Economics for Effective Regulation

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13

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Summary

Economics for Effective Regulation (EFER) is a new methodology for regulatory economic analysis. This paper discusses how it can help the FCA meet its new challenges. Specifically, the FCA's strategic objective is to 'make the relevant markets work well'. To achieve this objective, it often needs in-depth analysis of outcomes at the level of the market, as well as of the drivers of poor market outcomes and what can be done about them. Relative to its predecessor, the FCA needs to meet higher standards for assessing the effects of its interventions to comply with its new competition obligations and legal requirements for the cost benefit analyses (CBAs) that it is required to publish when consulting on new policy.

EFER is a market-based approach to the design of regulation. It produces a combined assessment of all the main problems facing regulators who want to make markets work well: information asymmetries, externalities, market power, and behavioural distortions, as well as any unintended consequences of previous interventions that arose from market responses to changes in the regulatory environment.

EFER has three key stages: problem diagnosis, intervention design and impact assessment. In this paper, we describe these stages, explain how they support effective regulation, and provide tools for applying the framework in practice. The tools will help regulators identify the underlying problems in the markets and the harm that arises as a result. They will also help regulators assess what interventions could best remedy the problems.

This new methodology draws on recent advances in academic research and regulatory best practice to extend conventional approaches to regulatory economic analysis in a number of ways. In particular, it:

- incorporates more explicit and structured consideration of behavioural biases and competition problems—both of which are increasingly recognised by regulators as playing an important role in driving poor market outcomes;
- recognises that severe cases of poor outcomes in markets frequently arise because of the interactions of multiple underlying problems, which need to be analysed and tackled together for regulation to be effective;
- stresses the importance of considering market participants' likely dynamic responses to significant interventions in markets; and
- tackles some challenging questions for cost benefit analysis (CBA), such as measuring the indirect effects (costs or benefits) of interventions or analysing welfare impacts on consumers, and recognises where textbook approaches to these issues are impossible and pragmatic alternatives are needed.

These extensions can make the analysis more complex. As a result, many of the elements in EFER are likely to be proportionate only for major interventions. Finally, and at the risk of stating the obvious, while the contribution that economic analysis makes to regulation is significant, strategy and policy must also be influenced by supervisory insights, governmental and EU considerations, and the tools and insights of competition enforcement.

1 Overview

Economics for Effective Regulation (EFER) is the name of the new approach to economic analysis of financial services, which has been developed to support the FCA's efforts in ensuring that financial services markets work well for consumers. This approach builds on methodologies for economic analysis used at the FCA's predecessor, the Financial Services Authority (FSA),[1] as well as other regulators,[2] and seeks to improve understanding of the variety and interconnectedness of root causes of problems in markets and the channels through which regulatory interventions affect market outcomes. Although its foundations lie in analytical frameworks for the policy cycle, EFER has been designed to support market-based regulatory analysis for competition and strategy, as well as complex instances of rule making.

Although EFER has been developed with the regulation of UK financial services in mind, we consider many of its principles relevant for the regulation of other markets, and note that regulating to improve competition will often ameliorate conduct problems. After all, complexity of the underlying drivers of poor outcomes in markets, growing importance of behavioural economics, and competition analysis or challenges in analysing and quantifying the dynamic market responses to regulatory interventions as part of impact assessments (some of the concerns that have driven our approach) are not confined to the UK and can be applied to areas outside financial services.

This paper introduces the main principles of EFER, as well as the structure for putting it into practice, in a fairly general way to allow for application in other contexts.

Analysing markets in the round

An important distinguishing feature of our new approach is the central role of complexity of, and interactions between, the forces that shape the outcomes in the markets we regulate. The four principles below summarise why we believe this approach can be valuable for addressing the more complex problems in markets.

1. **Effective regulation of financial services starts at the level of the market, rather than individual firms or products**. Product design and other elements of a firm's behaviour are shaped as responses to consumers' (real or perceived) need, which the product aims to meet, as well as by interactions with competitors that offer alternatives. That is, behaviour we observe—whether in providers or consumers—is strongly influenced by actions of other market participants. It is also influenced by market conditions such as regulation or technology. An intervention that changes one of these elements (e.g. restricts the actions of a particular provider) will not just change the behaviour of the individual provider or group of consumers that is directly affected; it may also change how all market participants interact with each other, and thereby have indirect but material effects on market outcomes.

[1] FSA (2006), A guide to Market Failure Analysis and high level Cost Benefit Analysis and FSA (2000), Practical cost benefit analysis for Financial Regulators Version 1.1.

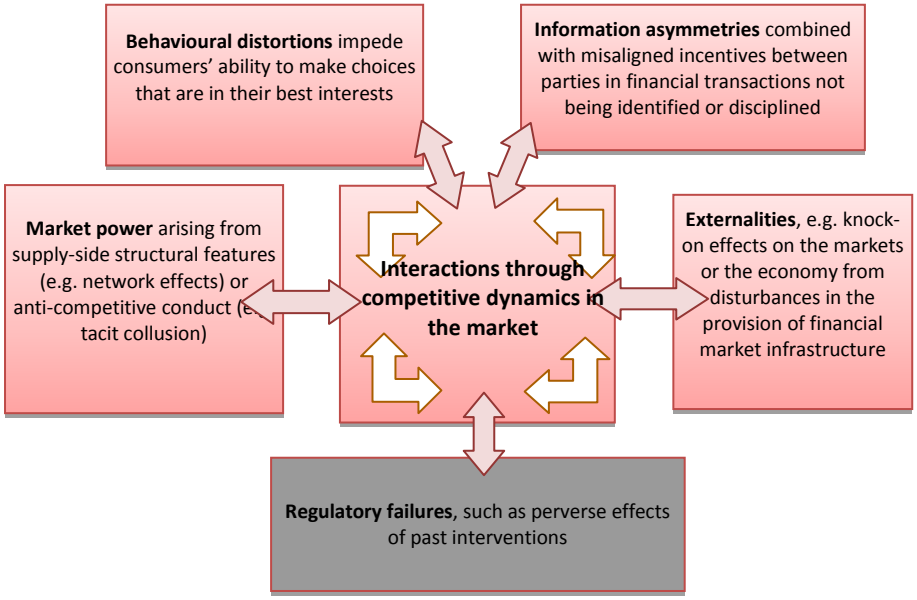
[2] Note that we are not the only body to have proposed something along these lines; see the European Commission Financial Services User Group's 2012 paper entitled New model financial regulation, the OFT's Guidance for market studies, and the Competition Commission's Guidelines for market investigations.

The analysis of how these factors interact with each other can be challenging, but for complex interventions with potentially large effects, it is likely to be worthwhile in order to avoid unintended distortions in the market. Not analysing the market as a whole could hide something regulators need to know: namely, that undesirable actions by a provider may not be elective, but instead driven by strategies adopted by other market participants as a result of problems in the market. In these cases, trying to fix a provider or a product in isolation may not address the pressures that caused the undesirable behaviour in the first place.

2. **Poor market outcomes are often driven by interactions of multiple underlying causes, which need to be understood and addressed together.** Regulatory experience shows that persistent or recurring instances of poor market outcomes rarely have a single isolated cause. Instead, they often arise from the interactions of multiple underlying problems that are present together (see Figure 1) and from the specific features of the market (such as characteristics of the product, past regulation and macroeconomic environment). For example, consumers could be failing to discipline providers by switching to better deals, and thereby paying too much for their products due to a combination of:
   - information asymmetries (e.g. current cost of use not revealed to consumer);
   - behavioural factors (e.g. procrastinating with clearly beneficial switching);
   - structural factors (e.g. network effects may mean consumers want to use the same provider as everyone else); and
   - regulatory failures[3] (e.g. past regulation may require additional time-consuming checks or paperwork to obtain the product from a new provider).

3. **Effective regulation will normally require close focus on how the demand side *really* interacts with other factors that shape market outcomes, and on how providers respond to any gaps in consumers' defences against error or exploitation**. We see, for example, that in most retail financial services, markets consumers often consider only some of the terms of a contract, and give

Figure 1: Interactions between market imperfections



[3] Throughout this document, the term 'regulatory failure' refers to cases in which interventions in markets had perverse consequences, and not to the special usage of the term in the Financial Services Act 2012 Part 5, sections 73, pp.77–83.

inadequate weight to others. Providers might then compete to offer their products in a way that takes advantage of this by emphasising certain product features over others, such as charges that arise down the line or on exit. Because business strategies and product offerings are often responses to such identifiable consumer behaviours, regulators need to consider the fundamental behavioural drivers at play, and how providers adapt to them. This is how the FCA's developing behavioural economics agenda supports better regulation.

4. **Looking at how markets work 'in the round' and flexibility in applying the regulatory toolkit are both important steps for regulators in changing how markets work and ensuring better consumer outcomes.** Serious problems in markets are likely to have multiple underlying causes and be influenced by circumstances and interactions unique to particular markets. The effects of interventions aimed at improving outcomes are shaped by the interplay of the original regulatory design of the remedy, responses of different groups of market participants, and other changes in market circumstances. In some cases, it may be impossible to fully understand all factors at play, let alone precisely predict and measure the effects of remedies. However, especially for complex problems, regulators can significantly increase the likelihood of delivering consumer benefits by upfront investment into understanding how the market works and keeping an open mind about the potential (combinations of) interventions that are likely to be suited to the particular problems identified.

From problem analysis to effective interventions

A comprehensive analysis of the complex interactions in markets is a difficult task in practice, so EFER aims to provide a framework for assessing these issues in a systematic and tractable way.

The process of the analysis in EFER can be broadly separated into the following three stages.

- **Stage 1: problem diagnosis**, to develop an understanding of how the market works and build an overview of the drivers of poor outcomes resulting from the interaction of different underlying market imperfections.
- **Stage 2: design of interventions** that are closely linked to identified problems and may require a combination of complementary measures where multiple underlying imperfections are causing a market not to work well.
- **Stage 3: impact assessment,**[4] which considers how the preferred intervention will change how market participants interact with each other and how these changes in behaviour will deliver improvements in outcomes (and measures these effects to the extent reasonably practicable in the circumstances[5]).

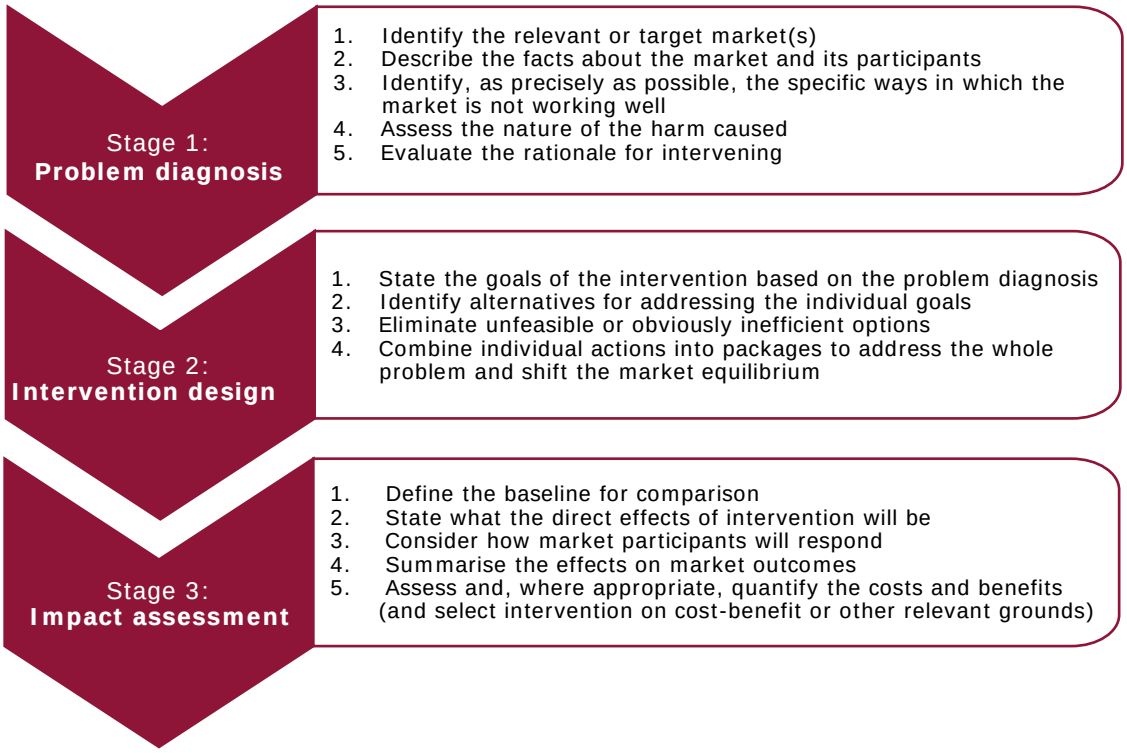
As outlined in Figure 2, each of the stages is further broken down into analytical steps that gradually guide the analysis from assessing simple facts to more complex market responses and interactions. Each step is supported by structured sets of questions and, sometimes, additional tools that help ensure that important issues are considered

[4] From this point onwards, we use the term 'impact assessment' to refer to cost benefit analysis. This term better reflects the breadth of the potentially useful analysis of the effects of intervention (even costs and benefits can be identified). Our use of 'impact assessment' describes the nature of activity involved and is not intended to refer to any existing methodologies by the same name (unless explicitly stated otherwise).

[5] The FCA has to have regard to the need to use its resources in the most efficient and economic way. Other regulators are likely to face similar constraints. For this reason, it may be inappropriate for the FCA to expend additional time and resources on quantifying some or all of the effects of its proposals, depending on the value that additional estimation would bring (in terms of the incremental improvement in certainty about the effects and the scale of the issue under consideration) and the amount of resources it would require.

appropriately. In practice, the boundaries between these stages can be blurred. For example, high-level impact assessment is typically needed to narrow down the list of interventions at the design stage and to determine how best to combine them into packages.

Figure 2: Process of EFER



Chapters 3 to 5 of the paper describe the three stages of the EFER process. Each of these chapters begins with a short overview of the process for the relevant stage. These can be read in isolation for a quick introduction to the structure of EFER as a whole. The rest of each chapter then provides additional detail on the steps of the analysis and introduces several tools (attached as annexes) designed to help with the more challenging elements of the analysis in practice.

Practical challenges in impact assessment

To develop our approach to analysing impacts of interventions, we decided to undertake a survey of economic impact assessment practice by leading authorities. As part of this, we have reviewed 100 recent and substantive CBAs for significant interventions published by a variety of authorities in the UK and around the world. Our survey was designed to explore how these authorities implement key features of textbook CBA:[6] quantification of costs, quantification of benefits (potentially in non-monetary terms), monetisation of benefits, and avoidance of spurious precision of estimates under uncertainty (e.g. through sensitivity analysis). We also looked at methodology guides from various authorities that appeared to be well-aligned with the textbooks in terms of contents.

[6] See, for example, Layard and Glaister (1994), Cost Benefit Analysis.

In terms of observed regulatory practice, however, our review found that less than a third of the CBAs contained even a partial monetisation of benefits, and almost half did not provide ranges for estimates or other reflection of the impacts of uncertainty on the assessment. The results for the frequency of practical welfare analysis—considered to be the standard approach for textbook CBA—were particularly striking (see Box 6 for more on this approach). Out of a hundred CBAs reviewed, only four contained an explicit attempt to quantify the welfare effects with reference to consumer surplus or willingness to pay. Even these four impact assessments are considerably more high level than the theoretical 'gold standard'.

Practical constraints are a likely explanation for these findings, as the information and resource requirements for performing robust welfare analysis, or even monetisation of benefits (and indirect costs) are very high. The task becomes even more difficult in the presence of behavioural biases that can lead to consumer mistakes. In such cases, even traditional techniques for welfare analysis—inferring preferences from observed consumer choices, for instance—might not reveal the value of the products, their characteristics, or other relevant elements of regulatory change. Moreover, while very useful in principle, even emerging new techniques of learning about consumer decisions in presence of biases, such as laboratory experiments or field trials, can have significant limitations in some practical circumstances.[7]

The state of affairs described above poses a significant challenge for regulators: how to maximise the chances of their interventions making society better off. While challenges in quantifying impacts can be significant, we also believe that regulators can still increase the likelihood of intervening in net-beneficial ways by understanding how the relevant markets operate and selecting interventions that are well-grounded in the specifics of the problem that has been identified and are informed by the likely market participant responses. We believe that investing upfront in researching, understanding and working with the mechanisms that drive the relevant market is likely to improve regulatory decisions and benefit the society more than spending equal resources on undertaking the (often seemingly unfeasible) quantitative welfare analysis or very precise quantification that are often expected of high-quality CBAs.

Why publish this paper?

The first reason, as discussed in Box 1, is to be transparent about the areas of economic analysis that appear to be important for pursuing regulatory objectives and satisfying legal obligations, such as those set out in the Financial Services and Markets Act (FSMA). The second reason is to share ideas on tackling the analysis of complex and diverse markets, as well as of policies with impacts that are difficult to quantify, in the hope that it might aid regulators in general and stimulate further progress in developing approaches to the effective analysis of markets in all their complexity. Box 2 summarises some of the recent strands of research we have drawn on in developing the new approach.

This paper is not, of course, a commitment by the FCA always undertake all the detailed elements of the analysis that are described herein. What economic analysis may be appropriate depends on the specific regulatory problem at hand, and the FCA's proportionality considerations. Moreover, we recognise that the EFER approach may, because it is innovative, need to be revised over time to reflect lessons learnt from continuing to apply it in practice and from debate engendered by this paper.

[7] See, for example, Deaton (2009) on some constraints in using trials for policy evaluation and Iscenko et al. (2014) on the practical advantages and limitations of behavioural experiments.

Box 1: How can EFER help the FCA achieve its objectives?

We argue that EFER reflects the changes in the FCA's statutory framework.

The FCA's **strategic objective is to ensure that the relevant markets function well**. Given that economics as a discipline specifically focuses on analysing how markets work, high-quality economic analysis can make significant contributions to the FCA's pursuit of its strategic objective efficiently and effectively. This holds despite other social policy considerations almost invariably also being important and demanding full consideration.

In order to shape the FCA's priorities in light of its new strategic objective to make markets work well, it is necessary to understand how the wide range of financial services markets within the FCA's remit work and what outcomes they deliver. An objective specified in this way demands a structured, tractable and efficient approach to regulatory analysis of markets.

Under the broad strategic objective, the FCA has three operational objectives:

- To secure an appropriate degree of protection for consumers.
- To protect and enhance the integrity of the UK's financial system.
- To promote effective competition in the interests of consumers.

The fact that the FCA has a **competition** objective and duty that its predecessor did not have also contributes to the increased emphasis on markets and dynamic responses to regulation by providers and consumers. Moreover, the FCA has a duty, so far as is compatible with advancing its consumer protection or integrity objectives, to discharge its general functions (making rules, general guidance, and codes) in a way that promotes effective competition in the interests of consumers. To understand how competition works and whether it is effective, we need to consider the market as a whole.

In another significant legislative change, the FCA is required to **publish estimates of both costs and benefits** when consulting on proposed interventions (where possible and reasonably practicable), in contrast with the FSA's obligation to estimate costs but only analyse benefits. While precise quantification of benefits is obviously impossible, even estimating them often requires extended and challenging empirical analysis of how interventions affect market processes and outcomes and, as acknowledged in the FSMA, may not always be possible or reasonably practicable given the issues at stake, the resources required, and the level of certainty that could be achieved by such analysis.

Box 2: Academic and regulatory advances motivating EFER

In developing EFER, we have drawn on many recent strands of academic and public policy debates about effective regulation of markets. Below are some examples of the economic research topics we draw on when updating our methodology from that used by the FSA.[8]

- **The effects of behavioural biases on individuals**: including the FCA's own earlier work on the importance of biases for understanding consumers.
- **Concepts in more advanced competition analysis**: for example, reflecting the market investigation methodologies used by other competition authorities.
- **Behavioural industrial organisation**: a growing area of research that describes the variety of ways in which individual consumer's biases can interact with other factors in the market and significantly distort competition and market outcomes.
- **Uncertainty and incredible certitude:** a strand of research that emphasises the importance and scale of uncertainty faced in empirical economic analysis, including in policy contexts, and cautions against overly specific estimates that require strong assumptions.
- **Challenges of practical welfare and well-being analysis**: including, in particular, the recent work on the extreme complexity of analysing and quantifying welfare in the presence of behavioural biases.

EFER also reflects some of the recent developments outside economics: for example, in administrative law and public sector management. Two notable examples are the current debate on 'wicked problems' and the limitations of traditional impact assessments in measuring performance.[9]

First, we will address the growing recognition that many of the major challenges that regulators face in markets are **wicked problems**: they are often very complex, multi-faceted, and do not lend themselves to formulaic remediation or tractable measurement. Faced with these problems, instead of striving for technical precision, the regulators can be more effective by investing in holistic approaches to understanding the issue at hand, and maintaining flexibility with respect to the combination of tools used to address it. EFER's attention to interactions in markets, greater focus on problem diagnosis and remedy design, and recognition of uncertainty in CBA all aim to better equip regulators to deal with such wicked problems.

Increasingly, public policy scholars highlight the **limitations of fully quantitative impact assessment (or CBA)**, arguing that its use may not be feasible or suitable for assessing regulatory performance, especially for complex problems. This literature often advocates alternatives, such as focusing on (less precise) measurement of a wider range of factors that are more directly linked with regulatory objectives, or focusing on incremental changes in regulation and more ex-post analysis. While EFER recognises the important role of CBA in the FCA's legal obligations and provides tools to facilitate the analysis, attention is paid to practical limitations and alternatives that can be used to achieve better outcomes.

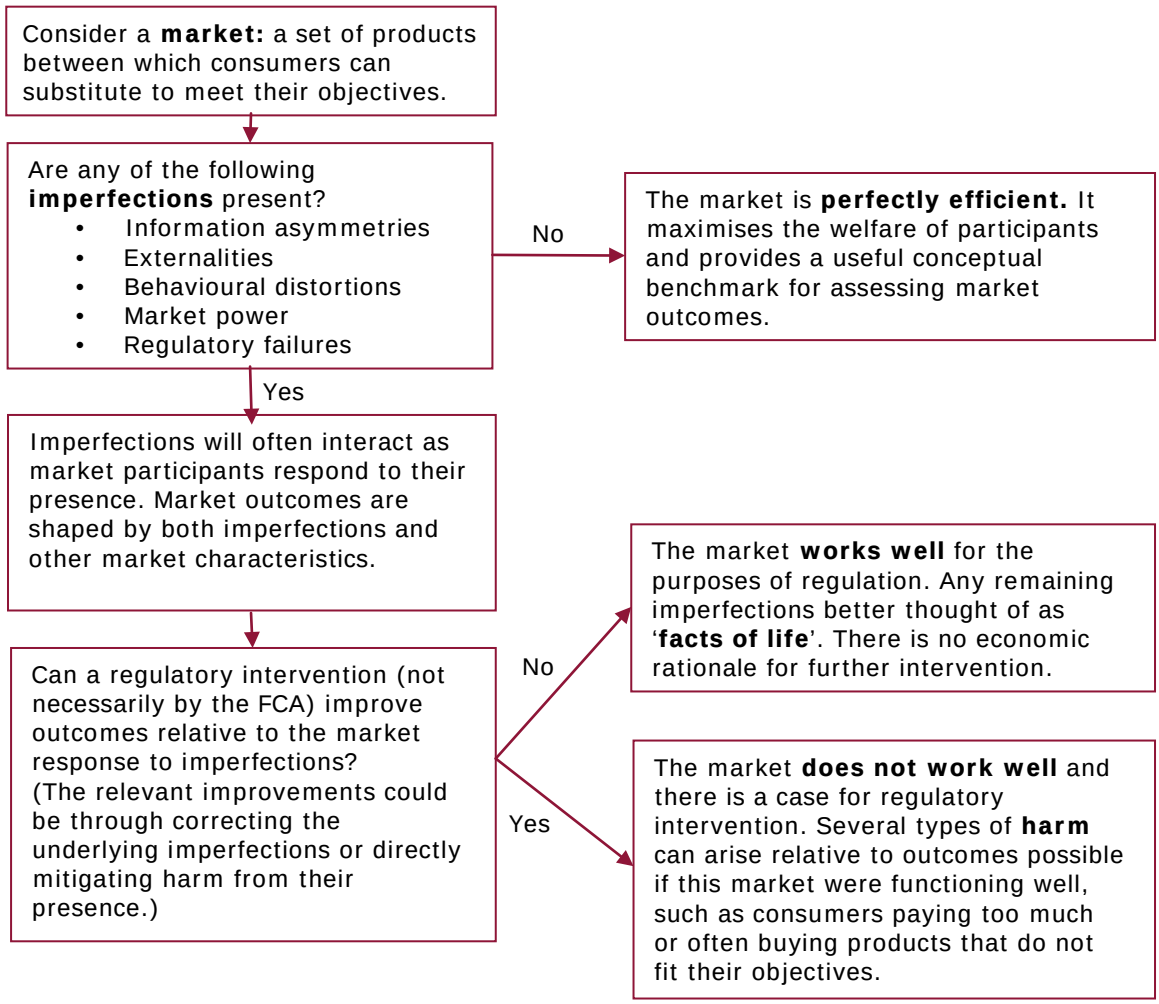
[8] Appendix 8 identifies some further reading on these and other topics that have influenced the development of EFER.

[9] On wicked problems, see: Camillus (2008), Strategy as a Wicked Problem and Head (2008) Wicked Problems in Public Policy. Footnotes 24 and 27, as well as further references cited therein, contain a further discussion of the literature on the limitations of the CBAs.

2 The conceptual framework for EFER: working out when it makes sense to intervene in markets

Much of the structure and the analytical process for EFER rest on a set of key principles about what economic markets are, why they may not work well, and when regulatory intervention can efficiently improve outcomes. In this chapter, we provide an introduction to this market-based conceptual framework for EFER (summarised in Figure 3 below). We build on economic theory, our own practical experience, and the practice of competition authorities.

Figure 3: Summary of the relationships between the key concepts



What is a market?

An economic market is as a structure within which consumers and providers of a good or service interact. For financial services, this 'structure' is shaped by a variety of factors, including, for example, legal and regulatory environment, characteristics of market participants, and available technology.

Typically, specific products or types of service are considered to be in the same market if they are close substitutes in serving the consumers' economic objectives (such as obtaining funds to buy a property or hedging a particular risk exposure). This market definition can be broader or narrower than a particular regulated activity or product category. For example, unit trusts and investment trusts could be in the same market because they have many similar characteristics.

What can prevent a market from working well?

Economics often uses the concept of a 'perfectly efficient' market to facilitate the analysis of market outcomes and processes that deliver them. A perfectly efficient market has the following characteristics:

- Consumers, whether they are private individuals or firms acting as clients, are able to compare alternatives and select products that offer the best combinations of price and quality, given their preferences.
- Consumers' choices correctly reveal to existing and potential providers what products are in demand and discipline those providers who offer options that are worse than other available alternatives.
- In turn, the providers can enter the market easily and compete among themselves, using observed consumer choices to learn about demand and to adjust products and prices they offer accordingly.
- In the long term, as providers undercut each other on price to attract business, prices are driven down until they only just cover all costs of production (including capital) for a given quality level.
- Market pressures from competitors and consumers also give incentives to providers to innovate in ways that maximise efficiency, improve product features and quality, or otherwise respond to changes in consumer preferences.

A market that works in this way maximises welfare by delivering goods and services that best meet consumers' needs at lowest possible price for a given quality—both at present and as market conditions and consumer preferences (and hence demand) change over time. To the extent that the market lacks these characteristics - there is a welfare loss, which regulation *may* be able to address, because society is not as well off as it could be.

In practice, most (if not all) markets fall short of perfect efficiency for a variety of reasons; therefore, a perfectly functioning market is not a realistic benchmark for what regulation should hope to achieve, although it remains a powerful analytical tool. For tractability, we group these 'market imperfections' into the following categories based on the type of distortions they cause:[10]

(i) **Information asymmetries:** One party to a financial contract knows more than the other and exploits this information advantage. This asymmetry could exist either before the contract is made (e.g. the consumer does not have the

[10] Further information on these market imperfections can be found, for example, in FSA (2006), A Guide to Market Failure Analysis and High Level Cost Benefit Analysis.

information about some essential product features) or after contracting (e.g. principal-agent problems where a consumer cannot monitor whether the adviser they selected is truly acting in their interests).

(ii) **Market power:** One provider (or more than one in combination) can act to set prices or quality without being challenged in the marketplace by consumers or other providers. The most natural case to think of is the charging of prices in excess of efficient costs (which include the cost of capital) for a significant period of time, profitably and without facing damaging loss of sales to rivals.

(iii) **Externalities:** Some impacts of a market transaction on third parties—such as other firms or the taxpayer—are not reflected in the price or other terms of the transaction. These externalities can be negative or positive. They also include public goods (such as financial stability): products or outcomes every market participant can benefit from without reducing their benefits to all others.

(iv) **Behavioural distortions:** Some inherent behavioural biases or capability limitations materially distort market participants' ability to pursue their economic interests. We discuss this point further below.

(v) **Regulatory failures:** Some existing regulations distort the market and do more harm than good—either because they were badly designed or implemented in the first place, or because their effects changed as market conditions evolved over time. This is an important but often overlooked source of problems in markets.

Regarding (iv) above, the growing body of evidence from **behavioural economics**—including from the FCA's own research programme—shows that behavioural distortions are more prevalent than was previously believed, and generally interact with other problems in the market rather than occurring in isolation. Developments in the field of behavioural industrial organisation specifically offer important insights on the profound effects that behavioural biases can have on how competition in the market works as a whole. Box 3 has more detail on behavioural distortions.

EFER not only reflects important behavioural issues throughout the different stages of analysis; it also aims to demonstrate how they can practically be considered alongside other types of problems through structured sets of questions and tools. This is important since in most markets, multiple categories of imperfections will be present together. In fact, there may even be more than one imperfection of the same type. For example, in the market for retail investment advice in the absence of regulation, consumers may have incomplete information about all of the following: characteristics of specific investment products; any commission their adviser receives and its likely effect on their recommendations; and the quality of advice received in the past, as observed poor investment performance could also be explained by bad luck. Taken together, these information asymmetries can lead to much worse outcomes than individual occurrences. There can be other contributing factors as well, such as behavioural distortions that impede consumers' ability to correctly even the information they do get: for instance, focusing excessively on factors like past performance.

When multiple imperfections interact to contribute to the same problem, poor outcomes would be likely to persist even if one of the imperfections were removed. In other cases, however, different (groups of) imperfections drive distinct problems in the market and could, in principle, be addressed individually. Understanding links between different underlying causes of problems in the market is, therefore, important for the design of effective regulation to address large and complex problems. Typically, these links are identified on a case-by-case basis by looking at the competitive dynamics and interactions in the specific market of interest.

Box 3: Behavioural distortions

Economic frameworks for public policy have traditionally focused on the first three categories above—information asymmetries, externalities, and market power—as rationales for regulatory interventions. Even when behavioural considerations were mentioned, such as in FSA's Market Failure Analysis Framework (2006), they were given far less prominence. In recent years, however, there has been growing recognition in regulatory thinking that behavioural limitations to consumers' or producers' ability to act in their rational self-interests can be a distinct source of imperfections that lead to significant harm.

Equally, a fact that is often not explicitly integrated in regulatory methodologies is that behavioural distortions typically affect market outcomes through interactions with other imperfections. Mandated disclosure to address information asymmetries sometimes proved to be ineffective when it did not recognise behavioural constraints on consumers' ability to use this information effectively. Advances in behavioural industrial organisation also demonstrate the important effects that behavioural distortions can have on the degree of market power and effectiveness of competition.

EFER reflects the importance of assessing behavioural distortions in the broader market context by weaving in relevant behavioural considerations throughout the process of regulatory analysis. In our experience, people raise several concerns about integrating behavioural biases into analysis in this way. We briefly respond to some of these potential objections below.

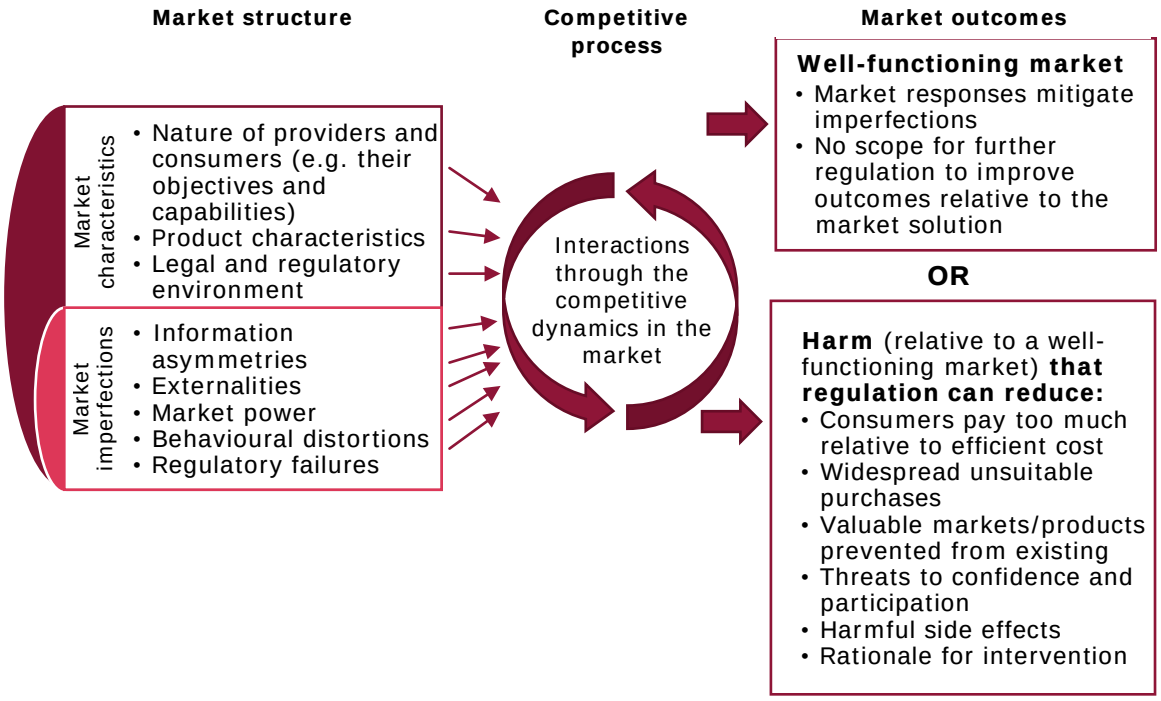
- **Prevalence:** The fact that behavioural biases are an inherent and universal part of how people think is not an argument against behavioural distortions being a market imperfection. By behavioural distortions, we mean situations where biases create systematic barriers to market participants' acting in their interests, and not just the existence of biases itself. Although generally widespread, in most cases, natural human biases will not distort markets in ways that are of regulatory concern.
- **Feasibility of remedies:** Underlying biases typically cannot themselves be remedied, but it may still be possible for regulatory interventions to address the imperfections arising from their effects. For example, information might be provided to consumers in formats that facilitate comparisons and improve decisions even if doing so does not remove so-called 'framing bias'. Even when a behavioural distortion itself is not remediable, it is still vital to understand it, as its presence will often constrain what other imperfections can be fixed.
- **Complexity:** Considering behavioural distortions does make regulatory analysis more complex, but given the central role they play in many retail markets, this is necessary to avoid regulatory failure. Moreover, the analysis of behavioural biases in a market context is likely to become easier as academic research and practical regulatory applications on this topic continue to develop.
- **Differences in regulatory philosophy:** Regulators may adopt different approaches to behavioural questions, such as the appropriate degree of paternalism. In any case, existence of behavioural distortions remains a fact about how the market works, and their role needs to be recognised for regulators to make informed judgements.

When do market imperfections justify regulatory intervention?

All markets have imperfections to some extent, and their existence does not necessarily mean that (further) intervention is required. Depending on the market's characteristics and the nature of the imperfection, responses by market participants may already mitigate the distortions to an extent that there is no further scope for a regulator to improve the outcomes further (see Figure 4).[11] This can happen either because the market response genuinely solves the problem or because, even if there were residual welfare loss, the economic costs of any feasible further intervention would outweigh the improvement it would achieve. In these circumstances, the market can be said to work well for regulatory purposes.[12] Attempts to intervene in well-functioning markets are likely to result in regulatory failure and related social costs.

Market imperfections, therefore, only provide an *economic* rationale for regulation where market responses do not remedy them effectively (or even exacerbate them, as illustrated in Box 4) *and* where there exist feasible interventions that, at least in principle, can achieve a net improvement in welfare. This kind of market does not work well, and gives rise to 'harm' or 'poor market outcomes'—the welfare loss relative to outcomes achievable in this market if it worked well—that regulation can, at least partially, reduce. This harm can take different forms depending on the context of the market. EFER classifies harm into five potentially co-existing types, as summarised in Figure 4. We will discuss this classification and how to apply it in practice in Chapter 3 and in Appendix 4.

Figure 4: Different effects of interactions on the market



[11] 'A regulator' here refers to any regulatory or government authority that has powers to intervene in the market, rather than the FCA specifically. A welfare-improving intervention needs to be feasible in principle.

[12] It is also not appropriate to think about the remaining imperfections as 'market failures' in this context, even though this term is commonly used to refer to any imperfection in the economic literature. It is, after all, still the market that provides the most welfare-maximising way of dealing with the distortions.

Box 4: Market responses to imperfections

Markets can sometimes solve their own problems, as competitive market dynamics drive behaviour that mitigates the effects of the existing imperfections. For example, it is an inherent feature of insurance markets that individual clients typically know more about their risk of an adverse event than the insurer. Due to competitive pressures, however, insurance providers continue to improve their actuarial models and develop better technologies for monitoring policyholders' behaviour. There is little scope for regulation to reduce this information asymmetry about customers' risk levels further, and thereby lower the 'risk premium' element of competitive insurance prices, or mitigate its effects in a proportionate way.

On other occasions, the market response to imperfections can serve to exploit and exacerbate them, leading to further consumer harm. Some insurable risks, such as those covered by extended warranties, may have much lower probabilities and smaller costs than consumers intuitively believe. Insurers may still not know an individual's riskiness, but by looking at aggregate outcomes, they may be better placed to detect that a consumer's perception of risk is typically mistaken. In the absence of effective competitive constraints, they can then price products significantly above actuarial value or even amplify consumers' misperceptions of risk through misleading marketing or sales tactics.

Distinguishing between market failures and the 'facts of life'

There are two ways in which regulation can achieve an improvement in welfare: fixing the underlying imperfections and directly mitigating harm.

In the first case, an intervention aims to make the market work better by reducing the relevant (combination of) imperfections that give rise to poor outcomes without imposing disproportionate costs. Where this is possible, we can meaningfully refer to the imperfections being market failures to be corrected through regulation.

In contrast, some imperfections in financial services markets are fundamental features of how the market works that cannot be directly remedied by regulation. Examples include certain types of products being inherently too complex for retail consumers to understand without assistance or natural market power arising from large economies of scale in the provision of wholesale market infrastructure. When faced with these 'facts of life', regulation can only rely on the second way of intervening: mitigating the harm that has arisen, such as by setting price caps or preventing retail customers from buying certain complex products without advice to reduce unsuitable purchases.[13] While these types of interventions improve welfare, it is important to recognise that the fundamental cause of the problem remains unaddressed and may manifest itself again in a different way as the market participants respond to regulation or conditions change over time. Such interventions are also more likely to introduce additional distortions in the market (such as creating barriers to new entry to mitigate harm from potential misconduct).

Effective regulatory interventions are therefore most likely to be based on an understanding of the nature of the underlying imperfections, and their interactions, and

[13] Imperfections in well-functioning markets can also be thought of as 'facts of life' as, by definition, they cannot be remedied by regulation. The distinction is that, in a market that works well, it is not possible for regulation to directly mitigate any remaining welfare loss in a proportionate way.

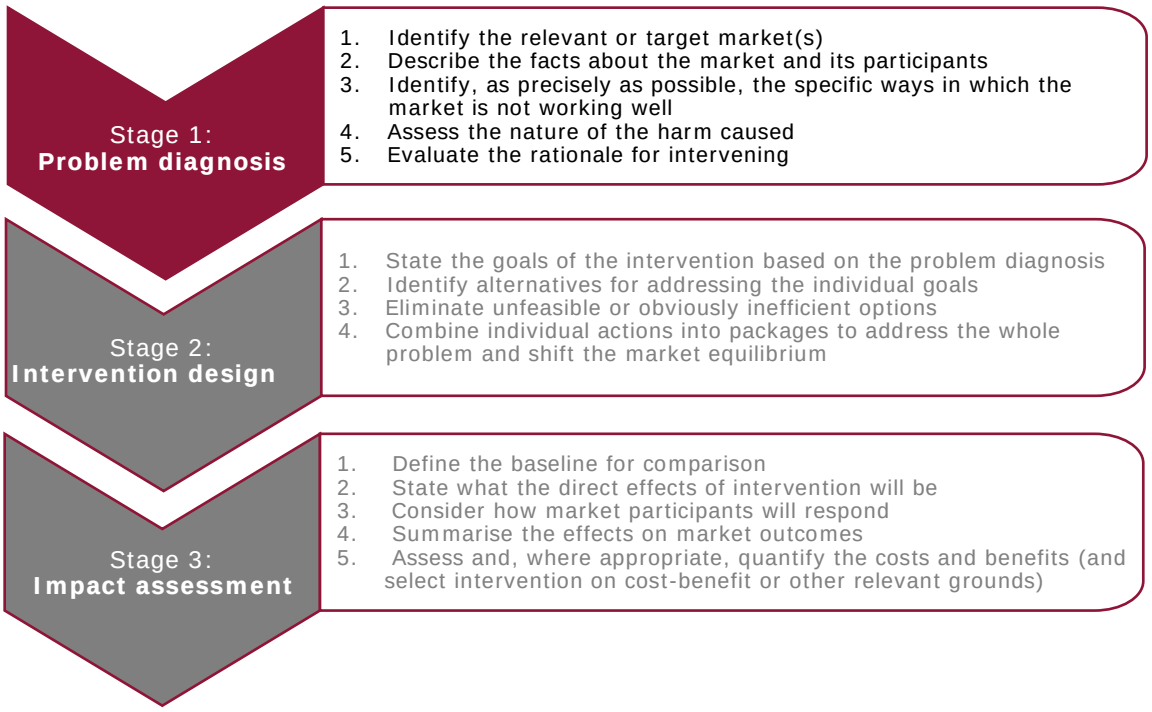
are only justified when improvement over the market solution is feasible. In the following three chapters, we describe the structure of EFER, which is designed to support the analysis of all these issues.

3 The process: diagnosing root causes of problems

3.1 Overview

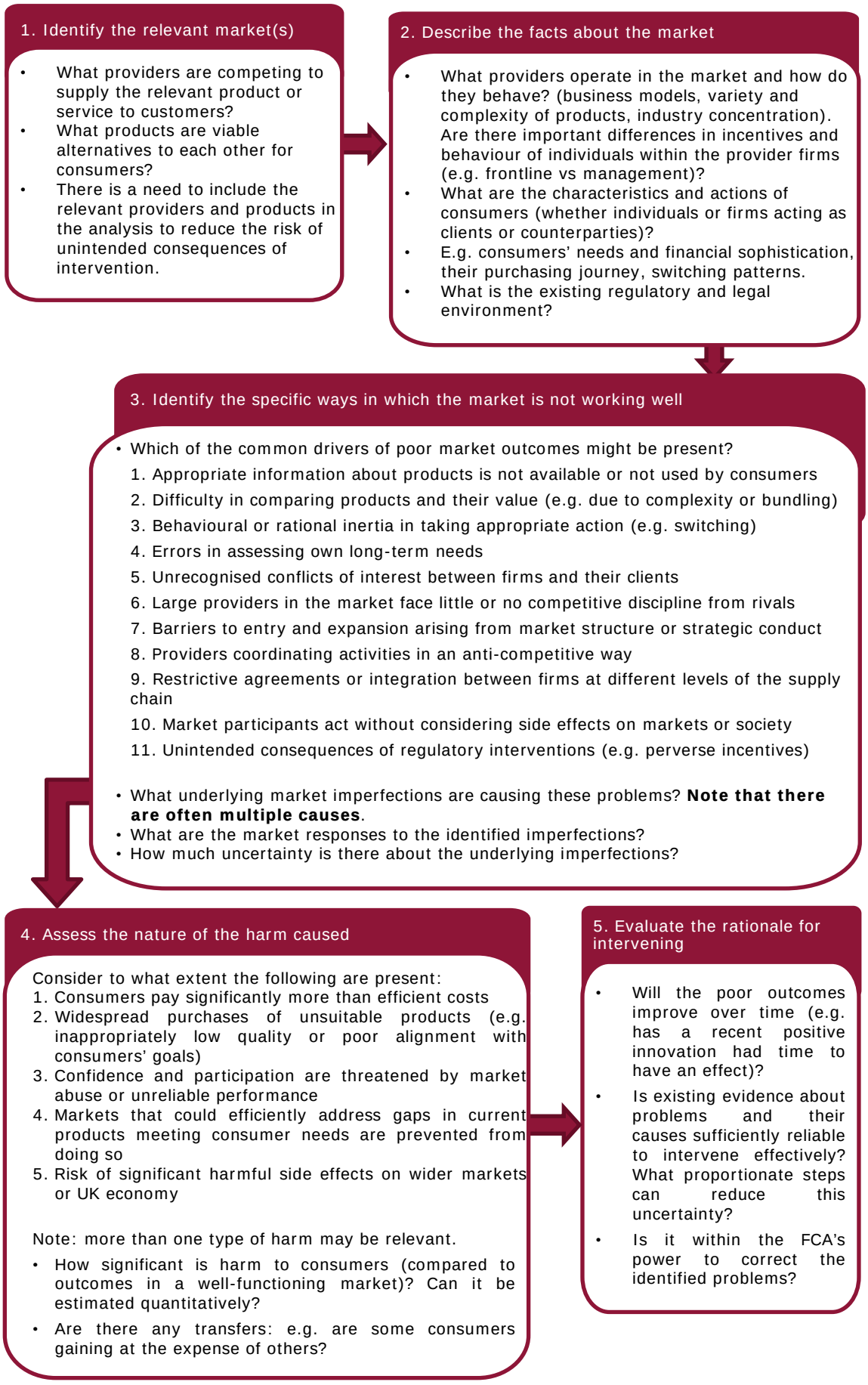
Comprehensive problem diagnosis supports the development of effective and proportionate regulatory interventions. It allows the regulators to get to the bottom of what is driving the problems in the market and address these root causes rather than continuously intervene to mitigate symptoms while the underlying driver of harm remains unresolved and continues to manifest in different ways.

This stage also provides important foundations for impact assessment. Assessing and measuring benefits of potential interventions is much easier when the nature and size of the problem are well understood. The process of diagnosis also provides an understanding of how the market works in general. This understanding of market mechanisms gives a sounder basis for analysing the effects of regulatory interventions and choosing those that are likely to be net-beneficial.



EFER recognises that the complexity of market processes can make problem diagnosis challenging in practice. It therefore provides a sequence of diagnostic steps (see Figure 5) to guide the analysis from gathering facts about the market to considering different causes of the market that are not working well and their interactions. The level of detail at which each step is considered will depend on the complexity of the problem and the importance of the issue under investigation.

Figure 5: Steps for problem diagnosis



3.2 Diagnosing problems in practice

Step 1: Identify the relevant markets

The standard unit of economic analysis is the relevant economic market. It is typically identified by taking the consumers' perspective (whether retail or wholesale) and assessing the range of products that are substitutable, i.e. that serve a sufficiently similar purpose. We also identify at this stage any providers who could enter this economic market and so constrain inefficiently high prices and low quality of the product.

Although the formal market definition that is carried out by competition authorities for mergers is unlikely to be necessary for policy analysis, considering substitutability of products and services more generally helps to ensure that policy interventions are effective and helps to minimise unintended consequences, such as distorting competition. For example, if the scope is defined narrowly, policies may impact too few products, allowing harm to persist if providers (subject to cultural constraints) and consumers substitute to other products that are not covered by the intervention but are in the same economic market. If the scope were too broad, activities beyond the relevant economic market would be affected. This could lead to unnecessary economic distortions (costs) where there had previously been no problems.

The boundaries of relevant markets may or may not coincide with the boundaries of regulated activities as defined by a statute or directive, which is a serious problem of regulatory design and, if not handled carefully, a possible source of unintended consequences.

Step 2: Describe facts about the market

In Chapter 2, we outlined broad categories of market imperfections: information asymmetries, market power, behavioural distortions, externalities and regulatory failures. However, for many complex issues an effective regulatory intervention in principle needs to be based on a much more precise articulation of the underlying cause of problems it aims to address. It requires an understanding of the particular imperfections at play (e.g. the nature of the different information asymmetries in the retail investment advice example earlier), and how they relate to each other and to other market characteristics. It is also important to understand the existing relevant regulatory interventions in the market and their gaps in order to form a view about the scope for further proportionate regulatory action.

To make these assessments possible, the problem diagnosis needs to start with collecting and analysing facts about the market: the nature and behaviour of market participants, characteristics of products involved, and the legal and regulatory context. Establishing such facts should improve regulatory design due to the following reasons:

- Exploring how the market is working as a whole provides an open-minded way of identifying potentially problematic areas for further investigation. When dealing with a complex problem in a market, a less systematic approach can focus too much on searching for evidence on a particular hypothesis about why the market might not be working well, thus missing important exacerbating factors or additional problems as a result.
- Understanding the current incentives, constraints and behaviours is important for any future analysis of the likely responses by consumers and providers of the relevant products to regulatory interventions.

Appendix 1 contains some suggested questions about products, consumers, providers and the regulatory context that can guide an analysis of how a market is working.

Appendix 2 provides a high-level overview of the different information-gathering methodologies that can support the fact-finding stage and the later steps of diagnosis and testing remedies.

Step 3: Identify the ways in which the market is not working well

Ultimately, the diagnosis needs get to the imperfections that cause the observed problems; however, due to the complexity of market interactions, it can be difficult to get to these underlying causes by simply observing facts about market behaviour. In fact, different specific imperfections (for example, certain kinds information asymmetries and behavioural distortions), or their combinations, can often manifest themselves in very similar patterns of market conditions and behaviour, such as lack of switching or conflicts of interest between parties in a transaction not being recognised and taken into consideration. In turn, these factors then combine with other characteristics of the market to lead to poor market outcomes.

To make the step from observing facts about the market to identifying the underlying specific causes of problems more tractable, we have set down a set of 11 systematic patterns of market activity through which (potentially different) imperfections can often manifest themselves. These 'drivers of poor market outcomes' are listed in Table 1.

Table 1: Eleven systematic drivers of poor market outcomes

Driver group	Specific patterns we observe
Consumer behaviour	1. Appropriate information about products is not available or not used by consumers 2. Difficulty in comparing products and services, and their value (e.g. due to complexity or bundling) 3. Behavioural or rational inertia in taking appropriate action (e.g. switching) 4. Errors by consumers in assessing own long-term needs
Supply-side behaviour and market structure	5. Unrecognised conflicts of interest between provider and their clients, leading to misaligned incentives 6. Large providers in the market face little or no competitive discipline from rivals (market power) 7. Barriers to entry and expansion arising from market structure or strategic conduct 8. Providers coordinating activities in an anti-competitive way 9. Restrictive agreements or integration between firms at different levels of the supply chain
Other market distortions	10. Market participants act without considering side effects on markets or society 11. Unintended consequences of past interventions (e.g. perverse incentives or outdated regulation)

Appendix 3 describes each of the drivers, provides examples, and lists questions to consider when assessing each of these drivers in practice.

These 11 drivers are a purely pragmatic device that helps to structure the analysis. First, the diagnosis can go through the drivers to identify whether there is evidence that any of them are present in the market in a material way. Then, for the drivers we observe, we can undertake further analysis to determine the underlying imperfections of which they are a manifestation in the particular market of interest:

- What different (combinations of) underlying imperfections could explain the observed behaviours in the market?
- If so, what further evidence is needed to discriminate between the plausible alternative explanations?

For example, going through the drivers may show that consumers are unable to compare products effectively and are not giving sufficient weight to certain important contract features (second listed in the table above). In this case, we need to consider—to the extent it is possible—which features are being ignored and what causes this lack of attention. Is it, for example, due to lack of relevant information in the disclosure materials, complexity of the disclosure that consumers receive, excessive focus on prominent headline prices, or consumers' inattention to the transaction as a whole? Note that, as with many other drivers, more than one type of underlying imperfection can be relevant to consider. In this case, for example, different kinds of information asymmetries and behavioural distortions can play a role.

Diagnosis also needs to identify why the problem persists: what stops competition, entry, or other market mechanisms 'correcting' consumer behaviour? For example, why are there no new entrants trying to educate consumers about what they should be paying attention to when choosing products, and offering a better overall deal?

This analysis of market responses can highlight the relevance of additional factors; for example, it may show that in addition to the identified demand-side distortions, there are also barriers to entry that deter new providers that could offer more transparent products. The driver alone may be insufficiently precise to target the intervention effectively. In those circumstances, the diagnosis should identify what the underlying causes of the barriers to entry actually are (e.g. economies of scale giving rise to natural market power or regulatory failure due to disproportionately high authorisation requirements for new or innovative firms).

This stage of the diagnosis ends with taking stock of the ways in which the market does not work well: the description of specific market imperfections present (and the extent to which they have been pinned down); the ways in which they combine to contribute to the same market behaviour (e.g. driver); and how the different distortions in market behaviour (such as lack of switching and structural barriers to entry) further interact with each other to result in poor market outcomes overall. It is also useful for the design of remedies to consider explicitly whether the identified imperfections are, in principle, remediable or appear to be 'facts of life'.

It may sometimes be difficult or impossible for the diagnosis to precisely identify the underlying root causes of the problems. Box 4 discusses the challenges of this diagnostic uncertainty in more detail.

Box 4: Dealing with uncertainty in diagnosis

Diagnostic uncertainty arises when more than one combination of specific market imperfections fits the available evidence. For example, there may often be multiple plausible combinations of behavioural and rational factors that could be driving consumers' lack of switching.

Some recent advances in research methodologies, high-performance computing and data availability can provide tools for reducing uncertainty more than was possible in the past. For example, experiments or field trials can help pin down the types of consumers' biases that give rise to behaviour distortions in a particular context;[14] or highly granular data on behaviour in the market (e.g. transaction reports or order book data in wholesale financial markets) can shed new light on the strategies of, and interactions between, different kinds of market participants.

Nonetheless, time, data and resource constraints may sometimes make these advanced diagnostic methods unfeasible or disproportionate for some regulatory questions. Furthermore, the complexity of the market interactions may mean that even these frontier techniques are not enough to pin down the underlying imperfections precisely. In these cases, to reduce the risk of unintended consequences of interventions, it is important to recognise where this uncertainty exists, identify where it matters the most, and articulate its implications. The level of certainty that is needed for practical purposes will vary, but the points below provide some general principles that can be useful to consider.

- Complete diagnostic certainty is generally neither feasible nor necessary: in many cases, it may be possible to get far in identifying appropriate courses for intervention by eliminating alternative explanations (i.e. underlying combinations of specific market imperfections) that are significantly less likely than the alternatives, given the available evidence.
- It might not be necessary to narrow down the diagnosis beyond the point where the remaining possible alternatives have the same practical implications for the suitability of different interventions. For example, it may be possible to conclude that a particular product is too complex for a certain group of consumers to buy without advice, even if it remains unclear whether it is misunderstood due to insufficient numeracy skills to calculate its returns or behavioural biases resulting in unrealistic probability weighing.
- There may still be cases where it will not be possible to narrow down the diagnosis sufficiently to avoid some likelihood of regulatory failure. The potential *plausible* sets of imperfections that could explain behaviour in the market could be so diverse that no matter which feasible intervention is chosen, it could turn out to be harmful under some explanations that could not be ruled out. In those circumstances, it will often be appropriate to avoid intervening until further evidence or feasible analytical approaches emerge that can enable better diagnosis, unless other drivers of action are at play.

[14] In the FCA Occasional Paper 3, Iscenko et al. (2014) for example, specifically discuss the significant contributions that experiments can make to diagnosing problems more precisely (as well as other stages of regulatory analysis) and how to design them to increase the relevance of these methods for regulatory applications.

Step 4: Assess the nature of harm caused

To the extent possible, the diagnosis also needs to establish the size and nature of the harm being caused. This is an important disciplining device for deciding whether an intervention is warranted or prioritising between different concerns. It also paves the way for more tractable analysis of the benefits of interventions as part of an impact assessment.[15] It is often challenging to quantify the size of the likely harm in the market, especially where some of the major impacts are not financial. In Chapter 5, we discuss in more detail the methodologies and challenges of measuring harm in practice (whether for existing detriment or to assess costs and benefits from an intervention).

Harm that arises as a result of market imperfections can take different forms and can therefore appear difficult to measure or compare across different contexts. To help with this task, EFER identifies five dimensions of harm, which summarise the types of poor outcomes that can arise when markets do not work well, as set out in the Table 2. These types of harm can have both financial and non-financial elements. For example, purchases of unsuitable products may lead consumers to lose money (e.g. from a risky investment they believed offered a guaranteed return), and also expose them to psychological detriment from the associated stress.

These types of harm are not mutually exclusive; in fact, there is often a lot of interaction between them. For instance, if providers are able to set prices signficantly above costs, it might also restrict access to the market for more consumers or increase incentives to mis-sell these profitable products.

In Table 2, we illustrate the direct relevance of the different types of consumer harm for public policy by linking them to the FCA's operational objectives.[16] However, we also believe that this typology applies equally well to problems that many other regulators see in markets.

Table 2: Broad types of harm used in EFER

Type of harm	Relevant FCA operational objective(s)
1. Prices significantly above efficient cost of production	Effective competition
2. Widespread purchases of unsuitable products	Consumer protection Effective competition
3. Confidence and participation threatened by market abuse or unreliable performance	Market integrity Consumer protection
4. Important consumer needs are not met due to gaps in the existing range of products or consumer exclusion	Effective competition Consumer protection
5. Risk of significant harmful side-effects on wider markets or the UK economy	Market integrity

Appendix 4 provides further detail on each of these dimensions of consumer harm and explains how they can capture a variety of common and more granular regulatory concerns.

Appendix 5 offers an illustration of the interactions between (some of) the types of harm that can arise in a market where market power and demand-side imperfections (behavioural or informational) exist together.

[15] As discussed in Chapter 2, however, some problems in markets are not within regulatory control, so we would ideally allocate resources to problems on the basis of expected payoffs, i.e. the net benefits forecast to be achieved by intervening—*not* just the size of the problem itself.

[16] See Box 1 for the wording of the FCA objectives.

It will often also be necessary for the analysis of harm to consider:

- how the scale and nature of harm are likely to evolve over time—for example, whether outcomes will continue to get worse due to increasing exploitation, constrained economic growth, or impeded desirable innovation that would otherwise have allowed the market to meet changing consumer needs;
- how significant are the differences in scale of harm experienced by different groups of consumers;
- whether harm falls disproportionately on consumers of particular regulatory interest, such as vulnerable consumer groups[17] or small and medium-sized enterprises (SMEs); and
- whether there are transfers between consumer groups, where some consumers are enjoying better outcomes than they would in a well-functioning market, but at the expense of others suffering losses. For example, whether there are savvy consumers who promptly switch at the end of teaser periods designed to exploit the inertia of the majority and thus get a better deal than would be possible if there were no teaser rates at all.

Step 5: Evaluate the rationale for intervening

The first question here is **whether an intervention is necessary**. An intervention may not be necessary if the poor outcomes are likely to correct themselves within an acceptable timeframe. Positive answers to the following questions suggest that an intervention may not be necessary:

- Did the problem arise only recently, such that competitive forces or learning by consumers have not had sufficient time to address it?
- Has there been recent or imminent regulatory intervention by the FCA or other authority in this market that may yet prove effective?
- Is there evidence of new entrants, business models, technologies being introduced, or other emerging trends that may materially improve how the market works?

The second question for any regulator is **whether it is appropriate to intervene**. Issues to be considered at this stage include:

- whether solving the problems would further the regulator's objectives;
- whether the problem would be best addressed by the regulator's powers or whether an intervention by another authority would be more effective or needed; and
- when promoting, say, a consumer protection objective, what degree of consumer protection and responsibility might be appropriate in a particular market.

Of course, these questions need to be considered even before beginning regulatory analysis on an issue in order to avoid wasting resources on irrelevant matters. Nonetheless, it is also important to take stock of them at the end of the diagnosis in light of the better information that has been gathered to reduce the risks of future regulatory failures, as, ultimately, regulatory interventions are only justified if they can improve on the outcomes achieved by market.

[17] In the FCA Occasional Paper 8, Coppack et al. (2015) offer an extensive overview of characteristics and circumstances can make consumers vulnerable and the regulatory issues related to protecting vulnerable consumers.

4 The process: designing effective interventions

4.1 Overview

Intervention design is rarely highlighted as an explicit stage in methodologies for regulatory analysis, which typically focus on problem diagnosis (market failure analysis) and on impact assessment (CBA) of the proposed interventions.

However, for regulation to be effective it is very important to ensure that the proposed remedies are targeted at the true causes of the problem and that efficient but unconventional ways of intervening are not overlooked. Because there are often multiple underlying causes of problems present at once, to improve market outcomes, it will often be necessary to introduce a package of regulatory measures that address different parts of the problem.

We have therefore included a separate intervention design stage in EFER to draw attention to these issues and create a structure for an open-minded exploration of different ways of intervening that are all firmly grounded in diagnosis. The steps of this stage of analysis are illustrated in Figure 6. Because choice of interventions is so context-specific, rather than proposing a detailed methodology in this chapter, we outline high-level prompts to consider issues and alternatives that can often be overlooked.

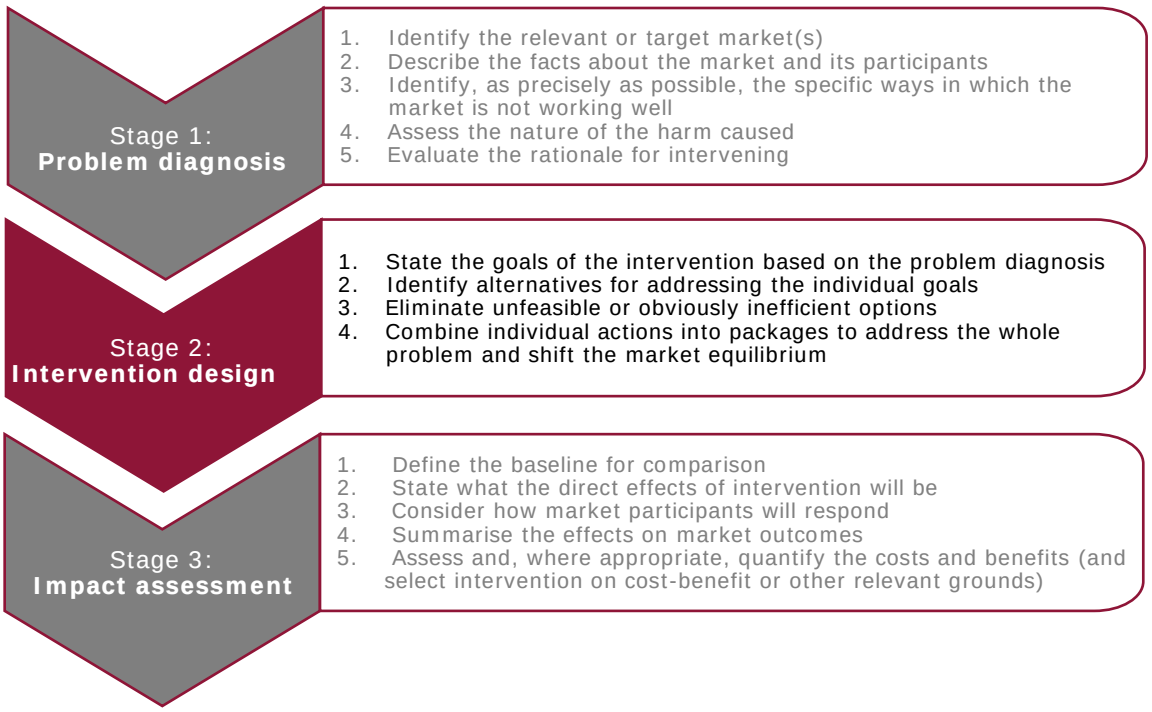
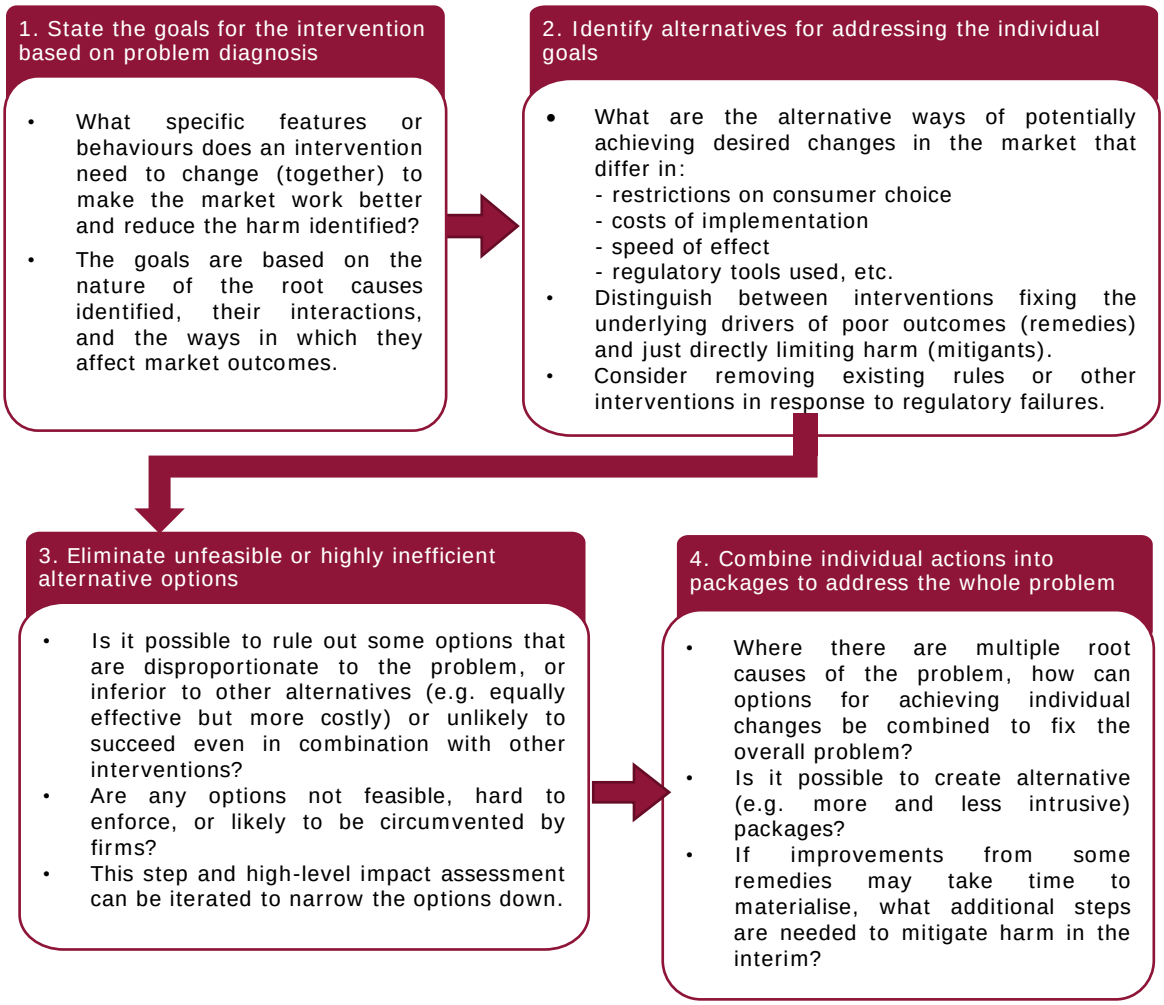


Figure 6: Steps for designing interventions



4.2 Designing interventions in practice

Step 1: State the goals of intervention based on problem diagnosis

Problem diagnosis reveals how the poor outcomes we seek to address have arisen. To make sure the development of intervention options draws on the results of the diagnosis and does not omit relevant factors, it is important to specify what imperfections (or their effects) the specific proposals seek to address and what specific changes in the providers' and/or consumers' behaviour they need to achieve. The underlying question here is: given what we know about how the market works, what specifically needs to change in the underlying conditions for the market to produce better outcomes? Where a goal of intervention is to achieve significant economic benefits, remedies under consideration should be clearly linked to the underlying imperfections and the nature of the harm(s) identified in the problem diagnosis.

Step 2: Identify alternatives for addressing the individual goals

Ways of addressing the problems diagnosed fall into two broad types: remedies and mitigants. Each of these have pros and cons.

Table 3: Two broad categories of interventions

Definition	Examples	Practical considerations
Remedies: aim to fix the underlying root causes of the problems by tackling market failure.	• Effective disclosure of latent conflicts of interest • Reducing barriers to entry • Simplifying product comparisons to lower search costs	• Preferred over mitigants, as they can address the root cause of the problem, but can be more expensive to identify, design and implement. • Some root causes may be difficult or not possible to address directly (e.g. imperfections that are 'facts of life', such as behavioural limitations on retail consumers' ability to assess complex products).
Mitigants: aim to mitigate or prevent symptoms of problems and/or directly contain detriment.	• Banning or constraining products • Price regulation • Supervisory action to limit exploitation of opportunities arising from weak or flawed competition	• Often simpler (e.g. banning a product) but have a higher risk of being ineffective in the long term or having unintended consequences (e.g. new products developed to circumvent ban and exploit the same bias). • Generally not very pro-competitive and more restrictive on innovation and the market evolving; in the long term, it would be ideal to remove mitigants to contain harm once remedies have altered behaviour. • The only way to improve outcomes arising from 'facts of life'.

At the early stages of remedy design, it is generally worth considering a range of both remedies and mitigants. Suitable interventions will vary according to the problem(s) identified, but the following general points can help identify alternative options:

- Looking at past policy interventions and best practice from similar cases in the FCA, the FSA, other UK regulators (OFT, CC, etc) and internationally, to the extent that markets and problems in them are similar.
- Considering the appropriateness of using different regulatory tools (e.g. rule-making, use of the FCA's Competition Act powers, improving supervision or enforcement of existing relevant regulatory requirements—this may be important because non-compliance in financial services appears to be common).
- When dealing with regulatory failures, exploring whether it is appropriate to deregulate—remove the existing ineffective or distortionary interventions rather than trying to fix their consequences with additional regulatory actions.
- Comparing measures that:
  - are more or less restrictive on consumer choice;
  - have different levels of restrictiveness and cost for providers (potentially including structural remedies such as divestments if appropriate);
  - constrain providers' ability to innovate (e.g. introduce new products or radically change distribution) to a different extent; and
  - include the 'do minimum' potential solutions for each identified market failure, i.e. the least restrictive regulatory action that could work.

Step 3: Eliminate unfeasible or highly inefficient alternative options

Selection of the appropriate (combination of) intervention(s) is a process of elimination. Some options might be rejected without significant further analysis. For example, if they may be legally or technologically unfeasible, too difficult to supervise or enforce effectively, present potential conflicts with other regulatory objectives, or be clearly disproportionate relative to the likely improvement.

Choosing among remaining options may require iterations between intervention design and high-level impact assessment. Some of the suggested considerations are outlined in Figure 6 above.

Step 4: Combine individual actions into packages

Often, different imperfections that together result in the market not working well require different, but complementary, interventions. As a result, after the non-viable approaches are eliminated, we may often need to combine the remaining options targeted at individual market imperfections into different packages of measures that would, in combination, be likely to tackle the problem as a whole. For very complex or uncertain problems in markets, it may sometimes be appropriate to compare more than one package of regulatory actions to the extent that time and resources allow this.

In order to design a package of measures that would work in an effective and efficient way, it may be helpful to consider the following:

- Combinations of measures that would jointly target all of the identified market failures and prevent poor outcomes from arising.
- The side effects that may be caused by the unaddressed market failures where there are no feasible remedies for some of the identified root causes (e.g. some types of consumer biases), and risk of other unintended consequences (e.g. creating perverse incentives).
- Potential duplication of effects across different measures that could mean some of them could be omitted without reducing effectiveness.
- The scope for responses from providers to circumvent the restrictions and the additional measures that can help prevent this.
- Any significant adverse impacts on consumers or competition that would not arise from measures in the package individually, but could result from their combination.
- The practical constraints imposed by existing EU regulation and other political considerations.

Before proceeding, we also need to check in a very preliminary way that, for each package, we have good grounds to think that:

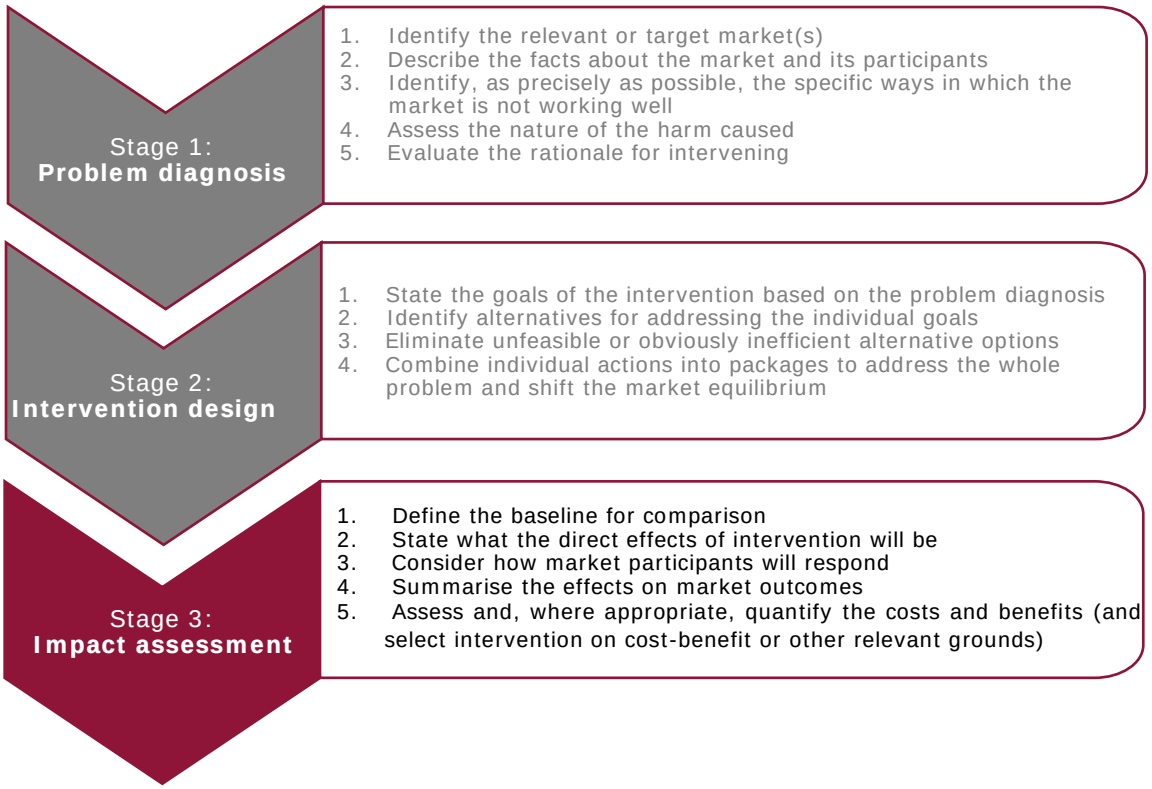
- it will be effective in reducing identified market and regulatory failures in a way that suitably mitigates risks to the FCA's objectives; and
- a high-level impact assessment (using the key elements of the process outlined in the next chapter) suggests its benefits (may well) outweigh its costs.

5 The process: assessing impacts of interventions

5.1 Outline of impact assessment

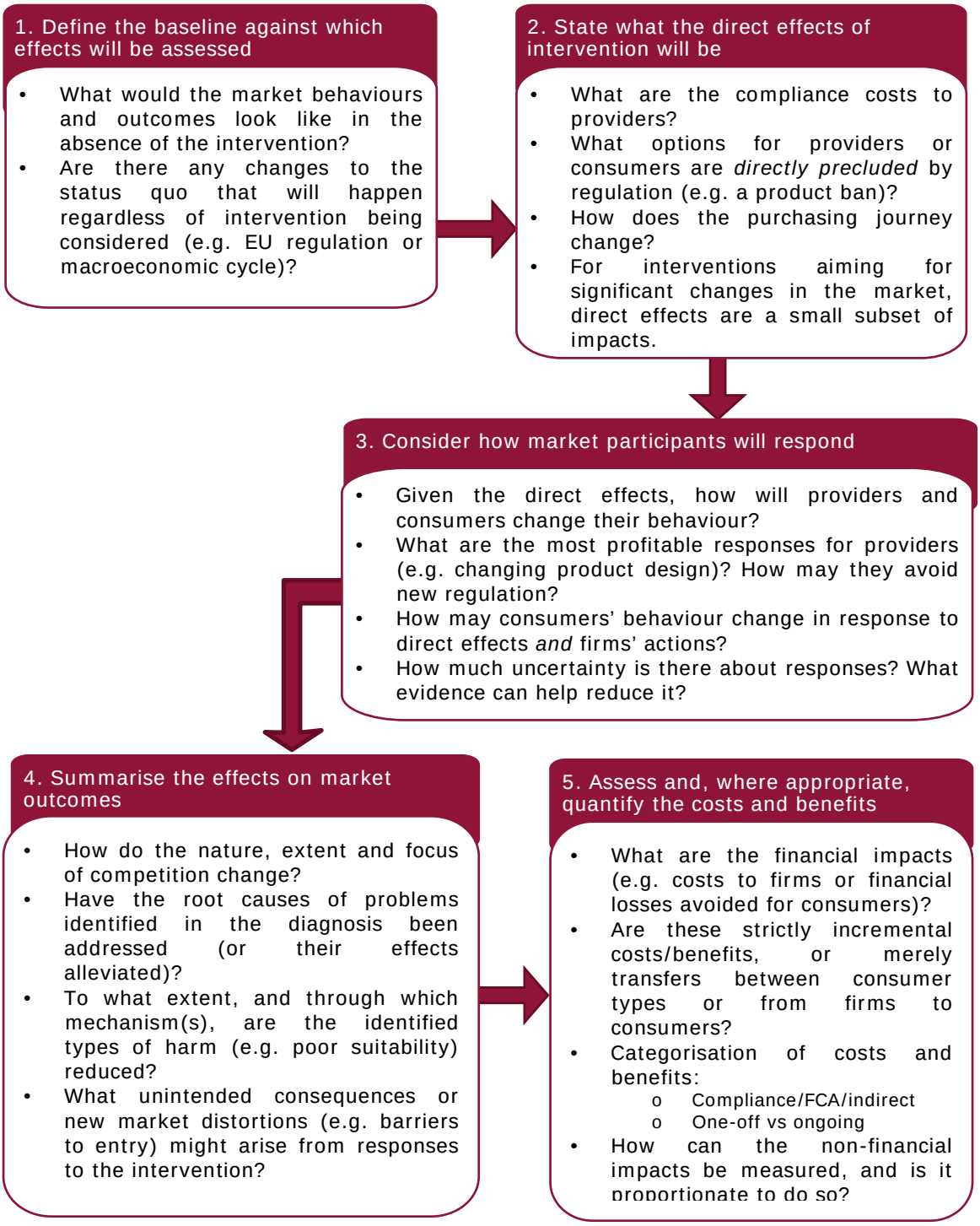
In practice, the early stages of the high-level impact assessment will run in parallel with narrowing down remedy options to form a view of how an intervention would change the way the market works and, therefore, its proportionality and effectiveness. Moreover, subject to certain exemptions, the FCA is required to publish a CBA when it consults on proposed rule changes. The CBA must contain an analysis and, where practicable, an estimate of the costs and benefits that 'will arise' if the rules are made (FSMA, 2012). The impact assessment is fleshed out further at this stage.

As before, Figure **7** outlines the general steps of this impact assessment process, which covers how the intervention would change behaviours and outcomes in the market, and ways of measuring these effects where practicable.



Clearly, regulators must meet their statutory requirements for CBA after allowing for any exemptions. Aside from this, the resources that regulators spend on impact assessment must be proportionate to the problem at stake, the costs of additional analysis, and the incremental improvement in certainty about the outcome of the intervention. Therefore, the detailed considerations described in this section are not a prescription for all CBAs that the FCA might undertake. Instead, they are a guide to issues that it may be useful to consider in an impact assessment that is designed to help decision making.

Figure 7: Steps for impact assessment



There exist many impact assessment guides that cover some of the elements of this analysis in a lot of depth.[18] Rather than aiming to provide an equally comprehensive introduction to a regular CBA, this section of the guide focuses primarily on the new elements of EFER (such as links between steps of regulatory analysis, considering dynamic interactions in markets, or dealing with uncertainty).

[18] For FSA guidance, see FSA (2000), Practical cost benefit analysis for Financial Regulators Version 1.1. and FSA (2006), A Guide to Market Failure Analysis and High Level Cost Benefit Analysis. Some of the other guides include: U.S. Office of Management and Budget (2011), Regulatory Impact Analysis: A Primer; HM Treasury (2011), The Green Book: Appraisal and Evaluation in Central Government; and European Commission (2015), Better Regulation "Toolbox".

5.2 Issues and challenges in practical impact assessment

Step 1: Define the baseline

The impact of different regulatory options can only be analysed against a well-defined baseline. Where the FCA is developing its own regulation, this is normally the present state of the market in the absence of the intervention. Thus, if 80% of firms presently do not use a particular reporting system, the cost of the FCA requiring this system to be used universally would be the cost of 80% of the providers currently operating in the market implementing and running that system (net of any proceeds from sales of existing systems or the value of the benefits of their redeployment).

Where an intervention is targeting a rapidly changing market or it is important to understand its effects (e.g. on lending) over the economic cycle, it may sometimes be more appropriate to use a dynamic counterfactual as a baseline. Such 'counterfactual' is a set of assumptions (or modelling predictions) about what would happen to the relevant market in the future without the regulation being considered.

The following principles are relevant for determining baselines when the FCA is implementing EU directives:

(i) When the FCA is implementing the minimum requirements in an EU directive, the baseline is still determined as described above.

(ii) Discretionary elements of implementation above the minimum directive requirements should be assessed against the baseline of the least costly way of implementing the directive (i.e. *additional* costs and benefits on top of (i)).

Step 2: State the direct effects on an intervention

An important distinction to avoid regulatory failures is between direct and indirect effects of an intervention. In practice, complex interventions rarely achieve their objectives through the direct changes they impose. Instead, they need to rely on the behaviour of market participants changing in response to the intervention to deliver the desired market outcomes. For example, after an effective ban on sales commission payments and other inducements from providers (a direct restriction), advisers' interests should become more aligned with consumers' interests; they should therefore be more likely to recommend the products that suit the clients' needs rather than those that offer the highest return to the adviser (indirect effects). This, in turn, can be expected to lead to lower harm from unsuitable purchases or excess prices paid by consumers. It is very important to understand the market mechanism that would actually deliver the intended benefits and assess what other indirect effects might undermine it.

To enable this analysis, however, we first need to understand the direct effects of the intervention before market participants respond to it. The two standard types of direct costs that always need to be assessed at this stage are as follows:

- **Compliance costs to market participants (e.g. retail product providers or wholesale broker dealers)**. What additional costs of running their business will market participants incur to start, and continue, complying with the new requirements? Will these costs weigh especially heavily on particular types of participants (e.g. smaller businesses)? Are the costs a one-off expense or an ongoing increase in costs of regulation? Compliance costs include changes required

to IT systems, staff training, hiring additional compliance staff, and consultancy expenses for, as an example, additional product testing.

- **Costs to the FCA.** New interventions normally involve additional costs for the FCA in regard to implementing the new requirements (e.g. introducing new reporting systems), and supervising and enforcing them on an ongoing basis (e.g. additional supervisory resource or training). These costs matter because they ultimately contribute to the industry's compliance costs through higher regulatory fees. Assessing costs to the FCA also helps us to understand whether the policy is feasible given the FCA's resource constraints.

Interventions can also have other direct effects by changing:

- **the range of options** or strategies available to consumers (e.g. directly restricting access to certain products for retail customers) or to providers (e.g. by mandating that advice on products in a market covers all available products); or
- **simplicity and cost for end consumers** of engaging in the market, making certain activities easier (e.g. by standardising disclosure to simplify product comparisons) or harder (e.g. mandating stricter identity checks for opening new current accounts that slow down switching).

Step 3: Consider how market participants will respond

The next step involves systematically analysing how the different market participants are likely to change their behaviour in response to the direct effects. What is the best available response to the new costs and restrictions for product providers (which could involve changing the product mix, trying to circumvent the regulation or even exiting the market if the new burdens are too high)? Do these effects differ materially across different provider groups in a way that might affect competition? The specific analysis of indirect effects is very context-specific. In Appendix 6, we provide a structured framework to guide the analysis of market responses.

Appendix 6 sets out the questions that guide the analysis from the direct effects of interventions to participants' likely responses to them and overall market impacts.

There are also some common indirect effects that can arise for many interventions, such as providers passing through their increased regulatory costs to consumers by raising prices. Table 4 summarises six of the most common or significant indirect effects, as it will often be useful in impact assessment to check whether these are likely to be relevant for the particular intervention under consideration.

Identifying that the intervention could result in significant unintended market responses—or, as specified, that it is likely to be circumvented—can also lead to revisiting intervention design to consider how the intervention could be altered to mitigate these effects (e.g. introducing lighter requirements for small firms or redefining scope of the remedy to make circumvention more difficult).

Step 4: Summarise the effects on market outcomes

Finally, an overall summary and assessment is made of how market participants' responses might change the market outcomes as a whole. As an intermediate step, it is useful to consider what would happen to the:

- **effectiveness of competition**—whether market participants are now better or worse equipped to exert genuine discipline on each other;

- **quantity of transactions**—depending on the market, the relevant measures could be the number of consumers in the market, the number of trades in a particular instrument, and the amounts of money involved;
- **quality of transactions**—for example, the suitability of purchases to the underlying objectives of customers, or simply the service quality and hassle involved;
- **variety of transactions**—the amount of choice on offer (which could be good or bad, depending on the circumstances);
- **prices paid**—important to consider, but the interpretation of the change (and dispersion) in prices depends on what happens with quality and quantity of transactions.

When an intervention is likely to change firms' incentives to innovate materially, it is important to recognise that the effects on any of these five factors in the long term can be much more significant than (or even different from) the initial impacts.

Table 4: Six common indirect effects of financial regulation

Indirect effect	How does the effect arise?
1. Providers pass compliance costs to consumers	Providers across the market increase product prices or reduce product quality to reduce the impact on profits of increased regulatory compliance costs. The pass-through of costs to end consumers is the standard assumption for most CBAs. *Example: increase product prices to reflect higher regulatory compliance costs.*
2. Providers get around the rules or minimise their impact	Providers seek to maintain profits by changing their products or sales practices to get around the rules or make the rules less effective at reducing consumer detriment. *Example: providers redesign product features so that the products are outside the scope of the new rules.*
3. Providers recoup the lost revenues from other product/service features or other business lines (waterbed effects)	In response to regulation that aims to reduce some costs to consumers or charges, providers increase other charges or prices of other products to retain the overall revenues. *Example: providers reduce unarranged overdraft charges on personal current accounts while increasing arranged overdraft charges.*
4. Consumers are empowered to choose a product/service that suits their needs, leading to more effective competition	Consumers may be more empowered to identify and purchase products that suit their needs, affecting competitive discipline that providers face in the market. *Example: providing consumers with more target information about whether their current product offers value for money encourages consumers to shop around and switch.*
5. Regulation makes it more or less difficult for smaller providers to compete (barriers to entry or expansion)	Costly compliance with regulation makes it more difficult for smaller providers to enter the market or offer good-value deals (e.g. because they are less able to absorb the regulatory fixed costs than the larger providers are).
6. Withdrawal of existing products/services, or stifling of innovation in the future	The costs or direct restrictions arising from the intervention, or even just from regulatory uncertainty, may discourage or prevent providers from supplying desirable products or services, or developing ones in the future, including those that reflect genuine changes in consumer preferences). (It is, of course, also possible that regulatory interventions—for instance, reduction of barriers to entry for firms with unusual business models—can stimulate innovation).

These changes are not costs and benefits by themselves, because whether they are desirable or efficient depends on the context of the market and the problems that exist there. For instance, larger quantities of transactions in unsuitable products is a very different outcome from the number of transactions increasing because lower prices attract more customers who genuinely value the product.

Instead, benefits of an intervention arise from addressing some of the harm identified at the problem diagnosis stage (by correcting market failures or mitigating their effects). Similarly, indirect costs arise where consumer harm along any of these dimensions is worsened (for at least some of the groups). Consequently, after assessing the plain facts about the expected changes in the characteristics of transactions and prices discussed above, it is important to identify how those changes would affect the nature and magnitude of the different types of harm:

(i) Prices significantly above efficient cost of production

(ii) Widespread purchases of unsuitable products

(iii) Confidence and participation threatened by market abuse or unreliable performance

(iv) Markets that could efficiently address gaps in current products meeting consumer needs are prevented from doing so

(v) Risk of significant harmful side effects on wider markets or the UK economy

The final stage (D) of Appendix 6 offers some questions that can be a starting point for thinking how the level of the different types of harm change as a result of intervention.

At this stage, it can also be important to understand whether the changes in outcomes are different for the different groups of market participants. For example, a cap to reduce unauthorised overdraft charges might lead to authorised overdraft charges rising to compensate for the overall cost of providing overdrafts. As a result, users of unauthorised facilities might pay less, but at the expense of frequent users of authorised overdrafts.

'Transfers' are a special case of these differential effects. They arise when some financial gains to one group of market participants are a flipside of an equal cost to another group (such as providers or consumers that use the product differently). Identifying transfers is important to ensure that impact assessment does not just focus on one of these dual effects and overstate true costs or benefits as a result. Box 5 provides a more detailed discussion of the kinds of transfers that may occur. It is also important because, in general, we might prefer to choose projects and remedies that produce outright benefits rather than transfers. Certainly, decision makers need to know which type of impact is likely.

It will often be important to consider whether the consumers on the two sides of the transfer differ substantially in their income levels (which may suggest different marginal utility of the same amount of money being transferred). The FCA has no mandate to identify and apply specific welfare weights to changes in income for different types of consumers. However, as a matter of established practice we take into account consumer vulnerability when comparing impacts on different types of consumers. Vulnerability is defined broadly to cover a variety of reasons for why consumers might be temporarily or permanently less empowered to pursue their interests effectively in the market: including, for example, low educational attainment or history of past problems in financial markets, or where wrong decisions may cause long-term and irreversible harm (e.g. escalating debt).

Box 5: Recognising transfers between different groups

We may find that some financial benefits to (some) consumers, such as lower prices for current product buyers, come directly from an equal financial cost to another group of market participants (usually either providers or a different type of consumer). Understanding these transfers is important for not overstating outright costs or benefits.

There are two broad categories of transfers that typically come up.

1. Transfers between providers and consumers occur, for example, when a provider undertakes a redress exercise or, less obviously, when an intervention strengthens competition, leading to lower prices but no (or a lesser) reduction in product quality. In this case, the supplier's loss of profit on the affected product equals the gain to consumers who had previously bought the product at inflated prices. Given the FCA's consumer protection and competition objectives, these transfers may still be desirable.

We note a frequent confusion, however. Some changes—such as a reduction in prices as a result of an improvement mentioned above—can give rise to transfers, but this is not their only effect. When prices become more reflective of efficient costs, for example, there is also an outright benefit because the overall allocation of resources (and hence efficiency) improves and the price fall may attract to the market new consumers, whose non-participation previously benefitted no one.

2. Transfers between consumers, in contrast, involve some consumers gaining financially at the expense of others. As a rule of thumb, such transfers arise when regulation changes (or creates) some form of a financial cross-subsidy between consumer groups. There are, broadly, two types of relevant cross-subsidies:

- Cross-subsidies across products. For example, if profitable add-ons allow suppliers to offer large discounts on the primary product, consumers who only buy the primary product are paying less than they would have done if both primary and add-on markets were working well (i.e. if there were no excess margins on add-ons), whereas those who buy the primary product and the add-ons are paying more. (This is the 'waterbed' situation described in Table 4.)
- A single product being used differently by different groups of consumers. For example, where less sophisticated consumers keep using a product after its teaser rate expires and prices increase, cross-subsidising the more sophisticated consumers, who switch promptly.

Not all cases in which regulation results in different outcomes for different consumer groups are transfers. One example is banning promotion of a complex investment product to retail customers in order to protect consumers who might buy it in error, even though a few more experienced investors currently legitimately buy and benefit from it. In this case, the less sophisticated consumers gain (from avoiding financial losses and stress) and the more sophisticated ones lose out (due to inconvenience and forgone investment income from having to switch to a second-best alternative). However, there is no fixed monetary amount moving from one group to another, and so the effects on the two consumer groups described above would be distinct costs and benefits, rather than a transfer.

Step 5: Assess and, where appropriate, quantify the costs and benefits

The final stage of the analysis involves taking stock of the impacts of the intervention and quantifying them, where it is feasible and proportionate.

The relevant impacts for CBA should already have been identified in previous steps:

- Changes in direct costs to providers and the FCA come from Step 2 (adjusted, if necessary, to reflect market responses such as providers exiting the market[19]).
- The indirect impacts on the market (and groups affected) come from Step 4.
- Where transfers are identified (see Box 6), both the cost and benefit sides in a transfer need to be explicitly identified and reported.

Assessing and measuring the direct impacts separately can be useful, especially where proportionality considerations do not allow an in-depth measurement of more complex indirect effects (or those are not likely to be significant). It is important to avoid double counting, however, such as adding the estimate of an increase in compliance costs (direct) and an increase in prices consumers will pay as a result of providers passing the costs on to consumers (indirect). The price increase will have the additional indirect effect of making some of the consumers who value the product below its new higher price leave the market. Collectively, these indirect impacts may be large, especially if the price change is non-trivial.

It may also be relevant to consider and record the time horizon over which the effects arise. The costs will sometime be immediate, but it may take a long time for the changes in consumer behaviour to materialise (in the case of an effective consumer education campaign, for instance) or a regulatory intervention can have long-term effects on lending and economic performance. When it comes to measuring impacts occurring over a long time, it is typically appropriate to discount costs and benefits that occur in the future.[20]

Having summarised the relevant effects, the impact assessment then needs to quantify them, where appropriate. The methods for quantifying direct impacts are relatively well established: [21]

- There exists extensive guidance on quantifying the direct compliance and regulatory costs. For example, the 2015 EU Better Regulation Toolbox offers several tools specifically for this purpose.
- Changes in the time costs of consumers participating in the market (the time it takes to complete the relevant regulatory paperwork, for example) are commonly quantified in terms of opportunity cost of time (average hourly earnings). Where customers are firms themselves, the tools from the compliance cost toolboxes are likely to be relevant for quantifying the inconvenience and delays.

The indirect effects, whether they are costs or benefits, are typically much more challenging to quantify. The underlying difficulty is that regulators are ideally looking for a common monetary denominator to compare the changes in the five different types of harm described above (which may also be changing, to a different extent and in different directions for different groups of market participants).

[19] For example, if compliance costs increase by £100k per firm (initial direct effect) and, as a result, the number of firms in the market is expected to fall from 100 to 80 (indirect effect), the final estimate of the total direct costs to firms for the CBA needs to be revised down to £8m (as long as other effects of firm exit are recognised elsewhere).

[20] See HM Treasury (2011), The Green Book: Appraisal and Evaluation in Central Government for the recommended HMT approach to discounting impacts over time.

[21] For more information, see: EC (2015), Tool #52: Methods to Assess Costs and Benefits (sections 1–7) and Tool #53: The Standard Cost Model for Estimating Administrative Costs and the FSA CBA Guide (2001), sections 5.222 and 5.223, for an explanation of opportunity costs.

Box 6: Using 'welfare' to (try to) quantify the indirect impacts of regulation

From the perspective of economic theory, the conceptually appropriate common denominator for quantifying the costs and benefits of regulatory interventions is total economic welfare.[22] This is defined as the sum of:

- consumer surplus (the difference between the amount the consumer pays and the maximum amount the consumer would be willing to pay for the product or services if they had full information and understanding); and
- producer surplus (the difference between the amount the producer receives and the minimum amount for which the producer would be willing to supply the product or services).

The sum of these also needs to be adjusted for any costs or benefits of the transaction to third parties. The valuation of changes in consumer surplus to different groups may also need to be adjusted by welfare weights—for example, to reflect the fact that public policy may be particularly sensitive to harm to low-income or vulnerable groups.[23]

However, this type of analysis requires understanding of (the correct) consumer demand and producer supply for products at all hypothetical prices, which regulators realistically do not have and have no practical means of obtaining in many circumstances. Gathering this information is further complicated in the presence of behavioural biases, which means that even observed choices or survey responses of market participants may not accurately reflect their true preferences and willingness to pay. It also requires an explicit and quantitative articulation of 'welfare weights' to be used for different affected groups, when defining and using these consistently in practice continues to be a major challenge for regulation.

As a result, regulatory CBAs, no matter who undertakes them, rarely, if ever, carry out a full welfare assessment as described above. In the light of this, we suggest that full welfare analysis may be better thought of as an analytical tool, like a perfectly efficient market, rather than a practical approach for quantifying impacts of regulation.[24]

Box 6 discusses economic welfare—the common denominator offered by economic theory—and the, often prohibitive, practical challenges that come with using it in practice. However, regulatory decision makers still have to make very difficult judgements about whether interventions are likely to be socially beneficial. Recognising this reality, we try to describe some more practical approaches to broadly estimating indirect impacts, bearing in mind that even those may be challenging to implement in some circumstances.

[22] See, for example, Just, Hueth and Schmitz (2005),

[23] Cowell and Gardiner (1999) provide a comprehensive discussion of the complex issues associated with choosing welfare weights.

[24] Recent debate about evaluating regulatory performance by leading public policy scholars also increasingly recognises the limitations of CBAs with full monetisation of impacts (see Baldwin, Cave and Lodge (2012)). Some proposed innovations instead involve using less rigorous quantification and focus on monitoring sets of criteria that are more directly linked to the objectives of the particular public body (e.g. 'balanced scorecard' by Kaplan (2001) or 'public value scorecard' by Moore (2003)). Similarly, Sparrow (2015) emphasises that standard performance indicators are insufficient and misleading, and argues for attention to be paid to, for example, compliance levels. While these approaches are alien to economists, they are considered by regulators to be very useful in general (Black and Baldwin, 2007).

Whatever type of harm they relate to, indirect impacts typically have both financial and non-financial elements. **Financial components** of these impacts tend to be more straightforward to quantify and can involve estimating changes in:

- amounts paid for the product (of given quality) by existing consumers in the market multiplied by the number of existing consumers (for excess price harm);
- financial losses from unsuitable product purchases (e.g. insurance products the buyer would never be able to claim on) multiplied by the probability of the loss;
- probability of a major market infrastructure disruption multiplied by the typical losses to market participants as a result of such event (for side effects); or
- probability of a financial crisis multiplied by the GDP loss if a crisis occurs (for side effects).

It is important to check, however, whether there is a commensurate and opposite financial impact on some other party in the market, as this quantification approach usually captures one side of the transfer rather than a genuine cost or benefit. For example, consumers losing less money by less frequently buying insurance that they cannot claim on may mean providers' profits fall as a result of lower sales of products on which they do not need to pay out.

There are many situations, however, where benefits of an intervention have substantial **non-financial components** as well. Examples include the following:

- **Welfare gains** from better quality and suitability of products (for a given price) or entry into the market of additional consumers who value the product above its real cost of production, but were previously deterred from participating by, for example, excess mark-ups, reduced market confidence, or regulatory barriers to accessing the market.
- **Psychological benefits** from avoided stress associated with unsuitable or unreliable products, or from unexpected poor service quality (such as threatening debt collection practices).
- **Time saved** through better quality transactions, avoiding the effort of seeking compensation or simpler shopping around (not just complying with regulation, which is covered under direct impacts).
- **Future welfare effects from changes in innovation** and dynamic competition (e.g. the prospect of greater quality for some consumer types or lower prices from reduced costs).

For some of these impacts, such as time costs, there are some well-established approaches and measures: for instance, using salaries to infer the value of forgone leisure to the individual or the more sophisticated estimated developed for transport policy.[25] However, as discussed above, non-financial effects are often difficult and costly to measure. In general, however, approaches for measuring non-financial impacts include the following:

- **Welfare analysis** (partial)—seeking to, at least partly, infer consumers' full willingness to pay for (or accept) the change in market outcomes through surveys or analysis of observed choices.
- **Well-being analysis**—using survey data on self-reported well-being to learn how changes in market outcomes as a result of regulation (such as a reduction in unaffordable borrowing) may affect consumer well-being directly. Again, behavioural biases may affect the reliability of the reports of well-being.

[25] See, for instance: Section 4 'Value of travel time savings' in Department of Transport (2014), User and Provider Impacts.

The presence of behavioural biases makes both of these types of analysis much more challenging because we can no longer rely on consumers' observed choices in the market necessarily revealing their preferences, and their survey responses (whether about valuation of market impacts or experienced well-being) might be sensitive to framing and other potential behavioural distortions.

The design of these complex approaches is highly context-specific, so we will not go into extensive detail about them here. It is worth bearing in mind that none of the methods discussed here directly deal with the issue of regulation potentially wanting to weigh changes in outcomes for different consumer groups differently. If relevant and material, this element of the analysis needs to be assessed separately (and, in general, qualitatively).

Appendix 7 provides a brief summary of the quantification approaches that are sometimes used for indirect impacts and the general pros and cons of each.

Often, it will, at best, be extremely challenging or disproportionate to provide a reliable monetary value for all or even many of the benefits and indirect costs, although it is of considerable practical value. It is also legally necessary for the FCA to do so, except where it is not possible or not reasonably practicable. Even in such cases, there may still be some less detailed forms of quantitative analysis that can be feasible and make a material difference to regulatory decisions. Below are some possible semi-quantitative approaches that are worth considering.

- **Quantifying impacts using non-monetary units.** For example, the analysis can discuss the number of consumers affected by a particular improvement arising from regulation (e.g. gaining access to the market) and provide only a qualitative indication of the welfare effects and how those compare to costs.
- **Break-even analysis.** If all relevant costs have been quantified, impact assessments may calculate by how much the estimate of the currently quantified costs exceeds the current quantitatively estimated benefits. This gives the minimum value of the unquantified benefits that is required for the intervention to be net beneficial overall. The analysis then also needs to discuss evidence for the likelihood of this threshold being exceeded.[26] This may be important for helping decision makers and demonstrating proportionality.

Regardless of the extent of quantification that is possible for a given impact assessment, there is typically considerable uncertainty about the estimates obtained in the analysis. Therefore, when carrying out an impact assessment, it is useful to explicitly consider the nature and extent of the uncertainty, consider its implications for the rationale for regulatory intervention, and provide robust justifications for the key assumptions used. Box 7 discusses in more detail regulatory uncertainty in impact assessment and mitigating its effects.

[26] Exactly the same logic applies in cases where all relevant benefits are quantified, but some major costs are unknown.

Box 7: Uncertainty in measuring impacts of interventions

Even where quantification is possible, it is rarely precise. In fact, uncertainty about impacts of regulatory interventions and their quantitative estimates in the financial sector has been grounds for an extensive legal and economic debate about the value of quantitative CBAs for regulatory analysis and accountability.[27]

It is important to be mindful of the impacts of this uncertainty in impact assessments in order to reduce the likelihood of unintended consequences. As always, what additional analysis is warranted to mitigate it depends on the circumstances. In general, it would only be proportionate to carry out additional analysis up to the point where it can realistically deliver additional and reliable knowledge that can materially inform the decision about the appropriate course of action. The ideas below suggest steps or further analysis that can be relevant.

- It is often more informative to consider ranges between lower and upper bounds on estimates for costs and benefits that can be obtained from the different sets of reasonable assumptions (or scenarios) justified by the available data, rather than striving for a spurious point estimate.
- It can be helpful to start an impact assessment with minimal assumptions beyond what is known from the data to see the (likely broad) ranges for costs and benefits that the intervention can be expected to have. If that answer is too wide to make a decision, the impact assessment can sequentially include additional assumptions (with clear justification why they are reasonable) until either the range narrows down to make it clear whether the intervention is proportionate, or it becomes clear that additional assumptions needed to make the case for the intervention are not sufficiently reasonable to proceed.[28]
- Where possible and proportionate, testing remedies in practice (for example, using a randomised controlled trial of new disclosure) can help alleviate uncertainty about the likely direct changes in consumer behaviour, even if it does not show how markets may, over time, respond to new regulation.
- The uncertainty that exists about the effects of regulatory interventions ex ante strengthens the case for more post-implementation reviews of regulations. Evaluating the impacts that the policy has had and comparing them to expectations also improves regulatory knowledge about what works in practice, which can then be drawn on in future cases that involve similar suspected problems or proposed remedies.

[27] For an up-to-date discussion of this issue, prompted by recent successful judicial reviews in the US, see Coates (2015), Sunstein (2014, 2015), and Posner and Weyl (2015). On balance, this discussion suggests that financial regulators are not unique in facing challenges in quantifying impacts of proposed regulations because of the complex chain of knock-on effects involved and the uncertainties about value of impacts on individual agents. In fact, some quantitative analysis of some areas of financial markets could be easier than in other policy areas, such as environmental regulation, given the availability of data and the objective (monetary) nature of at least some of the impacts (in contrast, for example, with environmental regulation). Both proponents and critics of CBAs in financial contexts, however, highlight that there are many areas where the mechanisms of impacts are often not well understood and the ranges of sizes of potential impacts are wide.

[28] This is the approach advocated by, for example, Manski (2011).

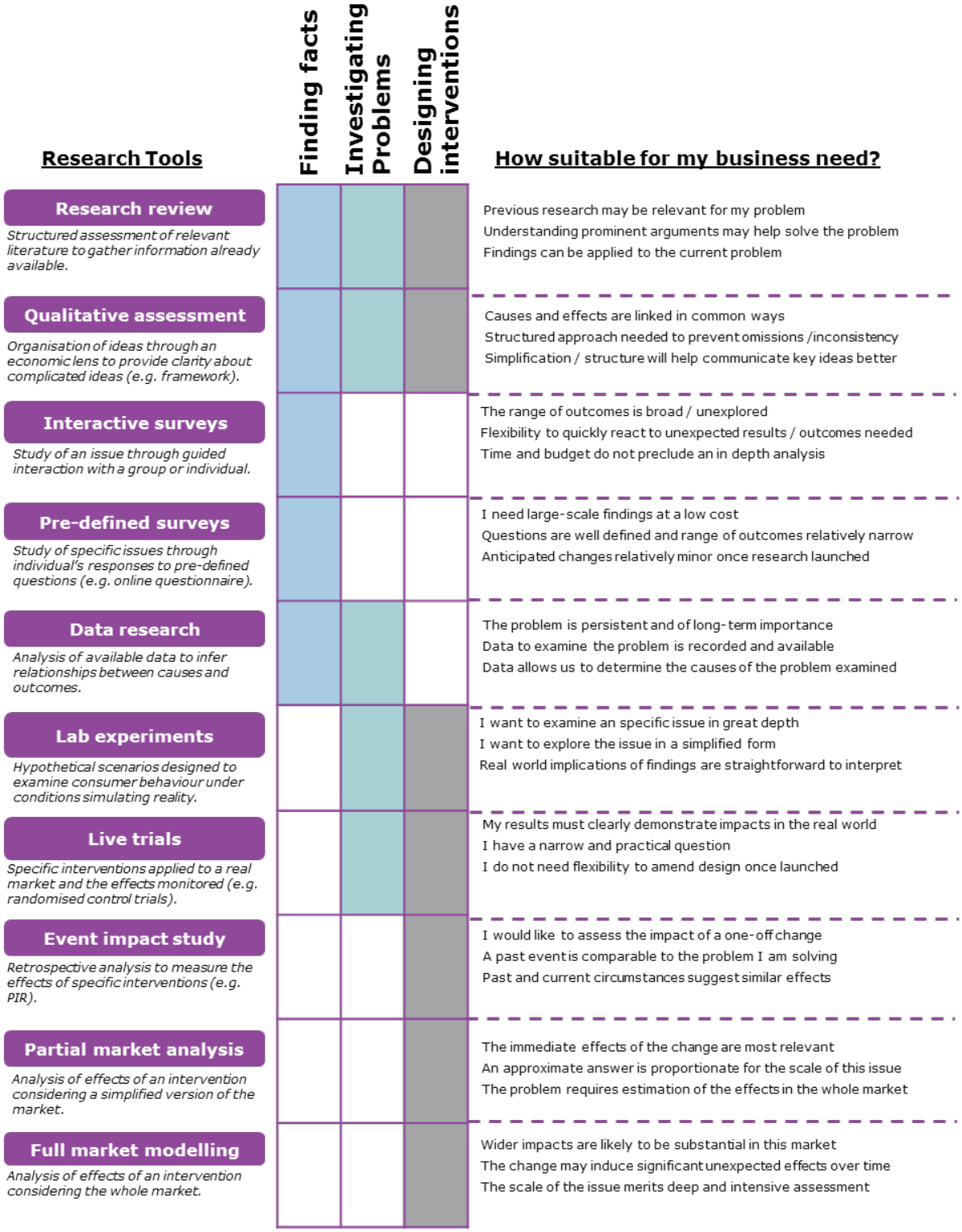
Appendix 1: Describing the market and its participants

Before analysing the drivers of harm (Tool 2), the regulatory assessment first needs to explain the most basic facts about the market and its participants, at present and in recent history. The assessment should cover the areas below.

Table 5: What to consider when describing the market

Focus on:	What to assess?
Products or services offered in the market	• Establish what products or services are viable alternatives (substitutes) for consumers. • Differences and similarities across products (quality, product features, price ranges). • What do providers compete on to gain business (prices, product quality, access to distribution, capturing the customer, branding that is not quality-related)? • What has recent innovation focused on?
Consumers in the market	• What consumer needs does the product or service satisfy? • What are the characteristics of the different groups of consumers purchasing the product or service (socio-demographic characteristics, financial literacy)? • Are there groups of consumers that have very different levels of sophistication or behave in different ways?
Providers in the market	• The number and types of providers in the market. • How are products or services distributed to consumers? Are there relationships between upstream and downstream firms? • How concentrated is the market (do a few providers dominate)? • Is there are lot of entry, expansion or exit, or is the market relatively static? • Are price-cost margins for any major providers within the market persistently high? How variable and correlated are margins or prices across different providers?
Regulatory context	• What is the legal and regulatory framework that affects how providers behave in the market (including the FCA, other regulators, European regulations and government interventions)? • If there are already some regulatory interventions that are relevant to the problem that motivated the current analysis, what are their effects? To what extent have they been enforced and/or complied with? What parts of the market do they cover?

Appendix 2: Information-gathering methods



Appendix 3: The 11 systematic drivers of poor market outcomes

As discussed in Chapter 3, to make the analysis of interactions in the market during problem diagnosis more tractable, it can be helpful to consider some systematic patterns of market activity through which (potentially different and multiple) imperfections can often manifest themselves and drive poor outcomes. The set of 11 such systematic drivers we have found useful in the past discussed below draws, in part, on common theories of harm used by competition authorities.[29]

Driver 1: Appropriate information about products is not available to, or not used by, consumers

Description:	For consumers to be able to search effectively, the key information about the product or service must be available and consumers must access it (or employ agents, e.g. advisers, to do so on their behalf). Different barriers can prevent consumers from accessing the relevant information, most importantly: • information may not exist (e.g. quality of credence goods like pensions); • information may be very difficult or costly to obtain (e.g. consumers need to pay a fee, information may be buried in small print); and • consumers may not access the information due to behavioural biases (e.g. consumers overestimate how difficult shopping around would be, procrastination, not paying attention to disclosures when presented with them).
Example:	In the cash savings market, many providers do not provide their existing consumers with easily accessible information about what interest rate they are earning on their account. When brokers execute trades on behalf of asset managers, it is very difficult to monitor whether they executed the trade at the best possible price, as it would require considerable data and analysis.
Questions to consider:	• What key relevant information about providers and products is and is not available to consumers? • Where information is available, do consumers access and use it in practice? If not, then why not (e.g. do they know they should be accessing the information)? • Are providers making it more difficult for consumers to access the information?
Common underlying imperfections:[30]	• Information asymmetries • Behavioural distortions

[29] See OFT (2010), What does behavioural economics mean for competition policy? and Competition Commission (2013), Guidelines for market investigations: their role, procedures, assessment and remedies.

[30] These lists are illustrative, but by no means exhaustive, lists of underlying imperfections that may manifest themselves as any given driver. For example, regulatory failure could, in principle, be associated with any of the 11 drivers. Furthermore, a combination of different imperfections of other market factors could also be at play. See section 2 for descriptions of these imperfections.

Driver 2. Consumers find it difficult to assess and compare the value of different products or services offered in the market

Description:	Barriers to understanding and comparing products can lead to consumers being unable to choose the product or service that suits their needs the best. Factors that can contribute to these barriers can either be: • rational (e.g. inherently complex products requiring a lot of effort to assess or compare properly); or • behavioural (e.g. consumers only noticing the salient elements of the total cost or making errors in predicting future product use). Providers can strategically amplify these barriers to reduce the competitive constraints they face by engaging in spurious pricing complexity or product proliferation.
Example:	Personal current accounts offered by different providers have different pricing structures and features that make it difficult for consumers to assess and compare which account offers the best deal, given their individual needs.
Questions to consider:	• Can consumers assess value for money provided by a particular product and compare products across markets? • Is information about different products in the market provided in a format that allows easy comparisons (e.g. standardised charges)? • Are providers engaging in practices that may make product assessment and comparison more difficult? • Are there any third parties in the market (e.g. advisers, price comparison websites) that can help consumers assess the information?
Common underlying imperfections:	• Behavioural distortions • Information asymmetries • Regulatory failure (e.g. non-comparable disclosure approaches)

Driver 3. Consumers do not take action that is suitable for their needs because of behavioural or rational inertia

Description:	Consumers sometimes fail to act in their own interests by, for example: • not shopping around for products, • not switching when better products are available, or • not using products as intended but rather sticking with the default option that is not appropriate for them. Explanations can be rational (e.g. switching is costly or time consuming and is not worth the gain) or behavioural (e.g. procrastination, inertia). Due to the lack of action by consumers, there may be little pressure on providers to improve the deals available in the market.
Examples:	Automatic insurance auto-renewals encourage consumers to stick to the insurance they already have and not to shop around. When firms decide to offer their shares to market for the first time, they may rely on the investment bank with whom they already have a relationship, thereby failing to get a better deal from somebody else.
Questions to consider:	• What is preventing consumers from taking action? Consider how easy/difficult would it be to take action. What would be the benefits? Do consumers' perceptions fit reality and could consumer biases be at play? • Do providers' practices impede or contribute to lack of consumer action (e.g. charging exit fees, using default product auto-renewals)?
Common underlying imperfections:	• Market power (rational barriers to switching, e.g. exit costs) • Behavioural distortions

Driver 4. Consumers make errors when assessing their own needs	
Description:	Some behavioural biases can lead consumers to misjudge their needs in ways they later regret and from which they suffer harm. For example: • **Present-bias** may lead consumers to focus on immediate benefits of a choice and pay insufficient attention to longer-term costs and consequences. • **Overconfidence** may lead consumers to be overconfident about their ability to predict their future product usage and therefore disregard some relevant costs and charges. Providers in a market may design products in ways that, intentionally or not, exploit consumers' misperceptions about their needs.
Examples:	When borrowing, consumers minimise the short-term cost of credit effectively, but do not pay attention to how their interest rates will increase later on because they have overconfident beliefs about paying off the loan by that point.
Questions to consider:	• What do consumers perceive their needs to be and how does this compare with reality? Are behavioural biases leading consumers to misjudge their needs? • Does the lack of understanding of needs affect what product or service information consumers choose to access and what they focus on when assessing it? • Do providers offer products or have practices that intentionally or unintentionally exploit consumers' lack of understanding of their needs?
Common underlying imperfections:	• Behavioural distortions

Driver 5. Unrecognised conflicts of interest between a provider and its clients	
Description:	Issues with conflicts of interest arise when a client (a 'principal') hires a firm (an 'agent') to carry out a task on his behalf, but the firm ends up acting in its own interests rather than the client's interests. The fact that a potential conflict of interest exists does not mean that it is necessarily a problem. When both sides of the transaction fully appreciate these conflicts, they can, for example, design contracts that align the incentives or specify how the conflicts will be dealt with. Conflicts of interest have the greatest scope to cause harm when the customer does not realise that the provider's incentives are not aligned with their own, and thereby does not adjust their behaviour (e.g. discount-biased advice) accordingly. Other exacerbating factors can include the provider not being practically constrained by its represented level of integrity, a fiduciary duty or a serious professional standard.
Examples:	Lack of consumer awareness and understanding of conflicts of interest is often an issue in intermediary markets (e.g. commission bias in financial advice targeted by the Retail Distribution Review). When brokers own and operate a 'dark pool', while at the same time executing orders on behalf of their clients, there are clear conflicts of interest that arise—not all of which can easily be monitored.
Questions to consider:	• Are providers hiding the potential conflicts of interest from consumers (e.g. commission payments)? If conflicts are not hidden, are they managed effectively by providers in practice? • Would consumers change their behaviour if they were aware of the hidden or mismanaged conflict of interest?
Common underlying imperfections:	• Information asymmetries • Behavioural distortions

Driver 6. Large providers in the market face little or no competitive discipline from rivals

Description:	A single firm or several providers acting independently can exercise market power—that is, set prices significantly in excess of costs for a persistent period of time and generally act without regard to other providers in the market. Alternatively, a firm may offer very good deals for a short period of time to push its smaller competitors out of business and then increase prices or lower quality once they are gone. Providers can often leverage market power from one product to another through tying and bundling.
Examples:	The large personal current account providers that also offer easy access savings accounts can use their market power to attract consumers to their easy access products despite offering lower interest rates. The market for financial data is dominated by a small number of providers that may use their market power to increase prices above the competitive level.
Questions to consider:	• What could be giving some providers the ability to maintain the high prices or sustain poor product/service offering? Factors to consider (other drivers) include: – consumer inertia (consumers find it difficult to shop around and switch); – other/new providers find it difficult to enter and expand in the market; – providers control access to some essential facilities or intellectual property rights; – point of sale advantage, cross-selling; or – nature of the product (e.g. network effects).
Common underlying imperfections:	• Market power

Driver 7. Barriers to entry and expansion arising from market structure or strategic conduct of providers

Description:	Barriers to entry and expansion make it more difficult for new providers to enter the market or existing providers to expand in the market. As a result, the incumbent providers in a market are less constrained by the threat of consumers going elsewhere in the event of prices rising or the quality of the product or service worsening. The main type of barriers include: • **Natural barriers** from the nature of production (e.g. economies of scale, large up-front investment required) or network effects (e.g. the more customers use the service, the more attractive it becomes to other consumers). • **Strategic actions of incumbent firms** to deter entry (e.g. making it costly for rivals to access essential facilities, predatory pricing). • **Consumer behaviour** (e.g. lack of shopping around and switching). • **Regulatory barriers** (e.g. regulatory requirements increasing the costs providers need to incur to operate in the market). This driver is closely related to market power (driver 6). For market power to persist, constraints from both existing competitors and potential entrants need to be absent or weak.
Examples:	High capital requirements and conduct standards can deter new providers from entering the market.

Questions to consider:	• Are there any barriers to entry or expansion in the market and what drives these barriers (e.g. consumer behaviour, regulation, strategic behaviour of competitors, features of the market)? • Do incumbents have strategic advantages that create barriers to entry or expansion, such as first-mover advantage or strong brands?
Common underlying imperfections:	• Market power • Regulatory failure

Driver 8. Providers coordinating activities in an anti-competitive way

Description:	Coordinated conduct between providers within one market (i.e. horizontal coordination) can allow them to soften competitive constraints from rivals and keep prices above competitive levels. Such conduct can include: • **Explicit** price-fixing or market-sharing agreements. • **Tacit collusion** where providers coordinate purely through repeated interaction and observing each other's strategies. Detecting anti-competitive coordination requires an in-depth competition investigation. However, several structural market features can make coordination more likely, such as: • stable and fairly simple product market, • high concentration, and • high transparency of competitors' prices or presence of certain arrangements (e.g. price-matching guarantees), which make it easier for competitors to monitor each other. *Note: some types of coordinated conduct can be in the interests of consumers (e.g. lenders pooling consumer credit risk data through credit reference agencies to improve underwriting standards).*
Examples:	An agreement between competing providers to keep the price of a product at a particular level (explicit coordination).
Questions to consider:	• Does the structure of the market and/or regulatory requirements to disclose certain information mean that providers can easily coordinate in keeping prices high (i.e. engage in tacit or explicit collusion)? • Are there patterns of market activity that indicate coordination (e.g. parallel pricing—main providers raise or lower prices at the same time or shortly after each other)?
Common underlying imperfections:	• Market power

Driver 9. Restrictive agreements or integration between firms at different levels of the supply chain

Description:	Sometimes, vertical relationships between firms at different levels of the supply chain can harm competition by reducing providers' incentives to compete or by allowing an incumbent firm to limit rivals' ability to enter or expand in the market. For example: • exclusive dealing or purchasing agreements; • a single provider controlling multiple levels of the supply chain (full integration); or • **tying** or **bundling** of products that help a provider to leverage its market power from one market to another one. *Note: sometimes, such vertical relationships can be beneficial for consumers and competition—for example, where it allows an upstream provider to distribute products more efficiently or address principal-agent issues.*
Examples:	A large annuity provider can agree with several pension providers that they will only be allowed to sell their consumers the annuities provided by this particular provider. Such agreements make it difficult for other annuity providers to access these consumers. A trading venue that is vertically integrated with a clearinghouse may have the ability to restrict competition for clearing services.
Questions to consider:	• Could the relationships between firms have a distorting effect on competition, such as disadvantaging or excluding competitors? • Is there a dominant player in one market who is a participant in different layers within the supply chain and could use its powerful position to disadvantage rivals or harm consumers in other parts of the supply chain?
Common underlying imperfections:	• Market power

Driver 10. Market participants act without considering side effects on markets or society (externalities)

Description:	In financial markets, decisions and choices of individual market participants can lead to 'externalities' or 'side effects' on other parties in the market or other markets that are not taken into account in the original decision. Underlying causes of such decisions can be: • **rational**, where individuals respond to their individual incentives (e.g. consumers underweight investment in service stability when choosing between market infrastructure providers because they do not bear all the costs if services are interrupted); or • **behavioural**, where biases can exacerbate the externalities (e.g. traders' emotional responses may cause herding in investment behaviour and result in volatile markets).
Examples:	A significant proportion of consumers taking out unaffordable mortgages and defaulting on them can create risks to the financial stability in the UK. Trading firms may lack pre-trade risk controls, which can result in trading activities that disrupt the functioning of markets.
Questions to consider:	• Are there any side effects of provider and/or consumer behaviour affecting other providers in the market, other markets, or the wider economy? • Do behaviours of individual providers or consumers create risks to market integrity or financial stability?
Common underlying imperfections	• Externalities • Behavioural distortions

Driver 11. Unintended consequences of regulatory or government interventions

Description:	Regulatory failures arise when a regulatory or government intervention distorts the market and leads to poor consumer outcomes, in addition to, or instead of, achieving the original aims of the intervention. For example, regulation can: • **increase barriers to entry or expansion** in a market (see driver 7); • **restrict access to a product or service** valued by consumers (see driver 4), leading to consumers switching to unregulated and more risky products or providers; • **change the nature of competition** in a way that is not in the interest of consumers (e.g. disclosure requirements creating false focal points for competition); • **stifle innovation**, particularly by discouraging providers from introducing new types of products in the market due to uncertainty about the potential regulatory treatment; or • **lead to providers exiting and the disappearance of a market** because of over-regulation.
Examples:	Poorly designed regulatory disclosure requirements may make it more difficult for consumers to assess products, leading to poor outcomes.
Questions to consider:	• Have the recent regulatory or government interventions had the desired effect? • Have the interventions led to providers changing their behaviours in ways that are detrimental to consumers (e.g. getting around the rules)?
Common underlying imperfections:	• Regulatory failure

Appendix 4: Assessing the five types of harm

This tool provides an overview of the types of harm that can arise when one or more of the drivers of harm (see Tool 2) are present in the market.

Nature of detriment	Description
1. Consumers pay significantly more than efficient costs	This category of harm captures cases where prices in a market are significantly in excess of efficient costs, i.e. the costs at which a product or service would be provided in a market that was working well. It is important to note the following: • Harm can arise even if **providers are not making excess profits** (for example, if providers are highly inefficient or there is no pressure on providers to keep the costs down). • Prices should be compared to the **efficient cost of meeting the needs that the consumer is trying to satisfy with the product**, rather than just the cost of supplying the product (for example, where consumers systematically choose a product that is more expensive when cheaper alternative products of different type(s) that meet the economic interests to the same extent are available. It may be that it is genuinely more costly to provide the more expensive product, so no excess profits are made). • Harm can arise where **not all prices are above cost** and/or **not all consumers are overpaying** (for example, where providers are competing on false focal points, such as headline prices, some prices may even be below competitive levels and lost profits could be offset by mark-ups on other less salient charges). *Questions to consider:* • *Are products in this market persistently priced significantly above the cost of production?* • *Is 'production' of the product or service likely to be highly inefficient (e.g. inflated expenses)?*

2. Widespread purchases of unsuitable products

This category of harm captures cases where consumers buy and/or use products or services that do not meet their needs for reasons other than excess prices.

It is important to note the following:

- There is usually a **misalignment between what the product or service does** (e.g. features, exclusions) and **the longer-term needs** of the consumer (for example, insurance that does not cover the circumstances the consumer expects it to cover, or an investment product that is more risky than the consumer expects it to be).
- Harm can arise not just from the **purchase** of the product, but also from how the consumer **uses it** (for example, over-borrowing on a credit card).

Questions to consider:

- *Are consumers buying products or services that clearly do not meet their needs (when there are better options available)?*
- *Does this lead to consumers getting no or little value from their products, or experiencing additional losses?*

3. Confidence and participation threatened by market abuse or unreliable performance

This category of harm captures cases where some groups of consumers do not want to, or cannot, participate in markets, and such participation would be beneficial to them.

It is important to note the following:

- This includes situations in which market participants who would otherwise engage in trades do not do so because cases of **individual misconduct** or ineffective competition in bilateral contracts lead to **concerns about market integrity.**
- Potential issues include '**race to the bottom**' on unobservable features of product quality that are not kept in check by competition but can undermine confidence.
- **Fraud**, **abuse** or **market manipulation** is relevant when it arises from systematic market drivers rather than ad-hoc decisions by individual providers that are not related to underlying market failures.

Questions to consider:

- *Do some consumers avoid participating in the market? Would they benefit from participating in a market that was working better?*
- *What is preventing consumers from participating in the market (e.g. perceived high risk of fraud, market abuse, confusing product design)?*

4. Markets that could efficiently address gaps in current products that meet consumer needs are prevented from doing so

This category of harm captures cases where valuable and economically viable products that would address consumer needs are not developed or markets cease to exist because of the presence of systematic drivers of poor outcomes (see Tool 2).

It is important to note the following:

- Cases include **excessive regulatory barriers/ requirements** that cause providers to stop supplying specific types of products that had served important consumer needs; or **markets failing to develop as consumers' needs change**, which may be due to regulatory requirements or lack of competitive pressures to meet consumer needs.
- **Consumers may be self-excluding** (e.g. consumers not seeking advice on debt that could be net beneficial, given cost).
- As far as economic detriment is concerned, this category **does not capture cases where consumers cannot buy products because they are too expensive for them** or do not end up with the best product all of the time.

Questions to consider:

- *Are products that address currently unmet consumer needs—and should, in principle, be commercially viable—prevented from developing?*
- *What is preventing providers from offering these products (e.g. regulatory requirements, weak competitive pressure or consumer misunderstanding)?*

5. Risk of significant harmful side effects on wider markets or the UK economy

This category of harm covers cases where activity in financial markets genuinely poses a threat to the wider economy or the stability of markets more widely.

It is important to note the following:

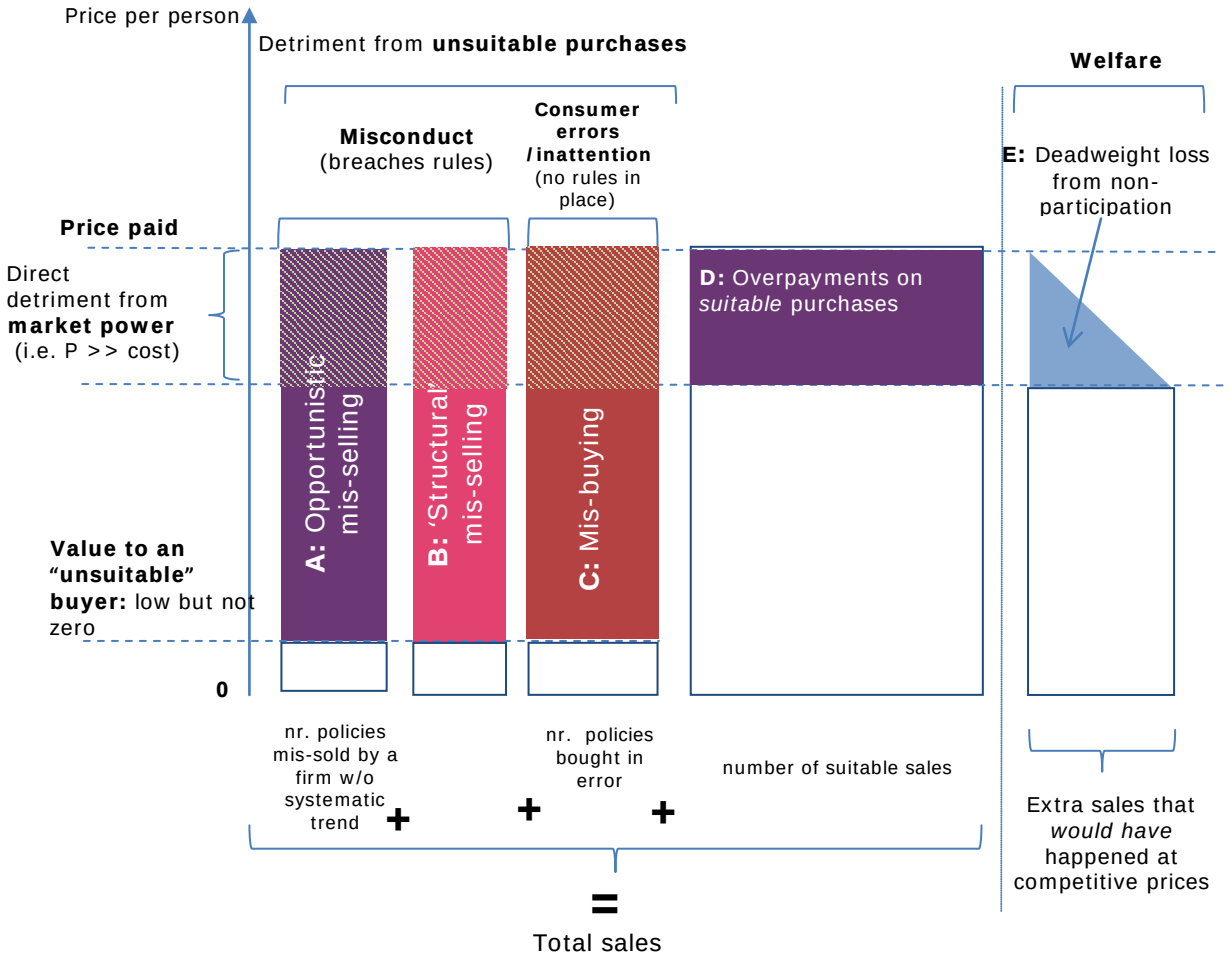
- This category primarily captures **potential sources of systemic risk**, and is therefore typically going to be relevant for large markets that are directly linked with the macroeconomic activity or are integral to financial stability (e.g. form central transmission mechanisms within the financial network).
- However, consumers' aggregate saving patterns (e.g. contribution into pension funds) can also have aggregate macroeconomic effects by changing the amount of funding in the economy and the timing of tax income to the state.

Questions to consider:

- *Does the activity of market participants potentially have a major negative consequence for other markets or the UK economy?*

Appendix 5: Types of harm: an illustration

The diagram below illustrates the potential different types of harm and their interactions in a hypothetical market with market power and additional imperfections (behavioural or informational) that leave some consumers unable to assess the value of the product correctly.



Ineffective competition directly causes detriment D + total overpayments from premium > cost on all other sales (i.e. the 'shaded' part of A, B and C), although the loss is offset by higher firm profits. It is often indirectly associated with detriments B and C. Excess profits create greater incentives to mis-sell, and weak demand-side discipline is often due to difficulties in assessing price and quality—i.e. there is a higher risk of consumer errors, whether or not driven by providers' breaches of rules (again, these overpayments lead to higher profits). Ineffective competition causes additional welfare loss (E) to consumers who would have (suitably) bought the product at competitive prices, but not at prevailing price.

Consumer protection would traditionally consider detriment categories A, B and C. However, only A can be reasonably tackled through firm-by-firm enforcement action alone without addressing the underlying market problems. Depending on the nature of misconduct, detriments A and B can also be relevant for **market integrity** and could prevent more consumers from participating in the market due to low confidence, which is not captured by E.

Appendix 6: Analysing the likely impacts of interventions on market outcomes

This tool helps you think through the potential direct and indirect impacts of the proposed remedies. These impacts arise at a market level when consumers and providers adjust their behaviour in response to regulatory interventions. These demand- and supply-side reactions need to be considered iteratively to understand the full effects of the intervention. The final element is bringing together the expected changes in how consumers and providers act into an overall picture of how the intervention changes the way in which the market works relative to the baseline of doing nothing.

(A) SUPPLY-SIDE REACTIONS: WHAT WILL PROVIDERS DO?

What actions would profit-seeking supply-side firms take in response to the direct effects of regulatory interventions and changes in consumer behaviour? [31]

- What is **the next most profitable thing for providers to do**?
- To what extent, and in what way, can the providers **pass through the increased compliance costs** to consumers through higher prices? Does this vary across different types of providers/costs? (The default assumption for impact assessments in competitive markets tends to be that the costs will be passed on to end consumers.)
- Will **new product types** or **business models** emerge or will existing ones become unavailable?
- Will some providers **exit the market** due to higher costs or changes in consumer behaviour?
- Could **new competitors enter** the market easily to respond to consumer demand?
- Would some providers emerge (or be strengthened) as crucially **important providers of services or market infrastructure** that are now less constrained in taking risks, raising prices, or reducing quality?
- Would the new market environment **facilitate some types of anti-competitive behaviour** (e.g. collusion, foreclosure of new entry)?
- Do **incentives to innovate** change?

Are there likely provider responses that would undermine the effectiveness of the interventions? If the intervention hurts profits, provider responses may include the following:

- **Regulatory arbitrage** (e.g. switching to activities that comply with the letter but not the spirit of the rule, redesigning products to be out of scope of new requirements, relocating business elsewhere).

[31] Behavioural biases affect all humans, not just consumers. When the regulation aims to change incentives of individuals in (especially small) firms, it may also be appropriate to ask whether it is realistic to assume that firms and their employees respond to rules in a fully rational way, and consider what the alternative responses might be.

- **Counteracting the effects of the intervention** (e.g. distracting consumer attention from new disclosure or making products more complex).
- **Not complying with the new requirement** if the threat of detection is low (e.g. it costs too much for the FCA to supervise and enforce the new rules).

Note: This step helps to identify how design and choice of interventions might be improved to anticipate providers' incentives to avoid regulatory constraints. Requirements need to be convincingly supervisable and enforceable; otherwise, little may change. Compliance incentives matter a great deal here.

(B) DEMAND SIDE REACTIONS: WHAT WILL CONSUMERS DO?

What would consumers do differently in response to provider behaviour or the direct effects of the policy?

- Would they **shop around more, or in a different way**?
- Would they **switch more, or to different providers**?
- **If some products become more costly or unavailable**, what would consumers do instead to meet their (real or perceived) needs?
- Will **new customers** be attracted to the market, or will **existing ones be put off**?

Note: Different consumers (e.g. more and less sophisticated) may react to interventions in different ways. Often, impact analysis will need to identify the main types of consumers and consider their respective responses separately.

(C) WHAT OVERALL CHANGES IN THE MARKET WILL OCCUR?

How will the nature of competition change, given changes in provider and consumer behaviour?

- Will **competition intensify**, and what will happen with **providers' profits?**
- What will **competition focus on** (e.g. price, quality, specific product features)?
- Will changes in how consumers shop around lead them to **buy some products more or less?**
- Will consumers be more able to choose products that will **suit their needs?**
- Will some consumers or providers be more or less able to **access the market?**

Will the market response to the intervention give rise to new failures? For example, will it:

- amplify behavioural biases;
- create externalities;
- strengthen unilateral market power or facilitate collusion;
- increase information asymmetries; or
- lead to consequences not intended by the regulator (i.e. regulatory failure)?

The problem diagnosis stage identified specific causes of the problems in the market. Have these root causes been removed or their effects alleviated?

(D) HOW WILL THESE CHANGES IMPACT ON THE FIVE TYPES OF HARM?

1. Excess prices given quality

- Would more effective competition drive providers to reduce costs of production to more efficient levels and pass on the benefits to consumers at lower prices?
- To what extent would the change in intensity and effectiveness of competition change the margins that providers can charge over their costs?
- If market prices fall due to the change in margins, to what extent would this attract new consumers who are currently priced out of the market?

Note: Where consumers buy the product before and after the price decrease, the difference between the initial price and the reduced one will be transferred from providers to consumers.

2. Unsuitable product purchases

- Will intervention lead to less frequent mis-selling by providers or mis-buying by consumers?
- How material are the financial and psychological losses avoided by the improvement in suitability of typical and worst-case scenario purchases?

Note: there is potential for double counting with the category above, in cases where consumers buying unsuitable products currently experience financial losses due to both low actual value of the product to them and providers' mark-ups over competitive prices.

3. Restricted participation due to low confidence

- How is the likelihood of unreliable performance of products and services in a particular market changed (e.g. infrastructure instability)?
- How is the frequency of illegal or abusive activities (e.g. fraud or market abuse) affected? Does the general quality of products and services sit above the level at which consumers would expect their needs to be met, so that they are willing to participate in the market?
- Given the effects above, how does the regulation change market confidence and, as a result, participation in the market (e.g. quantity of transactions)?

4. Missing markets

- How many current consumers of the product no longer participate in the market after increased costs to providers from regulation are passed on, at least in part, in the form of higher prices?
- Would some products that are suitable for some consumers be prevented from existing by regulation, or, instead, be more likely to emerge?

5. Risk of material side effects

- Will the volume of activity associated with the identified negative side effects on other markets materially increase/decrease as a result of regulation?
- Does the probability or size of the potential side effects change directly (e.g. costs of bank failure for the economy are lower)?

Appendix 7: Methods of (partly) quantifying indirect impacts

Approach	Approach and description
Financial impacts	Estimate direct financial impacts on different groups of consumers—for example, money gained by consumers from avoiding losses from the purchases of unsuitable or poor-quality products. Often adjusted for the probability of loss happening. There will typically be a commensurate and opposite effect on providers, so this method primarily helps to quantify one side of the transfer rather than incremental benefits. **Pros:** • Mostly simple to calculate and communicate. **Cons:** • Does not cover all the relevant benefits.
Welfare analysis	Estimate changes in consumers' welfare. This takes into account that individuals do not only benefit from financial gains, but also through their enjoyment of consumer surplus (i.e. the difference between their maximum willingness to pay for the product and what they pay). Approaches often use stated preference (consumer valuations identified though hypothetical surveys) or revealed preference (inferring valuation of certain features or outcomes from the observed consumer choices in the market). **Pros:** • Takes into account benefits of product improvements or more consumers being able to afford the product following price reduction (relevant to interventions aiming to promote effective competition). **Cons:** • Requires information on consumer willingness to pay (including for non-financial benefits) that may be difficult to obtain in practice, though it may be possible to arrive at high-level estimates.[32] • Usually complex to implement. • Not reliable when used in cases where the underlying consumer choices are driven by behavioural biases and where consumer choices might not represent what consumers truly prefer, unless further complex modifications are introduced. [33]

[32] For an example of the application of the approach in practice, see FCA CP14/29: Guaranteed Asset Protection insurance: a competition remedy and CP14/29 Technical Annex.

[33] Bernheim and Rangel (2007) propose one theoretical approach to welfare analysis in presence of biases. Although there have been some attempts to apply this methodology in academic research (most notably, Bernheim, Fradkin and Popov, 2011), at this stage the complexity of the proposed approach and the amount of information it requires appear to make ill-suited for regulatory practice.

Approach	Approach and description
Subjective well-being	Estimate impacts on standard, self-reported, well-being measures (e.g. how much happier are mortgage consumers who are not in arrears and by how much does the policy reduce the likelihood of being in arrears). To compare these self-reported well-being effects with other policy impacts, this approach calculates the increase in income that would be required for the consumer to achieve the same improvement in well-being. [34] **Pros:** • Useful when main impacts from a policy are non-financial rather than financial and could not be captured by the main approaches.[35] **Cons:** • Influenced by self-reporting errors or survey design; need to have (or create) surveys that contain the impact of interest (e.g. arrears) and well-being measures, so data may not be available for non-major financial products or issues.

[34] For an example with material behavioural factors, see: FSA CP11/31: Mortgage Market Review, p.76. More information about this analysis can be found in FCA Occasional Paper 11, Chapter 5.

[35] However, the very presence of non-financial effects does not necessarily mean they should be considered in a CBA, unless there is reason to believe the consumer did not make an informed choice to be exposed to them. For example, stress arising from investment losses is only an issue if the consumer did not know what level of risk to which they were being exposed. Someone who knowingly takes a gamble on the direction of the market and then suffers the consequences (including stress) if one of the worse potential investment returns occurs is unlikely to be suffering detriment relevant to regulation.

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