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Introduction

An analysis of the flow of funds between the Bank of England, the U.K. government and the U.K. households will show some surprising results. The Quantitative Easing program of the Bank of England, which started in March 2009, saw the Bank purchasing £895 billions of government debt or nearly 36.6% of all outstanding U.K. government debt as per the end of November 2022.

Such holdings represent a funds flow from the Bank of England to the U.K. government which reduced the need for the U.K. government to raise more funds in the open market, either through more borrowings or by increasing tax levels.

A second type of funds flow is the one from households by increasing the savings levels in home equity and in a retirement pension.

A third flow is from households and businesses in transferring some of their earnings to the U.K. government.

What these flows have in common is that they affect the spending power of households directly and through the company sector indirectly. Currently, the household spending flows are a hot topic as households are faced with rapid price rises; often referred to as the costs of living crisis.

The aim of this paper is to show that fund flows can be re-directed with the aim to stimulate economic growth levels.

1. Funding U.K. government expenditure.

In 2007, the funding of U.K. government activities looked very stable. U.K. government expenditure looked predictable and government debt to GDP stood at a level of 34%. However, since 2007, the Government debt to GDP levels have gone up to 101% as per September 2022. Not only that, but the Bank of England has strongly supported the U.K. Government with its Quantitative Easing program. The Bank has bought £ 895 billions of Gilts over this period. As per the end of June 2022, the net Government debt outstanding was £2.436 trillion. The £ 895 billion in funding received from the Bank of England covered 36.7% of the total U.K. government debt outstanding.

One more fact needs to be mentioned. The U.K. Government did decide, long ago, that civil servants pension obligations only start at the date of retirement. Therefore, during the civil servants working life there is and was no obligation to set aside funds according to the U.K. Government's philosophy. The unfunded amount due currently stands at £ 2.4 trillion. This amount equals 1.12 times the 2021 U.K. GDP level and nearly 2.2 times the total U.K. government expenditure level over 2021. Not an insignificant amount.

Other countries, like for instance the Netherlands, are providing for such amounts as and when civil servants are employed. In the Netherlands civil servants pay a percentage of their salary each month into a specific state-owned pension fund during their working life. The real difference between the U.K. system and that operating in the Netherlands is that in the Netherlands a specific percentage of the civil servants' salary is transferred monthly into this pension scheme. Such cash is managed by professionals who always decide about the risk reward ratio. In the U.K. such savings are known on paper only and not invested into shares, bonds or other financial assets that could help economic growth.

In conclusion, the funding of U.K government debt levels by the Bank of England is a clear case of a flow of funds transfer, whereby the beneficiary i.e., the U.K. government receives funds it would otherwise have to borrow in the open markets or obtain through higher tax levels. In addition, the practice to postpone saving for civil servants' pensions during their working life creates a future claim.

Does this arrangement matter? In the view of this writer, it does, because these actions are aimed at correcting a fiscal deficit on a temporary basis. It is not only the U.K. Government that suffers a deficit these days; the cost-of-living crisis affects nearly all households in the U.K.

2. U.K. households and the cost-of-living crisis.

The two key savings elements for most households are the purchase and funding of a home and the savings accumulated in pension funds. To start with the latter, nearly all employees apart from most civil servants are usually entered into a funded pension fund arrangement. In the Census 2019, the latest data are included[1]. The total assets in Defined Contribution and in Defined Benefits schemes were a total of £2.2 trillion by the end of 2019. The combined value of U.K. pension funds was 76.44% of the U.K.'s GDP in fiscal year 2019.

Savills U.K. has kept track of the value of homes in the U.K.[2] It estimated that the total values of all homes in the U.K was £ 7.56 trillion as per March 2021. Of this value, London, and the Southeast accounted for £3.19 trillion or 42% of all values. "Finder" keeps track of the total volume of outstanding mortgages in the U.K. among other statistics[3].

In the U.K. the total volume of outstanding home mortgages is about £1.6 trillion with an average mortgage amount of £57.797 per household. This means that the net housing stock value in the U.K. is just about £6 trillion if one takes into account the recent house price rises.

The value of the two main savings items: Pension savings and home equity added up to £8.2 trillion. The latest GDP level for 2021 was £2.2 trillion. This shows that these two savings categories were over 3.7 times the output level in 2021.

If one considers that the total tax revenues of the U.K. government over the fiscal year 2021/2022 were £718 billion and the estimated GDP for the fiscal year 2021-2022 was £2.209 trillion, then it becomes obvious that the savings levels of households in pension savings and in home equity are by a large margin more relevant to households than other factors.

What these data also show is that households and especially the younger generations suffer the most from increases in interest rates. This generation needs to save up more to start the process of acquiring their own home, while simultaneously being confronted by higher interest rates over their home mortgage borrowings. This at the same time when inflation levels have reached the highest levels for a long period. According to the Office of National Statistics[4], the inflation rate for November 2022 reached the level of 9.3%. This figure reflected higher costs of housing and services as well as increases in electricity, gas, and food prices.

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[1] https://www.ons.gov.uk/economy/investmentspensionsandtrusts/articles/ukpensionsurveys/redevelopmentand2019results

[2] https://www.bing.com/search?q=Savils+housing+stock+values+in+the+U.K&form=MSNSB1&refig=ff97e4ebb3dc408cada0d14d83fd2894&mkt=en-gb

[3] https://www.finder.com/uk/mortgage-statistics

[4] https://www.ons.gov.uk/economy/inflationandpriceindices

3. The flow of funds process

GDP figures only show the (annual) output level in a country and some of the flows of funds related to this output, i.e., the tax transfer from individual households and businesses to the U.K. government. What is missing in this analysis is the accumulation of funds for some specific purposes, in other words the savings levels. The building up of home equity is for many households a 25-to-30-year activity. The building of a pension reserve takes for most households nearly the whole of their working life. The combined accumulation of savings levels for home equity and pension provision were 3.7 times the GDP level of the fiscal year 2020-2021 or £8.2 trillion. Compare this with the government revenues for the same period of £718 billion and the logical conclusion can only be that the U.K. economy is not defined by its tax intake in one specific year, but by what happens to the two most important savings categories: home equity and pension fund savings. In other words, the aim of the flow of funds approach is to reach the goals of owning a home and having a sufficient pension during the retirement years. These are long term goals and for nearly all households can only be achieved over a long period of time.

How can this process be managed?

The first element in a flow of funds approach is that the theory needs to be linked to the reality in the savings markets. Households save with a purpose; the first objective is to save enough money over the years to acquire a home and the second one is to save enough for a decent retirement income.

Neither of these objectives are short term and they are clearly related to households.

One lesson that the U.S. situation can teach us is that the swings in house prices can be quite dramatic. The Federal Reserve publishes quarterly data on household owners' equity in real estate levels. In Q4 2005, U.S. households had a level of Owners Equity of $ 14.375 trillion.[5] This level dropped to $8.277 trillion by Q1 2012 and did only reach the level of $14.517 trillion by Q2 2016. The loss of $6.1 trillion in home equity between Q4 2005 and Q1 2012 was only recovered by Q2 2016: an adjustment period of well over 10 years.

Such loss of home equity and the adjustment period to recover from the losses took more than ten years in the U.S. For the U.K. a similar warning has been given.

In the U.K. according to data[6] from the Office of National Statistics, the average house price for the U.K. was £200,000 in October 2007. In line with the housing crisis in the U.S. over the period 2007-2009, U.K house prices dropped by some 15%. After 2009, the average U.K. house price went up to £296,000 by October 2022.

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[5] https://fred.stlouisfed.org/series/OEHRENWBSHNO
[6] https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/housepriceindex/october2022

3.1 The risks to pension savers and to homeowners in the U.K.

The risks to pension savers is quite different from the risks that homeowners in the U.K. experience. The risk for pension savers is that they require a job that is linked to a pension system. Self-employed need their own flow of funds to create their own pension provision. Nearly all U.K. companies offer full time employees a participation in a pension savings scheme. What they do not offer is an investment guarantee. The usual arrangement between employers and their employees is that both pay into a pension scheme. This process can be interrupted by employees by temporarily opting out. In an article in the U.K. Times newspaper headed: "Millions halt pensions to pay their bills"[7], it was made clear that 20% of employees in workplace pension schemes have opted out or have asked to have their pension reduction reduced. Another 20% are considering doing so. The need to maintain spending powers is extremely strong in the short term when the cost-of-living crisis is hitting all employees, with the lower income levels hit disproportionally hardest.

The risks to U.K. homeowners are even more acute in case they can no longer fulfil their mortgage payment obligations. Temporarily opting out of a pension payments scheme reduces the future income flow but does not destroy the right to have a lower pension. Homeowners, who can no longer afford the mortgage payments, risk losing most or even all their past savings invested in a home. Such risks are not equally spread between young or old. Young workers at the start of their career do not only need a stable income but generally a higher mortgage level to acquire a home. Middle age and older households usually have a greater buffer to absorb increased mortgage costs; they usually have also a higher percentage of home ownership. The risks to all these households originate from increased interest rates.

The Bank of England decides about the changes in the base rate.[8] The Bank aims to keep inflation levels at 2%. The Bank indicates that lower rates increase the value of wealth and higher rates increase the costs of goods and services. The current base rate is 3.5%. The Office of National Statistics has calculated the U.K. inflation rate at 9.3% in its latest announcement[9].

This gap between the base rate and the inflation level at 9.3% as per November2022 has not been so large since October 1990 when the inflation level reached 9.2%.

[7]https://www.thetimes.co.uk/article/03a2c39e-86dc-11ed-bb21-8f4d97ec7b02?shareToken=36f6b0b9354b22272d30ad0190ddea59

[8] https://www.bankofengland.co.uk/monetary-policy/the-interest-rate-bank-rate

[9]https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/l55o/mm23

4. A risk management strategy for households

Notwithstanding how necessary the Bank of England may view its decision on raising interest rates, it seems important to consider the effects of such decision on households and companies. The Resolution Foundation, in a recent report[10] , discussed the outlook for 2023. It stated that a combination of falling real wages; £900.- higher energy bills and increasing mortgage bills for at least 2 million households can be expected. The average mortgage costs to these households will be £3000.- more than their current mortgage obligation. These households will also be confronted with higher tax bills. This scenario will put a lot of pressure on households to overcome such strong headwinds.

With a total estimated net value of the U.K. housing stock of £7.56 trillion, a Quantitative Easing Home Equity exercise (QEHE) may be considered. Initially especially aimed for the 2 million households which see their mortgage payments go up in 2023 by £3000. The Bank of England could consider providing the £3000 to those mortgage holders at 0% interest rate as it is in the national interest to help these households. For these group of households, the bill would come to about £6 billion. If the Bank would consider a wider range of support, it could also include a temporary increase to compensate for the higher energy bills. The support to households could be based on the home equity levels, whereby the funding goes directly to the household, via the bank or financial institution which provided the original mortgage. Such claim system overcomes the £3000 increase in mortgage costs plus perhaps the energy costs and can be arranged as a temporary subordinated claim on the home. The payback date could be flexible in line with macro-economic developments. The same set up can -at a later date- serve all the other households in a similar position.

This risk management strategy helps households to overcome the negative effects of an interest rate increase. It can be a temporary facility, which could be operated when household finances come under unduly high strains because of the increased base rate. One cannot expect households to sell up and move to smaller or less expensive accommodation each time the Bank of England decides to increase its base rates. Another effect of a rise in base rates for households is equally important, which is a drop in house prices. According to a Nationwide report published in December 2022, house prices fell for the fourth consecutive month; the worst run since 2008. A Times newspaper[11] article indicated that two third of economists surveyed expected house prices to drop by more than 4% in 2023.

Wanting to own one's home is a desire for nearly every household. The increases in the base rates do create a loss position for households as and when their current fixed rate funding of their home loans comes to an end and needs to be replaced. If it is combined with a loss in home values as well, then some of the values of past savings made are obliterated. As was stated in the U.S. experience example, it took more than 10 years to readjust.

[10] https://www.resolutionfoundation.org/publications/new-years-outlook-2023/
[11] https://www.thetimes.co.uk/article/house-prices-set-to-slump-during-2023-8rkvf7ztw

The key question is: Can such loss be temporarily overcome with a Home Equity facility funded by the Bank of England and transferred to the individual household and into the account of the financial institution which granted the mortgage in the first place?

What the Bank of England achieves in doing so is that it keeps up households spending power. A restoration of maintaining household's spending power on basis of their home equity overcomes the sharp deterioration in the financial position of these households. The Bank of England will become an economic risk taker, but with an outcome that can be expected to lower risks to households, rather than increasing them.

5. Some conclusions

A home means a sense of security for households. The cost-of-living crisis has reduced the purchasing power of households. Any increase in the base rate affects households, especially where it hurts most: In their monthly mortgage payments. The prediction is that in 2023, two million households will come off their existing mortgage contract and will lose £3000 per household in replacing their mortgage at a higher level. In later years many more households will feel the same pressure as their mortgage rates go up. Households do not aspire to have to pay more for their mortgage but are forced into such action. On top of this the costs of energy and related items also go up. Households are confronted with an asset based (homes) and a world inflation-based squeeze. The U.K. government cannot easily come to the rescue as it itself is under pressure to spend more on salaries and other expenses. Tax rates might even have to go up.

The squeeze on households can be overcome by a program of Quantitative Easing Home Equity, whereby the Bank of England decides that a temporary facility for households can be arranged based on their ownership of a home. In exchange for a temporary transfer of a small level of home equity, the Bank can make some funds available to households that see their mortgage payments go up because of the Bank's decision to increase the base rate(s). The aim of a base rate rise is to slow down inflation levels. However, it is highly unlikely that it is the intention of the Bank to harm households in their endeavour to pay for their mortgage and at the same time see the values of the properties drop.

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