

Cost-benefit analysis of monetary and financial statistics

A practical guide



BANK OF ENGLAND





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Foreword

This handbook describes how the Bank of England has applied cost-benefit analysis (CBA) to its monetary and financial statistics. CBA is an established approach in other contexts, with a range of well-developed techniques in use. For an organisation like a central bank, employing many economists, it seems a natural approach to adopt for looking closely at what we do and how it affects other people and organisations.

Recent years have seen an increasing focus on the costs that collecting statistical data imposes on reporters. The CBA project is a way of challenging our current data collections, to be sure that the benefits from those data justify the costs incurred both by reporting banks and by the Bank of England. And it provides a stern test for assessing the worth of potential new data collections.

Although concerns over reporting costs are shared with other statistical organisations, there is little experience so far of applying CBA to the provision of statistics. So in some areas the project has had to develop new approaches and tools, rather than simply following established techniques already in use elsewhere. I hope that our experience, described in this handbook, may help other central banks and statistical institutes that are undertaking similar exercises. The approaches described here may need to be tailored to the particular circumstances of other countries and institutions, but there is likely to be much common ground.

This is a dynamic framework that will evolve over time, not least as we learn more about how data are used and the factors that determine banks' statistical reporting costs. We aim to maintain links with other organisations that are developing similar approaches and tools, and hope that we may be able to draw on their experiences.

Further development of the current approach can not, however, replace the need for continuing dialogue and consultations with both users and providers of data. Their views provide a vital complement to the CBA toolkit — indeed it is their help that has enabled the project to come as far as it has.

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Monetary and Financial Statistics Division would be interested in any comments on this handbook, or to learn about the experience of any other organisations of applying cost-benefit analysis to statistical collection. For comments or further discussions, please contact the Head of MFSD⁽¹⁾ or the Research and Development Team in MFSD.

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1 Introduction

1.1 Cost-benefit analysis and statistics

Monetary and financial statistics make an important contribution to a range of economic policies and analyses. But data collection and publication impose costs on both those who provide information and those who collect and compile statistics. This handbook describes how cost-benefit analysis (CBA) can be used to balance the needs of data users against the burden placed on suppliers.

The costs of UK economic statistics came under close scrutiny in the 1980s⁽¹⁾ and by the end of the decade concerns about the quality of UK statistics had begun to surface. The 1990s saw a number of initiatives to improve the quality of statistics and service to customers: examples include the Pickford review of government economic statistics; the adoption in 1995 of the Official Statistics Code of Practice; and the creation of the Office for National Statistics (ONS) in 1996.⁽²⁾ More recently, the UK Government has announced proposals to legislate for independence in statistics.⁽³⁾

In recent years, increasing attention has been paid to the costs to business associated with these improvements in quality. For example, all Government Departments undertaking statistical surveys since 1999 have been required to publish a compliance plan on a three-year rolling basis.⁽⁴⁾ The wide and continuing interest in these issues is illustrated by the 2005 Better Regulation Task Force recommendation to set a target for reducing the administrative burden.⁽⁵⁾ More generally, there has been sustained focus by government on reducing the burden of regulation on business. Statistical reporting costs account for a very small fraction of the overall burden of regulation, but there is nevertheless continuing pressure to bear down on them.

In common with other statistical organisations, the Bank of England does not wish to impose undue burden on reporters. This is reflected in the Bank's Statistical Code of Practice, discussed in Box 1 below. The present version of the Code, which was launched in 2004, includes an aim to balance the needs of users against the demands placed on suppliers. The CBA project was launched in late 2004 to put in place a more formal framework for achieving this balance, and for assessing whether the benefits that users obtain from the statistics justify the costs of producing them. CBA techniques have not been used frequently in the context of statistical

provision, so some techniques have had to be developed or adapted.

1.2 Monetary and financial statistics at the Bank of England

Monetary and Financial Statistics Division (MFSD) collects monetary and financial data from all banks operating in the United Kingdom. These data are used by the Bank in compiling the monetary aggregates and other banking data; by the ONS for estimating the contribution of the banking sector to the National Accounts and the balance of payments; and by a range of national and international organisations.⁽⁶⁾

The data contribute to the Bank's analyses of economic and financial conditions used in ensuring monetary stability and in contributing to the maintenance of financial stability. For instance, information on bank deposits and lending can help in assessing the strength of demand in the economy or the vulnerability of UK banks to shocks affecting particular sectors or countries. More generally, monetary and financial data provide policymakers and economists with information about the behaviour of the banking sector and, through their contribution to key ONS economic indicators, the economy as a whole.

The banking sector accounts for 3%–4% of UK GDP, and provides key services to other sectors of the economy. There are around 350 banks operating in the United Kingdom, although the market is dominated by a few large players: the top ten banks, for example, account for 55% of total banking sector assets. Banks provide statistical data to the Bank of England; some of these are passed on to the ONS or to the banks' supervisory body, the Financial Services Authority.

(1) The Rayner review of UK official statistics (Rayner (1981)) led to what became known as the Rayner doctrine: 'Information should not be collected primarily for publication. It should be collected primarily because the Government needs it for its own business.'

(2) The Pickford review (Cabinet Office (1989)) marked a return to the notion of statistics publication as a public good. See Central Statistical Office (1995) for the Official Statistics Code of Practice.

(3) See HM Treasury (2006).

(4) See Office for National Statistics (2005) for the ONS's most recent plan.

(5) See Better Regulation Task Force (2005).

(6) Banking data are published in a number of Bank of England Statistical Releases and in the monthly compilation, *Monetary and Financial Statistics*; these are available at www.bankofengland.co.uk/statistics/statistics.htm. Monetary and Financial Statistics Division (2006) provides an overview of the wide range of monetary and financial statistics collected by most central banks, as well as the main uses of these data.

Box 1

The Bank of England's Statistical Code of Practice

The Bank of England has had a Code of Practice for statistical work since 1995. A revised Code⁽¹⁾ was published in 2004, as a result of a review of the Bank's practices following the introduction of the National Statistics Code of Practice.⁽²⁾ Although statistics prepared by the Bank fall outside the scope of *National Statistics*, the Bank endorses the principles upon which the National Statistics Code has been based and the Bank's Code has much in common with that for *National Statistics*.

The Bank's new Statistical Code is intended for users, providers and producers of statistics. It rests on seven key principles:

- **Relevance:** ensuring that statistical outputs are relevant to user needs;
- **Integrity:** establishing the ground rules for building trust in statistics;
- **Quality:** addressing the accuracy and reliability of statistics;
- **Accessibility:** ensuring fair and open access to data;
- **Confidentiality:** respecting the commercially sensitive nature of banks' data;
- **Respondent burden:** balancing the needs of users with the burden on suppliers; and
- **Cost efficiency:** collecting, compiling and disseminating statistics efficiently.

For respondent burden, the key principle enshrined in the Code is that: *'Respondent burden will be kept to an acceptable level consistent with legislative requirements and balancing the needs of users against the demands on suppliers.'* Two components are identified in the Code: first, containing data providers' costs, subject to the need to produce statistics that are 'fit for purpose'; second, addressing the needs of data suppliers as an integral part of the statistical production process. CBA obviously has an important role in meeting the first of these; continuing dialogue with producers and users of data can also make a major contribution.

The Bank monitors its compliance with the provisions of the Code; the most recently published assessment of progress was set out in Bollan and Davey (2005).

(1) Bank of England (2004), discussed by Wright (2004).
 (2) See Office for National Statistics (2002).

The ONS does not collect monetary or financial data directly from banks.

Many of the Bank's monetary and financial statistics are based on information covering a very high proportion of the banking sector. For example, a quarterly balance sheet summary return is required from all banks; in late 2005, monthly returns were made by 216 banks covering 99.3% of total assets. So the data are likely to be high quality and less prone both to error and to revision than statistics based on a sampling framework. A system of reporting thresholds means that the largest banks complete all of the main forms, while the smallest banks complete rather fewer. Almost all forms require information that is taken from banks' accounting systems. Most forms are returned electronically to the Bank, which reduces the scope for processing or scanning errors.

1.3 Structure of this handbook

This handbook is structured as follows:

- **Chapter 2** discusses the principles of CBA, how they might be applied to statistical data collections, and the experience of other organisations that have undertaken or are developing similar analyses;
- **Chapter 3** looks at how banks' statistical reporting costs can be estimated, describing a model that has been developed within the Bank, discusses ways of reducing the number of follow-up questions that are asked of reporting banks, and considers how information on Bank of England costs and processes can help to improve efficiency and resource allocation;
- **Chapter 4** discusses how the benefits of data can be assessed and describes an assessment form that has been developed for use within the Bank;
- **Chapter 5** sets out the processes that have been put in place to assess and improve the balance of costs and benefits of the Bank's monetary and financial statistics, and presents the results of recent reviews; and
- **Chapter 6** offers some concluding remarks.

2 The principles of cost-benefit analysis

This chapter outlines the basic principles underlying cost-benefit analysis (CBA), discusses how these might be applied to statistical collection, and summarises some other institutions' experience of applying CBA to statistics.

2.1 CBA basics

CBA is an established approach in other contexts, particularly for assessing public policy proposals and investment projects, with a range of developed and tested techniques in use: for example, see Layard and Glaister (1994), Pearce and Nash (1981) and HM Treasury (2003). As early as 1936, the United States Flood Control Act stipulated that projects should be deemed desirable if 'the benefits to whomsoever they may accrue are in excess of the estimated costs'.⁽¹⁾ It took some time to gain acceptance and for techniques to be developed, but CBA has become standard practice in many settings.

CBA is used extensively for appraisal of UK government policies and projects. HM Treasury's approach to CBA in central government is set out in the *Green Book*,⁽²⁾ which recommends that 'all new policies, programmes and projects ... should be subject to comprehensive but proportionate assessment, wherever it is practicable, so as best to promote the public interest.' In this context, CBA should aim to quantify all relevant costs and benefits, where necessary making estimates when prices cannot be observed.

The general principle of CBA is simply to analyse and compare costs and benefits. If all costs and benefits can be quantified, then it leads to the decision rule that a project or action should proceed when benefits exceed costs. Where resources are limited, then the projects that proceed should be those that together deliver the largest benefit for the available level of funding — CBA here is a helpful aid to prioritisation. At a more detailed level, CBA can be used to compare different options for achieving a given outcome. The standard procedure is to compare the costs and benefits of each: the preferred option should be the one with the highest net benefit.⁽³⁾

This approach can also be generalised to a situation where there are many possible choices, rather than a simple yes/no decision. In the textbook model, such a situation would typically be characterised by well-behaved relationships of increasing marginal costs (relative to quantity, quality or some similar metric) and decreasing marginal benefits. In this case

the optimal situation, which delivers the largest total net benefit (assuming that total benefits exceed costs), would be that where marginal costs and marginal benefits are equal.

The challenge — and in many cases it is a considerable one indeed — is to identify and quantify all relevant costs and benefits. There are a number of complications that can affect the analysis, including:

- the relative value of costs and benefits that occur at different points in time;
- the effect of risk and uncertainty;
- the value of costs and benefits where there are no market prices; and
- the distributional allocation of both costs and benefits.

The problem of no available market prices is the most relevant for applying CBA to monetary and financial statistics, which are available free of charge to users (of course, including reporting banks too). This makes it difficult to estimate the value that users place on data. Various CBA techniques have been developed for estimating values where there are no market prices, which is often necessary for public sector projects. Questions that have been considered include the value of travelling time for commuters, the value of lives saved, the effect on residents of living close to a landfill site, and the 'social cost' of carbon emissions that exacerbate the greenhouse effect. However, as discussed in Chapter 4, these techniques are not easy to apply to statistical provision.

2.2 Applying CBA to statistics

This section uses a simplified framework to illustrate the potential gains from applying CBA to monetary and financial statistics. As CBA is not usually applied to the provision of information or to macroeconomic policies, the approach needs to be adapted to this different environment.

(1) Quoted in Pearce and Nash (1981).

(2) See HM Treasury (2003).

(3) This is sometimes known as cost-effectiveness analysis, where the decision is not so much whether or not to proceed with a project but which is the most cost-effective way of undertaking it.

MFSD's CBA was designed to apply cost-benefit analysis both to *existing* statistics and to any requests for potential *new* statistics. Set-up costs should be considered when assessing new data requests but not for existing data collections, because such fixed costs should then be treated as sunk costs. But the costs of changing systems do need to be taken into account when considering changes to existing data collections. And any potential effect on MFSD's costs may also be relevant. CBA is being applied to the Bank's existing data collections primarily through an ongoing review of the main statistical forms, which is described in Chapter 5.

The CBA project aims to consider not only the total costs and benefits of a particular statistic, but also some of its key characteristics. In general, greater benefits would be expected from statistics that are frequent, timely, accurate (eg based on a large sample), detailed (eg totals broken down into their major components) and that are relevant to economic or financial issues of importance to users. But most of these features would also be likely to increase the costs of providing those data. One of the challenges for CBA is to be able to shed light on such trade-offs.

The application of CBA to statistics assumes that costs and benefits can be related to data quality in at least a moderately well-behaved way. In particular it is assumed that as data quality rises, improvements in data quality become progressively more costly to achieve, and they deliver fewer incremental benefits to users.

These assumptions appear reasonably well founded, at least in relation to the extremes. Although there would be some set-up costs, it seems plausible that there will be a relatively low marginal cost for producing data of moderate quality (eg coming from a small sample with little cross-checking or processing). At the other end of the scale, where data are of exceptionally high quality, further increases in quality are likely to be particularly costly. Turning to benefits, the gains from having at least some data (subject to a minimum quality) are likely to be relatively high, but there are likely to be limited additional gains from improving data that are already of very high quality.

The bigger challenge for CBA lies in analysing how marginal cost and benefits behave between these extreme positions. **Chart 2.1** presents a stylised representation of well-behaved marginal cost and benefit curves — here costs would represent the reporting burden for the banking sector as a whole, and they could reflect factors such as the size of reporting panels or the amount of information required. Marginal costs increase only gently until data quality becomes high, while marginal benefits recede gradually as quality increases. The optimum point here is shown by the dashed line, where marginal cost equals marginal benefit — this is the point which maximises the total net value of benefits less costs.

Marginal cost and benefit curves show the optimum position, but not whether the overall benefits exceed costs. That requires analysis of total costs and benefits, including any fixed costs. **Charts 2.2, 2.3** and **2.4** show some possible configurations of total costs and benefits consistent with the marginal cost curves in **Chart 2.1** — the three variants are based on low, medium and high fixed costs. The dashed line shows the optimum point indicated by the marginal cost and benefit curves — the standard result is that the tangent lines (shown only in **Chart 2.2**) to the total cost and benefit curves are parallel at this point.

In this stylised example, total benefits exceed total costs by some way when fixed costs are low, and by only a little with medium fixed costs. But when fixed costs are high it is possible for total costs to exceed total benefits — if this were a proposed new data collection, then the recommendation from CBA would be not to proceed. However, in practice it is difficult to put a monetary value on either total costs or total benefits: the challenges and the solutions adopted are described in Chapters 3 and 4.

There is uncertainty about the precise shape and slope of both curves. Marginal costs are unlikely to be increasing as smoothly as shown in the chart — there may, for instance, be some threshold effect where higher quality requires a significant investment. Similarly, low quality data could have sufficiently low benefit that the marginal benefit curve initially slopes upward. These possibilities mean that the standard economic criterion of marginal cost equalling marginal benefit might not necessarily identify a unique optimum point. There could, for instance, be two equilibria with high quality data at the right-hand side of **Chart 2.1** or a 'cheap and cheerful' guesstimate at the other end. A comparison of total costs and benefits of these two options would quickly show which was the better.

The CBA project has been motivated by the belief that many of the Bank's monetary and financial data series are of very high quality, based on large samples or near-census of the banking sector. In terms of **Chart 2.1**, they may be some way to the right of the equilibrium point, with marginal costs exceeding marginal benefits. Moreover, given the large sample sizes for some surveys, it seems possible that at least some data collections could be at points where the marginal cost curve is sloping steeply upwards and marginal costs exceed marginal benefits. There may be an opportunity to reduce costs without significantly reducing the benefits to users.

As well as moving along the marginal cost and benefits curves in this way, there could be other changes that would shift the marginal cost curve itself. For instance, efficiency gains through improving business processes by greater use of IT might reduce costs without any significant impact on quality.

Chart 2.1 Stylised costs and benefits

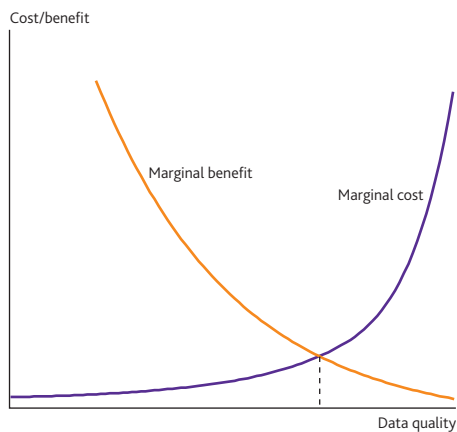


Chart 2.2 Stylised costs and benefits

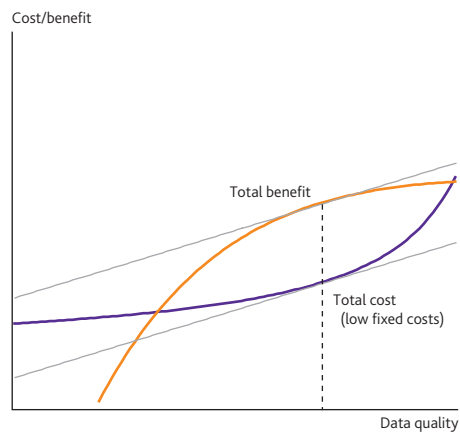


Chart 2.3 Stylised costs and benefits

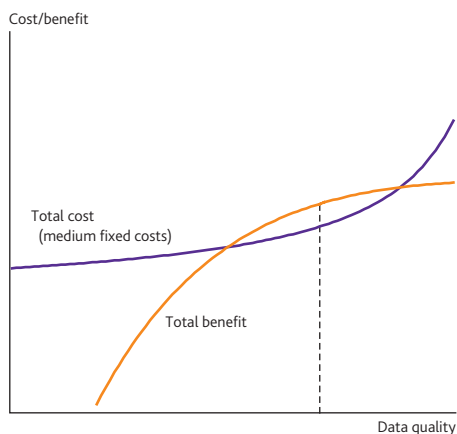
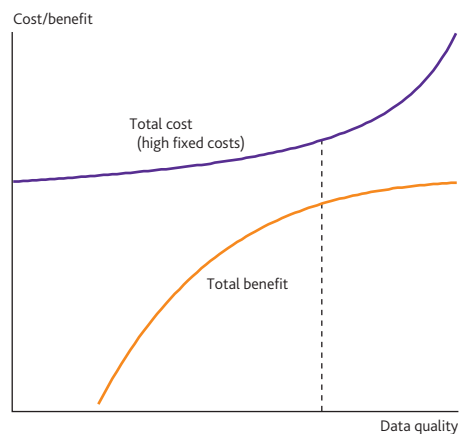


Chart 2.4 Stylised costs and benefits



2.3 Experience of cost-benefit analysis and statistics

Although CBA is a well-established technique for public sector appraisal, it has not been applied often to statistical provision. MFSD and the ONS sent a joint questionnaire to other central banks and statistical agencies to find out about their experiences of applying CBA to statistics. And further information was gained from an international workshop on CBA of statistics hosted by MFSD in July 2005.⁽¹⁾

These enquiries showed that so far there has been limited use of CBA by institutions responsible for collecting statistics. One reason suggested by some for not pursuing CBA was the difficulty of assigning monetary values to benefits.

Including some interviews, there were around 20 responses to the joint MFSD and ONS questionnaire on cost-benefit analysis; Annex 1 lists the organisations that replied. The key findings were:

- none of the institutions surveyed was then undertaking formal CBA. But central banks tended to employ some form of business case analysis, focusing more on the costs side

(both to reporters and to the central bank) than the benefits side;

- several institutions were starting to consider CBA-type approaches or were aiming to minimise the burden they place on reporting banks;
- some countries allowed 'best endeavours' reporting to minimise the burden on banks;
- some countries reported significant liaison and co-operation between the central bank, national statistical institute and other authorities to minimise the combined reporting burden. Some countries had central controls over the overall burden imposed by government agencies;
- there were some examples of innovative IT being used to decrease respondent burden;
- several countries involved their bankers' associations in the process of introducing new data collections; and

(1) See Holder (2005) for a report of the international workshop, including the ONS's use of CBA and the ECB's 'Merits and Costs' approach.

- central banks generally used bank size as a criterion, rather than random sampling, for deciding which banks report their forms. Several central banks asked bigger banks to complete forms more frequently (or in more detail) than the smaller banks. One central bank was investigating sampling.

The ONS has applied a CBA-based approach to specific issues, such as the 2011 Census, attempting to estimate benefits from particular collections. The evaluation of the Census did not include a full assessment and valuation of all benefits, but looked at a subset that was sufficiently large to demonstrate that benefits were likely to outweigh costs and that the project was therefore justified. More generally, the ONS has a ceiling for the total compliance cost of its business surveys,⁽¹⁾ which is published in an annual compliance plan that must be agreed by Treasury Ministers. However, these estimates of compliance costs mainly reflect the time taken to fill in forms rather than the full cost of obtaining information.

The European Central Bank (ECB) has developed a 'Merits and Costs' approach that aims to ensure that any new data collections are cost-effective and are justified by the benefits of the new information.⁽²⁾ A key difference from the approach adopted within the Bank of England is that the ECB procedure currently only applies to new data requests. Both the ECB's and the Bank's approaches to benefits are based on a form that brings together different criteria into an overall assessment — the Bank's form is described in Section 4.2 and an example is shown in Annex 3. However, the Bank has adopted a more detailed approach to statistical reporting costs, by modelling the main determinants (as described in Section 3.1).

The Standard Cost Model is used by a number of countries and organisations to estimate the cost of regulation,⁽³⁾ including the ONS's estimates of the compliance burden from business surveys. The model estimates the regulatory burden according to the basic formula of multiplying together the number of businesses affected, the typical time taken to meet the administrative requirements and the hourly wage of those involved in supplying the information. In practice, neither the time taken to comply with statistical reporting requirements nor the average wage of those involved can be measured with any precision. And of course the Standard Cost Model does not include any consideration of the benefits of data to users.

The Financial Services Authority (FSA) is obliged to publish a CBA for all significant changes in policy, providing an estimate of the costs and a qualitative analysis of the benefits.⁽⁴⁾ The rationale for this approach is that a full quantitative evaluation of costs and benefits is difficult to achieve and often unnecessary; and that undertaking CBA is itself costly and should be done in the most practicable and cost-effective manner. The FSA commissioned research to develop its understanding and estimates of the costs of regulation.⁽⁵⁾ This suggested that the administrative cost of financial sector compliance with rules in the FSA Handbook (a wider measure than statistical reporting requirement) was equivalent to around 0.5% of the financial sector's total costs, although the incremental costs of rules and reporting requirements could differ markedly both between sectors and between firms within a sector.

(1) See Office for National Statistics (2005).

(2) The Council Regulation (EC) No 2533/98 concerning the collection of statistical information by the ECB requires the ECB to keep the burden placed on reporting agents to a minimum.

(3) Better Regulation Task Force (2005) describes the Standard Cost Model and recommends that the UK Government uses it to estimate to provide a systematic measurement of the overall administrative burden.

(4) See Alfons and Andrews (1999).

(5) Deloitte (2006) looked at incremental costs of complying with individual FSA rules (not just reporting requirements) for firms in three sectors. Real Assurance Risk Management (2006) used the Standard Cost Model to estimate the administrative burden of reporting to the FSA.

3 Statistical reporting costs

This chapter considers how reporting costs can be estimated. This has proven difficult in practice and a model has been developed within the Bank to estimate the relative reporting cost of the different forms used to collect data. Reporting banks also incur costs in dealing with follow-up questions on their data, and ways of reducing these are discussed.

Data collection inevitably imposes some costs upon reporting institutions. For the banks, this means IT set-up costs for systems to produce the required information; and ongoing costs to compile and check returns, and to deal with any follow-up questions. The scale of these costs will reflect factors such as the difficulty of extracting information, and how closely the data required by the Bank match concepts that the reporting banks need for their own management purposes or to meet statutory financial reporting requirements.

At the start of the CBA project, MFSD staff visited a number of banks to gain a better understanding of the key influences on reporting costs; some other banks offered information by email. While there was considerable common ground between banks, there were also some significant differences, reflecting factors such as size and type of business, internal organisation, and the structure of banks' information systems.

The recording and provision of information, including meeting statutory financial reporting requirements, are part of banks' normal business practice and it is not always easy to identify the *incremental* cost of providing statistical information to the Bank of England.⁽¹⁾ Such costs can arise, for instance, when statistical data are required at a higher frequency or a shorter deadline than otherwise; for additional detail such as disaggregation by industry, by sector or by country of counterparties; or when data would not normally be produced for any other use. Nevertheless, for those banks that did offer estimates of their statistical reporting costs, these were a very small fraction of total operating costs.

In general, banks found balance sheet items less costly to report than information on flows: information from the balance sheet requires only a single reading at the end of the period, while information on flows requires keeping track of a potentially large number of transactions over a reporting period. And balance sheet information tended to be more closely related to what was available on banks' own systems.

In addition, supplying totals was less costly than disaggregating information, for example by the residency or industry of the counterparty.

Introducing new forms or changing existing forms may also mean set-up costs for reporting banks that need to change their systems. In many cases, however, it should be possible to mitigate the impact of such costs by consulting with banks and giving good notice of proposed changes, which may then allow changes to statistical reporting be introduced as part of regular system maintenance.

3.1 Modelling reporting costs

The overall reporting burden is uncertain and may vary markedly between banks. Continuing contact and dialogue with reporting banks is important to gain a better understanding of the determinants of statistical reporting costs. As a first pass, the information already provided by banks has been used to develop a model of the *relative* costs to banks of different reporting forms. This indicates which forms impose high reporting costs relative to other forms — it only considers recurrent reporting costs, not the fixed set-up costs associated with changing forms or introducing new forms. The model can be used to estimate each form's share of the overall statistical reporting burden imposed on banks, as well as the effect of proposed changes to forms.⁽²⁾

If reporting costs were simply a function of the volume of data collected, then the relative cost of a form could be calculated by the number of boxes, multiplied by the number of reporting banks and by the frequency of reporting. This would give a basic metric for the annual amount of information requested from the banking sector, with estimates that could be calculated for whole forms or for sections of forms.

Discussions with reporting banks, however, suggested that some pieces of information are more costly to supply than others, so a model that focused solely on the volume of information would omit other important factors. The current version of the costs model explicitly recognises this by building

(1) This limits the application of techniques such as the Standard Cost Model, described in Chapter 2, to estimate the overall statistical reporting burden on banks.

(2) Although the costs model only estimates relative costs, it goes significantly beyond the Standard Cost Model in analysing the factors that contribute to the reporting burden, rather than simply estimating the burden.

up estimates of the incremental statistical reporting costs from three basic components:

- the **scale** of the form — how much information it includes;
- the **accounting** type of information required — whether it is information on balance sheet items (eg stocks of loans outstanding) or on transactions (eg flow of lending over a period); and
- the **complexity** of the information required — whether it includes any items that are notably more difficult for banks to provide, or less closely related to their own records.

Of course, one form may include many different types of information. MFSD's visits to, and responses from, banks gave some indication of relative costs, which have been refined through a further survey and internal discussions.

The *scale* dimension will reflect three basic variables: the size of the form, the number of banks involved and the frequency. The current version of the costs model starts from the number of boxes⁽¹⁾ on each form. Many forms ask for totals to be broken down into various disaggregations, for instance by currency, by industry, sector or country of counterparty. The costs model generally treats such information as additional to the totals, except for country analysis which is discussed below. So, for example, where an item is disaggregated by currency, each currency is counted as a different box.

A slightly different treatment is used for country analysis. Some forms include around 230 countries and treating each of these as a separate box would significantly overstate their costs, as on average banks only report business for between one and eight countries for most country-based forms. A pragmatic calibration adjustment is made to the costs model for these forms, with costs scaled up to reflect the average number of non-zero countries that are reported on that form, rather than the total number of countries listed on the form. This approach prevents the relative cost estimates being dominated by those forms that include country information.

The costs model gives frequency of forms a directly proportionate impact on scale, so quarterly forms have four times the cost of equivalent annual forms, and a third of the cost of equivalent monthly forms. Some of the banks consulted, however, believed that the costs of more frequent reporting tended to rise less than proportionately, and particularly that the reporting costs of quarterly forms were less than four times those of annual forms. This might reflect greater familiarity for staff dealing with quarterly rather than annual forms, or easier response to follow-up questions if they only cover a three-month period. Nevertheless, other banks supported direct proportionality. Overall, therefore, it was not

at all certain that the potential gains from moderating the effect of frequency would outweigh the cost of the greater complexity that would be imparted to the model.

The *accounting* dimension of the model attempts to capture the cost difference between information on flows, which requires the sum of all transactions over a period to be calculated, and on stocks, which typically can be read as one figure from a balance sheet. All the banks surveyed agreed that flows information was significantly more costly to provide than stocks or levels. Following consultation with MFSD analysts and the questionnaire to reporting banks, the costs model has been calibrated such that flows information is four times as costly as levels or stocks information.

The remaining *complexity* dimension of the model captures two broad categories of additional information:

- disaggregation by counterparty detail (National Accounts sectors,⁽²⁾ industry, or UK/non-UK residency) — these are each assumed to be twice as costly as aggregate information, to reflect the additional costs to banks of recording counterparty details; and
- information that banks are less likely to hold for their own purposes. This covers a range of more complex requirements: items other than own account (eg third party holdings) and consolidated data for bank groups are both calibrated to be twice as costly as standard items; detailed information on financial instrument classification (where it is likely to differ from banks' own requirements) is assumed to be three times as costly as standard items; and flows in gross rather than net terms (which require retention of much more information) are modelled as costing four times as much as standard items to report.

These factors can be combined. For instance, the cost of providing a UK/non-UK resident split of transactions would take account of both factors (ie the costs of split into UK/non-UK residents and the costs of reporting transactions rather than stocks) and would be eight times as costly as a standard balance sheet information. Box 2 gives a worked example of the costs model for a hypothetical form. Naturally, there is a great deal of uncertainty around the estimates from the costs model and small changes to some of the parameters can affect the results. It is therefore only a starting point for applying cost-benefit analysis. But the model can also help to highlight particularly expensive types of data, which would need to be justified by relatively high user benefits.

(1) Here the term refers to physical boxes on the form. These are broadly equivalent to items of information that can be identified separately.

(2) These are the sectors used in the UK National Accounts, including for example households, central and local government, public corporations, private non-financial corporations, financial corporations and the rest of the world.

Box 2

A simple example of the costs model

This box applies the current version of the costs model to a hypothetical form that collects mainly balance sheet information. The costs model starts from a basic metric of the total number of boxes reported annually, and then increases the score to reflect information that tends to be more costly for banks to provide.

Suppose there is a quarterly form with 50 boxes and the reporting panel is 200 banks. The annual total of boxes is:

$$40,000 = 50 \times 200 \times 4$$

$$= (\text{boxes per form}) \times (\text{reporting banks}) \times (\text{forms per year}).$$

Of the 50 boxes, assume that 20 ask for a country split and that on average banks report 8 countries as non-zero, on which

basis the costs model gives each of the boxes split by country a score of 40.⁽¹⁾ So the total number of data cells now becomes:

$$\begin{aligned} \text{not split by country: } & 24,000 = 30 \times 200 \times 4; \\ \text{plus split by country: } & 640,000 = 20 \times 200 \times 4 \times 40; \\ & \text{making a total of } 664,000 \text{ cells.} \end{aligned}$$

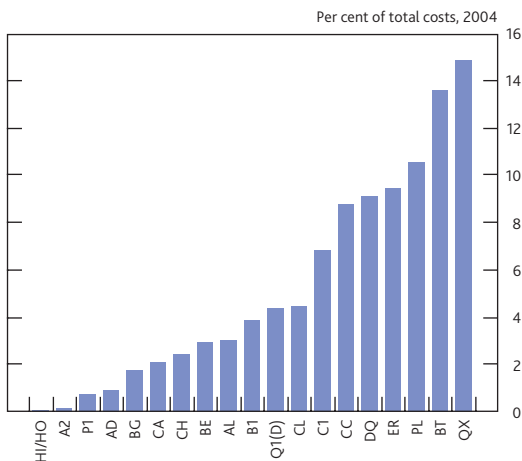
This compares with a total data collection of around 7½ million cells a year,⁽²⁾ which means that this form would account for around 9% of the annual data collection.

As noted in the text, the costs model also adjusts for a range of other types of information that is more costly for banks to supply, reflecting the accounting and complexity dimensions.

- (1) An additional scaling factor of five is applied to the number of non-zero countries. This is a pragmatic calibration that is used to balance the contributions of country and non-country boxes, reflecting the fact that banks typically report non-zero figures for only a portion of boxes on most forms.
- (2) This estimate is based on 2004 figures and the same assumptions as the costs model for country analysis.

Chart 3.1 provides an illustrative set of estimates for the suite of forms used to collect data from banks (information on the different forms and definitions can be found on the statistics part of the Bank of England website).⁽¹⁾ The most costly forms, in aggregate, include the key balance sheet and income and expenditure forms, which are required from all banks.

Chart 3.1 Relative costs of forms



The costs model can be used to estimate the effect on cost of proposed changes such as reducing the number of boxes or moving to a smaller reporting panel. It can also be used to estimate the relative cost of collecting new information, if it is possible to specify the scale and nature of the new form.

The costs model assumes that the cost of reporting a given form is the same for both large and small banks. This is a simplification where the benefits of a transparent and simple model were believed to outweigh any gains from an explicit modelling of bank size. While larger banks are likely to incur

greater statistical reporting costs for a given form than smaller banks, economies of scale in reporting should mean that costs rise much less than proportional to overall bank size. And it may be difficult to disentangle the effects on reporting costs from bank size alone, relative to similar factors such as the complexity of their business, which are often related to size.

While making no allowance for bank size may be an acceptable approximation in most cases, care is needed when assessing the potential savings from changing reporting panels (discussed in Section 5.4). If reporting costs do rise significantly with bank size, then cutting smaller banks from a panel would have a less than proportionate impact on the overall reporting burden. In this case, a simple application of the costs model would be likely to overstate the cost saving from reducing a reporting panel. Such a change would, of course, still help those banks dropped from the panel.

No model can accurately capture all of the factors that affect banks' statistical reporting costs. The costs model is designed to be a useful analytical tool, but it rests on a number of assumptions and simplifications. Some influences on costs are not amenable to inclusion in this sort of framework. For example, timing can be important if banks are required to report very recent information, or indeed if many different returns are due in at the same time. And banks incur costs in dealing with follow-up questions, which may be asked when there are large changes or more details of particular movements are required. Section 3.3 discusses this issue and describes the exercise under way within MFSD to reduce the number of such questions asked.

(1) See www.bankofengland.co.uk/statistics/reporters/index.htm.

The costs model has been developed to offer an initial view on the relative reporting costs of different forms, with the aim of informing reviews of forms about the potential impact on banks' reporting costs. It was based on average responses from banks and cannot take account of the potential differences between individual banks' reporting costs — discussions and contacts with banks highlighted how banks' costs could be affected by differences in internal structures and information systems. Results from the model will need to be complemented by dialogue with banks to test the realism of the overall results and of the assumptions that have been made. The costs model is part of a dynamic framework that will be kept up to date as new information comes to light.

As discussed in Chapter 5, the potential cost savings indicated by the costs model may in practice only be realisable by current reporting banks over a period of time. Cutting data requirements from forms, or parts of forms, may not translate into immediate cost savings for reporting banks or for the Bank of England — indeed, there could be some additional expense in the transitional period. Nevertheless, greater savings may be realisable for new reporters and as other banks refresh their information systems and cease to collect information that is no longer required.

3.2 Set-up costs

Set-up costs associated with new forms or changes to forms can be significant too and should be taken into account when evaluating new data requests or prospective changes to forms. There might be limited costs associated with small changes, such as moving information from one form to another. But introducing new forms, or asking for information that banks did not previously collect, will tend to be more costly. Set-up costs can often be mitigated, however, by introducing changes gradually and by giving sufficient advance notice to reporting banks.

Set-up costs are relevant when considering new data collections or changes to forms, but not for applying CBA to existing collections. It seems likely that set-up costs will vary more, both between forms and between banks, than recurrent reporting costs. So it was decided not to model set-up costs explicitly but to bring them into CBA in an *ad hoc* way. In some cases, the analyst will be able to make a reasonably well-founded assessment of potential set-up costs for a new form; in others, consultation with a number of banks could help to illustrate the likely impact of proposed changes. Where there is uncertainty over the choice between several options that deliver similar benefits, these could be presented to the reporting banks to solicit views on their preferred way.

3.3 Costs of follow-up questions

Feedback from discussions and visits to banks indicated that follow-up questions asked by MFSD analysts can be a significant component of banks' overall reporting costs. The application of CBA in MFSD has focused attention on the rationale for asking such questions and how they can be targeted more effectively to reduce costs, both for reporting banks and for the Bank of England (discussed in Section 3.4).

Following a review, significant reductions have been made in the number of follow-up questions asked of banks by MFSD. This has reflected greater awareness of the costs of these questions, and better targeting on those returns most likely to affect important overall aggregates. A number of steps were taken to try to reduce the volume of follow-up questions asked of banks. These included:

- analysts were encouraged to look more carefully at the materiality of the likely effect on aggregate measures, as well as the variation for the bank in question;
- previous questions were reviewed to identify any areas where information might be available from other sources;
- analysts were given guidance on which areas in their data were of most interest at that time; and
- some existing thresholds for rule failures were raised,⁽¹⁾ and in one case a percentage change rule (at individual bank level) was scrapped altogether.

Although significant progress has been made in reducing the number of questions asked, a gradual move towards a more formal approach, drawing on an approach in the literature known as 'selective editing',⁽²⁾ could help to secure further reductions in some cases. It would also provide improved support for analysts — particularly important for new analysts who have less experience to draw on — and help to prevent upward creep in the number of questions asked. For any such change, however, careful implementation will be important so that staff have time to get used to new procedures and to assess the opportunities offered by the new approach.

3.4 Costs to the Bank of England

Although the costs of collecting and publishing statistics are likely to be rather smaller in scale than the reporting costs

(1) Automatic rules, for instance based on absolute or percentage variation from previous value, are used to highlight changes that may be worth following up with a question to the reporting bank.

(2) Engström and Granquist (2005) is a good overall summary of the approach, including further references. Underwood (2001) describes a successful ONS trial of selective editing for the Monthly Inquiry into the Distribution and Service Sectors, while Hedlin (2003) sets out some of the theoretical background to the ONS work and compares selective editing with some alternative approaches.

imposed on banks, statistical institutions will also be subject to resource constraints. It is unlikely that a full CBA exercise would be justified for all internal processes, but the principles can still be applied to help judge the relative benefits and costs of different activities. This information can be used to improve efficiency and resource allocation.

For example, an internal survey was conducted in 2005 to estimate the composition of MFSD costs in 2004. This was based on a survey of managers and team leaders, which asked for estimates of hours spent on specified tasks for each form. These included:

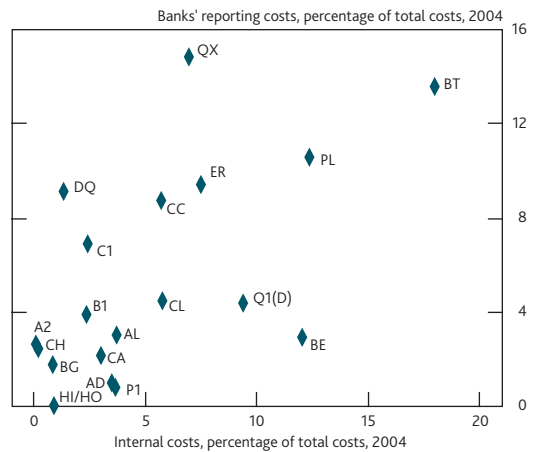
- initial follow-up questions to banks;
- running data aggregation systems;
- analysis, such as examining totals and identifying any further questions to banks;
- compiling internal and external outputs;
- preparing Statistical Releases and other publications; and
- briefing and liaison with users (inside and outside the Bank).

Chart 3.2 shows the broad split of costs in 2004, with initial follow-up questions to banks taking up the largest portion of internal costs, followed by briefing, compiling and analysis. The information from the survey and the costs model can be combined to show how statistical reporting costs relate to internal costs. Chart 3.3 shows the two sets of estimates for 2004: forms that are relatively expensive for banks tended to be among the more expensive in terms of internal costs. But the correlation is far from perfect.

Chart 3.2 MFSD costs of collection and production



Chart 3.3 Estimates of banks' costs and internal costs



Other approaches might also yield useful information about internal costs. Records of follow-up questions to banks can be used to give an accurate count of the number of such questions asked over time. As well as a useful cost indicator, this information can be helpful in assessing progress in reducing the total number of questions asked of banks. Similarly, there could be management information or time recording systems that can be sources of information on internal resource requirements.

4 Assessing benefits

This chapter discusses how benefits can be assessed, some of the problems encountered in trying to obtain a monetary estimate, and the approach that has been developed within the Bank to assess the relative benefits of different data collections.

Any assessment of benefits needs to take account of the wide variety of uses of monetary and financial data, across a range of users. Benefits are more disparate than costs, and are more difficult to identify and to estimate. Within the Bank of England, monetary and financial data help the Monetary Policy Committee set interest rates to meet the inflation target and they contribute to the maintenance of financial stability. For example, the behaviour of monetary aggregates and lending can help in assessing the pressure of nominal demand in the economy; and information on bank lending can indicate whether the UK banking system is becoming heavily exposed to particular sectors or countries.

There are many external users as well. The Office for National Statistics uses monetary and financial data as inputs into the National Accounts and the balance of payments. And they are used more generally by economic policymakers, researchers, analysts and commentators. Data are also used by international organisations, such as the European Central Bank, the Bank for International Settlements, the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development. Some users may want timely data that shed light on current economic behaviour and conditions; others may want a long time series of well-founded data to use in econometric estimation of key economic relationships, such as the relation between monetary growth and inflation.

4.1 Assessing benefits in theory

The absence of a market price for monetary and financial data presents a challenge for valuing the benefits that users derive from these data. A frequent recourse for CBA in such cases is to survey how much people would be willing to pay (in this case for the data), or alternatively what amount of money would compensate them for any loss (here, if data were discontinued). But for monetary and financial data this sort of approach may not offer a reliable guide, given the subjective nature of such estimates, the limited community of primary users, and the large number of ultimate beneficiaries.

In principle, the benefit from the major uses could be estimated directly by assessing first the contribution of monetary and financial statistics to a policy decision or piece of analysis; and second the consequence of wrong decisions (or incomplete analysis). In the case of the MPC's interest rate decisions, such an exercise would thus combine estimates of the welfare cost of cyclical fluctuations,⁽¹⁾ the effect of 'wrong' interest rates, and finally the contribution of the data to the particular policy decision. Each of these three stages would be difficult in itself, let alone when combined with the other two into a single estimate. Overall, these sorts of estimates are conceptually possible but would be subject to such wide confidence intervals that they would offer little help in the CBA project.

One approach could be to focus on particular aspects that contribute to data 'quality'. For instance, Brackstone (1999) lists six dimensions of data quality:

- **relevance:** how closely the data relate to the concepts and issues of most interest to users;
- **accuracy:** whether the data are compiled from a large sample and if they are subject to large revisions;
- **timeliness:** how quickly the data are available;
- **accessibility:** how easy it is to get hold of the data;
- **interpretability:** whether any required supplementary information and metadata are available; and
- **coherence:** how well the data relate to other similar series, fit in with a broad analytical framework and cover a long timespan.

These aspects go beyond a purely statistical measure of quality — perhaps coming closer to 'usefulness', which is closely related to benefit. However, they do not avoid the need to make an essentially subjective judgement of the relevance of the data. The Brackstone dimensions are well suited for comparing different data that contribute to one particular task, but they are less able to distinguish between data for which there are a number of different uses. For instance, it is not

(1) See, for example, Lucas (2003) and Canzoneri *et al* (2004).

clear how to compare the benefits from data that are vital for a minor decision with those from data that make a minor contribution to a very important decision.

Other approaches to statistical quality adopt a similar approach. Both the IMF and Eurostat have developed frameworks for assessing data quality.⁽¹⁾ There is a considerable degree of overlap between these, the Brackstone dimensions discussed above, and the criteria outlined in the Statistical Codes both of the Bank and for *National Statistics*.

4.2 Developing structures to assess benefits

Given the inherent difficulties in putting a monetary value to the benefits, attention in the CBA project focused instead on assessing the *relative* benefits from different data. This approach avoids the need for monetary valuation by focusing on whether the benefit from a particular collection is high or low compared with the average across all collections. But it does not avoid the need for a subjective judgement on the relative importance of different uses, and on the contribution of monetary and financial data to those uses.

As a first step, a survey of users from different parts of the Bank of England was undertaken in which views were sought on the relative importance of various uses of the Bank's monetary and financial data. The survey asked users about the importance of a number of different activities and about the contribution to those made by monetary and financial data. The most important uses were believed to be monetary and financial stability and the direct contribution to the National Accounts.

The information from the survey, however, only gave a partial and indicative picture of the benefits from these statistics and a more systematic comprehensive approach was needed. A simple benefit assessment form was therefore developed as a way of embedding CBA in the process of reviewing forms (discussed in Chapter 5). This assessment form should enable a fuller consideration of the relative benefits of monetary and financial data, and help to establish a consistent approach to evaluating benefits. The form takes account of the following dimensions:

- **Policy use:** the highest marks are given to data that contribute to the assessment and maintenance of monetary and financial stability, or that are used directly in the National Accounts,⁽²⁾ in line with views from the internal survey;
- **Policy relevance:** this captures the importance of the data to the principal policy use(s) and decisions identified under the previous criterion. This is a subjective judgement that will vary depending on the precise policy use and the

information concerned. It is a part of the assessment where discussions with key users are likely to be particularly important;

- **Value added:** this section captures the gain from these data over and above what is available elsewhere. So a low mark should be recorded here where there are close alternatives from other sources, including data from other forms or collected by other statistical agencies; a high mark would be appropriate where no other source comes close;
- **Quality:** this section looks at the underlying statistical quality of the data — how good is the sample, are there frequent revisions, do they correspond well with other data series? This criterion is not wholly independent from policy relevance: it is unlikely, for instance, that low quality data would play a large role in decision making; and
- **Meeting international standards and additional uses:** these are given as additional marks to capture the *incremental* benefit where data are required by law, to meet an agreed international standard (eg the 1993 System of National Accounts or the IMF Balance of Payments Manual), where they help international comparisons, or where data are useful to others. The scores here aim to capture the *marginal* impact — it is good to meet international obligations but not of great value if it means collecting data that have no other significant use. Other users of data include other economic policymakers (eg where government economists take interest in the data); outside researchers (eg economic commentators or academics); the general public or the media.

An illustration of the benefit assessment form applied to a hypothetical data collection is shown in Annex 2. It calculates an overall summary score based on the weights shown in **Table 4.A**. The assessment form would typically be applicable to particular outputs or groups of outputs (which might be a section or a sub-section of a form) and was designed to help review an existing form, or to assess the benefits following a request for a new data collection.

Although an analyst reviewing a form may have enough knowledge to fill in most or all of the assessment form at an early stage, it is important to test such views through discussions with users, and to keep scores under review as new information becomes available. The benefits assessment form can help to focus discussions, but it is not a substitute for dialogue with users. The latter is essential for developing an accurate understanding of how data are used and their benefits relative to other sources.

(1) These are discussed in Wright (2002).

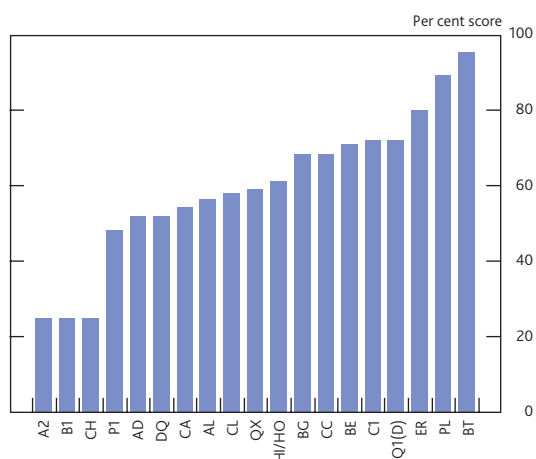
(2) Series used *directly* in the National Accounts are typically those that contribute to estimates of GDP or the balance of payments; those used *indirectly* would for example help to determine sectoral flows or counterparty details.

Table 4.A Components of the benefit assessment

	Percentage weight
Policy use	Up to 25
Policy relevance	Up to 25
Value added	Up to 15
Statistical quality	Up to 10
Additional benefits: ^(a)	Up to 25
Meets legal obligation	
Meets international standard	
Helps outside researchers	
Helps inform general public/media	
Helps other economic policymakers	
Published, eg as Statistical Release	
Helps consistency check or selection of reporting panel	
Helps international comparisons	

(a) In broadly descending order of marks awarded.

The form was designed to be easy to complete and more detailed guidance on the various categories was made available to MFSD analysts. **Chart 4.1** shows the distribution of relative benefits scores for a selection of forms.⁽¹⁾ Early experience of using the assessment form highlighted a need for some mechanism to ensure consistency of scores looking across the whole suite of reporting forms, as well as some areas to clarify guidance given to analysts. Proposed benefits assessments are therefore moderated by members of MFSD's Research and Development team, who are well placed to take an overview of the relative importance of particular items of data. Completed forms form part of the divisional record, helping to increase transparency and over time enabling the team to build up a picture of relative benefits across the entire range of data.

Chart 4.1 Relative benefits of forms

The process of moderation and analysis of the overall scores highlighted some areas where improvements were needed. But the eventual pattern of scores across forms was thought to be a plausible reflection of their relative benefits. It provides a useful benchmark for combining with costs estimates in the form reviews and assessment of new data requests, discussed in the next chapter.

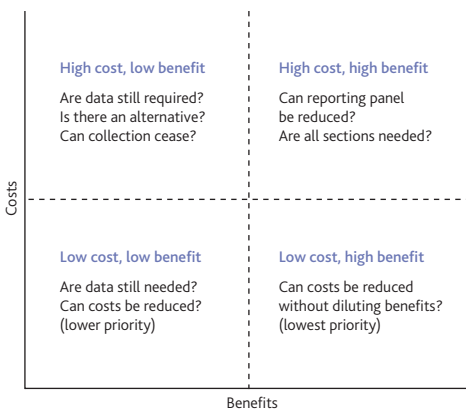
(1) The forms shown here are consistent with the estimates of costs in 2004 from the costs model, shown in **Chart 3.1**. There have been a number of changes to forms since 2004. For instance, a new form CE has largely replaced form C1.

5 Implementing cost-benefit analysis

5.1 Balancing costs and benefits

The previous chapters outlined how costs and benefits can be assessed. This chapter brings together these analyses of relative costs and relative benefits. **Chart 5.1** summarises some of the key questions to be asked, depending on the balance of costs and benefits.

Chart 5.1 Balancing relative costs and benefits



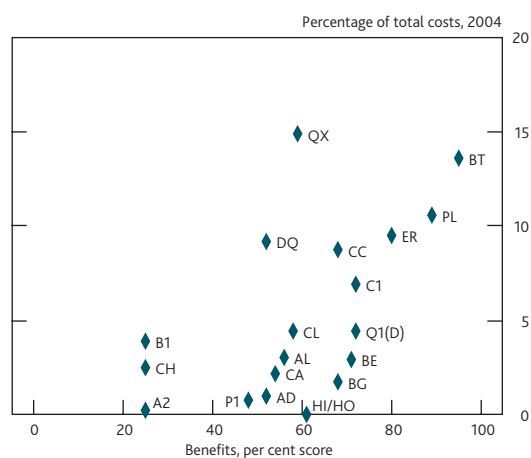
Where the assessment of costs and benefits shows that data have relatively low benefits but high costs, there is a need to investigate whether continued data collection is justified. In conventional CBA, a decision would depend on whether the benefits exceed the costs, which requires a monetary valuation for both sides. Because the analysis here is in terms of *relative* costs and benefits, it does not necessarily follow that a data collection with high cost and low benefit should be discontinued. Rather, this indicates an area where it is more likely that data may be no longer required, or where an estimated alternative would suffice; also where the potential gains from action are largest.

The case for any proposed changes would have to be established in conjunction with users, not least to ensure that the benefit assessment is fair and that ceasing any collections would not cause undue difficulty. Where data are still needed, it may be possible to obtain satisfactory estimates at lower costs from alternative sources. Early consultation with users is also helpful in terms of signalling any areas where suggested cuts, however justified, would be strongly opposed.

For most collections, there is likely to be a more even balance of costs and benefits. **Chart 5.2** combines the relative

cost and benefit scores from **Chart 3.1** and **Chart 4.1**. This shows a reasonable balance of costs and benefits for most forms, with few forms towards the top left corner — those where costs appear highest relative to benefits have been reviewed and steps taken to reduce the costs. Even so, there may be smaller changes to a particular form or to reporting practices that could reduce banks' reporting costs, without significantly diluting the benefits and while ensuring that data remain 'fit for purpose' (as required by the Bank's Statistical Code of Practice). Close consultation with users and providers is necessary to ensure that theoretical gains are translated into practical ones. CBA has been applied in practice through a review of the Bank of England's statistical forms, which is discussed in more detail in Section 5.2 below.

Chart 5.2 Relative costs and benefits of forms



The application of CBA has also focused attention on other aspects of banks' reporting costs and, in particular, the rationale for follow-up questions asked of banks, as these can be a significant contributor to banks' overall statistical reporting costs. A better understanding of the expected benefits from asking such questions will help MFSD's work to reduce the overall number of questions asked of banks, described in Section 3.2 above, as part of its concern to keep banks' statistical reporting costs to an acceptable level.

5.2 Reviewing existing data collections

The principal vehicle for putting CBA into practice is a review of the 20 or so main forms that the Bank uses to collect information from banks. The overarching aim of the review is

to ensure that monetary and financial statistics remain relevant for users without placing an unnecessary burden on reporting institutions. CBA plays a key role in delivering that, by ensuring that the data collected are still required and could not be supplied more cost effectively from a different source. In some cases, the content of a form is sufficiently homogenous to allow CBA to be undertaken for that form as a whole. More complex or diverse forms are likely to require separate analyses for different sections.

To spread the workload, the programme of reviews is taking place over a period of five years. The decision to undertake such a rolling review of forms reflects the experience of the previous review, the *1997 Review of Banking Statistics*,⁽¹⁾ which aimed to review the whole suite of forms (in part because of changes to the statistical framework with the adoption of the European System of Accounts 1995). Such a comprehensive review proved challenging, both for reporters and for the Bank: the main balance sheet form was revised in the *1997 Review* but it was agreed to postpone changes to the income and expenditure form for a number of years.

A rolling programme of form reviews, however, presents some logistical challenges, not least when a review concludes that some boxes might be better collected on a different form. Sequencing problems could arise if that form had recently been reviewed (as banks would not welcome a second round of changes) or if the form was not scheduled for review for some time (as any changes now could pre-empt the future review). This risk can be reduced to some extent by scheduling reviews of similar forms together, but it is unlikely to be avoided altogether.

The precise conduct of a review is the responsibility of the relevant MFSD analyst. They will usually have a good idea whether the review is likely to be fundamental and radical, or more limited in scope. In broad terms, the key stages of a review are likely to follow something close to the following pattern:

- assemble background information on the form, its history and interdependencies with other forms;
- identify major users of the data and, where possible, how the data are used;⁽²⁾
- undertake consultations with potential internal users and key external users⁽³⁾ to gain greater understanding of how data are used (or not) and to establish the importance placed on the data;
- complete (or revisit) the benefit assessment form;
- compare relative benefits with the relative costs suggested by the costs model — this may be done at a form level for

simple, homogeneous forms, or on a more disaggregated basis for longer or more detailed forms. It may also be relevant to consider the internal costs of compiling the information;

- give priority to any sections or data that appear to have relatively low benefit and high costs. The analyst should investigate options that would improve the cost-benefit trade-off. These may include estimating the data from alternative sources (for example, using stock data to estimate transactions data that are costly for banks to provide),⁽⁴⁾ dropping some or all of a data collection, and changes in frequency, timing or size of reporting panels (discussed in Section 5.4);
- use the costs model, if necessary, to illustrate the estimated impact of potential proposals;
- formulate recommendations to be discussed with colleagues and presented to the review steering group; and
- for significant changes, seek agreement by the Executive Director or one of the Governors and consider whether public consultation is needed.

Consultation with key users is important during the review and in advance of any significant changes to data collections and publications. This is an opportunity to fine tune views of how data are used and to gauge whether potential options for change in the review would cause serious problems. However, it is also important to be aware that some users may be reluctant to lose *any* data, even when they are hardly used in practice. So care is needed in forming a view on the ultimate importance of data.

Where information is valued by users, the aim is to continue to provide data that are fit for purpose, though reducing the burden on reporting banks where possible. Proposals for amending data collections are discussed with the British Bankers' Association before implementation and are also made available on the Bank of England website.⁽⁵⁾ If the outcome of a review is a recommendation for significant changes to data collection (including discontinuations or introductions), the

(1) The broad outcome of the *Review* is described in Thorp (1997).

(2) MFSD has developed an IT tool for its database that links boxes on a particular forms to the associated aggregates, exported and published data. This allows an analyst to see all the different places within MFSD's dataset where the input information is used.

(3) Direct input to the early stages of a review from external users is usually only sought from the Financial Services Authority and the Office for National Statistics. If significant changes are proposed to data that are used widely by other external users, then a public consultation would normally take place once the review has made recommendations but before any changes are enacted. See Weldon (2006) for an example of such a consultation.

(4) For example, Burgess (2006) describes how a new method has been developed to derive transactions data using market price indices. This has enabled one form to be discontinued and two sections to be removed from another. These changes should allow reporting banks to make cost savings without having a material effect on the quality of published data.

(5) Available at www.bankofengland.co.uk/statistics/about/BBAlist.pdf.

approval of the Governor or appropriate Deputy Governor must be sought, as set out in the Bank's Statistical Code. Public consultation will be undertaken where significant changes are proposed.

At the end of a review, a record should be kept of the outcome and the considerations that led to those conclusions — this includes any views of users that were sought during the review or who contributed to any formal consultation on proposed changes. The record of the review will be important in case there is any challenge to decisions, and also to provide a starting point for future reviews. Annex 3 gives an example of a pro forma that has been used to record discussions and outcome of reviews, in this case for proposed new data requests (see Section 5.3).

The costs model can be used to estimate the potential costs of various options, relative to the cost of other forms or to the overall reporting burden. These estimates together with other relevant calculations, such as the impact on internal costs or on banks' set-up costs, should also form part of the formal record of the review. If the estimated effects on banks' statistical reporting costs are recorded in a systematic and consistent way, it should be possible to estimate the *overall* effect on banks' costs of a programme of reviews. It is important to remember, however, that these are estimates of the potential savings in bank reporting costs over time — the extent to which such savings accrue in practice will depend on action taken by banks.

5.3 Assessing new data requests

CBA can also be applied to any requests for new data that fall outside of the review timetable. One important difference is that the overall judgement on whether to proceed will need to take account of the potential set-up costs to banks, as well as recurrent reporting costs. Set-up costs are likely to be more variable across reporting banks than recurrent reporting costs and thus less amenable to a modelling approach (see Section 3.2). It is likely that consultation with banks would help to provide useful information.

Apart from the inclusion of set-up costs, the process for assessing new data requests is likely to follow a pattern very close to that outlined above for existing forms. Early consultations would be mainly with those who have requested the data, and should cover issues like just how the new data would be used, what quality is required (eg whether estimates from existing sources are likely to be acceptable) and what would happen if the data were not supplied. At this stage it may be helpful to discuss the needs of users in terms of factors such as frequency and timeliness too — if possible, to gauge what might be the minimum requirements for data that are fit for purpose.

As with a review of existing data, the benefit assessment form can be used to gauge the benefits of the prospective data relative to the existing suite of data collections. Here, the assessment should also consider other potential uses and users too, not just that of the person or organisation making the initial request. This might be unlikely for specialised requests, but could be more important for data covering new markets or sectors that have been developing rapidly.

Similarly, the costs model can be used to indicate the likely level of costs relative to other forms. This may need to be a provisional judgement, depending on how much is known about factors such as the number of boxes required and the size of the reporting panel.

At the same time, internal costs may need to be considered as well. Development and implementation of new forms, or even changes to existing forms, can put demands on staff and resources. There will also be ongoing costs of collecting and producing the new data. If it is difficult to meet these costs from within existing budgets, then the decision must also take account of the opportunity cost in terms of any activities that would need to be foregone. In some organisations, practices such as charging for new requests can make these sorts of constraints more explicit.

As with reviews of existing forms, a record should be kept of consultations with users and suppliers and of the key factors that influenced eventual decisions.

5.4 Reviewing reporting panels

Many monetary and financial statistics are based on data collected from a panel of banks that does not cover the whole population. This introduces the potential for sampling error, but reduces the overall costs to banks and to compilers — if the panel has been selected well, then the reduction in costs should justify the potential error from having fewer banks in the reporting panel.

The concentration of the banking sector means that many of the smaller banks have little effect on the overall aggregates, so there may be scope to obtain good quality estimates with smaller reporting panels,⁽¹⁾ which would further reduce the overall reporting burden. In terms of **Chart 5.1** above, a reduction in the reporting panel while maintaining data quality would represent a downward shift. This would reduce the aggregate reporting burden on banks, although the savings would not accrue to those banks remaining in the panel.

(1) Boyle (1997) discusses the criteria for selecting reporting panels, given the structure of the UK banking sector, and illustrates these with recommendations for panels of planned balance sheet forms.

There are a number of approaches that can be taken to selecting a sample:

- **top-slicing** is used for UK monetary and financial statistics and is most commonly used for banking statistics in other countries. It selects a panel based on the largest reporters. This can be selected by using either a threshold (eg all banks with total assets over £1,000 million) or by specifying minimum coverage (eg banks chosen so that the sample covers 95% of all assets). The reporting population comprises all banks above the relevant threshold, with reviews from time to time to ensure that the panel is kept up to date;
- **random sampling** would select a given proportion of the banking population purely at random, so that the largest and smallest banks stood exactly the same chance of inclusion. The sample would usually be rotated over time, so that new banks were brought in and the risks from drawing an unrepresentative sample were reduced;⁽¹⁾ and
- **stratified random sampling** combines elements of top-slicing and random sampling and is the method most commonly used by the ONS for data from UK business surveys. The reporting population is divided into different groups, typically based on size. Often the sample includes a census of the largest group, and a random sample drawn from each of the other groups, with a higher proportion of larger reporters chosen than of smaller ones.

Top-slicing is the method most suitable for the UK banking sector. The concentration of the sector, with the top ten banks accounting for over half of banking sector assets, rules out a purely random sample because that would not guarantee that the panel included the largest firms. Stratified random sampling could overcome this problem, but the significant set-up costs associated with collecting data from banks would make any form of random sampling difficult if the sample were rotated periodically (as it should be). Banks would be unhappy to incur set-up costs for only a short period in the sample. And once dropped from a sample, banks might not be willing to realise potential savings from their reduced reporting requirements if they anticipated that they might be brought back into the sample at some time in the future.

Over and above the standard periodic updating of reporting panels (eg bringing in banks that have grown in size or removing banks that have fallen below the threshold), CBA can be applied to a reporting panel review by checking whether a different size of panel would deliver a better balance between costs and benefits. There are a number of criteria that can be used to assess potential panels. One way is to look at the percentage of the population (if figures are available) that the proposed panel would cover for key boxes in the form: if these are all quite high then the resulting data should still be of good

quality. Another way to assess the potential impact of changes in reporting panels, which can also be useful in consulting with users, is to estimate historic data using the proposed panel — if the differences from a smaller panel are minor then there should be little impact on quality from changing the panel.

When conducting panel reviews, it is important to take account of all uses of data from a particular form. If some are used for cross-checking other forms, or for assessing reporting populations of other forms, then care should be taken in adjusting panel size in case a reduced panel precludes these uses.

A practical challenge for CBA is to assess what quality of data should be considered fit for purpose. Often panel sizes have been set such that there is no significant impact on data quality, but this could still result in data of a quality that is higher than needed for a particular use. A CBA approach would be to compare the benefits from different levels of data quality against the costs of the panels that would deliver those levels of quality. In practice, however, it is difficult for producers or users to specify with any precision what level of quality is needed for particular uses of data.

5.5 Measurement and performance indicators

Section 3.1 described the costs model that has been developed to estimate the relative costs of different forms. The model builds up estimates from basic components such as number of boxes and types of information, so that it can also be used to estimate the potential impact on reporting costs from making changes to forms. This does not offer a monetary estimate of the potential saving, but instead provides a measure of the scale of costs, relative to the total for a single form, or for all forms, in a base year (currently 2004).

In practice, there are a number of reasons why the actual impact on banks' statistical reporting costs from changes to a form may differ from those suggested by the costs model. The figures from the costs model represent relatively long-term estimates of the potential impact. The short-term saving from, say, cutting a form may be rather lower. When relatively small changes are made, banks may continue to collect data rather than change their systems immediately. So the full potential savings may take some time to be realisable, depending on the timescale for updating systems and working practices. In addition, the costs model is an abstraction based on average responses from banks and is unlikely to provide a precise match for any particular single bank.

(1) If estimates of levels are of most interest, then the sample should be redrawn frequently. But if growth rates are of more interest than levels, then there is some benefit from continuity within the sample and rotation should be more gradual.

Box 3

Case study — review of information collected on the industrial composition of banks' business with UK residents (forms AD and AL)

Quarterly information on the industrial composition of banks' business with UK residents is collected in forms AD (deposits) and AL (lending) and published in a quarterly Bank of England Statistical Release, *Analysis of bank deposits from and lending to UK residents*.⁽¹⁾ The two forms were introduced following the *1997 Review of Banking Statistics* and they have been reviewed as part of MFSD's ongoing programme of form reviews. The Bank of England recently consulted over proposed changes to the forms and to published data.⁽²⁾

The review included consultation with users in the Bank, the ONS and the Financial Services Authority to establish the main uses of the data. Within the Bank, the data are used by economists in Monetary Analysis and Financial Stability to analyse trends in the UK economy and the financial sector, for example to show which sectors of the economy have been relying heavily on bank lending and which have been building up (or running down) bank deposits. The ONS uses some of

the data in calculating private non-financial companies' profits and their industrial allocation.

The review and consultations identified some areas of the industrial dataset where data offer relatively low benefits compared with costs. Following consultation with users, the main changes include:

- ceasing to collect and publish a quarterly industrial breakdown of bank holdings of commercial paper and of acceptances granted, which are both very small in relation to outstanding loans and deposits; and
- removing data on deposits from and lending to individuals from the industrial dataset, as these are available more extensively and with wider coverage elsewhere in the Bank's monetary statistics publications.

The detailed implementation of these changes is being discussed with reporting banks, but seems likely to result in a significant cut in the number of boxes on the two forms.

(1) Westley (1999) discusses the data collected on these two forms.

(2) Weldon (2006) invites comments from users of the data and sets out the proposed changes more fully.

Chapter 3 emphasised the importance of complementing the results of the costs model through continuing discussions with reporting banks. This enables the assumptions and views enshrined in the costs model to be tested and to be kept as up to date as possible. Close consultation with users and reporters is also important when proposing changes to forms, to ensure that the benefits are maintained, data remain fit for purpose and that reporters agree that there are potential savings to be made. The case for change would be weakened if it turned out that there would be no realisable savings for reporting banks (though the costs to prospective reporters as well as existing ones need to be considered too). These sorts of discussion may also help to refine the way that some factors are treated in the costs model, including gaining a better understanding of how well the estimated savings from the model translate into actual savings.

The costs model can nevertheless be used to track the overall potential impact of form reviews on the reporting burden, subject to the caveats above. Discussions with banks could play a useful role here in comparing their experience with the predictions from the costs model — for example, how valid is the assumption underlying the costs model that a 50% cut in boxes will allow a 50% cut in reporting costs?

Estimates from the costs model could also be used as performance indicators, to track progress on limiting or reducing the burdens placed on reporters. Similar caution would be needed here, particularly as there is little scope for

independent evaluation or audit of the estimates. But they can play a useful indicative role in illustrating the likely scale of changes.

5.6 Results of early reviews

A number of forms have already been discontinued as a result of the ongoing review of existing forms. These were cases where the relative benefits did not appear to justify the costs, including some where data of satisfactory quality could be estimated using other sources. For other forms, there may be scope to reduce the number of boxes on forms, so that less information is required from reporting banks. Box 3 presents a case study of a review currently under way: that of the information provided on the industrial composition of banks' business with UK residents.

Table 5.A presents results from those form reviews where proposals for change have been finalised. Taking preliminary results from the model of banks' costs that has been developed, these forms together are estimated to have accounted for over 35% of banks' recurrent statistical reporting costs in 2004. In five cases, the review found that the data collected on these forms (or sections of forms) were no longer required or could be provided from other sources (though some of the forms were actively selected for early review because it was already believed that there was little continuing need for them). For example, form P1 collected

Table 5.A Changes from forms already reviewed

Form	Percentage of estimated costs in 2004 ^(a)	Main changes	Percentage changes in		Estimated change as percentage of 2004 costs
			number of boxes	reporting panel	
A2/CH — custody holdings on behalf of non-residents	2½	Forms dropped	-100 ^(b)	-100	-2½
AD/AL — industrial analysis ^(c)	4	Some cuts	Significant cut	–	-1½
B1 — country exposure for UK branches of foreign banks	4	Form dropped	-100	-100	-4
BG — country analysis of payments	1½	Moved to quarterly to meet EU regulation ^(d)	–	+87	+1½
P1 — securities transactions	1	Form dropped	-100	-100	-1
QX — supplementary balance sheet information	15	Two sections dropped ^(e)	-9	–	-3
DQ — derivatives	9	Two sections dropped ^(f)	-12	–	-5½

(a) Estimated share of banks' recurrent reporting costs from preliminary version of MFSD's costs model, rounded to nearest ½%.

(b) Removing these forms required a few boxes to be added to form CL.

(c) Following public consultation, detailed proposals are being discussed with reporting banks.

(d) A European Council and European Parliament Regulation passed in early 2005 requires a limited geographic breakdown of the Balance of Payments quarterly. The increase in reporting panel is because of larger banks moving to quarterly reporting. The cost of this may be an overestimate, as consultations during the review indicated that banks may not incur much cost in moving from annual to quarterly reporting for this information.

(e) Sections 2 and 3 of the form have been dropped. Proposals for changes to other sections will follow.

(f) Sections 4 and 6 of the form will be dropped. Proposals for changes to other sections will follow.

banks' own account transactions in securities issued by non-residents and overseas residents' transactions in UK equities; these data were used in balance of payments estimates. However, banks found such transactions data costly to provide and the form involved a significant workload for them. Research within MFSD showed that these flows could be estimated using stock data from another form, and the ONS agreed that switching to these alternative estimates would be acceptable.

Of the other reviews, the proposals for information collected on the industrial composition of banks' business with UK residents (forms AD and AL) would reduce the number of boxes significantly. Further cost savings to the banking sector may result from the forthcoming panel review for those forms. The review of information on the country composition of banks' payments to and from non-UK residents (form BG), however, resulted in a greater number of forms needing to be completed each year, because European regulation requires information from that form on a quarterly rather than annual basis.

Overall, MFSD's data collection is equivalent to around 7½ million data cells a year.⁽¹⁾ Including provisional proposals from form and panel reviews that are under way but not yet completed, over three quarters of the annual data collection has been reviewed. The proposed reduction in data collection corresponds to around 2½ million data cells (approximately one third of the annual data collection).

(1) This estimate is based on 2004 figures and the same assumptions as the costs model for country analysis.

6 Conclusion

Monetary and financial data contribute to meeting the inflation target, maintaining financial stability and understanding the behaviour of the UK economy. The cost-benefit analysis project has developed ways of assessing the costs and benefits of these data. Monetary valuation of both costs and benefits has proved elusive, but estimation of relative costs and benefits has been more tractable.

A key aim of the project has been to develop a framework and tools that can be used as part of the ongoing review of reporting forms. The benefit assessment tool has been used in reviews since the second half of 2005 and the costs model was finalised during 2006. Over and above these formal methods, however, the review of forms has already embraced the principles underlying CBA; namely seeking a better balance between benefits and costs, rather than the highest possible quality of data, regardless of cost.

So far, application of CBA through the form reviews has resulted in the withdrawal of four forms and four sections of other forms; and proposals for significant simplification of two more. These changes should reduce statistical reporting costs for all banks that return these forms. The reviews also aim to ensure that any data from discontinued forms that are valued by users can be estimated or replaced from alternative sources. Reviews currently close to completion are expected to propose changes to other forms that should result in further reductions in banks' reporting burden.

The Bank of England will continue to develop tools to bring CBA to bear on its statistical data collection. The framework is dynamic and the tools and approaches will be updated as required, including any change indicated by greater understanding of the uses of monetary and financial data and the key determinants of banks' statistical reporting costs. Over time, the CBA framework should help the Bank to focus its efforts on those data that are most important to users, while bearing down on the burdens imposed on data providers. At the same time, it will look for ways of strengthening further links with both users and providers of data.

Monetary and Financial Statistics Division would be interested in any comments on this handbook, or to learn about the experience of any other organisations of applying CBA to statistical collection. For comments or further discussions, please contact the Head of MFSD⁽¹⁾ or the Research and Development Team in MFSD.

(1) Email address jo.paisley@bankofengland.co.uk. Correspondence can also be sent to R&D Team, MFSD, Bank of England, Threadneedle Street, London EC2R 8AH.

Annex 1 Respondents to the international questionnaire

Australian Bureau of Statistics*
Reserve Bank of Australia
Bank of Canada
Statistics Canada
Danmarks Nationalbank
Eurostat
Bank of Finland
Banque de France
International Monetary Fund
Bank for International Settlements
Central Statistics Office Ireland
Italian National Institute of Statistics
Bank of Japan*
De Nederlandsche Bank
Reserve Bank of New Zealand
Norges Bank
Sveriges Riksbank
Swiss National Bank
US Bureau of Economic Analysis
US Bureau of Labour Statistics
US Census Bureau
Board of Governors of the US Federal Reserve System

* Based on interviews rather than questionnaires returned.

Annex 2 The benefit assessment form

Data set	Example of important data series													
Description of uses (include MFSD uses, eg panel selection, cross-checks, etc)	Makes a significant contribution to high profile publications, complies with legal obligation													
Policy use (choose 1 only)	<table border="1"> <tbody> <tr> <td>Very high</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>High</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Medium</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Low</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Very low</td> <td><input type="checkbox"/></td> </tr> <tr> <td>None</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Very high	<input checked="" type="checkbox"/>	High	<input type="checkbox"/>	Medium	<input type="checkbox"/>	Low	<input type="checkbox"/>	Very low	<input type="checkbox"/>	None	<input type="checkbox"/>	Score 25 Used in key policy decisions, or flagship publications and statistics Used in important policies, publications and statistics Used in less important policies, publications and statistics Hardly used or in secondary publications Very rarely used
Very high	<input checked="" type="checkbox"/>													
High	<input type="checkbox"/>													
Medium	<input type="checkbox"/>													
Low	<input type="checkbox"/>													
Very low	<input type="checkbox"/>													
None	<input type="checkbox"/>													
Policy relevance contribution of these data (choose 1 only)	<table border="1"> <tbody> <tr> <td>Very high</td> <td><input type="checkbox"/></td> </tr> <tr> <td>High</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Medium</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Low</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Very low</td> <td><input type="checkbox"/></td> </tr> <tr> <td>None</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Very high	<input type="checkbox"/>	High	<input checked="" type="checkbox"/>	Medium	<input type="checkbox"/>	Low	<input type="checkbox"/>	Very low	<input type="checkbox"/>	None	<input type="checkbox"/>	20 The key component of the activity/policy use A main important activity of the activity/policy use A generally important component of the activity/policy use A sometimes important component of the activity/policy use A rarely important component of the activity/policy use
Very high	<input type="checkbox"/>													
High	<input checked="" type="checkbox"/>													
Medium	<input type="checkbox"/>													
Low	<input type="checkbox"/>													
Very low	<input type="checkbox"/>													
None	<input type="checkbox"/>													
Standards and regulation (choose 1 only)	<table border="1"> <tbody> <tr> <td>Legal obligation</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Meets agreed standard</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Helps international comparisons</td> <td><input type="checkbox"/></td> </tr> <tr> <td>None</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Legal obligation	<input checked="" type="checkbox"/>	Meets agreed standard	<input type="checkbox"/>	Helps international comparisons	<input type="checkbox"/>	None	<input type="checkbox"/>	15 No choice but to implement (excluding ESA95) For full consistency with international standard (ESA, SNA, BPM) Other countries also produce the data, but none of the above apply				
Legal obligation	<input checked="" type="checkbox"/>													
Meets agreed standard	<input type="checkbox"/>													
Helps international comparisons	<input type="checkbox"/>													
None	<input type="checkbox"/>													
Additional uses (choose all that apply)	<table border="1"> <tbody> <tr> <td>Helps outside researchers</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Helps inform general public or media</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Helps other economic policymakers</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Published, eg Stats Release</td> <td><input type="checkbox"/></td> </tr> <tr> <td>MFSD consistency check panel selection, etc</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Helps outside researchers	<input checked="" type="checkbox"/>	Helps inform general public or media	<input checked="" type="checkbox"/>	Helps other economic policymakers	<input checked="" type="checkbox"/>	Published, eg Stats Release	<input type="checkbox"/>	MFSD consistency check panel selection, etc	<input type="checkbox"/>	2 2 2		
Helps outside researchers	<input checked="" type="checkbox"/>													
Helps inform general public or media	<input checked="" type="checkbox"/>													
Helps other economic policymakers	<input checked="" type="checkbox"/>													
Published, eg Stats Release	<input type="checkbox"/>													
MFSD consistency check panel selection, etc	<input type="checkbox"/>													
Value added for internal analysis (choose 1 only)	<table border="1"> <tbody> <tr> <td>High</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Medium</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Low</td> <td><input type="checkbox"/></td> </tr> <tr> <td>None</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	High	<input checked="" type="checkbox"/>	Medium	<input type="checkbox"/>	Low	<input type="checkbox"/>	None	<input type="checkbox"/>	15 Main source of high level data (ie aggregate boxes) Further breakdowns of main aggregates from other forms Similar data available elsewhere, or data could be estimated No value added				
High	<input checked="" type="checkbox"/>													
Medium	<input type="checkbox"/>													
Low	<input type="checkbox"/>													
None	<input type="checkbox"/>													
Quality (choose 1 only)	<table border="1"> <tbody> <tr> <td>High</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Medium</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Low</td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	High	<input checked="" type="checkbox"/>	Medium	<input type="checkbox"/>	Low	<input type="checkbox"/>	10 Fill in this section mainly with regard to sampling accuracy and empirical coherence (revisions)						
High	<input checked="" type="checkbox"/>													
Medium	<input type="checkbox"/>													
Low	<input type="checkbox"/>													
Total score (per cent)		91												

Annex 3 Pro forma for recording action on new data requests

A Series/data description:

B Who has requested the data?

C User reasons for requesting the data? — Include any legal obligations.

D Where data would be collected? *New form or change to existing form?*

Likely impact on overall reporting burden for new of existing forms

Summary of proposals and effects		Current	After proposals
Description of recommendations	Number of reporters (per frequency)		
	Number of forms processed (per annum)		
	Number of lines on form. Of which, breakdown of existing		

E Cost significance of proposals: *Monetary figure or High, Medium, Low assessment*

F Data benefits: Benefit Tool value; and any other benefits:

G Alternative options considered and reasons for their rejection: *Include 'do nothing'*

H Knock on to other forms in MFSD?

I Any other relevant details?

J Recommendation/Next steps

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