of moral hazard risk and may fail to lead to appropriate behaviour on their part. But then again, just because information is disclosed doesn't mean that all consumers will know how to correctly interpret it, in which case if protection is inadequate, consumers may not have sufficient trust and confidence in the integrity of the system.

They may choose on the basis of accessibility and convenience, reputation, etc. and ignore otherwise superior products

They may choose products simply on the basis of accessibility and convenience, and will tend to stick with a given service provider, even when better value products are available elsewhere. A good reputation and perceptions of an institution's safety tend to be more highly valued than the savings from lower fees and prices.

Search costs, switching costs and adverse selection are reasons why

Three factors can account for this behaviour: for consumers, **high search costs and high switching costs**; and for providers of financial services, an **adverse selection problem**.

The consumer's perspective

Product complexity and proliferation make consumer choice more difficult

Search costs: Various features of financial products discussed above tend to make search more difficult and possibly more costly than for some alternative products. Product complexity and opaque pricing are two examples. Institutions can further complicate the matter by increasing the quantity and complexity of information provided or by substantially differentiating their product range,³ activities that tend to make choice more difficult.

The more limited is a consumer's understanding, the less the propensity to search for better value

Other things equal, a better understanding of financial products and markets implies a lower cost of processing financial information and, thus, favours increased search activity. But the more limited is a consumer's understanding of financial products and markets, the less inclined is he or she to engage in search activities. The propensity to search might also vary by age and income level, and by other socio-economic factors.

The inability to properly assess financial information can become an impediment to switching to providers of better value products

Switching costs: It stands to reason that if search costs are too high, rational consumers will have less incentive to engage in search activities. By extension, if consumers do not shop around for better values, they are equally unlikely to switch providers. In the extreme, they become, in effect, "locked in" with their existing service provider and probably never switch to a new seller as long as they remain in the same location. The inability of financial consumers to properly assess financial information becomes in effect an impediment to switching. Other types of switching costs can include high up-front fees and charges, low surrender values, lock-in penalties, and possibly excessive product proliferation.

Perspective of providers of financial services

If consumers do not switch, service providers have less incentive to compete actively

Viewed from the perspective of service providers, the existence of inelastic demand curves arising from the behaviour of consumers is a type of market entry barrier. What advantage is there for an institution to invest in technology to become a low-cost provider of a given product or service if consumers prefer long-term relationships with their existing provider and are relatively insensitive to price?

The absence of switching confers on the existing provider a degree of market power and protection against rivals

If customers find it costly to switch from one service provider to another, then the existing service provider gains, at least in principle, a measure of market power over customers with whom it has an established relationship, which also provides some protection against rival providers. According to some estimates, the average bank derives about a third of its market share from its established customer relationships.

The common arrangement takes the form of long-term relationships between consumers and firms

This arrangement – long-term relationships between consumers and service providers – is the essence of the retail market segment. In retail banking, for example, in lending to individuals and SMEs, banks acquire private information that tends to lock these types of customers into a form of captive relationship.⁴

But some arguments suggest that information asymmetry works in the other direction, too, dissuading service providers from readily taking on customers from rival institutions

Adverse selection: The benefits of these banking relationships are not necessarily one-sided, however. Retail customers may benefit from the maintenance of a long-term relationship with a given service provider, the capitalised value of which may be sacrificed if they switch to another institution that does not know them as well. The rationale in this case is the potential *adverse selection* problem the new service provider faces. Because the existing relationship is based on privileged information, a new institution would not know in advance the quality of a prospective client. Owing to this information asymmetry, a high-quality customer attempting to switch from an institution with which it has an established relationship to a new provider may initially encounter unfavourable terms – those typically offered to lower quality customers.

Barriers to switching thus arise on both the demand and supply sides of the retail market segment

In summary, barriers to switching arise on both sides of the market and can include: consumers' perceptions that loyalty carries benefits, redemption penalties or other charges, insufficient information, and complexity. Market configurations that enable consumers to switch readily from one service provider to another (e.g. flexible distribution channels, low switching costs) have the potential to offset these parochial tendencies, at least to some extent.

To develop a fuller understanding of these interactions among service providers, products, and consumers a number of questions should be considered

The following questions are relevant in developing an understanding of the interactions among service providers, products, and financial consumers:

- What is the nature of the product or service?
- What is the structure of the costs to produce the product?
- What is the nature of the main industry participants?
- Who are the major customers: intermediaries, employees, other individuals, vulnerable investors, other investors, etc.?
- What are the relations among the various parties; how do they interact?
- Define the market; how does it work? Is it public or private? What factors are involved (e.g. tax treatment, regulation)?

These considerations provide a backdrop against which the process of financial innovation can be explored in the consumer protection context.

II. Implications of financial innovation for consumer protection

Under pure competition, homogeneity of the product means that firms compete on the basis of price alone

In the textbook model of pure competition, the product is homogeneous so price (cost efficiency for suppliers) occupies centre stage. In real markets, while some financial products may, at a basic level, be easily recognised as the same sort of item – that is, a retail deposit account is a retail deposit account and a life insurance policy is a life insurance policy – they are not, in most cases, thought to be perfect substitutes by the typical retail customer.

In practice, financial products are not perfect substitutes, which gives providers incentives to find ways to maximise the profitability of the relationship with the client

One of the tasks of providers of financial services is to develop an in-depth understanding of the needs of their customers to ascertain how best to serve them, which in the end increases profitability. Product innovators have various options to respond to perceived competitive impulses. In the main, the options can entail the introduction of new products and services, new ways to product or distribute existing products and services at lower costs, and changes in business models and institutional structures.

Product customisation is one way for service providers to meet the varying needs of consumers

Product customisation or differentiation is a way for service providers to tailor products for customers that cover a wider variety of risks or satisfy customers' idiosyncratic investment needs. More sophisticated institutions can take advantage of financial engineering and advanced risk management models to enable various risk to be unbundled and sold or hedged separately or alternatively repackaged to form new instruments with risk characteristics that meet the needs of different groups of investors.

When successful, these innovations broaden the menu of financial services available to various economic agents

When successful, these product and process innovations broaden the menu of financial services available to ultimate lenders, ultimate borrowers and other economic agents. For consumers, the benefits have included:

- increased access to credit;
- access to technological advances such as automated teller machines and point-of-sale electronic funds transfer; and for some others,
- new options to adopt their preferred risk profile and to adjust that profile as their own circumstance change or in response to changes in the overall financial and macroeconomic environment

But some innovative products have had detrimental effects on consumers...

But some innovative products have had detrimental effects on consumers, including delinquencies, bankruptcies, and losses of retirement savings. Table 3 provides a summary of common detriments to retail consumers. There have been broader negative market and system-wide effects as well. Notable developments in the recent bout of innovation included:

- governance problems and the lack of appropriate market discipline, reflected in an increased tendency for conflicts of interest and

conduct of business problems to arise in large, integrated service providers

- increased complexity of products and risks
- greater dispersion of risk, but in some cases to more opaque participants; and
- financially illiterate consumers

Table 3. Examples of common detriments to retail consumers

<i>Type of detriment</i>	<i>Characteristics of the detriment</i>
Reduced choice	Consumers encounter a limited range of products and services on account of their own lack of awareness, limited switching behaviour, or excessive risk aversion, or owing to restrictions on trade or other barriers to entry.
Excessive product differentiation	Consumers have difficulty making appropriate product choices because of excessive product differentiation or misleading or simply excessive advertising/marketing.
Sub-optimal choice	‘Mis-buying’ of unsuitable products by poorly informed or financially illiterate consumers.
Exposure to operational risks	‘Mis-selling’, fraud or other firm misconduct results in delinquencies, defaults, or bankruptcies of consumers.
Financial risks	Failures of institutions can result in losses on the part of small depositors and investors and reduced (or no) access to credit on the part of SMEs.
Fallout from systemic risks	Same as above but with potential reductions in economic growth, higher unemployment, and direct costs to taxpayers.
Market power of firms	Consumers face high fees and charges or other forms of poor value.
Higher costs from transaction/system inefficiencies	Consumers face high costs, a limited range of financial services and obsolescent financial processes.
Financial exclusion	Concerns on the part of service providers about adverse selection or other information problems may result in some consumers failing to gain adequate or affordable access to financial services.

Source: Secretariat and UK Financial Services Authority “The benefits of financial regulation”

... which suggests a need to assess innovations

These developments suggest that an assessment of innovations as they affect retail consumers should take into account the following core issues: **product design**, **sales practices**, and **recourse** (dispute resolution).

Product design

A major consideration in assessing suitability is the nature of the product itself or the process used to

Whose fault is it when product choices turn out to be poor ones or inappropriate ones for retail financial consumers? Where is the line to be drawn between *caveat emptor* versus *caveat vendor*? The answers to these questions depend in part on the nature of the products in question. What appear to be the intrinsic characteristics of the product? How does the product itself or the process used to create it differ from traditional products and methods? Answers to the latter two questions and others of this nature help identify what makes a

create it

new product innovative.

Some products seem to be complex but can be decomposed into a few simple payment streams

Some new products may seem at first glance to be complex, but can actually be decomposed into a few simple payment streams. New products may simply be combinations of various existing products, such as options on futures, straight options, or even straight securities. The innovation may lie in the nature of the combination and not in the product itself.

Other new products are complex and may embody tiered layers of risks

But some other new products may be based on mixtures of complex derivatives and may rely heavily on assumptions of abundant market liquidity, low interest rates, or low inflation, etc. They may also embody tiered layers of risks, the interactions among which are unlikely to be easily grasped, if at all, by the relatively uninformed.

A high degree of complexity has been one of the major problems with recent product innovations

Perhaps the most serious shortcoming with recent new product development and indeed with the products themselves has been the extremely high degree of complexity, which has aggravated an already troublesome problem with asymmetric information. The excessive heterogeneity, complexity, and opacity obscured underlying risks, allowing them to build to levels grossly disproportionate to the perceived benefits.

Complexity inhibits the proper allocation of risk to those most capable of bearing it

Obscuring risks is obviously counterproductive for systemic stability. System stability is enhanced when risks are properly identified and properly allocated. The entity where a particular financial risk ultimately resides should be determined on the basis of appropriate strategic and risk management decisions. In most cases, those most capable of absorbing risk will not be retail consumers. And complex structures make that even more likely.

Even the most complex products can be useful under certain conditions, but the risk of misuse is obviously high

While it is not inconceivable that even the most complex products can be useful instruments for hedging some risk exposures, high degrees of complexity increase the chances for mistakes to be made, and the higher amounts of gearing that are typically involved will act to magnify any problems that do arise. Service providers may also use them inappropriately, either through mistakes in risk management or as part of deliberate risk-taking strategies.

The best antidote for complexity is simplicity

The best antidote for complexity is simplicity, which means, other things equal, that straightforward structures are to be preferred to more complex ones. Complex structures may be used to mask regulatory or tax avoidance. If the economics of the transaction only work when these conditions are met, supervisors may wish to subject the arrangement to closer scrutiny.

If complex structures are necessary, disclosure should be adequate to permit appropriate monitoring of systemic risks

Where more complex arrangements are perceived as needed to achieve the desired risk transformation, disclosure should be adequate to permit market overseers to monitor any untoward concentrations of risk that may be hidden by complex counterparty exposures or other developments with a potential to disrupt the proper functioning of the market in question or the system as a whole.

Sales practices

At the retail level, consumers still value traditional face-to-face service and advice for many products and may not be especially price sensitive

As noted before, many retail customers still value traditional face-to-face service and advice, and some may not be especially price sensitive. Owing in some cases to product complexity but more often to the perception that loyalty to an existing service provider carries benefits, retail financial consumers rarely switch to new service providers. There is some variation across products, with, for example, a greater amount of shopping around for retirement products than for retail bank products, but in general the amount of search appears to be limited. In many product categories, switching costs can be quite high. Reputation also plays a role.

But these sorts of direct distribution channels are expensive to establish and maintain ...

The usual defining characteristic of the retail financial services segment has been the importance of the relationship itself, which helps account for the attention service providers have devoted to developing or gaining access to direct distribution channels. The usual examples include the branch-based network of commercial banks and the local agent/broker network of insurance companies. These types of *retail distribution infrastructures can be very costly to establish and maintain. To make them more cost-effective requires an increase in the volume of products and services that are distributed through them.* In the retail segment, new products often represent an attempt by service providers to achieve this goal.

... which creates an incentive for service providers to utilise them more intensively to improve the underlying economics

Service providers can also improve the economics of new product development if selected features of products developed for other clients can be tweaked to make them marketable to retail consumers or their portfolio managers. The advantages from new product development are typically short-lived. Financial products do not generally enjoy patent protection, which means that innovators might enjoy some first-mover advantages, but new products will tend to have a finite life-cycle as sources of excess returns, as other institutions eventually begin to offer similar products and services. The temptation to take advantage of the existing retail base can be quite tempting under such circumstances. There can be benefits from such a strategy on both sides, but some precautions are needed in these situations to ensure that unsuitable products are not pushed to retail consumers.

Finding innovative products to push through these channels is one approach for doing so

Product innovators have various options to attempt to stay ahead of their competitors. They can, for example, add bells and whistles to existing products to differentiate them in markets characterised by relatively homogeneous products or into which perceived close substitutes have been introduced; tweak products developed for a different clientele to adapt them for the mass market; use marketing and advertising to convince consumers that their particular product is special when, in fact, no fundamental difference exists; or they can increase product complexity, thereby obscuring key characteristics.

There can be benefits for consumers from new products, but some can prove overly

In most cases, the policy response to the placement of new products has been to ensure adequate disclosure. New products raise a particular challenge in this regard. The increasing complexity of certain consumer financial products can pose problems for consumers' understanding and thus impair their ability to make sound decisions. *Disclosures may in some cases be unable to*

challenging for retail consumers.

Surveys and periodic testing may be needed to ascertain whether existing disclosures are adequate to overcome these difficulties

convey adequate information to facilitate proper consumer choice. In those cases, specific rules may be needed to safeguard consumers and to prevent unfair and deceptive practices. This determination should be based on careful analysis. Surveys and periodic testing may indicate, for example, that there are products that some classes of consumers are simply unable to understand adequately, even with what might be construed to be the best disclosures. Such products may need to be prohibited investments for the particular clientele.

Recourse

A problem with financial products is that the determination of quality tends not to be obvious at the time of sale

As noted before, a problem with inter-temporal choice decisions like savings and investment options is that not all relevant information may be available at the time the product is purchased. Some performance-based financial products ultimately yield returns that are within the targeted range, but many others will produce returns that turn out to be lower than expected or result in loss of principal. Given hindsight, it may be clear that the product in question was not a good purchase, but this determination would not have been obvious at the time of sale.

Moreover, with financial products, the entire category might under-perform at some point

Financial products are not unique in this respect. To be sure, there can be “lemons” in the physical goods world as well, as reflected, for example, in high rates of necessary repairs. However, one typically thinks of lemons among physical goods as being exceptions, while most other products in the given category perform about as expected. In the case of financial products, by contrast, the whole category might underperform at some point.

To make informed choices consumers need information on the price, quality, and terms of the range of products on offer

To make informed choices when buying financial products, consumers need information on the price, quality and terms of the range of products available. They can obtain this information indirectly by reading printed material such as newspapers or magazines, or surfing the Internet. They can also delegate the job of search to an expert of some sort. Less likely is that they themselves will do so by actively shopping around to compare the products that are on offer from a number of different providers.

However they obtain the necessary information, they need to understand it if they are to avoid problems with poor choices

No matter which of these methods consumers use, they must still at some point understand the information received if they are to avoid problems down the road. *Disclosure may help to improve the quality of information, but it does not affect the ability of consumers to understand the information that is disclosed.* Some observers argue that many investors, in particular, “unsophisticated” retail investors, are simply unable to appropriately process large amounts of complex information. Critics of the financial services industry in this regard cite such arguments in complaints about what they perceive to be excessive and overly complex disclosure levels.

Consumer advocates argue that disclosure

Consumer activists in particular argue that a more pro-active approach is required for adequate consumer protection. This assertion refers again to where

alone is not sufficient to ensure adequate protection of consumers

to draw the line between caveat emptor versus caveat vendor. Specifically, should new products be subject to prior approval or authorisation, presumably to avoid the introduction of products considered to be inappropriate or harmful?

But a number of factors argue against going so far as to require prior approval for all new financial products

A number of factors argue against a blanket requirement for all new financial products to have prior approval. For one, as noted above, the life-cycle for new products can be quite short. Requiring prior approval before new products are introduced could substantially diminish the incentives for innovation, including of products that could prove to be “good” for some categories of consumers. A second issue concerns the nature of the products. Many innovative products are simply combinations of existing products. Under such circumstances, the regulatory approach that attaches to the new product should not differ from the treatment of the existing ones.

One can argue that the regulatory treatment of new products should be based on the promise that the products embody

By similar reasoning, it can be argued that the treatment of new products, as far as consumers are concerned, should be based on the nature of the promise that the products embody, which in many cases might not require prior approval. Existing rules and regulations already apply to trustees and others with fiduciary obligations. In most cases, these requirements will be sufficient if properly enforced, which argues against the need to block product development and may adequately address distribution concerns, as well.

To ensure retail consumers are not exposed to unsuitable products indirectly proper governance mechanisms and controls are needed for portfolio managers

Investment rules governing pension fund managers and those for other fiduciaries generally limit the degree of exposure the institutions can have to complex entities and innovative products that entail complex risk exposures. These requirements must be matched by appropriate governance mechanisms to ensure adequate protection for beneficiaries, investors, policyholders, etc. Such arrangements should be in place for all institutional investors including collective investment schemes to ensure that retail consumers are not exposed to unsuitable products indirectly through their portfolio investments in managed funds.

But service providers also must be held accountable for their own behaviour ...

That said, service providers themselves should be subject to appropriate accountability. They must have adequate safeguards in place to avoid conflicts of interest and other malpractices that result in unsuitable products being pushed to unsuspecting investors. The requirement for appropriate internal controls over the product creation/distribution process is an important aspect of proper infrastructure. Some products are simply not considered appropriate investments for retail clients or for service providers with fiduciary duties, classic examples being hedge funds for the former and gearing for institutional investors like pension funds. Obviously, investors and consumers must themselves exercise proper discipline and avoid exposures to products they don’t understand, but the onus should be on the service provider to ensure that such products are not being mis-sold.

... and consumers themselves must exercise proper discipline and avoid exposure to products they don’t understand

In the final analysis, consumers are best served when they have access to proper

In the final analysis, consumers of financial products are best served when they have access to proper information on which to base their decisions and adequate understanding of the information that is disclosed. But unsophisticated consumers and investors have difficulty processing financial information, which

information on which to base their choices and adequate understanding of the information that is disclosed

means that even the best disclosures alone will not be sufficient. It is highly unlikely that lengthier and possibly more detailed disclosures will resolve this problem. The emerging consensus among many prudential policymakers is that improved financial education is clearly necessary to overcome some of these deficiencies. But some products are just not suitable for retail investors. Adequate testing and surveys should help to indicate which.

But where disclosure proves inadequate on its own authorities must step in to ensure consumers receive adequate protection

But as a final recourse, authorities may have few options to resolve the problems faced by unsophisticated consumers/investors other than the use of various forms of bonding arrangements (e.g. guarantees), which are designed to insulate protected parties from losses, either partially or completely. These sorts of mechanisms are quite common in the financial services industry. Government sponsored arrangements exist in many OECD countries for depository institutions, insurance companies, and certain pension plan assets.

Table 4 Possible antidotes to common detriments faced by retail consumers

<i>Type of detriment</i>	<i>Possible antidotes</i>
Reduced choice	Improved disclosure to address high search costs; financial education to address lack of knowledge on the part of consumers; liberalisation of trade in financial services or removal of other barriers to entry
Excessive product differentiation	Conduct of business rules should effectively address proliferation. Disclosure rules should mandate clear and simple statements regarding products. Service providers should be encouraged to make use of simpler structures for products targeted to retail consumers.
Sub-optimal choice	Financial education should help to address financial illiteracy. Existing rules for financial advisers should help consumers avoid egregious errors. Service providers should have appropriate internal controls to minimise the chances that consumers take on inappropriate products.
Exposure to operational risks	Stricter penalties to address ‘mis-selling’, fraud or other firm misconduct; better governance and internal controls to ensure proper controls over new product development and distribution.
Financial risks	Micro-prudential regulation and supervision already address failures of institutions. Some classes of retail consumers benefit from guarantees and related support mechanisms.
Fallout from systemic risks	Macro-prudential oversight should help to limit systemic upheavals.
Market power of firms	Competition policy to address market structure failings, while conduct of business requirements should address particular misconduct.
Higher costs – from transaction/system inefficiencies	Competition (and openness to trade) policies to ensure entry barriers remain low to enable more efficient providers to have access to the market.
Financial exclusion	Financial education, conduct of business, competition policy, special guarantee programmes or other mechanisms to encourage lending to excluded consumers, but with appropriate controls to minimise risks.

Source: Secretariat and UK Financial Services Authority “The benefits of financial regulation”

III. Conclusions

This note addresses a few of the primary concerns of consumer protection in relation to suitability

The discussion in this note addresses a few of the most prominent concerns of consumer protection, paying particular attention to questions in relation to suitability. The questions touched upon include the factors relevant to a determination of what products can safely be sold to retail financial consumers? And who bears the blame for poor choices? There can be both direct and indirect effects.

Innovative products raise a number of concerns in this regard

The degree of heterogeneity and rapid pace of introduction of new products, and the complexity of product design tend at times to overwhelm the capacity of the system to measure and limit risk. The traditional antidote for complexity is simplicity, accompanied by enhanced transparency and disclosure. But while disclosure and transparency are important for properly functioning markets, they are not panaceas for all market imperfections.

End-users of financial products and services have difficulty evaluating the quality and suitability of financial products, and innovative products tend to be especially complex

End-users of financial products and services, especially unsophisticated customers and investors, have difficulty processing financial information to evaluate the quality and perhaps even the suitability of financial products and services. Thus, there are limits in their ability to protect themselves in their dealings with financial service providers. Even the best disclosures, alone, may not be adequate. To avoid situations in which retail investors become involved with unsuitable products institutions should be “encouraged” to develop sufficient measures for client protection as part of their product development activities.

Thus, disclosure tends to be supplemented with other measures to ensure adequate protection of consumers’ interests

In addition, policymakers also implement various regulatory measures to protect the interests of retail consumers and investors. The standard approach has two prongs: On the one side are measures designed to protect investors, borrowers and other end-users of the financial system against undue risk of loss from failures of providers of financial services. In particular, micro-prudential regulation addresses some risks by dictating that financial service providers operate in a safe and sound manner, while macro-prudential measures may seek to ward off contagion and related externalities at the system-wide level.

Measures generally act to ensure that consumers have information to make appropriate choices, but it is doubtful that disclosure alone will suffice

Measures such as the ones described above should help to ensure that consumers have the information they need to make appropriate choices. Of course, consumers must also have the education to understand the information that is provided, and available evidence suggests that much remains to be achieved on the financial education front. But it may be wishful thinking to assume that financial education and disclosure will be all that is required.

In summary, the discussion in this note suggests a number of basic propositions

In summary, the discussion in this note suggests a number of basic propositions regarding new product development and protection of retail financial consumers. Pursuant to the discussion in the text, the propositions mostly relate to considerations about access and suitability. They include:

regarding new product development

- The issue of financial innovation and consumer protection is mostly about access and suitability. Innovative products tend generally to be either positive for access to finance or neutral. To ensure adequate choice for consumers it is recommended to improve disclosure to address high search costs, improve financial education to address a lack of knowledge on the part of consumers, and remove trade restrictions or other barriers to entry to allow a broader range of product offerings on the market.
- But products that actually result in increased access to finance may nonetheless still raise suitability issues. Financial education is needed to help address financial illiteracy. Service providers should have appropriate internal controls to minimise the chances that consumers take on inappropriate exposures. Stricter penalties should be used to address mis-selling, fraud or firm misconduct.
- Consumers of financial products have idiosyncratic information endowments (i.e. what they know) and therefore needs (i.e. what they should know), reflecting their individual circumstances and risk preferences. Improved disclosures may help to improve the quality of information across the range of consumers. But where the financial products themselves are sufficiently complex, or the institution offering them does so through a complex structure, it may be the case that disclosure alone may simply not suffice to enable consumers to make choices, no matter how much information is provided.
- The ideal arrangement is to establish a set of principles to ensure that the incentives of financial intermediaries are consistent with the objective of safeguarding the interests of the consumers that hold their obligations. Competition policy can address barriers to entry and market structure failings, while conduct of business requirements should address particular misconduct.
- Consumers, in turn, must have the incentives to make the correct choices and the relevant information on which those decisions can be based. Disclosure rules should mandate clear and simple statements regarding products. And financial education should help improve the ability of consumers to interpret the information that is disclosed. But such measures will still need to be supplemented by micro-prudential regulation and supervision to address safety and soundness and macro-prudential regulation to limit systemic upheavals. Special guarantee programmes or other mechanisms may be needed as well to encourage lending to excluded consumers, albeit subject to appropriate controls to minimise risks.

Notes

1. See Bruno Levesque, “Addressing Financial Consumer Protection Issues in the Post Crisis Era”, unpublished internal document.
2. The perfect capital market is an idealised abstraction from reality in which resource allocation is optimal, in part, because there are no information asymmetries, no market power imbalances, and no externalities, as contracts that cover all contingencies can be written and enforced at minimal costs. Its usefulness as a benchmark derives from the simple fact that real markets can be understood in terms of the way in which they depart from its precepts and assumptions.
3. Products are differentiated when, owing to differences in physical attributes, ancillary service, geographic location, information and/or subjective image, one firm’s products are clearly preferred by at least some buyers over rival products at a given price.
4. Banks have incentives to invest in such information-intensive, but potentially profitable, borrowers only if they are able to develop long-term relationships with them. Through repeated interactions with the borrower a bank gains inside information that helps attenuate information asymmetries. If the bank expects to be able to extract surplus rents through subsequent lending or additional fee-generating business as the firm matures, it may be willing to offer lower rates or more favourable terms to the borrower initially or refrain from imposing additional charges when the borrower faces temporary credit problems. Once the business becomes profitable, however, it becomes an attractive potential client for rival banks, which can offer more favourable rates than the initial bank as they do not have to recoup the initial investment in information gathering and funding the unprofitable early stage of the business. Faced with the possibility of competition *ex post*, banks have incentives to ration credit to these types of borrowers.