FINANCIAL CONDUCT AUTHORITY

How we analyse the costs and benefits of our policies

This is not the latest version. To find our latest Statement of Policy on cost benefit analyses, which provides the latest guidance on how we assess the costs and benefits of our policies, please visit Measuring our impact before we intervene.

February 2024

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Foreword

When it comes to policy, what we propose matters. But how it gets measured is also critical. Identifying what an intervention will cost, who will pay and who will benefit – and by how much – provides an empirical weighting that enables us to assess more clearly whether or not to proceed and what to prioritise.

We, and our predecessor, have used cost benefit analyses (CBA) since 2001. During that time, financial markets, products and services have changed significantly and so has our remit. We now regulate more, and more diverse firms than ever before. As markets evolve, CBA helps us make sure we are using our rule-making powers to tackle the biggest problems and deliver the greatest benefits in the most proportionate way.

We last published our approach to CBA in 2018. We think it is important to be clear about why, when and how we do CBA in developing policy interventions. This new publication gives an update, explains the core principles of our methodology, expands on how we estimate benefits and updates our Standardised Cost Model.

The Financial Services and Markets Act 2023 requires the FCA to establish an independent CBA Panel and prepare and publish a Statement of Policy in relation to CBA after consultation with the Panel. Later in 2024 we will establish the CBA Panel and consult them on the approach to CBA we set out in this document, along with the other elements that will eventually form our published Statement of Policy.

We undertake and commission research externally to continuously improve our CBA practices and methods. For example, in January 2021, we published research into the impact of debt on subjective wellbeing for potential use in CBA for FCA market interventions. Alongside this update of how we do CBA, we are also publishing external research, including on valuing consumers' time and will continue to do this especially in areas where estimation methods and evidence of impacts are developing. This ensures our CBA practitioners can draw on the latest and most relevant evidence and best practice methodologies when assessing the impact of our policies.

We intend to keep our approach to measuring impact up to date and evolving over time and welcome views from stakeholders at any point about the approach and techniques we use.

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Chief Economist

Chapter 1

Why we do cost benefit analysis

1.1 This chapter sets out what we mean by cost benefit analysis (CBA). It defines CBA as both a process of understanding the impacts of a policy proposal and the resulting document that is published alongside our consultations.

What we mean by cost benefit analysis

1.2 CBA is a structured way to assess the costs and benefits a policy is expected to generate. It describes and quantifies, as far as possible and proportionate, the likely impacts of a policy. It compares benefits against costs and shows who we expect will benefit and who will bear the costs.

1.3 Doing CBA allows us to judge whether a policy is consistent with our proportionality principle. This says that any cost we impose on a person, or on the carrying on of an activity should be proportionate to the benefits we expect as a result. CBA also tells us whether a policy would disproportionately affect any firms or groups in society, or market processes such as competition or innovation.

1.4 The process of undertaking CBA helps us better understand the impacts of our policy proposals and make better choices around when and how to intervene. This process delivers a CBA product that we publish in our consultation papers on policy proposals. In this framework, we use the terms 'carrying out CBA' or 'undertaking CBA' to refer to the process of CBA. When we use the terms 'a CBA' or 'the CBA' we mean the published CBA document.

1.5 Publishing a CBA, usually as part of a consultation on a policy proposal, makes the consultation exercise more meaningful because we are explicit about intended and potential unintended impacts. We are transparent with our stakeholders and the public about the impacts we expect on firms, consumers and markets.

1.6 We are legally required to publish a CBA of some regulatory proposals alongside a draft of our proposed rules, and if we make rules which we consider are significantly different from those consulted upon. We do not publish CBAs for other activities such as enforcement action or general supervisory activities.

1.7 Although we are not legally required to publish a CBA for general guidance, we may do so in some circumstances (see paragraph 2.7 and 2.8).

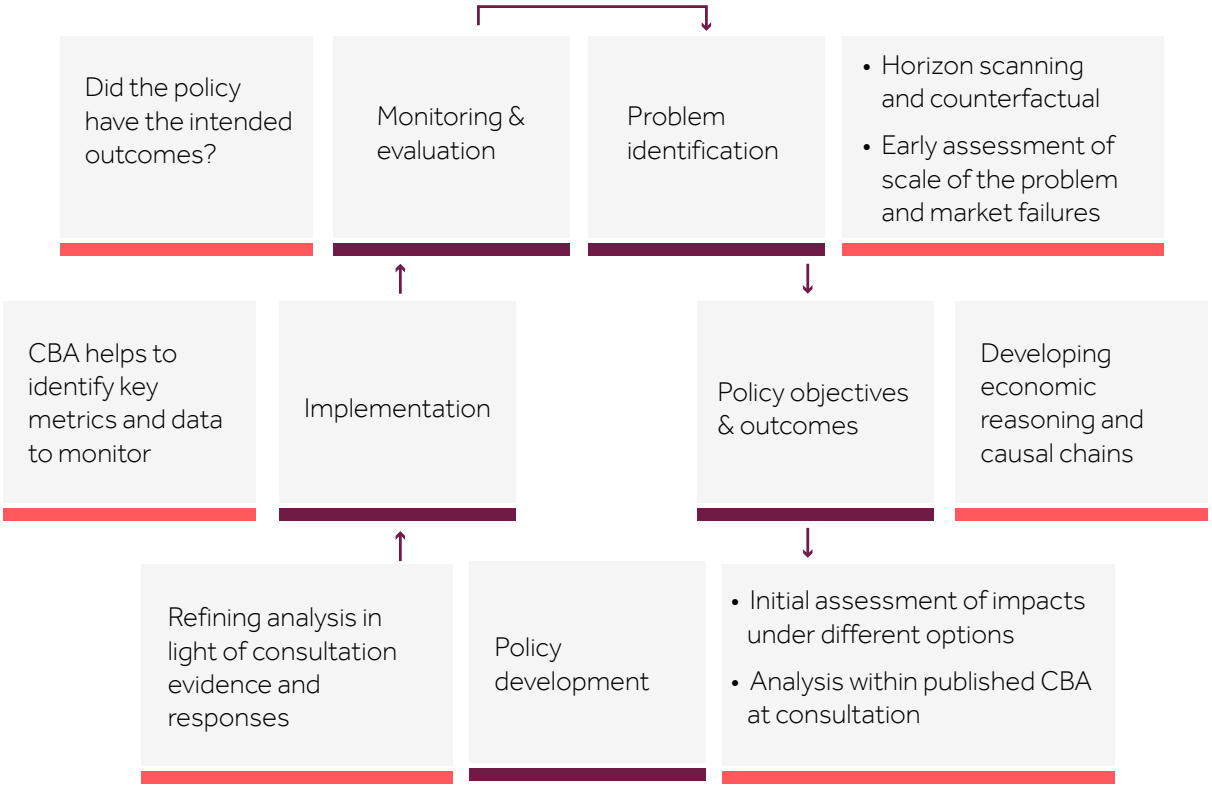
How we carry out cost benefit analysis during the policy-making cycle

1.8 Our process of carrying out CBA involves the following steps:

- we gather evidence to understand a market, identify where there is harm, its scale and whether the market could work better
- we determine whether a policy intervention is appropriate
- if it is, we assess our available policy options so we can select the preferred option
- we identify and estimate the costs and benefits of our preferred option
- we publish a consultation with the CBA and refine our estimates or methodology based on the relevant feedback and any new evidence

1.9 After this process and having considered all feedback on the consultation, we settle on and implement our policy, and monitor its effectiveness. We may also review a rule (see our Rule Review Framework). Depending on the findings of a review, we may consider whether we can clarify the rule, whether a more detailed review would be helpful or whether a change to the rule is needed (including varying or revoking the rule).

Figure 1: How CBA fits in our policy-making cycle



Chapter 2

When we do a cost benefit analysis

2.1 This chapter sets out our legal obligations to produce and publish a CBA alongside a consultation.

Our legal obligations on cost benefit analysis

2.2 The Financial Services and Markets Act (FSMA) specifies, subject to some exemptions, that before making any rules we must publish a draft of the proposed rules (s.138I of FSMA) and this must be accompanied by a cost benefit analysis.

2.3 This is defined as an analysis of the costs together with an analysis of the benefits that will occur if the proposed rules are made.

2.4 As well as providing a CBA, our consultation papers must also include an explanation of the purpose of the proposed rules, any statement prepared under s.138K(2) of FSMA about mutual societies, a compatibility statement about compliance with our objectives and regulatory principles, and notice that representations about the proposals may be made to us within a specified time (see s.138I(2) of FSMA).

2.5 If we believe rules being adopted are significantly different from those consulted on, FSMA also requires us to publish a CBA, together with details of the difference. In these cases, a cost benefit analysis means an analysis of costs together with analysis of the benefits that would occur from the rules which have been adopted.

2.6 FSMA does not require us to prove mathematically that benefits exceed costs. But we do need to have regard to the principle that a burden or restriction which is imposed should be proportionate to the benefits which are expected to result.

CBA and Guidance

2.7 FSMA requires us to provide a CBA for new rules but not for guidance (see s.139A of FSMA on power of the FCA to give guidance and s.139B of FSMA on the meaning of general guidance).

2.8 However, it is our policy to produce a CBA for general guidance about rules if a high-level assessment of the impact of the proposal identifies an element of novelty, which may be in effect prescriptive or prohibitive, that may result in significant costs being incurred. See for example CP22/18, 'Guidance on the trading venue perimeter'.

2.9 We do not produce a CBA if the detailed steps in the guidance are the kind of detailed steps firms would reasonably have to undertake to comply with the rule.

When we do not publish a cost benefit analysis

2.10 FSMA does not require us to publish a CBA with our consultation papers proposing new rules when we believe these rules will involve either no cost increase or where the increase will be of 'minimal significance' (compared to a scenario of no FCA intervention). There will also be no requirement to publish a CBA (or consultation paper) if we consider that the delay involved in doing so would harm consumers' interests.

2.11 The requirement to produce a CBA does not apply to certain types of rules, for example our fees rules.

2.12 The Treasury has a power to exempt us from consultation and CBA in limited circumstances involving the repeal of assimilated EU law, where we make rules replacing that law. We are required to make various explanatory statements if we use this exemption.

When we do not include an estimate of costs and benefits

2.13 The CBA needs to include an estimate of those costs and benefits unless, in our opinion, they cannot be reasonably estimated, or it is not reasonably practicable to produce an estimate (s138I(8) of FSMA).

2.14 In those cases, we must include a statement of our opinion and explain why no estimate of those specific costs or benefits is required.

Chapter 3

How we gather and use evidence

Why we collect data

3.1 Qualitative and quantitative data are critical components that inform our decision-making. We use data to identify harm and then in our analysis to identify the most effective intervention.

3.2 We can use data collected from a variety of stakeholders (such as businesses, intermediaries, distributors, trade associations, consumers, consumer groups, government agencies, and regulators), as well as our own data, past studies and analyses, to identify the scope and scale of harm in a particular market.

3.3 Data is also useful in generating descriptive statistics to provide a summary of the market where we are intervening. For example, the number of firms, turnover, number of consumers affected, type of products and how the market operates. We can then use this data in detailed analysis to assess the impacts of our intervention. See Chapter 6: Our approach to estimating impacts.

3.4 We also collect data to monitor our interventions in a systematic way, where feasible and proportionate. If the data suggests that there may be a problem with how the rule is working, we will consider a range of actions that we can take to address this, including undertaking a review. See Chapter 11: Monitoring and evaluation and our Rule Review Framework.

Our procedures around data collection

3.5 We need to collect data in line with best practice for data protection, data security and ethics. We also need to be proportionate in what we ask for.

Ethics

3.6 Our stated intention to become a data-led regulator requires us to use data in an ethical way. We will use our internal best practices for ethical data usage.

Proportionality

3.7 Better data can improve CBAs. However, data and information requests can sometimes be burdensome for firms. We aim to collect the right data in the right way and to be proportionate and reduce duplication in our requests, consistent with our proportionality principle and the principle that we need to use resources in the most efficient and economic way.

3.8 The level of detail in a CBA is influenced by the availability of evidence. The amount of evidence we seek to gather will in turn be influenced by the scale of impact we expect from the policy. We try to gather evidence as early as possible in the policy-making process. See Chapter 6: Our approach to estimating impacts.

Storing and disclosing information

3.9 We will store information securely and in line with our Data strategy.

3.10 We are subject to the Freedom of Information Act 2000 (FOIA). The requirement to disclose information under FOIA has an exemption where a statute prohibits disclosure of the relevant information. Our guide to the information we can share gives further information on how the FOIA applies to s348 FSMA (Restrictions on disclosure of confidential information).

3.11 We try to keep our collection of personal data to a minimum. We use anonymised data as far as possible and only ask for personal data where we believe it is necessary for the research exercise in question. Further information is available on how we collect this information and why we use personal data.

Types of data we collect

3.12 We may use qualitative or quantitative data from a range of sources to produce a CBA.

Qualitative

3.13 Qualitative data collection methods can help us understand the impacts of our interventions in more depth and provide meaning to quantitative data. Quantitative methods are typically used to measure the 'what', while qualitative methods are often used to explore the 'how' and 'why'.

3.14 Impacts that cannot be quantified should still be accounted for qualitatively in a CBA. We may describe the magnitude, range, and nature of the impact.

3.15 Qualitative data collection may include:

- semi-structured interviews
- questionnaires or surveys with open-ended questions and free text responses
- focus groups
- case studies
- observation

Quantitative

3.16 Quantitative data is a type of data that can be measured and counted. It is typically represented by numbers (non-monetary units such as the number of consumers affected by our intervention), and can also include monetised impacts (for example, the pound value of compliance cost on firms).

3.17 We collect quantitative data through a variety of methods, such as surveys, administrative data sources, experiments and observational studies. It can be further analysed using statistical techniques, such as descriptive statistics and modelling.

Sources of data we use

3.18 To produce a robust CBA, we need to tailor the evidence to the specific issue, market (or similar market), and policy under consideration. This may involve getting evidence from firms, consumers or other stakeholders. This can be time consuming and involves a resource cost to us as well as a burden to respondents. So we first look for existing sources of evidence that we can use.

3.19 Some of the sources of evidence we could use include:

- **Surveys:** We can design and send surveys to firms or consumers. We may do this to assess compliance costs to firms, but it can also cover other costs and benefits. Breaking down costs and benefits by constituent elements helps us compare responses from different firms and understand the assumptions they have made. We also survey consumers, for example see the Financial Lives survey below.
- **Standard cost sources:** To limit the burden to firms of replying to compliance cost surveys, we may instead use our standardised cost model if appropriate (see Appendix 1).
- **Previous publications, evaluations and horizon scanning:** Our existing research papers, reports and evaluations of previous policies offer valuable data and insights to inform our analysis. By using the knowledge from these sources, we can build upon previous research and strengthen our estimates.
- **Financial Lives survey:** Our Financial Lives survey provides comprehensive data on consumers' financial behaviours and circumstances. This source of information is particularly useful when assessing the scale of harm and the potential impacts of potential policies on consumers.
- **FCA and Practitioner Panel survey:** The FCA and Practitioner Panel survey is sent to a sample of regulated firms, to gather their feedback on how we are doing in regulating the industry. We use the survey results to get a better understanding of the issues affecting firms.
- **Supervision and market intelligence:** Our continuing oversight of firms and of individuals controlling firms can help us identify harm and potential harm to consumers and markets. Our internal regulatory data and previous data requests from relevant organisations help us understand trends and assess a variety of impacts.
- **Experiments:** Randomised Controlled Trials (RCTs) provide a helpful way to come up with a causal estimate of benefits. These trials can take the form of online 'lab' experiments or field trials. Online experiments offer reliable causal evidence about the likelihood and direction of policy effects. However, it is important to consider whether the experiment truly replicates real world effects. Field trials, which involve real firms and consumers making real-life decisions, provide a more accurate estimate of the potential magnitude of effects from implementing a policy, but have implementation challenges and costs. See our note on when and how we

use field trials and OP51, 'Using online experiments for behaviourally informed consumer policy' for further discussion, especially on external validity.

- **Other reputable sources:** Information gathered from UK and international sources, including research publications and data from reputable institutions such as the Office for National Statistics (ONS).
- **Paid sources:** We may pay private providers for their data or for bespoke data requirements, for example we may use financial data platforms such as Bloomberg or Refinitiv.
- **Research publications:** which may have relevant data sets we can use.
- **Synthetic data:** Synthetic data preserves the statistical properties of another dataset without the identifying information about specific individuals. It uses a mathematical model or algorithm to generate artificial data which replicates the statistical properties of real data. It can be useful in preserving individuals' privacy by allowing us to undertake analysis on data which contains the same patterns as real data but manages the risk of any individual being identified. It can also reduce the cost and time of data collection and data processing and allow us to manage ethical or practical constraints around getting data from certain groups.

How we manage the quality of our data

3.20 When we have collected data, we ensure the accuracy and reliability of our analysis through cleaning the data and ensuring its validity.

Data cleaning and processing

3.21 Even if the underlying collected data meets validity criteria, it may require some data cleaning for it to be usable (for example, removing duplicates or correcting data entry errors). Data is often messy and incomplete, which can make it difficult to extract or analyse the information we need. Processing data can help to provide context and meaning. We may need to clean and reshape our data to make it fit for purpose.

3.22 Some examples of this cleaning or processing includes:

a. Labelling data correctly and organising data in a structured and relational format.
b. Correcting or identifying outliers.
c. Ensuring consistency. For example, on data formats, units, time periods, etc.

How we manage outliers in the data

3.23 Before we use our data, we undertake data cleaning to identify and rectify errors and outliers that could skew the results. We ensure we record our data with consistent formatting and units to ensure effective comparison.

3.24 Outliers can be a problem because we often try to estimate mean or 'average' values in a population before scaling up to reach the impact across the population (see Chapter 7: Using assumptions in our cost benefit analysis). When our sample includes outliers - a small number of observations with significantly higher or lower values than the rest of the data - our estimates of the population mean can be distorted.

3.25 For example, where a firm reports an unusually high expected cost, we may check with the respondent to ensure they have understood the regulatory change and the reported costs are solely the result of the proposed intervention. We may consider the possibility that an unusual result may be valid but representative of a smaller subgroup and so adjust our sample stratification or weights.

3.26 Other methods we may use to manage outliers include:

- 'Winsorizing' the data, for instance by taking the value at the 90th percentile of the data and using that for any observation with a higher value and doing the same with values lower than the 10th percentile.
- Using the sample median rather than the sample mean to represent the 'average value' which we use to scale up to estimate the overall population effect. The sample median is less likely to be affected by outliers.
- Excluding outliers from the sample.

Representative sampling

3.27 Representative sampling is a statistical technique where a sample is selected from a population in a way that means the sample accurately reflects the characteristics of the population it is supposed to represent. This is important to avoid misleading or biased conclusions. When considering how representative a sample may be, we need to consider factors such as the source of the data, how it was collected, its relevance and timeliness.

3.28 For our interventions, we engage with firms early to gather their views and any evidence they may have. We aim to reach out to a diverse range of firms, including those of different sizes and structures. This helps us to get a full understanding of the population being looked at and ensure that our data is valid.

3.29 Where we have a sample that is not representative, we can use methods to reduce the bias from the unrepresentative sample such as weighting or post-stratification. This involves adjusting the weights of undersampled and oversampled subpopulations to make them more representative of the true population.

Chapter 4

Addressing harm and market failure

4.1 When we consult on policy proposals, our consultation paper will set out the problem we are trying to address and our rationale for the proposed intervention. The CBA will usually include a summary of these points to provide context around how we have defined and estimated the costs and benefits.

4.2 To understand the impacts of a proposal, we need to understand the problems it aims to tackle. Resolving a problem (or 'harm') in a market will deliver benefits to specific groups. But the intervention may create new costs for those groups or for others.

Types of harm

4.3 We set out the outcomes that we expect to see in markets and the way we measure them in our outcomes and metrics. When the outcomes we see in a market fall short of the outcomes we expect to see, there may be some harm in the market.

4.4 The **topline outcomes** we expect to see in the markets we regulate

- For **consumers**, we expect to see:
  - **Fair value** - consumers receive fair prices and quality
  - **Suitability and treatment** - consumers are sold suitable products and services and receive good treatment
  - **Confidence** - consumers have strong confidence and levels of participation in markets, in particular through (1) minimised harm when firms fail, and (2) minimised financial crime
  - **Access** - diverse consumer needs are met through (1) high operational resilience, and (2) low exclusion
- For **wholesale markets**, we expect to see:
  - **Fair value** - market participants are able to make well informed assessments of value and risks due to appropriate transparency
  - **Confidence** - markets are (1) resilient to firm failures, and (2) clean with low levels of market abuse, financial crime, and regulatory misconduct
  - **Access** - markets are orderly in a variety of conditions so that participants are able to access a diverse range of services with minimised operational disruptions

4.5 Table 1 sets out 5 broad categories of harm that would lead to outcomes in a market falling short of the topline outcomes we expect. Where we identify harm, we describe its extent and who is affected. For instance, where we consider that consumers are mis-sold financial products, we may set out the number and type of consumers affected. This gives us a reference point against which to define and measure benefits if our intervention resolves the harm.

Table 1: How our topline outcomes apply to types of harm

Type of harm	Topline outcomes
Prices too high or quality too low	Fair value
Buying unsuitable or mis-sold products; customer service/ treatment	Suitability and treatment
Important consumer needs are not met because of gaps in the existing range of products, consumer exclusion, lack of market resilience	Access
Confidence and participation threatened by unacceptable conduct such as market abuse, unreliable performance or by disorderly failure	Confidence
Risk of significant harmful side-effects on wider markets, the UK economy and wider society. For example, crime and terrorism	Confidence

Drivers of harm and market failures

4.6 When we have identified one or more types of harm that we want to address, we will usually set out the potential drivers (causes) of harm. We discuss specific drivers of harm in detail in OP13, 'Economics for Effective Regulation' (Appendix 3: The 11 systematic drivers of poor market outcomes).

4.7 The drivers of harm can generally be grouped within market failures that economics traditionally suggest are the main reasons to intervene in a market. Market failures are deviations from a situation where a market works effectively.

4.8 If the outcomes in a market are not in line with those we expect in our topline outcomes, there is usually one or more of the following features present:

- **Asymmetric information**, typically arising when consumers know less than suppliers about key characteristics of products and services, including principal-agent problems where a consumer cannot monitor whether an adviser they chose is acting in their interests.
- **Market power** curbing effective competition, which often results in poor quality and high prices.
- **Externalities**, where firms or other agents impose consequences on third parties that are not reflected in the price or other terms of a transaction (for example, excessive risk when one does not suffer all potential consequences).
- **Behavioural distortions**, where behavioural biases or capability limitations distort people's ability to participate in a market (see OP1, 'Applying behavioural economics at the Financial Conduct Authority').
- **Ineffective or outdated regulatory interventions** where existing rules prove ineffective or even harmful and we can improve market outcomes by removing or amending them.

4.9 In some cases where we have an existing regulatory framework in place, we may identify a way of achieving the same market outcomes through an approach which leads to lower costs to business and improves the medium to long-term competitiveness of the business environment. This is why we sometimes intervene to remove existing rules or alter them in a way that reduces the burden of complying with them.

Intervening to help particular subgroups

4.10 Sometimes harms can affect particular subgroups ('distributional' harms). A market may work generally well and deliver good outcomes for many participants, but deliver substandard outcomes for a particular subgroup of participants. We may intervene to improve outcomes for these subgroups, particularly when a harm is concentrated on consumers with characteristics of vulnerability (see FG21/1 'Guidance for firms on the fair treatment of vulnerable consumers'). Where an intervention is motivated by, or where the rationale for intervention includes concern about, distributional effects then we undertake distributional analysis (see Chapter 6: Our approach to estimating impacts).

Showing impact through a causal chain

4.11 To illustrate how our proposed intervention will lead to addressing the harm and drivers of harm, we will often include a causal chain. This sets out the logic of how an intervention is intended to work, by setting out the key steps (or causal links) between our intervention and the ultimate outcomes. If a policy is key to one of our strategic commitments, then we will align the outcomes in the CBA's causal chain to those commitment outcomes. For an example of a causal chain, see page 34 of CP23/13, 'Strengthening Protections for Borrowers in Financial Difficulty: Consumer Credit and Mortgages'.

4.12 The causal chain can help us:

- identify the key changes that need to happen for the proposal to be successful
- focus, for the quantitative analysis, on the outcomes that are likely to be most significantly impacted
- take decisions on the types of evidence-gathering needed for testing the likely effectiveness of an intervention

4.13 If, for example, achieving an outcome is based on consumers responding in a particular way, we can develop evidence (such as online experiments or large-scale field trials) so that we know with some degree of certainty what the consumer response is. See our note on when and how we use field trials and OP51, 'Using online experiments for behaviourally informed consumer policy' for further discussion on when we use randomised controlled trials to assess policy options, as well as our Occasional Paper and Research Note series for examples where such evidence has supported policy consultations.

4.14 Our causal chain can also help us to identify any key assumptions and uncertainties which we need to consider when carrying out analysis. It also gives clarity on where we expect impacts to be direct or indirect (see Chapter 5: How we identify impacts).

4.15 As explained in our Rule Review Framework, setting out causal chains in CBAs also helps us plan for how we will monitor and evaluate our rules.

Assessing the options

4.16 Before we decide on our proposed intervention, we assess a range of options that may be available to us to address the relevant harm and drivers of harm we are looking at. We usually discuss these in some detail in our consultation paper.

4.17 This is not a requirement for a CBA: the CBA which FSMA requires is an analysis only of the costs and benefit of the rules we are proposing. Although FSMA does not require a CBA of policy options we do not propose to take, assessing options is very much part of our policy development process. So, in our CBA, we may include a table summarising our options assessment to help explain why we preferred the proposed intervention.

Chapter 5

How we identify impacts

5.1 Before we can estimate and quantify the impacts, we identify the impacts that we expect from the intervention. For each impact, we consider:

- who is affected by the impacts
- the direction of the impacts (whether they are costs or benefits)
- whether the impacts are direct or indirect
- the timing of the impacts
- whether some impacts result from a transfer from one group to another

5.2 This chapter sets out how we identify the types of impact our proposals may have, how those impacts may be felt and how we deal with transfers between different groups.

The parties that are affected by our interventions

5.3 We consider impacts to all parties who could be affected by the proposal. This includes consumers and suppliers of products or services in the main affected market (or markets), and also parties who are involved in related markets. This could be because an intervention affects a product in a primary market which has spillover effects to a secondary market, such as for a complementary product. Alternatively, it could be because an intervention affects access to services such as banking, credit or insurance which are prerequisites for participation in another market.

5.4 Where relevant, we disaggregate groups if we have good reason to believe the impacts may not be uniform. Impacts on consumers may vary according to their income, location, level of engagement in a market or other personal characteristics. Impacts on firms may vary depending on firm size or business model. We discuss this further in Chapter 6: Our approach to estimating impacts. We also consider the effects to the wider economy (see Chapter 10: How we estimate wider economic impacts).

Impacts on consumers

5.5 We generally define a consumer as any natural person who is acting for purposes which are outside their trade or profession. However, when making policy in wholesale markets we will consider impacts on different types of market participants, such as buy-side and sell-side participants.

5.6 Impacts (which can be positive or negative) to consumers from financial regulation may include:

- the price, quality and range of products and services available
- the level and ease of access to financial services, including the amount and clarity of information available to make informed choices
- the level of protection from fraud or being exposed to misleading treatment
- impacts on consumers' wellbeing

Impacts on firms

5.7 We usually outline the number and types of persons, entities and firms affected by our interventions. These are usually FCA regulated firms but may include others if they are also affected. Where practicable, we will also consider different categories of persons. For example, where institutional investors are acting on behalf of consumers investing as individuals, we try to separate where possible impacts on institutional investors from those which will be passed through to consumers who are individuals.

5.8 Impacts (which can be positive or negative in direction) to firms from financial regulation include:

- the cost of compliance with regulations, sometimes described as 'the regulatory burden'
- the ease and ability of new firms to enter or bring new products to a market
- the competitive conditions of the market in which they trade, and the ability for them to compete fairly
- the level of confidence and trust which consumers have in the products or services the firm supplies, and the ability of a firm to signal the quality of its products or services to consumers
- the resilience and security of the markets in which the firm trades, for instance the ability of the sector to withstand shocks, volatility or operational disruption

Impacts on financial markets

5.9 Impacts (which can be positive or negative) to financial markets from financial regulation may include:

- the market's stability
- the level of systemic risk
- the amount of liquidity available
- the efficiency of the market, for instance the amount of information available to support price discovery and the costs of undertaking transactions
- the ability to spread innovations through a market

Impacts on the wider economy or society

5.10 Our financial services regulation can affect parties outside the markets we regulate. Impacts (which can be positive or negative) to the wider economy may include:

- factors which affect the dynamism of the wider business environment, such as the cost of capital, level of access to credit, ability to invest and diversify and manage risk in an investment portfolio
- the competitive position of the UK economy relative to other countries, and its attractiveness to inward investment, incentives for and ease of spread of innovation, and ability to export financial services
- the level of economic growth in the UK

5.11 We have a secondary objective to consider the effect of our policies on international competitiveness and medium to long-term growth. Where relevant, our CBAs include an assessment of how our proposed itervention would affect this secondary objective (see Appendix 6).

The categories of impacts our interventions may have

5.12 When we describe the costs and benefits of an intervention, we distinguish between impacts that occur directly as a result of the intervention, and impacts that occur indirectly due to the way consumers or firms respond. These are sometimes described as 'first round' and 'second round' effects. The causal chain can help identify them.

5.13 This distinction is important because indirect impacts involve more assumptions and so their estimates are more uncertain (see Chapter 6: Our approach to estimating impacts).

Direct impacts

5.14 Direct impacts are unavoidable. Compliance costs to firms are usually direct because firms must meet them to remain compliant with our rules. If a loss of revenues for business is due to a rule that bans or restricts business activity (such as by controlling prices) these are likely to be direct costs. Increased business revenues due to an intervention which liberalises business activity - such as by removing previous restrictions on entering or providing certain products in a market - are likely to be direct benefits.

5.15 Direct impacts are likely to happen immediately or soon after the intervention is made, and there should not be many steps in the causal chain between intervention and effect.

5.16 Direct impacts generally take effect in the same market that is subject to the intervention. Impacts that take effect in separate markets are often spillovers that rely on some kind of behavioural response to take effect (see indirect impacts below).

Indirect impacts

5.17 Indirect impacts depend on the way in which consumers and firms respond. This is a key factor which distinguishes them from direct impacts which take place regardless of any response from market participants.

5.18 Firms may respond to an intervention by changing the type of products or services they offer, or by passing compliance costs through to consumers via higher prices. In some cases firms may enter or exit a market due to a policy intervention. Consumers may respond by changing the type of products or services they use, such as switching between bank accounts or insurance providers.

5.19 As a result of these responses, there may be changes to a market equilibrium, in other words the market price and the quantity of products or services may change. This can lead to costs and benefits to different parties. When a market price falls, consumers will benefit but firms may incur costs of reduced revenues or profits. These are indirect impacts. We summarised a number of potential responses from firms and consumers and their potential effects in Appendix 6 of OP13, 'Economics for Effective Regulation'.

5.20 To assess indirect impacts, we may need to make some assumptions about how firms or consumers will respond. This means we must take into account additional uncertainty in our estimates (see Chapter 6: Our approach to estimating impacts). Where we are not able to quantify indirect impacts, where possible we describe their likely scale and who will be affected.

5.21 Where impacts take place in a different market from that targeted by the intervention, they are likely to be indirect, because there is likely to be some behavioural response involved before they can take effect. This can happen when different markets are closely related, such as when an intervention affects a particular product linked to other products that are substitutes or complements. The effect on the market for substitute or complement products will depend on how much consumers and firms respond to changes in price or availability of the product subject to intervention, by adjusting patterns of demand or supply.

5.22 Where a causal chain shows that an effect requires several steps in the chain from the original intervention, the impacts are likely to be indirect.

5.23 Distinguishing between direct and indirect impacts can be difficult and involves some judgements on a case-by-case basis. We make appropriate use of existing literature on this issue, such as BEIS/RPC (2015),'Evaluating costs and benefits for regulatory purposes: Direct and Indirect impacts of regulation on business' and RPC (2019), 'Business Impact Target specific issues: direct versus indirect impacts'.

Box 1: Examples of direct and indirect effects

Example 1

A new rule requires firms to give consumers additional information on products and services. Firms face direct costs of familiarising their staff with the new regulations and undertaking business change processes to comply with the new requirements. These are likely to be 'transitional' costs which are incurred at the time or shortly after the rule is introduced.

Firms may also face ongoing direct costs of preparing the additional information and ensuring they make it available to consumers.

The additional information makes it easier for consumers to compare between options in a market and switch to lower priced options that offer better value. These are indirect benefits to consumers.

The firms who provide better value products start to take a bigger share of the market. Their rival firms respond by reducing the price of their products. The market price falls due to this competitive process. As the market price is lower, some firms find their profits reduce compared to those they made before the new rule. These are indirect costs to firms.

Consumers now face lower prices than before. These are indirect benefits to consumers.

The new rule did not require firms to reduce prices – this happened due to the way consumers responded to the new information, and the way firms responded to consumers' behaviour.

Example 2

A new rule imposes a price control on a particular product. Firms face direct costs of familiarising staff with the new regulations and undertaking business change processes to comply with the new requirements.

This time the fall in price is driven by the introduction of the price control. The reduced profits to firms from the lower price are direct costs to firms, and the benefits to consumers from lower prices are direct benefits.

Example 3

A new rule prohibits a particular business practice as it has been found to be causing harm to consumers. Firms face direct costs of familiarising staff with the new regulations and those that had previously used the prohibited business practices also have to undertake business change processes to comply with the new requirements.

In this example, the lost profits to the firms which previously used the prohibited business practices are direct costs. The benefits to consumers in terms of the reduction in harm (such as from no longer being overcharged for products due to the now prohibited business practice) are direct benefits.

In this case, the impacts are direct as they were unavoidable – the business practice was prohibited directly by the rule.

Table 2: Examples of direct and indirect costs and benefits (not exhaustive)

	Consumers	Firms
Direct cost	Regulation requires more information to be collected from consumers (for example, as part of a mortgage application)	Costs of compliance Reduced revenues due to price cap
Direct benefit	Lower prices due to price cap	Deregulatory measures simplifying or removing compliance requirements
Indirect cost	Compliance costs passed through to consumers in higher prices	Reduced revenues due to consumers switching in response to additional information causing fall in market price
Indirect benefit	Lower prices due to consumers switching in response to additional information causing fall in market price	Regulation improves trust and confidence in financial markets leading to increased market transactions and greater revenues

Timing of impacts

5.24 We often set out when we expect impacts to occur in the context of an appraisal period of 10 years starting from the point the rule is introduced (see Chapter 7: Using assumptions in our cost benefit analysis).

5.25 Where impacts are only expected to occur within a single year, we describe these as 'one-off' impacts. These may include transitional costs incurred by business following the announcement of a rule change. For example, familiarising staff with the new rules or investing in new capital resources such as new IT equipment or software.

5.26 Where impacts are likely to recur in future years, we describe these as 'ongoing' impacts. These may include ongoing compliance costs such as firms being required to provide additional information to consumers. Where we expect a rule change to lead to a fall in the market price which would be persistent (holding other market conditions constant) we count the benefits to consumers as ongoing.

Transfers of impacts

5.27 Sometimes interventions result in a transfer of economic value from one group to another, such as when an intervention leads to lower prices for consumers with a corresponding reduction in profits for firms.

5.28 These may be hidden in figures presenting aggregate impacts, as the gain to one party typically offsets the loss to another. We therefore highlight where transfers have taken place to be transparent about how the effects fall across different parties.

Transfers between firms

5.29 Interventions aiming to improve conduct can create transfers between firms, because they remove the advantage 'bad' firms may have previously held over 'good' firms through profiting from harmful conduct.

5.30 Price interventions typically benefit more efficient firms, while less efficient firms exit the market. Pro-competition interventions also cause transfers among firms, as the ones providing better value for money increase their profits and low-value providers lose out, leading to ambiguous aggregate impacts on firms in the short-term.

5.31 In the long-term, the aggregate impacts on firms and the economy from competition are generally positive, as efficiency and productivity increase. We will normally flag the possibility of this redistribution within the industry affected, without estimating its extent as this is usually not possible to quantify.

Transfers between consumers

5.32 Some consumers may gain financially at the expense of other consumers. This may happen where consumers face different costs in accessing the same product.

5.33 For example, firms may 'segment' a market into 'engaged' consumers who are more active in searching and comparing options in a market, and 'less engaged' consumers who are more likely to stay loyal to their existing provider. In the case of a market which involves repeat or subscription-based sales, firms may attempt to win 'engaged' customers from their rivals by offering cheaper deals to new customers. At the same time, they may increase the price for existing customers at renewal, so 'less engaged' consumers pay higher prices over time. This is known as 'price walking'.

5.34 Interventions that address 'price walking' may lead to a change in market prices so 'less engaged' consumers no longer face the higher prices at renewal. However, firms may respond by removing the cheaper deals that were previously available to the 'engaged' consumers. This involves a transfer from 'engaged' to 'less engaged' consumers. CP20/19, 'General insurance pricing practices market study' provides an example of this type of market segmentation.

5.35 If we identify transfers between consumer groups that have a clear distributional element (such as different impacts falling on consumers of different incomes) we may undertake distributional analysis (see Chapter 6: Our approach to estimating impacts).

Transfers between firms and consumers

5.36 Transfers between firms and consumers typically happen where we address a market failure, such as too much market power or incomplete information, which led to firms being able to profit at the expense of consumers before the intervention.

5.37 This can happen where our intervention increases price competition among firms for similar products, leading to lower prices to consumers with an equivalent fall in revenues and profits for firms. For example, see CP16/37, 'Implementing information prompts in the annuity market'.

5.38 It can also happen when we help consumers engage with their finances, so they avoid overspending on products they do not need, reducing consumer expenditure and firm revenues. For example, see CP14/29, 'Guaranteed Asset Protection insurance'.

5.39 We present these transfers as a benefit to consumers and offsetting cost to firms, as part of the general presentation of the net present value (NPV) of our proposals.

5.40 When transfers result from us correcting a market failure that harmed consumers, the costs incurred by firms are the reduction in the excess profits they were making from consumers before the harm was addressed. In these cases, we may also present the impacts of our intervention if we excluded those costs from the analysis. We describe this as an 'Adjusted NPV' and will present this alongside the NPV. See Chapter 12: How we present the results of our CBA and CP21/1 'Restricting CMC charges for financial products and services claims' as an example where we have done this.

Welfare improvements

5.41 Cases that involve transfers from firms to consumers may also lead to an aggregate gain or loss to society which is counted separately from the transfer. An intervention that reduces firms' market power and improves the functioning of a market may lead to lower prices and an increase in the overall number of products sold in the market. This may lead to an aggregate increase in economic activity and overall economic welfare which exceeds the simple transfer from firms to consumers.

5.42 Estimating the value of this increase in economic activity robustly requires detailed understanding of the market supply and demand curves, which usually requires obtaining a large amount of information from market participants. Where it is possible and proportionate to do so we may do this, as in CP14/29, Technical Annex to 'Guaranteed Protection Insurance: a competition remedy'.

5.43 Where it is not proportionate to gather this level of information, we may include a qualitative description of the potential aggregate gains or losses in overall economic welfare, which exist outside simple transfers from firms to consumers.

Chapter 6

Our approach to estimating impacts

6.1 This chapter sets out our general approach to estimating impacts, including our approach to proportionality and the accuracy we aim for, how we handle uncertainty in our estimates and how and when we undertake distributional analysis.

Taking a proportionate approach to cost benefit analysis

6.2 This chapter and those which follow set out examples of the methods we may use when undertaking CBA. The methods we use vary. The level of detail we include in a CBA, the complexity of our approach and the amount of time and resource we commit to preparing a CBA all depend on the individual case and are proportionate to the size, cost, strategic priority and risk of the intervention.

6.3 In applying proportionality, we carry out additional analysis only up to the point where it can realistically deliver additional and reliable knowledge that can materially inform our decision on the appropriate course of action. Additionally, the time and resources necessary to obtain and deliver that knowledge must be reasonable considering the benefits that knowledge is likely to deliver.

6.4 We consider the costs of doing the CBA in increasing detail relative to the scale of the policy intervention. The costs to us associated with doing CBA include:

- resource costs of spending more time and effort on an issue
- opportunity cost of spending time on something else that could be more important
- cost of delaying the implementation of any response to the ongoing harm identified

6.5 When deciding the amount of resource costs and time that we dedicate to a CBA, we take into consideration the following factors:

- the expected scale of impacts which would result from the intervention
- the availability of data or other sources of evidence, and the relative burden on businesses or consumers, as well as to us, of gathering new evidence
- the complexity of analysis involved, including whether it requires the use of novel techniques
- the level of uncertainty around the impacts, and how far we can reduce this by dedicating more resource and time
- whether we expect significant distributional impacts, and need to conduct additional distributional analysis
- the time available before the policy measure is set to be introduced, particularly in cases when there is a requirement for us to intervene swiftly to address harm

The accuracy and detail we aim for

6.6 The aim of the CBA is to produce an assessment of the costs and benefits that is sufficient to inform consultation and a decision on the proposed course of action.

6.7 We are required to analyse and prepare estimates of the costs and benefits of our proposed rules, unless they cannot reasonably be estimated or it is not reasonably practicable to produce them.

6.8 We cannot always produce precise estimates within the parameters of what is reasonable in the circumstances. Where possible, we at least attempt to estimate a range in which the cost or benefit in question may fall. In some cases, it may not be reasonably possible to estimate a particular cost or benefit. In this case, we produce a qualitative assessment of the costs and benefits, in a way that will suitably inform consultation and decision on the proposed course of action.

6.9 To see whether the overall costs we may impose are proportionate to the benefits, it is better to broadly recognise all likely costs and benefits, rather than produce exact estimates of partial elements of the impacts. Spurious accuracy can also be misleading about the level of confidence we have in our estimates.

How we handle uncertainty in our estimates

6.10 When we do a CBA we are trying to estimate future impacts of a policy. This is inherently uncertain as we often have to make several assumptions about the way markets will develop and the way consumers and firms will respond.

6.11 There can be uncertainty due to a lack of evidence or difficulty in understanding the likely impacts of our interventions, especially where we are dealing with novel situations involving new markets and new technologies. Sampling and limitations of modelling may lead to errors in estimation. There may be uncertainties over the behavioural reactions on demand and supply sides, the future macroeconomic environment, concurrent policy interventions and other factors outside our control.

6.12 There may also be uncertainty because of incomplete information due to the prohibitive cost or time of gathering evidence or because some important features are unobservable.

How we address uncertainty caused by gaps in evidence

6.13 Chapter 3: How we gather and use evidence provides information on the data available to inform our CBA estimates. However, in some situations this available data is not sufficient to enable us to quantify impacts. We may explore alternative methods to fill key gaps of evidence to assess uncertainty, as set out below.

Delphi methods

6.14 The Delphi method is a process of iterated surveying used to arrive at a group opinion from a panel of experts. In this process, the panel of experts receive multiple rounds of questionnaires, after each round the responses of the group are aggregated and shared back to the group. The experts can then adjust their answers each round, with the final result after rounds of surveying to be interpreted as the 'true' consensus of the group.

Ranges and central estimates

6.15 We indicate a range of outcomes with a central or best estimate. The range reflects the upper and lower bounds that we would reasonably expect, our central/best estimate is typically a midpoint estimate.

6.16 However, the probability distribution of estimated values may not be uniform. The true value may be more likely to be close to the central estimate, and the likelihood of reaching the upper or lower values may be low. In practice, we usually do not have enough information to model the probability distribution. However, we may explain where we can make reasonable assumptions about the nature of the distribution. For instance, through explaining where the relative likelihood of an outcome towards the extremes of the range is low.

Sensitivity analysis

6.17 Sensitivity analysis often takes the form of assessing the sensitivity of results to changes in one or more of the inputs or assumptions we used in our modelling. It can also be used to adjust for wider conditions outside of our control.

6.18 Partial sensitivity analysis allows us to assess the impact that changes in certain key parameters will have on our results. We typically conduct one-way or two-way sensitivity analysis, where we vary one or two of the most significant parameters to see how varying their values affects the final estimates.

6.19 We are particularly interested in which values of the parameters make the benefits outweigh the costs, known as 'switching values'. This can allow us to make judgements around how likely the benefits of an intervention are to exceed the costs. For instance, by telling us what share of consumers are required to respond to new informational provision by switching to a lower cost provider, for the benefits to outweigh the costs.

6.20 Sensitivity analysis can include adjusting for potential changes to economic conditions over time, and the implications of those changes for estimated benefits and costs. A baseline represents an analytically reasonable assessment of the way the world would look without the regulatory action being proposed. If we believe potential changes to the economic conditions would significantly change the costs or benefits we estimate, we may use different scenarios for the baseline as an effective tool to reflect this.

6.21 We may use 'breakeven analysis' within our sensitivity analysis. This is where we set out the minimum or maximum values of particular assumptions that would lead us to expect the benefits of an intervention to exceed the costs.

Simulation-based modelling analysis

6.22 When we conduct sensitivity analysis with multiple assumptions, it becomes more important to take the nature of the probability distributions into account. Creating ranges using sensitivity analysis based on the extreme values assumed for multiple parameters can lead to a very large range where the joint probability of the upper or lower bounds is extremely low.

6.23 In these cases it can be more informative to conduct simulation-based sensitivity analysis with assumptions built into the simulation about the mean and variance of the distributions.

6.24 Monte Carlo analysis is a form of simulation-based modelling that uses random sampling to estimate possible outcomes by simulating them many times and reporting the probability distribution of the results. It allows us to perform sensitivity analysis on many parameters at the same time, by assigning probability distributions to each parameter and randomly sampling from them to generate many scenarios. The distribution of the outcomes of the simulation can tell us how sensitive the model is to variations in the parameters.

6.25 We may use simulation techniques such as Monte Carlo analysis to help derive ranges around estimates where we have many uncertain parameters. We need to take into consideration proportionality when deciding whether to conduct Monte Carlo analysis. It requires a lot of computational resources to run sufficient simulations and it may be difficult to accurately determine the appropriate probability distributions and ranges for the parameters. If these are not chosen accurately, the simulation results can be biased.

Scenario analysis

6.26 Scenario analysis is a form of 'what if' analysis that is useful where there are significant future uncertainties. We can choose certain stylised scenarios to explore significant uncertainties which will affect the success of an intervention. For instance, where a market is currently new, we may assume high growth in a market compared to low growth. The scenarios used may also form a 'best' and 'worst' case scenario range, reflecting the upper and lower bound of what we reasonably expect.

Box 2: Scenario analysis for CP19/25, 'Pension transfer advice: contingent charging and other proposed changes'

To account for a significant level of uncertainty, we modelled several different scenarios using different assumptions. The outcome scenarios reflect what may happen from our intervention to ban contingent charging, adjusting the assumptions around the number of consumers willing or able to take advice, the number of consumers transferring and the effectiveness of our ability to enforce our rules.

To adjust for the effectiveness of our enforcement, the 'policy efficiency rate' reflects how far our intervention is successful in achieving better rates of suitable advice. This ranges from 50% to 90%, where 100% means advisers never give unsuitable advice (reflecting a full compliance assumption). This was used to capture our ability to supervise and enforce and the firms' willingness to comply with the newly introduced rules. The 50% to 90% adjustment then had an impact on the overall benefits of the policy (the benefits from a reduction in unsuitable advice).

Alternative appraisal periods

6.27 Using alternative appraisal periods may be appropriate where we believe the effects of our intervention may continue far beyond the default 10-year appraisal period. For example, where we have evidence to suggest our intervention impacts upon long-term UK emissions, the Green Book advises in some cases an appraisal period of up to 60 years may be suitable.

6.28 We may also reduce the appraisal period where appropriate. For example, in CP23/15, 'The Framework for a UK Consolidated Tape' we used an appraisal period of 5 years because that was the length of the initial tender contract. We noted that costs and benefits would continue to accrue after that period, but it was not possible to produce realistic estimates of these.

How and when we undertake distributional analysis

6.29 The costs and benefits of our policies may be distributed unevenly across different groups. In some cases, our interventions are targeted at trying to improve outcomes for particular groups. For example, we may have identified that consumers with characteristics of vulnerability (see OP8, 'Consumer Vulnerability') are more likely to experience harm in a market, or face difficulties in accessing financial services. In this section we describe when we undertake distributional analysis and distributional weighting.

When we undertake distributional analysis

6.30 Distributional effects are the impacts of a policy across different subgroups of a population, for instance by age, income, financial knowledge, vulnerability, protected characteristics or size (for wholesale consumers). We estimate these through distributional analysis.

6.31 We undertake distributional analysis when our policy objectives include addressing harm or improving outcomes for a specific subgroup (such as consumers with characteristics of vulnerability) rather than simply thinking about the overall population (such as all consumers in a market). Because distributional analysis can involve gathering more

evidence and taking more time with the analysis, we take into consideration whether the value of the analysis would be proportionate to the impacts of the policy.

6.32 When distributional analysis is appropriate, we set out how the harm we are trying to address, and the costs and benefits of our proposal, are distributed across relevant subgroups. When we are not able to provide quantified impacts across different subgroups, we describe how different stakeholders may be affected.

6.33 Distributional analysis can be important in deciding whether to proceed with an intervention. In some cases we might decide to proceed with an intervention even when the expected monetised costs exceed the monetised benefits. This may happen if we think the benefits accrue to people most in need. For example, when we foster access and improve protection to those who face difficult circumstances.

6.34 An Equality Impact Assessment is provided in the consultation paper and is where we assess the impacts of a measure on those with protected characteristics. Where the assessment has uncovered significant negative impacts on those with protected characteristics compared to those without, we will include this analysis in the CBA.

Distributional weighting

6.35 We usually assume that costs and benefits affect all individuals in the same way, so £1 of benefit has the same value across the whole population.

6.36 When we do distributional analysis by income groups, we may apply weighting to our estimates. This reflects the fact that a low-income consumer may value an additional £1 of benefit more than a high-income consumer. The PS19/16, 'High-cost Credit Review: Overdrafts' CBA provides an example of where we have used weights in distributional analysis by income.

6.37 Where we use welfare weights, we present both the weighted and unweighted estimates of costs and benefits. Appendix 5 gives more detail on our approach to distributional weighting.

Chapter 7

Using assumptions in our cost benefit analysis

7.1 This chapter sets out how we use assumptions in our CBAs, including standard assumptions that we use in all CBAs and how we use assumptions which are specific to a particular CBA.

The counterfactual we use for assessment

7.2 We assess the impacts of the policy against a baseline, or 'counterfactual' scenario, which describes what would happen without the proposed intervention(s). That is, we compare a 'future' under the policy, with an alternative 'future' without the policy.

7.3 In many cases the counterfactual assumes the current observed situation in the market or sectors affected will continue without the intervention. However, there may be circumstances where the counterfactual is not the same as the current market conditions and regulatory environment. For example:

- the volume, value and number of firms in the market may be expanding or shrinking, or there could be reasons to expect it to vary significantly in the near future
- other key factors may be changing or expected to change, such as price levels, macroeconomic conditions or interest rates
- other interventions by us or other national or international authorities may be in the pipeline
- consumers and firms may be adapting their behaviour to other regulatory changes

7.4 In these situations, we may adopt a counterfactual different to the current situation where these considerations are significant enough and reasonably measurable. We explain in the CBA the reasons for adopting a different counterfactual from the status quo.

7.5 In some cases, uncertainty around the counterfactual might justify us looking at how the effect of varying the counterfactual would affect the underlying analysis. We may include different counterfactuals as part of sensitivity analysis.

Counterfactual for transfers of assimilated EU law

7.6 Following the implementation of the Financial Services and Markets Act 2023, there will be some instances where we bring into our Handbook some regulatory obligations that are currently set out in legislation as part of assimilated EU law.

7.7 Assimilated EU law is EU law which applied in and to the UK directly immediately before the end of the EU withdrawal transition period, and which became UK law under the

European Union (Withdrawal) Act 2018. The Financial Services and Markets Act 2023 repeals all assimilated EU law in financial services. We will replace relevant provisions with rules in our Handbook.

7.8 When we assess the impacts of these new rules, our counterfactual is the current observed situation in the market at the point of transfer, assuming compliance with the existing obligations set out in assimilated EU law. Where all we do is to replace an existing obligation which applies under assimilated EU law, with no policy changes, we would generally expect no costs to result. Where we make policy changes, our CBA will be of the effect of those changes.

The use of assumptions and their impact

7.9 To estimate the costs and benefits of a future policy intervention we often need to make several assumptions. We use these in modelling the estimates in place of values that are unknown at the time of assessment. We make assumptions based on existing data, evidence, theory and expert judgement. Assumptions can enable us to simplify the analysis to a level which makes estimations feasible and transparent.

7.10 However, assumptions can introduce bias or errors into the estimates if they do not reflect the real world values they are chosen to represent. So we need to manage the use of assumptions carefully. For example, by testing the implications of varying our assumptions as part of sensitivity analysis and by being transparent about the assumptions we have used and what evidence they are based on. We include a list in our CBAs of key assumptions used and their underlying evidence, so that respondents to the consultation can make appropriate representations about their validity. Where we receive evidence as part of a consultation that enables us to update our assumptions we can set out the effect this has on the CBA in the Policy Statement.

Standard assumptions we apply across our cost benefit analysis

7.11 To ensure consistency across CBAs, we use a standardised approach with a few common principles described below. Our approach is broadly consistent with recommendations in the Green Book. If we believe we have good reason to deviate from the principles below in a particular CBA, we set out our reasons clearly in the CBA.

Appraisal period

7.12 We will consider the effects of our interventions typically over a 10-year appraisal period.

7.13 We distinguish between one-off impacts and those we expect to happen across multiple years. For example, a new rule may lead firms to incur transition costs such as familiarising themselves with the obligations or investing in new software to meet new reporting requirements. These may reasonably be expected to be incurred in the first year after the rule is introduced. There may also be ongoing costs, such as needing

additional staff time to comply with new reporting requirements, which are incurred every year on an ongoing basis.

7.14 If we have reason to believe that an alternative appraisal period to 10 years is more appropriate, we explain our justification in the CBA. In some cases, where the size of estimates may become more uncertain over time, we may consider the effect of varying the appraisal period as part of our sensitivity analysis.

Discount rate

7.15 To be consistent with the approach used by UK government departments and regulators, we usually apply the discount rate recommended in the Green Book - currently 3.5%. This rate determines the present value of the stream of costs and benefits expected in future years.

7.16 This means the present value of a benefit of £100 expected to arise in one year's time is $100/1.035^1$ = £96.62. If it occurs after 2 years, the present value is $100/1.035^2$ = £93.32. After discounting, we typically present the NPV of expected impacts (benefits minus costs) over the 10-year period, as well as the equivalent annual value that corresponds to the NPV (see Chapter 12: How we present the results of our cost benefit analysis).

Prices and taking account of future inflation

7.17 We report our prices in terms of a base year, which will normally be the current financial year at the time of the intervention. This means that we have to take account of future expected inflation.

7.18 Values that are fixed in nominal terms typically need adjusting - for instance where upper limits on compensation levels are fixed for a few years. If inflation is increasing, then over time those fixed values are worth less due to price rises.

7.19 When our estimates are in nominal terms, we use GDP deflators produced by the Treasury using data from the ONS and Office for Budget Responsibility (OBR) to adjust for the effect of future price rises in the 10-year appraisal period. GDP deflators measure the price changes of all final goods and services in the economy.

7.20 In some cases, the estimates that we collect do not require adjusting for inflation. For example, estimates from firms about the economic cost of complying with a regulation would reasonably be expected to rise in line with inflation as the component factors that make up the cost (labour, capital, overheads) would also be expected to rise over time. We would not apply GDP deflators to these estimates, because we would not expect the economic cost of compliance to become less due to price rises in the economy.

7.21 We explain clearly in our CBA which estimates are adjusted for inflation and why.

Use of averages

7.22 We usually estimate impacts in terms of an average cost or benefit per firm or consumer. This is taken to represent the mean impact on firms or consumers. We can

then estimate the total impact by multiplying it by the expected population of firms or consumers affected.

7.23 In some circumstances we expect the impacts to differ across different groups. Firms may have different impacts depending on their size or business model, and consumers may be affected differently depending on their location, age, income or other characteristics (see Chapter 6: Our approach to estimating impacts).

7.24 Where this is the case, we estimate the average cost or benefit of a relevant subgroup and calculate the total impact by weighting these estimates up in proportion to the population of the subgroup.

7.25 Our rules often have a varied impact on different firm populations. We recognise this by using 'average firm' figures from the different firm populations. For example, large, medium and small firms, or firms in different regimes as in CP17/25, 'Individual Accountability: Extending the Senior Managers and Certification Regime: Cost Benefit Analysis'. It is important to note when firms will be affected by interventions differently according to their precise structure, existing approaches and the design of our policy.

7.26 While we are not required to present averages, this is often the easiest way to produce our estimates. We do not do a CBA on every individual or firm. Where we get our estimates from a sample (for instance estimates on business costs using a sample of firms), we seek to estimate the population mean of the relevant group of interest. Usually, the sample mean is the most appropriate estimator for the population mean. However, in cases where the sample is small and the sample mean may be distorted by outliers, we may use the sample median to estimate the population 'average' (see Chapter 3: How we gather and use evidence).

Assumptions that may vary across our cost benefit analysis

Compliance

7.27 We generally assume there will be full compliance from firms with any new policy we implement.

7.28 Nonetheless, this may not be appropriate in all circumstances. Where we have strong evidence to suggest it is likely there will be imperfect firm compliance or there are limits on our ability to enforce, we take this into account in our estimates. We can address uncertainty about the level of firm compliance and the ability to wholly enforce through a qualitative description of the likelihood of imperfect firm compliance, or by quantitatively estimating impacts of differing levels of compliance through sensitivity analysis. For example, see CP19/25, 'Pension transfer advice: contingent charging and other proposed changes'.

Standardised Cost Model

7.29 Our standardised cost model is a framework for estimating common types of compliance costs. The framework is based on our understanding of how certain

compliance costs are structured, drawing on a 'core' set of assumptions. We can then estimate costs in a bottom-up manner by supplying some variables specific to the intervention. These variables principally relate to how many hours of time a certain activity requires of different types of firms.

7.30 We use the standardised cost model to estimate the cost of new regulations to firms where we believe that these are likely to be broadly typical of standard regulatory compliance costs. This reduces the burden to firms of us making requests for information or asking them to complete compliance cost surveys during the CBA process.

7.31 Where we believe that a new policy intervention imposes non-standard costs or where the costs are likely to be very high, we collect additional information from firms to test whether use of the standardised cost model would be valid or whether we need to make bespoke assumptions.

7.32 See Appendix 1 for details and assumptions used in the standardised cost model.

Assumptions specific to a particular cost benefit analysis

7.33 Individual CBAs frequently need to make assumptions which are tailored to the particular intervention or market under consideration. These may include assumptions about:

- the wider macroeconomic environment
- rates of entry into or exit from a market, or growth in market size
- changes in competitive conditions, such as new entry increasing competition
- behavioural responses from consumers, for instance changes in switching patterns in response to new information, where we do not have field trial evidence
- strategic responses from firms, for instance to reduce prices due to stronger competition, or to pass on (some of) the costs of compliance to consumers through raising prices
- differences in responses from particular groups, for instance between engaged and disengaged consumers, or between firms using different business models
- whether business models used by firms are likely to remain stable or evolve over time
- rates of 'take up' from a particular policy intervention, such as claims for compensation

7.34 The assumptions we make can have a considerable impact on our estimates. We explain clearly where we have made assumptions and the evidence that has informed them.

7.35 We are transparent about the level of confidence we have in our assumptions, and we take appropriate steps to manage uncertainty in our estimates. This may include sensitivity analysis or scenario modelling (see Chapter 6: Our approach to estimating impacts).

Chapter 8

How we estimate benefits

8.1 Understanding and aiming to measure benefits is important for assessing the impact of our proposals. The process of searching for evidence on benefits encourages us to rigorously assess the impact of our interventions, even if the results are unclear.

The process of estimating benefits

8.2 Table 3 sets out the process we use for estimating benefits. The ability to carry out all elements of the process in Table 3 depends on various factors (see Chapter 3: How we gather and use evidence). Even if all the information is available, the estimation process may be extremely time-consuming compared to the additional insight it yields and so we may conclude an estimation of benefits is not proportionate. See Chapter 6: Our approach to estimating impacts.

Table 3: Description of stages when estimating benefits

Stage	Description
Identifying the benefits	Benefits correspond to a reduction in a harm identified within the market.
Quantifying those affected by harm	Attempting to identify the number of individuals or firms affected by a particular harm to be addressed by the policy. Depending on the data available, this could either be simply quantifying the number of consumers or firms in a given market for which harm is present or, if a richer dataset is available, quantifying those within a market who are particularly affected by harm.
Quantifying those who receive a benefit (ie those for whom harm is reduced)	Attempting to identify and quantify the number of individuals or firms who will see harm reduced by the policy. This requires both the estimate of those within a market specifically affected by a harm (set out above), and an estimate of the proportion of those individuals who will potentially benefit from the remedy.
Monetising benefits	Providing a monetary value on the reduction in harm experienced due to the policy. As well as an estimate of the proportion of individuals or firms in a given market who will see reduced harm, this requires an estimate of the monetary value to individuals or firms of reducing the harm. It also requires consideration of whether the benefits are one-off or ongoing.

Benefits to consumers

8.3 Consumer benefits arise from reducing the harm consumers experience without our intervention, which is measured against a 'counterfactual' (see Chapter 7: Using assumption in our cost benefit analysis). The drivers of harm are linked to the market failures that our intervention is trying to address. By identifying the various harms and their drivers, we can set out the consumer benefits that we expect from a policy intervention.

8.4 Example types of benefits to consumers from our interventions are in Table 4. Depending on the specific circumstance, many of the benefits in Table 4 can be classified as direct, indirect or intermediate outcomes. In this example, intermediate outcomes might include more shopping around by consumer.

8.5 Increased shopping around as such is not a benefit. However, it can be a process that leads to beneficial consumer outcomes, both as consumers find better deals and as firms come under pressure to provide better offers.

Table 4: Examples type of benefits to consumers from our interventions (not exhaustive)

Consumer benefit	Description	Illustrative examples
Lower prices	Consumers benefit when the price of a product or service falls. This can happen when excessive prices are addressed, or firms save costs and pass those savings on to consumers.	In PS14/16, 'Detailed rules for the price cap on high-cost short-term credit - Including feedback on CP14/10 and final rules' we introduced a price cap on high-cost short-term credit (HCSTC) loans to reduce the cost of HCSTC for consumers who remain in the market. In CP21/1, 'Restricting CMC charges for financial products and services claims' we restricted CMC charges for financial products and services claims to secure an appropriate degree of protection against excessive charges.
Increased choice	Consumers can benefit from increased choice, for example because of innovation.	In CP22/24, 'Broadening access to financial advice for mainstream investments' we sought to strengthen consumer protection by allowing a greater number of consumers to access low-cost simple financial advice. Innovation and improvements to banking services encouraged by open banking.

Consumer benefit	Description	Illustrative examples
Better choice	More appropriate transactions can occur when consumers have better information about products and services, or when the range of choices available to them better meets their needs. When products and services are better matched to consumer needs and risk preferences, consumers may value them more highly. Improved matching can also address several issues, such as excessive markups and low market confidence.	In CP18/17, 'Retirement Outcomes Review: Proposed changes to our rules and guidance' we set out rules to diversify holdings and increase consumer engagement with pension savings. These rules may benefit consumers by helping them make more appropriate investment choices for their retirement objectives. In CP19/22, 'Prohibiting the sale to retail clients of investment products that reference cryptoassets' we banned the sale, marketing and distribution of cryptoasset derivatives and exchange traded notes (ETNs) to retail investors to reduce and prevent the harm to consumers from investing in high-risk investments, including cryptoassets, that do not match their risk appetite.
Lower costs from addressing transaction or system inefficiencies	Lower costs can result from addressing transaction or system inefficiencies which are often caused by information gaps. Lower costs from addressing transaction or system inefficiencies can include time saved by better quality transactions, avoiding the effort of seeking compensation or through easier shopping around.	In PS16/12, 'Pension reforms – feedback on CP15/30 and final rules and guidance' we required firms to either show a projected future pension annuity or show the age at which funds expire. We argued these changes made it easier to summarise information in a single table and saves time for the consumers, who can compare annuity projections faster and more easily. In CP21/3, 'Changes to the SCA-RTS and to the guidance in 'Payment Services and Electronic money – Our Approach' and the Perimeter Guidance Manual' we argued changes to technical standards meant that less time was needed for consumers to authenticate contactless payments.

Consumer benefit	Description	Illustrative examples
Psychological	Preventing the sale of unsuitable products and ensuring that service quality is consistently high can reduce negative psychological impacts. For example, our Simetrica research shows the unsuitable purchase of debt products can lead consumers to develop significant debt arrears, resulting in psychological harm. There is also a psychological cost from the stress of defaulting and potential late payments (on debt and distress see OP20, 'Can we predict which consumer credit users will suffer financial distress?' and OP28, 'Preventing financial distress by predicting unaffordable consumer credit agreements: An applied framework'.	In CP23/5, 'Debt packagers: feedback on CP21/30 and further consultation on new rules and perimeter guidance' we provided an illustrative example of how referring a consumer to a more suitable debt solution could change their wellbeing (using Simetrica research), with an equivalent monetary figure using the Green Book approach. See Appendix 3.

Consumer benefit	Description	Illustrative examples
Improved confidence	Consumer confidence in financial services encourages financial participation and inclusion, which can have positive impacts for individuals and the wider economy. Consumer confidence also depends on the scope, awareness and ease of access to redress when consumers have suffered harm in a market. We reduce risks from the disorderly failure of a firm, which might improve consumer confidence and the wider integrity of markets and the financial system.	Reducing the risk that a customer of a regulated funeral plan provider or distributor could suffer financial harm if the firm went out of business and owed a customer money through our regulation of funeral plans (see CP21/20, 'Regulation of funeral plans: Further proposals). Aggressive marketing and nuisance calls can cause consumers' distress. This can lead consumers to participate less in financial markets. In CP18/15, 'Claims management: how we propose to regulate claims management companies' we demonstrated such distress can make it less likely for consumers to seek redress for a problem. In CP18/27, 'Consultation on illiquid assets and open-ended funds and feedback to Discussion Paper DP17/1', we argued our remedies would reduce the first-mover advantage and the risk of a run on funds. Consequently, our remedies would improve market integrity by reducing systemic risks. In CP21/31, 'Changes to reporting requirements under UK EMIR', we amended UK European Market Infrastructure Regulation (EMIR) reporting standards, requirements and requirements for trade repositories, improving authorities' ability to monitor and reduce systemic risk.
Financial inclusion	Expanding appropriate coverage for retail consumers, particularly those with vulnerability characteristics that make them less likely to be served by some firms, and who may be unaware of specialist firms that can help them.	In CP19/23, 'Signposting to travel insurance for consumers with medical conditions' we introduced a 'signposting rule' to help consumers with pre-existing medical conditions (PEMCs) who struggled to access affordable travel insurance covering their conditions. We required firms, in certain circumstances, to give consumers details of a directory of travel insurance firms that can cover consumers with more serious PEMCs.

Consumer benefit	Description	Illustrative examples
Consumer needs are met through high operational resilience	Consumers can benefit when there is a reduction of expected losses and other costs from operational failure such as fraud, or a systems breakdown. This also depends on the scope, awareness and ease of access to redress when consumers have experienced harm in a market.	Increasing consumer awareness of redress or changing the way compensation is made to consumers through the Ombudsman. For example, in CP18/31, 'Increasing the award limit for the Financial Ombudsman Service'. In CP19/32, 'Building operational resilience: impact tolerance for important business services and feedback to DP18/04', we set out policy proposals to make it clear that firms are expected to take ownership of their operational resilience. If disruption occurs, firms are expected to communicate clearly, for example by providing customers with advice about alternative means of accessing the service.

Benefits to firms

8.6 Our CBA can consider the reduction in costs of compliance and other interventions that improve efficiency. This may include guidance that makes it easier for firms to understand and comply with existing rules.

8.7 Firms may also make gains from pro-competition interventions, as well as benefits from easier market access. Measures that increase trust in the institutional framework of UK financial services and reduce participants' perception of risk in a market can lead to higher trading volumes and higher returns to firms.

8.8 Cost savings are identified as a benefit in our framework. These can include cost savings from deregulatory measures and lower compliance costs. In these circumstances, we may use our standardised cost model or firm surveys to estimate cost savings for firms.

8.9 For example, the removal of an EU rule from our Handbook, involving capital expenditure on IT in year 1 and subsequent compliance cost savings in subsequent years. In our framework, the capital expenditure in year 1 is considered a cost and the ongoing compliance cost savings against the counterfactual are considered a benefit, not a negative cost.

8.10 Table 5 gives examples of types of benefits to firms from our interventions. Depending on the specific circumstance, many of these benefits can be classified as direct or indirect.

Table 5: Examples type of benefits to firms from our interventions (not exhaustive)

Firm benefit	Description	Illustrative examples
Increased efficiency	Firms benefit from regulatory changes that reduce or simplify administrative costs or make it easier for firms to understand their obligations without needing to hire external advisors. Increased efficiency can also come from reducing costs to cross-jurisdictional trading. This can be achieved by aligning the UK regulatory framework with international standards and ensuring markets are open and accessible.	In CP19/14, 'Mortgage customers: proposed changes to responsible lending rules and guidance', we introduced new rules and guidance for responsible mortgage lending. We argued firms saved the cost of conducting full affordability checks where no additional debt was requested. Simplifying rules in certain financial sectors. For example, in CP19/28, 'Motor finance discretionary commission models and consumer credit commission disclosure' and in CP18/18, 'Guidance on regular premium PPI complaints and recurring non-disclosure of commission'. Alignment with international standards can benefit UK firms, particularly those in multinational groups, to leverage costs associated with their regulatory reporting systems. For example, in CP21/31, 'Changes to reporting requirements, procedures for data quality and registration of Trade Repositories under UK EMIR'.

Firm benefit	Description	Illustrative examples
Competition	Regulatory changes that encourage new entrants to compete with established firms can create a more competitive market. Benefits can also come from interventions to correct regulatory imbalances between existing firms, or fostering increased competition between incumbents. The impact of competition may vary across firms. For example, stronger competition may erode excess profits for some firms which were previously derived from holding stronger market power. Firms with a competitive offer may benefit from greater demand.	By appointing one consolidated tape provider through the UK consolidated tape framework (see CP23/15, 'The Framework for a UK Consolidated Tape'), we expect competitive pressure to fee structures and licensing terms of existing data providers. The consolidated tape framework can indirectly lead to further positive outcomes for data users, by encouraging greater competition in the bond data market. In CP19/28, 'Motor finance discretionary commission models and consumer credit commission disclosure' we expected to trigger the car finance industry to move away from models of remuneration which create conflicts of interest. This would lead to benefits to consumers, directly from lower interest costs, and indirectly from greater competition and better aligned incentives among lenders and brokers.
Increased trust and reputation	Trust and reputation increases investment and confidence to do business in the UK, supporting productivity and growth, and making the UK more internationally competitive. Increasing trust can also improve the depth and liquidity of UK financial markets, which helps market participants to optimise costs. Regulations that place environmental, social or governance (ESG) obligations on firms trading in a market can also help raise the reputation of firms by signaling commitment to high standards of ethics and environmental or social responsibility.	In CP18/40, 'Consultation on proposed amendment of COBS 21.3 permitted links rules', we introduced new limits, guidance and rule amendments on patient capital investments. We argued this will increase confidence and participation in the market by providing appropriate protection for investors seeking to invest in patient capital through unit-linked funds. In PS23/13, 'Introducing a gateway for firms who approve financial promotions', we argued our changes could improve consumer trust in the financial services market, potentially leading to higher demand for firms' products.

Firm benefit	Description	Illustrative examples
Risk reduction	Benefits arise where policy interventions reduce the risk of fraud or market instability.	The changes set out in CP18/27, 'Consultation on illiquid assets and open-ended funds and feedback to Discussion Paper DP17/1' reduced the risk of a run on funds, which can undermine confidence in other funds and potentially spread.
Market integrity	One of our operational objectives is to protect and enhance the integrity of the UK financial system. Market integrity protects investors and consumers and builds confidence in UK financial markets and institutions. Market integrity of the UK financial system includes the financial system's soundness, stability and resilience, and the orderly operation of financial markets. This includes the UK financial system not being used for purposes connected with financial crime, insider trading or market manipulation. Market integrity can also relate to transparency in wholesale markets, that can lead to greater price discovery (the means through which an asset's price is set by matching buyers and sellers according to a price that both sides find acceptable) and related efficiency in pricing.	The benefits of interventions aimed at ensuring market integrity, such as managing major market disruptions, are generally analysed qualitatively rather than quantitatively. Our CP21/31, 'Changes to reporting requirements, procedures for data quality and registration of Trade Repositories under UK EMIR' provides an example of a qualitative description of the market integrity impacts of our intervention. Estimating the benefits of managing the likelihood of major market disruptions can also be attempted within a CBA through breakeven analysis, but this is usually restricted to where a 'unit cost' of an adverse impact is compared to the overall cost of the intervention. For example, see CP19/32, 'Building operational resilience: impact tolerances for important business services and feedback to DP18/04'

Firm benefit	Description	Illustrative examples
Liquidity benefits	Liquidity is an important characteristic of any financial market, but it is difficult to define precisely. See our OP14, 'Liquidity in the UK corporate bond market: evidence from trade data' for a discussion on the definition of liquidity in financial markets. There are social benefits from an increase in the liquidity of wholesale financial markets. For example, increased liquidity can lead to greater market resilience and efficient price discovery. It is often not feasible to monetise the other benefits from greater liquidity such as greater market resilience, confidence, efficiency, and financial stability. The monetised benefit of increased liquidity is likely to include some transfers between firms (see Chapter 5: How we identify impacts). For example, between those supplying liquidity (that is, the market-makers who earn the spread) and those taking liquidity (for example, investors paying the spread).	While the benefits of enhanced liquidity are typically described qualitatively, we have calculated monetised benefits on occasion. In CP21/22, 'LIBOR transition and the derivatives trading obligation' we monetised the benefits of increased market liquidity using trading volumes, bid-ask spreads and academic research. Other ways to measure liquidity include assessing the impact on overall market trading volume, depth, resilience, and liquidity premia. For examples of market liquidity measures, see our research into liquidity conditions in the UK corporate bond market.

How we may estimate benefits

8.11 This section outlines some of the ways we may estimate benefits. The exact method we choose will depend on the specific nature of the intervention.

Estimating benefits using market prices

8.12 We may estimate the change in market prices to monetise an impact. For example, in CP19/25, 'Pension transfer advice: contingent charging and other proposed changes', we ran scenario analysis using firm and supervisory data on the upfront price of advice, to estimate the benefit to consumers from a reduction in advice costs.

8.13 We may use prices from the relevant market (excluding taxes and subsidies) to inform benefits estimations.

8.14 In some cases, a closely comparable market can be used where a direct market price is unavailable to proxy the size of the identified benefit. We may also run simulations or combine the data with trading volumes, to estimate the benefits from our interventions.

8.15 In CP21/22, 'LIBOR transition and the derivatives trading obligation' we monetised the benefits of increased market liquidity using trading volumes, bid-ask spreads and academic research.

Financial analysis

8.16 We may use financial analysis to understand the supply-side dynamics within a given market or sector.

8.17 In price regulation the most established method of assessing profitability assesses whether the level of profit a company earns is reasonable or not. It does this by comparing the return on capital employed (ROCE) to its weighted average cost of capital (WACC). This is not always possible so we may use different methods where appropriate. CP21/01, 'Restricting CMC charges for financial products and services claims' includes a discussion of this method and why it was not suitable in the case of claims management firms.

8.18 In CP20/15, 'Liquidity mismatch in authorised open-ended property funds', we used the capital asset pricing model (CAPM) to calculate the potential benefit from an increased exposure to property returns if cash balances were reduced.

8.19 Annex 1 of our MS15/2.3, Asset Management Market Study gives an example where we have assessed ROCE and WACC to identify competition issues.

Estimating benefits using non-market prices

8.20 When there is no market price for costs and benefits to society they may need to be estimated and are known as shadow prices. This is particularly important for environmental, social and health effects.

8.21 Market benefits can be measured directly, such as when consumers pay lower prices for a product. Non-market benefits are more difficult to estimate but are still valuable. For example, consumers may benefit from avoiding stressful situations.

8.22 In OP39, 'Estimating the benefits of interventions that affect consumer behaviour', we discuss 3 common approaches for assessing true preferences and value non-market impacts when measuring the benefits of interventions, namely: stated preference, revealed preference and subjective wellbeing.

Stated preference

8.23 Stated preference uses specially constructed questionnaires to prompt estimates of people's willingness-to-pay for (or willingness-to-accept) a particular outcome.

8.24 We may use survey data to elicit willingness-to-pay (WTP) and willingness-to-accept (WTA) estimates directly from consumers or stakeholders. WTP is the maximum

amount a consumer or a firm is willing to pay for a good or service and WTA is the amount that consumers or firms are willing to accept in compensation for the loss of a good or service.

8.25 We may use these surveys to estimate the consumer surplus, which is equal to the difference between a consumer's maximum WTP for a good or service and the price actually paid. In CP14/29, 'Guaranteed Asset Protection insurance: a competition remedy', we estimated the consumer surplus after asking customers how likely they would be to buy the same insurance again in the future.

Revealed preference

8.26 Revealed preference observes people's behaviour in related markets. Hedonic pricing (which decomposes the items being researched into its constituent characteristics and obtains estimates of the contributory value) is an example of this where econometric techniques are used to estimate values from existing data.

Subjective wellbeing approach

8.27 The subjective wellbeing approach has gained popularity in recent years. It attempts to measure people's experiences rather than expose their preferences. We may derive monetary estimates using research from Simetrica and the Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance. Appendix 3 gives an example of the steps we can take to monetise wellbeing effects.

Chapter 9

How we estimate costs

9.1 We aim to provide estimates of the costs from our interventions, except where we are not required to under FSMA. See Chapter 2: When we do a cost benefit analysis.

9.2 This section outlines some of the different types of costs to firms and consumers that we may include in our CBAs and how we estimate them. We also discuss our efforts to reduce the administrative burden on firms and our standardised cost model (see also Appendix 1).

Costs to firms

Costs of compliance

9.3 Compliance costs are the costs firms incur as a direct result of meeting the requirements of our intervention. They are the incremental changes that firms would not have undertaken without the intervention. Compliance costs may include:

- **Staff time** diverted from usual business activity to fulfil requirements necessary to ensure compliance (for example: familiarisation, training, collating and quality assuring information).
- **Investment** in new capital such as new IT systems for the purposes of compliance.
- **Fees for commissioning external services** to help with compliance activity, such as lawyers, accountants or other professional services.
- **Changed overheads** such as additional building or other additional operating costs incurred, such as a requirement to provide particular services or offer additional opening hours.

9.4 Table 6 shows the steps we take to estimate compliance costs.

Table 6: Steps to estimating compliance costs

Stage	Description
Identifying functions of firms affected	The most common functions affected by interventions are compliance, human resources and training, IT, legal, sales and marketing, and senior management.

Stage	Description
Estimating the incremental activities by those functions	The time staff (of different types and levels) require to implement an intervention, and any other direct expenditure firms will incur, on average. As noted in Chapter 6: Our approach to estimating impacts, impacts may differ for different kinds of firms and, where possible and relevant, we use average figures accordingly (for example, average costs per large and per small firm). The precise segregation method will depend on the particular intervention and the available evidence. See Appendix 1 for the approach we use in the standardised cost model.
Setting out one-off costs and any ongoing costs of regulatory change	One-off costs arise from activities such as the cost of staff time diverted to learning new rules, training staff on new procedures, implementing a new IT system, as well as assessing how the firm's approach/governance has to change. Ongoing costs arise when costs are incurred after the initial year of implementation. For example, firms requiring additional staff time to comply with new reporting requirements on an ongoing basis (see Chapter 5: How we identify impacts). Rather than ask firms for costs such as familiarisation costs on a repeated basis, we developed a standardised cost model (see Appendix 1). This model is based on the length of documents and legal annexes and assumptions of how many staff read and review FCA publications. Larger scale CBAs may still require bespoke compliance cost surveys.
Monetising	Compliance costs are generally monetised on the basis of the opportunity cost of staff time, using salary information for a range of occupations in financial services sourced from salary benchmarking survey data, national statistics, or other research. We then add an uplift factor to account for non-wage labour costs. There may also be costs for external compliance or legal advice.
Extrapolating to the population of firms affected	Once we have average per-firm costs, we can multiply these by the total population affected. Where we have cost estimates for subpopulations of firms, we will usually multiply by the size of the relevant subpopulation. See Chapter 7: Using assumptions in our cost benefit analysis)

9.5 Not every requirement of an intervention incurs a cost of compliance for industry. Where new requirements are closely aligned with current business-as-usual practices, then firms can meet the regulation without material incremental costs compared to the counterfactual. For example, a written disclosure requirement might impose one-off costs, but ongoing costs might be negligible if firms fully absorb the disclosure into the business-as-usual practice of contacting customers.

9.6 When our cost estimates are subject to significant uncertainty, we take a cautious approach and lean towards the higher rather than lower estimates. This ensures a careful approach to policy-making and reduces the risks of underestimating costs (see Chapter 6: Our approach to estimating impacts).

Box 3: The standardised cost model

Forming an objective view of compliance costs can be difficult. Firms themselves may find it challenging to provide a view of the costs involved in implementing regulations from past experience, because many costs of new regulations are absorbed into 'business as usual' costs, which are not allocated to projects, or because of the effort required to locate the information. Firms may also not answer survey questions consistently, for example, by providing total rather than incremental costs.

To reduce this risk, we sometimes use a model of standardised parameters and assumptions to estimate certain compliance costs. For example, salaries, overheads and discount rate (see Appendix 1 for further details). The standardised cost model is designed to speed up and standardise some common recurring costs such as familiarisation, gap analysis and training.

The model is based on our understanding of how certain compliance costs are structured and draws on a set of assumptions. By applying some variables specific to the intervention (principally how many hours of time a certain activity requires for different types of firms) we can estimate certain common compliance costs.

The assumptions underpinning the model are based on consultation with firms and trade bodies, discussions with software vendors, a review of previous CBAs, internal consultation and desk-based research.

Opportunity cost of staff time

9.7 Typically, a large part of the compliance costs of an intervention is the opportunity cost of staff time which is diverted away from usual business activity. This could include time spent familiarising themselves with new requirements, internal training, time spent preparing material to comply with reporting obligations or in getting additional information, time spent on internal quality assurance and sign-off processes. This staff time has an opportunity cost to firms.

9.8 We assume:

- The economic value of staff time when spent on usual business activity is equivalent to the cost of labour to the firm. We assume implicitly a competitive labour market with no surplus value to the firm or worker, and a constant marginal revenue product of labour for each hour worked.
- The economic value to the firm of staff time spent on compliance activity is zero.

9.9 So, the opportunity cost of diverting staff time away from usual business activity to compliance activities is equal to the cost of labour to the firm. As outlined in the 2022 Green Book, the opportunity cost of labour should include the total value of the output employees produce. This is the cost of employees' time, based on full-time equivalent (FTE) costs and includes pension costs, National Insurance, allowances, benefits and basic salary. Typically, data is more readily available on employee wages than total cost of

labour. In the absence of bespoke firm-level information on the total cost of labour, we apply an 'uplift' factor to wages to account for non-wage labour costs.

9.10 Regulatory Policy Committee (RPC) guidance to government departments and regulators in 2019 recommended using either Eurostat data to calculate the non-wage labour cost uplift, or following the advice from the Department for Business, Energy and Industrial Strategy (now the Department for Business and Trade). As Eurostat no longer report data on wages and non-wage labour for the UK, we follow the Department for Business and Trade approach, which uses experimental statistics produced by the ONS on hourly labour costs. The uplift figure recommended in 2023 was 17.9%.

9.11 Consistent with guidance on impact assessments to government departments, we assume no impact on wider overheads such as building costs (see RPC guidance note on 'implementation costs'). Where we judge that overheads are also likely to be affected, we will capture the additional impact. For example, through a bespoke compliance cost survey.

Reduction in revenues or loss of profits

9.12 Estimating the impact of a policy on revenues (and often profits) requires assessing both direct and indirect effects. Direct effects may include a ban on some activities that directly reduce the revenues of firms engaged in those activities.

9.13 We consider the expected indirect effects based on how we think actors in the market will respond to our intervention. For example, fiercer competition leading to increased choice and lower prices and the entry and exit of firms from the market.

Other costs

9.14 Depending on the intervention, there are many other costs we may consider. These are typically indirect costs which occur once consumers and firms have changed their behaviour in response to the intervention. These reactions often lead to further costs on different parties. For example, firms passing compliance costs through to consumers via higher prices.

9.15 Some of our interventions may indirectly affect the fixed costs of firms. For example, in CP17/25 and CP17/26, 'Individual Accountability: Extending the Senior Managers and Certification Regime: Cost-Benefit Analysis' we noted that placing higher levels of responsibility on senior managers may mean some staff leave the financial services sector, increasing future recruitment costs.

9.16 Indirect costs and wider market changes are more difficult to estimate than compliance costs. In our CBAs, we aim at least to describe the likely indirect effects of our policies.

Timing of costs

9.17 Unless there is specific reason to assume otherwise, we assume that all one-off costs take place in the first year of the appraisal period. We assume that ongoing costs start from the point the intervention comes into force, which is typically also in the first

year. In most cases, costs in the first year will include both one-off and ongoing costs, and each subsequent year of the appraisal period (typically up to 10 years) will contain ongoing costs which will typically be discounted at a rate of 3.5% (aligned with the Green Book approach).

Costs to consumers

9.18 Some interventions may create additional costs to consumers. For example, an intervention that limits some consumers' access to credit, or when we require that consumers should receive additional services, such as advice. While aiming to deliver certain benefits to consumers (for example, improved suitability of investment products), these interventions may also result in higher prices (for example, on providing advice on certain products). We are careful not to double count the monetary cost to the firm with any costs passed through to consumers.

9.19 There may also be unintended costs to consider. In CP18/12, 'High-cost Credit Review' our rent-to-own intervention includes a discussion of some of these costs to consumers, such as reduced convenience from changes in sale processes. We can consider or reduce risks of unintended costs from a policy by testing so we have a better understanding of what consumers will actually do (for example, see CP17/10, 'Credit card market study: consultation on persistent debt and earlier intervention remedies'.

Opportunity cost of consumer time

9.20 We often monetise the impacts of time savings or losses from our interventions. Some interventions result in consumers saving or losing leisure (non-working) time. For example, consumers may save time through better quality transactions, avoiding the effort of seeking compensation or through shopping around more easily. In contrast, consumers may spend more time reading additional disclosure or shopping around when they become more engaged in choosing financial services and products. For example, the time it takes to read additional disclosures, or the additional time taken shopping around (see Annex 1 in CP11/20, 'Packaged Bank Accounts: New ICOBS rules for the sale of non-investment insurance contracts'.

9.21 Currently, there is no finance sector-specific guidance on how to monetise these impacts. We have predominantly used the Department for Transport (DfT) Transport Analysis Guidance (TAG) values of time (VoTs) as recommended by the Green Book, unless there was other survey evidence available (for example, in our CP20/19, 'General insurance pricing practices market study').

9.22 We have considered how far VoT estimates developed elsewhere are appropriate in our assessment of costs and benefits. We completed an initial assessment of how we value time impacts to consumers in our CBAs and of available approaches. We then commissioned the Institute of Transport at the University of Leeds (ITS Leeds) to assess the transferability of the value of travel time saving from the transport context to the finance context.

9.23 ITS Leeds concludes that, without VoT estimates specific to the finance sector, estimates can be transferred from the transport context to provide a reasonable approximation of the value of consumers' time spent dealing with financial services. The standard value of travel time savings for 'other non-work' (often referred to as 'leisure') journeys, averaged across all travel modes, can be used, from Unit A1.3 of the DfT's TAG. The value in DfT's TAG is £6.60 per hour in 2022 prices, which is regularly updated.

9.24 ITS Leeds also suggested sensitivity testing can be used in some cases to provide additional assurance around applying the value of travel time savings to the finance context in our CBAs. Appendix 4 gives further details on the value of time.

Costs of switching and searching

9.25 Our interventions can make it easier for consumers to switch between providers. There may be costs or benefits from increased switching. These costs and benefits could be related to the time and effort that consumers spend shopping around (that is, the opportunity cost of time for consumers), or to the fees and charges that firms and third-party services charge consumers. For example, exit fees and legal cost from mortgage switching.

9.26 We may be able to estimate the cost of switching for consumers. However, it is not possible to estimate the total cost of switching if our intervention does not require mandatory switching and if there is no relevant previous research. We assume that consumers will not choose to voluntarily switch if it is not beneficial to them.

Additional information for consumers

9.27 Providing additional information to consumers may become burdensome rather than beneficial. This can occur because the new information being provided is unclear or creates a burden of understanding for consumers. For example, in OP62, 'Matter of fact-sheets: improving consumer comprehension of financial sustainability disclosures', consumers reported confusion regarding the length and presentation of certain information. This enabled us to refine our proposals.

Cost pass-through

9.28 Consumers may bear some of the additional costs to firms in markets where firms can pass on costs to consumers in the form of higher prices. If a market is competitive in terms of suppliers, how far firms can pass costs through depends on the relative elasticities of supply and demand. In markets where demand is inelastic relative to supply, firms are more likely to be able to pass on costs to consumers, as consumers are less likely to reduce their consumption of products in response to price increases.

9.29 In a monopoly market, or one featuring imperfect competition, predicting the degree of pass-through is more complex and requires information on the slope of the demand curve, the cost structure (whether marginal costs are increasing or decreasing) and whether firms are engaging in strategic competition. Further details are covered in RBB Economics' 2014 report on cost pass-through for the Office of Fair Trading.

9.30 Gathering the type of detailed firm-level information required to conduct robust assessment of cost pass-through rates can place a high burden on respondents and is resource-intensive for the FCA. It may not be reasonably practicable in the preparation of many CBAs. However, it is important that our CBA acknowledges where additional costs to firms can potentially be passed through to consumers. We will estimate the extent of cost pass-through if it is feasible and proportionate to the value these estimates have for our policy development.

Waterbed effects

9.31 'Waterbed effects' are where a reduction in the price of one product or service leads providers to increase the prices of another product or service.

9.32 We may include an assessment of potential waterbed effects as a result of our interventions. However, the notion that multi-product firms can recoup revenue losses caused by new rules on a product by simply raising prices on other ones is often misleading. Waterbed effects only occur if firms have the ability and the incentives to increase the price of a product or service in response to new rules affecting another product or service.

9.33 The ability of the firms to recoup some or all negative impacts on profit may depend on:

- The links between product prices - waterbed effects may occur if the intervention on a product actually changes the profit-maximising price that firms charge on another product.
- The competitive environment - if there are linkages between products, waterbed effects are more likely in a 'high-competition' environment where margins are already squeezed. In that case, firms need to raise prices of related products to avoid losses.

9.34 Impacts of interventions removing pricing differentials between consumers should not be described as waterbed effects. Instead, where there is a clear distributional element (such as different impacts falling on consumers of different incomes) we may undertake distributional analysis.

Costs to the FCA

9.35 The CBA considers whether the intervention causes an increase in the cost of our activities beyond business as usual, for example, following an expansion in our remit.

9.36 We exclude policy development costs as they are usually sunk costs, that is, costs that cannot be recovered. Often we will supervise new rules using existing regulatory resources (for example, through efficiency savings). If additional resources are required, we estimate these costs using the opportunity cost of staff time methodology and estimating the cost of other required resources (for example, IT system changes).

Chapter 10

How we estimate wider economic impacts

10.1 The potential for an intervention to have wider impacts across the economy, society and the environment should be considered whether they are intentional or not. This is particularly important for interventions with long-term impacts where structural changes may occur. Such external structural shifts may be due to demographic, technological, environmental, cultural or other similar external changes. In this section we outline possible methods we may use to estimate wider impacts and give examples of some wider impacts that are particularly relevant for us.

Assessing wider economic impacts

10.2 Significant effects in markets outside of those directly targeted by our regulation are relevant to our CBA. A common approach to understanding and measuring these wider market impacts is through general equilibrium analysis. General equilibrium analysis attempts to measure the impacts an intervention makes on the economy as a whole, rather than measuring the impacts on a single market, as happens with partial equilibrium analysis.

10.3 However, general equilibrium models are often costly and difficult to apply to individual ex-ante impact assessments. They also have limitations as they rely on several assumptions. As an alternative to this, systems thinking offers a framework for visualising those interconnections and developing an understanding of how wider markets interact and change in response to our interventions. For further guidance on this approach, see the Government Office for Science, 'Systems thinking for civil servants' publications.

10.4 Wider impacts are often difficult to quantify and monetise. If quantification or monetisation is not possible, our analysis may describe potential impacts in a qualitative way and evaluate the strengths and limitations of the relevant arguments. Where possible, we aim to include relevant data to support the qualitative analysis.

Examples of wider economic impacts

10.5 In this section we provide examples of some wider impacts we may assess. These are just some examples, and we might assess other wider impacts depending on the intervention.

International competitiveness and long-term growth

10.6 The Financial Services and Markets Act 2023 gave the FCA and the PRA a secondary objective to facilitate the international competitiveness of the UK economy (including in particular the financial services sector) and its medium to long-term growth, subject to aligning with relevant international standards.

10.7 Our CBA will include an assessment of the impacts of our proposals for the secondary objective, where applicable. Appendix 6 explains how we will assess the impacts of the secondary objective in our CBAs.

10.8 Effective regulation of financial services can deliver positive impacts to the wider economy. A clear and stable regulatory framework for financial services helps attract investment, facilitate efficient allocation of capital between savers and borrowers and enables safe and trustworthy market transactions. This helps make the economy more internationally competitive and fosters sustainable economic growth. Other wider economic spillovers from financial services regulation may occur if regulations lead to better business practice in the context of environmental or social responsibility.

10.9 Our work to advance our primary objectives already plays an important role in facilitating international competitiveness and the sustainable growth of the wider economy. Some of our past interventions were aimed at reducing restrictions or increasing the protections for investors in more 'productive' investments (often termed 'long-term UK capital projects'). An increase in productive investments should ultimately lead to higher growth and benefit the consumers who use these investments or goods from these productive investments.

10.10 For example, in CP21/12, 'A new authorised fund regime for investing in long term assets', we identified a greater opportunity for investment in long-term, productive finance assets.

10.11 As a further example, by removing restrictions to listing set out in CP21/21, 'Primary Markets Effectiveness Review', we aimed to encourage business growth in the economy. Removing these restrictions was designed to bring new companies to list in the UK (whether from the UK or elsewhere) and to increase activity and revenue opportunities for UK-based financial and professional services.

10.12 The secondary objective only applies 'so far as reasonably possible'. There may be circumstances where our intervention only advances our primary objectives and not our secondary objective of international competitiveness and growth.

Assessing impacts from regulatory divergence or alignment

10.13 Following the UK's withdrawal from the European Union (EU), the UK is no longer obliged to follow EU directives. This means that some of our rule changes may involve diverging from the regulatory approach used in the EU. Where a rule change leads to greater divergence or alignment with other regulatory jurisdictions, we consider the wider costs and benefits it may lead to, beyond the firms and consumers directly affected. We set out some of the impacts we consider below.

Cost of doing business

10.14 Divergence can change the cost of doing business, for instance by removing certain obligations from firms when doing business in the UK that they need to comply with when doing business in another jurisdiction. This may create a competitive advantage for the UK and incentivise firms to relocate operations to the UK. It may also lead to greater opportunities for innovation in the UK, where divergence means new innovations can be brought to market more quickly or with fewer regulatory hurdles.

10.15 Where firms do business in both the UK and another jurisdiction, divergence can also create new costs, for instance if they are required to report to 2 different systems or produce different product information. This may create new costs of familiarisation and other transition costs. If firms trading cross-border had previously established structures and processes that were aligned with another jurisdiction in which they continue to trade, they may not be able to fully take advantage of reductions in compliance obligations in the UK market.

10.16 Rule changes that lead to greater alignment with another jurisdiction can result in reductions in the cost of doing business across borders over time, by allowing firms to standardise their processes for multiple markets.

Flexibility of a tailored regulatory environment

10.17 Divergence can allow specific challenges to be addressed in the UK that would not have been possible in a regulatory environment that was designed to cover a broader market and did not take into consideration specific UK issues. We may be able to tackle problems in a UK market more quickly when we have rules tailored to the UK than through using those aligned with another jurisdiction. This can reduce the cost from future harms by enabling us to intervene with greater speed.

Cross-border cooperation

10.18 Regulatory alignment can allow for cross-border cooperation from institutions across different jurisdictions. This can mean greater sharing of information between regulators or other relevant bodies or cooperation on enforcement cases. It can encourage greater cross-border trade and increase the size of a market as it raises the level of trust consumers or investors have in cross-border transactions. Divergence can create the opposite effect if it prevents or reduces the ability for cooperation.

Market access

10.19 In some cases, regulatory alignment is a prerequisite for other forms of market access between jurisdictions, which may go outside financial services. Divergence can lead to market access being withdrawn or make it more difficult to negotiate better access in the future, with reduced opportunities for trade. When assessing potential impacts on market access or cross-border cooperation, we may need to make assumptions about other jurisdictions' responses as these may not be clear at the time a decision is taken to diverge.

Examples of spillovers to the wider economy

10.20 Spillovers to the wider economy from the financial sector can be significant and can have both positive and negative effects. Spillovers are often referred to as 'externalities' where a cost or benefit falls on a third party. We give just some examples below and we may assess other spillovers to the wider economy depending on the intervention.

Environmental Social and Governance (ESG)

10.21 ESG factors can lead to both direct benefits and costs for firms and customers but are also likely to have wider economic impact, particularly where externalities occur. For example, ESG policies may have an impact on greenhouse emissions or the way in which firms interact with wider society.

10.22 Financial services and markets play a crucial role in transitioning to a sustainable future. Our regulatory approach aims to create an environment where market participants can manage risks and seize opportunities in moving to a more sustainable economy. This is in line with our regulatory principles (introduced by the Financial Services and Markets Act 2023) to contribute towards achieving the UK net zero emissions target and environmental targets.

10.23 ESG-related policy interventions in financial services can involve obligations to provide information to the market. For example, this can include disclosing climate-related risks and opportunities (see PS21/24, 'Enhancing climate-related disclosures by asset managers, life insurers, and FCA-regulated pension providers'). Disclosures can reduce potential harm and enable consumers to identify products that meet their needs and preferences.

10.24 Evidence on the impacts of ESG-related disclosures is still developing (see a literature review). In this area, as for other areas where the impacts are uncertain, analysis should include an appropriate level of sensitivity analysis and acknowledgement of any uncertainty (see Chapter 6: Our approach to estimating impacts).

Spillovers to public sector services

10.25 Our interventions can have wider impacts on public sector services, such as reducing costs on the healthcare or justice system.

10.26 As highlighted in CP23/5, 'Debt packagers: feedback on CP21/30 and further consultation on new rules and perimeter guidance', research by The Money and Pensions Service (MaPS) found debt advice contributes towards an improvement in mental wellbeing by alleviating the incidence of depression, anxiety and panic attacks. There are also benefits to society (or positive externalities) through improving the health of individuals as this puts less stress on the healthcare system. The study estimated that for everyone seeking debt advice (1.5 million people), reduced mental health care costs from receiving good quality advice could benefit society between £50m and £93m each year.

Reduced financial crime

10.27 Our interventions to ensure the integrity of UK financial markets may reduce financial crime. This is often a direct impact from a particular policy intervention. However, many of our policy interventions may also have the impact of reducing financial crime, such as money laundering, and potentially spillover into reducing other crimes, such as contraband.

10.28 In CP20/17, 'Extension of Annual Financial Crime Reporting Obligation', we argue there is a link between supervision of money laundering regulations and reduced societal harm. We set out the channels by which we believe the benefits could occur, but the indirect link and many compounding drivers of the underlying harm of money laundering, mean quantifying these was not reasonably practicable.

Chapter 11

Monitoring and evaluation

11.1 This chapter explains how we consider monitoring and evaluation at the CBA stage. Our Rule Review Framework sets out in more detail why and how we monitor and evaluate our rules.

11.2 What we learn from monitoring or evaluation allows us to take any necessary action, and transfer any lessons to future work. How effective remedies are can inform future policy decisions. If we monitor an intervention and find it has not been implemented as intended or there are unintended consequences, we can further examine why this might be the case. Once we build our understanding, we can think of potential solutions to address any issues.

Why we consider monitoring and evaluation at the cost benefit analysis stage

11.3 Planning the monitoring and evaluation during the CBA process ensures that we have a robust strategy and the necessary data to evaluate our interventions effectively. For example, this may require collecting bespoke or new data sources which we must measure as the intervention is implemented. The earlier that this is considered, the better firms will be able to ensure they can provide the necessary data for monitoring and evaluation. It is also crucial to measure a baseline of the key outcomes before the intervention as well as considering how to establish a counterfactual to measure the causal effect of the intervention. Considering evaluation at this stage also means that we can adapt the design of the intervention to support an evaluation, such as a staggered rollout.

How we monitor the effectiveness of our rules

11.4 Monitoring outcomes, including lead indicators or intermediate outcomes, helps us assess whether our policy was successful. As explained in our Rule Review Framework, for many rules we identify a set of metrics for key outcomes to help us establish whether an intervention is working as intended.

11.5 Evidence for our metrics can come from different sources of data, including our authorisation, supervision and enforcement work. See Chapter 3: How we gather and use evidence for more information.

11.6 More broadly, we monitor and report progress against our key areas of focus in our FCA outcomes and metrics. In many cases, those for our interventions will align with our organisational outcomes and metrics.

What we set out in a cost benefit analysis about monitoring and evaluation

11.7 The CBA should outline at a high-level the following aspects of a monitoring or evaluation plan, where appropriate:

- Whether we plan, bar feasibility and wider prioritisation decisions, to evaluate the impact of a policy or undertake a post-implementation review ahead of a firmer commitment in the Policy Statement. For proportionality reasons not all policies can be evaluated after we have intervened, and we have set out criteria where we should most consider evaluation in our Rule Review Framework.
- Whether active monitoring is planned and if so the success factors of the intervention (typically identified in the causal chain) and what metrics would be appropriate to monitor.
- The realistic timeline over which effects are expected to be observable.
- Available data or other sources of evidence that we can use to monitor the outcomes of the intervention.

How we use rule reviews to inform and improve CBA estimates

11.8 We can use findings from an appropriate rule review to provide evidence for assumptions we use in subsequent CBAs. For example, we used evidence from EP18/1, 'An evaluation of our guaranteed asset protection insurance intervention' to adjust the assumptions we made in the CBA for CP18/12, 'High-Cost Credit Review' on the effect of a point of sale ban.

11.9 Sometimes the causal effects we identify in an impact evaluation are only valid for a subset of the affected population in a CBA, and cannot be reliably extrapolated to a wider population or to a different market or context. We consider the validity of estimates from a previous evaluation when applying them to a new CBA and make appropriate adjustments for uncertainty. See Chapter 6: Our approach to estimating impacts.

Chapter 12

How we present results of our cost benefit analysis

12.1 This chapter sets out how we present our estimates in our published CBAs. To maximise transparency, we aim to present our estimates in a way that is clear, easy to interpret and consistent across our CBAs.

12.2 We first include a summary table which sets out the various costs and benefits to the main affected groups, such as firms and consumers. We explain clearly where impacts occur one time only or are expected to recur, and we distinguish between direct and indirect impacts (see Chapter 5: How we identify impacts).

12.3 Where we cannot monetise particular impacts, we state the expected direction of impact (whether they will be a cost or benefit), are clear that they are unquantifiable and give some indication of the expected scale where possible.

How we present aggregate impacts

12.4 We will present a summary table with a description of the benefits and costs including which groups are affected (for example, firms, consumers or other relevant parties), whether they are direct or indirect and if they are one-off or ongoing impacts. Ongoing impacts are usually constant over the standard 10-year appraisal period, but we will state if this is not the case.

12.5 We then show aggregate impacts in present value terms, after discounting the value of impacts we expect in future years. We report the following aggregate impacts for each CBA:

- **Net Present Value (NPV)** –the discounted aggregate impact (total benefits (B) minus total costs (C)) to society, typically over 10 years.
- **Adjusted NPV** –the relevant discounted aggregate social impact (B-C) if we exclude costs to business of reduced revenues caused by us reducing harm from a market failure or serious misbehaviour.
- **Equivalent Annual Net Direct Cost to Business (EANDCB)** – the annualised present value of the net direct costs to business over 10 years, as set out in the Better Regulation Framework and used by Government departments.

Adjusted NPV

12.6 In some cases we intervene to prevent harmful conduct due to a market failure. In these cases, we consider how the balance of costs and benefits from the policy would change if we excluded the costs to firms from addressing that conduct. We present an Adjusted NPV alongside the NPV to illustrate the effect of excluding those costs.

12.7 For instance, if an intervention stops firms from exploiting consumers' lack of information about a product and overcharging them, we may expect prices to fall to the level they would be in a market with better information. We count the lost revenue to firms from lower prices as a cost and the gain to consumers from lower prices as a benefit. This is a transfer from firms to consumers and does not show up in the NPV because the cost to firms offsets the benefits to consumers.

12.8 The Adjusted NPV excludes the lost revenue to firms, although it includes the benefit to consumers from lower prices. We used this concept in CP21/1, 'Restricting CMC charges for financial products and services claims' where we described the Adjusted NPV as 'Net Adjusted Benefits'.

Equivalent Annual Net Direct Cost to Business

12.9 The EANDCB is an estimate of the average annual net direct costs to business in each year that the measure is in force.

12.10 To calculate the EANDCB, we first sum up the discounted value of the stream of net direct costs which accrue over the appraisal period to reach the present value of the net direct costs. We then convert this into an equivalent annual figure by dividing by an annuity rate.

12.11 The annuity rate, **a**, is given by the following formula where **t** is the time period, **r** is the discount rate:

$$a_{t,r} = \frac{1+r}{r}\left[1 - \frac{1}{(1+r)^t}\right]$$

12.12 In the case of the standard 10-year appraisal period and discount rate of 3.5%, the annuity rate is approximately 8.61.

Annex 1

Glossary

Key term	Description
Causal chain	A causal chain sets out the logic behind how we intend an intervention to work, by setting out the key steps (or causal links) between our intervention and the ultimate outcomes.
CBA	FSMA defines a Cost Benefit Analysis (CBA) as an analysis of the costs and benefit of the rules being proposed and an estimate of those costs and benefits, unless the FCA considers they cannot reasonably be estimated or it is not reasonably practicable to do so (see s.138I of FSMA). CBA is a structured way to assess the costs and benefits we expect a policy to generate if the proposed rules are made. It describes and quantifies, as far as possible and proportionate, the likely impacts of the policy. It compares benefits against costs and shows where and on whom these benefits and costs are expected to fall.
Consumers	We generally define a consumer as any natural person who is acting for purposes which are outside their trade or profession. However, when making policy in wholesale markets we will consider impacts on different types of market participants, such as buy-side and sell-side participants.
Estimation	Estimation is the process of making a judgment about the value of something, often based on incomplete or uncertain information. Estimation can include quantification and monetisation.
Monetisation	Monetisation is the process of placing a monetary value because of our intervention. For example, the pound value of compliance costs on firms or the pound value of consumer benefits.
Quantification	Quantification is the process of assigning a numerical value. For example, how many individuals or firms are affected by our intervention.
WELLBY	A one-point change in life satisfaction on a 0-10 scale, per person per year.

Annex 2

Abbreviations used in this paper

Abbreviation	Description
BEIS	Department for Business, Energy & Industrial Strategy
CBA	Cost Benefit Analysis
CMC	Claims Management Companies
CP	Consultation Paper
DfT	Department for Transport
EANDCB	Equivalent Annual Net Direct Cost to Business
EP	Evaluation Paper
ESG	Environmental, Social and Governance
ETN	Exchange Traded Notes
EU	European Union
FCA	Financial Conduct Authority
FG	Finalised Guidance
FOIA	Freedom of Information Act (2000)
FSMA	Financial Services & Markets Act (2000)
FTE	Full-time Equivalent
GDPR	UK General Data Protection Regulation
ITS	Institute of Transport Studies
NAB	Net Adjusted Benefits
NPSV	Net Present Social Value
NPV	Net Present Value

Abbreviation	Description
OBR	Office for Budget Responsibility
ONS	Office for National Statistics
OP	Occasional Paper
PS	Policy Statement
PSR	Payment Systems Regulator
PRA	Prudential Regulation Authority
RCT	Randomised Controlled Trials
RMA	Retail Mediation Activity
ROCE	Return on Capital Employed
RPC	Regulatory Policy Committee
STPR	Social Time Preference Rate
TAG	Transport Analysis Guidance
UK	United Kingdom
VoL	Value of Leisure
VoT	Value of Time
VTAT	Value of Time Assigned to Travel
VTTS	Value of Travel Time Savings
WACC	Weighted Average Cost of Capital
WTA	Willingness-to-accept
WTP	Willingness-to-pay

Appendix 1

The standardised cost model

1. The standardised cost model is designed to speed up and standardise the assessment of some common recurring costs in our CBAs. This appendix describes the approach we take in using this model and gives details on some of its key underlying assumptions. Setting out our approach and assumptions provides transparency.

Approach

2. The standardised cost model is a framework for estimating common types of compliance costs. The framework is based on our understanding of how certain compliance costs are structured, drawing on a 'core' set of assumptions. We can then estimate costs in a bottom-up way by including some variables specific to the intervention, mainly how many hours of time a particular activity requires of different types of firms.

3. The model's assumptions are based on a review of previous CBAs, internal consultation, and desk-based research. We combined this with consultation with firms and trade bodies, and discussions with software vendors.

4. This model does not represent a new approach to CBAs; it helps to estimate costs in a manner consistent with our previous approaches. Certain costs are presented in a more standardised and explicit way. When we use the standardised cost framework, we must still meet all the current CBA requirements as specified by FSMA. For large or complex interventions, we are still likely to conduct bespoke research and/or conduct surveys of firms. In these circumstances, we might use the standardised cost model to estimate particular costs we could not estimate by research or bespoke surveys, where response sizes or answers are inadequate and as a sense check. The main purpose of the model is to facilitate and improve consistency of CBAs for smaller and simpler interventions. For example, changes to internal governance processes or small changes to disclosure that require amendments on a firm's website.

When we use the standardised cost model

5. The standardised cost framework requires information and estimates specific to the intervention. In this sense, it is partially standardised, but cost estimates themselves vary depending on the intervention.

6. We use the standardised cost model when we want to estimate the types of costs the model covers (see below), and where we believe the approach is appropriate. For example, if we think the large/medium/small firm distinction is not appropriate,

a CBA can still take a separate approach. If there is a complex impact on customer transactions, it makes more sense to estimate it separately rather than force it through the approach provided in the standardised cost model. Equally we may combine a particular assumption within the model with separate information, as for some CBAs we still conduct bespoke research and conduct surveys of firms.

7. Whenever the model is used, we explain the relevant assumptions so that the reader can understand our estimates.

Updating the model

8. The core assumptions in the model might change over time. In this appendix we have set out the current assumptions we use, but we will review and update the assumptions as new evidence becomes available. In early 2023, we updated the underlying salary and firm size data. In late 2023, we changed the way we uplift the salary data on an annual basis. Previously, we used ONS earnings inflation data for all industries to uplift the salary data but now uplift the salary data using ONS earnings inflation data for the finance sector.

Implications

9. One of the main implications of this approach is that only in rare circumstances will CBAs contain no quantified costs. For example, in most cases we quantify at least some costs in CBAs as a consequence of accounting for familiarisation and gap analysis costs.

10. The model is useful at the option appraisal stage of policy-making, as it allows us to compare the potential costs of different intervention options more effectively.

How the standardised cost model works

11. The standardised cost model helps estimate costs predominantly on the basis of staff time. The key pieces of information we require to estimate the costs of an intervention are what incremental tasks a new rule requires of firms, and how much staff (or external contractor) time is required to complete those tasks. This time is likely to vary according to a firm's size and their activity in that market.

12. We then base most cost estimates on a calculation like the one below (separately for each size of firm). This approach is common across CBAs:

- Additional minutes of staff time x average cost of time per minute x number of firms.

13. To put a cost on time, we have sourced salary information for a range of occupations in financial services. Salaries for large and medium firms are based on the 2022 Willis Towers Watson UK Financial Services Report. Small firm salaries were sourced from

a systematic review of adverts on the websites of Indeed, Reed and Glassdoor, which we cross-referenced with other publicly available sources. In the absence of bespoke firm-level information on the total cost of labour, we apply an 'uplift' factor to wages to account for non-wage labour costs.

14. Regulatory Policy Committee (RPC) guidance to government departments and regulators in 2019 recommended using either Eurostat data to calculate the non-wage labour cost uplift, or follow the advice from the Department for Business, Energy and Industrial Strategy (now the Department for Business and Trade). As Eurostat no longer report data on wages and non-wage labour for the UK, we follow the Department for Business and Trade approach, which uses experimental statistics produced by the ONS data on hourly labour costs. The uplift figure recommended in 2023 was 17.9%.

15. Consistent with guidance on impact assessments to government departments, we assume no impact on wider overheads such as building costs (see RPC guidance note on 'implementation costs'). Where we judge that overheads are also likely to be affected, the impact should be additionally captured, such as through a bespoke compliance cost survey.

16. Salary estimates are uprated using ONS full-time earnings inflation figures for the finance and insurance sector.

17. In each CBA we aim to identify the firms that we expect to be affected by the intervention. If it is not possible to identify all the firms affected, we will make an approximation. If we know which firms are affected, we can take account of their size (see Box 4) and apply different assumptions of compliance costs for large, medium and small firms. We can use regulatory data reported by those firms, for instance the number of advisers reported in retail mediation activity (RMA) returns.

Box 4: Firm size

The model distinguishes between costs incurred by firms of different sizes. We have classified all regulated firms as large, medium or small using data from annual FCA fee blocks.

There is no standard way to define firm size using available FCA data. Data on total employees is not available for most firms and ranking firms by revenue or FCA fees can create perverse results because of multiple tariff bases. Instead, we use underlying tariff base data to give each firm a rank among all firms that use the same tariff base (annual income, gross premium income etc.). We then take each firm's maximum rank (many firms use multiple tariff bases) to order firms. The top 250 firms are classified as large, firms from 251 to 1750 classified as medium, and all the rest as small. This means that the size categories are fixed. There may be cases where the evidence suggests using a different size methodology (for example, size definitions by revenue for a particular portfolio). If this is the case, the CBA will outline the methodology used.

Main sections of the model

18. The sub-sections below summarise the key sections and the main assumptions we use in the standardised cost framework. These are baseline assumptions; other figures will be used if there is better information available and we will update these figures over time as new evidence becomes available.

Familiarisation and gap analysis

19. Familiarisation and gap analysis refers to firms reading and familiarising themselves with the detailed requirements of new rules, guidance or good and bad practice, and checking their current practices against these expectations. Familiarisation estimates are based on the length of FCA publications such as consultation papers. Gap analysis estimates are based on the length of the legal instrument or good/bad practice text. The salary used is an average of the compliance function. We include compliance senior management salaries in this average, which accounts for the assumption that senior management for compliance will review an FCA consultation. We do not assume Board and Executive Committee time as a familiarisation cost; however, these costs can be added elsewhere in the model. For example, in change projects or as another staff cost.

20. There are 3 scenarios for how many staff may read a publication. The choice of scenario is meant to reflect the impact the proposals will have on the firm.

Table 7: Familiarisation - the number of people per firm assumed to read new FCA publications

People per firm assumed to read documents:	Large	Medium	Small	Use
Standard	20	5	2	Publications that have a bearing on the business model of the firms in question, for example, high priority consultation papers
Small	6	4	1.5	Small-scale changes, for example, low-impact consultation papers and thematic reviews
Very small	3	1.5	1	Certain letters and technical notes requiring attention but no action by firms

21. We estimate gap analysis costs using a combination of assumptions about the size of a legal team or equivalent (using the salary of a legal professional), and the time each member of that team takes to review 50 pages of legal text (for example, the consultation paper instrument).

Table 8: Gap analysis - legal review team size and days to review 50 pages of legal text

	Scenario	Example use	Large firm	Medium firm	Small firm
Size of legal or compliance team	Standard	Standard rule-making and new guidance	4	2	1
	Small	Deregulations and redrafting	2	1.5	1
Days per team member to review 50 pages of legal text	Standard	Standard rule-making and new guidance	4	3	1
	Small	Deregulations and redrafting	2	1	0.5

Training

22. Training includes information given to staff, ranging from informal memos and oral updates, through to formal classroom-based training delivered by a professional.

Table 9: Types of more formal training course options and possible use

Training type	Use
Bespoke or premium training	Classroom-based training by HR or external training providers
Basic training	More informal meeting-based training, often delivered by colleagues with expertise
Written/briefing	Basic information (for example, on new processes) that staff are informed of via email, 'cascades' or in meetings

23. All large firms and 40% of medium firms are assumed to have in-house training departments. The costs of in-house training are assumed to include: the cost of time of staff to design and deliver training, the cost of time of attendees and any time attendees spend familiarising themselves with the training material. The costs of external training are assumed to include: the costs of buying training courses from external providers, the cost of time of attendees and any time attendees spend familiarising themselves with the training material. We cap the total cost of training per employee for large and medium firms at the external training rate to avoid the scenario in which per-employee costs are modelled as unrealistically large.

Table 10: Main assumptions used for training

Firms	Variable	Assumptions
All firms	Number of classroom training hours per day	6 hours
	Average number of participants per class (to calculate delivery hours)	15
	Written / basic briefing familiarisation time required after training course (as % of training hours)	0%
	Basic training familiarisation time required after training course (as % of training hours)	25%
	Bespoke and premium training familiarisation time required after training course (as % of training hours)	50%
Firm with in-house training function	Hours of preparation per hour of written/ basic briefing	0 hours
	Hours of preparation per hour of basic training	8 hours
	Hours of preparation per hour of bespoke and premium training	40 hours
Firms without in-house training function	Cost of external training course per person per day	£700
	Premium per day rate for external training (for example, major changes such as MiFID II)	£1000

IT development

24. Our regulations may require firms to undertake changes that necessitate modifications to IT systems, additional work by IT staff or buying in outside IT assistance. We take a different approach for large and medium firms compared with small firms.

Large and medium firms

25. For one-off IT development costs, the main assumption in the standardised cost model is an archetypal project structure for all large and medium firms. These firms are assumed to have (or incur costs as if they have) in-house IT capability. This is an average cost structure based on our research of common types of regulation-driven IT projects. We have identified the following well-defined elements of a software development project:

Table 11: IT cost estimate structure for large and medium firms

Element	Percentage of resource	Description
Business analysis	5%	Work carried out in conjunction with business areas to understand how the IT system interfaces with business processes and will deliver business requirements.
Design	15%	Includes 'solution architecture' which translates the business requirements from the business analysis phase into detailed technical specifications for the new/amended software.
Programming/coding	55%	The actual coding of the new software in line with the technical specifications. This is generally the longest part of the project.
Project management	10%	The overall time spent in managing the project which may involve diverse and/or geographically separated teams of programmers. All the work needs to be checked it is to specification and fits together properly.
Testing	10%	No new software is released into the live system until it has been thoroughly tested. This comprises of internal IT testing of each new component, user acceptance testing of the finished product and 'regression testing' to ensure that new components do not disrupt, disturb or corrupt existing systems in unforeseen ways.
Senior management	5%	Senior management review and sign-off.

26. To calculate the total resources of the project, it is necessary to provide a total number of project days, which can be split according to the structure. We can calculate the total hours of different types of staff, and use salary estimates to calculate a total cost estimate. The model currently contains a number of scenarios of project size that we can refine and map to interventions over time. In terms of project length, we provide a number of scenarios ('complexity grades') of the number of project days. Table 12 shows the current complexity grade scenarios, together with the implied total person days in each case (as a result of combining project length and team sizes). We emphasise that these parameters are flexible and can be changed depending on the case in question.

Table 12: IT 'complexity grades' for large and medium firms

	Large		Medium	
Complexity grade	Project length (days)	Total Person days	Project length (days)	Total person days
Very small project	5	46	2	8
Minor project	60	546	40	156
Moderate project	120	1092	80	312
Large project	180	1638	150	585
Mega project	300	2730	220	858

Small firms

27. We assume small firms do not have in-house IT departments. So, the model does not contain assumptions about the structure of IT costs. For small firms, current CBA practice is to estimate IT costs based on informal or formal consultation, or using other evidence.

Change projects

28. Change projects (sometimes called governance changes) relate to policy interventions that require firms to change their internal processes or governance arrangements in some way. The main costs relate to the opportunity cost of staff time required by the intervention.

29. The way we estimate these costs in the model is to calculate a total number of hours incurred by a project team and project management. Board or executive committee review can also be selected. This time will depend on the regulation, but the model contains assumptions about the size of these teams in different firms which enable us to calculate the total time. For example, an hour of company board time would be multiplied by the average board size.

Table 13: Change projects - number of staff in project and leadership teams

Variable	Large firm	Medium firm	Small firm
Size of change management project team	8	6	2
Average size of company board	10	8	2
Average size of executive committee	8	6	2

Customer transaction, sales and other changes

30. Customer transactions and sales changes refer to various regulatory requirements that change the length of a particular firm process such as a customer sales process or a transaction.

31. The key inputs to estimate these costs are the total number of relevant transactions (based on evidence such as the total number of sales of a product per year) and the additional minutes of staff time that the intervention requires. These inputs are not standardised, but the model provides a framework to undertake this type of calculation quickly for the specific firms affected.

32. We can also add other charges, such as other per firm costs (for example, buying external services) and other staff costs (for example, board and executive committee hours).

Appendix 2

Discount rates

1. Consistent with the Green Book approach, we typically apply a discount rate of 3.5% to determine the present value of the stream of costs and benefits we expect to occur in future years. The discount rate used in the Green Book is known as the 'social time preference rate' (STPR). It is the rate at which society values the present compared to the future. While the Green Book recommends the social time preference rate for discounting, some other jurisdictions use the opportunity cost of capital as the theoretical basis for discounting.

2. This STPR includes 2 components:

- 'time preference' (1.5%) – the rate at which consumption and public spending are discounted over time, assuming no change in per capita consumption. This captures the preference for value now rather than later.
- 'wealth effect' (2%) – this reflects expected growth in per capita consumption over time, where future consumption will be higher relative to current consumption and is expected to have a lower utility.

Health impacts

3. When appraising changes in wellbeing that occur in future years, we use the Green Book 'health' discount rate. This rate is 1.5% for the first 30 years and then declines gradually. The standard discount rate of 3.5% contains a discount rate component of 2% to reflect the lower marginal utility of income of a richer future society (that is, the wealth effect). We exclude this component of the discount rate for impacts to wellbeing because the subject being discounted is already expressed in utility terms.

Intergenerational impacts (including environmental)

4. Sensitivity analysis is appropriate when an intervention has long-term effects and involves large or irreversible transfers of wealth between generations. This involves applying both the standard Green Book discount rate and a reduced discount rate (which excludes 'pure' social time preference) to costs and benefits.

5. For the reduced discount rate, we can adjust the time preference to account for new generations as per the Green Book, as summarised in Table 14. When applying this approach, the Net Present Social Value (NPSV) using the standard and the reduced discount rate would both be included in the appraisal results. The difference between these 2 estimates of NPSV provides an estimate of the intergenerational wealth transfer that is attributable to pure social time preference. The basis for this approach

to long-term discounting can be found in the Green Book's supplementary guidance on intergenerational wealth transfers and social discounting.

Table 14: Summary of discount rates

Year	0 - 30	31 - 75	76 -125
Discount rate (standard)	3.50%	3.00%	2.50%
Reduced discount rate for intergenerational impacts	3.00%	2.57%	2.14%
Health	1.50%	1.29%	1.07%
Health and intergenerational impacts combined	1.00%	0.86%	0.71%

Appendix 3

Wellbeing effects

1. Wellbeing effects can be important, particularly in the context of our consumer credit interventions. We commissioned Simetrica to help us do this.

2. The following is an example of the steps to take to monetise wellbeing effects for interventions to reduce the likelihood of consumers suffering because of being in debt. This type of calculation can be used within a CBA to get estimates of wellbeing impacts. However, they should only be used where these are not counted elsewhere and there is strong evidence that the intervention may result in wellbeing effects. Here are the steps we would take:

    Understand whether the intervention will lead to an increase or decrease of existing debt or if it will result in entry/exit from debt (as both forms have different coefficients). The type of debt should be matched to the closest descriptor within the list of Simetrica coefficients.

3. To illustrate, a change in 'household bill arrears' has a coefficient of -0.0538 (Simetrica, Table 4, p.20).

    Once the change and the coefficient are known, we would measure the change in wellbeing due to the intervention. This is generally measured either by applying the coefficient directly to situations of debt entry or exit, or by applying the percentage change of indebtedness (where the scale of debt changes because of the intervention). Due to each coefficient being in the (natural) logarithmic functional form, the following formula is required to estimate the change in wellbeing:

$$= coefficient * \ln \frac{(100 + (\frac{post\ intervention\ debt\ (£) - pre\ intervention\ debt\ (£)}{pre\ intervention\ debt\ (£)} * 100)}{100}$$

4. To illustrate, the change in wellbeing from a change in household bill arrears of £500 to £200 would be calculated as follows:

$$= -0.0538 * \ln \frac{(100 + (\frac{200 - 500}{500}) * 100)}{100}$$

$$= 0.049296441\ (increase\ in\ wellbeing\ on\ a\ scale\ of\ 0\ to\ 10$$

5. 0.049296441 is the increase in wellbeing on a scale from 0 to 10.

d. The resulting change in life satisfaction can be converted to a monetary value by multiplying by £13,000. This is the Green Book Wellbeing Guidance recommended standard value of 1 wellbeing adjusted life year (a 1 point change in life satisfaction for 1 year, otherwise known as a 'WELLBY') in 2019 prices and values (to convert figures into a different price and value base year, see pg. 57 of the Green Book Wellbeing Guidance). A range can be calculated using the Green Book recommended range of £10k-£16k.

6. This would result in a central monetised benefit of £641 per person affected, with a range between £493 and £789 in 2019 prices and values.

e. The per person monetary impact can then be applied to all individuals affected to monetise wellbeing effects.

Appendix 4

Value of time

1. In the absence of finance-specific valuations, the Department for Transport's (DfT) Value of Travel Time Savings (VTTS) represents a reasonable approximation of the value of time to consumers in a finance context. However, we can use sensitivity testing to provide additional assurance around applying the VTTS to the finance context in our CBAs. We only apply this where it is proportionate to do so, particularly if time impacts to consumers contribute to a significant proportion of the costs or benefits in a CBA.

2. The theoretical basis for the practice of applying VTTS to estimate time impacts is as follows:

   VTTS = VoL – VTAT

   where:

   VTTS is the value of travel time savings

   VoL is the value of leisure

   VTAT is the value of time assigned to travel

   The interpretation of VTTS is that it is the value of re-assigning time from travel to leisure.

3. Research we commissioned from the Institute of Transport Studies (ITS) at the University of Leeds examined the key issues involved in the transferability of the VTTS from the transport to the finance context. There are 4 technical issues which could affect this particular transferability. These are how far VTTS varies:

   - if the representative sample of travellers is different from the representative sample of consumers of financial products and services
   - depending on whether time is gained or lost. DfTs VTTS is averaged over gains and losses, while our interventions are usually associated with time losses
   - depending on the size of the time gain or loss ('deltaT') assumption. DfT's VTTS is based on a deltaT of 10 minutes, while our interventions may be associated with time losses substantially higher than 10 minutes and are often up to 1 hour
   - if we extract travel-specific factors and the resulting unit value is effectively 'sector-neutral', as the VTTS would be equal to the VoL

4. Based on analysis of these issues, the ITS report concludes that the VTTS represents a reasonable approximation for the value of time in the finance context. However, we can use sensitivity testing to account for potential differences between the VTTS and a value of time specific to the finance context using multipliers estimated in the report.

Most of the resulting multipliers are close to 1, so they do not materially undermine the transferability of VTTS from transport to finance context.

Sensitivity tests

5. The sensitivity tests relate to 2 scenarios.

6. Scenario I considers that the value of time assigned to travel represents a reasonable proxy for the value of time assigned to finance. In this scenario, DfT's VTTS for leisure journeys are transferred to the financial products and services context. We expect this to be the scenario we mostly work within. Under this scenario, sensitivity tests 1-2 below can be used and a range of estimates presented.

7. Scenario II considers that DfT's VTTS for leisure journeys undervalues the corresponding value in the financial products and services context. In particular, this scenario considers a case where the value of time assigned to finance is zero (that is, VTAF=0), such that VTTS reduces to the VoL. Under this scenario, the VTTS captures the full opportunity cost of reallocating time from leisure to financial products and services (and vice versa) but omits the direct (positive and negative) utilities of spending time on financial products and services (for example, because they are accounted for elsewhere in the CBA) or assumes that such utilities net to zero. Under this scenario, sensitivity test 3 can be applied in addition to sensitivity tests 1-2 and a range can be presented.

8. More details on the multipliers are in Table 15 and Table 16 and how they were derived can be found in the ITS report.

Sensitivity test 1: Adjusting for representativeness of the sample

9. A multiplier of 0.9895 can be applied to the VTTS to adjust for slight differences between the socio-economic demographics of transport users and consumers of financial services. This multiplier was estimated by comparing the representativeness of the sample of travellers in the National Travel Survey to the sample of consumers in the Financial Lives Survey 2022.

Sensitivity test 2: Adjusting for reference dependence

10. Reference dependence affects the VTTS through so-called 'size' and 'sign' effects.

11. Sign effects are associated with the direction of change in time and cost. Under sign effects, individuals are assumed to be more sensitive to time and cost losses and less sensitive to time and cost gains. Sign effects have been removed from the DfT VTTS by averaging across time gains and losses. To account for sign effects, we can apply a multiplier of 0.90 to the VTTS for time gains and a multiplier of 1.15 for time losses.

12. Size effects are associated with non-linearity in the time and cost sensitivities. It is assumed that as the size of the difference in time (or cost) relative to the reference trip increases, the time (or cost) sensitivity either increases or decreases. The DfT VTTS is

based on a deltaT of 10 minutes. If the deltaT in a CBA is significantly different, the VTTS can be adjusted using the multipliers in Table 15. For example, if the deltaT is 60 minutes, then VTTS can be multiplied by 1.402.

Table 15: Impact of deltaT on the VTTS

Δt (min)	Ratio vs Δt = 10
1	0.580
2	0.682
3	0.750
5	0.847
10 (default)	1.000
15	1.103
20	1.183
25	1.249
30	1.306
35	1.357
40+	1.402

Sensitivity test 3: Use value of leisure time

13. The value of time assigned to finance is zero (ie VTAF=0), such that VTTS reduces to the VoL and a multiplier of 4.65 could be applied to the VTTS.

14. This sensitivity test could be considered instead of, or in addition to, sensitivity tests 1 and 2 under 2 sets of circumstances.

15. Firstly, when the direct (positive and negative) utilities of spending time on financial products and services are, at least partially, estimated elsewhere in the CBA, and so we can directly offset the utility benefits against the value of leisure time (VTTS x 4.65) in the CBA. For example, when we estimate the monetary reward from spending time searching and switching financial products separately in the CBA.

16. Secondly, when the direct (positive and negative) utilities of spending time on financial products and services are judged to net to zero. This could be the case when there is limited benefit from additional time spent on a very difficult or challenging activity involving financial services and products. In practice, the appropriate application of the sensitivity test under this circumstance will likely be difficult to judge, and so we expect this application to be rare.

Worked Example

17. Assume that a given FCA intervention involves a requirement for financial services providers to provide additional advice to consumers to help them choose an investment solution that is aligned to their objectives. It is estimated that, on average, this involves an additional 30 minutes of a consumer's time based on the additional disclosure and additional time taken to factor this into their decision-making.

- The baseline is the currently (2022 prices) recommended VTTS (£6.60/hr), which are updated regularly.
- Sensitivity test 1 applies a multiplier (0.9895) simply to correct the sample so it is representative.
- Sensitivity test 2 also applies multipliers (1.15) to adjust for the intervention imposing a time loss, and for the magnitude of time loss being more than 10 minutes (in this case, for 30 minutes, 1.3065).

18. This produces a VTTS in the range £6.60/hr to £9.81/hr.

Table 16: Impact of deltaT on the VTTS

Rationale	Baseline	Test 1	Test 2
Representative sample	1.0000	0.9895	0.9895
Time loss	1.0000	1.0000	1.1500
deltaT=30 mins	1.0000	1.0000	1.3065
Overall multiplier	1.0000	0.9895	1.4867
VTTS for other non-work (£/hr 2022 prices/values)	6.60	6.60	6.60
Implied VTTS (£/hr 2022 prices/values)	6.60	6.53	9.81

19. Sensitivity test 3 could instead apply the 4.65 multiplier to reflect a situation where we partially estimate the utility elsewhere or the benefit from spending time on financial products/services relative to leisure nets to zero. This would produce a VTTS in the range of £6.60/hr to £30.69/hr.

Appendix 5

Distributional weightings

1. This is relevant when measuring the impact of interventions that benefit some consumers at the expenses of others. Here are the steps we take:

   a. We want to understand the income of the groups affected by our intervention. An approach we have used is to calculate After Housing Costs (AHC) equivalised (accounting for differences in household size and composition) income quantiles. See Box 5 for an example of how this can be calculated without direct access to income data.
   b. Once we have the equivalised income quantiles, we apply to each quantile a welfare weight equal to $(M/Q)^E$, where the median income (M) is divided by the quantile (Q), then taken to the power of the elasticity of the marginal utility of consumption E (where E is 1.3 according to a review of international evidence).
   c. We adjust each income quantile for the intervention's impacts. Our intervention may cause a loss to some consumer groups, while providing a gain to others. We then apply the marginal change, that is the monetary increase or decrease caused by our intervention, to each equivalised income quantile times their welfare weight.
   d. Multiply each weighted change by the number of consumers affected within each income quantile. The total across the groups of consumers provides the net distributional outcome of the intervention.
   e. The sum of the distributional weighted changes then provides a figure that will be comparable to 1 (where 1 represents the pure economic transfer only). Figures below 1 represents an economic welfare loss and thus a cost to consumers, while a figure above 1 represents an economic welfare gain to consumers.

Box 5: Distributional impacts in our High-cost Credit Review: Overdrafts intervention

The CBA in CP18/42 'High-Cost Credit Review: Overdrafts consultation paper (and subsequently in PS19/16, 'High-cost Credit Review: Overdrafts policy statement') estimated the impacts of our proposed changes in overdraft pricing on different consumer groups. The Index of Multiple Deprivation (IMD) was used as a proxy for vulnerability to measure how the proposed policy changes could affect different consumers groups split by IMD decile.

In our central scenario we expected that firms would try to recover a similar amount of income from their overall overdraft. As a result, the three most deprived deciles would be, on average, better off, whilst the seven least deprived deciles would be, on average, worse off.

To see whether the benefits of the redistribution resulting from the policy were likely to exceed its costs, we conducted breakeven analysis by calculating the elasticity of marginal utility of income that would lead to the benefits equalling the costs. Using a standard appraisal period of 10 years, the breakeven elasticity was 0.34, and with a shorter appraisal period of 5 years the breakeven elasticity was 0.50. Both of these estimates were significantly below the standard assumption for elasticity of 1.3 used in the Green Book in line with a review of international evidence.

This gave us confidence that, when taking into consideration the fact that an increase in income is more valuable to consumers with lower incomes than to those with higher incomes, the redistribution caused by the intervention would likely mean the benefits exceeded the costs. In EP23/1, 'An evaluation of our 2019 overdraft intervention' we showed that the benefits estimated in the CBA for the most deprived deciles were in line with our central scenario, while benefits for the 7 least deprived deciles were closer to our optimistic scenario in CP18/42 'High-Cost Credit Review: Overdrafts consultation paper.

Appendix 6

The secondary objective and our drivers of productivity

1. Productivity is a core contributing factor to both international competitiveness and growth within financial services and the wider economy. The FCA can, through our actions, influence productivity and therefore international competitiveness and growth.

2. Financial services contribute to UK productivity growth in 2 ways:

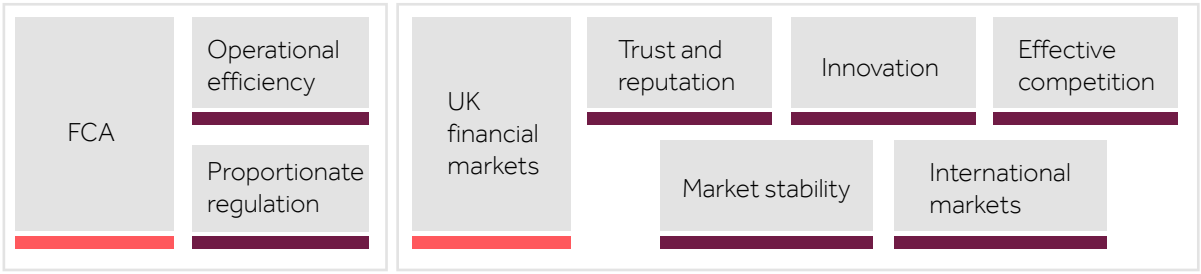
   a. Directly, through financial services firms improving their own productivity.
   b. Indirectly, by arranging and providing financing and financial intermediation services to the rest of the economy.

3. Some factors are likely to be relevant to us successfully advancing competitiveness or growth. These factors can helpfully be analysed across 7 specific drivers of productivity, which drive growth and international competitiveness.

4. We think at least some of the 7 drivers will be relevant to most policy situations.

5. These are:

Figure 2: Our '7 drivers'



6. The drivers reflect the areas we can most directly influence within financial services. We have identified them through research on the key factors that have the ability to increase productivity, and through engagement with our statutory panels. These drivers give us a broad, flexible approach and common language to use if we need to change our focus over time depending on how markets and the economy develop.

7. The secondary objective is also important for consumers. By enabling the drivers of productivity, we can facilitate medium to long-term growth and competitiveness that can secure better outcomes for all consumers, including through better variety, price and quality of products and services.

8. The drivers are not mutually exclusive, there is significant overlap between them. For example, improved FCA operational efficiency can lead to improved trust and reputation in UK financial markets. Proportionate regulation can increase effective competition,

which in turn fosters innovation. And UK market stability can encourage more investment from international markets. These linkages mean that when considering the impact of our actions on growth and competitiveness, each action can be connected to multiple drivers. Table 17 sets out how the 7 drivers can contribute to growth and competitiveness.

Table 17: Further details on the '7 drivers'

Driver	Contribution to growth and international competitiveness
FCA operational efficiency	Smart regulation promotes efficient and stable financial markets. Increasing the speed and efficiency of our decision-making and administrative procedures, while maintaining high standards, facilitates regulated firms' productivity and the ease/attractiveness of doing business in the UK.
Proportionate regulation	Proportionate regulation seeks to ensure that regulatory costs or restrictions on firms are proportionate to the expected wider regulatory benefits. This should also make the UK financial services industry a more attractive place to participate in, so improving competition and the UK's competitiveness as a financial hub.
Trust and reputation	Trust and reputation increases investment and confidence to do business in the UK, supporting productivity and growth, and making the UK more internationally competitive. Increasing trust can also improve the depth and liquidity of UK financial markets, which helps market participants to optimise costs. Greater trust from consumers in financial services firms encourages take-up of appropriate financial services products and services, which helps underpin economic growth.
Innovation	The commercial application and flow of ideas through innovation is key to long-term productivity, growth and international competitiveness.
Effective competition	Effective competition lowers prices for consumers and market participants, increases the quality of goods and services, and provides greater product variety. Competition is also one of the key drivers of innovation. Effective competition drives firms to be more efficient.
Market stability	Market stability protects investors and consumers and builds confidence in UK financial markets and institutions. This provides a stable foundation for increasing investment in the UK which, in turn, supports productivity and market growth.
International markets	Playing a leading role in setting international standards and increasing the attractiveness of UK markets supports our position as a world-leading place to invest and to raise capital. Attracting foreign and multi-national firms to participate in the UK's finance sector can also help enable greater and more efficient business investment in the wider domestic economy, increasing capital formation and productivity.

Assessment of the impacts of the secondary objective in our CBAs

9. As an economic concept, 'competitiveness' does not have a universally accepted definition. For a taxonomy of different definitions, see Berger (2008), 'Concepts of National Competitiveness'. There are some studies that quantify regulatory impact on competitiveness and offer estimation methodologies. However, lots of factors outside our regulatory perimeter contribute to competitiveness and growth – the wider business environment, taxation policy, availability of labour and skills, macroeconomic stability – and it is hard to give a quantification of the effects which come from our interventions, particularly ex-ante.

10. As acknowledged in FSMA, it may not always be possible or reasonably practicable for us to provide estimates given the issues at stake, the resources required and the level of certainty that could be achieved by such analysis. It is important for us to be realistic and proportionate.

11. When quantitative analysis is not feasible, in a CBA we will use causal chain logic to detail how we expect our actions to advance or inhibit any of the 7 drivers that facilitate the outcome of international competitiveness and growth of the UK economy as a whole.

12. Including assessments of the potential impacts of growth and competitiveness in our CBAs can improve our understanding of the drivers by which financial regulation affects the wider economy. This fosters a more informed discussion among stakeholders, policy makers, the media and the public. Describing the impacts in the context of these 7 drivers enables respondents to our consultations to give us more targeted feedback on how our proposals might affect drivers.

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