

A framework for assessing the benefits of financial regulation

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Financial Services Authority**

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Executive summary

Oxera was commissioned by the Financial Services Authority (FSA) to develop a framework for assessing the benefits of financial regulation. The framework seeks to establish the following.

- **What to measure**—the framework is designed to identify the dimensions along which financial services regulation delivers benefits by improving outcomes in the market. This provides a systematic description of the types of benefit to be measured.
- **How to measure**—having identified what should be measured, the framework is extended to discuss how the types of benefit can be measured. Importantly, the framework distinguishes between the direct measurement of improvements in market outcomes and the indirect measurement using proxy metrics and techniques. It is the combination of both direct and indirect measurement that allows benefits to be systematically evaluated.

This report should be seen in the wider context of the debate on the costs (and benefits) of financial regulation. The cost of regulation study, conducted by Deloitte on behalf of the FSA and the Financial Services Practitioner Panel,¹ has estimated the (direct) compliance costs in three markets in the financial services sector. These costs are incurred by financial services firms, but economic logic tells us that such costs will ultimately be borne by the users of the financial services—ie, private individuals and companies. The level of these costs should therefore also be considered from a consumer perspective: do the benefits of FSA rules to users of financial services outweigh the direct and indirect costs?

The framework for conducting benefits measurement can be summarised as follows.

- The benefits of regulation can in principle be measured as the improvements in market outcomes that result from regulation. In ex post analysis, where the aim is to evaluate the impact of regulation already in place, measurement requires comparison of actual market outcomes in a regulated world with outcomes that would have arisen in the ‘counterfactual’ world without regulation. Where a proposed regulation needs to be evaluated ex ante, the assessment requires measurement of the likely improvements in market outcomes compared with the status quo.
- However, direct measurement of improvements in market outcomes due to regulatory intervention is difficult in practice. Hence, actual measurement will require systematic analysis and measurement of the mechanisms through which regulation delivers benefits and improves market outcomes.
- Market failure is one of the main rationales that the FSA uses for intervention in markets. Where there is no market failure, intervention is likely to bring net economic costs. Understanding the types and severity of market failures that would pertain in a market without regulation—usually labelled as asymmetric information, externalities and market power—is therefore critical to identifying the potential benefits of regulation (ie, the maximum benefits that regulation could, in principle, deliver).

¹ Deloitte (2006), ‘The Cost of Regulation Study’, study commissioned by the Financial Services Authority and the Financial Services Practitioner Panel, June.

- Two additional features are important in identifying potential benefits: risks and incentives. Even severe market failures may not have a significant impact on market outcomes if risks are low or incentives between market participants are aligned.
- The starting point is therefore to identify the types of problem that determine negative market outcomes in the absence of regulatory intervention (problems such as a combination of market failure, risks and misaligned incentives). This defines the set of potential benefits that may result from regulation.
- The framework applies to the measurement of any type of regulatory intervention, be it the introduction of a specific rule (or set of rules), or deregulatory measures intended to remove or replace existing rules. However, from a methodological perspective, measurement must take account of the sequencing of regulatory interventions. For example, introducing a particular rule may deliver positive market impacts, but removing it may have no effect if the market has permanently adjusted market practice to meet previous requirements. Measurement must also take into account that rules may interact by overlapping or mutually enhancing their individual impact. For example, the benefits of a particular rule may be small, or indeed zero, when measured in isolation, but large if its impact is measured as part of a set of complementary rules.
- The framework starts with the identification of potential benefits in terms of improvements in market outcomes, rather than with explicit reference to the FSA statutory objectives. The reasons for this are mainly practical: the FSA's four statutory objectives do not lend themselves directly to measurement because they are defined at very high levels of generality (eg, market confidence). In addition, the four objectives are linked, explicitly or implicitly, to market outcomes. For example, if market confidence had no impact on the supply or consumption of financial services, it would not be an objective worthwhile achieving. However, the market failure approach may not capture everything that is captured by the statutory objectives. For example, the FSA objective of the reduction in financial crime (eg, setting up a business for money-laundering purposes) is mostly not captured by the market failure approach.
- The market failure approach used as a starting point in this part of the analysis also limits the dimensions along which benefits will be measured to those that relate to the market delivering economically efficient outcomes. Even if markets were operating efficiently, financial services provision may not be adequate to meet all consumer needs, or it may be unaffordable by some (a point stressed by the consumer groups that were consulted as part of the research). 'Financial exclusion' is a detrimental market outcome for some consumers, and the reverse a potential benefit that regulation could be delivering. Although the FSA objectives are not in general targeted at improving distributional outcomes in the market, the framework can be extended to capture benefits along this dimension.
- Having determined the dimensions of potential benefits (or the maximum benefits that could be attained by regulation under a market failure framework), this identifies the set of benefits that, within this framework, could be realised by actual regulation—ie, it defines the 'what to measure' in a benefits assessment.
- The 'how to measure' focuses on empirical methodologies available to allow measurement of improvements in market outcomes. In practice, it turns out that the direct measurement of benefits is often difficult, in particular where predictions about the impact of regulation are required.
- Where direct measurement of improvements in market outcomes is not possible, an alternative technique is available, which involves the identification and measurement of proxies which are themselves good and robust indicators of changes in the desired market outcomes.

- In the market failure framework, regulation delivers benefits by improving market outcomes through one (or more) of three mechanisms: reducing market failures; reducing the frequency of risks or lessening their impact; and aligning incentives between financial services firms and their customers. Hence, indirect measurement can focus on proxy metrics that provide an indication of the degree to which regulation reduces the underlying market failure, mitigates risks, and/or aligns incentives.
- More generally, indirect measurement seeks to quantify improvements in the mechanisms through which regulation delivers better market outcomes. This requires identification of the complete set of causal links between the direct impact of the regulation and the desired market outcomes and, importantly, validating that these links hold in practice. If valid then measures of improvements in the intermediate mechanisms are suitable proxies and can be used to infer the ultimate benefits of improved market outcomes.
- Regulatory intervention also imposes costs, including direct compliance costs for firms as well as indirect costs (ie, negative market impacts). The measurement of benefits cannot proceed without giving some consideration to cost, since in most cases regulation-driven changes in market outcomes reflect benefits net of costs. Regulatory failure occurs where costs exceed benefits, and market outcomes deteriorate as a result of regulation. Although the focus of the research is on the benefits of regulation, the framework is generic enough to capture costs. Moreover, many of the proposed approaches to benefits measurement also apply to the measurement of negative market impacts.

Although the actual measurement of benefits is beyond the scope of this report, the description of the framework is followed by illustrations of how the benefits of specific rules can be measured. The illustrative applications focus on three rules that have been found to be among the more burdensome for firms operating in the market for investment and pension advice, as identified in the Deloitte study on the compliance costs of regulation and selected by the FSA:

- the requirement for a suitability letter (COB 5.3.14 of the FSA Handbook);
- the rule requiring a firm to maintain competence (TC 2.6.1 of the FSA Handbook);
- the rule on projections for packaged products (COB 6.6 of the FSA Handbook).

Benefits measurement is a complex exercise in practice, more so than measuring the direct costs of regulation. As a result, measurement may not always be possible, or, where it is possible, may not be precise. Nonetheless, application of the framework described should improve not only actual measurement, where possible, but also policy formulation, by emphasising the conditions that must be met for the particular regulation being assessed to bring about improvements in market outcomes.

The framework for benefits assessment and the illustrations developed in this report have two practical implications, in particular. First, some of the tools for measurement described, because of their complexity, may require policy-makers to draw on specialist researchers and/or the Economics of Financial Regulation Department at the FSA. Second, when setting the policy timetable, consideration should be given to the time necessary to carry out the required analysis and provide estimates of benefits, to ensure that policy proposals are produced on the basis of established and properly evidenced benefits.

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1 Introduction

Oxera was commissioned by the Financial Services Authority (FSA) to develop a framework for assessing the benefits of financial regulation. Although there is a considerable body of literature on regulatory impact assessments and cost–benefit analysis, existing studies often do not provide a comprehensive overview of the dimensions of benefits that regulation may be delivering, or contain little discussion of how different types of potential benefit can be measured. On the empirical side, existing cost–benefit analyses often focus on the quantification of costs, leaving the benefits assessment to qualitative discussion, without measurement or explicit analysis of the mechanisms through which regulation is supposed to deliver the asserted change.

1.1 Approach

The research for this study builds on the existing literature, but aims to advance benefits measurement by developing a conceptual framework that sets out the relevant dimensions of benefits, the mechanisms through which regulation may deliver these benefits, and the approaches that can be adopted to measure the relevant dimensions. More specifically, the framework seeks to establish the following.

- **What to measure**—the framework is designed to identify the dimensions along which financial services regulation delivers benefits by improving outcomes in the market. This provides a systematic description of the types of benefit to be measured.
- **How to measure**—having identified what should be measured, the framework is extended to discuss how the types of benefit can be measured. Importantly, the framework distinguishes between the direct measurement of improvements in market outcomes and the indirect measurement using proxy metrics and techniques. It is the combination of both direct and indirect measurement that allows benefits to be systematically evaluated.

This report does not aim to provide a detailed discussion of the empirical tools and techniques that can be used to measure benefits. Economists have developed myriad statistical, econometric and modelling techniques to perform empirical analysis, and these have been well documented in the literature. Rather than describing specific tools and techniques, the framework discusses at a conceptual level how benefits can be measured, and provides examples of measurement techniques—it allows the user to ask the right questions as a starting point for any assessment of benefits. Nonetheless, where appropriate, some core tools and techniques are described, and references are made to the relevant literature.

The framework provides a generic methodology to identify and then measure the types of benefit of regulation, whether in an ex ante assessment of the likely benefits or in an ex post evaluation of actual benefits. It can be applied to assess benefits of regulation regardless of which type of regulatory intervention is being considered, at what level of disaggregation of the rulebook, or in which industry sector. Although the research focuses on the benefits of regulation, it should be understood in the wider context of regulatory impact assessments or cost–benefit analysis, where benefits are set against costs and regulatory interventions are evaluated with respect to their cost effectiveness. The framework is sufficiently generic to capture the costs imposed by regulation, and many of the proposed measurement approaches also apply to assessing the negative market impacts of regulation.

1.2 Role of this report in the wider policy debate of the costs and benefits of financial regulation

Although this report does not seek to provide estimates of the benefits of financial regulation, it does present a framework to conduct the assessment and explains what and how to measure. In particular, it focuses on the impact of regulation on market outcomes and the mechanisms through which regulation delivers improvements in market outcomes.

The measurement of benefits is a complex exercise in practice, more so than measuring the direct costs of regulation. As a result, measurement may not always be possible and, where it is possible, may not be precise. Nonetheless, application of the framework described herein should improve not only actual measurement, where possible, but also policy formulation by emphasising the conditions that must be met for the particular regulation(s) being assessed to bring about improvements in market outcomes. This process should therefore be followed even if quantification is not achievable with precision.

This report should be seen in the wider context of the debate on the costs (and benefits) of financial regulation. The cost of regulation study, conducted by Deloitte on behalf of the FSA and the Financial Services Practitioner Panel,² has estimated the (direct) compliance costs in three markets in the financial services sector. These costs are incurred by financial services firms, but economic logic tells us that such costs will ultimately be borne by the users of the financial services—ie, private individuals and companies. The level of these costs should therefore also be considered from a consumer perspective: do the benefits of FSA rules to users of financial services outweigh the direct and indirect costs?

Although the actual measurement of benefits is beyond the scope of this report, the description of the framework is followed by practical illustrations of how the benefits of three specific rules can be measured, selected by the FSA from the list of rules analysed in the Deloitte study. It may often be difficult to exactly quantify the benefits of the individual rules (also different rules may often contribute to the same market outcome). However, by making explicit the different mechanisms or chains of causality through which a particular rule may deliver benefits, it is possible to assess the extent to which a rule is likely to contribute to an improvement in market outcome (or assess whether the rule will contribute anything at all).

The framework for benefits assessment and the illustrations developed in this report have in particular two practical implications. First, some of the tools for measurement described here, because of their complexity, may require policy-makers to draw on specialist researchers and/or the Economics of Financial Regulation department at the FSA. Second, when setting the policy timetable, consideration should be given to the time necessary to carry out the required analysis and provide estimates of benefits, to ensure that policy proposals are produced on the basis of established and properly evidenced benefits.

1.3 Structure of the report

This report is structured as follows:

- section 2 presents a short overview of the framework of analysis;
- section 3 describes how benefits are identified within that framework to establish ‘what to measure’;
- section 4 provides a summary of ‘how to measure’ the benefits of regulation;
- section 5 contains illustrative applications of the framework to three specific rules contained in the FSA Handbook of Rules and Guidance.

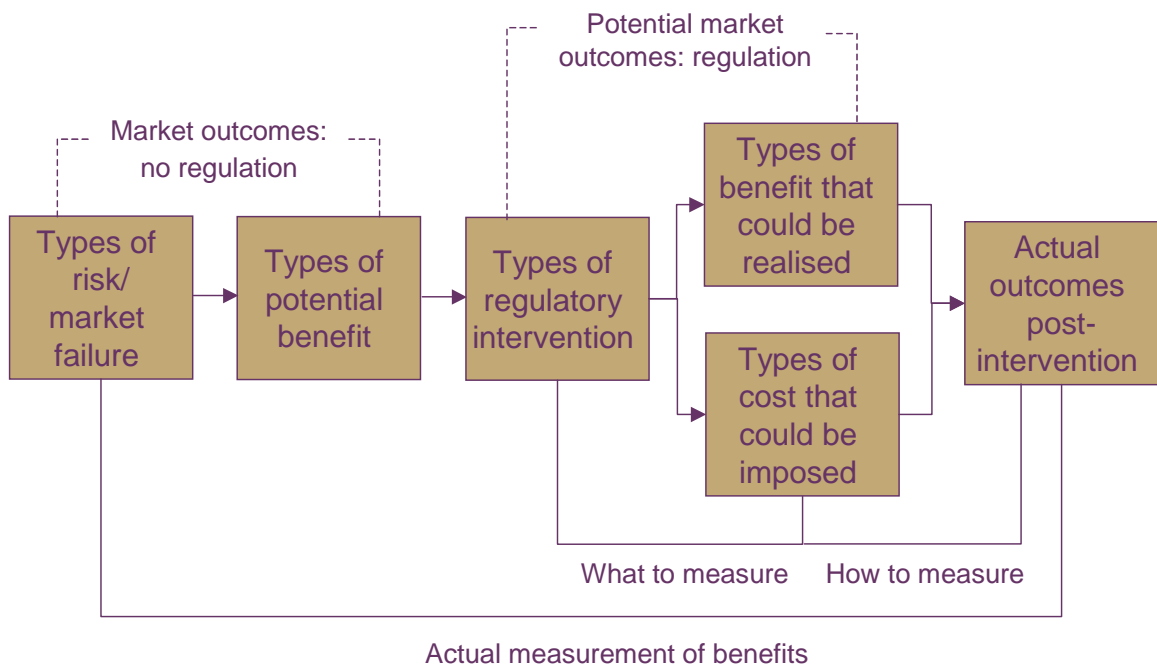
² Deloitte (2006), ‘The Cost of Regulation Study’, study commissioned by the Financial Services Authority and the Financial Services Practitioner Panel, June.

2 Overview of conceptual framework

An overview of Oxera’s conceptual framework of analysis is shown in Figure 2.1 and can be summarised as follows.

- The benefits of regulation can in principle be measured as the improvements in market outcomes that result from regulation.
 - In ex post analysis, where the aim is to evaluate the impact of regulation already in place, measurement requires comparison of actual market outcomes in a regulated world with outcomes that would have arisen in the ‘counterfactual’ world without regulation.
 - Where a proposed regulation needs to be evaluated ex ante, the assessment requires measurement of the likely improvements in market outcomes compared with the status quo.
- However, direct measurement of improvements in market outcomes due to regulatory intervention is difficult in practice. Hence, actual measurement will require systematic analysis and measurement of the mechanisms through which regulation delivers benefits and improves market outcomes.

Figure 2.1 Overview of conceptual framework



Source: Oxera.

- Market failure is one of the main rationales that the FSA uses for intervention in markets. Where there is no market failure, intervention is likely to bring net economic costs. Understanding the types and severity of market failures that would pertain in a market without regulation—usually labelled as asymmetric information, externalities and market power—is therefore critical to identifying the potential benefits of regulation (ie, the maximum benefits that regulation could, in principle, deliver).

- Two additional features are important in identifying potential benefits: risks and incentives. Even severe market failures may not have a significant impact on market outcomes if risks are low or incentives between market participants are aligned.
- The starting point is therefore to identify the types of problem that determine negative market outcomes in the absence of regulatory intervention (problems such as a combination of market failure, risks and misaligned incentives). This defines the set of potential benefits that may result from regulation.
- The framework applies to the measurement of any type of regulatory intervention, be it the introduction of a specific rule (or set of rules), or deregulatory measures intended to remove or replace existing rules. However, from a methodological perspective, measurement must take account of the sequencing of regulatory interventions. For example, introducing a particular rule may deliver positive market impacts, but removing it may have no effect if the market has permanently adjusted market practice to meet previous requirements. Measurement must also take into account that rules may interact by overlapping or mutually enhancing their individual impact. For example, the benefits of a particular rule may be small, or indeed zero, when measured in isolation, but large if its impact is measured as part of a set of complementary rules.
- The framework starts with the identification of potential benefits in terms of improvements in market outcomes, rather than with explicit reference to the FSA statutory objectives. The reasons for this are mainly practical: the FSA's four statutory objectives do not lend themselves directly to measurement because they are defined at very high levels of generality (eg, market confidence). In addition, the four objectives are linked, explicitly or implicitly, to market outcomes. For example, if market confidence had no impact on the supply or consumption of financial services, it would not be an objective worthwhile achieving. However, the market failure approach may not capture everything that is captured by the statutory objectives. For example, the FSA objective of the reduction in financial crime (eg, setting up a business for money-laundering purposes) is mostly not captured by the market failure approach.
- The market failure approach used as a starting point in this part of the analysis also limits the dimensions along which benefits will be measured to those that relate to the market delivering economically efficient outcomes. Even if markets were operating efficiently, financial services provision may not be adequate to meet all consumer needs, or it may be unaffordable by some (a point stressed by the consumer groups that Oxera consulted as part of the research). 'Financial exclusion' is a detrimental market outcome for some consumers, and the reverse a potential benefit that regulation could be delivering. Although the FSA objectives are not in general targeted at improving distributional outcomes in the market, the framework can be extended to capture benefits along this dimension.
- Having determined the dimensions of potential benefits (or the maximum benefits that could be attained by regulation under a market failure framework), this identifies the set of benefits that, within this framework, could be realised by actual regulation—ie, it defines the 'what to measure' in a benefits assessment.
- The 'how to measure' focuses on empirical methodologies available to allow measurement of improvements in market outcomes. In practice, it turns out that the direct measurement of benefits is often difficult, in particular where predictions about the impact of regulation are required.
- Where direct measurement of improvements in market outcomes is not possible, an alternative technique is available, which involves the identification and measurement of proxies which are themselves good and robust indicators of changes in the desired market outcomes.

- In the market failure framework, regulation delivers benefits by improving market outcomes through one (or more) of three mechanisms: reducing market failures; reducing the frequency of risks or lessening their impact; and aligning incentives between financial services firms and their customers. Hence, indirect measurement can focus on proxy metrics that provide an indication of the degree to which regulation reduces the underlying market failure, mitigates risks, and/or aligns incentives.
- More generally, indirect measurement seeks to quantify improvements in the mechanisms through which regulation delivers better market outcomes. This requires identification of the complete set of causal links between the direct impact of the regulation and the desired market outcomes and, importantly, validating that these links hold in practice. If valid then measures of improvements in the intermediate mechanisms are suitable proxies and can be used to infer the ultimate benefits of improved market outcomes.
- Regulatory intervention also imposes costs, including direct compliance costs for firms as well as indirect costs (ie, negative market impacts). The measurement of benefits cannot proceed without giving some consideration to cost, since in most cases regulation-driven changes in market outcomes reflect benefits net of costs. Regulatory failure occurs where costs exceed benefits, and market outcomes deteriorate as a result of regulation. Although the focus of the research is on the benefits of regulation, the framework is generic enough to capture costs. Moreover, many of the proposed approaches to benefits measurement also apply to the measurement of negative market impacts.
- The relevant ‘market’ depends on the regulation to be assessed, but broadly speaking is defined as the market in which financial services providers and their customers transact with each other in the specified product(s). Benefits can be measured anywhere along the chain of provider–customer relationships; however, for policy-making, market outcomes at end-consumer level are particularly important and therefore the focus of this framework. Measurement can centre on a specific market segment only, but a complete analysis requires assessment of the outcomes in the ‘economic’ market—ie, the market in which products compete.
- The framework emphasises the impact of regulation on market outcomes (for direct measurement) and the mechanisms through which regulation delivers improvements in market outcomes (for indirect measurement). It is therefore relevant not just for the actual measurement exercise, but also for policy formulation. Put differently, the framework integrates well in all parts of the policy-making cycle.

3 What to measure? Identifying the potential benefits of regulation

The potential benefits of regulation are the improvements in market outcomes compared with outcomes in an unregulated market that may be detrimental for various groups: (end-) consumers, regulated firms, and the wider economy. There are many dimensions of market outcomes that may be affected by regulation (or a specific rule), and identifying these dimensions defines what it is that should be measured.

3.1 Sources of detrimental market outcomes in the absence of regulation

From an economic perspective, detrimental market outcomes can be the consequence of three main problems, outlined briefly below.

- **Market failures**—market failures are the FSA’s stated rationale for regulation, and are critical to understanding the efficiency of outcomes in markets. They are commonly attributed to the existence of asymmetric information, market power and externalities. It is useful to distinguish between at least five reasons why markets may fail:
 - **asymmetric information related to product offerings**—eg, consumers cannot evaluate the characteristics of a financial product;
 - **asymmetric information related to providers**—eg, consumers are imperfectly informed about the quality of a financial services provider;³
 - **market power**—eg, firms may use their market position to charge excessively high prices;
 - **positive externalities**—eg, providing information benefits not only the provider of the information but also other participants in the market, meaning that information may be underprovided in an unregulated market;
 - **negative externalities**—eg, the behaviour of one firm in the market may adversely affect the reputation of other firms and reduce consumer confidence in the market at large.
- **Risks**—in financial services, market failures are inextricably linked to risks. In particular, relevant risks include operational risks, financial (or default) risks, and systemic risks.

If there were little risk, the potential detriment from a market failure would be low. For example, lack of information about a firm’s financial position would not be associated with consumer detriment if there were no risk that the consumer could lose funds or otherwise be adversely affected in the event of firm default. Similarly, it is the presence of externalities, combined with the risk of default, that give rise to concerns about systemic failures in the banking sector.

Conversely, the existence of risks per se is not a problem that may call for regulatory intervention. If consumers were able to correctly anticipate that their funds were threatened by firm default, they would be able to incorporate the risk in their decision-making and adjust the charges they would be willing to pay to a firm. Similarly, if consumers understood the risk characteristics of investment products, risks would be priced in terms of the anticipated returns. Again, it is the combination of risks and market failures that may call for regulatory intervention to improve market outcomes.

³ The information asymmetry may also work in the opposite direction, with the consumer holding the relevant information—for example about medical conditions at the point of sale of a health insurance contract or about their earnings capacity when applying for a mortgage.

- **Incentive problems**—market failures are also inextricably linked with the incentives of participants in the financial services industry. For example, even if a consumer were not able to observe or monitor fully the activities of a financial intermediary, there would be no detrimental impact and indeed no market failure if it were possible—eg, by means of a completely specified contract—to align the incentives of the intermediary with those of the consumer. It is the problem of incentive misalignment that gives rise to, or exacerbates the negative impact of, a market failure.

Market failures, risks and the problem of incentive misalignment are all interlinked, and it is the combination that leads to potentially detrimental market outcomes.

3.2 Dimensions of market outcomes that regulation can improve

The more detailed analysis of the above problems and their combined effect on market outcomes generates a list of potential detriments. The mitigation of these detriments defines the list of potential benefits that regulation may deliver.

3.2.1 Consumer detriments and the potential benefits of regulation

From the perspective of the consumer (a private individual or any other user of financial services), there are seven broad types of consumer detriment. These are summarised in Table 3.1, together with an example. The potential benefits of regulation for consumers come from the mitigation or elimination of these detriments; thus, the table also sets out the dimensions of market outcomes that can be improved by regulation.

Table 3.1 Types of consumer detriments and potential benefits of regulation

Types of consumer detriment in the absence of regulation	Example/explanation of detriment	Potential benefits of regulation
Sub-optimal choice	'Mis-buying' of financial products (eg, when poorly informed consumers decide to buy a product not suitable for them)	Value that consumers derive from better choice (ie, more optimal fit between what they buy and what they need)
Reduced choice	Lack of consumer confidence may make it not worthwhile for firms to offer certain types of product, reducing the choice set available to consumers	Value that consumers derive from increased choice (ie, reduction in opportunity cost of not being able to buy what could be available)
Higher costs—from operational risks	Losses that arise to consumers as a result of an operational failure by a firm (eg, 'mis-selling' or other negligent advice, fraud, systems breakdown); higher prices if failure is compensated by the firm and cost passed on to consumers	Reduction of expected losses and other costs associated with operational failure
Higher costs—from financial risks	Losses that arise to consumers as a result of the default of a firm (eg, deposited funds cannot be returned, losses from operational failures cannot be compensated)	Reduction of expected losses and other costs associated with financial failure
Higher costs—from systemic risks	Costs incurred by consumers due to widespread failures of the financial system	Reduction of expected losses and other costs associated with systemic failure
Higher prices—from market power of firms	Consumers pay excessively high prices to a firm exercising its market power	Reduction of excessive prices
Higher costs—from transaction/system inefficiencies	Consumers incur higher transaction costs (eg, due to the need to monitor financial intermediaries if there is no regulator to perform this function)	Reduction of transaction costs/prices arising from inefficiencies, including consumer search costs
Financial exclusion	Even if markets were efficient, some consumers may not be able to gain adequate or affordable access to financial services	Value consumers derive from improved access to financial services

Source: Oxera.

The dimensions of market outcomes emerge from analysis of the underlying sources of detriment discussed above, in particular market failures—the FSA's stated rationale for regulatory intervention—as well as the associated risks and incentive problems. The following provides an overview with illustrations of how the dimensions of market outcome can be mapped against the sources of detriment.

- **Sub-optimal choice**—this detriment largely arises from informational problems on the part of consumers regarding product offerings. Consumers' lack of access to, or understanding of, the investment or market risks associated with products, or their inability to identify what products match their needs may result in sub-optimal purchase decisions.
- **Reduced choice**—if consumers are imperfectly informed and not able to evaluate the characteristics of products or the quality of the services provided by a firm, or if there is a system-wide lack of consumer confidence, firms may not find it worthwhile to innovate and develop new products or services. The variety of products or services offered may also be reduced if one or a few firms have market power and there is restricted entry by new firms.
- **Higher costs due to operational and financial risks**—operational failures and firm defaults can cause financial losses for consumers. If consumers were able to evaluate in

full the risk of these losses, they would be able to adjust their decisions accordingly. The market failure arises where consumers are imperfectly informed about risks. Moreover, where there is a problem of asymmetric information, firms may be induced to engage in behaviour that is detrimental to consumers, potentially exacerbating the risk of losses.

- **Higher costs due to systemic risks**—the risk of systemic failures is generally related to negative externalities or contagion effects where the default of one firm can trigger further defaults in the system.
- **Higher prices due to market power**—market power gives financial services firms the ability to restrict output and raise prices beyond the level that would apply in perfectly competitive markets.
- **Higher costs due to transaction costs**—system inefficiencies arise in the presence of informational problems, for example where consumers need to spend time and money to search for suitable products or providers and monitor performance afterwards. Another market failure giving rise to higher transaction costs relates to negative externalities, for example where firms need to devote resources (and as a result charge higher prices to consumers) in order to maintain or rebuild their reputation in the market, which may have been adversely affected by the actions of other firms in the market.

Table 3.1 lists another type of consumer detriment, summarised under the heading ‘Financial exclusion’. Market outcomes so far have been described from an economic perspective rather than with reference to public policy objectives. Even if there were no market failures and related problems, the market may not generate an outcome considered adequate to meet the financial needs of all consumers. For example, some consumers may not be able to purchase financial products even if the market were efficient and prices reflected minimum cost. In this case, regulation could deliver benefits to some consumers by improving their access to financial services (but this may require subsidies and increase the prices paid by other consumers for their financial services).

More generally, Table 3.1 captures the dimensions of market outcome that relate to a broadly defined ‘consumer protection’ objective. It therefore captures outcomes that are detrimental not necessarily from an efficiency point of view only, but that may also be judged detrimental from the distributional standpoint. For example, the operational risk dimension can capture a mixture of efficiency and distributional outcomes—operational failures raise efficiency concerns where the market cannot correctly price the risks, but in many cases involve pure transfers between the affected parties. The transfer of risks to consumers can be defined as a potentially detrimental market outcome for consumers in the generic framework, although it needs to be borne in mind that the FSA does not have an explicit distributional objective.

3.2.2 **Producer detriments and the potential benefits of regulation**

Regulated firms can be ‘consumers’ and ‘producers’ of financial services. Although the potential detriments summarised in Table 3.1 are intended to capture those arising at the level of the end-consumer, most also apply to intermediate consumers that operate somewhere along the vertical chain of the industry. Even wholesale firms are ‘consumers’ when they are purchasers in transactions to which regulation applies.

From the perspective of a regulated firm as a ‘producer’ of financial services, the detriments that may arise in the absence of regulation relate to the following.

- **Higher costs**—higher costs in a market without regulation include, for example, increased efforts that firms would need to expend on monitoring their counterparties; in this case, the potential benefits of regulation would come in the form of a reduction in transaction costs. Another example of producer detriment would be the higher capital costs firms may face if providers of capital were not able to rely on a regulatory ‘stamp of

approval' of a firm's financial position; the corresponding potential benefit of regulation would be a reduction in the cost of capital.

- **Lower output**—in addition to possible output reductions through higher costs, in the absence of regulation output may be lower due to demand-side effects. For example, lack of consumer confidence in the market may render the provision of certain products and services unprofitable. Put differently, the existence of statutory regulation may create demand from consumers who might otherwise be too risk-averse and reluctant to engage in certain financial transactions.

The potential benefits of regulation should be measured with respect to improvements in market outcomes. Under the assumption of reasonably competitive markets, the costs and benefits incurred by firms are passed on to consumers. Thus, the potential benefits arising to firms are 'intermediate' benefits and should already be reflected in the 'ultimate' benefits in Table 3.1. For example, reduction in monitoring or capital costs would be passed on to consumers via lower prices. Similarly, increased consumer confidence due to regulation may allow firms to offer and allow normal profits on certain products that would have not been profitable in the absence of regulation, increasing choice for consumers.

Where markets are not competitive, the benefits that accrue to firms are not fully passed on to consumers. From the perspective of consumers of financial services, these benefits should not be captured in the analysis and there are reasons why measurement should instead focus on improvement in market outcomes for consumers.⁴

Nonetheless, benefits of regulation that accrue to firms can be benefits to the economy as a whole even if they do not flow through to consumers. They take the form of higher profits (accruing to shareholders) or higher wages (accruing to management or other employees).

However, a distinction needs to be made between the causes of the benefits arising to firms. If firms benefit because regulation reduces competitive pressure and allows firms to raise prices, any benefits they receive are counterbalanced by a detriment from a consumer welfare point of view. If, by contrast, the benefit arises because regulation reduces firms' cost of operation and makes them more efficient, there is still some benefit to the economy even if this is not reflected in reduced prices for consumers.

In this context, given the international nature of the UK financial services industry, there may be instances where benefits arising to UK firms do not translate into improvements in market outcomes as perceived by (end-) consumers in the UK. If regulation delivers benefits to firms in their international operations (eg, increased business due to the reputation of being FSA-regulated), these benefits would not be captured as improvements in market outcomes for UK consumers of financial services. Instead, they would mainly arise to UK firms and the UK economy as a whole.

Identification and measurement of benefits at the level of firms is therefore important where a regulation is expected to improve outcomes for firms and deliver benefits that do not fully flow through to the end-consumer (as long as the benefits do not come at the expense of the end-consumer).

In addition, even if all benefits fully flow through to end-consumers, measurement at the firm level can be important for practical reasons. As further discussed below, it is often difficult to directly measure improvements in final market outcomes that result from regulation. In this case, measurement of 'intermediate' benefits at the level of the firm can serve as a proxy for

⁴ In general, transfers from consumers to firms or vice-versa present redistributions of income that are welfare-neutral—ie, one side of the market is made better off and the other is made worse off, but total surplus does not change. However, monopoly rents may be used in unproductive ways and hence may produce detriment to the economy as a whole. Moreover, policy-makers may attach greater weight to consumer surplus than producer surplus, in which case the redistribution is also no longer neutral. Given the FSA's consumer protection objective, a greater weighting of consumer benefits may be implicit.

measuring 'ultimate' benefits. For example, a wholesale regulation that reduces market inefficiencies may deliver benefits in terms of lower prices for end-consumers; however, if it is too difficult to estimate directly the ultimate price reduction, measurement could instead take an indirect route and quantify the reduction in wholesale transaction costs, using input price data provided by firms. Assuming competitive markets, the cost reduction at the wholesale level can then be used to infer the reduction in final market prices paid by consumers.

3.2.3 **Detriments to the wider economy and the potential benefits of regulation**

Any improvements in market outcomes for consumers and producers of financial services that result from regulation translate into direct benefits to the economy. In addition, for the identification and measurement of benefits to be complete, the wider economy (ie, parties outside the financial services sector) should be considered as a third recipient group of potential benefits.

The list of the potential wider benefits of regulation is long and includes increases in UK output (or avoidance of output reduction) due reductions in systemic risks, increased outputs for sectors providing ancillary services to regulated firms, lower costs in other industry sectors as a result of more efficient financial services provision, balance-of-payment benefits from increased net exports of financial services, etc. These wider benefits are outside the remit of the FSA, but are nevertheless important. Measurement approaches for these wider benefits will not be considered.

3.2.4 **Relationship between detriments and FSA statutory objectives**

The potential benefits have been defined in terms of improvements in market outcomes that regulation may deliver rather than with explicit reference to the FSA's four statutory objectives. This is mainly because the objectives are defined at high levels of generality and do not lend themselves easily to direct measurement. The statutory objectives are linked to the market outcomes (just as they are linked to the underlying sources of detriment) as illustrated below.

However, the market outcomes may not capture everything that is captured by the statutory objectives (eg, reduction of financial crime) and at the same time may allow identification and measurement of the impacts of regulation that are outside the remit of the FSA statutory objectives. For example, 'financial exclusion' is a detrimental market outcome for consumers and the reverse (ie, wider access) a potential benefit that regulation could be delivering. Another example noted above refers to the benefits that financial services regulation may deliver to the wider economy. These benefits are not necessarily captured explicitly in the FSA objectives, but nevertheless may be benefits that may be wished to be captured in an impact assessment.

- **Consumer protection**—this objective is generally linked to two types of underlying market failure and associated risks and incentive problems: asymmetric information and market power (although the FSA does not have an explicit competition objective). Hence, consumer protection regulation can be targeted at protecting poorly informed consumers from making wrong financial decisions; from suffering losses they would incur if they were exposed to risk of operational failures or firm default; from paying excessive prices, etc. 'Protecting consumers' is therefore an objective that can be broadly related to most, if not all, consumer detriments listed in Table 3.1.
- **Public awareness**—increasing public awareness relates to information, and in particular concerns that the provision and use of information may be insufficient in an unregulated market. One main dimension of detrimental market outcome therefore links to transaction costs or system inefficiencies in the form of greater search and monitoring costs incurred by market participants. The public awareness objective can in principle also be linked to other detrimental market outcomes listed in Table 3.1—eg, improving

consumer awareness, either of their own needs or of the availability of different products, to avoid mis-buying of financial products, selecting low-quality firms or other outcomes that are attributable to informational problems in the market.

- **Market confidence**—lack of market confidence can have several detrimental market outcomes. In particular, it can exacerbate contagion effects and the risk of systemic failure if, on default of one firm, market participants perceive there to be wider problems in the system, leading them to withdraw funds and thereby triggering further failures. Lack of confidence can also adversely affect consumer demand and make it not worthwhile for firms to innovate and increase product offerings, thereby reducing choice. The third dimension of market outcome most likely to be linked to the market confidence objective is transaction costs and efforts spent by market participants to overcome confidence problems in the market (eg, increased costs of reputation building).
- **Reduction of financial crime**—the FSA objective of the reduction in financial crime (in the sense of reducing the extent to which it is possible for a business to be set up and used for a criminal purposes) is not captured by the market failure approach. However, certain aspects of financial crime in the financial services sector can be linked to the various market outcomes. For example, criminal activities by a financial intermediary (eg, fraud or misappropriation of client funds) are captured as a consumer detriment in the operational risk dimension in Table 3.1. More generally, financial crime may require efforts by market participants to defend themselves against it, thereby affecting transaction costs. From a strict economic standpoint criminal activities themselves may only have distributional implications, involving pure transfers from one party to another—eg, between firm and consumers, between consumers, or involving third parties. However, if gains for criminals are not seen as a legitimate market outcome, any transfer to criminals is a consumer detriment and a detrimental market outcome.

3.3 Gross versus net benefits

Regulatory intervention does not come without cost, and the cost of regulation will also have an impact on market outcomes. Indeed, if it were always possible to evaluate all changes in all market outcomes, the full impact of regulation in terms of both benefits and costs could be evaluated by comparing market outcomes.

It is inevitable that the measured improvements in market outcomes in many cases do not reflect gross benefits, but benefits net of costs. In other words, the benefits measurement exercise cannot be carried out in isolation from an assessment of regulatory costs.

While intervention may be targeted at reducing a market failure, mitigating risks and improving incentives, it can impose costs that may be disproportionate to the economic problems it seeks to address in the market. Moreover, regulation may exacerbate rather than reduce existing problems and may crowd out some market solutions to the underlying problems. For example, if the existence of a regulatory regime induces consumers to (wrongly) think that they are fully protected, they may inappropriately exclude the possibility of loss in their decision-making. Similarly, detailed rules—instead of high-level principles—may give room for regulatory arbitrage or otherwise distort incentives of firms and thereby increase risks. Regulatory failure occurs where the costs exceed the benefits of regulation, and the net effect on market outcomes is negative.

Importantly, regulation can have an impact along more than one dimension of market outcome. The same regulation may improve one dimension, but have a negative impact on another dimension of market outcome. For example, capital requirements improve market outcomes along the default risk dimension, but may adversely affect the market power/excessive pricing dimension if they create barriers to entry into the market. Similarly, product regulation may limit the scope for consumers to buy the wrong product, but at the same time may have an adverse effect on product innovation, thereby reducing choice.

This re-emphasises the need to consider all the dimensions along which regulation may affect market outcomes, taking account of both positive and negative impacts. The proposed approaches for measurement can be applied to all effects on market outcomes, whether positive or negative.

A related issue concerns the distribution of costs and benefits. In particular, what may be an improvement in market outcomes for one type of consumer may be detrimental for another. Depending on policy preferences, a £1 of benefit for one consumer may not be considered worth the same than a £1 cost for another. This would call for some form of weighting mechanism to give greater weight to benefits arising to consumers who are of particular policy concern, discounting the adverse impacts on consumers not destined as beneficiaries of a regulatory measure. Methods to achieve different distributional objectives are not addressed further in this paper.

4 How to measure? Establishing the actual benefits of regulation

Benefits measurement should aim to provide a quantitative assessment of improvements in market outcomes that result from regulation or a specific rule. The following summarises how to measure directly improvements in market outcomes and when it is possible to do so. It then discusses indirect measurement methods using proxy information, which can be used as a substitute for direct measurement or to provide complementary information.

4.1 Direct measurement of improvements in market outcomes

Section 3.2 listed the dimensions of market outcomes that regulation can improve, and hence defined what should be measured in a benefits assessment. From the perspective of the consumer, the potential improvements in market outcomes can be reduced to eight main dimensions (including the access/financial inclusion dimension).

Quantification of the improvements generally requires information about the change in the relevant metric (eg, market price or transaction cost) and the monetary value that consumers attach to that change. In some cases, the change in the metric of market outcome is already measured in monetary terms, so that the benefits are automatically, or easily, monetised (eg, change in prices). In other cases, the change in the metric will not be expressed in monetary terms (eg, change in the incidence of mis-buying) and a valuation for the change in the metric will also be required. There are many relatively well-developed techniques available for this, including consumer willingness-to-pay surveys, revealed-preference surveys and direct measurement of the financial detriment for samples of transactions. Although the monetisation step is important for the final measurement of benefits, it is not the focus of this analysis, which concentrates on the issues surrounding the development of the identification and measurement of the change in the relevant metric.

Table 4.1 below summarises the relevant measure for each dimension of market outcome that should be examined in the measurement exercise as well as examples of the main empirical approaches available for quantifying the impact of regulation. The empirical approaches include three main types of analysis, as described below:

- before-and-after comparison of the relevant market outcome measure (only available for ex post analysis);
- surveys to gather subjective evidence of improvements in market outcomes arising from regulation;
- international comparisons or other benchmarking to draw inferences about the change in market outcomes by analysing the experience in markets that differ in regulatory structure but are otherwise comparable.

Table 4.1 Direct measurement of improvements in market outcomes for consumers

Type of detrimental market outcome regulation may improve	Relevant measure of benefit	Examples of measurement techniques
Sub-optimal choice	Value that consumers derive from better choice (ie, more optimal fit between what they buy and what they in fact need)	<p>Ex ante and ex post:</p> <ul style="list-style-type: none"> – consumer surveys to establish willingness to pay to avoid mis-buying or willingness to accept compensation for misbought products and services – controlled experiments to establish what consumers purchase when faced with new regulations and external/independent evaluation of the suitability and value they derive from the more optimal choice <p>Ex post:</p> <ul style="list-style-type: none"> – before and after analysis of consumer decisions (eg, using consumer surveys) to judge the actual increase in optimal purchases
Reduced choice	Value that consumers derive from increased choice (ie, reduction in opportunity cost of not being able to buy what could be available)	<p>Ex ante and ex post:</p> <ul style="list-style-type: none"> – consumer surveys or controlled experiments as above <p>Ex post:</p> <ul style="list-style-type: none"> – econometric techniques to estimate the value of a new product
Higher costs—from operational risks	Value that consumers derive from reduction of losses and other costs associated with operational failure	<p>Ex post:</p> <ul style="list-style-type: none"> – changes in operational failure rates and losses to consumers – changes in market prices <p>Ex ante and ex post:</p> <ul style="list-style-type: none"> – international comparisons of failure/loss rates – consumer surveys as above (eg, willingness to accept compensation for mis-sold products)
Higher costs—from financial risks	Value that consumers derive from reduction of losses and other costs associated with financial failure	<p>Ex post:</p> <ul style="list-style-type: none"> – changes in default rates and consumer funds lost – changes in market prices <p>Ex ante and ex post:</p> <ul style="list-style-type: none"> – international comparisons of failure/loss rates – consumer surveys as above
Higher costs—from systemic risks	Value that consumers derive from reduction of losses and other costs associated with systemic failure	<p>Ex post:</p> <ul style="list-style-type: none"> – in principle, ex post analysis as for financial risks, but including assessment of changes in employment, income lost by individual consumers, etc <p>Ex ante and ex post:</p> <ul style="list-style-type: none"> – international comparisons (eg, drawing from costs incurred in countries where there have been widespread banking failures or bailouts)

Type of detrimental market outcome regulation may improve	Relevant measure of benefit	Examples of measurement techniques
Higher prices—from market power of firms	Value that consumers derive from reduction of excessive prices	Ex post: <ul style="list-style-type: none"> – changes in market prices – econometric demand-modelling techniques to estimate resulting changes in consumer surplus Ex ante: <ul style="list-style-type: none"> – international comparisons, benchmarking
Higher costs—from transaction/system inefficiencies	Value that consumers derive from reduction of transaction costs/prices arising from inefficiencies	Ex post: <ul style="list-style-type: none"> – changes in market prices – changes in search costs to consumers Ex ante: <ul style="list-style-type: none"> – international comparisons, benchmarking
Financial exclusion	Value that consumers derive from improved access to financial services	Ex post: <ul style="list-style-type: none"> – change in penetration of financial services (and valuation of the change in income distribution) Ex ante and ex post: <ul style="list-style-type: none"> – international comparisons

Source: Oxera.

4.1.1 Overview of empirical measurement techniques

Direct measurement works best for ex post analysis, when it is possible to *compare the relevant metric defining a market outcome before and after the regulation*.

In particular, the measurement exercise can be approached using event-study methodology, where specific regulatory actions are treated as the events around which to measure performance improvements.

For example, Aldridge (2005) uses an event-study approach to estimate the impact of regulatory intervention by the Securities and Exchange Commission (SEC) on the returns and share price volatility of financial services firms that are publicly traded in the USA.⁵ Using a large database of share prices for the firms and information on the timing of 113 rules made by the SEC during 1997 and 2003, Aldridge finds evidence of a significant reduction in share price volatility but no effect on the level of stock returns immediately after SEC rule adoption.

Another example is Dubow and Monteiro (2006), who examine share price movements ahead of regulatory announcements relating to takeover bids and trading performance before and after 2001, when the FSA assumed its regulatory powers. Using a large sample of announcements of UK listed companies, the authors test whether the introduction of the new market abuse regime has reduced insider trading (as measured by reductions in the number of pre-announcement share price movements).⁶

Event-study methodology may also be employed to measure the impact of regulation on other market outcomes. For example, where a regulation is expected to have reduced the price of investment products, measurement would focus on changes in prices, returns or spreads of the products following implementation.⁷

⁵ Aldridge, I.E. (2005), 'Do Financial Companies Benefit from SEC Regulation?', Working Paper, University of Toronto, April.

⁶ Dubow, B. and Monteiro, N. (2006), 'Measuring market cleanliness', *FSA Occasional Paper Series 23*.

⁷ The tools employed by competition or industrial economists in their analysis of markets are particularly relevant for measuring many changes in market outcomes. For example, where regulations allow firms to raise price above the competitive level, there

Inferences about the benefits of regulation may be confounded because changes in market outcomes over the period of analysis may be influenced by factors other than the regulation. A number of econometric techniques are available to test for structural breaks before and after the implementation of a regulation and, through regression analysis, control for other factors that may explain changes in market outcomes.

In addition to requiring time-series data on the variable of interest (eg, price of an investment product), regression analysis and statistical tests for structural breaks require data on all other variables (interest rate movements, new product offerings, change in distribution channels, etc) that may influence product prices over the time period, over and above the regulatory intervention. Although possible in principle, these techniques therefore often impose significant data and research requirements and may not always be cost-effective to carry out in practice. Rather, feasibility of these techniques depends on the specific regulation to be examined, the dimension of market outcome to be measured, specification of the econometric model, and available data and controls.

Methods that are built around before/after comparison do not work when measurement is required ex ante for policy decision-making. For ex ante analysis, the starting point could be the quantification of the total detriment that a regulation is aiming to address. This estimate would provide an upper bound of the benefit the regulation could be delivering—eg, what are the total costs of product mis-selling under current regulatory arrangements, and hence what are the maximum possible benefits from regulatory intervention? While providing an upper bound, this analysis would not provide quantification of the actual improvement resulting from regulation. Techniques for ex ante measurement of the actual benefits of regulation include:

- **Consumer surveys**—consumer surveys can ask consumers directly about the value they would attach to the introduction of a proposed regulation. Surveys can be designed to obtain estimates of either consumers' 'willingness to pay' for the change or their 'willingness to accept' compensation if the regulation were not introduced.⁸ Surveys can also be used for ex post analysis—eg, sampling of consumers' actual experiences when searching for, being advised on, and ultimately buying, financial products so as to track changes in outcomes after the introduction of regulation for ex post assessments. This is likely to involve quite detailed economic analysis of actual outcomes, rather than large-scale surveys.

Such techniques have been applied with some success in the past, although the results should be interpreted with care. In particular, they rely on subjective valuations of benefits, which may differ significantly across consumers and depend on consumers' ability to fully foresee and themselves quantify the effect of a regulation. Consumers' survey responses of what they would do or how they would behave following a regulatory intervention may not reflect their actual decision-making when interacting with financial intermediaries.⁹ In particular, survey techniques are unlikely to deliver good

are approaches to estimate the resulting detriment in monetary terms, using data (or plausible assumptions) about the extent of the elevation in price, the price elasticity of consumer demand, and the size of the market measured by annual revenues. Similarly, where regulation creates barriers to entry, these market models can be used to empirically estimate the impact of the likely reduction in the number of entrants on price and quantity. Techniques are also available to estimate the value of a new product or greater product variety, as for example done in Hausman, J.A. and Leonard, G.K (2002), 'The Competitive Effects of a New Product Introduction: A Case Study', *Journal of Industrial Economics*, **50**, 237–63.

⁸ A specific empirical technique that can be used to estimate consumers' valuation of, or willingness to pay for, certain types of regulation or product feature is a conjoint analysis. A conjoint analysis uses stated-preference surveys and enables respondents' choices to be analysed in a way that reveals the weight that they attribute to the various factors that underlie their decisions. An example of a practical application of conjoint analysis is recent research on the regulation of taxis undertaken by Oxera for the OFT. The conjoint analysis was used to estimate the valuation that consumers attribute to different aspects of taxi services and informed about the type regulation that would be desired. See OFT (2004), 'The Regulation of Licensed Taxi and PHV Services in the UK', November. Depending on the benefits assessment to be carried out, it is conceivable that a similar approach could be used to estimate the willingness to pay for a specific financial regulation.

⁹ A large body of literature suggests that hypothetical willingness –to pay based on survey evidence may overstate the actual willingness to pay of individuals (see for example Harrison and Ruström (2005). Methods have been proposed to reduce or eliminate the potential bias in hypothetical valuation questions, including 'cheap talk'—ie, a process of explaining the hypothetical bias to individuals prior to asking a valuation question (see for example Cummings and Taylor (1999) or Lusk

estimates of the benefits of regulations that are aimed at mitigating detrimental market outcomes for poorly informed consumers. If the source of detriment is a lack of consumer knowledge or understanding about financial products or the quality of intermediaries—eg, resulting in mis-buying or mis-selling—how can consumers be expected to quantify the benefits of a regulation if they are not in the position to evaluate the extent of the problem that gives rise to the regulatory intervention in the first place?

Previous research conducted on behalf of the FSA examined consumers' financial decision-making processes and their often limited use of financial information to influence their decisions.¹⁰ There is also a large body of academic literature that highlights behavioural anomalies of consumers and the limitations in their ability to make well-informed and rational decisions.¹¹

Deriving benefits measures from consumer surveys can therefore be problematic, in particular with regard to benefits concerning the optimality of purchase decisions (establishing other benefits, such as reductions in search costs, may be easier through a survey). In many cases, evidence of actual consumer decisions is required to provide reliable information about whether changes to regulation lead to more optimal decisions. Where such evidence is required before actual changes can be observed in the market, it may be possible to conduct controlled experiments with samples of consumers to assess how they behave when making decisions under the existing and proposed regulatory environment. The suitability of decisions regarding product purchases could then be assessed, at least in principle and provided that the assessor is in a position to evaluate consumer needs and the product characteristics.

- **International comparisons and other benchmarking**—in some cases, it may be possible to conduct benchmarking exercises to evaluate the impact of a proposed regulation. For example, it may be possible to compare or benchmark market outcomes internationally, such as by comparing market prices in the UK with those in another country that has already implemented a similar type of regulation.

The quality of inferences that can be drawn from an international benchmarking analysis critically depends on the ability to identify suitable comparators. The same type of regulation may have varying impacts across countries because of differences in the wider regulatory framework in which the rule is embedded, the structure of the market and, more generally, the institutional environment and macroeconomic conditions. Therefore, the cases in which it is possible to identify suitable comparators and control for other factors that may cause cross-country differences in market outcomes may in practice be limited—while international comparisons may give a high-level indication of the likely benefits, they will often not allow quantification of improvements in market outcomes.

For example, a number of academic studies have adopted the international-comparison approach to evaluate the benefits of laws and regulations, using econometric techniques that exploit cross-country variations in the level or quality of the legal and regulatory frameworks while controlling for other factors. Hail and Leuz (2005) report that countries with extensive securities regulation and strong enforcement have a lower cost of equity than countries with weak institutions, even after controlling for country and other risk

(2003)). References: Harrison, G. and Ruström, E. (2005) 'Experimental Evidence on the Existence of Hypothetical Bias in Value Elicitation Methods.', in Handbook of Results in Experimental Economics, ed. Plott, C., and Smith, V.L., New York: Elsevier Science; Cummings, R and Taylor, L. (1999) 'Unbiased Value Estimates for Environmental Goods: A Cheap Talk Design for the Contingent Valuation Method.' *American Economic Review*, **89** 649–65; Lusk, J. (2003) 'Effects of Cheap Talk on Consumer Willingness-to-Pay for Golden Rice.' *American Journal of Agricultural Economics*, **85**:4, 840–56.

¹⁰ FSA (2004), 'Consumer Understanding of Financial Risk', *Consumer Research Series 33* and FSA (2003), 'The Development of More Effective Product Disclosure', *Consumer Research Series 18*.

¹¹ See, for example, DeBondt, W. and Thaler, R. (1987), 'Further Evidence on Investor Overreaction and Stock Market Seasonality', *Journal of Finance*, **42**, 557–81, and McFadden, D. (1998), 'Rationality for Economics', *Journal for Risk and Uncertainty*, **19**, 73–105.

factors.¹² The study builds on earlier work by, among others, La Porta et al (2003) who confirm a relationship with countries' stock market development.¹³ However, these studies focus on the overall quality of legal and regulatory frameworks rather than the impact of specific rules, which is likely to be far more difficult to measure using the international benchmarking approach.

As well as drawing from international evidence, benchmarking may also work within a country, for example by comparing the market price of financial products subject to some form of regulation against products that are unregulated but otherwise similar in nature. Such a comparison again depends on the existence of benchmarks, their suitability and the ability to control for other influences that may explain observed differences.¹⁴

4.1.2 Measurability of the relevant metrics of market outcome

The measurement techniques can in principle be employed for all the dimensions of market outcomes that regulation may be affecting. However, direct measurement for some dimensions is more difficult than for others, due to differences in the measurability of the relevant metrics.

Considering the list of dimensions and metrics in Table 4.1, particular problems arise when attempting to measure the benefits relating to consumer choice. Measuring the benefits of regulation targeted at improving consumer choices (eg, reducing product mis-buying or mis-selling) require judgements about the optimality of consumers' purchasing decisions, at the time that the decision was made. How suitable are current choices, what would be more appropriate choices considering consumer needs, and by how much (in monetary terms) would consumer welfare increase if choices improved? Even *ex post*, it would be difficult to establish whether an adjustment in consumer choices as a result of regulation had actually contributed to improving the fit between what consumers purchase and what they really need. Moreover, even if consumers have been 'mis-sold' a product (eg, a product that carries too high a risk *ex ante*), they may actually be better off *ex post* if higher returns are realised.

One possibility would be to re-evaluate a selection of consumer choices when they are made, using disinterested experts and taking considerably more time to establish the underlying consumer needs and to measure whether the *additional* intervention leads to a closer alignment of what consumers buy with the more optimal products that are available. The measure of the impact is not how close consumers get to the optimal, but how much closer they get with the additional intervention. This technique would also be available *ex ante* by simulating the purchase process.

A similar point can be made regarding the measurement of benefits of increased consumer access to financial services (ie, reduction in financial exclusion). Quantification would generally require some judgement about the level of provision consumers need.

Problems also apply when measuring the benefits of enhanced choice. While any increase in product offerings and variety is directly observable, the value that consumers derive from that is not. Indeed, greater choice may provide a disbenefit if it increases the likelihood of consumers making less optimal choices.

¹² Hail, L. and Leuz, C. (2005), 'International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter?', ECGI—Law Working Paper No. 15/2003.

¹³ La Porta, R., Lopez-de-Silanes, F. and Schleifer, A. (2006), 'What Works in Securities Laws?', *Journal of Finance*, **61**, 1–32.

¹⁴ Where benchmarks and data are available and the aim is to evaluate the relative performance or efficiency of individual firms or products, or general improvements in performance or efficiency that may be due to regulation, it may be possible to apply data envelopment analysis (DEA). DEA has emerged as a statistical tool for performance measurement, allowing estimation of the 'efficiency frontier' or individual performance relative to the frontier. For example, benefits that result from changes in a capital adequacy regulation could be assessed using DEA to explore whether the new regime induces firms to reduce risks for the same portfolio return, or enables them to move closer to the efficient frontier for the same level of risk to their ability to generate higher returns.

Other metrics of market outcomes are more suitable for direct measurement. For example, reductions in market prices due to a lessening of market power or lower transaction costs are observable, and the resulting benefits can be quantified in monetary terms using measurement techniques commonly adopted by economists. Similarly, reductions in search costs can be measured by gathering data on the time and effort spent by consumers when making financial decisions and purchasing products. Assessing improvements in the time or effectiveness of consumer searches can be particularly important since the benefits or value to consumers of the financial services and products purchased are often a function of the extent of the search.

Benefits that accrue to firms and are not passed on to consumers in the form of lower prices can be measured using the different metrics of profit commonly used in financial performance assessments.¹⁵

Benefits resulting from reductions in risks can also be directly measured, at least on an ex post basis. For example, the rate of operational failures can be compared before and after the implementation of a regulation, to draw inferences about reductions in operational losses. Where such losses are borne by the firm or the firm's insurance, the benefits would not take the form of reductions in consumer losses but price reductions (assuming that the savings at the level of the firm are passed on); again, price reductions should in principle be measurable. As regards financial risks, improvements in market outcomes may also be directly measurable provided a sufficiently long history of data is available to identify whether there has been a significant reduction in firm defaults and losses following regulatory intervention.

The benefits resulting from a lower risk of systemic failure, however, are difficult to measure: how likely is it that a systemic failure would have occurred in the absence of intervention, and how severe would the failure have been in an unregulated environment? Even ex post, the absence of a systemic failure does not inform about the benefits of regulation because failures may also not have occurred in the absence of regulation.

4.2 Indirect measurement using proxy metrics

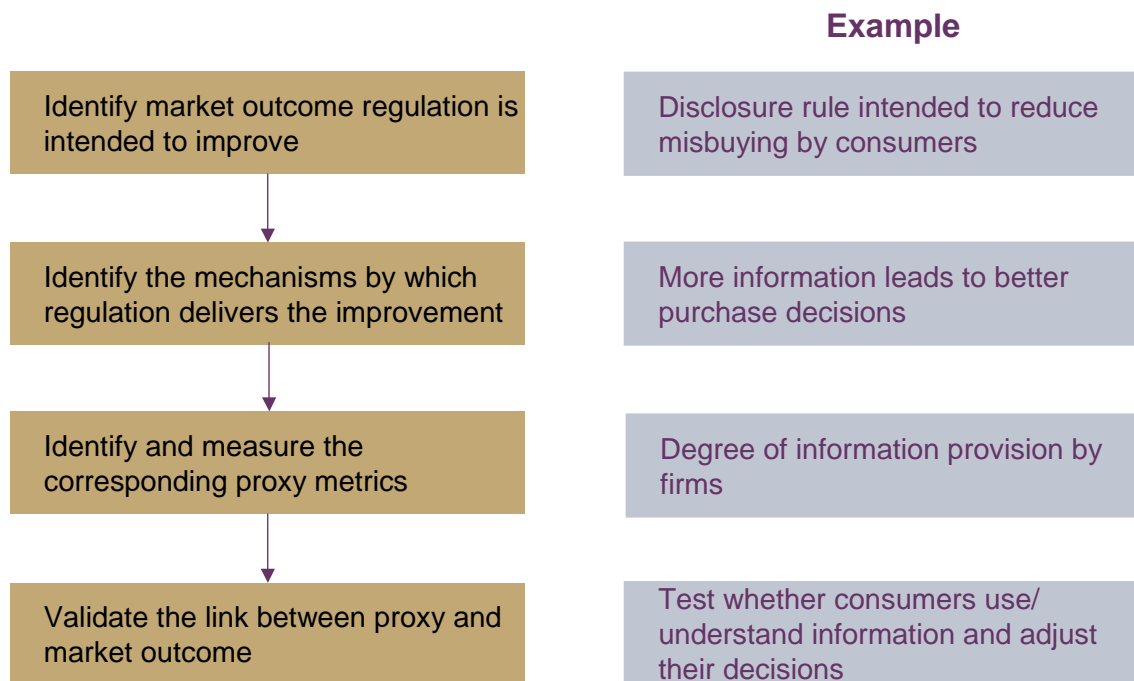
Benefits measurement should aim to directly quantify improvements in market outcomes, and techniques are available for doing so. Where direct measurement is not possible or accurate quantification of changes in market outcomes is difficult, an alternative indirect measurement technique can be applied. With indirect measurement, benefits are evaluated indirectly by identifying and measuring suitable proxies, which are themselves good and robust indicators of the changes in market outcomes. These proxies can provide important substitute (and complementary) information about the benefits of regulation.

4.2.1 Overview of approach to indirect measurement

The overall approach to indirect measurement is summarised in Figure 4.1, with an illustrative example.

¹⁵ For techniques on how to measure profitability in the competition policy context, see for example Oxera (2003), 'Assessing Profitability in Competition Policy Analysis', OFT Economic Discussion Paper 6, July.

Figure 4.1 Indirect measurement



Source: Oxera.

Beginning with identifying the market detriment that regulation or a specific rule is supposed to mitigate, the next step is to consider the mechanisms or process by which regulation is likely to deliver the desired change in market outcome. Indirect measurement refers to quantifying 'intermediate' improvements somewhere along the process. The last and important step is to validate that the chosen proxies are suitable for drawing inferences about improvements in market outcomes.

The distinction between direct and indirect measurement using proxies is important. Existing cost–benefit analyses often evaluate benefits by considering changes in metrics that are in fact proxies rather than outcome measures. Absent any discussion of the rationale for the chosen proxies and validating their suitability, there is a risk that the estimated improvements generate incorrect inferences about ultimate benefits.

Illustration

Consider the introduction of a disclosure rule that requires firms to provide additional information on the characteristics of financial products. This rule has the potential to improve market outcomes by improving consumer purchase decisions (ie, reduce mis-buying of the financial products).

Direct measurement of improvements in market outcomes would focus on quantifying the extent to which the regulation ensures a more optimal fit between what consumers need and what they in fact buy, and the value that consumers derive from the better fit of their purchases. Direct measurement could be conducted, for example, using consumer willingness-to-pay surveys as one main source of information. However, in practice, direct measurement for this particular dimension of market outcome is difficult, and the estimates obtained may provide inaccurate estimates of the true benefits of the regulation, in particular ex ante.

Example 1 Consumer mis-buying—direct measurement

Pre-regulation: 10% of all purchases are sub-optimal.

Post-regulation: 5% of all purchases are sub-optimal.

It may also be possible to attach a monetary estimate to the improvement in market outcome—eg, in terms of reductions in pounds lost before and after the regulation is introduced or by assessing consumers' willingness to pay for the improvement.

Instead of direct measurement, benefits of the rule can be measured indirectly using some metric that proxies for the improvement in market outcome. For example, one possible proxy is the degree of information provision by the firm. Thus, rather than directly measuring the extent to which a disclosure rule induces consumers to make better choices, measurement could instead evaluate the extent to which the rule improves the quantity/quality of information provided to consumers.

The proxy measure—eg, the number of customers given the right information—is measurable and is also reasonably predictable. For example, if the disclosure rule stipulates that the consumer must be given the right information—eg, key facts—before signing the contract then, assuming the rules are enforced, a measure of the actual improvement (ex post) or the likely improvement (ex ante) can be derived.

Example 2 Consumer mis-buying—indirect measurement

Mis-buying is caused by *information asymmetry* (lack of relevant information provided to consumers).

Pre-regulation: 10% of consumers are not given access to the information they need to choose optimally.

Post-regulation: 5% of consumers are not given access to the information they need to choose optimally.

The suitability of the proxy measure depends on the existence of a causal link between sub-optimal purchasing and access to the relevant data. Suppose there was a one-for-one relationship—ie, consumers always make optimal purchases as long as they have access to the right information. In this case, indirect measurement using the proxy provides the same information as the outcome measurement described in Example 1—ie, 10% of customer misbuy pre-regulation and 5% of customers misbuy post-regulation.

However, the proxy (the number of customers given the right information) will only provide a good metric for measurement if there is a clear causal link between proxy and market outcome (mis-buying)—ie, under the assumption that better information improves consumer purchase decisions. If this assumption does not hold in reality, the estimates obtained from indirect measurement will not provide the correct information about improvements in the market outcome.

Example 3 Consumer mis-buying—indirect measurement

Even if consumers have access to the information they need to choose optimally, mis-buying may still occur, for example due to their *inability to understand the relevant information*

Pre-regulation: 10% of consumers are not given access to the information they need to choose optimally.

Post-regulation: 5% of consumers are not given access to the information they need to choose optimally.

The chosen proxy measure is the same as in Example 2, but now suppose that access to information was not the only link to sub-optimal purchasing. If consumers do not understand the relevant information (irrespective of whether they have access to it), the proxy provides poor information about the change in outcome—ie, post-regulation, the mis-buying rate would remain at 10% even after the disclosure rule was applied. Although the proxy would suggest otherwise, the introduction of the rule had in fact no benefit.

Hence, it is important to validate that the chosen proxies are suitable for drawing inferences about improvements in market outcomes. In this illustration, more information only delivers the intended benefit if consumers understand and use the information to make better decisions. If there were no link between information availability and the quality of consumer decision-making, this would invalidate the proxy measure and lead to wrong inferences about the market outcome. Consumers would appear to be better off, but are in reality worse off to the extent that they ultimately pay for the cost of the regulatory intervention (and the costs arising from the time and effort expended in actually carrying out the measurement exercise).

4.2.2 Identifying proxy measures

Numerous metrics are available as potential proxies in benefits measurement. As the above illustration has shown, the suitability of proxies depends on the degree to which they link to market outcomes. A good starting point for identifying suitable proxies is to ‘unpack’ the mechanisms by which regulation or a specific rule can be expected to improve market outcomes—ie, what are the underlying sources of detrimental market outcome, and how does regulation address these problems?

From an economic perspective, regulation delivers benefits by improving market outcomes through one (or more) of three main mechanisms:

- reducing market failures (eg, disclosure requirements that address asymmetric information between firm and customer);
- reducing the frequency of risks or lessening their impact (eg, capital requirements that reduce the probability of firm default);
- aligning incentives in the system (eg, senior management responsibilities or enforcement actions that improve incentives for compliance).

Hence, if the underlying sources of market detriment are a combination of market failures, risks and incentive problems, proxies can be metrics which:

- reflect the degree of underlying market failure;
- relate to the frequency and impact of risks or the underlying drivers of risk; or
- indicate the incentives of participants in the market.

In this case, measuring the benefits of regulation involves quantifying in how far regulation has (ex post) or will (ex ante) mitigate the market failure, reduce risk, or improve incentives.

More generally, indirect measurement seeks to quantify improvements in the mechanisms, somewhere along the process, by which regulation delivers better market outcomes. This requires identifying the complete set of causal links between the direct impact of the regulation and the desired market outcomes, and validating that these links hold true in practice. If valid, then measures of improvements in the intermediate mechanisms are suitable proxies and can be used to infer the ultimate benefits of improved market outcomes.

The proxies can be identified solely based on theory (in which case, the theoretical linkages must be validated as being correct) or instead emerge from existing empirical evidence (eg, a particular metric has in the past been validated as being a good proxy for a market outcome).

Related to the above, two additional types of measurement proxy are available.

- **Proxies using firm-level data**—where benefits cannot be measured directly as improvements in ultimate market outcomes, measurement can proceed by evaluating the impact of a rule at the intermediate level of the firm. For example, if changes in market prices paid by end-consumers cannot be measured directly, it may be possible to draw inferences from measuring the scope for cost savings arising to firms from a regulatory change (translating into a benefit to consumers under the assumption that

cost savings are passed on). Similarly, it may not be possible to directly measure the impact of a rule on consumer choices, but it is relatively easy to ask firms whether the rule is likely to increase their product offerings (translating into a benefit to consumers if they value choice). As a final example, if it is difficult to directly measure whether a regulatory intervention has reduced the costs or expected consumer losses from financial risk, assessing the improvement of firms' financial position or the reduction in the volatility of their returns can provide useful proxy information.

- **Proxies based on past regulatory interventions**—a new rule may be similar in nature to a regulation that has been previously introduced and evaluated in another market or context (eg, the regulations have an impact on market outcomes through the same mechanisms and processes). Evidence on benefits obtained in the past can then be used to proxy for the likely benefits that the new regulation can be expected to deliver.

4.2.3 Examples of proxies and measurement methods

Table 4.2 provides examples of proxies for each of the dimensions of market outcomes for consumers that may be improved by regulation or a specific rule.

Table 4.2 Examples of indirect measurement by dimension of market outcome

Type of detrimental market outcome regulation intends to improve	Examples of proxy measures and/or measurement
Sub-optimal choice	<ul style="list-style-type: none"> – Survey of consumers to ask about degree of information problem: <ul style="list-style-type: none"> – information they seek or have access to, – the degree to which they make use of published information, – the degree to which they understand the information. – Experiments to assess consumer recall or understanding of financial information. – Complaints to Ombudsman, Citizens Advice, etc about misbought products. Claims made to FSCS relating to mis-buying. – Revealed preference—how many consumers have adjusted decisions following a regulation (or ex ante, how many would switch)? – Value of contractual penalties or repeated initial charges avoided as a result of reduced mis-buying
Reduced choice	<ul style="list-style-type: none"> – Product offerings and variety in the market – Survey of firms to ask which products they would/would not be supplying in the absence of regulation – Surveys or experiments to assess how consumers deal with greater choice, whether a larger choice set affects their decisions, whether consumers are likely to switch as a result of new products; etc – Surveys to assess confidence in firms and quality of products they provide – Revealed preference—how many consumers have switched as a result of increased choice (or ex ante, how many would switch)?
Higher costs—from operational risks	<p>Measures of frequency of operational failures:</p> <ul style="list-style-type: none"> – mainly in relation to mis-selling: the number of complaints to the FOS or FSCS compensation claims; mystery shopping exercise to evaluate quality of advice provided; experiments or simulated sales processes to assess the change in interaction between adviser and consumer, and in the outcome of the advice – number of breaches of rules recorded by the FSA, number of enforcement cases in relation to such failures, etc – Insurance or prevention costs – Surveys of firms to assess/rank frequency of different types of operational failures (whether compensated or not) – Testing quality of systems and controls in place to identify risks early <p>Measures of impact of operational failures:</p> <ul style="list-style-type: none"> – as above, but focus on amounts that could have been lost (but were borne by firms' profits, capital or other sources) or that were indeed lost; total compensation payments

Type of detrimental market outcome regulation intends to improve	Examples of proxy measures and/or measurement
Higher costs—from financial risks	Measures of frequency/likelihood: <ul style="list-style-type: none"> – number of defaults – capitalisation of firms, credit ratings, volatility of returns Measures of impact: <ul style="list-style-type: none"> – amounts of consumer funds at risk (deposits, client monies, value at risk (VAR) calculations, etc)
Higher costs—from systemic risks	<ul style="list-style-type: none"> – As per default risk – Proxy costs of systemic failure using international/historic evidence
Higher prices—from market power of firms	<ul style="list-style-type: none"> – Market shares and other measures of concentration—is the market concentrated such that there may be concerns about firms exercising market power? – Company profitability—are companies earning excessively high profits? – Other competition indicators: consumer switching rates, dispersion of prices for same product (eg, geographically), etc
Higher prices—from transaction/system inefficiencies	<ul style="list-style-type: none"> – Costs along the chain of intermediary relationships to proxy for final market prices; total commissions paid – Number of quotes obtained by consumers before purchase and time spent shopping around – Time/funds spent on educating consumers and/or providing them with relevant information
Financial exclusion	<ul style="list-style-type: none"> – Participation rates (eg, number of consumers without a particular type of pension product); savings rates; average private pension income in retirement; etc

Source: Oxera.

As regards measurement techniques for the proxies, these are often similar to the ones described in the context of direct measurement of improvements in market outcomes. However, because the causal links have a large variety of mechanisms which carry the regulation through to the change in market outcome the scope of relevant research methodologies is considerably wider.

- **Ex post**—measurement is again easiest for ex post assessments when it is possible to infer the impact of regulation (or a specific rule) by conducting before/after comparisons for a particular proxy metric. For example, ex post the impact of regulation can be assessed by establishing whether the informational environment in which consumers make decisions has improved; product offerings and variety in the market have increased; consumers have switched to new and better products; the level of complaints has declined; firms' capitalisation levels have increased or return volatility has fallen; etc. Provided that it is possible to control for other factors that may have an impact at the same time as the change in regulation (eg, using controlled experiments or econometric techniques), the measured change in proxy metrics may then be used to infer the benefits of regulation.
- **Ex ante**—the proxy metrics can provide information about the extent of the current problem and hence help establishing the maximum potential for improvement. For example, surveys of consumers can be carried out to draw inferences about current confidence levels in the market; mystery shopping exercises can be conducted ex ante to inform about the quality of advice consumers currently receive; current systems and controls can be tested with respect to their ability to identify risks early; etc.

To evaluate the likely impact of a specific regulation ex ante, surveys of consumers can inform about their likely response to the regulation—eg, would they adjust their purchase decision and switch to a new product or firm as a result of a new risk disclosure rule?

Another way to gauge consumers' preferences and assess their behavioural response to new regulation is to undertake an experimental study. Targeted experiments with consumers can help establishing how they make choices under different conditions, so

as to simulate the likely effect of a regulation—eg, to what extent are consumer choices influenced by the type of information disclosed?¹⁶

At the firm level, surveys can be undertaken asking firms to predict their likely response to a particular rule change—eg, would they be more or less likely to supply certain products to consumers? Simulation techniques are also available to model the likely impact of a rule—eg, VAR techniques have been used in the past to model the impact of capital requirements on banks’ loss exposures. Any responses at the firm level in the form of cost or output adjustments can then be used to proxy changes in the price paid by consumers and sales volume in the market.

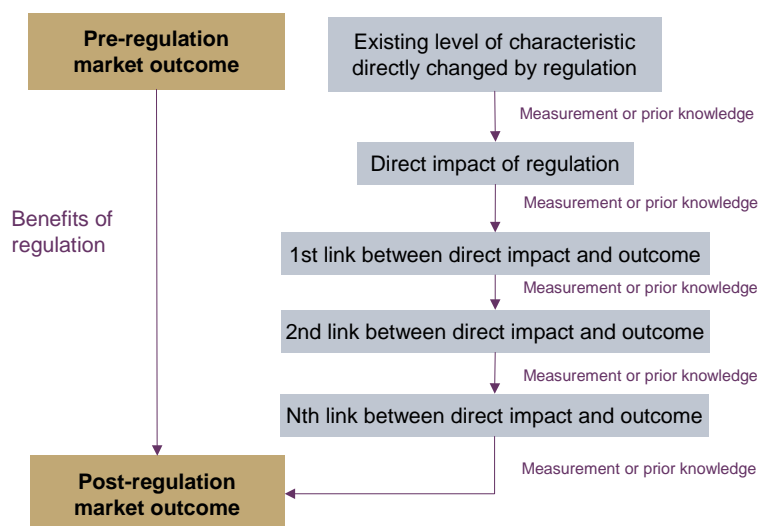
Finally, benchmarking is another ex ante (and ex post) technique that can be applied not only to direct measurement but also to indirect measurement. Rather than comparing market outcomes, the relevant proxy metrics can be benchmarked against those in other segments of the market (or other countries) that are already affected by a regulation that is similar to the one to be evaluated.

4.2.4 Establishing and validating the relationship between proxy measures and outcomes

The suitability of proxies depends on the degree to which they relate to market outcomes, which in turn requires an understanding of the mechanisms by which regulation is actually delivering the change in market outcomes.

There are always at least two conditions that have to be met if the regulation is to result in the desired change. The first is that the regulation does have the direct effect that it is supposed to have, and the second is that the causal link(s) between the direct effect and the desired outcome hold in practice. This reasoning can be applied to form a coherent structure for measuring the benefits of regulation or a specific rule using the proxy route. A stylised presentation is shown in Figure 4.2.

Figure 4.2 Validating the link between proxies and market outcomes



Source: Oxera.

¹⁶ An example of the application of experimental economics is a recent study undertaken by the US Federal Trade Commission (FTC) on how disclosure of broker compensation in the mortgage sector affects consumer understanding of loan costs and consumer choice of loans. The FTC study examined the effect of disclosure within a controlled experiment. Approximately 500 recent mortgage customers were shown cost information about two hypothetical mortgage loans and asked a series of questions. Respondents were randomly divided into different groups which were provided with different amounts of information about broker compensation. Comparison of the understanding of loan costs and loan decisions taken by respondents in the different groups provided an estimate of the effect of the disclosure. Lacko J.M. and Pappalardo, J.K., (2004), 'The Effect of Mortgage Broker Compensation Disclosures on Consumers and Competition: A Controlled Experiment', Federal Trade Commission Bureau of Economics Staff Report, February 2004.

In Figure 4.2, instead of measuring the benefits of regulation by directly comparing market outcomes, an indirect route can be taken that looks at the mechanisms or causal links by which a regulatory intervention delivers the change. Each link in the process needs to be identified and then validated so that the full chain of the process can be established.

Validation may require measurement, or prior knowledge that the links are valid in practice. Indirect measurement, which quantifies improvements along the process, can then be used to proxy improvements in ultimate market outcomes. It is important to stress that the complete chain of links needs to be established. Improvements somewhere in the process may not translate into better market outcomes if one of the links is missing, in which case measurement of intermediate changes may lead to misleading inferences about changes in ultimate outcomes.

There is no guarantee that the regulation examined only has an impact via a single chain of causality and affects a single dimension of market outcome. There may be impacts in addition to the intended impact, affecting other dimensions of market outcome than the desired one (both positive or negative). This means that, in addition to tracking the primary links that lead from a regulation to the desired change in outcome, other plausible chains of causality should also be explored and, if significant, evaluated.

Illustration

As an example, consider the training and competence requirements specified in the FSA's 'Training and Competence Source Book'. These particular rules and guidance apply across a number of activities, but in particular apply to staff interacting with retail consumers. The requirements generally ensure that those dealing with retail customers have a minimum degree of competence.

The factual and counterfactual is, in this case, the market outcome with no minimum competency requirements and the market outcome with the minimum training/competency requirements.

The regulation has the potential to positively affect a number of dimensions of market outcomes, with the most relevant relating to 'better purchase fit as a result of advice' (captured in the operational risk dimension in Table 3.1).

The purchase fit dimension could in principle be measured on an ex post basis, such as applying methodologies (mystery shopping, consumer survey, etc) that allow in-depth analysis of a sample of purchases before and after the introduction of the training/competency requirement. Ex ante measurement of the improvement in market outcomes would be more difficult.

The main mechanism(s) by which training and competency standards translate into different market outcomes is via the interaction between the sales person (to whom the requirements for training and competency apply) and the potential consumer. To affect the final market outcomes, the skill and knowledge of the sales person must either result in a different purchase by the customer (including no purchase), which results in a better purchase fit.

For training/competency to have this effect, links can be identified that *must* be in place for the rules to improve market outcomes. These links include the following.

- 1 **Content relevance**—the information content of the training must be *relevant* so as to influence consumer purchases. This could be directly via the content of the training (eg, training that ensures that the sales person has a wider knowledge of suitable products) or via techniques that enable the sales person to better evaluate the requirements of the customer
- 2 **Content capability**—the enhanced information/techniques must be *capable* of being put into practice by the sales person. For example, training courses that are required

within a set period of time of starting the sales process can clearly have little direct impact until the time when the sales person is actually trained

- 3 **Behaviour change**—the enhanced information/techniques must *actually* be put into practice by the sales person in the situation
- 4 **Consumer understanding**—consumers must be capable of *understanding* the enhanced information given to them by the sales person or must be willing to accept the (better) advice given to them by the sales person
- 5 **Consumer decisions**—where consumers have understood the enhanced information or advice given to them, they must act in a way that allows that information or advice to (positively) influence their decisions.

The mechanisms described in each of these links can be validated, if not on an ordinal scale then at least in terms of the mechanism existing at all. Examples of possible methods are shown in Table 4.3.

Table 4.3 Illustration of how to evaluate/validate links in indirect measurement

Required links for regulation to improve outcome	Examples of methods for evaluation/validation of links
1. Content relevance	The content of the training courses could be analysed with respect to the information that would be required to change the choice of consumers
2. Content capability	As it is the behaviour of trained versus untrained sales personnel that is at issue, evaluation of the training can be carried out by simulation of the sales process—eg, using trained and untrained persons. The outcome can then be evaluated against the known requirements of the (simulated) customer
3. Behaviour change	The actual process of sales will produce a specific recommendation to a specific customer. Analysing these transactions (ex post) could be used to understand the motivation of the sales person, which can then be employed to establish the link (if any) with the content of the training
4. Consumer understanding	Directly testing consumers' <i>understanding</i> of the information that they would be given can be conducted through both simulations of the purchase process and (ex post) by directly asking consumers who have recently been through the purchase process. In both cases, consumer understanding of the relevant information can be directly tested
5. Consumer decisions	Simulation techniques can be used to establish if the purchasing patterns of a number of simulated purchases (eg, answering the question 'what would you buy') are altered by a change in the content of the sales interaction, with that change being representative of the change arising from the training and competency requirements. An alternative approach is to analyse the real purchasing decisions (ex post) of consumers and to try to establish a causal link between the outcome and the information content of the training/ competency requirement

Source: Oxera.

Such an explicit description of the chain of causal links between the direct impact of a regulatory intervention and the desired outcome may appear complex, but it is necessary to evaluate the actual benefits that result from the intervention. It is an equally important policy tool at the stage of formulating regulatory interventions. If any of the links in the chain between intervention and market outcome is missing, it is unlikely that regulation will deliver the desired change. Thus, establishing the complete chain of causal links is required not only for proxy measurement but also to justify the intervention in the first place.

Detailed measurement may not always be required, but what is needed is strong a priori knowledge that the links exist in practice. The explicit description of the chain of causal links

is likely to reveal those areas where there is considerable uncertainty regarding the strength of particular links, so the more detailed analysis can focus on these areas. Moreover, different rules may all depend on the same set of key causal links. Once established as valid, any new measurement exercise may take these links as given. In view of future measurement requirements, this suggests the usefulness of conducting generic research and evidence-gathering into some of the main mechanisms through which different types of rule are expected to deliver benefits, and testing the validity of the causal links in practice.

The detailed analysis of mechanisms and causal links required for indirect measurement will also help in identifying other unintended impacts that the regulation may have. Since the potential impact of a regulation can be wider than that of the intended change, a formal analysis of the potential impact along other dimensions is important to help ensure that all the significant impacts of the regulation have been captured. Thus, a completeness check will need to be carried out to understand the full impact of a regulation on the market. This requires identification of other dimensions of market outcomes that may be affected by the regulation, and the mechanisms through which these changes are expected to occur. In principle, the measurement framework outlined above (ie, via the direct or indirect route) will then need to be repeated to capture all impacts. To the extent that these impacts can be both positive and negative, the proposed framework is therefore one that can also be used to identify and measure adverse market impacts of regulation.

4.3 The impact of the move to principles-based regulation

The FSA is planning to switch to principles-based regulation where it can. This will mean a move away from detailed rules set out in regulations, and, therefore, a move away from compliance being achieved by conforming to the detailed rules (which often specify a particular process to be followed, or a specific piece of information to be given to consumers). Instead, compliance with the principle will, at least in theory, be achievable by a number of alternative routes.

This means that different firms will be able to meet the compliance requirements in different ways, with different associated costs, as well as different benefits. In other words, some ways of achieving compliance may be more effective than others in actually meeting the market failure, risk or incentive misalignment issues that are the objective of the principle. Notwithstanding this, the same general issues surrounding the measurement of the benefits of regulation will apply, although there may be some differences in carrying out the measurements of benefits (and, indeed, costs). In addition, the level at which the principle is specified will have a bearing on the approach required. In particular, if the principle is set:

- very close to the existing detailed requirements and compliance will be assured by the continuation of the existing processes (for example, if the requirement for a suitability letter is replaced by a principle that, say, firms must ensure that a consumer has a written record of the reasons why a firm has recommended a particular product within the cooling-off period), the issue of measuring costs and benefits moves from what firms should do to what they actually do. (Or, in an ex ante world, what firms will do.) Under these circumstances little is likely to change, apart from ensuring that, in any simulations or similar research methods, what is tested is the actual behaviour of firms, not the process, as specified by the rule(s);
- at a higher level of generalisation, or in the form of an (intermediate or even final) outcome requirement, rather than an input requirement, there is likely to be a more significant change to the methodology. If, for example, the principle with respect to potential commission bias were couched in terms of firms having to ensure that their sales were not subject to commission bias, part of the chain of causation would move from a problem of the effectiveness of regulation to an issue of whether firms were complying. However, even here, the general issues remain the same: firms are subject to a regulatory requirement, they change their behaviour and may incur additional costs,

and, as a result of their changed behaviour, the market outcomes are different and consumers are better off. To achieve the market outcome objective, the chain of causation from the change in behaviour of the firms to the altered market outcome must still be complete.

In addition, whether or not the regulation is couched in terms of principles or detailed rules, the *maximum* benefit available as a result of the complete elimination of the market failure, elimination of operational risk or removal of the incentive misalignment, will still apply. Ex ante, therefore, the measurement of the potential benefits available will be the same under rules or principles. Where direct measurement of the change in market outcome is also possible, this can be undertaken in the same way, irrespective of the mode of the regulatory requirement. Where intermediate and indirect measurement is required (which is likely to be most, if not all, of the time), a change of approach may be necessary. More emphasis will need to be placed on what techniques firms have actually used or, ex ante, what they will use, to comply with the principles. Particularly for ex ante analysis, this raises a question regarding the reliability of any information supplied by firms, which may have an incentive to overestimate the costs involved and may not have a strong incentive to predict that they will use the most cost-effective way of meeting the requirement of the principle. More reliance may need to be placed on the regulator having a good idea of the benefits (and costs) that would arise from a reasonably efficient approach to meeting the requirements of the principle, rather than just relying on information from firms.

4.4 Summary

The overall framework for how to measure benefits can be summarised as follows.

In the first instance, benefits measurement should aim to directly quantify improvements in market outcomes that flow from a regulation or specific rules. In practice, direct measurement can be difficult for reasons including the following:

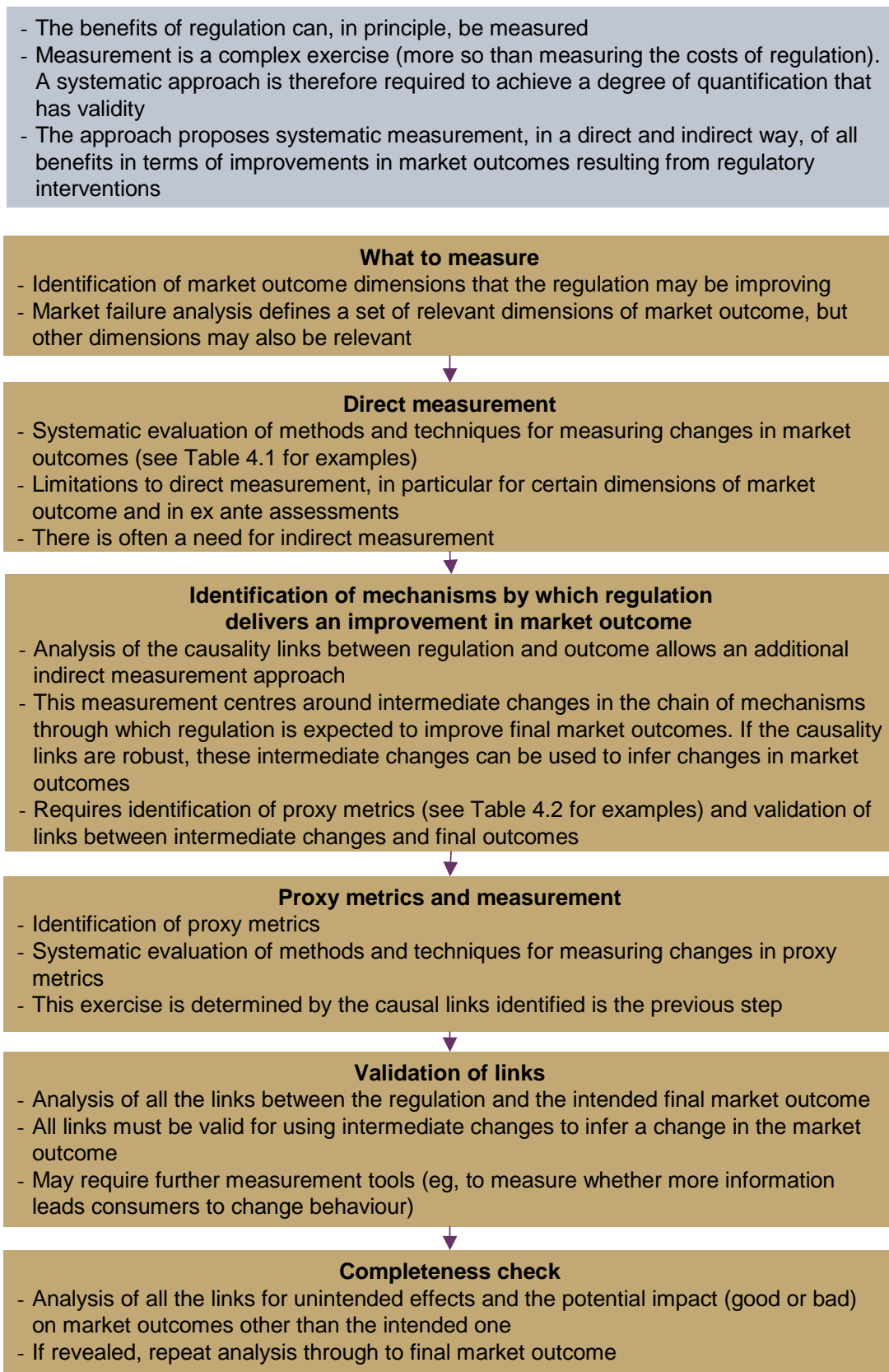
- ex ante predictions are needed;
- market outcomes depend on a large number of factors, which cannot always be controlled for to isolate the impact of regulation;
- where the regulation is in place, the data on what the outcomes were before the regulation was introduced may not exist;
- some of the relevant dimensions of market outcomes are inherently hard to measure and/or quantify in monetary terms.

Where direct measurement is not possible, benefits can be assessed via indirect measurement. This requires a systematic identification of the mechanisms through which regulation is likely to deliver the desired improvement in market outcome. These mechanisms inform the identification of the metrics that can be used to proxy for final market outcomes. The measured or estimated changes in these proxy metrics allow inferences about the impact regulation has on market outcomes, provided that there is a clear causal link between proxy and outcome. Hence, validation of the links is required to establish that the chosen proxies are suitable for drawing inferences about improvements in market outcomes.

Benefits measurement is a complex exercise in practice, more so than measuring the direct costs of regulation. The framework set out in this report does not hide these complexities, but seeks to improve measurement by systematically describing the benefits that should be measured, and the direct and indirect approaches available to achieve measurement. Moreover, by emphasising the impact of regulation on market outcomes (for direct measurement) and the mechanisms through which regulation delivers improvements in market outcomes (for indirect measurement), application of the framework should improve not only actual measurement but also policy formulation. Put differently, the framework integrates well in all parts of the policy-making cycle.

A summary of the measurement framework is depicted in Figure 4.3. Section 5 contains three illustrative examples of how the framework can be applied to specific regulations.

Figure 4.3 Summary of framework for measuring the benefits of regulation



Source: Oxera.

5 Illustrative applications of framework

5.1 Introduction

This section provides three illustrative applications of the framework for assessing the benefits of financial regulation. The applications focus on three specific rules that have been found to be among the more burdensome for firms operating in the market for investment and pension advice, as identified in the Deloitte study on the compliance costs of regulation and selected by the FSA:

- the requirement for a suitability letter (COB 5.3.14 of the FSA Handbook);
- the rule requiring a firm to maintain competence (TC 2.6.1 of the FSA Handbook);
- the rule on projections for packaged products (COB 6.6 of the FSA Handbook).

Compliance costs are direct costs incurred by financial services firms, but economic logic tells us that such costs will ultimately be borne by the users of the financial services—ie, private individuals and companies. The level of these costs should therefore also be considered from a consumer perspective: do the benefits of FSA rules to users of financial services outweigh the costs? For the rules to be overall beneficial to consumers, the benefits will have to outweigh the compliance costs—they may have to more than outweigh the compliance costs to also compensate for any indirect costs (or negative market impacts) the rules may cause. Such an assessment would require a detailed CBA of the individual rules, which is beyond the scope of this report.

5.1.1 Purpose and structure of illustrations

The illustrative applications described below set out the dimensions of market outcome that the three individual rules may be improving and the mechanisms or chains of causality through which these benefits may be delivered. Quantification of the benefits is beyond the scope of this study, but suggestions are provided for different types of empirical measurement. In particular, the illustrations focus on the conditions which need to hold for there to be any benefits. Suggestions are provided for different types of analysis which could be undertaken to test whether these conditions hold and to quantify how much the individual rules contribute to improving market outcomes. However, the empirical methodologies are outlined at a high level only, without assessing their feasibility, and would need to be developed further to allow actual quantification.

The illustrations presented in sections 5.2 to 5.5 are structured to first provide an overview of the specific rule examined. Following the framework described in sections 2–4 above, they then explain ‘what to measure’ (ie, the dimensions of market outcome that the rule may be improving) before describing ‘how to measure’ the benefits, using both direct and indirect measurement approaches.

5.1.2 Summary of general issues emerging

In applying the framework to the three specific rules, some general issues have emerged.

- The illustrations apply the framework to specific rules rather than an aggregated set of rules. This raises a particular issue when there is several rules other than the rule examined that attempt to deal with the same market failures, risks or incentive problems, and that seek to improve the same market outcome.

If the objective is to match the benefits of a specific rule to its costs—eg, testing whether the additional costs of the rule are justified by its benefits—this approach seems

reasonable and is the one adopted here. However, if the objective is more about assessing the effectiveness of regulation per se, analysing the counterfactual on a rule-by-rule basis may not be efficient or particularly informative. This is because rules will interact with each other, so the sum of the costs and benefits of individual rules will not necessarily be the same as the costs and benefits of the set of rules taken together. Under these circumstances, it may be more informative to seek to measure the costs and benefits of the set of rules that are aimed at addressing a particular consumer detriment or improving a particular dimension of market outcome. Nonetheless, the rule-by-rule approach helps in understanding the particular mechanisms through which the rule may deliver benefits and its contribution to improving market outcomes.

- Particular difficulties arise in the direct measurement of the main dimension of market outcome which all three of the selected rules are intended to improve: sub-optimality of consumer purchase decisions due to mis-selling or mis-buying of investment and pension products. How suitable are current choices? What choices would be most appropriate, given consumer needs? By how much (in monetary terms) would consumer welfare increase if choices improved? Even ex post, it can be difficult to establish whether an adjustment in consumer choices as a result of regulation has actually contributed to improving the fit between what consumers purchase and what they really need, also bearing in mind that some consumers may actually be better or worse off irrespective of whether they have bought the wrong product.
- The illustrations identify at a general level the empirical methodologies that might be applied to quantify changes in market outcomes and validating the mechanisms through which these may be delivered. While some of the suggested approaches and tools have been applied in previous measurement exercises (see section 4 for examples), there is insufficient information available to shed light on the likely effectiveness of all the suggested methodologies. This has made it difficult to draw robust conclusions as to which methodology should be tried first or would work best. In some cases, general applied research may be required and actual attempts at quantification needed in order to establish whether the suggested methodologies work or not—eg, whether simulated experiments of consumer purchase decisions are good predictors of how the purchase decisions in financial services are actually made.
- Some of the suggested methodologies are inherently difficult to implement and, indeed, present their own problems in terms of whether they are going to be reliable or practical. However, the difficulty of measuring an impact does not in itself mean that the impact is either present or absent. Rather, when faced with a measurement problem, to justify a rule, it is necessary to either *assume* (on the basis of no evidence) that there is an impact or to try to (however imperfectly) measure what that impact is. In general, the latter approach is likely to deliver better regulation than the former.
- Overall, the illustrations show that benefits measurement is, in general, a complex and lengthy exercise. In addition to the need to identify and understand the main dimensions of market outcome that may be affected and the underlying mechanisms, some of the empirical methodologies for measurement may require policy-makers to draw on specialist researchers and/or the Economics of Financial Regulation Department at the FSA. The research-intensive and time-consuming nature of benefits measurement also suggests the need to allow for sufficient time and resources to carry out the required analysis and provide properly evidenced estimates of benefits.

5.2 Illustration 1: Suitability letter

5.2.1 Overview of the requirements

Firms are required to take care to ensure the suitability of the advice they give to consumers. As part of the wider set of provisions concerning product suitability contained in the FSA's

Conduct of Business Sourcebook, COB 5.3.14 requires firms to issue a suitability letter which must:

- 1) explain why the firm has concluded that the transaction is suitable for the customer, having regard to his personal and financial circumstances;
- 2) contain a summary of the main consequences and any possible disadvantages of the transaction.

According to the guidance provided by the FSA, a suitability letter should explain simply and clearly why the recommendation is viewed as suitable, having regard to customers' personal needs and financial circumstances, needs and priorities identified through the fact-finding process, and attitude to risk in the area of need to which the recommendation relates.

A suitability letter is provided after a recommendation has been made. At this point, the customer still has the opportunity to either not conclude the contract or cancel the contract on reading the suitability letter.

Introduced in 2001, the FSA requirement for a suitability letter replaced previous requirements for a 'reason-why letter' to private customers explaining the recommendation of a product.

This application considers the requirement for a suitability letter against the counterfactual of no suitability letter. Oxera was not asked to consider the suitability letter against other counterfactuals, such as the counterfactual of MIFID, which also has some requirements for record keeping.

5.2.2 **What to measure—underlying sources of consumer detriment and relevant market outcomes that the rule may be improving**

Market failures, risks and incentives

The markets for retail investment and pension advice are characterised by asymmetric information between adviser and consumer. Investment and pension products can be complex and have a high degree of product differentiation, while products may exhibit very different performance. Furthermore, the relative performance of the assets underlying the products is in general not observable by consumers; therefore, the level of risk exhibited in the underlying assets also cannot be assessed. Consumers may not be in the position to assess that the advice they have received is of high quality or that the products they have been advised to buy are suitable for them.

Furthermore, there is a principal–agent problem in the markets for retail investment and pension advice. The interests of the agent (the firm) are not necessarily aligned with the interests of the principal (the retail consumer) due to the fact that the firm may receive a commission from the product provider for the sale of products. This may give firms an incentive to sell certain products not necessarily because it is in the interest of the consumer but because it is in their own financial interest.

Relevant market outcomes

The information asymmetry together with the principal–agent problem may result in a sub-optimal choice of products by consumers. Consumers may be sold products with risks higher than those they in fact want to bear or with terms not suitable to their personal situation. Furthermore, the product may not be tax-efficient—ie, it is not the right product because it does not allow the consumer to take advantage of certain tax benefits. The measurement should therefore focus on the difference between the financial consequences of the product purchased and the financial consequences of the products that the consumer would have chosen if they had chosen optimally.

A suitability letter may result in a better fit between what consumers buy and what they in fact need. Thus, the main dimension of market outcome that COB 5.3.14 seeks to improve

concerns the optimality of consumer purchase decisions. A suitability letter may affect this market outcome in the following two ways.

- A suitability letter may help consumers to better understand whether the product they consider buying is suitable. The requirement for a suitability letter may not be unique in its effect—ie, there are other rules such as the requirement to give suitable advice itself and product disclosure and risk warnings which are likely to contribute to a better fit between what consumers buy and what they need.
- A suitability letter may result in a better assessment of suitability by firms. The fact that a firm has to explain in writing why a product is suitable for its customers may incentivise it to better comply with the rules on suitability. In other words, suitability letters may enable the FSA to assess the quality of the assessment of suitability conducted by firms. In this respect, the requirement for a suitability letter is unique—there is no other rule that results in verifiable evidence (ie, an audit trail) of the way the firm assessed the suitability of a product for a particular consumer.

Related to the second type of benefit, the requirement for a suitability letter may positively affect another market outcome. Proof of the suitability letter may make it easier for consumers to file complaints or claim for compensation in the event of mis-selling, thereby reducing transaction costs in the redress process. It may also reduce FSA enforcement costs.

5.2.3 How to measure—direct and indirect measurement of benefits

Direct measurement of the improvements in the optimality of consumer choices as a result of the suitability letter is difficult, both ex post and ex ante (see Box 5.1).

Box 5.1 Direct measurement of improvements in the optimality of consumer purchases

The requirement for a suitability letter may result in a better fit between what consumers buy and what they in fact need. Direct measurement of this type of benefit is not straightforward as it requires calculation of the overall detriment to consumers of some form of mis-buying or mis-selling (and changes in the detriment as a result of regulation). For example, where consumers have bought a product with an ‘unsuitable’ risk–reward profile, the outcome may be that some consumers will be worse off and some better off, irrespective of whether they have bought too risky a product. Is the total detriment the sum of the detriment of all those who have mis-bought the product, of all those worse off, or should the fact that some are better off as a result of mis-buying also be taken into account and the benefits netted off against the total detriment?

As already discussed in section 4 above, possible direct measurement techniques include the following.

- Ex post, the effects could be measured if consumer purchase patterns were recorded before and after the introduction of the requirement, and it were possible to judge the improvement in the optimality of those purchases before and after the introduction. For example, before-and-after surveys of a sample of randomly selected consumers could establish changes in purchase patterns. This could be followed by an independent assessment of product suitability and measuring the benefits to the consumer if they had purchased a product that was more suitable. Comparing these estimates before and after the introduction of the requirement would then give an indication of the benefits.
- Ex ante, it may be possible to conduct a controlled experiment, involving a sample of consumers and asking them to make hypothetical purchase decisions to simulate changes in outcomes that could be delivered if the suitability letter were introduced. For

example, a sample of consumers could be asked to purchase a financial product that would meet certain pre-defined needs. One group would receive a suitability letter before the purchase decisions and the other group would not. The experiment would be based on hypothetical purchase decisions rather than actual purchases (although it would also be possible to conduct experiments in a real-world environment, provided the experiments are properly managed to avoid actual consumer losses). The experiment would assess whether the availability of a suitability letter would have any effect on the decisions taken by the consumers participating in the experiment. The benefits of the suitability letter could then be calculated as the difference between the costs that would fall onto consumers as a result of wrong product choices in the scenario without a suitability letter and the costs that would fall onto them in the scenario with the suitability letter—in other words, the reduction in number of mis-bought products times the average costs that fall on people that have mis-bought.¹⁷

To assess whether the rule delivers benefits, measurement via the indirect route is therefore likely to be required. The indirect route requires the identification of the mechanisms (or chain of causal links) through which the rule may deliver benefits. These are summarised in Box 5.2.

Box 5.2 Mechanisms through which the requirement for a suitability letter may deliver improvements in market outcomes

For a suitability letter to have a positive effect on the fit between what consumers buy and what they need, a number of conditions need to hold; in particular, the requirement to send a suitability letter results in the consumer changing their purchase decision, *after* receipt of the letter, to a more optimal choice provided that:

- the suitability letter is a good reflection of the consumer’s needs;
- the consumer reads and understands the content of the suitability letter;
- as a result, the consumer changes their purchase decision;
- this change results in a more optimal purchase in terms of product (and/or quantity).

The requirement to send a suitability letter may also improve the sales process *prior* to the sending of the letter (eg, by providing firms with incentives to take more care in assessing suitability) provided that:

- the sales interaction prior to the sending of the letter changes;
- as a result, consumers receive better information and are provided with better advice;
- the ultimate choice of product provider and product by the consumer is more optimal.

The requirement to send a suitability letter provides an audit trail that may have a positive impact on the redress (and enforcement) process in terms of lowering transaction costs provided that:

- the suitability letter has evidential value and is used as such by the dispute resolver (or supervisors);
- the facts contained in the suitability letter would be more difficult, more expensive, or more time-consuming to establish independently through other means;
- the suitability letter is a fair reflection of the information given to, and by, the consumer during the sales process.

¹⁷ An example of such a controlled experiment is provided in section 4.2.3 (footnote 16).

Does the rule improve consumer purchases?

The first mechanism (ie, it may help consumers to make better decisions) only holds if consumers read, understand and act on suitability letters. There is limited evidence on whether people read suitability letters (see Box 5.3). Further research could be undertaken to determine the use of the suitability letter in consumer decisions. This could be established by means of a survey of consumers who have recently gone through the sales process—eg, asking them at what point in the sales process they have received the letter, whether they recall the content of the letter, and whether they changed their purchase decisions as a result of the information contained in the letter. Similarly, consumers' use of or capability of understanding the suitability letter could be established in a simulated sales process. Further information on the use of the letter in the sales process could be obtained by surveying firms' views on the importance of the letter in influencing consumer decisions, or by conducting mystery-shopping exercises to establish how advisers' purchase recommendations are influenced by the letter. Expert analysis of actual consumer decisions or a sample of suitability letters provided by firms to consumers could be carried out to provide an independent evaluation of the suitability of consumer decisions or the quality of the suitability assessment carried out by firms and the way it is disclosed to consumers.

Does the rule improve firm incentives and behaviour?

The second mechanism (ie, the requirement to produce a suitability letter may change firms' behaviour) is to some extent supported by the compliance cost figures as estimated in the Deloitte cost of regulation study. In theory, if firms conducted suitability assessments (in line with the rules on suitability), the incremental costs of putting this in a letter would most likely be low. However, the Deloitte study indicates that some firms consider suitability letters an important incremental cost. This may mean that in the absence of the requirement for a suitability letter, firms may not assess the suitability of a product as thoroughly as they would do if they had to produce a suitability letter. Furthermore, in absence of the requirement for a suitability letter, competition may result in a race to the bottom. Due to competitive pressures to reduce costs, other providers may also decide to only conduct a very limited assessment of suitability. However, further research would be required to examine what firms would do in the absence of the rule. This could be established by means of an international comparison, examining the practice in comparable (eg, commission-driven) markets where there is no requirement to produce a letter, or by asking firms directly whether they would produce a letter and what the content of this letter would be.

The requirement for a suitability letter may only affect firms' behaviour if suitability letters are supervised by the FSA and/or used in enforcement or redress proceedings. Thus, a review could be carried out to establish the importance of the suitability letter in this context. Such a review could examine cases of non-compliance with the rules and track the consequence of non-compliance (eg, is there any evidence that failures to produce an adequate suitability letter are observed in instances of mis-selling?). It could also assess how supervisors or dispute resolvers incorporate the suitability letter and its content in their actions, such that the letter could have a disciplinary effect over and above other methods used to examine suitability and the quality of a firm's assessment. (In other words, does the suitability letter contribute to supervisory control and have an additional disciplinary effect?)

Does the rule facilitate the redress process?

These methods are also relevant for establishing the existence and validity of the third mechanism (ie, making it easier for consumers to seek redress). In particular, analysis could be carried out to assess the degree to which suitability letters are used as evidence in complaints and compensation proceedings. For example, the number of cases in which a suitability letter was used and significantly contributed to the award of the compensation times the average value of the compensation paid out per case would then give a rough estimate of the benefits of the requirement for a suitability letter, at least in terms of the consumer receiving compensation (whether adequate or not).

Box 5.3 Do consumers read suitability letters?

In 2003, the FSA commissioned a market research company to conduct interviews with consumers to ascertain evidence on the usefulness of suitability letters.¹⁸ Although no detailed results are available, the research concluded that the suitability letter is read and used effectively by consumers. However, it should be noted that only 20 consumers were interviewed, meaning that the results may not be representative or reliable.

More recent research, focusing on the general insurance market, commissioned by the Association of British Insurers (ABI), indicates that many consumers in this market do not in fact read the suitability letter.¹⁹ Consumers were asked to indicate whether they recalled receiving a suitability letter after purchasing a motor insurance, critical illness cover (CI), and payment protection insurance (PPI). Only around 50% of the consumers that had purchased PPI or CI recalled receiving a suitability letter. In the case of motor insurance, this was around 35%. Those who recalled receiving a suitability letter were asked to rank the usefulness of the suitability letter from 1 to 5, where 1 meant that it was not at all useful, while 5 mean that it was very useful. This shows that the suitability letter was seen as useful and received a rank of 3.9 in the case of CI, 3.8 in the case of PPI, and 3.7 in the case of motor insurance. No evidence is reported on whether consumers used the letter to change their purchase decisions. These results apply to the general insurance market, and it is possible that a suitability letter may be considered to be more important in the case of decisions about the purchase of long-term investment and pensions products.

5.3 Illustration 2: Maintaining competence

5.3.1 Overview of the requirements

TC 2.6.1, contained in the FSA Handbook, Training and Competence, Chapter 2, requires firms to have appropriate arrangements in place to ensure that an employee who has been assessed as competent to engage in or oversee an activity maintains competence. TC 2.6.1 is supported by guidance as to what a firm should do to ensure that competence is maintained. This guidance indicates that a firm should:

- ensure that technical knowledge and its application, skills and changes in the market to products, legislation and regulation are taken into account;
- maintain systems for monitoring an employee's competence;
- make and retain records for the criteria applied in assessing continuing competence.²⁰

The FSA does not prescribe what a firm should consider to be an appropriate arrangement to maintain competence. Rather, the FSA provides guidance, for example during its supervision process, as to whether the arrangements the firm has in place to ensure competence is maintained and the criteria by which this is assessed are appropriate. Firms are required to keep records of how they assess whether competence is maintained, which allows the FSA to check compliance with the rule and facilitate enforcement. It is this aspect of the maintaining competence requirements which firms may consider to be particularly burdensome and generate incremental compliance costs as little or no benefit from keeping records may accrue to them.

¹⁸ The results of the research are summarised in FSA (2003), 'Informing Consumers: Product Disclosure at the Point of Sale', February.

¹⁹ Charles Rivers Associates (2006), *Market impacts of regulating general insurance*, A report prepared for the Association of British Insurers, March.

²⁰ This is required for the purposes of TC 2.8.1.

The maintaining competence requirements are separate from the rules that require firms to ensure that their employees *attain* the required knowledge and skills; the attaining competence rules are contained in TC 2.4, with separate requirements on the examinations employees have to pass being set out in TC 2.5. The benefits arising from the maintaining competence rule therefore depend on the effectiveness of these other rules in delivering appropriate competence levels in the first place (and on whether the competence levels attained would deteriorate and become inappropriate as time goes on). As such, the maintaining competence rule may be necessary but not in itself sufficient to deliver better market outcomes through increased advisor competence.

5.3.2 What to measure—underlying sources of consumer detriment and relevant market outcomes that the rule may be improving

Market failures, risks and incentives

In the investment and pension advice market, the key problem is asymmetric information between adviser and consumer about product offerings and the quality of both the adviser and the advice provided. In the absence of regulatory requirements on training and competence, firms may have too little incentive to incur the additional costs associated with ensuring that their employees maintain competence, such as sending employees to regular seminars, because they may not expect to face the full consequences of incompetent staff. In turn, consumers, should they want to, may not be able to verify, for example, whether individual advisers are competent in giving them suitable advice (and whether they are maintaining their competence also to keep pace of market developments and new product offerings).

Relevant market outcomes

The main objective of TC 2.6.1 is to ensure that those who sell, or supervise those who sell, financial products have the necessary skills and information to ensure that consumers receive the right advice. As such, the market outcome that this rule is trying to affect is the optimality of fit between what the consumer needs and what they actually buy.

However, as noted above, the benefits of the maintaining competence rule depend on appropriate competence levels having been attained in the first place. Moreover, the TC requirements are not the only rules designed to address the competency of the sales staff, with other requirements placing a similar, although less specific, requirement on regulated firms to ensure that those involved in the sales process are competent. For example, the requirement for a suitability letter discussed in section 5.2 may itself provide a strong incentive to firms not to let incompetent staff loose on consumers. The maintaining competence rule is, therefore, nested inside a set of requirements relating both directly and indirectly to competence, and removal of this specific rule would not remove the general requirement for competence.

Notwithstanding the nesting of the rule, it can still have an impact on the market outcomes in a number of ways. In particular, it may have the following effects.

- The rule may increase the overall effectiveness of the more general requirements on competence, resulting in a more competent sales process with corresponding improvement in consumers' product purchases. Moreover, a 'maintaining competence' rule can make a *unique* contribution to improving the sales process—for example, where new complex products are introduced that advisors lacking ongoing and up-to-date training may not be able to understand.
- More competent sales people may reduce transaction costs of either the firm or the consumer, as the sales person may be more efficient in explaining the products available and quicker at identifying and recommending a suitable product. In addition, consumer knowledge of the rule (although unlikely) may increase their confidence that the sales person is and remains competent, thereby reducing their transaction costs, as

they do not need to verify for themselves that the advice being given is, indeed, appropriate.

By standardising the requirements for maintaining competence and/or by specifying activities such as record keeping, the FSA may be able to reduce its own enforcement costs. This in turn reduces the transaction costs of either the firm (directly or indirectly through lower fees to the FSA) or consumers. Overall, the main detrimental market outcome that TC 2.6.1 is likely to address is sub-optimal product purchase decisions by consumers. The rule may also have beneficial effects on other dimensions of market outcome, such as lowering transaction costs.

5.3.3 How to measure—direct and indirect measurement of benefits

Direct measurement of the impact of TC 2.6.1 on the quality of investment and pensions advice and the optimality of product purchase decisions by consumers is difficult, in particular because the requirement to maintain competence is nested in a general set of rules designed to ensure the competency of staff, and it is difficult to isolate its impact from other rules.

The benefits of this rule may however be assessed indirectly. Indirect measurement focuses on the mechanisms through which the rule may deliver improvements in market outcomes (see Box 5.4).

Box 5.4 Mechanisms through which a rule on maintaining competence may improve market outcomes

If a rule on maintaining competence has a positive effect in terms of improving the optimality of consumer purchase decisions (or reducing mis-selling), it would be expected that firms (or their advisory staff) complying with the rule are less likely to, either inadvertently or advertently, give poor advice or mis-sell financial products. A number of conditions must hold for this to be the case.

- Competence levels would deteriorate in the absence of the rule—eg, because firms saw no commercial reason to spend resources on ensuring that their sales staff remain competent (and acquire new knowledge and skills as markets develop and new products are being offered).
- The rule and associated guidance (and enforcement) are effective and ensure that competence is in fact maintained.
- The operation of the rule changes (improves) the level of competence found among the sales staff/sales supervisors compare with what would otherwise be observed.
- The outcome of the sales process where *more* competent staff/supervisors participate results in *less* mis-buying or *less* mis-selling.

In addition to affecting the optimality of consumer purchase decisions, the rule may have a positive impact on other dimensions of market outcome. The main ones are summarised below, together with an overview of the main conditions that must be met for the mechanisms to work and the rule to deliver benefits.

Reduction in transaction costs for consumers in the purchase process

- Consumers are aware of the rule and believe that it increases the (likely) competence of the sales force (or it is obvious to consumers that a sales force that is compliant with the rule remains competent).
- Consumers either reduce the number of firms they approach, or reduce the time they spend trying to evaluate each firm when making a (potential) purchase as a result of their belief about competence. Note, however, that it is unlikely that consumers are aware of the rule, so this mechanism may not be plausible.

Reduction in enforcement costs

- the FSA gives evidential value to the process description and record keeping required by the rule when evaluating firms and the risks they pose;
- in the absence of the rule, the FSA requires a more resource-intensive alternative to ensure compliance with the other requirements in place to achieve that the same level of actual competence is being maintained in the sales process.

A key requirement for the rule to result in any improvement in market outcome is that increases in competence actually deliver better consumer purchases—ie, a reduction in mis-selling or mis-buying of financial products. In addition, the rule must deliver actual improvements in competence levels compared with levels that would otherwise be observed in the market, which as a result deliver a better market outcome.

Does the rule help to ensure that competence is maintained and the sales process improved?

The rule may be ineffective in terms of delivering improvements in competence relative to a world where there were no such rule. First, in the absence of the rule, it may be that firms continue to behave more or less as they behave now, so the level of competence (whether adequate or not) would remain the same and not deteriorate as a result of removing the maintaining competence requirement. Second, even if the firms' behaviour changes (eg, fewer staff are sent on training courses), the level of competence may not fall as the rule is ineffectual (eg, the content of training courses does not meet what is needed to maintain competence).

In terms of measurement and validation of these mechanisms, research could be undertaken to assess whether firms in comparative activities (or countries) where a maintaining competence rule does not apply spend significantly lower resources on maintaining competence, or whether this expenditure has increased among regulated firms since the rule was introduced.

Assuming that all firms meet the *attaining* competence requirements, the difference in competence between those *attaining* competence and *maintaining* competence could be contrasted in firms where both requirements are met, and firms where only the attaining requirement is met. This could help establish whether there is a need to have a maintaining competence rule over and above a rule on attaining competence. Analysis could also be undertaken to understand the extent to which competence levels deteriorate and existing skills are lost, or, in the absence of the rule, become inadequate given market developments, regulatory changes and new product offerings—eg, by testing sales staff some time after they have passed the relevant examinations.

The rule focuses on the processes a firm must have in place to ensure that competence is maintained, rather than directly imposing a competence requirement. For the rule to have a benefit, the processes must therefore be capable of actually delivering improved competence levels. For example, the content of the ongoing training (and other aspects of the processes) that is carried out as a result of the rule must actually deliver improvements in competence (or avoid deterioration in competence). To assess this, expert analysis of the content and effectiveness of a sample of the processes that firms have in place (and which the FSA would perceive as meeting the requirement) could be undertaken. For example, if the rule is considered necessary to ensure that sales staff remain competent and knowledgeable about new products in the market, this analysis could involve testing whether the staff that have undergone the ongoing training (or have been subject to other aspects of the processes) are more knowledgeable about the developments and more competent to give the advice than they were before (or compared with their peers who have not been subject to the same processes).

To further establish and measure the link between maintaining competence and the optimality of consumer purchase decisions, tests could be undertaken around previous episodes of mis-selling—eg, where mis-selling has been observed, is there any evidence, ex post, to suggest that the firms and employees involved have failed to maintain competence? Furthermore, a review of consumer complaints might indicate instances of mis-selling that were related to failure of a firm to maintain competence and/or comply with the rule. An ex post review may, however, not be possible or practicable. In principle, although also difficult in practice, experiments could be conducted based on a sample of advisers with differing levels of competence, including some who would not be assessed as having maintained competence. These advisers could then be tasked with advising on products to a sample of potential consumers. Differences in the quality of advice provided could then be examined for their significance and relationship with competence.

Benefits may arise to consumers if the rule reduces their transaction costs in the purchase process and change their behaviour as a result of their perceptions about the competency of the adviser. The *maintaining* competence rule is specific and does not affect the general requirement for competence. Also, consumers are unlikely to know about the existence of the specific rule. Hence, the link between this rule and consumer perception or behaviour may be difficult to assess, and indeed may not exist at all. Nonetheless, even if not helpful for this specific rule, it may be useful to conduct general research—eg, using consumer surveys, to establish the general link between competence (and perceptions about competence) and consumer decision-making.

Does the rule facilitate FSA supervision and enforcement?

The other main mechanism set out in Box 5.4 relate to enforcement of the competency requirement. To assess whether the rule reduces FSA enforcement costs, the use of firms' records on maintaining competence could be reviewed internally by the FSA, in terms of their use in both the supervisory process and enforcement cases. If not used effectively, it is difficult to see how the rule can deliver this particular dimension of potential benefit.

5.4 Illustration 3: Projections

5.4.1 Overview of the requirements

COB 6.6 contained in the FSA's Conduct of Business Sourcebook sets out the rules and guidance in respect of projections for packaged products (which include life policies, pensions, etc). COB 6.6 specifies, among other things, when the rules apply, the information and statements to accompany projections, what records must be kept of projections issued to consumers, and methods for calculating both projections and charges and expenses.²¹ In particular, firms must not provide projections for the products unless the projection is calculated and presented in accordance with the rules set out in COB 6.6. COB 6.6 therefore standardises how firms should calculate and present projections.

This in turn may affect consumers' choice of how much to buy, what to buy and who to buy from. One key objective of the rules is to prevent firms from competing on the basis of speculative forecasts as to the potential future value of the products for consumers based on overly optimistic predictions about the gross return of the particular product being sold; instead the rule seeks to focus competition on expenses and charges, which need to be disclosed and incorporated in the projections as net returns. Firms are also required to ensure that projections are relevant to a particular consumer's circumstances (although not all projections need to be personalised) and, where the projection leads to a sale, requires projections to be retained, in some instances for up to six years.

²¹ The method of calculating charges and expenses relates to key features schemes or simplified prospectus schemes. The content of COB 6.6 also includes a method of calculating the effect of deductions (the reduction in yield) which must be included within key features and assumptions to be used when converting a retirement fund into an annuity.

The impact on consumer choices may be direct—in so far as consumers use the information contained in the projections themselves to help determine their choice of product and quantity—or it may operate indirectly through the intermediaries who themselves use the information as an input to their advice to consumers. Intermediaries may find the information contained in the projections useful in comparing products, and the requirement to provide the projection information to consumers may make it harder for them to sell products with high charges.

5.4.2 What to measure—underlying sources of consumer detriment and relevant market outcomes that the rule may be improving

Market failures, risks and incentives

Consumers generally have imperfect information about the characteristics of product offerings and the quality of the provider or sales adviser. In particular, investment returns can only be observed after a period of time, and it is not easy to distinguish, even looking back, between performance attributable to the skill of the product provider or overall market development or good fortune. Furthermore, long-term investment and pension products are usually purchased infrequently, limiting the extent to which consumers could learn from their own experience.

In the absence of a rule on how projections should be calculated and presented, some product providers and advisers may still continue to provide projections. Indeed, the presentation of projections has become a well-accepted part of the sales process. When making a purchasing decision, consumers may choose the provider and product that quotes the highest expected returns. Thus, to compete for customers, product providers and advisers may be incentivised to use overoptimistic assumptions for projected returns to win new business. This could lead to a ‘race-to-the-bottom’, with assumptions becoming more unrealistic; even if all firms agreed that the projection rate had reached completely unrealistic levels, no downward adjustment may be observed since no single firm would have an incentive to start reducing its rates, unless actions were coordinated and other firms did the same.

As a result of unrealistic projections, consumers risk purchasing the wrong quantity or type of products from the wrong providers. For example, unrealistic projections may attract consumers to purchase products that are not compatible with their underlying risk appetites. Also, lack of standardisation could confuse consumers and result in projections becoming the wrong focal point in their decision-making. The detriment for consumers is likely to be particularly high where purchase decisions are irreversible or exit/switching charges high.

Relevant market outcomes

In light of these problems, the main market outcomes addressed by a rule on projections concerns sub-optimal choice of the following two types.

- **Sub-optimal quantities of the product are purchased**—if the expected net returns to the consumer are based on wrong gross return assumptions, consumers may either over- or under-purchase the financial products. This can include not only buying the wrong quantity of a product to which a projection is attached, but also buying the wrong product completely or not purchasing a product at all. Projections are ingrained in some areas of the market, and considered necessary to show how some financial products work. In particular, they may protect consumers from being sold riskier products without them realising that this is the case.
- **Sub-optimal choice between providers and products**—if there are different gross return assumptions or estimations of charges and expenses, consumers may only be able to make poor comparisons between the financial products of different providers, possibly resulting in wrong choices. Similarly, advisers may find it difficult to compare

and give advice on products of different providers, and to avoid recommending high-charging products.

A related issue concerns contagion effects, or the fact that in the absence of a rule that standardises projections, firms have an incentive to overestimate expected gross returns (and underestimate or not properly disclose their charges and expenses). This could lead to a collapse of confidence in projections on the part of consumers, with possible further implications on the amount and type of products being bought and offered in the market.

There are a number of other market outcomes that may be positively affected by the rule on projections; examples are given below.

- **Reduction in market prices**—the rule may allow consumers or advisers to better compare the prices and performance of standardised products, thereby stimulating competition between products and providers. In particular, since the rule standardises gross return assumptions, this focuses product competition on charges and expenses, which need to be disclosed under the rule.
- **Reduction in transaction costs for consumers**—if there are differences in gross return assumptions or cost estimations, there may be higher transaction costs to consumers as a result of having to individually calculate or standardise projections to create like-for-like comparisons between products and providers (or, more likely, ask their advisor to provide this information). (Where the intermediary faces a reduction in its transaction costs because the projections are already standardised, consumers should also benefit through a reduction in the price they have to pay for the services of the intermediary.)
- **Reduction in transaction costs in the redress process**—the written information consumers receive on projected returns as well as the internal documents maintained by firms may provide evidence in, and thereby facilitate, complaints and compensation proceedings. Costs may also overall be lower if the standardised projections reduce the number of complaints related to mis-selling of the products, bearing in mind that investment performance not matching a projection is not, itself, grounds for a complaint.

In addition, a rule on standardised projections may provide direct benefits to firms—eg, by reducing the need to create own standardised projections, which requires skilled actuarial input to develop and regularly check assumptions and calculation methods and internal research teams to forecast market developments. Having firms standardise projections is likely to be less efficient (in terms of the total effort required) than standardising the projections across the industry. Firms may also benefit if the rule avoids loss of business from unfair competition that might arise if different firms were to adopt different gross returns for their own projections.

The rule may have adverse consequences on the competitive process—eg, by sheltering consistently poor performers by stipulation of standard projection rates for all firms (assuming the poor performance is not due to explicit charges), or by requiring the same prescribed rates to be used for products with different risk–return characteristics.²²

5.4.3 How to measure—direct and indirect measurement of benefits

Direct measurement of the benefits of the projection regulation on the optimality of consumer purchases (and other dimensions of market outcome) can be difficult. In particular, projections have been in use for a long period of time, such that it is not possible to carry out

²² Note that firms are under an obligation not to use the regulated gross rates of return if they think these are unrealistically high.

a direct ex post impact assessment. Moreover, the general problems pertain to determining what constitutes an optimal consumer decision, as discussed in section 4 above.

Indirect measurement is likely to be required, focusing on understanding the mechanisms through which the rule is likely to improve market outcomes and measuring improvements along those mechanisms (see Box 5.5).

Box 5.5 Mechanisms through which a rule on projections may deliver improvements in market outcomes

A rule on projections may improve the optimality of consumer purchase decisions—regarding the type of provider and product and the quantity bought (including whether to purchase a product at all). In particular, they may better reveal product characteristics and reduce the scope for misrepresentation of the risk–reward trade-off of a product. For the rule to deliver better choices in terms of type of product and provider, the following main conditions must be met.

- In the absence of the rule, firms would produce projections that are based on assumptions about expected returns (and charges) that are more unrealistic than the standardised assumptions set by the rule (and that differ between providers).
- Consumers read and process the information contained in the projections, which in turn influences their decisions. (Alternatively, advisers use projections as an input to their advice.)
- Consumers adjust their decisions to choose more optimally than they (or their advisers) would without access to standardised projections. In particular, the ultimate purchase is more optimal when consumers cannot use differences in gross return assumptions (but can use differences in charges) to choose between providers and products. (Included here is the improvement in choice as a result of the potential reduction in the confusion that might arise in the market place if competition took place on the basis of differences in assumptions of gross returns.)

It is possible that the introduction of the rule changes the way in which consumers use projections—eg, with consumers taking little notice of projections now that they are standardised, but projections being important if they were no standardisation. Evidence on consumers' current use of projections would then need to be interpreted with caution.

For projections to deliver more optimal choices in terms of the amount of products bought, the conditions to be met are similar. The main difference is the additional requirement that:

- the projected growth rates specified in the rule must be more accurate than growth rates that would be otherwise used by firms (or, in the case where the counterfactual is no projections at all, compared with consumers' own explicit or implicit assessment about growth rates). That is, while the first type of choice-related benefits depends on standardisation (whether accurate or not), the potential quantum benefits depend on the accuracy of the projections.

Additional mechanisms may be in place for the rule to have a positive impact on other market outcomes. The main conditions that need to hold for some of these other outcomes to be improved can be summarised as follows.

Reduction in 'contagion risk'

- In the absence of the rule, providers would produce projections on the basis of different gross return and cost assumptions;
- consumers would wish to use these projections to choose between products and providers;

- the ensuing confusion results in consumers not being able to use the information, leading to some consumers exiting from the market.

Reduction in market power and market prices

- Consumers use differences in projections that are standardised (other than in terms of charges) to choose between providers

Reduction in consumers' (or firms') transaction costs:

- In the absence of the rule, providers provide non-standardised projections (or no projections);
- consumers want standardised projections;
- consumers create their own standardised projections or, more likely, ask their advisor to produce comparable information between different products on offer. (Alternatively, providers produce their own projections, which takes them more time and effort than using the standardisation set out in the rule).

Reduction in redress costs

- Standardised projections result in less mis-selling, or if mis-selling occurs, the documented information speeds up or otherwise facilitates the redress process.

What would firms do in the absence of the rules?

All types of benefit depend on what firms would do in the absence of the rule, whether projections would be provided, how these projections would be calculated and presented, and the extent to which these would be non-standardised between firms. To establish this counterfactual, it may be informative to draw from international comparisons in markets where projections are not standardised. In addition, it may be possible to draw from historic behaviour in the UK market before projection regulations were introduced (in 1988). Prior to 1988, life offices were generally permitted to use their own assumptions. For example, for with-profits policies, the practice was to assume a continuation of current bonus rates, which the regulator considered to be an unrealistic means of projecting forward.²³ Referring to historic behaviour as the counterfactual is complicated by the fact that the market and the overall regulatory regime have changed considerably in the intervening period. An alternative route to establishing what firms would do in the absence of the rule may be simply to ask firms directly.

Are projections used and understood?

Whether there are benefits also depends on projections actually being read and used by consumers in their decision-making. The simplest way to test this is by means of a survey of consumers who have recently purchased a relevant financial product to establish whether projections played any part in their choice of product, provider or quantity bought. It may also be useful to survey advisers to ask their assessment of consumers' demand for, and understanding of, projections and the importance of projections in the sales process (including their own use of projections in providing advice). To evaluate how projections are used in the sales process by advisers, mystery-shopping exercises could be carried out—eg, how well the adviser has explained how the projections are derived and what they mean.

Does the rule improve consumer purchase decisions?

Further methods for measurement are available in relation to specific dimensions of market outcome, or for checking the validity of the underlying mechanisms. For example, to assess whether the rule improves consumer decisions regarding the optimality of the quantum of purchases, analysis could be conducted with the following aims.

²³ An overview of the history of projection rates is contained in FSA (2004), 'Projections Review—the Case for Change', FSA Discussion Paper 04/1. Although no detailed evidence is presented, the Discussion Paper suggests that firms would tend to use higher rates in the absence of the rules.

- To survey (actual or simulated) purchases to establish the relationship between the projection rate and the quantity purchased—ie, is there any evidence that differences in projections induce consumers to save different amounts and buy different quantities of investment and pension products?
- To check the accuracy of projections by tracking the actual net return of a sample of existing products compared with the projections that were made at the time. The objective of the rule is not to provide very accurate projections (which is likely to be impossible, given the variability in actual returns) but to prevent competition on the basis of overoptimistic and inaccurate projections. Nonetheless, if the rule is to have a positive impact on the amount of consumer purchases, some reasonable level of accuracy is required—the projections should at least be more accurate than those that would be observed in the absence of the rule.²⁴ As part of this, analysis could be carried out to evaluate the growth rates prescribed by the rule, how it correlates with actual growth rates (ex post) or with alternative industry forecasts at the time.
- To survey consumers to assess whether they understand projections, the relationship between projections and actual net returns (eg, that the lower bound on projections is not a guaranteed minimum or that projections are inherently problematic), and what this implies for their saving and investment decisions.
- To assess the quantities purchased by consumers (eg, in a controlled experiment) and evaluate the optimality given their needs (eg, using expert analysis).

To assess whether the rule improves the choice between providers and products, research could be carried out to achieve the following.

- To survey (actual or simulated) purchases to assess the proportion of consumers who take account of differences in projections in their decision-making.
- To track the correlation between net returns actually achieved and the projected charges (the latter being the only variable that is non-standardised by regulation and can vary across projections of different providers)—this most likely requires econometric analysis to control for other factors that may influence net returns. If the data reveals a significant negative relationship, this provides (quantitative) evidence that buying lower cost products delivers higher net returns. If no relationship is found, it is difficult to see how differences in projections can have any information value in choosing between products.
- To survey consumers to check whether they understand the correlation between projections (or projected charges) and actual net returns.
- If the counterfactual is a world without projections, the above results can be used to quantify total benefits—eg, using additional information on the number of consumers being supplied with standardised projections. If the counterfactual is a world where projections are already being produced, the benefit of the rules would need to take account of only the marginal increase in useable information. The latter would require further analysis—eg, using a detailed survey of what providers would actually do in the absence of the rules.

In addition, evidence could be sought from past instances of product mis-selling, such as the pensions and endowment mis-selling episodes. What was the role of projections, to what

²⁴ Product classes vary by both their average returns and volatility of returns as a class. In addition, the returns achieved by individual products within the class will vary. It may not be possible to accurately predict the returns of a particular product but for the consumer to be able to make a trade-off between quantity purchased and quantity of future reward, some idea of the likely future reward outcome is required. If projections do not provide an approximation of this reward at the class level, it is difficult to see how consumers can use projection information in a meaningful way.

extent have unrealistic projection rates attracted consumers to the wrong type or quantum of product, and what detriment arose to consumers (eg, compensation paid)?

Does the rule reduce transaction costs?

Evidence from past mis-selling episodes, in particular the use of projections in the complaints and compensation proceedings, can also be used to assess the extent to which the projection information provided to consumers (or internal projection records maintained by firms) facilitates dispute resolution and has evidential value in the redress process.

To establish whether projections reduce transaction costs incurred by consumers in the purchase process, the costs consumers currently incur in using projections under the rule could first be quantified (eg, measured by the time taken to read, process and use the disclosed projections) and compared against the costs they would incur in the absence of standardised projections. Estimation of the latter may require experiments to establish whether and how consumers would attempt to construct their own projections (or to adjust non-standardised projections to make them comparable across providers and products), and what the costs would be in terms of consumers' time.

However, it is unlikely that consumers, even the more sophisticated ones, would be able to generate their own projections. They would rather rely on their advisers to provide them with the relevant information. In this case, to the extent that advisers rely on standardised calculations, their transaction costs would likely be lower as a result of the regulation. Even where advisers have to make their own calculations, the existence of a standardised methodology is likely to reduce their costs as they do not need to check that the methodology they use is reasonable and appropriate. Measurement of this transaction-cost benefit could be conducted at the adviser level rather than at the level of consumers, but using a similar approach. The approach could also be adopted to evaluate the reduction in transaction costs at the provider level—ie, comparing the resources spent on producing projections by providers under the rule and the resources that would be spent if providers were unable to use standardised assumptions and calculations.

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