A Story About Money

Objectives

- To discuss how our financial system actually works
  - Uses a simple model initially
- To examine the budget decisions by looking at available official data
  - Considering the poverty aspects
- To identify the effects of those decisions

Let's set the scene
in the next few slides

Things changed, and the economists largely don’t seem to have noticed

- The Bretton Woods Agreement was abandoned in the early 70s
- This changed how out monetary system worked very significantly
  - It alters the way we should think about our money system fundamentally, even though it was a simple change
  - It alters the things we can do economically
  - It has changed how we can think about poverty
- We need to understand that change
  - Neoliberalism seems to deny the change as their text books teach topics and ways of thinking that were applicable in the 60s
- It is all summed up by the phrase “We Don’t Have The Money”
  - Or “Where’s the money going to come from?”
- So, this starts with a simple story about money, which seeks to show where money does come from and how our system (much simplified) actually works
  - We can examine a few economic indicators of performance
  - Then we can look at the effects of this misunderstanding on us all, but particularly those who have no voice against the Establishment

Let’s develop a simple model first
-the setting is a desert island

- I need to try to explain a number of points to show how our system works
  - It is simplified, and intended to show the basis of the our system
  - Please do not try to put all our current practices into this model
  - It is intended to be a tool for explanation
  - it covers some initial fundamental ideas only
- Imagine all of you, and packed boat-load of the passengers and crew, are shipwrecked on a beautiful, but deserted desert island, richly endowed enough to support a human settlement
  - You have rescued essentials for life in the short term
  - The Captain, whose in charge, has informed you all that there is no chance of rescue so all need to plan and work to live on the Island for the long term future
    - This was perfectly possible as the passengers and crew have a wide range of skills
  - However, whilst the crew are working, the passengers continue to treat the event as a holiday, despite pleas that they should all be involved in survival activities
    - The passengers got something for nothing, and that was detrimental to the developing society
  - The Captain decides on some draconian-seeming measures
  - All who can, must work, and will be paid in Island Pounds (IP)
    - All will be charged daily for being on the Island and for everything provided by the Captain
    - Only IPs will be accepted
    - 4 hours/day work will provide sufficient money to live with a little left over

Why invent money, why not use those shells (or any other physical thing on the island)

- The Captain replied
  - The situation would be uncontrollable and unstable (more later)
  - There could be to many or too few objects to meet the new community's needs
  - Also, some may just pick up the shells and will then be fed for free without contributing to our society
- But what about children, the old and the sick who cannot work on projects requiring significant physical effort
  - Every adult will have a job
  - Jobs will be matched to capability
  - Eg. Those who are older will be paid for tasks they can manage; perhaps, child minding and other less physically demanding jobs
  - Those too ill/infirm to do anything will be paid the same as everyone else
  - The cost of paying for the children's needs will also be met in an allowance to the family; the children will be "earning" by learning to take over in years to come
  - There were enough teachers on board to set up a school

But where are the IPs to come from

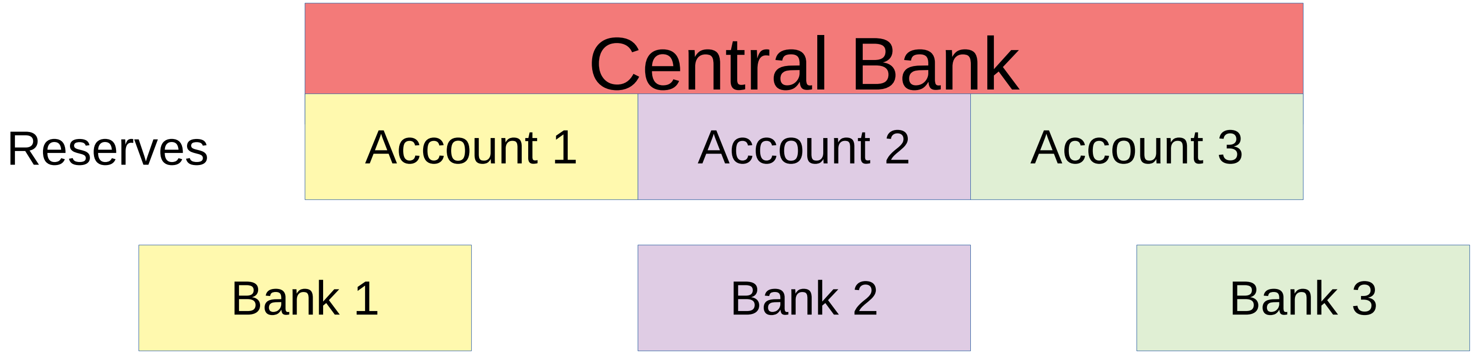
- The Captain replied that he would print them on the only photocopier
  - Just enough would be printed to meet immediate needs,
  - the amount would change as needs changed
  - All made would be recorded and accounted for
  - Forgery was forbidden and be punishable
- The Purser was put in control of all this (the Central Bank, CB)
- Thus, the state came into being
  - Land was cleared, seed planted, shelters built
- But it soon became clear that some citizens wanted more ‘things’ and some could sell their skills to others
  - In fact, with their free time, most developed a sideline in their spare time each day
  - They started to traded with each other
  - Money was starting to circulate as individuals personalised their way of living.
  - But the money left after the Captain had charged for what he supplied was insufficient for many inhabitants
    - The Captain offered them guaranteed longer hours at the same pay rate = more disposable income
    - This became the de facto lowest pay rate as passengers and crew started to pay more for others to work for them
    - Living standards could improve as more was produced
    - The old days of something for nothing had gone

What’s happening here?

- The Captain (government) is a currency issuer
- When they landed on the Island, there was no money, IPs.
- Only the Captain can produce valid money at this point; ie he issues it as as needed to meet the needs of the community by requiring work:
  - Money is spent into existence to pay for work done; ie the government is discharging its debt to the workers for the work done
  - His spending is the first monetary action; there were no IPs to borrow by the government and he didn’t need to anyway
  - So now there is money, fiat money, in circulation
  - Government Spending has given rise to Income
  - It has been used to buy each person’s efforts intended to benefit the population
  - He then charges for what the government supplies to the workforce
    - But the Captain cannot ask for more to be supplied than the workforce can produce
  - But the money does not all go back to the government each day, some is saved or spent instead
- The people are currency users – a VITAL KEY DISTINCTION, they have to produce a needed product to get money
  - This is essentially how our system works; government spending is a necessary action
    - Other pieces still need to be added, but first we need the Banks

Banks appear

- People needed somewhere to store their money
- They didn't really want to have piles of paper money
- The Captain agreed to the formation of banks
  - 3 were formed, answerable to the CB
  - Record keeping and money transfers rather than physical money were introduced
- Paper money didn't need to be used for every transaction
  - Account balances were recorded; transfers could be made in the banks ledgers between accounts
  - These transfers became common, with the banks having an account at the CB to enable a daily final reckoning
    - To ensure stability, the CB would always ensure that such reconciliation could always happen by loaning money to the bank in difficulties (for a charge)
    - But inter-bank loans at a lower overnight rate was also possible



Bank Loans

- Sometimes, people wanted to spend money in advance of receiving it
  - To remind you: the government spent without borrowing money from the people – the non-government sector; but the people cannot do this, they must either earn first OR borro
- If a borrower was hard-working and could repay the loan, they got one
  - Their account would simply be credited with the loan amount, and they now also have a liability
  - the bank would hold the loan as an asset; ie money is created – it is indistinguishable from money from the CB and is accepted to pay taxes
    - It has to be to ensure acceptance and stability
  - The money, when spent, will probably end up being placed on deposit in bank account
    - That is: The LOAN HAS CREATED A DEPOSIT
    - Many text books wrongly teach that deposits create loans
    - [Discovering this caused me to doubt anything I read in text books of a neoliberal persuasion, whether they are right or wrong on other topics, basically I had no way of knowing whether the text book was right or wrong on any subject]
  - When the loan is discharged, it's as if the loan had never been created; the money has disappeared from circulation, ie it's been destroyed
- Now, over 95% over our money is loaned into existence by the banks

Money in the modern economy is just a special form of IOU, or in the language of economic accounts, a financial asset

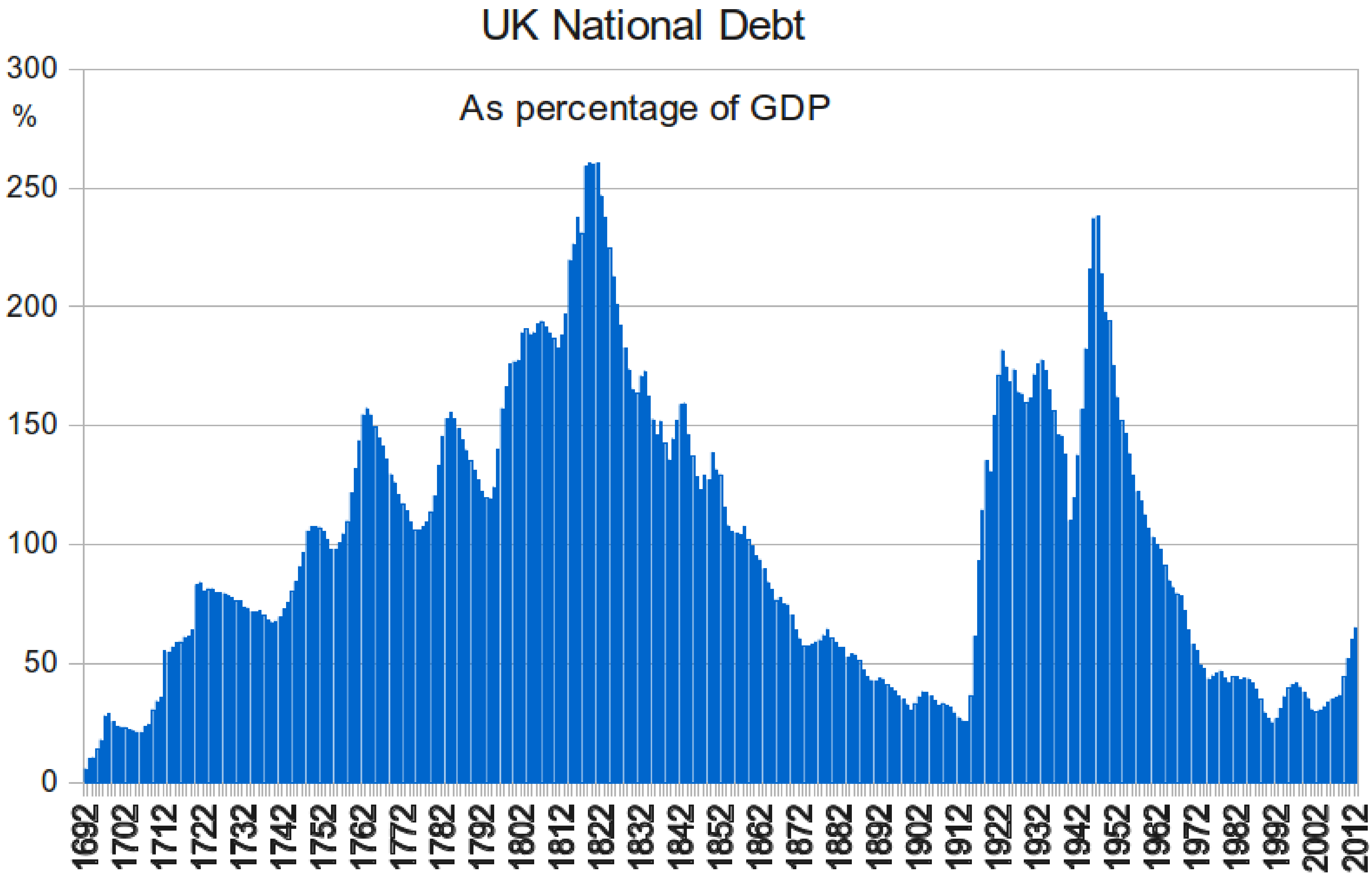
From: Money in the modern economy: an introduction from the Bank of England

Now there are Problems
- after a time ………

- There was too much money in circulation
  - Trades were costing more and more – ***INFLATION***
  - **IMPORTANT** – it is not government spending alone that can cause inflation; it is ***any*** spending, in aggregate, that causes the supply capability of society to be exceeded. It is this that causes inflation not just government spending
- Money needed to be removed from the system for it to be stable in the long term
  - Taxation
  - Bond sales for further adjustment
- To consider them in turn
  - Taxation – Mandatory and permanent removal
    - Eg on trading between members of the public
    - IPs are needed to pay taxes, therefore there is a demand for IPs
  - Bond sales to public and the commercial banks - Voluntary, still counts as an asset
    - Reduce immediate ability to spend; in return the owner gets a payment (the interest rate/coupon)
    - If you hold bonds, you can still get the money at market value, you just cannot guarantee the amount
    - But by buying back the bonds from the banks and the public, spending money can be re-injected into the economy, thus increasing spending power and allowing more jobs to be generated
    - Bonds are 100% safe as they are in the currency issued by the state; the CB can always pay the interest
- At other times there was insufficient demand in the economy
  - Money can be injected by bond sales, but note, if this just went into saving, it didn't generate jobs
  - or additional government spending could be used to provide demand
  - That is, the government is the economy's backstop final source of demand AND they can always spend
- Hence the government now has levers to try to achieve stability
- People wanted to save for a number of reasons; costly items, for their old age and have more to spend
  - The money for those savings comes from government spending

Consequences

- Note: the government does not need taxes or bond sales to spend, *if the resources are available in its society*, the government can spend, ALWAYS.
    - (but this does not really apply to imports – to be considered)
  - Remember: the government started the monetary economy by just introducing and spending fiat money, it had no money ie no IPs
  - Things are different with commodity money (– gold standard) and in the EU
- Calculating (Government Spending-Taxation) was valid when we were on the gold standard – it meant something then for government finances; it doesn't mean the same now, but most economists behave as it it does
  - BUT, the calculation (G - T) can be done and does represent something worth knowing
  - Each year this 'deficit' is the excess of money spent into the economy that has yet to be returned to the government by taxation
    - Add it up, back to the date of formation of the BoE and the 'debt' is the total money in the non-government sector


UK National Debt
As percentage of GDP
300
%
250
200
150
100
50
0
1692
1702
1712
1722
1732
1742
1752
1762
1772
1782
1792
1802
1812
1822
1832
1842
1852
1862
1872
1882
1892
1902
1912
1922
1932
1942
1952
1962
1972
1982
1992
2002
2012

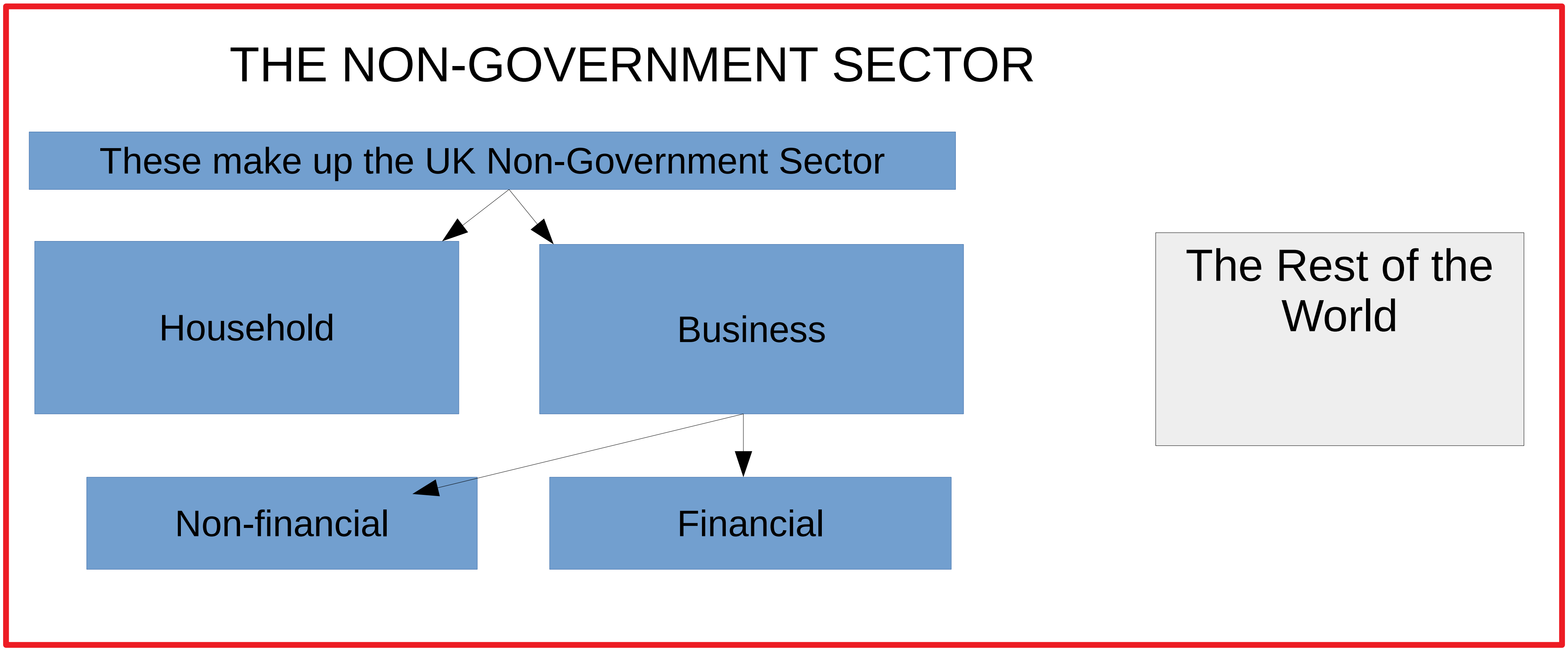
Back to the Island

- If the Captain receives back in taxation more than he has spent in an accounting period, then the ISLAND population do not have so much to spend
  - Ie the population is poorer
  - Eliminating the deficit and going into surplus means that the Island population is going to be poorer, year on year
  - I am not advocating that the deficit may be allowed to grow uncontrollably, but for the UK a deficit is a relatively normal state particularly as we have an external deficit.
  - A QUESTION: IS THE DEFICIT A REAL DEBT?
  - In the days of the Gold Standard it was; but we now use a fiat currency
    - Borrowing first, before spending, is an unnecessary step for the government; it suits the finance industry to plug it as they get a guaranteed income for just loaning money to the government for a bit of paper – NOTHING HAS BEEN PRODUCED and its risk free for a state that is sovereign in its own currency. Not true for the eurozone
    - Government borrowing is deflationary (alternatively, government sale of bonds)
- However, there is a problem with our deficit with the rest of the world – to be considered in a few slides.

The Concept of Sectors

- It's convenient to consider the whole economy as two sectors
  - The Government Sector and the non-Government Sector
  - The non-government sector is now going to be split into two parts;
    - The private sector
      - This will be split further
    - The Rest of the World – that is in our model another nearby island with which trade develops. That island has its own, but different, currency.
      - The exchange rate between the two islands floats freely.
- Note that each sector can be split again and again – basically as many times as is useful in the model, but nothing can be left out
- We will be dealing with GDP soon as it is the most commonly used measure of the size of the economy. However, there are leakages so its not all-encompassing even though its use is so common.
  - Available data from ONS uses GDP

Now add the Rest of the World
– as another sector
Its best to leave the Island for this

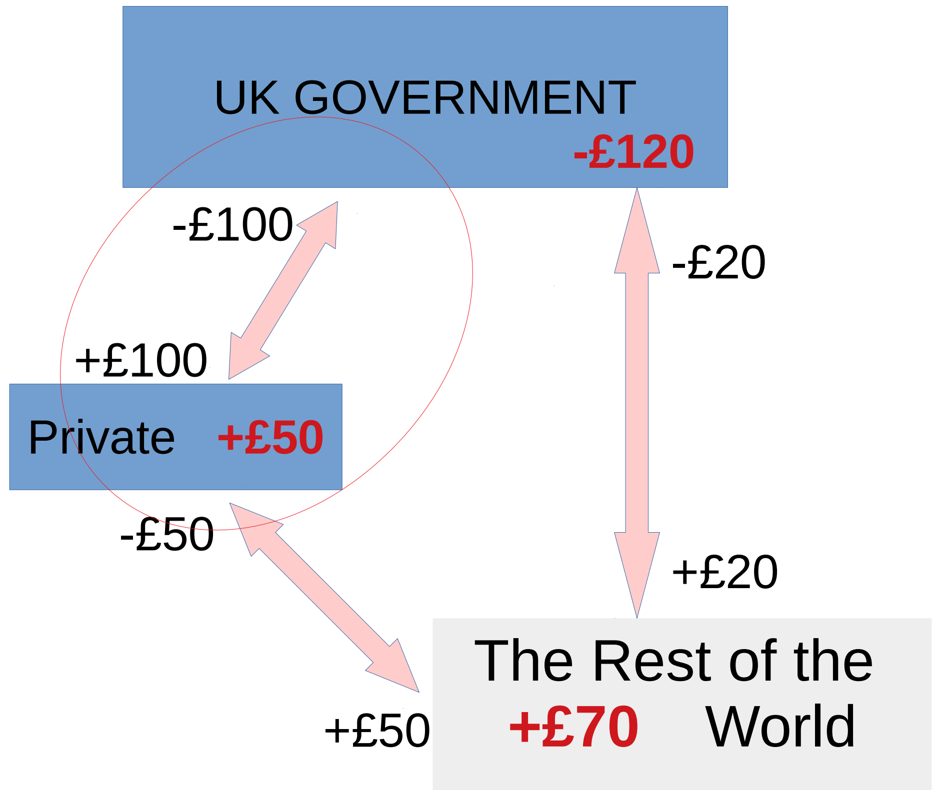


Money flows within each Sector and between all sectors.
Each sector can be further sub-divided as needed.

Money flows between Sectors

- Money flows between Sectors
  - and within a sector
- If the Gov. spends £100 in the private sector then the Gov will be £100 in deficit and the Private sector will be £100 in surplus
  - This is true for all transactions between sectors
  - The Sum of all flows between sectors must equal zero
- The Gov receives and spends
  - If it spends more than it receives, its in deficit
  - The sum of all the deficits and surpluses each year for the Government is called the National Debt (or surplus)

Goods and services go in one direction and money goes in the other



The surplus in the Private Sector is our saving
As we have a deficit with the ROW, ***if the Government has a surplus, the private/non-government sector must be in debt or cut its spending***

An Accounting Identity

Government Sector Balance
+
Non-Government Sector Balance
+
External Sector Balance

= 0

An identity – a relationship that is true by definition

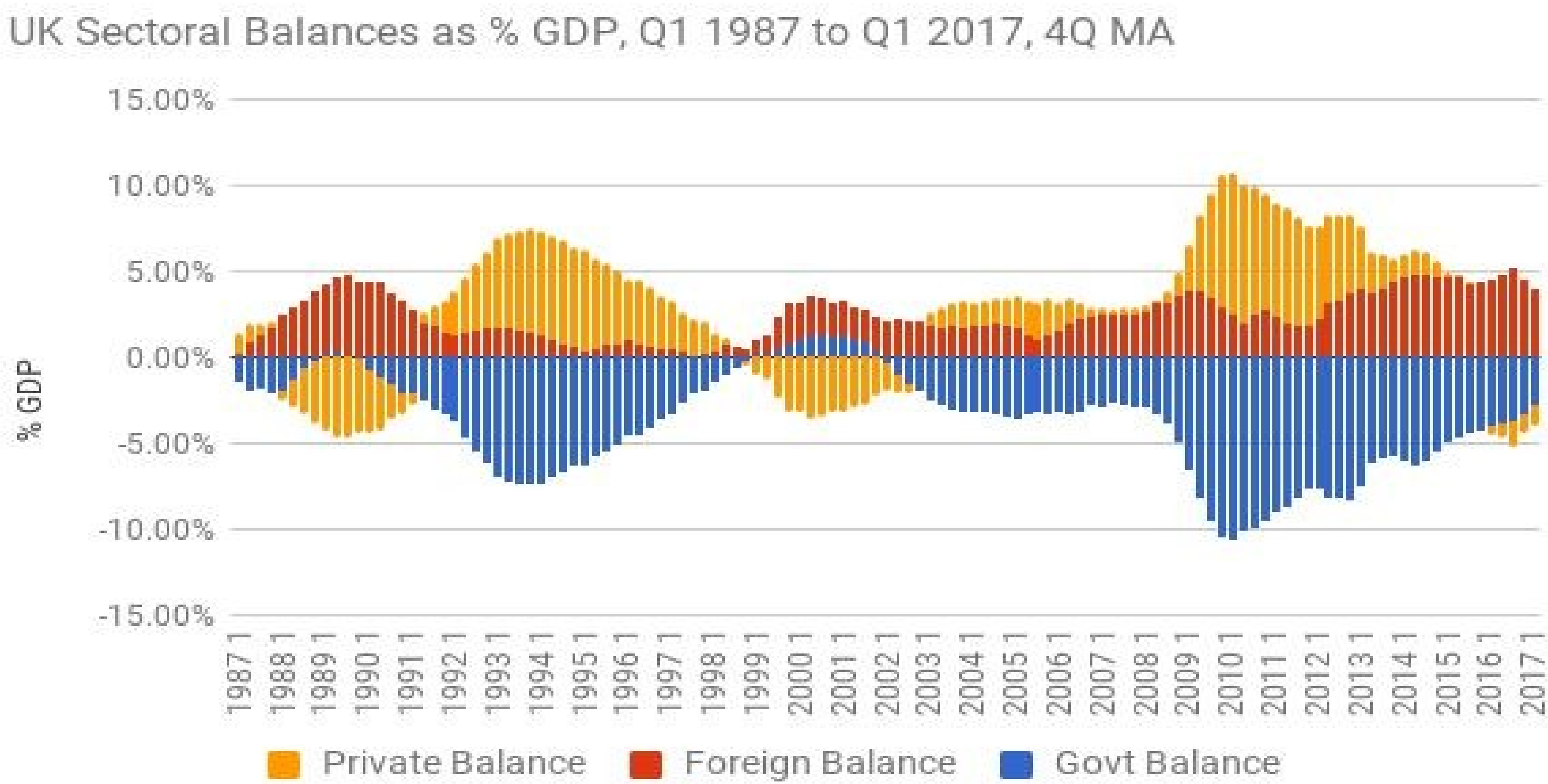
As another example of an identity:
Another Identity:
Gross pay – Taxes = Net Pay

There can be problems in collecting the data
But the identity describes the relationships within the economy
This means that what happens in one sector affects the others; they are not independent of each other

So, How Can This Be Used?

We can look at a graph of these balances

Sectoral Balances (% of GDP)



Current UK Gov debt £1.7295 Tn (2017 Q1)

The private sector can be divided further to see relevant detail

From: https://docs.google.com/spreadsheets/d/1ktX29jafu9iV3oFZ8GVLtAHaFmUkikdfYrw_BRPFUTU/edit#gid=3
By Neil Wilson http://www.3spoken.co.uk/2016/04/uk-sectoral-balances-q4-2015.html
ONS Data

A Diversion - Flow of Funds Analysis
by ONS

- This takes the analysis to a deeper level that just considering those top level sectors. It breaks the sectors down to their constituent parts

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.

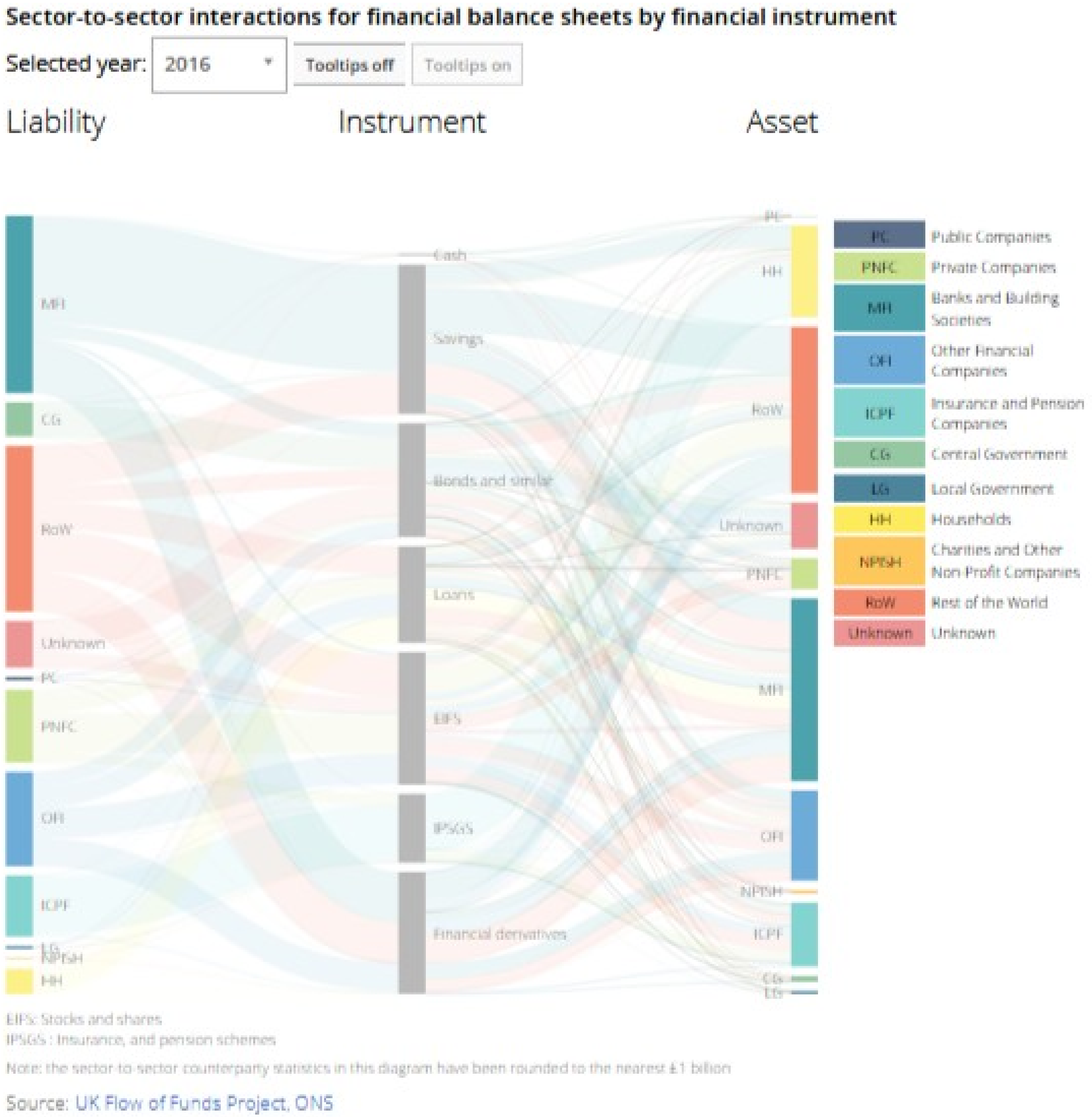
https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/economicstatisticstransformationprogrammeenhancedfinancialaccountsukflowoffundsenhancingtheunderstandingofukhouseholdfinance/2018-06-26

For the Sankey diagram see:

https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/economicstatisticstransformationprogramme/enhancedfinancialaccountsukflowoffundsexperimentalbalancesheetstatistics1997to2016

For the larger version:

https://www.ons.gov.uk/visualisations/dvc456/sankey/sankey_instr/index.html

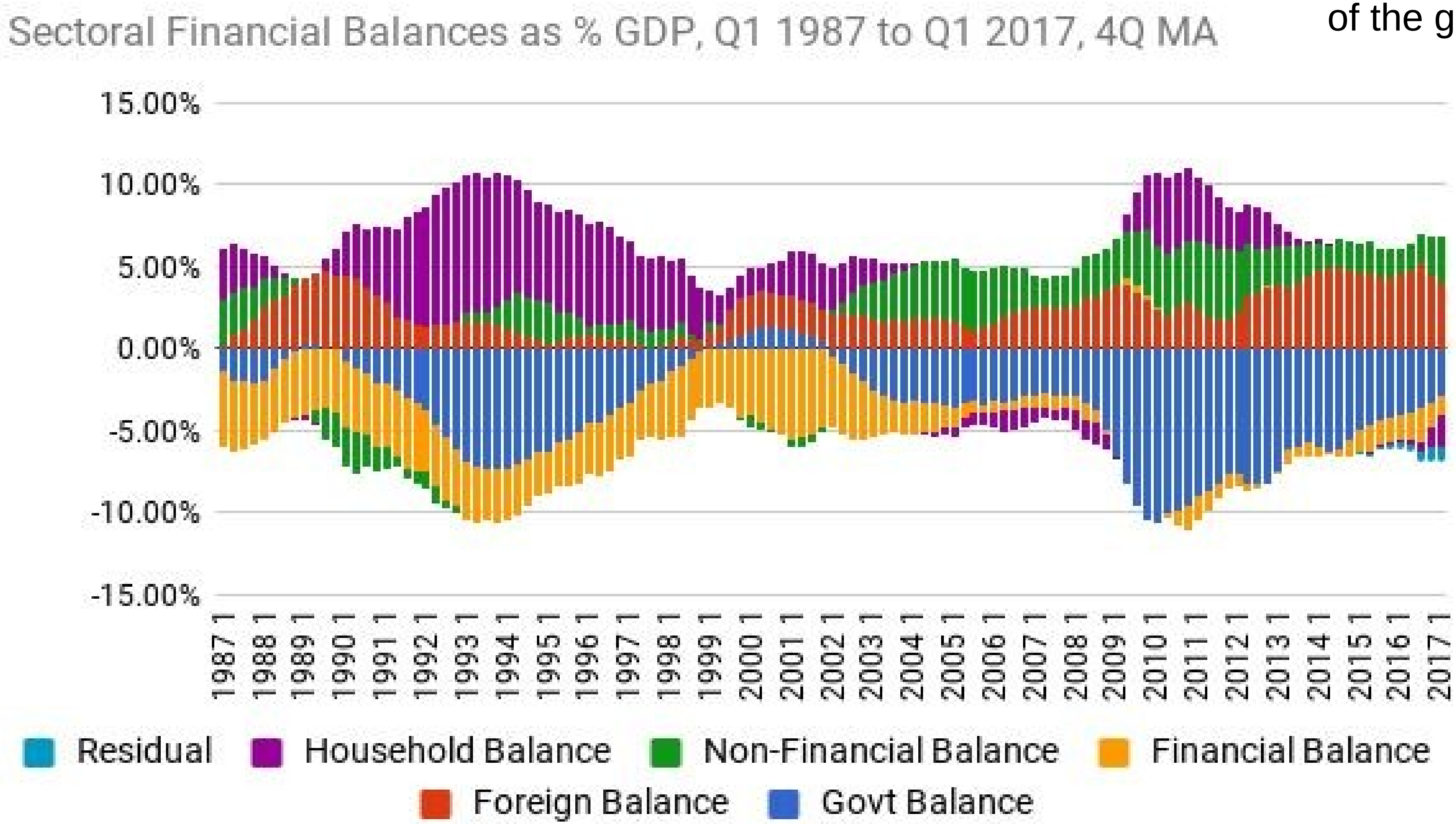


https://www.ons.gov.uk/visualisations/dvc456/sankey/sankey_instr/index.html

Sectoral Balances

Digging into the detail

Expanded view of the last part of the graph

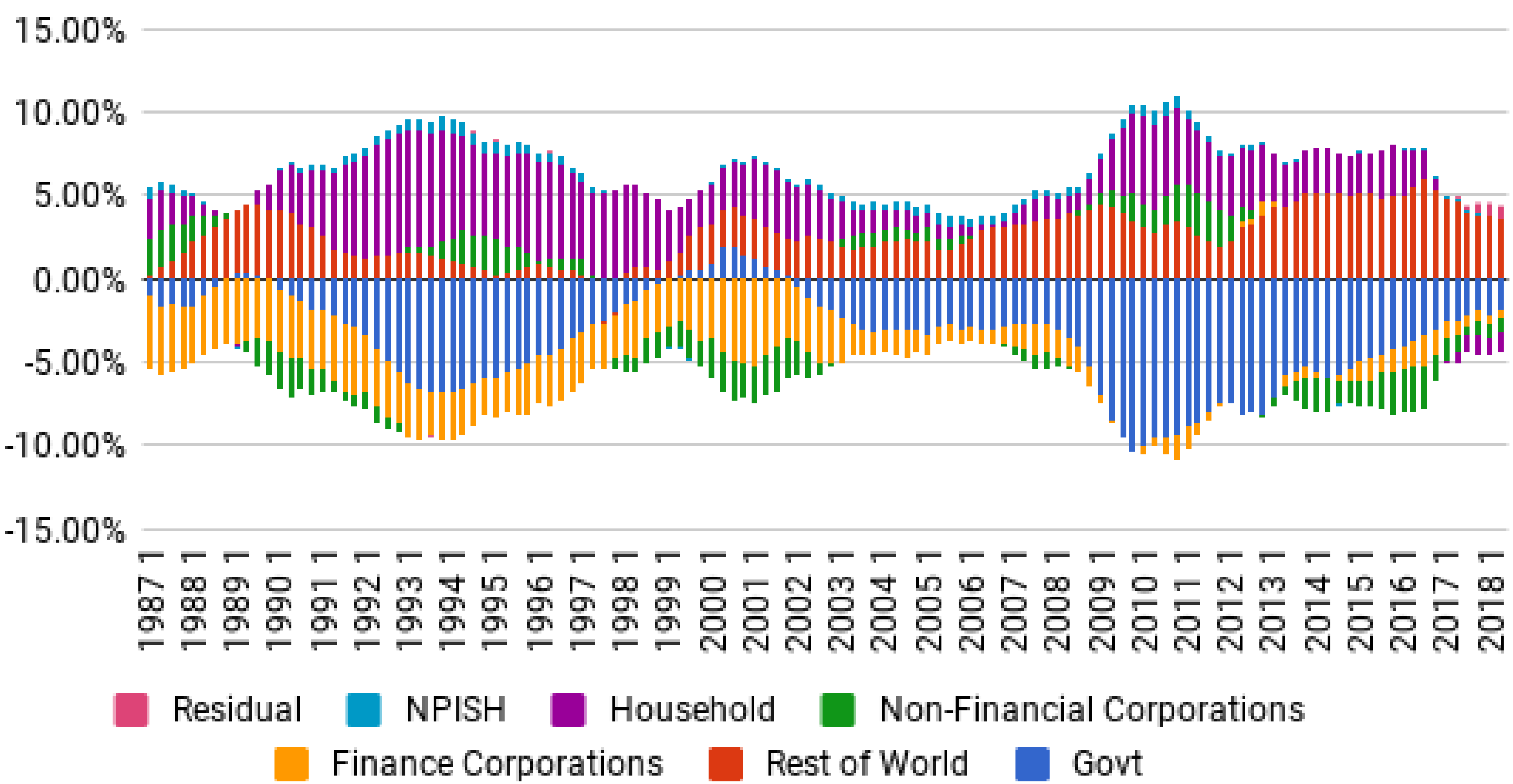


Private sector split into: Household, Non-financial and Financial sectors
Borrowing by non-government sectors is not sustainable in the long term

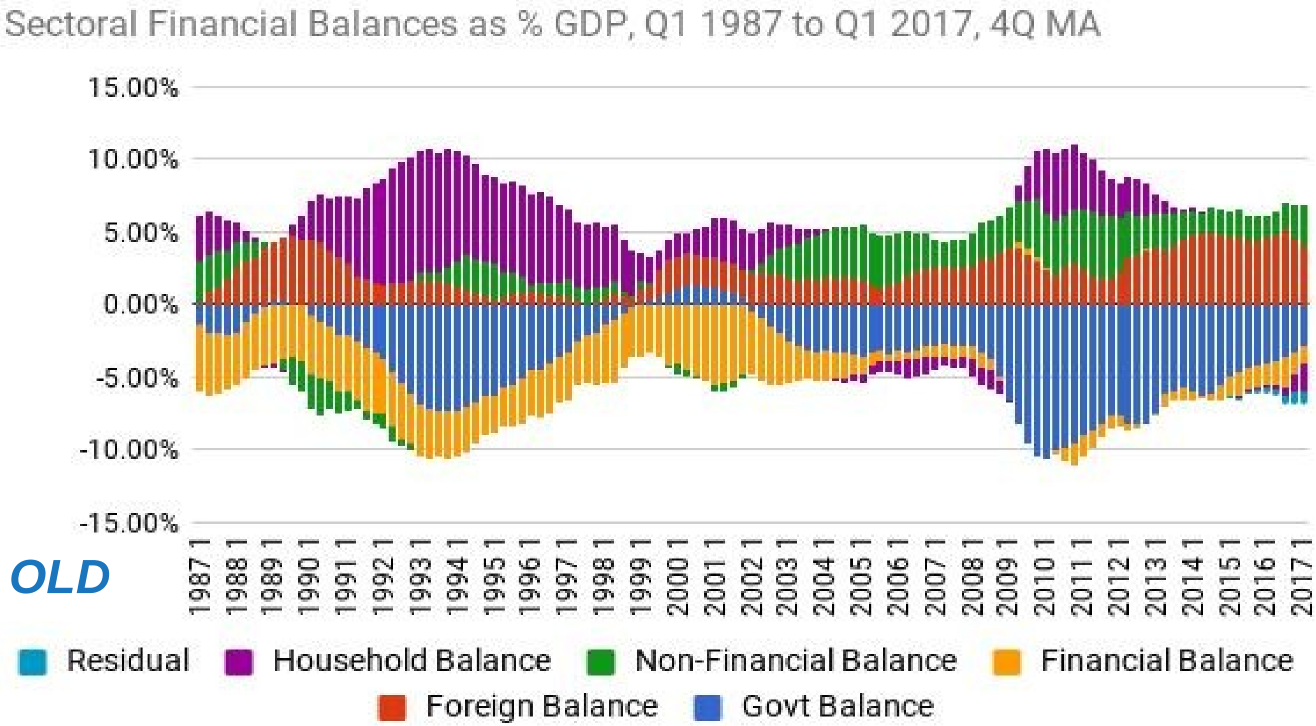
Now, there is a problem with this data

This can be seen in the next slide

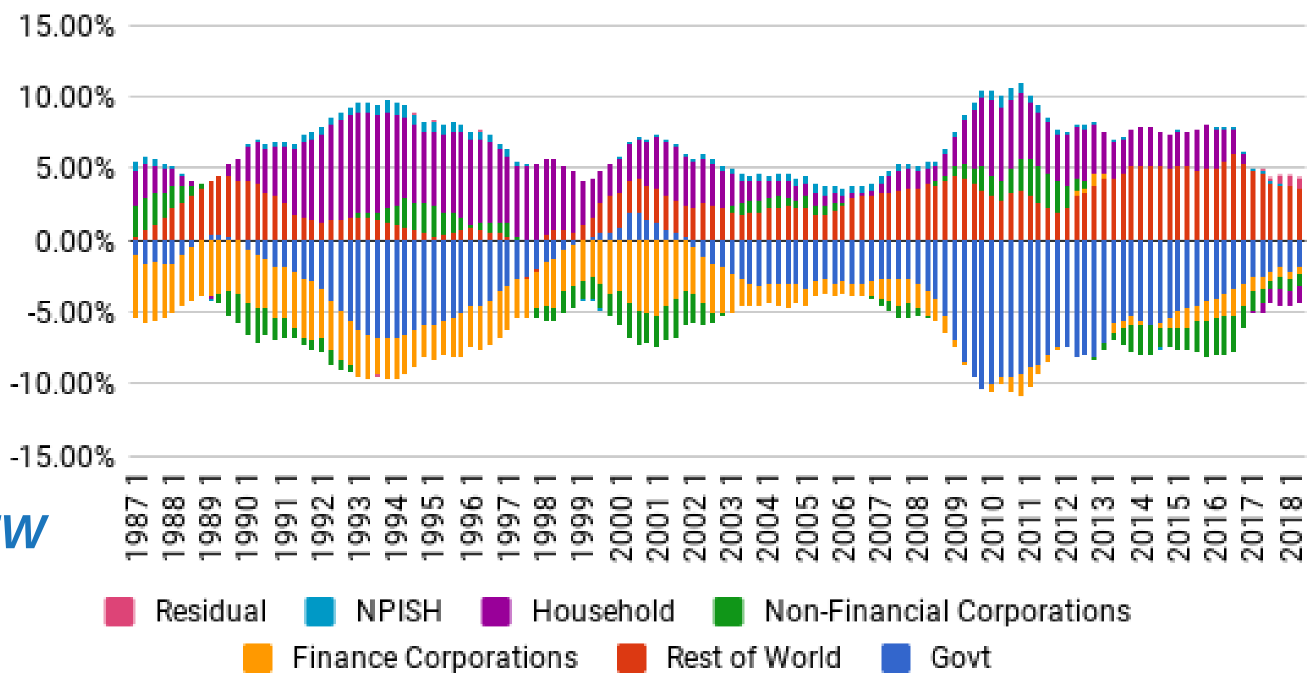
ONS update/revise the data



There's Trouble Ahead



OLD



NEW

“Achievements” of the tories

UK households have seen their outgoings surpass their income for the first time in nearly 30 years, our data have shown.

On average, each UK household spent or invested around £900 more than they received in income in 2017; amounting to almost £25 billion (or about one-fifth of the annual NHS budget in England).

Households’ outgoings last outstripped their income for a whole year in 1988, although the shortfall was much smaller at just £0.3 billion.

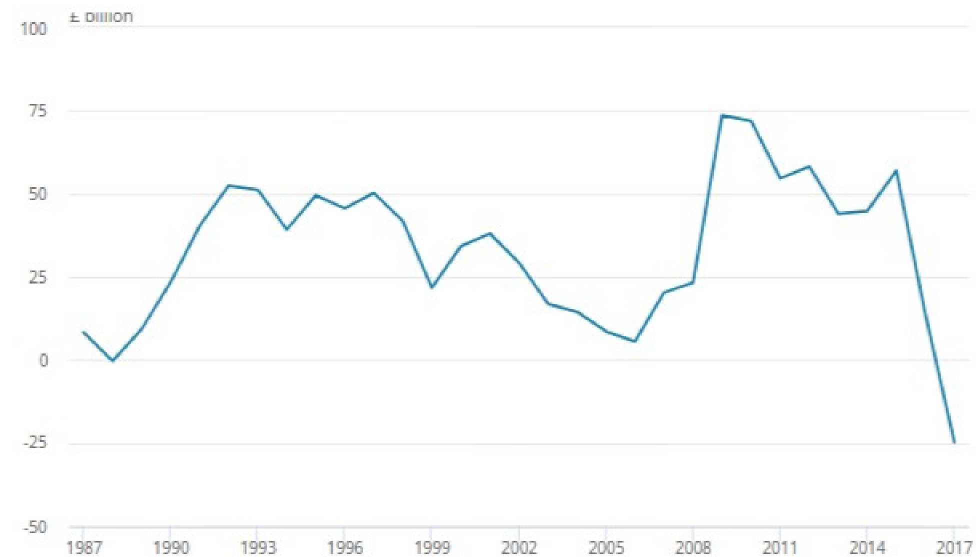
Even in the run-up to the financial crisis of 2008 and 2009 – when 100% (and more) mortgages were offered to home buyers without a deposit – the country did not reach a point where the average household was a net borrower ……..

….In total, households accumulated more debt (due mainly to loans) than assets (such as deposits, bonds, shares and pensions) in 2017 for the first time since records began in 1987. If this were to continue, households could risk lacking enough collateral to cover their debts.

Ref on next slide

Households have become net borrowers for the first time since 1988

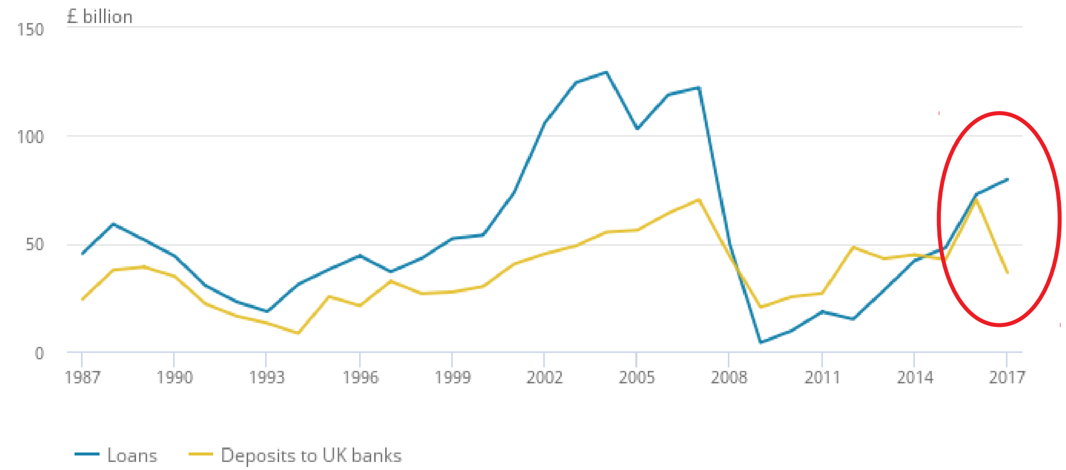
Net lending (positive) or borrowing (negative) position of UK households, 1987 to 2017



Source: Office for National Statistics

Loans and deposits diverged last year

Households' accumulation of loans debt compared with deposits to UK banks, 1987 to 2017



Source: Office for National Statistics

https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/makingendsmeetarehouseholdslivingbeyondtheirmeans/2018-07-26

The ONS write:

To fund this shortfall, households either have to borrow – at which point they could be living beyond their means – or dip into their savings.

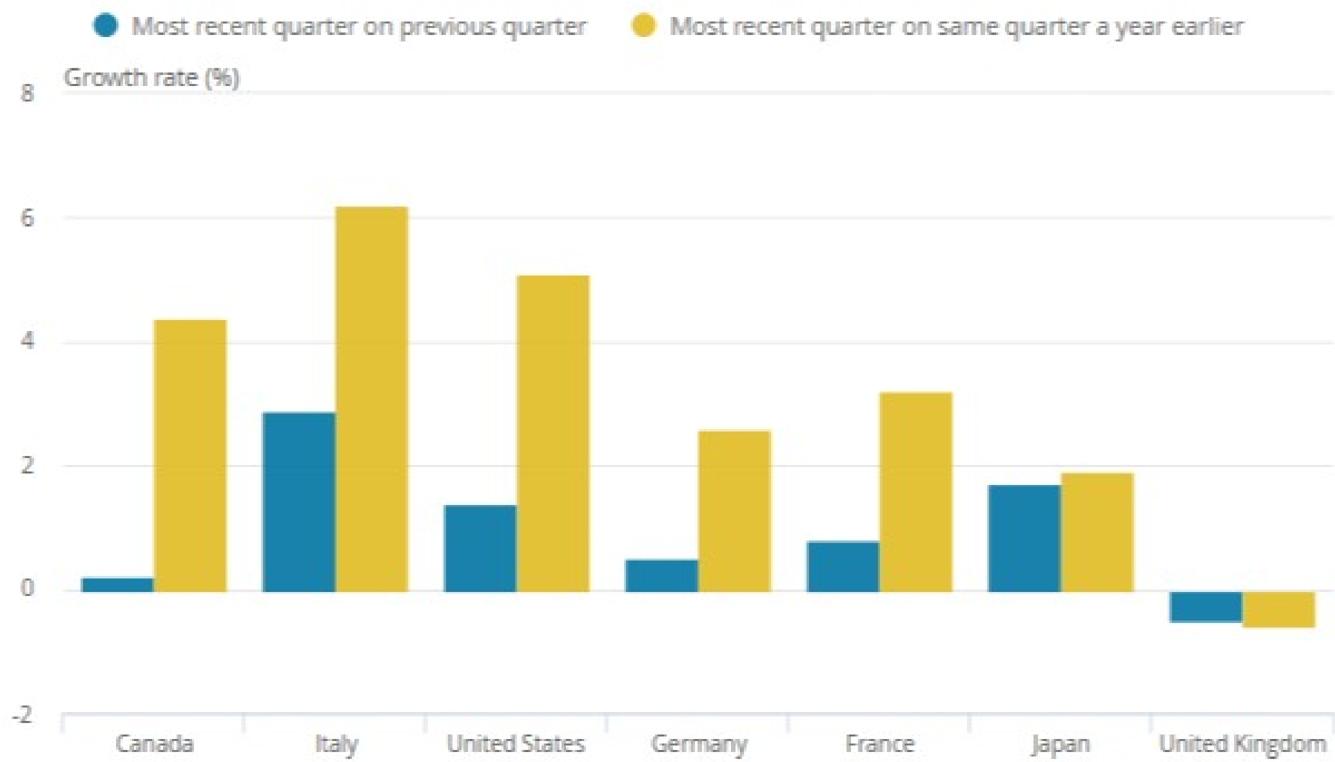
And our data show they are borrowing more and saving less.

Households took out nearly £80 billion in loans last year, the most in a decade; but they deposited just £37 billion with UK banks, the least since 2011.

International Comparison (G7) for Gross Fixed Capital Formation

Figure 7: Gross fixed capital formation growth for the G7 nations, for Quarter 2 (Apr to June) 2018, chained volume measure, seasonally adjusted

2016, UK



Source: Office for National Statistics (UK) and Organisation for Economic Co-operation and Development (OECD)

https://www.ons.gov.uk/economy/grossdomesticproductgdp/bulletins/businessinvestment/apriltojune2018revisedresults

So, it's just the UK heading in the wrong direction out of the G7

This isn’t just academic

For example, local authorities have to manage a £5.8bn funding deficit from 2017 to 2020 (LGA, 2017). Furthermore, a study released by the British Medical Journal reported that since 2010, England has experienced constraints in public expenditure on healthcare (PEH) and social care (PES) (Watkins, Wulaningsih, Da Zhou et al., 2017). **This study indicates that the constraints on PEH and PES have impacted mortality rates. The cuts in public expenditure between 2010 and 2014 were linked to an estimated 45 368 (95% CI 34 530 to 56 206) higher than predicted number of deaths in relation to pre-2010 trends. Deaths in those aged 60 and over in care homes accounted for the majority. Moreover, the study noted that changes in real PES per capita could be linked to mortality, mostly via changes in nurse numbers** (Watkins, Wulaningsih, Da Zhou et al., 2017). **Projections to 2020 based on the 2009-2014 trend were cumulatively linked to an estimated 152 141 (95% CI 134 597 and 169 685) additional deaths. Spending constraints, especially PES, are associated with a substantial mortality gap (Watkins, Wulaningsih, Da Zhou, et al., 2017). Meanwhile, between 2011 and 2016, the number of people sleeping rough in the UK had increased by 49%** (Crisis, 2017: 3).

The affects are real, detectable and happening now.

https://www.ohchr.org/Documents/Issues/EPoverty/UnitedKingdom/2018/Academics/BrunoDOliveira_UniversityofBrighton.docx

And on Universal Credit

From: **UN Special Rapporteur on extreme poverty and human rights UK Visit - Poverty Alliance submission**

Impact of Universal Credit

Reduction in income

Research has shown that cuts to Universal Credit can be expected to push at least 1 million more children into poverty by 2022. It can be reasonably expected, therefore, that the full rollout of UC in Scotland – particularly as a result in cuts to work allowances - will have a detrimental impact on the income of a substantial number of low income households and further increase poverty.

Increased foodbank use

It is clear that Universal Credit, in areas where it has been rolled out, has made it more likely that people will experiences income crises. One indication of this is the 52% average rise in foodbank use in areas after 12 months of full Universal Credit service.

Increased rent arrears

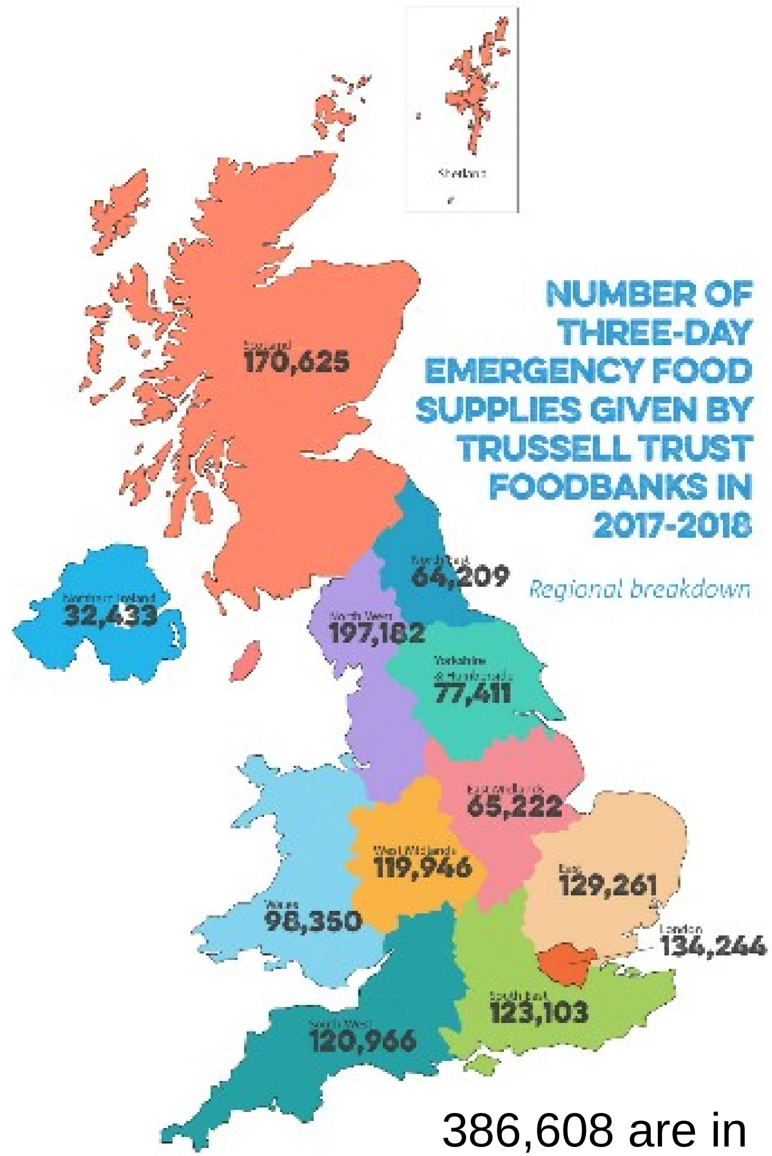
Particularly for people with unstable incomes (e.g. individuals in insecure work), Universal Credit can increase the likelihood of building up rent arrears (due to fluctuating levels of housing support being provided).

And Foodbank usage grows

Between 1st April 2017 and 31st March 2018, The Trussell Trust's foodbank network distributed 1,332,952 three day emergency food supplies to people in crisis, a 13% increase on the previous year. 484,026 of these went to children. This is a higher increase than the previous financial year, where foodbank use was up by 6%.

Read the press release

Number of three-day emergency food supplies given by Trussell Trust foodbanks



386,608 are in the SE = 29%

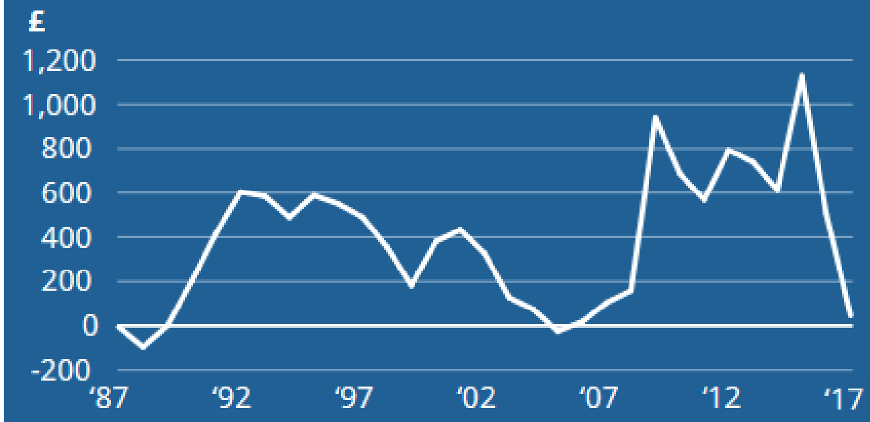
Are we living beyond our means?

Click through the cards to see how household budgets have changed in the last 30 years.

Budgets are being squeezed...

Difference between gross disposable income and spending per head

1987 to 2017 – UK



Household budgets are under increasing strain. Rising prices have led to increased spending in recent years, while disposable income has risen only modestly.

As a result, the gap between disposable income and spending per head has closed by around £1,100 since 2015, to the narrowest in 11 years.

...leaving us with less available to save

Households' saving ratio

1987 to 2017 – UK

Back in the early 1990s, the average household had around £120 left over to save from every £1,000 of income (after taking out their spending and taxes).

By 2017, this had fallen by two-thirds to just £41, which is the lowest ever.

We're investing in our homes

Household investment in non-financial assets
1987 to 2017 – UK

It's not just day-to-day spending that's on the rise. Despite budget pressures, households are also investing more in their homes than at any time in the last 30 years.

Households' investment reached a record high of £74 billion in 2017, most of which was spending on new homes and major home improvements.

We're turning to short-term debt

Stock of consumer credit
1987 to 2017 – UK

The amount of money owed in short-term loans has surpassed its pre-crisis level. These loans do not require any collateral (such as a house deposit) to be approved, but they're expensive to pay back because they demand higher interest repayments.

The stock of consumer credit – including credit cards, car finance plans and payday loans – has risen by nearly one-third in the last five years. Car finance is comfortably the fastest growing type of credit, with nearly 90% of new car purchases now funded this way.

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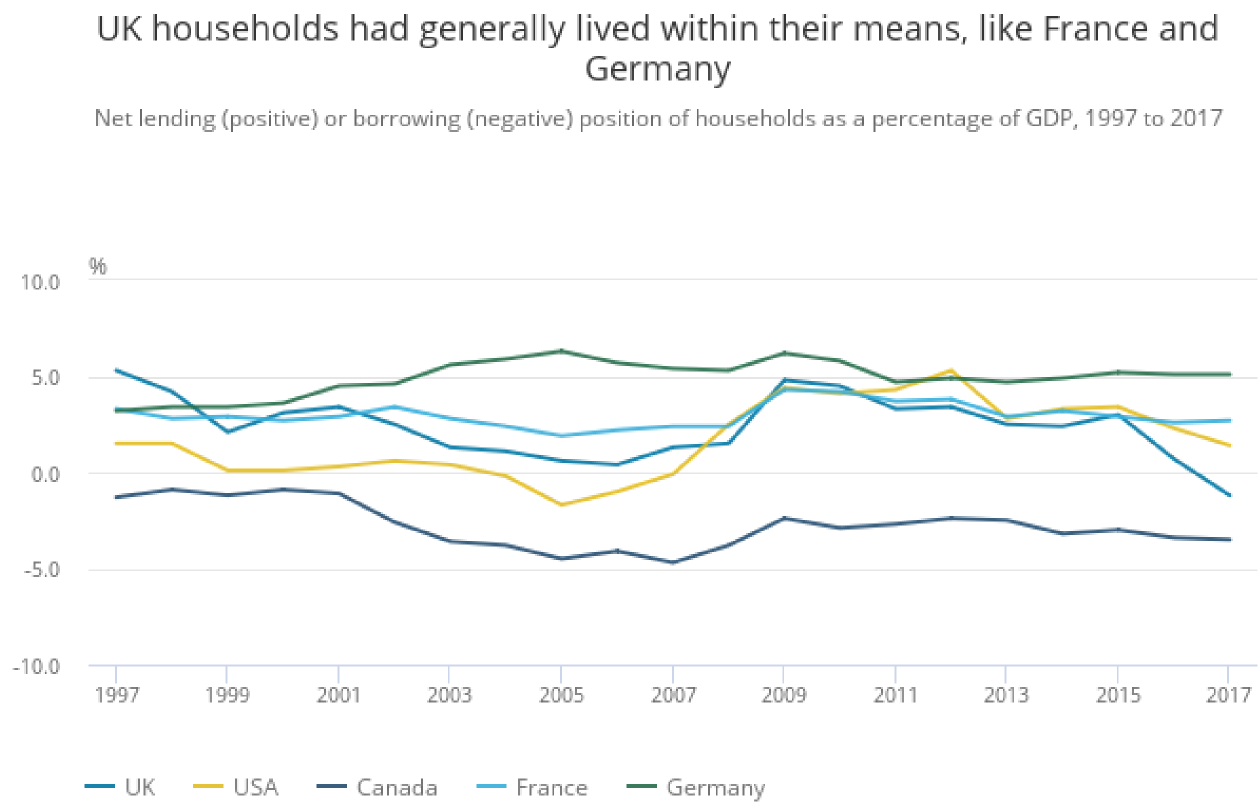
How does the UK compare with other nations over time



Source: Office for National Statistics, Statistics Canada, Bureau of economic analysis, Statistisches Bundesamt (Destatis), Institut national de la statistique et des études économiques

https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/articles/makingendsmeetarehouseholdslivingbeyondtheirmeans/2018-07-26

Looked at over a longer timescale, it becomes clear we are in unfamiliar territory

..so let’s look back to 2011 to what was written by Professor Mitchell

Prof Mitchell is a professional Australian economist who carries out research into the topics I have been discussing.

From a blog by Professor W Mitchell (Billyblog 29 April 2011) just after an Osborne budget

If you then consult some of the OBR papers you will come across this document (published April 21, 2011) – Household debt in the Economic and fiscal outlook.
http://budgetresponsibility.independent.gov.uk/wordpress/docs/household debt paper formatted.doc1.pdf
You will read the following March 2011 household debt forecast which is the OBR input for the "household debt projection in the Economic and fiscal outlook" (that is, the Budget):

"Our March forecast shows household debt rising from £1.6 trillion in 2011 to £2.1 trillion in 2015, or from 160 per cent of disposable income to 175 per cent. Essentially, this reflects our expectation that household consumption and investment will rise more quickly than household disposable income over this period. We forecast that income growth will be constrained by a relatively weak wage response to higher-than-expected inflation. ***But we expect households to seek to protect their standard of living, relative to their earlier expectations, so that growth in household spending is not as weak as growth in household income. This requires households to borrow throughout the forecast period.***"

The following Table is taken from the OBRs Table 1 and shows the forecasts for household assets and liabilities as a percentage of disposable income. It tells a particularly nasty story.

The OBR says that "net worth is forecast to decline as a percentage of income as the household debt ratio is expected to rise and the household assets ratio is expected to fall".

Table 1: Household assets and liabilities as a percentage of disposable income (end calendar year)

	debt	physical assets	financial assets	total assets	net worth
2010	160%	417%	452%	869%	709%
2011	160%	382%	445%	827%	667%
2012	162%	370%	442%	812%	650%
2013	165%	366%	441%	807%	642%
2014	170%	362%	440%	802%	632%
2015	175%	358%	439%	797%	622%

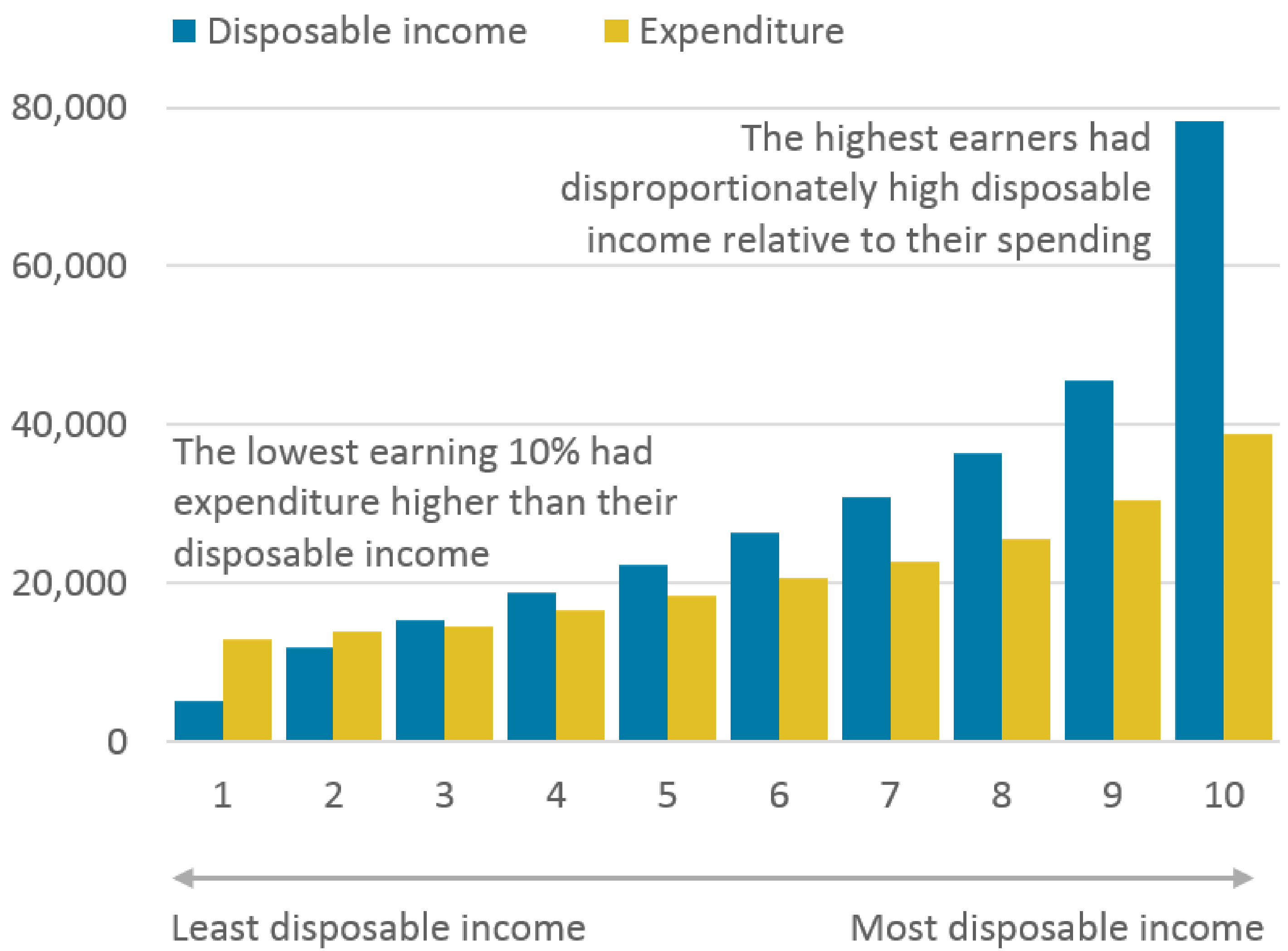
Prof Mitchell continues:
"What the British government's strategy amounts to is reducing public debt at the expense of more private debt. Prudent fiscal management requires that exactly the opposite is the case when the economy is floundering – given current conventions about matching budget deficits with public debt issuance.

It is totally unsustainable to create a growth strategy that relies on increased private sector indebtedness when that sector is already burdened by crippling levels of debt."

http://bilbo.economicoutlook.net/blog/?p=14325 29th April 2011

WE ARE NOT WHERE WE ARE BY ACCIDENT, IT'S DELIBERATE AND PLANNED

Disposable Income and Expenditure
by decile



https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/articles/anexpenditurebasedapproachtopovertyintheuk/financialyearending2017

Remember – by returning to the beginning

- The government doesn't need to borrow
  - It spends to buy needed goods and services to benefit the general public
  - The danger is inflation due to too few resources being available for sale
    - bond sales and taxation control available money
    - Interest rates control cost of borrowing
  - **The money spent by the government is the non-government sector's wealth**

Thanks for listening