

# Measures of M4 and M4 lending excluding intermediate other financial corporations

By Norbert Janssen

Tel: 020 7601 4341

Email: [norbert.janssen@bankofengland.co.uk](mailto:norbert.janssen@bankofengland.co.uk)

*In September 2007, the Bank proposed to modify the measurement of broad money in the United Kingdom. Excluding the deposits of 'other financial corporations' (OFCs) that specialise in intermediation between banks would provide an economically more relevant measure of broad money than that based on the traditional M4 definition. This article explains how quarterly measures of M4 (and M4 lending) excluding 'intermediate' OFCs are compiled. It also sets out the Bank's plans for future monthly publication of these statistics.*

## Introduction

In September 2007 the Bank of England undertook a user consultation setting out proposals to modify the measurement of broad money in the United Kingdom<sup>1</sup>. The aim was to ensure that the Bank's measure of broad money remained relevant in a global financial system that was evolving rapidly. The main proposal was to exclude the money holdings of some types of 'other financial corporations' (OFCs) from broad money (M4); that was likely to provide a measure of money more closely related to nominal spending<sup>2</sup>. This article provides an update on developments since that user consultation, including details about the compilation of a measure of broad money and credit that excludes the deposits from and loans to such OFCs. It ends with a brief discussion of the Bank's work to increase the frequency of publication of these data.

## Background

The concept of money refers to any good or asset that meets three requirements: it serves as a unit of account; it is a store of value; and it is accepted as a means of payment for goods and services. In a sophisticated financial system such as the United Kingdom, an economically relevant measure of money needs to be defined broadly, covering notes and coins circulating in the economy, as well as deposits held with banks and building societies. Because a large part of banks' and building societies' liabilities are used as a means of payment, they are considered to be *money-creating* or monetary financial institutions (MFIs). And as one MFI's liability to another MFI cancels out across the sector, inter-MFI deposits are not part of UK broad money. The *money-holding* sector covers all UK-resident private non-MFI entities: ie the household

sector; private non-financial corporations; and other (non-MFI) financial corporations (ie OFCs).

The OFC sector covers a wide range of companies undertaking different activities. For example, the deposits of insurance companies, pension funds and securities dealers are likely to affect asset prices and nominal spending, reflecting these companies' direct interactions with the household and corporate sectors in the economy.

Other types of OFCs focus on intermediation between banks and building societies, effectively creating transactions that are similar to inter-MFI business. Central clearing counterparties – facilitating the settlement of securities transactions – and securitisation special purpose vehicles and covered bond entities (used by MFIs as a source of funding and to transfer assets and/or risk from their balance sheets) are the most widespread examples of such 'intermediate' OFCs.

The consultation article proposed to *exclude* intermediate OFCs from the money-holding sector, which would allow the creation of more meaningful measures of broad money and credit. In the absence of separate data on MFIs' business with intermediate OFCs, these measures could only be constructed by approximation. The next section explains how the calculation of these measures has developed since 2007.

## History of measures of money and credit excluding intermediate OFCs

Since publication of the consultation paper, estimates of broad money and credit excluding intermediate OFCs have been published in various editions of the *Inflation Report* (for compilation details see Table 1 overleaf). In recent months, the Bank has undertaken a project to improve the quality of the data used to estimate MFIs' business with intermediate OFCs. Although that project is still ongoing, quarterly data on M4 and M4 lending

<sup>1</sup> Burgess, S and Janssen, N (2007), 'Proposals to modify the measurement of broad money in the United Kingdom: a user consultation', *Bank of England Quarterly Bulletin*, Vol. 47, No. 3, pages 402-14.

<sup>2</sup> See also the box about 'Money, credit and deleveraging' on page 16 of the August 2008 *Inflation Report* and the box on 'Broad money' on page 13 of the May 2009 *Inflation Report*.

excluding intermediate OFCs were included for the first time in the statistical release *Analysis of bank and*

*building society deposits from and lending to UK residents* of 8 May 2009.

**Table 1: History of publication of quarterly money and credit excluding intermediate OFCs**

<b>Money excluding intermediate OFCs</b>		
<b>Published in</b>	<b>Compilation method</b>	<b>Components available from</b>
2007 Q3 <i>Quarterly Bulletin</i> and May 2008 <i>Inflation Report</i>	Aggregate M4 minus sterling deposits of: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies; and</li> <li>• other activities auxiliary to financial intermediation.</li> </ul>	1997 Q4 for all four industrial categories
August 2008, November 2008 and February 2009 <i>Inflation Report</i>	Aggregate M4 minus sterling deposits of: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies;</li> <li>• other activities auxiliary to financial intermediation; and</li> <li>• other financial intermediaries, to the extent that these deposits are held with MFIs in the same group of financial companies (ie ‘intra-group’ deposits).</li> </ul>	1997 Q4 for all four industrial categories. 2007 Q3 for ‘intra-group’ deposits, using approximate quantitative information from a small sample of banks (accounting for nearly 40% of banks’ business with other financial intermediaries).
2009 Q1 <i>Analysis of bank and building society deposits from and lending to UK residents</i> and May 2009 <i>Inflation Report</i>	Aggregate M4 minus sterling deposits of: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies;</li> <li>• other activities auxiliary to financial intermediation; and</li> <li>• other financial intermediaries, to the extent that these deposits are held with MFIs in the same group of financial companies (ie ‘intra-group’ deposits).</li> </ul>	1997 Q4 for all four industrial categories. 2005 Q1 for ‘intra-group’ deposits, using approximate quantitative information from a larger sample of banks (accounting for over 80% of banks’ business with other financial intermediaries).

<b>Credit excluding intermediate OFCs</b>		
<b>Published in</b>	<b>Compilation method</b>	<b>Components available from</b>
2007 Q3 <i>Quarterly Bulletin</i> and May 2008 <i>Inflation Report</i>	Aggregate M4 lending (excluding the effects of securitisations and loan transfers) minus sterling loans and advances to: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies; and</li> <li>• other activities auxiliary to financial intermediation.</li> </ul>	1997 Q4 for all four industrial categories
August 2008, November 2008 and February 2009 <i>Inflation Report</i>	Aggregate M4 lending (excluding the effects of securitisations and loan transfers) minus sterling loans and advances to: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies;</li> <li>• other activities auxiliary to financial intermediation;</li> <li>• other financial intermediaries, to the extent that these loans and advances are provided by MFIs in the same group of financial companies (ie ‘intra-group’ loans); and minus</li> <li>• MFIs’ holdings of (sterling-denominated) securities issued by their related securitisation vehicles.</li> </ul>	1997 Q4 for all four industrial categories. 2007 Q3 for ‘intra-group’ loans and holdings of securities, using approximate quantitative information from a small sample of banks (accounting for nearly 40% of banks’ business with other financial intermediaries).
2009 Q1 <i>Analysis of bank and building society deposits from and lending to UK residents</i> and May 2009 <i>Inflation Report</i>	Aggregate M4 lending (excluding the effects of securitisations and loans transfers) minus sterling loans and advances to: <ul style="list-style-type: none"> <li>• non-bank credit grantors;</li> <li>• mortgage and housing credit corporations;</li> <li>• bank holding companies;</li> <li>• other activities auxiliary to financial intermediation;</li> <li>• other financial intermediaries, to the extent that these loans and advances are provided by MFIs in the same group of financial companies (ie ‘intra-group’ loans); and minus</li> <li>• MFIs’ holdings of (sterling-denominated) securities issued by their related securitisation vehicles.</li> </ul>	1997 Q4 for all four industrial categories. 2005 Q1 for ‘intra-group’ loans and holdings of securities, using approximate quantitative information from a larger sample of banks (accounting for over 80% of banks’ business with other financial intermediaries).

The starting point for the calculation of statistics on M4 and M4 lending<sup>3</sup> excluding intermediate OFCs is an *industrial breakdown* of deposits and lending data provided to the Bank each quarter by banks and building societies operating in the United Kingdom. For the compilation of these measures of underlying money and credit, intermediate OFCs were initially defined as consisting of four industrial categories: ‘non-bank credit grantors’; ‘mortgage and housing credit corporations’; ‘bank holding companies’; and ‘other activities auxiliary to financial intermediation’ (see Table 1 on the previous page). Securitisation vehicles and covered bond entities are part of the first two financial categories, whereas central clearing counterparties are included in the last industrial sector. Bank holding companies are also classified as intermediate OFCs because they do not undertake much business outside their financial group.

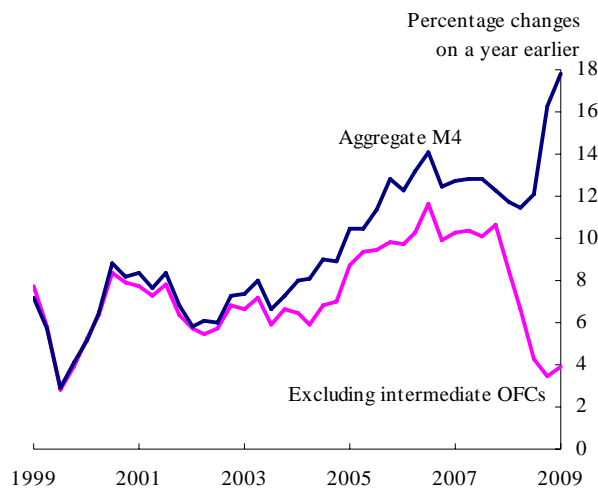
In addition, since the August 2008 *Inflation Report* the Bank has used *approximate quantitative information* from a sample of banks (covering nearly 40% of banks’ business with the industrial category ‘other financial intermediaries’) to make further adjustments to both M4 and M4 lending excluding intermediate OFCs. In particular, sterling deposits from and sterling loans and advances to other financial intermediaries have been excluded from broad money and credit respectively, to the extent that they reflect MFIs’ business with companies in the same financial group. Moreover, banks’ and building societies’ holdings of securities issued by their related securitisation vehicles have been excluded from M4 lending. Until recently, this approximate quantitative information on ‘intra-group’ activity and on securities’ holdings was available from the third quarter of 2007 onwards, when the closure of securitisation markets led to banks retaining a large proportion of securities issued by their related securitisation vehicles.

As a result of the recent Bank project to improve the quality of the data on business with intermediate OFCs, both types of approximate quantitative information have now been collected back to 2005 Q1 and from a larger sample of banks (accounting for around 80% of banks’ business with other financial intermediaries) than previously.<sup>4</sup>

The quarterly time series of M4 and M4 lending excluding intermediate OFCs are now available (in seasonally adjusted form only)<sup>5</sup> via the Bank’s Statistical Interactive Database, and start in 1997 Q4. A shorter

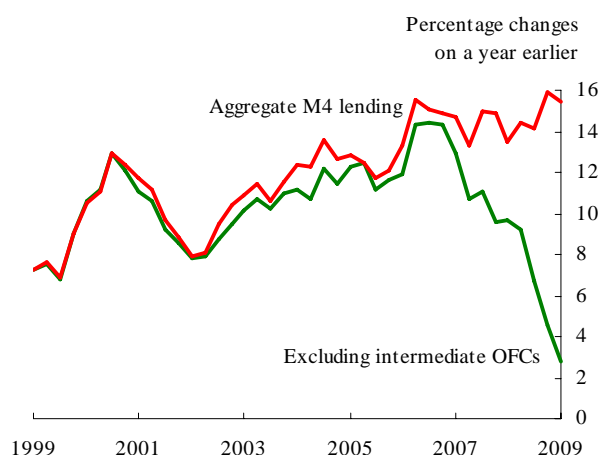
quarterly time series of these data will be included in this publication from 2 June 2009 onwards in Table A2.2.3. Statistics covering the four industrial categories were already available back to 1997 Q4. Further detail on the approximate quantitative information used to compile the measures excluding intermediate OFCs cannot be made available, to protect the confidentiality of individual reporting banks.

**Chart A: Aggregate M4**



Charts A and B compare annual growth in the traditional headline measures of broad money and credit with the equivalent series excluding intermediate OFCs (all using quarterly data). Charts C and D show the impact of intermediate OFCs on money and credit data for the whole OFC sector.

**Chart B: Aggregate M4 lending<sup>(a)</sup>**



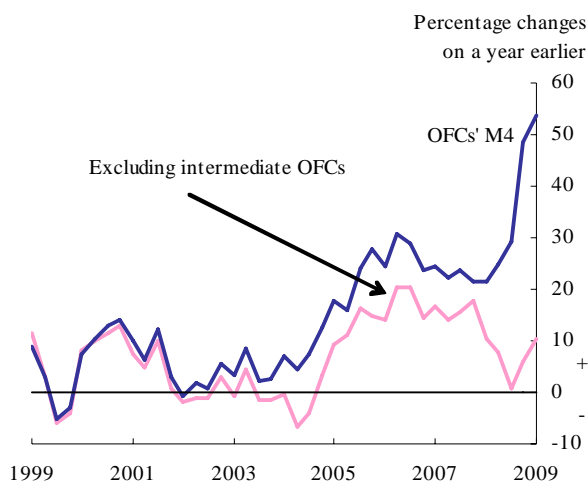
(a) Excluding the effects of securitisations and loan transfers.

<sup>3</sup> The credit calculation uses aggregate M4 lending excluding the effects of securitisations and loan transfers (M4Lx), as that is a better reflection of the UK private sector’s debt than aggregate M4 lending. For further details about the differences between M4Lx and M4 lending see <http://www.bankofengland.co.uk/statistics/ms/articles/artnov04.pdf>.

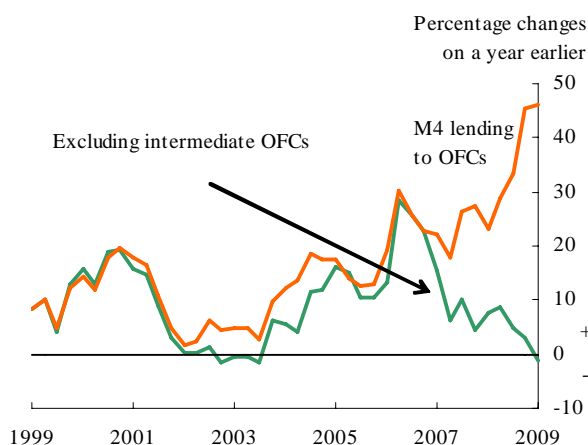
<sup>4</sup> For statistical purposes, from April 2009 data onwards, covered bond entities are treated as an integral part of the MFI to which they belong rather than as intermediate OFCs. As a result, MFIs’ deposit and lending business with their own covered bond entities is excluded from the headline figures for aggregate M4 and M4 lending respectively from April 2009 onwards (see <http://www.bankofengland.co.uk/statistics/m4/2009/apr/provm4.pdf>).

<sup>5</sup> Deposits from and loans and advances to the four industrial categories have been found not to be significantly seasonal.

**Chart C: OFCs' M4**



**Chart D: M4 lending to OFCs<sup>(a)</sup>**



(a) Excluding the effects of securitisations and loan transfers.

## Plans for future publication

Over the past year or so, Bank staff have also used approximate quantitative information from a sample of banks (accounting for around half of banks' business with OFCs) to compile monthly proxies for M4 and M4 lending excluding intermediate OFCs. Although these monthly proxies are volatile (reflecting the approximate nature of the estimates), they have been used to provide the Monetary Policy Committee with a steer as to the broad direction of movements in the underlying quarterly measures of money and credit.

The monthly proxies do not meet the quality standards required of other Bank of England statistics, as banks currently separate their deposits and loans by industry once a quarter only. A large, but volatile, part of banks' repo and reverse repo activity with OFCs reflects business with central clearing counterparties (the remainder is mainly accounted for by business with securities dealers). The Bank therefore asks those banks with significant movements in repo/reverse repo business with OFCs to provide monthly quantitative estimates of

the extent to which these movements reflect central clearing counterparties. Those estimates are then treated as a proxy for deposits from and loans to central clearing counterparties respectively. That information is supplemented with approximate quantitative estimates of all intragroup business – ie not confined to business with related 'other financial intermediaries' – for a sample of banks<sup>6</sup>, as well as estimates of MFIs' holdings of securities issued by securitisation vehicles in their financial group. Despite their lower quality, the monthly proxy measures for M4 and M4 lending excluding intermediate OFCs will be made available to users on request.

In order to improve the quality of the monthly measures of underlying money and credit, the Bank will collect an industrial breakdown of deposits and lending data at a monthly frequency from July onwards. A monthly version of M4 and M4 lending excluding intermediate OFCs – covering data for the month of July – will then be published for the first time on 1 September 2009, in an additional table in the *Sectoral breakdown of aggregate M4 and M4 lending*. Because the Bank does not have a reliable monthly time series of these data, that release will only contain data on amounts outstanding, one-month changes and a one-month growth rate in M4 and M4 lending excluding intermediate OFCs for July. Three-month annualised growth rates will be released for the first time on 30 November. Once July 2010 data are available (to be published in early September next year), an updated annual growth rate will be added to the release each month.

<sup>6</sup> On average, the sample accounts for around 75% of banks' business with the OFC sector as a whole.