

Article

# Economic Statistics Transformation Programme: enhanced financial accounts (UK flow of funds) – enhancing the understanding of UK household finance

An update on the use of flow of funds statistics in improving the analysis of household finance.

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# 1 . Introduction

The financial crisis has reaffirmed an old lesson – good data and good analysis are the lifeblood of effective surveillance and policy responses at both national and international levels ([The Financial Crisis and Information Gaps \(2009\) \(PDF 606KB\)](#)). An understanding of the economic performance of the UK is especially important for effective policymaking and improving welfare. The non-financial accounts have long been extensively monitored as a health check for the economy, but they do not fully capture the build-up of financial risk. For instance, changes to the underlying resilience of the UK's source of funding can impact the economy in a way that is not obvious from studying fluctuations in income or output.

Since the recent financial crisis, the importance of improving and studying the financial accounts has been discussed in a growing literature. We have partnered with the Bank of England to address this, by enhancing the coverage, quality and granularity of financial accounts statistics for the UK. The centrepiece of this initiative is to develop from-whom-to-whom, or flow of funds (FoF), statistics on the balance sheet positions and inter-sectoral financial flows for a larger number of sectors and instruments.

This is the first in a series of articles reviewing tools in the national accounts that help us understand the financing of the UK economy and the risks within it. Throughout the series, which will focus on one institutional sector at a time, we will highlight the relevance of FoF statistics and discuss how ongoing development in the FoF initiative adds value to the existing range of national accounts tools, most notably the income and capital accounts and the financial accounts.

We will first consider the UK household sector, which makes up approximately 60% of the spending in the economy by value. Existing literature on household finance using national accounts is typically constrained to analyses of high-level economic indicators such as the saving ratio, net borrowing/net lending position and/or aggregate financial accounts information. These do not readily shed light on key dimensions of household borrowing and investing activities, such as the source and quality of credit, the portfolio of investment, and so on, which can be important in determining both current and future consumption. For example, [Greenspan and Kennedy \(2007\) \(PDF 401KB\)](#) argues that funds from cash-out refinancing can have a large effect on consumer spending. [Barba and Pivetti \(2009\) \(PDF 229KB\)](#) point out that negative income shocks can lead to unsustainable debt for indebted households and may lead to financial instability in the economy. At the same time, how households interact with financial instruments to service debt and to reduce their risk exposure is important to study ([Brown and others \(2006\) \(PDF 716KB\)](#)), perhaps particularly so at the turning points of the business cycle and at times of uncertainty, as it can give an indication of the resilience of household spending. We will demonstrate the use of FoF statistics in understanding these issues.

## 2 . Household finance in the non-financial accounts

A range of information and data on household finance can be found in the UK Economic Accounts (UKEA). Within UKEA, there are two types of accounts: non-financial and financial. In this and the next section, we discuss what each type of accounts can tell us about household finance <sup>1</sup>.

The current accounts within non-financial accounts record resource available to a sector in the current period – that is, income generated – and its uses. Income that is not used for current consumption can be saved for future uses. For households, this is captured in the income accounts by the households' saving ratio, calculated as the proportion of household disposable income (with any adjustment for change in pension entitlements) not spent on consumption expenditure. It is popularly used as an indicator of households' resilience to changes in economic conditions. For example, a higher saving ratio implies that households can better absorb future negative income shocks without the need to take up debt or give up consumption.

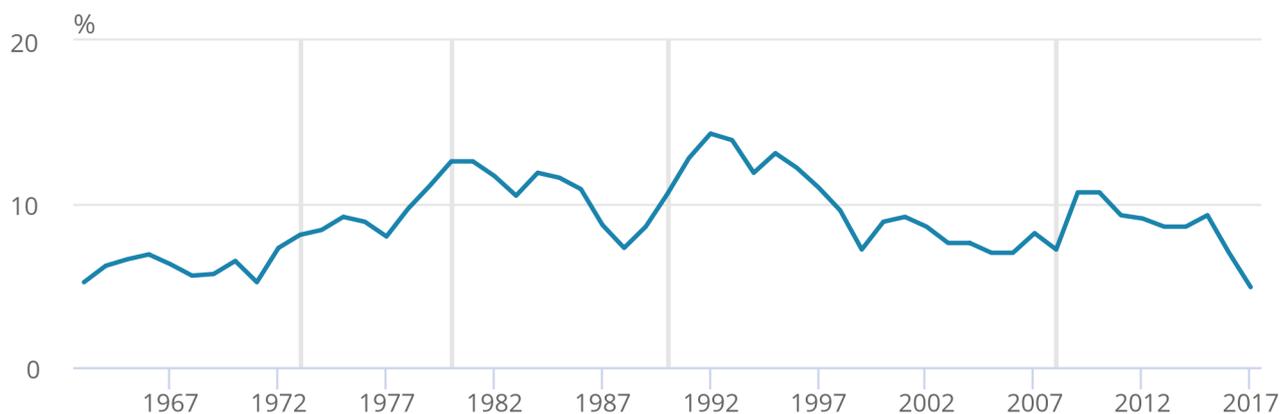
Figure 1 shows the UK households' savings ratio on an annual basis. We see that it tends to decrease during economic booms and increase during downturns. If we take the past 20 years as an example, during the so-called "golden decade" of low inflation and strong economic growth in the run-up to the 2008 financial crisis, households were increasingly optimistic and spending more of their income and saving less. After the onset of the financial crisis, uncertainties kicked in and households immediately responded by spending less and saving more. This acted as a stabiliser in response to poor future income outlook and indeed, during the recovery period savings eased and consumption held up better than most expected at the time.

Interestingly, the saving ratio has recently dropped to a record annual low of 4.9% in 2017. The recent downward trend in household savings has not coincided with a major UK economic uplift as it historically did. It is instead due to households saving less to keep up consumption amidst declining real wages, largely caused by the high inflation as a result of the depreciation of sterling following the EU referendum. This has put household finance under the spotlight, with questions raised concerning if and how household consumption can be sustained going forward, and whether the sector is financially resilient, in the current economically uncertain climate.

**Figure 1: Households' saving ratio**

UK, 1963 to 2017

(A) Figure 1: Households' saving ratio (B) (C) (D)  
UK, 1963 to 2017



Source: Office for National Statistics

Notes:

1. The vertical lines refer to the four most recent economic downturns beginning: (A) = Q3 1973 (double dip); (B) = Q1 1980; (C) = Q3 1990; (D) = Q2 2008.

Apart from the saving ratio, another useful indicator from the non-financial accounts to gauge a sector's financial condition is the net borrowing/net lending position from the capital accounts. Intuitively, if a sector acquires more non-financial assets (less disposals) than its available savings and net capital transfers received in the current period, it would need extra resource from other sectors to fund its activities and hence be a net borrower. Alternatively, if its available savings more than cover its capital formation activities, it could lend the unused resource to other sectors and be a net lender. A net borrower would have to run down its net financial wealth (in other words, assets less liabilities) while a net lender would add to it.

Recent data in Figure 2 show that in the most recent five quarters, coinciding with historically low households' saving ratio is the fact that the household sector has switched from being a net lender traditionally to a net borrower. This adds weight to the assessment that household finance is, on surface at least, in a worse position than a couple of years before, now with less headroom left in income to sustain consumption and needing to run down its financial net wealth. This also means other sectors of the economy that typically rely on the net lending from households may suffer from the drying up of such funds.

**Figure 2: Households' net lending (+) and net borrowing (-) from the non-financial accounts**

UK, Quarter 1 (Jan to Mar) 1987 to Quarter 4 (Oct to Dec) 2017

Figure 2: Households' net lending (+) and net borrowing (-) from the non-financial accounts

UK, Quarter 1 (Jan to Mar) 1987 to Quarter 4 (Oct to Dec) 2017



Source: Office for National Statistics

While the households' saving ratio and net lending/net borrowing position feature heavily in mainstream macroeconomic analysis of the UK economy, they have some clear drawbacks that limit their usefulness to understanding financial stability and resilience.

Firstly, these concepts, and the income and capital accounts in general, are based on availability of resource in the current period. In other words, they are concepts of resource flows. They do not readily summarise the current stock of assets and liabilities, which is very important for thinking about where vulnerability lies in the system and if risks are building up. For example, a large net lending position may look like good news for the resilience of the sector, but that may not be so if it is adding high-risk assets to an existing stock of already risky assets.

Secondly, movements in the net lending/borrowing position do not distinguish between movements in assets and liabilities separately. For example, the households' net borrowing behaviour in recent quarters may reflect a run-down of its financial assets from a large pool, or it may reflect a take-up of more loans and liabilities. Clearly, the implications on financial stability are different between the two sets of behaviours, yet they are indistinguishable just by studying the net borrowing/lending position.

## Notes for Household finance in the non-financial accounts

1. Statistics within this paper are based on [Blue Book 2017](#) estimates. UKEA consistent with Blue Book 2018 will be published on 29 June 2018. An indicative impact of changes to the UKEA can be found [in a national accounts article published on 1 June 2018](#).

## 3 . Household finance in the financial accounts

The UK financial accounts contain balance sheet information that shows the value of the stocks of financial assets and liabilities held by the sectors in the economy. It can provide indications of where risks to stability lie. For example, a sector that relies heavily on one type of financial instrument for funding may be vulnerable to shocks to that market. Also, in the case of the household sector, the composition of the stock of financial assets can be important for thinking about the sustainability of consumption beyond retirement.

In theory, the net lending/net borrowing position in the non-financial accounts should equate the accumulation of net wealth in the financial accounts, after taking into consideration revaluation effects and other changes in volume (such as write-offs of debt). However, due to differences in data sources, they typically do not match up. Nonetheless, they do follow the same long-term trend<sup>2</sup>.

Using the UK financial accounts data, Figure 3 shows that households are increasingly holding more liabilities and financial assets by value (in current prices) than they have done in the past. In Quarter 4 (Oct to Dec) 2016, households held £1.7 trillion (or 90% of gross domestic product (GDP)) worth of liabilities and £6.3 trillion (325% of GDP) in assets. Possible reasons behind this include:

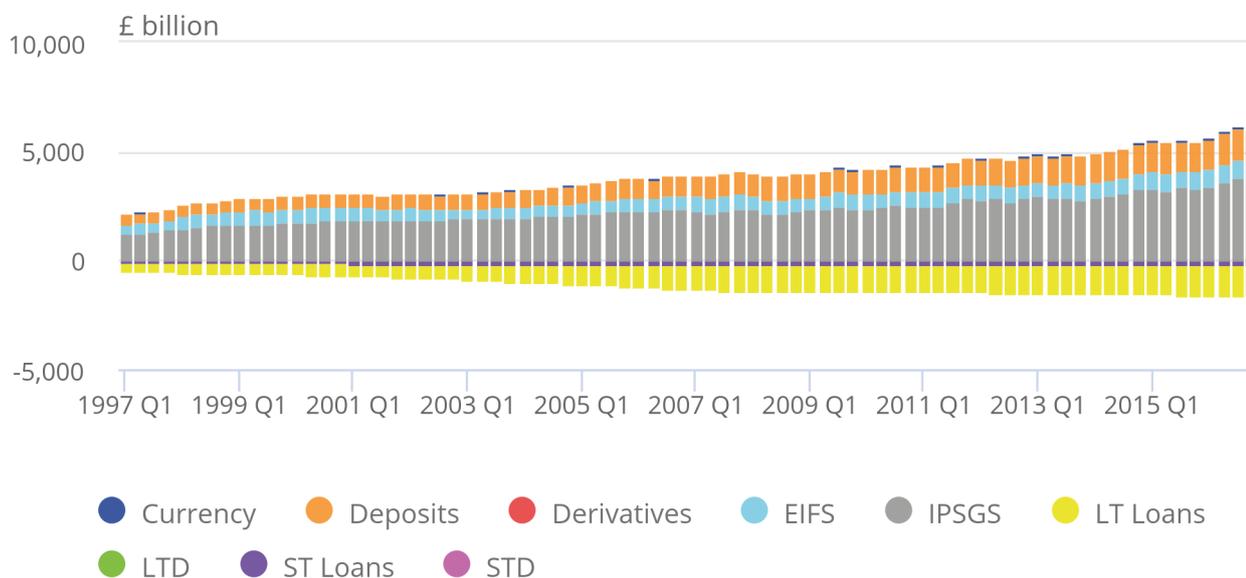
- an increasing number of people wanting private pension plans
- recent credit expansion
- increasing house prices leading to larger loans on dwellings
- financial innovation leading to more financing and investment options for households ([Kent 2017](#)).

### Figure 3: Households' net assets (+) and liabilities (-) by instrument

UK, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2016

## Figure 3: Households' net assets (+) and liabilities (-) by instrument

UK, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2016



Source: Office for National Statistics, experimental flow of funds statistics

#### Notes:

1. EIFS = Equity, Investment Funds and Shares, IPSGS = Insurance, Pensions and Standardised Guarantee Schemes, LT Loans = Long-term loans (maturity over one year), ST Loans = Short-term loans (maturity equal to or under one year), LTD = Long-term debt securities (original maturity over one year), STD = Short-term debt securities (original maturity of one year or less).

The UK households' financial assets portfolio<sup>3</sup> is largely made up of insurance and pension schemes, followed by deposits and equity and investment fund shares (EIFS). According to the Organisation for Economic Co-operation and Development (OECD 2017), the high proportion of households' assets held in insurance and pension schemes is a unique feature of the UK. The US households, for example, have a much larger share of their financial assets in equity and investment shares, while those in European countries tend to hold a higher proportion of financial assets in currency and deposits. This could mean that compared with other countries, in the long-term UK households' consumption is more resilient to the population's aging and fluctuations in asset prices.

Turning to households' liabilities, we can see that before the 2008 financial crisis there was a large expansion in long-term loan liabilities (that is, loans with maturity of one year or more), primarily made up of loans on dwellings. After the financial crisis, for a few years households' liabilities growth was flat as banks became more reluctant to offer loans as funding in capital markets dried up. Since 2012 however, growth in households' liabilities has picked up again, with other short- and long-term loans increasing every quarter since Quarter 4 (Oct to Dec) 2013. This can be attributed to the expansion in dealership car finance, personal loans and credit card debt in the face of slow real wage growth.

Lending conditions in the mortgage market have also become easier, leading to the increase in loans secured on dwellings. As of Quarter 4 2016, according to OECD households' debt data, the UK has the second-highest debt to disposable income ratio (137%) amongst the G7 countries<sup>3</sup>. The Financial Policy Committee at the Bank of England stated that: "Within a benign overall domestic credit environment, there is a pocket of risk in the rapid growth of consumer credit. It is a risk to banks' ability to withstand severe economic downturns, because this asset class is disproportionately more likely to default." ([Financial Policy Committee 2017](#)).

While analyses of the balance sheet can in theory provide insights into financial risk and resilience, existing financial accounts data only capture a high-level breakdown of financial assets and contain limited counterparty information. This restricts the usefulness of the balance sheet approach in understanding risk. For example, while households' financial liabilities have been picking up since 2012, the breakdown currently available in the financial accounts is not particularly helpful: we can only tell they are predominantly long-term loans secured on dwellings. A deeper understanding of the importance of shadow banking<sup>4</sup>, a market less heavily regulated than traditional banking, as an alternative source of funding to households may be very useful to policymakers and researchers. Also, the ability to define the financial instruments more finely, such as by maturity of long-term loans, is key to understanding the potential mismatch between liabilities and assets that can affect financial stability.

## Notes for Household finance in the financial accounts

1. Details of the size of this discrepancy can be found in the [UK Economic Accounts](#).
2. The value of households' non-financial assets, such as dwellings, is excluded from the financial balance sheet but it is worth noting that their estimated value stands at £5.5 trillion in 2016.
3. G7 consists of Canada, France, Germany, Italy, Japan, the UK and the United States.
4. The [Financial Stability Board \(FSB\) \(PDF 936KB\)](#), defines shadow banking as "credit intermediation involving entities and activities (fully or partly) outside of the regular banking system". See [Miller \(2018\)](#) for our development.

## 4 . Household finance in the flow of funds data

Flow of funds (FoF) data capture information on which sectors are providing financing to which other sectors, by providing a breakdown of financing by holder and counterparty sector. The main advantage over a simple financial balance sheet approach is that they provide insight into the sources and destinations of financial funds. This allows analyses of implicit risks. For example, the households' holding of equity and investment fund shares may or may not be risky depending on the counterparty and the exact instrument. Furthermore, FoF data can provide clearer insight into which sectors are likely to be affected by certain economic events: if households are increasingly financed by the rest of world, they are likely to be more vulnerable to overseas shocks.

We have partnered with the Bank of England to produce flow of funds data as part of the Enhanced Financial Accounts initiative. In November 2017, we [published the latest experimental FoF matrices](#) from 1997 to 2016. An intuitive way to understand and visualise the experimental data is through the use of a Sankey diagram, as shown in Figure 4. By hovering over assets and liabilities of the household sector, we can see their breakdown by instruments and counterparty.

### Figure 4: Experimental flow of funds data visualised through a Sankey diagram<sup>1</sup>

We can combine the experimental FoF data with income data to understand households' leverage. Figure 5 illustrates the households' liabilities-to-income ratio calculated using households' gross disposable income over a 12-month period, with breakdown by counterparty sectors. While not directly shown, about 85% of the households' liabilities are long-term loans and the majority are secured on dwellings. Financial accounts data (overall height of the bars) show how the liabilities-to-income ratio peaked at 148% around the 2008 financial crisis after a decade of rising trend, before correcting to lower and probably more normal and sustainable levels afterwards.

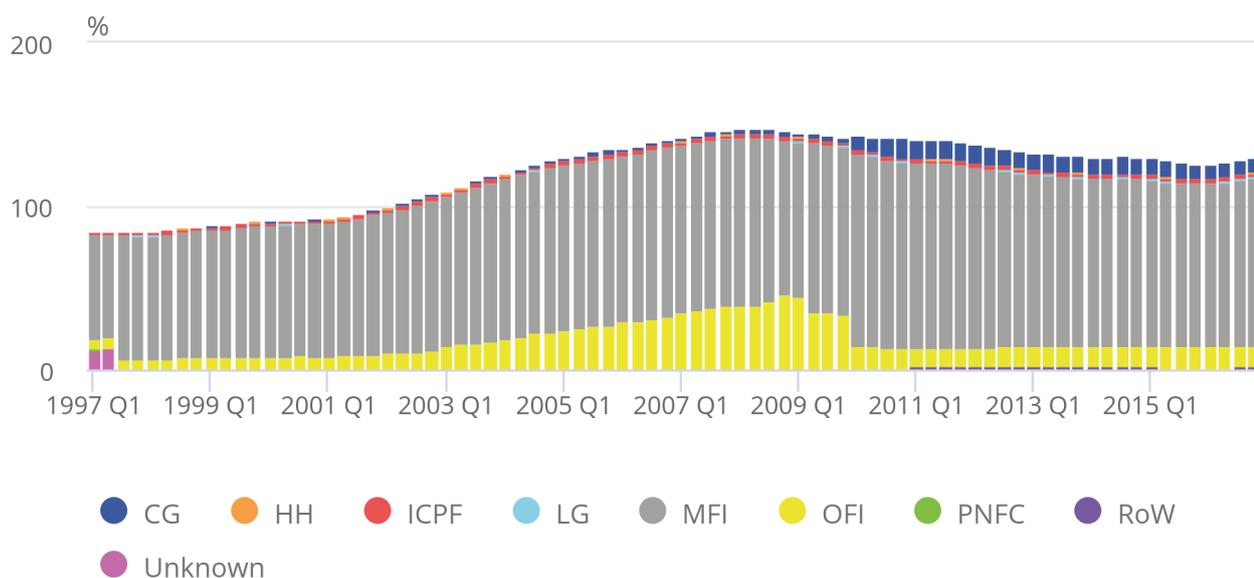
The experimental flow of funds statistics allow us to build on this and understand which counterparty sector(s) is driving the trend. In the run-up to the financial crisis, it is clear that shadow banks, as proxied by the "other financial institutions" (OFI) sector<sup>2</sup>, played a key role in driving up households' leverage. After 2009, the importance of the OFI sector is reduced, in part due to two reclassification step-changes that redefined certain OFI assets as being under the control of central government or traditional banks. Interestingly, the uptick in households' leverage in the most recent periods according to the FoF data looks not to be driven by funding from the OFI sector, which was the case before 2008. This demonstrates the potential of the data: even though households' leverage looks to be on the rise again, the counterparty information suggests that the OFI sector is not the main driver. This kind of insight is unique to FoF data.

**Figure 5: Households' liabilities, % households' gross disposable income by counterparty sector**

UK, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2016

Figure 5: Households' liabilities, % households' gross disposable income by counterparty sector

UK, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2016



Source: Office for National Statistics, experimental flow of funds statistics

Notes:

1. HH = Households, NPISH = Non-profit institutions serving households, RoW = Rest of world, CG = Central government, LG = Local Government, ICPF = Insurance companies and pension funds, MFI = Monetary financial institutions, OFI = Other financial institutions, PNFC = Private non-financial corporations, PC = Public corporations.

## Notes for Household finance in the flow of funds data

1. More details on the meaning of the sectors and financial instruments can be found in the Annex.
2. OFI include non-money market funds (for example, hedge funds, private equity funds), other financial intermediaries (for example, non-bank securities dealers, securitisation special purpose vehicles), financial auxiliaries (for example, central clearing parties, brokers, asset manager) and captive financial institutions and money lenders (including holding companies).

## 5 . Flow of funds use case: pension funds and insurance companies

We have seen in section 3 that pensions and insurance are a significant part of households' assets portfolios. Pension funds play an important role in the economy as they allow pension savings to be channelled into investment in financial and non-financial assets. Life insurance companies also play this role as many of them provide pension services. Growing pension savings lead to deeper capital markets, and therefore may have a positive effect on economic growth by allowing firms that are more dependent on external finance to grow more ( [Bijlsma and others. \(2014\) \(PDF 25MB\)](#)).

Perhaps surprisingly, little is recorded in the national accounts about the activities of pension funds and life insurance companies in terms of the type of pensions that are held against them and how they invest. The flow of funds initiative is looking to address this and in this section we summarise recent development in two relevant strands of work.

### Pensions

In March 2018, we published an [article that presents estimates of the total obligations](#), or gross liabilities, of UK pension providers (these are also the entitlements or assets of the households that are receiving or will receive pensions, which may be in the UK or abroad, so gross pension liabilities and entitlements refer to the same values seen from different viewpoints). The estimates are compiled for national accounts Table 29: Accrued-to-date pension entitlements in social insurance (2015), which is being [published by all European Union \(EU\) countries](#) for the first time. The information provided in Table 29 adds granularity to what is currently available in the core national accounts (funded pensions), as well as unfunded pensions that do not appear in the core accounts.

There are two main types of funded workplace pension schemes in the national accounts: defined benefit (DB) schemes and defined contribution (DC) schemes.

DB schemes are workplace schemes in which the rules specify the rate of benefits to be paid. The benefits promised to members must be paid in retirement irrespective of the performance of any invested funds. This means that the risk falls upon the pension scheme manager or sponsor, normally an employer, who is responsible for accumulating the assets to cover future benefit payments.

DC schemes are those in which the benefits are determined by the contributions paid into the scheme, the investment performance and the type of product chosen at retirement. The risk is borne by the individual beneficiary rather than the pension scheme manager or sponsor.

Table 1 shows the liabilities of UK government and non-government (mainly private sector) pension managers at the end of 2015. Total UK government and workplace pension liabilities equated to £7.6 trillion in 2015, with 97% of the total being held by UK households.

**Table 1: Households' pension entitlements in the supplementary table on pensions, end-2015, £billion**

Recording	Core national accounts			Not in the core accounts			Total pension schemes	Counterpart entitlements		
Pension manager	Non-general content		Central government							
								Resident households		
	DC	DB and hybrid schemes	Total	DC	DB schemes for general government employees			Social security pension schemes		
					Classified in financial corporations	Classified in general government	Classified in general government			
	A	B	C	D	E	F	G	H	I	J
Pension entitlements (including contingent pension entitlements)	240	2,104	2,344	N/A	334	N/A	917	4,027	7,622	7,361

Source: Office for National Statistics

In 2015, non-government pension managers held 90% of their liabilities in DB pensions (including annuities), so households' pension entitlements were predominately DB in value terms. However, for private sector DB pension schemes, active membership (current employees who would normally contribute) has halved in the last 10 years, while active membership of schemes open to new members in 2016 was only 38% of its 2007 level ([Occupational Pension Schemes Survey](#)). For those employers providing DB pensions and for the trustees responsible for running these schemes, the years following the financial crash of 2008 have been particularly challenging, with historically low gilt yields driving up the cost of DB scheme liabilities and contributing to increases in funding deficits ([DWP 2017 \(PDF 2.37 MB\)](#)).

On the other hand, there has been a sharp increase in employee participation in DC pension schemes since 2012, driven by automatic enrolment. According to data from the [Annual Survey of Hours and Earnings](#), around 43% of UK employees paid into a DC pension in 2017, compared with 17% in 2012. Over time, as these employees' contributions build up and are invested to produce returns, the value of households' DC pension entitlements as captured in Table 29 is expected to increase.

The granularity in such FoF data is key to understanding development in the pensions market and how the landscape may change in the future as a result of workplace auto-enrolment. Further work in this area will look at reviewing survey information provided by the different pension schemes to understand how they invest and manage assets.

## Life insurance

In April 2018, we published an [article setting out the first set of experimental statistics](#) on the financial assets and liabilities of the UK insurance sector, based on data from the Solvency II (SII) regulatory framework.

The results for 2017 are shown in Table 2. It shows that life insurance and pensions are a prominent part of the business of the UK's insurance companies, accounting for £1.4 trillion out of a total of £1.9 trillion liabilities (or households' entitlements) in Quarter 4 (Oct to Dec) 2017. While the SII data do not allow pension liabilities of insurance companies to be separately identified from their life insurance liabilities, as part of future work we are aiming to produce such breakdowns for future years to allow users to gain better understanding of the market.

Also shown in Table 2 is the assets portfolio of the whole insurance sector. The two largest components are £525 billion worth of non-money market investment fund shares and £519 billion worth of debt securities, of which £333 billion are issued by non-government. Listed shares (£191 billion, of which £82 billion are issued by UK residents) and loans (£133 billion, of which £117 billion are issued by UK residents) also play significant but smaller roles. While currently there is no separate estimates of the assets portfolio of the life insurance and pensions subsector, given its sheer size in the market one may make an educated guess based on inferring from the sector's overall portfolio.

Again, the from-whom-to-whom nature and granularity of such FoF data is important for understanding how households interact with the insurance sector as they make long-term financial plans.



**Table 2: Assets and liabilities of the UK insurance corporations, UK, Quarter 1 (Jan to Mar) 2017 to Quarter 4 (Oct to Dec) 2017**

## 2017

	Q1	Q2	Q3	Q4
<b>STOCKS (ASSETS)</b>	<b>1811</b>	<b>1804</b>	<b>1804</b>	<b>1853</b>
Currency and Deposits	30	28	27	30
Long-Term Government Securities	194	191	187	186
Issued by UK Government	141	139	136	133
Issued by non-residents	53	51	51	53
Other Debt securities	339	338	332	333
Issued by UK residents	153	152	150	153
Issued by non-residents	185	186	183	181
Loans	123	127	131	133
To UK residents	110	113	117	117
To non-residents	14	14	14	16
Listed Shares	191	189	189	191
Issued by UK residents	85	84	83	82
Issued by non-residents	106	105	106	109
Unlisted shares and Equities	32	32	33	31
Issued by UK residents	22	22	23	20
Issued by non-residents	9	10	10	10
Money Market Investment Fund shares	70	70	74	78
Non-Money Market Investment Fund Shares	473	489	498	525
Technical Reserves <sup>a</sup>	235	222	219	233
Non-life	39	41	47	43
Life & Pension	196	181	171	190
Unit & Index Linked	121	112	113	128
Other	75	69	58	61
Derivatives	49	42	40	45
Non-financial Assets	40	40	41	38
Other Assets	35	35	34	31
<b>STOCKS (LIABILITIES)</b>	<b>1811</b>	<b>1804</b>	<b>1804</b>	<b>1853</b>
Debt securities	24	24	24	24
Loans	82	85	80	82
Shares and Equities	141	150	142	139
Technical Reserves	1454	1477	1456	1510
Non-life	133	140	146	141
Life & Pension	1321	1337	1310	1370
Unit & Index Linked	698	720	712	754

Other	624	617	599	615
Derivatives	40	36	33	36
Other Liabilities	69	33	68	62
<b>SELECTED TRANSACTIONS (Assets) <sup>b</sup></b>				
Currency and Deposits	1	-1	-1	2
Loans	-6	3	4	2
Listed Shares	-12	-1	-2	-2
Investment Fund Shares	11	11	9	17

Source: Office for National Statistics, Bank of England, Prudential Regulation Authority

Notes:

1. Technical reserve assets (also known as reinsurance recoverables).
  2. Net acquisition of financial assets.
  3. Estimates may not add up due to rounding.
1. Q1 is Quarter 1 January to March, Q2 is Quarter 2 April to June, Q3 is Quarter 3 July to September and Q4 is Quarter 4 October to December.

## 6 . Conclusion and future work

In this article we reviewed tools in the national accounts that help us understand household finance, including the income and capital accounts, financial accounts and flow of funds (FoF) statistics. We discussed how the FoF data, with information on the counterparties to financial assets and liabilities, can add value to typical analyses of household finance that are often based on more limited data. We argued that they are unique and valuable to the cause of monitoring financial resilience and the build-up of financial risks in the economy. We also showed that FoF data are key to understanding the market of pension funds, which is where the majority of the UK households' financial assets are held. They help to inform judgement and analyses on the long-term sustainability of households' consumption, in the face of an aging society.

Ongoing work as part of the ambitious enhanced financial accounts initiative will look to produce granular FoF statistics for more subsectors and for a more detailed breakdown of financial instruments. For households, for example, we are [investigating the use of lending data from the credit reference agency, Equifax](#), to produce statistics on the range of lending instruments made available to consumers by different counterparty sectors. When such progress is made, it will provide users with a more complete picture of the interaction between households and the financial sector.

Our preferred approach in achieving better data granularity is to use non-survey record level data such as administrative, regulatory and commercial data sources. Such data allow greater flexibility over surveys in responding to evolving user requirements for granularity. They also reduce burden on business. Where necessary, survey data will continue to be used to fill any gaps. The EFA initiative has identified a range of data sources to achieve its ambition and as progress is made, experimental statistics will be released at the earliest opportunity on an incremental basis before full implementation into the national accounts. This will give users early sight of development and an opportunity to offer feedback. See annex for the list of relevant articles released to date.

We are interested in your feedback on this article as well as future development of FoF. Please send any comments to [flowoffundsdevelopment@ons.gov.uk](mailto:flowoffundsdevelopment@ons.gov.uk).

## 7 . Authors

Rikesh Patel and Keith Lai

## 8 . Annex: Guide to the statistical classifications of institutional sectors and financial instruments

Sector / subsector	Meaning
Monetary financial institutions (MFI)	This is a subsector of financial corporations. It includes three further subsectors: <ul style="list-style-type: none"> <li>• central bank (the Bank of England)</li> <li>• deposit-taking corporations (that is retail banks and building societies)</li> <li>• money market funds (for example, unit trusts)</li> </ul>
Other financial institutions (OFI)	This is a subsector of financial corporations. It includes four further subsectors: <ul style="list-style-type: none"> <li>• non-money market funds (for example, hedge funds, private equity funds etc)</li> <li>• other financial intermediaries (for example, non-bank securities dealers, securitisation special purpose vehicles and so on)</li> <li>• financial auxiliaries (for example, central clearing parties, brokers, asset manager and so on)</li> <li>• captive financial institutions and money lenders (for example, holding companies)</li> </ul>
Insurance companies and pension funds (ICPF)	This is a subsector of financial corporations. It includes insurance companies that provide non-life, life, pensions and annuity products; and pension funds that invest the assets of pension schemes.
Private non-financial corporations (PNFC)	This is a sub-sector of non-financial corporations. It includes corporations in which the principal activity is the production of goods and non-financial services for the market.
Households (HH)	This includes mostly individuals who are consumers. It also includes the self-employed.
Central government (CG)	This is a sub-sector of general government. It includes all administrative departments of the state and other central agencies whose competence extends normally over the whole economic territory. It also includes the devolved administrations for Scotland, Northern Ireland and Wales. It is the issuer of gilts.
Rest of world (RoW)	This includes all institutions or individuals that are not resident in the UK but have economic interactions with UK-resident units. These can be overseas corporations, charities, governments or private individuals, or international organisations, irrespective of their geographical location.

<b>Instrument</b>	<b>Meaning</b>
Equity and Investment Fund Shares (EIFS)	This includes listed and unlisted shares, other UK equity and mutual funds units or shares.
Debt securities	This includes short-term (with maturity less than or equal to one year) and long-term (with maturity more than one year) negotiable financial instruments serving as evidence of debt, such as gilts and bonds.
Derivatives	A financial security with a value that is reliant upon or derived from an underlying asset or group of assets.
Insurance, Pension and Standardised Guarantee Schemes (IPSGS)	This includes: non-life insurance technical reserves, life insurance and annuity entitlements, pension entitlements, claims of pension funds on pension managers and entitlements to non-pension benefits.
Loans	This includes short-term (with maturity less than or equal to one year) and long-term (with maturity more than one year) non-negotiable instruments that are created as creditors lend to debtors.
Deposits	This generally refers to cash held within bank accounts.

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