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Household debt: statistics and impact on economy

By Daniel Harari

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Summary

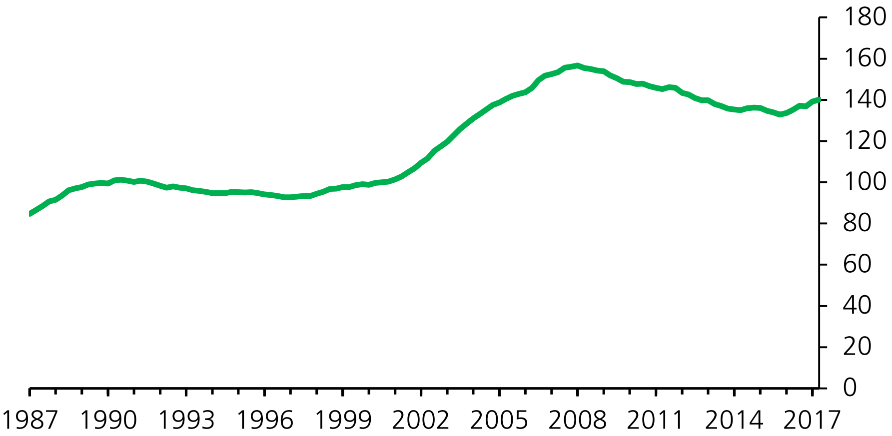
Household debt is money borrowed by individuals, usually from banks or financial institutions. This includes mortgages, personal loans, student loans and credit card balances.

Latest statistics and forecasts

Total household debt in the UK rose sharply from the late 1990s up until the financial crisis began in 2008. Debt as a proportion of household income rose from 93% in 1997 to 157% at its peak in early 2008 (the total amount of household debt went up from £600 billion to £1,600 billion over this time).

During the recession of 2008/09, banks were much more reluctant to lend money and consumers were less interested in taking on credit, with some focusing on paying off existing loans during difficult economic conditions. As a result, the household debt-to-income ratio fell to 133% by late 2015. Starting in early 2016, growth in household debt levels have accelerated, leading to the debt-to-income ratio to increase from 133% in Q4 2015 to 140% in Q2 2017.

Household debt, % of disposable income



Sources: ONS, series NNPP (debt) and rolling 4-quarter total of QWND (income)

In November 2017, the Office for Budget Responsibility (OBR) forecast the household-debt-to-income ratio to rise slowly over the next few years, reaching 150% in early 2023.

The cost of servicing debt is lower now than it was prior to the recession, with interest rates at historic lows. This makes the debt burden more affordable for households.

Official statistics of household debt are not available for constituencies or local areas.

Guide to understanding household debt statistics

The downsides to household debt are well known and include over-indebted households cutting back on their spending on other things, thus reducing economic activity. In addition, there could be problems in the banking system when loan defaults rise. Research from the UK and internationally has shown that large increases in household debt prior to recessions make those recessions worse and inhibits the following recovery.

Household debt, however, does provide benefits to an economy and individuals. It allows people to buy things, like a house, that they would not be able to pay for in one go, raising their standard of living. In other words, it allows people to smooth their consumption over time, including during periods when their incomes temporarily fall. This can provide stability to the economy.

1. Guide to understanding household debt statistics

This section provides an overview of what to look out for in household debt statistics and how to interpret them.

1.1 What is household debt?

This is money borrowed by individuals in the form of loans that are to be repaid later. Individuals are collectively referred to as the household sector in economic data.

Loans are usually provided by banks or other financial institutions. A prominent example is a mortgage. Other forms of household debt include personal loans, car loans, student loans, the balance on credit cards, and overdrafts on bank accounts.

The total sum of all the various types of outstanding loans in the economy – mortgages, unpaid balances on credit cards and so on – is what economists refer to when they use the term household debt.[1] In other words, this is the total of all borrowing accumulated over the years by households that has not yet been paid off.

1.2 Types of household debt

Household debt can broadly be grouped into two categories: secured and unsecured.

Secured debt is a loan secured on an asset which serves as collateral. This means that if the person borrowing the money can't repay it, the creditor will then be able to take possession of the asset. The most obvious example of secured lending is mortgages. In the UK, mortgages account for the vast majority of overall household debt.[2]

Unsecured debt is lending provided to individuals that is not secured on an asset. Credit card lending is the most prominent example. Personal loans, student loans and loans from payday lenders also come under this category.

1.3 Why household debt can be beneficial

Debt can be beneficial to an individual and the economy as a whole. Individuals can borrow money to buy a house and to purchase durable goods such as a car or kitchen appliances, thereby improving their standard of living.

In other words, debt allows people who do not have the upfront money needed to buy a car, house or to enrol on a course, to borrow it today

1 Sometimes debt is also referred to as liabilities.
2 Bank of England, Money and Credit – lending to individuals statistics

knowing that they will have sufficient income to pay off that loan in instalments in the future.[3]

Debt allows individuals to smooth their consumption of goods and services over their lifetime. The "permanent income" or "life-cycle" model states that consumption depends on the expected lifetime income of an individual.[4] For example, younger people will borrow money in the expectation that they will receive higher earnings in the future when they will be able to pay back the borrowed money.

As well as benefiting individuals or families, household debt can provide stability to the whole economy by smoothing out spending during periods of temporary falls in income.[5] Having a high level of debt among households and private businesses is often seen as a sign of financial development, and more advanced economies do generally have higher private debt levels than developing economies.[6]

A spurt of increased lending to individuals will also boost economic growth in the short term, as individuals will have more money to spend on goods and services, potentially leading to increased business revenues, profits and hiring.

1.4 Why household debt can cause problems

High levels of household debt can also, of course, create problems for individuals and the economy more widely. A sudden change in circumstances, such as losing your job, will make it more difficult for an individual to keep up with repayments on their outstanding debts, which they will still be required to make despite the loss of income. In order to continue to make these repayments the individual may cut back on their spending. Other factors such as rising debt repayments due to higher interest rates may also lead to reductions in spending.

Magnified to the whole economy, an economic downturn or recession can cause many individuals to face this problem and lead to reductions in consumer spending. In turn, companies faced with reduced revenues, or perhaps the prospect of going out of business entirely, will then cut back on their costs including labour costs either by lowering pay or reducing their workforce. There is some evidence that rising debt levels before a recession can make it worse by making the business cycle more volatile (see section 3 below for more on this).[7]

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3 Bunn, P. and Rostom, M., "Household debt and spending", Bank of England Quarterly Bulletin Q3 2014

4 For a review of this model which Modigliani and Brumberg are usually credited with formalising in the 1950s, see Browning, M., and Crossley, T. (2001), "The lifecycle model of consumption and saving", Institute for Fiscal Studies WP01/15

5 Röhn, O. et al. (2015), "Economic resilience: A new set of vulnerability indicators for OECD countries", OECD Economics Department Working Papers, No. 1249, OECD Publishing, Paris, page 12

6 IMF, "Dealing with household debt", Chapter 3, World Economic Outlook, April 2012 and Bank for International Settlements, Total Credit to the non-financial sector, March 2016

7 Bunn, P. and Rostom, M., "Household debt and spending", Bank of England Quarterly Bulletin Q3 2014, p308

Another way in which high household debt can negatively impact on the economy is via the financial sector. This can be a result of more relaxed lending standards, as banks compete for new customers, leading to riskier lending and more defaults when the good times end and individuals default on their loans. If enough of the financial sector is exposed to these bad loans – either directly or via having lent money to institutions that do – a banking crisis could ensue, with an associated credit crunch hurting the economy.[8] The US sub-prime mortgage market in in the run-up to the 2008 Great Recession is an obvious example of this scenario.

1.5 Measuring household debt affordability

So far the focus has been on the overall amount of household debt. Another important thing to consider is the monthly cost of paying off this debt – how much it costs to service the debt. This will be determined by the size of the original loan, the interest rate on the loan and the length of time in which the individual has to repay it.

Lower interest rates reduce the cost of repaying loans. So even if the amount of household debt is rising, it is possible that if interest rates fall, people might actually be spending *less* per month paying off their debt.[9] The reverse is also true, household debt might be falling but higher interest rates could mean people are paying more each month in servicing their debt.

As well as the amount to repay, a critical factor in determining the affordability of repayments on a loan is income. The same monthly repayment could account for a large proportion of someone's income, but only a tiny amount for someone on a higher income.

For this reason, economists often use measures of debt servicing costs and the overall level of debt, in terms of their proportion of income. If debts are rising by 5% a year but incomes are also rising by 5% a year, the ratio of debt to income is unchanged.

An additional factor to consider when looking at household debt in the economy is how it is distributed across individuals (although data on this is fairly limited). For instance, if the total amount of mortgage debt in the economy is unchanged, but the number of people with a mortgage has fallen, the average amount of mortgage debt per household has risen. Specific groups of people may have a particularly burdensome amount of debt, say first-time homebuyers, meaning they would be more exposed to higher interest rates or a fall in their incomes.[10]

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8 Röhn, O. et al. (2015), "Economic resilience: A new set of vulnerability indicators for OECD countries", OECD Economics Department Working Papers, No. 1249, OECD Publishing, Paris; and André, C. (2016), "Household debt in OECD countries: Stylised facts and policy issues", *OECD Economics Department Working Papers*, No. 1277, OECD Publishing, Paris

9 This is not automatic and will depend on the magnitude of the fall in interest rates and rise in household debt. If rates fall by a little but the total amount of debt rises a lot, people will be paying more each month to service their debt.

10 Neal Hudson, Savills Residential Research, "Household debt: concentrated risk", via Pieria.co.uk, 1 Feb 2016

2. Statistics and latest trends

2.1 Data availability

The main source of the level of household debt in the UK is from the national accounts published by the Office for National Statistics (ONS).[11] Using household disposable income data also from the ONS, we can calculate a household debt-to-income ratio.[12] These figures are updated every quarter and are available from 1987.

There are also separate monthly household debt data from the Bank of England. This is based on information from financial institutions provides breakdowns of total outstanding debt to individuals.[13] These figures are split into mortgage debt, credit card debt and other consumer debt, but excludes student loans.[14] Data are available from 1993.

All household debt figures are in cash terms. There is no adjustment for inflation.

2.2 Availability of local data

The main sources of data mentioned above are only available for the UK. There are no official figures for constituencies or local authorities.

As an alternative, statistics on individual insolvencies produced by the Insolvency Service are available for constituencies.[15] The Money Advice Service also commissioned some estimates of the number of people that are over-indebted for each local authority and constituency.[16] These estimates are derived from a model that looks for characteristics of people that are more likely to be over-indebted.

StepChange, a charity that helps people with debt problems, publishes some figures at regional and local level (postcode area, e.g. Manchester (M), or East London (E), and postcode district, e.g. M60 __ _) of average unsecured debt based only on people who have contacted them for advice.[17] As these figures are only based on those individuals who have contacted StepChange, they are not necessarily representative of the whole population.

Regional data based on the ONS wealth and assets survey provides figures on the median financial debt (excluding mortgages) of households, with latest figures for the period 2012-2014.[18]

The Council of Mortgage Lenders (CML) provides data by postcode sector, e.g. M60 1_ _.[19] However, this only provides figures on the total

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11 Series code NNPP. Published in the UK economics accounts
12 Series code QWND. Published in the UK economics accounts
13 Bank of England, Money and Credit statistical release
14 Bank of England, Explanatory Notes - Total lending to individuals
15 The Insolvency Service, Insolvency Statistics
16 Money Advice Service, "A Picture of Over-Indebtedness", Mar 2016
17 StepChange, Debt statistics and Debt View local data atlas
18 ONS, Wealth and Assets Survey 2012-2014, Chapter 7: Extended Analyses, Wealth in Great Britain, 2012 to 2014, Debt burden
19 CML, Lending by postcode sector

amount of outstanding mortgage debt for the participating financial institutions which make up about 73% of total UK mortgage lending. Although this provides information on the changing level of debt, the data on their own provide little context on the scale of mortgage debt in each area due to the lack of additional information, such as household incomes, that allows one to gauge affordability. In addition, over a quarter of mortgage lending isn't covered by this data, and how this unaccounted for lending is distributed across local areas is unknown (coverage in some areas may be higher or lower than 73%).

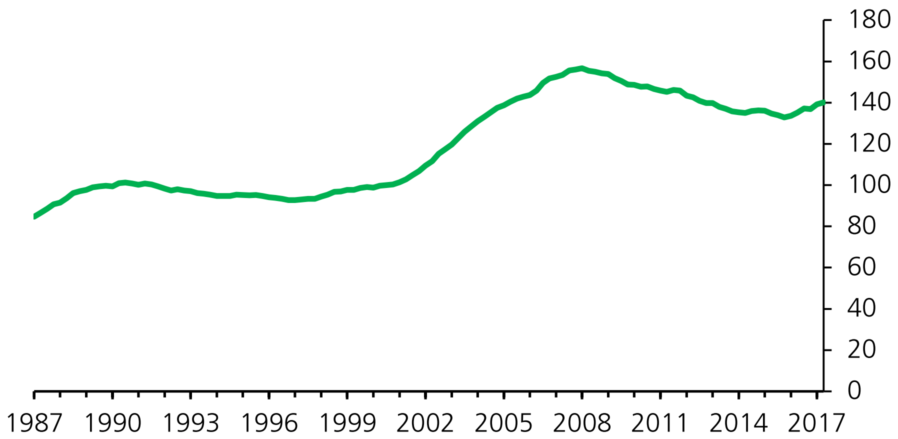
A similar set of data for personal lending (and bank lending to small and medium sized businesses) by postcode sector is available from the BBA.[20] These data include lending from institutions which account for around 60% of unsecured personal loans.

2.3 Historic trends including 2008-2009 recession

UK household debt as a proportion of UK households' disposable income, that is income after tax, rose in the lead up to the early 1990s recession from 1987 (the earliest data available) to mid-1990.[21] That recession was preceded by an overheating economy and housing market.

For most of the rest of the 1990s the household debt-to-income ratio slowly fell below 95%. Beginning in 1997, however, the ratio began to rise, slowly at first, but from around 2001 it increased more quickly (represented by a steeper line in the chart below). There was annual growth of over 10% in household debt between 2001 and 2004, and again for a period in 2006-2007. The level of household debt more than doubled from £720 billion in early 2000 to £1,620 billion in late 2008.

Household debt, % of disposable income



Sources: ONS, series NNPP (debt) and rolling 4-quarter total of QWND (income)

The global financial crisis and severe recession in 2008/09 led to banks being much more reluctant to offer loans. In addition, households were

[20] BBA, Postcode lending
[21] Library calculations based on ONS, total financial liabilities of the household sector (series NNPP) and rolling 4-quarter total of disposable household income (series QWND). Source: UK Economic Accounts, tables 6.1.4 and 6.1.9

less interested in taking on additional debt, instead concentrating on paying off existing commitments – deleveraging, in the jargon.

The result was a decline in the household debt-to-income ratio from 157% at its peak in early 2008 to 133% in late 2015. The absolute level of household debt remained broadly steady at around £1,600 billion from 2008 until 2013, with household disposable income (in cash terms) rising.

2.4 Latest statistics

The absolute level of household debt in the economy began to increase again in 2014, with annual rates of growth of 3-4% recorded up to end of 2015. Household disposable incomes grew at a slightly higher rate during this period, meaning that the all-important debt-to-income ratio continued to ease lower (it was 133% at the end of 2015).

More recently, growth in household debt levels have accelerated from 3.5% in Q1 2016 to an average of over 5% since then. With household disposable income growing by less than that during this time, the debt-to-income ratio rose from 134% in Q1 2016 to 140% in Q2 2017. Total household debt stood at £1.9 trillion in Q2 2017.

UK household debt, 2000-2017

Figures are for end of each year or quarter updated 15 Dec 2017

	Total (£ bn)	annual % change in debt	Total as % of household disposable income	%-point change in debt-to-income ratio
2000	762	8.5%	100.4	1.3
2001	846	11.0%	106.9	6.5
2002	964	13.9%	117.4	10.5
2003	1,089	12.9%	128.5	11.1
2004	1,216	11.7%	137.5	9.0
2005	1,318	8.4%	142.8	5.3
2006	1,467	11.3%	151.7	8.9
2007	1,583	7.9%	156.0	4.3
2008	1,622	2.5%	154.2	-1.8
2009	1,605	-1.1%	148.7	-5.5
2010	1,602	-0.2%	146.6	-2.1
2011	1,622	1.2%	145.9	-0.8
2012	1,631	0.6%	139.9	-6.0
2013	1,641	0.6%	135.8	-4.1
2014	1,695	3.3%	136.3	0.5
2015	1,750	3.2%	132.8	-3.5
2016	1,833	4.8%	136.8	4.0
Q2 2017	1,887	4.6%	140.1	4.8

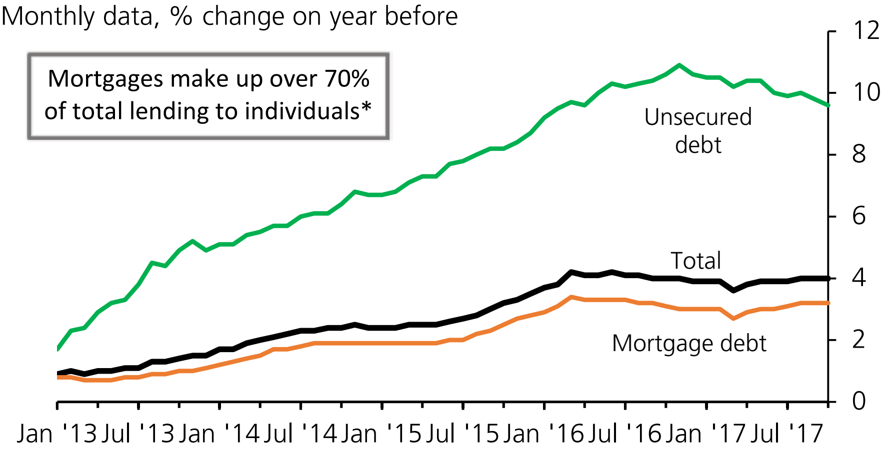
Sources: ONS, national accounts series NNPP, QWND

Note: A rolling four-quarter total for household disposable income is used

%-point change in debt-to-income ratio is compared to period one year before

Turning to separate figures from the Bank of England, their measure of total outstanding debt to individuals rose by an annual rate of 4.0% in October 2017.[22] This was comprised of a 3.2% rise in mortgage debt (the vast majority of total debt) and a 9.6% rise in unsecured debt, down slightly over the course of the year from the decade-high 10.9% growth recorded in November 2016. Growth in total debt is still low compared with pre-recession rates that were regularly showing double-digit growth.

Change in outstanding levels of debt to individuals
Monthly data, % change on year before



Sources: Bank of England, Money and Credit: Oct 2017 *ONS data

Causes of recent non-mortgage debt growth

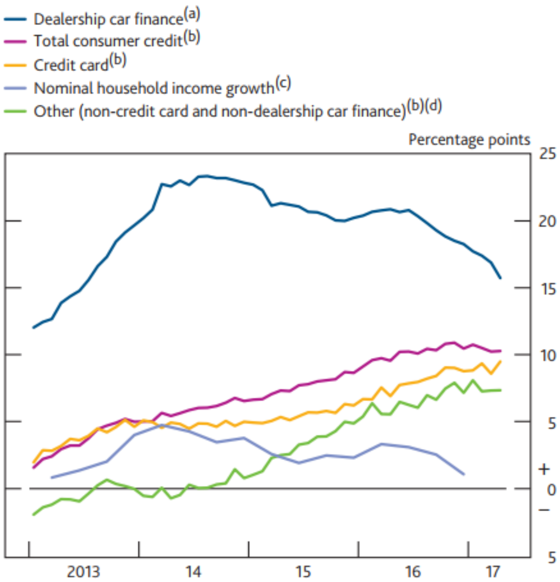
Looking a little bit more closely at the causes of the recent double-digit growth rates of non-mortgage debt, the Bank of England in 2016 noted that growth in car finance – for example, via the increased prevalence of people leasing their cars via PCPs or Personal Contract Purchase plans[23] – has been "particularly strong in the past three years" but that in recent months there has been an increased contribution to credit growth from "other forms of unsecured lending, such as personal loans". [24]

More recently, the exceptional growth in car finance has eased somewhat of late, contributing to the slight slowing in overall non-mortgage debt growth (also known as consumer credit). The chart below, reproduced from the Bank of England's June 2017 *Financial Stability Report* shows the annual rates of change of different types of consumer credit alongside household income growth.[25]

22 Bank of England, Money and Credit statistical release, 4 May 2017
23 See Bank of England staff blog, Bank Underground, "Car finance – is the industry speeding?", 5 August 2016 for some analysis on the topic
24 Bank of England, *Financial Stability Report: November 2016*, 30 November 2016, pp16-17
25 Bank of England, *Financial Stability Report: June 2017*, 27 June 2017, p14

Chart A.19 Consumer credit has been growing much faster than household incomes

Annual growth rates of consumer credit products and household income



Sources: Bank of England, ONS and Bank calculations.

(a) Identified dealership car finance lending by UK monetary financial institutions (MFIs) and other lenders.
(b) Sterling net lending by UK MFIs and other lenders to UK individuals (excluding student loans). Non seasonally adjusted.
(c) Percentage change on a year earlier of quarterly nominal disposable household income. Seasonally adjusted.
(d) Other is estimated as total consumer credit lending minus dealership car finance and credit card lending.

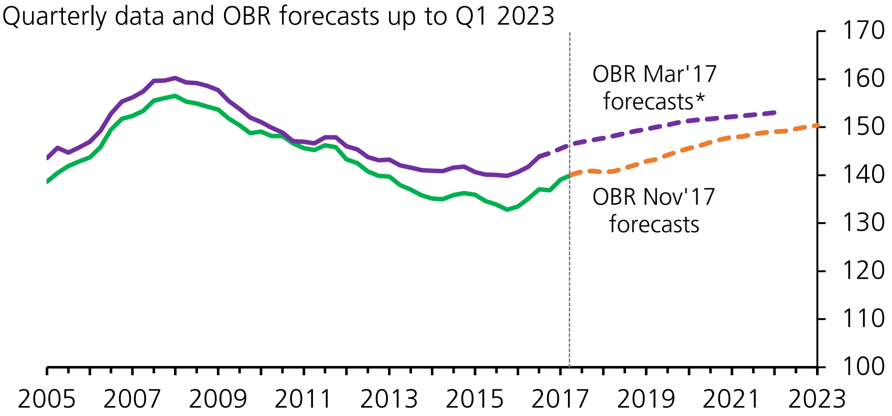
2.5 Forecasts

OBR

The OBR's forecasts made in November 2017 projected the household debt-to-income ratio to gradually increase in coming years, peaking at 150% at the end of its forecast period in early 2023.[26] This is lower than the previous OBR forecast made in March 2017, when it forecast the ratio to peak at 153% in early 2022. This upward revision mainly reflects upward revisions by the ONS to past household income data, which lowered the debt-to-income ratio in recent years (the green line in the chart below).

[26] OBR, Economic and fiscal outlook, November 2017, chart 3.27 and pp74-5

UK household debt as % of income
Quarterly data and OBR forecasts up to Q1 2023



* There have been revisions to historic data since Mar'17 forecasts
Source: OBR, Economic and fiscal outlook Nov'17, chart 3.27

Despite this projected rise in debt, the cost for households of servicing this debt is likely to remain low relative to household income, and much lower than in the pre-recession period. This is because interest rates are much lower now at 0.5% – even after the November 2017 rate rise from the Bank of England – than they were then and are expected to remain at low levels for the foreseeable future.

IMF

In a February 2016 report on the UK economy (prior to the UK's vote to leave the EU), the IMF stated that the relatively high numbers of new mortgages with high loan-to-income ratios and the UK's relatively high household debt-to-income ratio makes households vulnerable to changes in interest rates, incomes and house prices:

> High house prices result in some households taking on high leverage, posing financial stability risks. Despite recent declines, the percentage of new mortgages at high LTI [loan-to-income] ratios remains well above pre-boom (i.e., circa 2000) levels, as does the aggregate household debt-to-income ratio, which has stopped declining and is higher than in most other G7 countries. Such high leverage significantly exposes households and banks to interest-rate, income, and house-price shocks.[27]

In a subsequent June 2016 report, the IMF cited relatively "still-high levels of household debt" as a key vulnerability to the economy.[28]

2.6 Bank of England policy

August 2016 interest rate cut

In August 2016, the Bank of England's Monetary Policy Committee (MPC) downgraded its forecasts for the UK economy in the wake of the vote to leave the EU. As a result, it cut interest rates from 0.5% to 0.25% and introducing other measures to stimulate the economy, including extending its quantitative easing programme (creating money to buy government and company debt).

27 IMF, United Kingdom: 2015 Article IV Consultation, February 2016, p20, para 40
28 IMF, United Kingdom: 2016 Article IV Consultation, 17 June 2016, p31, para 57

The MPC intended for the rate cut to lead to lower borrowing costs and higher levels of spending and investment for households and business.[29]

Financial Policy Committee

The Bank of England's Financial Policy Committee (FPC), in its November 2016 *Financial Stability Report*, listed the level of household debt – which it said "remains high by historical standards" – as one of the risks to financial stability.[30]

The FPC suggested that the "uncertain macroeconomic environment" could lead to more households facing difficulties in servicing their debt should the economy weaken. In a hypothetical scenario where unemployment rises from 5% to 8% and there is a large fall in household income similar to the 2008 recession, the Bank forecasts that the proportion of households with high mortgage repayment costs (40%+ of pre-tax income) would double to 2.3%. That would be similar to levels seen in 2007.[31]

At the press conference following the release of the November 2016 Stability Report, Bank of England Governor Mark Carney commented that although household debt-to-income ratios were lower than before the financial crisis, debt levels were starting to pick up:

> All that said, debt is relatively high still, and households have been running down their savings, and we're starting to see for the first time a releveraging of households. In other words, the level of household debt is going up.[32]

The Governor then noted that increases in debt were due to growth in unsecured debt:

> Now why is that happening? We look at the extent to which it's mortgage debt and it reflects a turnover of the housing stock, and house prices have been going up over time on average, and so that releveraging somewhat is natural. Or to what extent is it consumer credit?
>
> What we're starting to see for the first time is it's the latter, and we're watching that closely and we're looking at the balance between so-called unsecured debt - between auto lending, which really is secured, and what we've been seeing up until now, and the growth in more pure unsecured debt, if you will, credit card type debt, which has started to pick up. So it's just - it's the early phase of a releveraging following a long period of improvement of the position.[33]

This was why, the Governor said, that restrictions on high loan-to-income mortgages introduced and stricter affordability tests introduced in 2014[34] have been kept in place:

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29 Bank of England, Monetary Policy Committee decision 4 August 2016

30 Bank of England, *Financial Stability Report: November 2016*, 30 November 2016

31 Bank of England, *Financial Stability Report: November 2016*, 30 November 2016, pp17, including chart A.30

32 Bank of England, Financial Stability Report Q&A, 30 November 2016, pp6-7

33 Ibid.

34 These are (i) No more than 15% of total borrowing of mortgage lenders can be to loan-to-income ratios of 4.5 or higher; (ii) Lenders should test how affordable mortgages would be to borrowers if interest rates were 3%-points higher than at the time. For more detail on these measures see p.20 of the Financial Stability Report

> …so that we don't end up as an economy with a large proportion of households with very high debt to income ratios.[35]

At its meeting on 22 March 2017 the Bank's Financial Policy Committee said it backs reviews being conducted by the Prudential Regulation Authority (PRA) into credit quality, and by the Financial Conduct Authority on assessments of creditworthiness in the consumer credit market:

> [The FPC] supports a review launched by the PRA into the credit quality of new lending by PRA-regulated lenders and a review by the FCA into its rules and guidance on creditworthiness assessments used in the consumer credit market. The FPC will review these findings over the coming months.[36]

In June 2017, the Financial Policy Committee noted that "there are pockets of risk" with regards to financial stability including in consumer credit which had "increased rapidly". As a result, the FPC increased the amount of money lenders need to raise as a buffer for risks attached to rising consumer debt.[37] In November 2017, the FPC raised the level of this buffer – the countercyclical capital buffer – again, effective in November 2018.[38]

Interest rates increased in November 2017

The Bank of England's Monetary Policy Committee raised interest rates for the first time in over a decade at its November 2017 meeting.[39] The base rate was raised by 0.25 percentage points to 0.5%, reversing the August 2016 rate cut following the vote to leave the EU.

The interest rate set by the Bank of England is a crucial factor in determining borrowing costs, although it is up to individual banks and financial companies to set the interest rates they offer consumers. Should the rate rise be passed on, it will make it more expensive to borrow money and increase the cost of servicing debt for those on variable interest rates. This is most prevalent in the mortgage market, where approximately 43% are on variable rates (including trackers) and will see their monthly payments increase. For a household still owing £100,000 on their mortgage, an increase in their interest rate from 3.0% to 3.25% will see their monthly repayment go up by £13 per month (assuming there is 20 years left on the mortgage).[40]

2.7 International comparisons

The table and chart below provides OECD data on international comparisons of household debt as a percentage of household disposable income.[41] It shows the UK above some countries like the US,

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35 Ibid.
36 Bank of England, Financial Policy Committee statement from its meeting, 22 March 2017
37 Bank of England, Financial Stability Report - June 2017, 27 June 2017
38 Bank of England, Record of the Financial Policy Committee Meetings held on 22 and 27 November 2017, 27 November 2017
39 Bank of England press release, "Bank Rate increased to 0.50%", 2 November 2017
40 For more on the rate rise and the impact on households, see Library blog post Why have interest rates been raised? And what's the impact?, 2 November 2017
41 OECDstat, Household Dashboard: cross country comparisons, these figures may differ slightly from ONS data for the UK

France and Germany, but well below other countries like Australia, the Netherlands and Denmark.

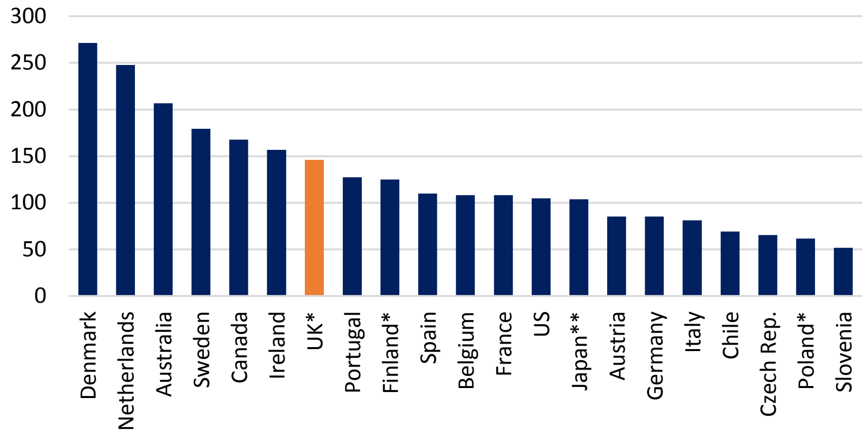
Household debt, % of disposable income, available OECD countries

	Q2 2017
Denmark	271.4
Netherlands	247.9
Australia	206.6
Sweden	179.2
Canada	167.6
Ireland	156.6
UK*	**145.6**
Portugal	127.1
Finland*	125.1
Spain	109.8
Belgium	108.3
France	108.1
US	104.7
Japan**	103.7
Austria	85.3
Germany	85.3
Italy	81.0
Chile	69.2
Czech Rep.	65.4
Poland*	61.8
Slovenia	51.6

*Data for UK, Finland & Poland is Q1 2017 and for Japan is Q1 2016

Source: OECDstat, Household Dashboard: cross country comparisons

Household debt, % of disposable income, OECD countries Q2 2017



*Data for UK, Finalnd & Poland is Q1 2017and Japan is Q1 2016 Source: OECDstat

3. Effect of household debt on economic growth

As explained in sections 1.3-1.4, household debt can be beneficial to the economy and living standards but can also lead to problems if debt levels becomes too onerous for households to repay.

This section provides a summary of research into the impact of household debt on economic growth and stability in the UK and internationally, with a particular focus on the lead up to and aftermath of the financial crisis and recession of 2008-2009.

3.1 UK

A paper by the Bank of England found evidence that households with higher levels of debt reduced their spending on goods and services, as a proportion of income, by more than the average household during and after the 2008-2009 financial crisis.[42]

The result was to increase the depth of the recession and slow the recovery. An estimated 2%-points of the 5% fall in total consumer spending after 2007 was associated with cuts in spending by households with higher debt levels.

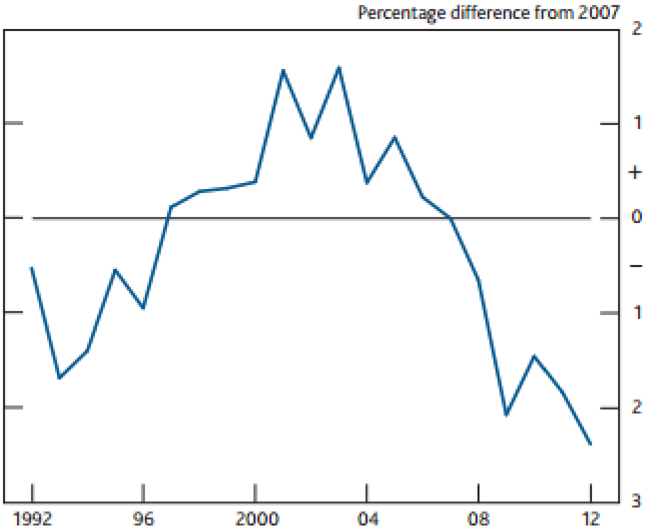
The same research found that the accumulation of household debt from 1996 to 2003 contributed to economic growth, with indebted households adding roughly 0.35%-points a year to overall consumer spending growth of about 4.5% per year over this period. Put another way, a total of 2.5% was added to the level of consumer spending from 1996 to 2003.

Much of this increase was in household durable goods (such as cars, furniture, appliances and electronics) and non-essential items (such as recreational spending). The larger-than-average fall in expenditure by highly-indebted households after the crisis was in these same categories of spending.

The chart below, reproduced from the Bank of England paper, summarises the impact of debt on the aggregate level of consumer spending, or private consumption, compared to the level seen in 2007 (just before the crisis took hold). Debt-fuelled consumption added to private consumption, and thus GDP growth, in the decade prior to 2007, but reduced consumption during and after the crisis.

42 Bunn, P. and Rostom, M., "Household debt and spending", Bank of England Quarterly Bulletin Q3 2014

Chart 8 **Estimated impact of debt on the level of total private consumption, relative to 2007**[(a)]



Sources: DCLG, LCF Survey, ONS and Bank calculations.

(a) The impact on non-housing consumption is constructed by taking predicted spending for each household from the model described in footnote (2) on page 309, and then subtracting what the model predicts they would have spent if debt had had the same estimated influence on spending patterns in each year as it did in 2007, keeping all other characteristics unchanged. Differences are then summed across households. To get to a total impact on aggregate private consumption there is assumed to be no effect on housing consumption or the consumption of non-profit institutions serving households.

Based on a 2013 survey of households cited in the same paper, those with higher mortgage debt-to-income ratios were more likely to cut spending due to concerns about credit availability and debt. Specifically, as reasons for reducing their expenditure they cited the reduced availability of credit (to renew or increase their debt) and also concerns about their ability to make future debt repayments (rather than them actually having difficulty in making repayments).

3.2 International

The international evidence generally finds that large increases in household debt prior to recessions tends to lead to deeper and longer downturns. This is due to households with high debt levels cutting back on their spending by more than other households during and after a recession.

A 2012 OECD Working Paper found that high debt levels impaired the ability of households to smooth their spending.[43] It also suggested that when household debt levels rise above trend the likelihood of a recession increases.[44] The economic expansions before these recessions are typically longer and larger.

Research by the IMF in 2012 also found that recessions preceded by large increases in household debt are more severe and protracted.[45] It

43 And for companies to smooth their investments.

44 Sutherland,D. and P. Hoeller (2012), "Debt and Macroeconomic Stability: An Overview of the Literature and Some Empirics", *OECD Economics Department Working Papers*, No. 1006, OECD Publishing, Paris

45 IMF, "Dealing with household debt", Chapter 3, World Economic Outlook, April 2012

also discovered that the fall in consumer spending seen following large increases in household debt also occurred in economies that did not experience a banking crisis around the time of a housing bust.

A paper by Jorda, Schularick and Taylor (2013) looked at private and public sector debt in 150 recessions and recoveries since 1870. It found that once a country enters into recession, if it carries the legacy of a large private credit boom[46] the post-recession economic recovery is typically slower. [47]

46 Private refers to households and corporations
47 Jorda, O., Schularick, M., and Taylor, A. (2013), "Sovereigns versus Banks: Credit, Crises, and Consequences", Federal Reserve Bank of San Francisco Working Paper 2013-37

4. Distributional analysis of UK household debt

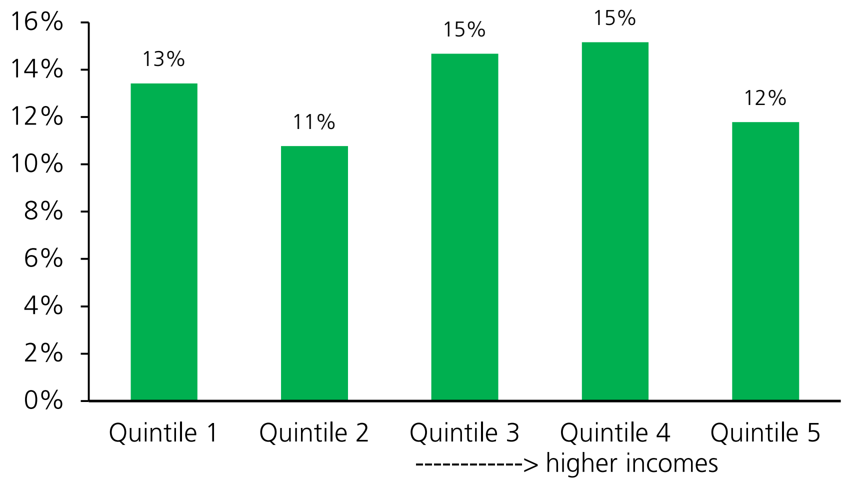
[Written in May 2016]

As described in section 2, the main sources of statistics on household debt do not contain breakdowns by individual or household characteristics such as income, wealth, age, family status etc.

The Wealth and Assets survey conducted by the ONS, however, does provide some statistics on which types of households are more likely to have debt than others.[48] The information presented in the survey is for Great Britain and does not include mortgage debt, only other financial debt such as personal loans, overdrafts, outstanding balances on credit cards and student loans. The latest round of the survey was conducted from July 2012 to June 2014.

The survey found that 48% of households had some debt (excluding mortgages). Dividing all households into five segments – or quintiles – ordered by their annual income levels[49] shows that the average debt as a proportion of household income was highest in the middle and upper-middle income groups at 15%.[50]

Median debt (excluding mortgages) as proportion (%) of income
July 2012 to June 2014

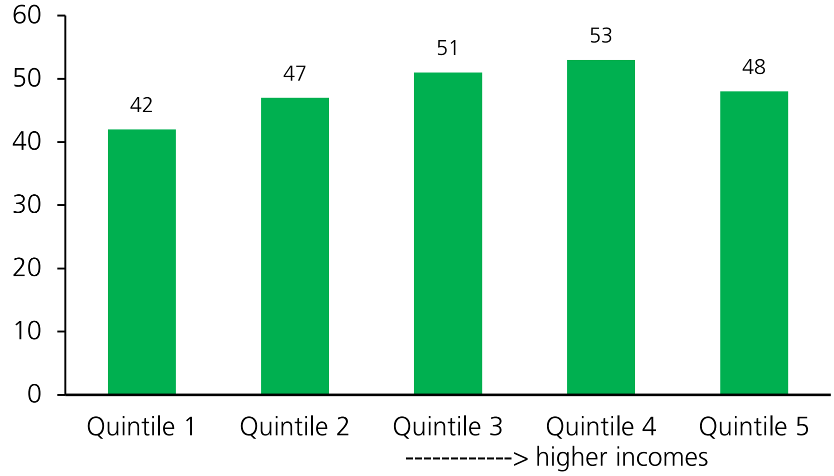


Source: ONS, Wealth and Assets survey via article "Household debt inequalities"

Households in the lowest income quintile were less likely to have debt (excluding mortgages) than those higher up the income distribution.

48 ONS, *Household debt inequalities*, 4 April 2016
49 More specifically it is ordered by household net equivalised income. This means household incomes after tax are adjusted, or equivalised, to take account of the number of people living in the house/flat and how many of them are children. This is done in order to allow fair comparisons of income between, say, a household with a single adult and a household with a couple and two children (who would require a larger income to have the same living standard).
50 This is based on the median level of debt among households that actually have debt (those with none are excluded). Median debt in this context is the debt value at which half of households in the quintile of income have more debt than and half less.

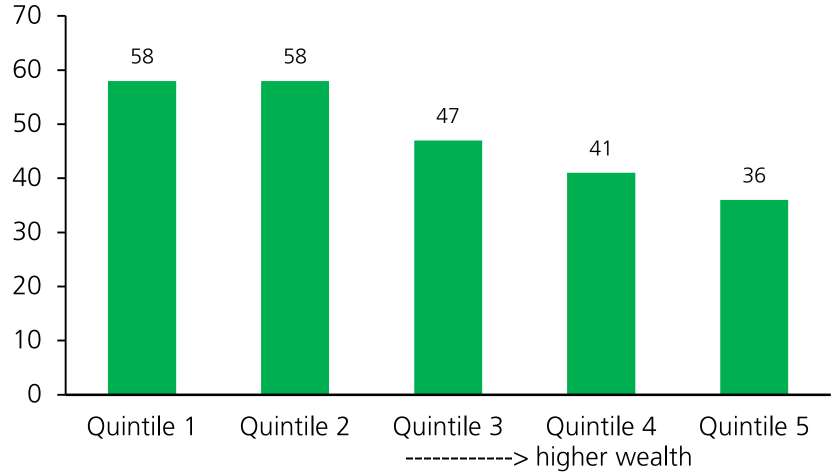
Proportion of households with debt (excluding mortgages)
% of households in each income quintile, July 2012 to June 2014



Source: ONS, Wealth and Assets survey via article "Household debt inequalities"

The same analysis was also done for households divided by their overall wealth. This showed that households in lower wealth quintiles are more likely to have debt (excluding mortgages) than those higher up the wealth distribution.

Proportion of households with debt (excluding mortgages)
% of households in each wealth quintile, July 2012 to June 2014



Source: ONS, Wealth and Assets survey via article "Household debt inequalities"

The Wealth and Assets survey also asked households whether they felt their debt was a heavy burden, somewhat of a burden or no burden at all to them. Households were then ranked according to their income and divided into 10 groups, or deciles. Individuals with lower incomes were more likely to report that their debt was a heavy burden for them, with 43% of those in the bottom decile saying so, compared with only 5% of those in the top decile.[51]

[51] ONS, Chapter 7: Extended Analyses, Wealth in Great Britain, 2012 to 2014, figure 7.14

Figure 7.14

Individual financial debt burden by household net equivalised income decile, Great Britain, July 2012 to June 2014

Great Britain **Percentage (%)**

	Heavy burden	Somewhat of a burden	Not a burden at all
1	43	33	24
2	35	36	29
3	30	31	39
4	24	31	45
5	20	33	47
6	16	35	49
7	12	34	54
8	8	29	63
9	7	27	65
10	5	20	75

Source: Wealth and Assets Survey - Office for National Statistics

Notes:

1. Income includes regular income from employment including bonuses, self-employment (including loss), benefits, private pension, state pension, investment income, and other regular income such as rental income.
2. Excludes individuals with no financial liabilities

5. Further information

Library information

- "Household Debt: Key Economic Indicators", latest household debt data

Data sources and forecasts

- ONS, UK Economic Accounts (quarterly)
- Bank of England, Money and Credit release (monthly)
- OECDstat, Household Dashboard: cross country comparisons
- Bank for International Settlements, Total Credit to the non-financial sector
- OBR, "Economic and fiscal outlook"
- Bank of England, Financial Policy Committee

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- Sutherland,D. and P. Hoeller (2012), "Debt and Macroeconomic Stability: An Overview of the Literature and Some Empirics", *OECD Economics Department Working Papers*, No. 1006, OECD Publishing, Paris
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