Introduction

The purpose of this article is to articulate the responsibilities of the Office for National Statistics (ONS) with respect to the UK inflation target. At its simplest level the relationship is straightforward: ONS is responsible for measuring inflation, and a wide range of other economic statistics. ONS has no further input into the Bank of England’s inflation projections, over and above supplying statistics on what has actually happened, and has no role in defining the inflation target. The publication of ONS’s data also allows the public to judge the success of monetary policy.

In essence, the current processes for monetary policy in the UK might be depicted as a tripartite relationship between HM Treasury, the Bank of England, and ONS. HM Treasury sets the inflation target, the Bank of England is responsible for meeting the target, and it uses statistics, predominantly from ONS, to inform the policy decision.

This paper therefore has two discrete elements: the first part describes these institutional relationships in more detail, while the second addresses ONS’s core business of data production directly with a discussion of the construction of ONS’s inflation statistics.

Monetary Policy in the UK – the Institutional Arrangements

This section starts with an overview of monetary policy in the UK, illustrating how the focus on economic statistics has developed with changes in the monetary policy framework. This leads naturally into a discussion of the statutory basis of the Office for National Statistics, its relationship with HM Treasury, and the monetary policy remit set for the Bank of England by the Chancellor of the Exchequer. It is followed by a description of the relationship between ONS and the Bank of England.

Monetary policy and the link with economic statistics

The Bank of England has only had responsibility for setting interest rates since 1997; before this the Chancellor of the Exchequer was responsible for setting interest rates. There has always been a close relationship between the monetary policy framework and the demands made on economic statisticians, and the demands have increased with recent developments.

The UK money supply targets in the 1970s and early 1980s could be measured just using data from the Bank of England, although the policy makers also had some input from a range of macro-economic statistics. With the switch to an inflation target in 1992 attention on Government statisticians increased, as the chief providers of macro-economic data. Then in 1994 the move was made to start publishing the minutes of the regular meeting held between the Chancellor and the Governor of the Bank of England to discuss the Chancellor’s interest rate decision. This immediately increased the transparency of the process, focussing attention on the wide range of economic data used to make the decision.

Since 1993 the Bank of England has published an overview of inflationary pressures in their quarterly Inflation Report. This has provided useful background for economic commentators and observers. It includes consideration of monetary and financial conditions, demand and output, the labour market, and costs and prices.

The Inflation Report came into its own in May 1997, when the Treasury passed responsibility for setting interest rates to the Bank of England, with the Chancellor’s announcement of operational independence for the Bank. The Remit from the Chancellor to the...
Governor, as Chair of the MPC, provides additional details including those on the structure of accountability; this was sent in June 1997. Since then the Monetary Policy Committee (MPC) of the Bank of England has used the *Inflation Report* to present its inflation projections; and to share the MPC’s thinking on monetary policy. The *Inflation Report* is a substantial resource, comprising some 60 pages of closely argued discussion of recent economic developments. As this provides far more detail than before on the rationale for policy decisions, it has provided another step change in the degree of transparency of the process, and led to increasing public scrutiny of ONS’s economic statistics, and their coherence.

The responsibilities of ONS

ONS was created in 1996 from the merger of the Central Statistical Office (CSO) and the Office of Population Censuses and Surveys (OPCS). ONS is a Government department and is also an agency reporting to the Chancellor of the Exchequer.

ONS produces most official economic statistics, including:
- the full range of price statistics, as outlined below;
- national accounts and trade statistics;
- short term output indicators, notably the monthly indices of production and distribution output and the retail sales inquiry; and
- labour market statistics.

In June 2000 a new framework was launched – National Statistics. This followed the Government’s pledge in its 1997 election manifesto to provide independent national statistics. The scope of National Statistics is wide, including all statistics published by ONS, as well as nominated statistics from other Government departments.

Responsibility for National Statistics is shared between three central players:
- the National Statistician, who is both the professional Head of National Statistics and the Director of the Office for National Statistics;
- the Chancellor of the Exchequer, who is the Minister for National Statistics, and
- the Statistics Commission, which is independent of Ministers and the producers of National Statistics.

The Framework Document for National Statistics stipulates that the National Statistician has ‘responsibility for the professional statistical quality of all the outputs comprising National Statistics’, inside and outside the Office for National Statistics. He is ‘accountable to the Chancellor for the performance of National Statistics and, with Heads of Profession [in Departments], for the discharge of the annual work plans approved by Ministers’.

The Statistics Commission’s role is to advise on the quality assurance and priority setting for National Statistics and on the procedures designed to deliver statistical integrity. It produces an annual report that is laid before Parliament by the Minister for National Statistics. As part of the process of setting priorities, there is wide consultation with users.

The *Framework Document for National Statistics* specifies slightly different responsibilities for the Retail Prices Index (RPI) to those for other statistics. For all National Statistics apart from the RPI, the National Statistician is responsible for ‘developing and maintaining statistical standards, definitions and classifications and promoting high quality statistical output through systematic evaluation and research’. However, for the RPI: ‘the National Statistician will take the lead in advising on methodological questions concerning the RPI but the scope and definition of the index will continue to be matters for the Chancellor of the Exchequer’.

HM Treasury: the institutional relationships

The aim of HM Treasury is ‘to raise the rate of sustainable growth, and achieve rising prosperity, through creating economic and employment opportunities for all’. The first of the nine objectives to achieve this goal is ‘maintaining a stable macro-economic framework with low inflation’.

The relationship between the Office for National Statistics and HM Treasury has two angles:
- HM Treasury’s interest in economic statistics deriving from its responsibility for macro-economic policy, and
- the fact that the Chancellor of the Exchequer is the Minister for National Statistics, and, linked to this, ONS is one of the Chancellor’s departments, along with other departments such as the Inland Revenue and Customs and Excise.

The working relationship between HM Treasury and ONS is governed by a Concordat which outlines the aims and objectives of each, specifies the consultation arrangements between the two organizations, and provides for service level agreements. The key service level agreement (SLA) relating to macro-economic policy is the SLA on Macro-Economic Statistics – which is very similar to the SLA with the Bank of England, as described in.
Under the public spending regime, in common with other smaller departments, HM Treasury also agrees with ONS a Service Delivery Agreement specifying performance targets for ONS.\(^9\) This states that the Chancellor of the Exchequer will determine the policy and financial framework within which ONS operates, and that the operational management of ONS is delegated to the Director of ONS.\(^9\)

When the Labour Government gained power in 1997 one of their first acts was to grant operational independence for the Bank of England and establish a Monetary Policy Committee with the responsibility of setting monetary policy to achieve an inflation target. The Government and Parliament remained responsible for setting and defining the objective of monetary policy. These arrangements were enshrined in law through the Bank of England Act (1998), which legislated procedure for MPC meetings, minutes and appointments.\(^10\) The exact definition of price stability, and thus the nature of the inflation target, is communicated to the Bank through the remit, which is set by HM Treasury. The remit has not changed since its introduction in 1997.

The remit given to the Monetary Policy Committee on interest rate policy is as follows. The target rate of inflation is 2½ per cent for the 12-month increase in the Retail Prices Index excluding mortgage interest payments (RPIX). The MPC is charged with meeting this target at all times. It is a symmetric target. If inflation deviates by more than one percentage point above or below the target the Governor of the Bank of England must send an open letter to the Chancellor of the Exchequer explaining:

- why inflation has deviated from target;
- what action the Bank of England’s Monetary Policy Committee (MPC) intends to take to get it back to target;
- how long it will be before inflation returns to target; and
- how this meets the MPC’s remit as set out by the Chancellor.

The 2001 Budget Report\(^11\) explains that this helps to support the Government’s wider economic policy objective of high and stable levels of growth and employment.

The monetary policy remit given to the Bank of England by the Treasury complements the Memorandum of Understanding between the Treasury, the Bank of England and the Financial Services Authority in the field of financial stability.\(^12\) In addition, the Bank of England Act covers both of these Bank of England functions.

### ONS and the Bank of England: the wider working relationship

ONS and the Bank of England have developed a far closer relationship in recent years. Until the mid-1990s, the main working relationship was between statisticians in the two institutions, CSO (before the creation of ONS) and the Bank of England’s statistical division, although the Bank’s macro-economists also took a close interest in ONS’s macro-economic data. The focus of the statisticians was on the financial data the Bank provided to CSO to feed into CSO’s compilation of macro-economic statistics.\(^13\)

When responsibility for setting interest rates was passed to the Bank of England in 1997 the relationship changed immediately. The Bank became one of its key customers, and ONS’s links widened from collaboration with statisticians at the Bank to include the Bank economists who analyse the economy and brief the MPC.

This relationship was formalised by the service level agreement between the Bank of England and ONS,\(^14\) which was agreed and signed by both sides in October 1999. This outlines the services ONS will provide to the Bank of England, and the obligations of the Bank of England in return. It stipulates the form and timeliness of the data supplied to the Bank of England, and requires ‘sufficient’ quality and scope of statistics, consistent time series, and full, public documentation of its sources and methods used in constructing key economic statistics. The Bank of England undertakes to inform ONS of their use and interpretation of ONS economic statistics.

The service level agreement also provides for regular meetings between ONS and the Bank of England, and this has proved to be a good way to develop strong working relationships, and a good sense amongst both parties of the objectives of the other side, and their constraints. ONS places significant weight on the views of the Bank of England when formulating spending priorities for economic statistics.

ONS provides both the Bank of England and HM Treasury with regular updates on progress on the key development programmes, and they attend several of the project boards monitoring methodological change to provide feedback on user needs. Both take a keen interest in the RPI research programme, and tripartite meetings are held once a quarter to feed the views of HM Treasury and the Bank of England in to the ‘technical board’ of ONS staff. In parallel with this, ONS has increased the number of economists on its staff in recent years; one of their roles is to help ONS understand the perspective of economist users of ONS statistics.

One feature of ONS’s close working relationship with HM Treasury, and more recently the Bank of England, has been a strong focus on the need for timely economy data. The recent European ‘benchmarking’ study comparing the timeliness of economic data in Europe with the US found that UK short-term economic statistics were rather more timely than any other member state. The UK
was the fastest country to publish six of the twelve indicators reviewed, and in the top three countries for ten of the twelve. This seems likely to be a result of the very close working relationship between ONS and its key macro-economic users, HM Treasury and the Bank of England.

**Inflation measurement in the UK**

This section complements the discussion of institutional responsibilities with a brief overview of ONS’s work on prices measurement, focusing on the RPI. It starts by outlining the wide range of price statistics produced by ONS. This is followed by a discussion of the uses of the RPI over time, and then a summary of progress on the RPI development programme.

**ONS’s price statistics**

ONS publishes an unusually wide range of price statistics. The most high profile statistics are the family of domestic retail price indices produced each month:

- the ‘headline’ Retail Prices Index (RPI), which represents retail prices for the whole population, apart from the richest 4 per cent and those pensioner households mainly dependent on state pensions;
- the Retail Prices Index excluding Mortgage Interest Payments (RPIX), which – as its name suggests – excludes mortgage interest payments from the RPI;
- the Retail Prices Index excluding mortgage interest payments and indirect taxes (RPIY); and
- detailed product breakdowns of the RPI.

Current press releases and further information are found at [www.statistics.gov.uk/rpi](http://www.statistics.gov.uk/rpi).

ONS also produces the harmonised index of consumer prices (HICP). This measure is designed for comparison between European countries. It is calculated differently from the RPI – in particular using the geometric mean to aggregate prices at the most basic level rather than the RPI’s arithmetic means. A number of RPI series are also excluded from the HICP, most particularly those relating to owner occupiers’ housing costs (e.g. mortgage interest payments, house depreciation, council tax and buildings insurance). In the UK HICP inflation has consistently been lower than RPIX inflation. HICP inflation in July 2001 was 0.75 percentage points lower than RPIX inflation; of this 0.5 percentage points was due to the formula effect, although this effect can vary over time. ONS is concerned about the size of this formula effect, and this is a major element of the research programme described below.

ONS complements these retail price series with a number of monthly producer price series, notably:

- trade prices, broken down by continent and commodity type – the export prices are directly collected by ONS from UK manufacturers and the import prices use world market prices where the products are traded on a world basis (e.g. some raw agricultural materials), some proxies, and directly collected prices otherwise (more information at [www.statistics.gov.uk/bop](http://www.statistics.gov.uk/bop));
- producer input and output prices covering UK production for domestic markets ([www.statistics.gov.uk/ppi](http://www.statistics.gov.uk/ppi)); and
- experimental corporate services prices, which price a range of services used as inputs to other goods or services ([www.statistics.gov.uk/cspi](http://www.statistics.gov.uk/cspi)).

A range of deflators is currently produced as part of ONS’s comprehensive National Accounts data set. These build on the directly collected price indices, incorporating the effects of balancing adjustments where necessary. The ONS also produces the experimental Final Expenditure Price Index, which is a direct measure of economy-wide inflation. This covers government and investment expenditure as well as consumers’ expenditure. It was requested by the Treasury and the Bank, who use it as an additional measure of economy-wide inflation, alongside the implied deflators.

ONS is not at present using a ‘stage of processing’ framework to develop a complete set of price indices at the various stages of production. However, we are developing a consistent and detailed set of deflators as part of the major programme to develop constant price input-output tables; this will provide a systematic structure and database to develop a stage of processing framework.

**Uses of the Retail Prices Index**

The RPI has the longest history of ONS’s price statistics. Although there were occasional official comparisons of prices for food in the late 19th and early 20th centuries, the Government first began a systematic, continuous check on the increase in the cost of living in 1914. This was pushed as an aid towards protecting ordinary workers from what was initially expected to be temporary economic circumstances of the First World War. The figures initially released related only to food prices but after June 1916 they were expanded and calculated retrospectively to cover clothing, fuel and some other items reflecting the principle expenditure of a working class family.
As noted above, the use of an inflation target for monetary policy is relatively recent. The RPI has a range of other functions, in particular:

- many benefits are linked to the RPI, notably pensions;
- the RPI is used to set the return on index-linked gilts, issued since 1981; and
- the RPI is used in private sector contracts to specify benchmark price changes.

It is ONS policy not to revise the RPI because of these wider uses.

With respect to index-linked gilts, the terms of the prospectus state that if the coverage or the basic calculation of the index is changed in a way that is ‘fundamental’ and ‘materially detrimental’ to the interests of holders of the particular index-linked stock, in the opinion of the Bank of England, then HM Treasury is obliged to offer the stockholders the right to redeem their stock at the uplifted par value. If the coverage or the basic calculation of the index is changed in a way that is fundamental and that would have been materially detrimental to the interests of the relevant stockholders,

The RPI is currently described as a ‘measure of price change’. A convenient way to understand the nature of the RPI is to envisage a very large shopping basket comprising all the different kinds of goods and services bought by a typical household. As the prices of individual items in the basket vary, the total cost of the basket will change – the RPI is a measure of the change in this total cost from month to month.

As the balance of interests has moved there have been periodic reviews over the years, considering whether the basis for the RPI should be changed – notably to a cost of living index. However, the diversity of uses is a significant constraint on changing the rationale of the RPI, and the net result has been to retain the ‘measure of price change’.

Where significant changes are being considered to the RPI the Chancellor of the Exchequer has in the past called a Retail Prices Index Advisory Committee (RPIAC) to advise him on whether the changes are appropriate, and how they should be handled. In the past, RPIAC’s have been staffed with representatives from the public and private sector, including a Bank of England official as a full member and an HM Treasury official appointed in a personal capacity, based on their relevant expertise. The Secretariat was provided by CSO, the forerunner of ONS.

Further details on the construction of the RPI and its history are available in the Retail Prices Index Technical Manual.  

The RPI Development Programme

After moving to an inflation target, policy makers – first HM Treasury and then also the Bank of England – have placed increasing emphasis on the accurate measurement of retail prices. The Boskin report into bias in the US Consumer Price Index crystallised concerns, and ONS established a comprehensive programme of research on the methodology of the RPI. The main areas of work are outlined in Economic Trends.  

Formula bias: bias arising when the formula used to weight together prices is inappropriate. ONS is establishing broad principles for when the arithmetic mean should be used and when the geometric mean is more appropriate. ONS has also been investigating the impact on the formula effect of moving the base month at which the RPI is rebased, for example from January to December, and the practical implications of any such move. The arithmetic differences observed need not be interpreted as bias, as the appropriate formula depends, amongst other things, on the definition and use of an index.

Quality bias: bias occurring when insufficient account is taken of changes in the quality of goods. ONS is investigating a range of techniques for improving the measurement of quality change, including hedonics.

Substitution bias: this has two elements. The first is ‘product substitution bias’: bias arising because there are lags before the price index adjusts for changes in purchasing patterns. In the UK the RPI is rebased every year, so this bias will be relatively small compared to countries which rebase less frequently. The second is ‘outlet substitution bias’: bias from lags in taking account in changes in where people do their shopping. ONS have carried out a systematic rebalancing of the RPI sample, and outlets are re-enumerated every five years on a rolling programme. ONS is also currently investigating practical ways of measuring internet shopping, and is also reviewing its general procedures for monitoring shopping trends to ensure these are reflected in the RPI on a timely basis.

New goods bias: bias occurring as a result of delays in including the prices of new goods in the index. ONS has estimated the effect of excluding new goods from the RPI in recent years, and it is negligible. The project is also tracking prices of products from when they first enter the market, to check whether price falls have a more significant effect early in a product’s life.
Conclusions

The changes to the monetary policy framework in recent years provide far more information on the rationale for interest rate decisions, which has naturally led to a higher public profile for economic statistics. In parallel, the three main parties in the monetary policy framework – HM Treasury, the Bank of England and ONS – have developed clearer written agreements documenting their institutional relationships and responsibilities. This too has increased the transparency of the process. This article provides, in one place, a comprehensive overview of all these agreements.

These agreements confirm the allocation of responsibilities between the three parties: ONS measures what has happened; the Bank of England uses these data, amongst others, to assess inflationary pressures and thus set interest rates to meet the inflation target; and HM Treasury sets this monetary policy remit. As key users of ONS economic data, ONS consults the Bank of England and Treasury when setting its work priorities.

In response to the adoption of an inflation target, ONS is implementing an extensive RPI development programme, investigating all the main potential sources of bias, and has also reconsidered the design of the RPI in the light of its evolving uses.

Acknowledgement

I am very grateful to a range of ONS staff for their help with this paper, including Len Cook, John Kidgell, Dave Fenwick, Prabhat Vaze and Geoff Tily.

Notes and References

1. Medium-term ‘monitoring ranges’ for monetary variables such as M0 and M4 remained in place until 1997.
This is being revised to take account of the Framework Document for National Statistics.
12. Memorandum of Understanding between the Treasury, the Bank of England and the Financial Services Authority. (www.bankofengland.co.uk/financialstability/mou.htm)
15. Final Expenditure Prices Index web page: www.statistics.gov.uk/fepi
16. The terms governing index-linked gilts are not all the same – prospectuses for new issues of index-linked gilts were changed from March 1982 onwards to allow for the possibility of switching to a substitute price index which, as long as it did not result in material detriment, would avoid the early redemption clauses being triggered.
17. The UK Debt Management Office, which has responsibility for gilts issuance, has recently launched a consultation on the redesign of the next tranche of gilts, including a review of the wording of the early redemption clause.