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Kees De Koning

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Introduction

Who, in the U.S., is ultimately responsible for servicing government debt levels? They are the individual households, directly and indirectly through the ownership of companies.

The number of households increased from 116.01 million as per the end of 2007 to 129.93 million per the end of 2021.

The U.S. government debt per household increased from $53,617 per household as at the end of 2007 to $94,444 as per the end of 2021. With a 2021 median household income of $67.463, the U.S. government debt per household is now 1.4 times the median annual household income level over 2021.

All central banks aim to stabilise prices when price levels go up. The usual response is to increase interest base rates. It is likely that the Fed will further increase its interest rate levels this year. The option of even more Quantitative Easing is not a very attractive one as the source of repayment of government debts will ultimately have to come from higher taxes on households.

U.S. households will bear the brunt of such upward interest rate changes as and when the Fed adjusts its interest rates due to the expected further rise in consumer goods prices. Increases in interest rates are aimed to slow down demand levels to lower inflation pressures. U.S. households are and will be confronted with rising prices, higher taxes and consequently a reduced level of purchasing powers.

There are four variables that play a major role in the economic adjustment processes: two are related to current disposable income and tax levels while the other two are linked to savings for pensions and savings in home equity. Conversion of wealth into income levels is rarely a straightforward process.

A new approach might need to be considered: “Using existing home equity levels as a generator for economic growth.” Such approach would be an asset-based approach.

This approach can be called the bottom-up approach: Quantitative Easing Home Equity (QEHE). It starts with each household individually and the level of purchasing powers they require. To allow households to use some of their home equity at 0% interest rate could provide the U.S. economy with just the boost it needs. It could be a freedom of choice method for households within a macro economic program.

1.The effects of higher inflation rates on U.S. households.

In slightly over 20 years, the U.S. outstanding government debt level has gone up from U.S.$ 5.670 trillion in the fiscal year 2000 to U.S.$ 28.428 trillion in the fiscal year ending in 2021.

If one compares these data between the U.S. government debt and GDP for the year 2000, the ratio between these two statistics showed that in the year 2000, the U.S. government debt to GDP level to be “only” 54.5% of GDP. The same calculation for the year 2021 shows a ratio of 135% of government debt as compared GDP. These data reflect a substantial and structural economic change.

The Federal Reserve has played a major role in financing a share of this debt level through its Quantitative Easing Programme. This programme started on 1 September 2008, when the volume of outstanding funds was $905.253 billion. The latest available data on April 25, 2022, showed an outstanding QE level of $8.939 trillion.

There are basically three methods to counteract a rise in inflation levels. In the U.S., the current inflation rate has reached a 40-year high according to the Bureau of Labour Statistics. In March 2022, consumer prices in the U.S. were 8.5% higher than a year earlier. Food prices rose by almost 9% over this period, while energy prices were up by close to a third. New cars sales prices were up by 12.5% and second-hand vehicles prices by 35%.

The households most affected by these steep price rises are the lower income households, which in the U.S. could be assessed as the bottom 60% of households by income levels. This group of households generally has a lower level of savings than the top 40% of households.

The three methods currently in use for managing the U.S. economy are: 1. Changing the base rate in an upward manner to slow down demand levels in the economy. 2. Quantitative Easing, which has been used with the objective to help the U.S. government to spend more; above its level of taxes collected (creating money). Method 3 has been to increase the Government borrowing ceilings above its revenue levels.

The common denominator of all these three methods relies on the Federal Reserve or on the U.S. Government to take the lead in attempting to overcome the inflationary pressures.

One could call these methods: the top-down methods.

There are very good reasons to look for opportunities to start a program of a bottom-up approach involving households directly.

The first reason is that in the U.S. the outstanding government debt level has increased from $9.0 trillion as per the third quarter 2007 to $28.4 trillion as per the third quarter 2021.[1] As mentioned in the introduction, this development increased the debt per household from $53,617 to $94,444 for a household at a median household income level. This implies that the government debt level per household has now reached a level of 1.4 times the annual median household's income level. For 2007, it was just 1.055 times the median household income of $50,233. Is it a sound policy which sees these claims grow higher and higher?

There is another statistic from the Federal Reserve: the statistic which measures the owners' equity in real estate level.[2]

In Q2 2006, this level reached $14.231 trillion. By Q1 2012 this level had dropped to $8.277. The last available data are for Q4 2021 when the level reached $26.36 trillion. The Fed's latest figure for the current GDP over 2021 was $22.99 trillion. In other words, the home equity level now represents a multiple of 1.147% the total U.S.GDP of 2021 at current prices.

2. Asset and liability management as a supplement to inflation management.

2.1 The role of pension funds in the U.S

The U.S. has by far the largest savings in pension funds for any of the OECD Countries. By the end of 2019, the U.S. had a pension savings total of $18.8 trillion or 58% of the total for all OECD countries.[3]

The U.S. has an even higher level in home equity savings. According to the Fed's latest data for Q4 2021, the level of home equity has risen to $26.4 trillion.

Just these two savings levels together of $45.2 trillion represent nearly 200% of the 2021 GDP level of practically $23 trillion. A conclusion one may draw is that many U.S. households are asset rich but cash poor.

A savings in a pension fund is a saving made with the intention to have an acceptable disposable income after retirement. To use such funds before the retirement date -which in in the U.S. is an option- may defeat the aim of having a specified annual income after retirement. This is especially important for 401 K and other defined contribution plans.

[1] https://fiscaldata.treasury.gov/datasets/historical-debt-outstanding/historical-debt-outstanding

[2] https://fred.stlouisfed.org/series/OEHRENWBSHNO

[3] https://www.oecd.org/publications/oecd-pensions-at-a-glance-19991363.htm

2.2 The savings in home equity.

Over the years 2000-2021, why did the ratio between the collective households' home equity and GDP levels showed such wild swings? One has only to follow the unemployment data over these periods to understand the pressures that households were under to keep their mortgage payments up to date. In October 2006, the number of unemployed reached a low of 6.727 million unemployed. This number of unemployed increased rapidly during the financial crisis to peak at 15.219 million by November 2009. It took another 8 years to October 2017 before the unemployment numbers dropped to 6.7 million. It may be pointed out that such a long adjustment period comes with many stresses.

The first stress element can be found in the link between home values and GDP.

In a previous paper by this author about economic growth, employment levels and home equity in the U.S.[4], two key issues were addressed: firstly, the median term swings in the ratio between home equity and GDP over the period 2000 to 2021 and secondly some explanation of how such swings could occur. Just to repeat the key data: In Q1 2000, the home equity ratio to GDP was 68.05%; by Q4 2005 it had increased to 107.88%. By Q4 2012 the ratio had dropped to 50.41%. By Q3 2021 the ratio had again recovered to 109.11%.

The Federal Reserve publishes data about the median house sales price in the U.S.[5]. In Q1 2000 the median house sales price was U.S.$ 165,300. By Q1 2007 it reached U.S.$ 257,400. By Q3 2011 the median price had dropped to U.S.$ 223,500. The recovery period started and by Q4 2017 the median house sales price in the U.S became U.S.$ 337,950. The latest data are for Q1 2022 when this median price became U.S.$ 428,700.

In a recent study by senior economists at the Federal Reserve[6], attention was given to the question of how voluntary equity release was related to home equity values. One main conclusion was that households, especially at the lower income levels, had become more careful before entering into private sector equity release schemes, notwithstanding the appreciation in house prices.

[4] MPRA_paper_111827.pdf

[5] https://fred.stlouisfed.org/series/MSPUS

[6] https://www.federalreserve.gov/econres/notes/feds-notes/how-much-does-home-equity-extraction-matter-for-spending-202005

The Fed also produces statistics that show how home ownership levels have moved over the years.

In recent years, the highest home ownership level was reached by Q3 2004 with a 69.0% home ownership in the U.S. Between Q1 2004 and 2016, this rate dropped to 62.9% by Q2 2016. It took to Q1 2022 before the level came back up to 65.4%.[7] Home ownership levels did not exceed the 69.0% level over the last 18 years.

There is another statistic from the Fed about the Households owners' equity in real estate level[8]. This statistic allows one to make a comparison between the home equity levels and the GDP levels. The ratios between home equity levels and the GDP figures show how volatile the home equity levels were compared to GDP levels. For Q1 2000 the ratio was 68.05% for home equity as compared to GDP levels. By Q4 2005 the ratio was 107.88. By Q4 2012 the ratio had dropped to 50.41% and by Q3 2021 the ratio was back to 109.11%.

3. Main threats and opportunities

The currently expected rise in inflation levels goes far beyond the levels of the originally expected ones. In a recent paper produced by the Fed in Cleveland[9]' the realized inflation for the year to February 2022 was 7.91% while the expected inflation level was 2.61%. With many prices rising rapidly, -both in commodities and in other goods and services-, the outlook is for a continuation of a substantial series of upward price movements.

This threat is on a scale not seen for many years. Just to increase the base rate to counteract the current inflation pressures will lead to a recession more severe than the 2008 recession. The effects on households since that recession led to increased unemployment levels from 2008 until 2017.

The two main opportunities to stave of the currently expected recession are potentially embedded in the savings levels in pension savings and the ones in home equity.

To start with the pension savings: the aim of these savings is to provide households with a reasonable level of incomes after retirement. Any draw down before the retirement age reduces the available income levels after retirement. For the bottom 60% of income groups this is more relevant than for the top 40%. The latter often have other savings to help them through their retirement life. On this basis one may conclude that a preferred economic

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[7] https://fred.stlouisfed.org/series/RHORUSQ156N
[8] https://fred.stlouisfed.org/series/OEHRENWBSHONE,January 10,2022
[9]https://fredblog.stlouisfed.org/2022/03/the-meaning-and-mechanics-of-inflation-shocks/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog

position could be that households from the bottom 60% of households by income level would be advised not to draw down their pension savings before their retirement.

The building up of home equity usually starts at a relatively young age, when a household has been able to save enough for a down payment on a home. The remainder funding usually comes from a mortgage provider.

It is a normal requirement from these providers to expect a margin over their cost of funds. Gradually over the years the remaining outstanding loan amount is expected to be repaid.

The key difference between pension savings and home equity is that the fluctuation in asset prices in pension savings do not immediately lead to any curtailment in income levels when asset prices drop. In the case of mortgages, the agreed contract between lender and obligor makes it possible for the lender to call in the mortgage as and when the "borrower" defaults under the mortgage contract. The powers of the lenders undermine the powers of the savers!

The last recession started in 2008. From that year onwards to 2017, many households defaulted on their mortgages as unemployment levels increased rapidly. About one in four households lost their home between 2007 and 2016 due to foreclosure proceedings. In economic terms it represented a destruction of savings levels not experienced during many, many previous years.

In a previous paper by this author some key factors were illustrated.[10]

"The U.S. financial crisis of 2008 created a recession: the Great Recession. A recession is technically declared over after two subsequent quarters of economic growth. By Q3 2009 this recession was declared over. However, the laws of unintended consequences show a totally different picture. Between May 2007 and October 2009 nearly 7 million U.S. individuals lost their jobs and thereby their incomes. It took just over ten years before the unemployment rate had dropped again to 4.4% -to what it was in December 2006. Equally unintended was the development in the real median household income. In 2007 this income was $59,534. It dropped to $54,569 for 2012 and it only returned to the levels of 2007, by 2016. Another unintended consequence was the difference between the fix for the banks in trouble and those for individual mortgage borrowers in trouble. Nearly all banks were bailed out in 2008, with the odd one declared bankrupt. For individual households/mortgage borrowers there was no respite in being pursued for outstanding mortgage debt. Over the period 2007-2014 21.228 million U.S. households were confronted with foreclosure proceedings. This number represented 41.4% of all household mortgage holders in the U.S. House prices tumbled after 2007. The S&P/Case-Shiller national home price index seasonally adjusted stood at 184.52 in January 2007 and for the first time only exceeded this level by November 2018 at 184.87. New housing starts also dropped significantly. In January 2006 the number was 2.273 million annualized new starts. The trend line moved from annualized 490,000 new starts in January 2009 to 1.230 million by January 2019. Another main unintended consequence of the financial crisis was the effect on U.S. government borrowings. U.S. Federal debt increased by $4.8 trillion between Q4 2007 and Q4 2010, while real GDP still shrank. In three years, the Federal

[10] The Laws of Unintended Consequences© Kees De Koning, MPRA paper 92839 19th March 2019

Government's debt increased by more than 50% and its growth did not stop there. Another major change was in interest rates. Fed funds rates have not been so low for over 60 years, until recently. All these factors show that a more streamlined approach to economic thinking is needed. The interactions between the financial markets and the real economy can be better handled. "

4. The bottom-up approach

Imagine a world in which U.S. households can save but, in some periods, also temporarily reduce their home equity. It probably sounds fanciful, but it may just be the solution that could be considered under the current economic circumstances if the program is well defined.

The current inflation levels in the U.S. are racing upwards. The Federal Reserve has as its tool the setting of interest rates. But when current inflation levels are running at 7.91% and continuing in an upward direction, then rate setting becomes an extremely difficult task.

QE programs have been used to help the U.S. government to spend more than its tax revenues. These programs postpone the dates that households will be called on to repay such debts. The nearly U.S.$9 trillion in outstanding QE funds have helped the U.S government to spend more than its revenues. For 2021, the U.S. government revenues level was U.S.$ 4.05 trillion and its spending level was U.S.$6.82 trillion.

What the programs have -so far- not tried is to support households directly -a Quantitative Easing Home Equity variant or QEHE.

The question could be why it has not been done yet.

In the years since 2008, the length and depth of the recession was accelerated by the financial institutions that participated in the private sector "bale out" of indebted households. Rather than having a policy of Quantitative Easing directly accessible for qualifying households; it was left to private financial institutions to claim that short term non-payment was a sufficient reason to take over the embedded debt of the 21.228 million homeowners and for many take over their homes. Many households lost substantial sums in this process, including many that were forced out of their homes.

A bottom-up approach would have produced much better results.

How could such a system work?

The first question to ask is what is the objective of such scheme? On a macroeconomic level, there is no right or wrong level of home equity savings. However, the large fluctuations as described in the above, show what kind of long-term effects this savings element can have on economic growth and on the national but also on the households' welfare levels.

The U.S. government and especially the Federal Reserve could create a mechanism that works for households individually and for the U.S. as a nation. In the current situation there could be three elements to such approach.

The first element is the acceptance that the current level of home equity of $26.36 trillion is at an all-time high. Some of this equity could be turned into cash for the group of 60% of the households with the lowest incomes. The experience of letting the private financial sector do this over the period 2008-2017 led to rapidly rising unemployment levels and an extremely stretched recovery period.

If the Fed would create a scheme -Quantitative Easing Home Equity or QEHE- that would offer homeowners occupiers from this group of lower income households a temporary advance at 0% costs for a limited period what would such scheme mean to households, to the financial sector lenders, to economic growth levels and to the U.S. government.

Households would have to decide whether they -in these times of financial stress- would accept such additional income amounts of cash. My expectation is that they would as such supplementary income would be gratefully added to their income. Higher prices are easier to cope with, with the benefit a temporarily higher income. Without such income adjustment, demand levels will fall.

Could the temporary income boost be allowed to service only the interest due to banks? The first observation could be that in the past, the U.S. government did rely on the private financial sector to settle outstanding claims. As indicated in section 3 above: the consequences for many U.S. households were catastrophic especially for those on lower incomes who lost their jobs and many of them their homes as well. If the choice is made that the financial sector will only receive the interest amount due, this QEHE will free up a sizable amount to be used for consumption purposes. Of course, the banking sector will need to agree, but with some persuasion that this scheme reduces credit risks, they might well do so.

Economic growth levels can be maintained at a higher level than would have been possible without the cash injection. Simultaneously home repossessions will remain at low levels and house prices may drop less than when the private banking sector pursues homeowners.

For the U.S. government it would mean that the drop-in economic activity would be less severe; thereby receiving a higher tax income than without such scheme.

To make it work requires the involvement of some government owned financial institutions.

The three State Owned financial companies, such as Fannie Mae, Freddy Mac and Ginny Mae come to mind as possible intermediaries.

5. Some conclusions

The recovery period from the Great Recession which started in 2008 took 10 years before employment levels, house prices and some of the savings were restored. It is not recommended to use the private sector as a source of financing for this recovery period.

The current crisis is not about the U.S. government. It has increased its spending levels over the years to such an extent that its government debt has increased to 123.39% by Q4 2021[11] of GDP.

It is recommended that the Federal Reserve considers a different approach to QE, namely Quantitative Easing Home Equity; a scheme managed by the Fed but executed by selected Government Owned financial institutions.

The Federal Reserve would have total control over the group of households eligible for such financing. It could decide about the level of QEHE allocated per household or household group. It could decide for how long such financing is available before repayments need to be made. It could also decide that the temporarily release of home equity could be at 0% interest for the period that the facility is outstanding. Any extension for longer than the decided period would incur a move to commercial interest rates.

What is key in all this is that the lower income households get support when inflation levels become exceptionally high, and the borrowing rates go up and up. The level of QEHE support can be varied according to the response from the eligible households.

Whether the Program reaches U.S.$ 2 or 3 trillion is less important, than avoiding lower income households again becoming the victims of an avoidable home equity crisis. Giving these households the chance to pay for the increased prices on basis of their home equity, would reduce the length of the macro-economic adjustment period. An increase in base rates could be more limited and would have less side effects.

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