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A proposal to use two interest rates in the U.S.:

The Fed Funds Rate and the Economic Recovery Rate.

Kees De Koning

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1. Introduction

The Federal Reserve has indicated that it will gradually reduce its purchases of eligible securities (Quantitative Easing) from November 2021. At the same meeting of the Federal Reserve Board, the Committee members who decide when to start raising interest rates were split equally about a possible starting date. The current guidance rate is between 0% and 0.25%. If the guidance rate is changed, the banking sector follows.

An element that needs further attention is how an interest rate rise would affect households and thereby employment levels, profit levels of companies and the tax receipts of the U.S. Government.

Take mortgages as an example. A mortgage represents the encumbered element of a home. The second element is the home equity savings element. In case of an increase in base rates, the financial sector can be expected to follow up with an increase in mortgage rates. The borrowers will have no choice but to pay up.

There is another option that focuses on the savings element in U.S. home equity, currently estimated at $23.6 trillion. Treating home equity savings as a key to economic expansion needs a system that helps households to temporarily reduce some of such home equity and use it for funding its consumer spending levels.

The financial sector cannot lend funds at 0% as they borrow their funds at market rates. However, the Fed can do so by introducing not one but two different rates: one the Fed funds rate, which influences the rate for the financial, commercial and Government borrowing sector and the second one for a temporary release of some home equity for households; the Economic Recovery Rate (ERR). The latter –a 0% rate- can be applied as a micro and equally a macro economic tool to stimulate the U.S. economy as and when needed.

Why and how such dual interest rate system could work is explained in this paper.

2. The U.S. household's home equity and outstanding mortgage amounts over the period Q4 1990- Q1 2021.

One can distinguish four different periods in the Households Owners Equity in Real Estate[1]: the first period is one of a steady growth from Q4 1990 to Q1 2000. In Q4 1990 the home equity level stood at $4.67 trillion and by Q1 2000 it had grown to $7.13 trillion. The second period is from Q1 2000 to Q4 2005 when home equity values doubled to $14.375 trillion. From Q4 2005 a steep downward period was entered into, as home equity values dropped to $ 8.274 trillion by Q1 2012. The fourth period started at Q1 2012 and has continued to the latest period for which statistics are available: Q2 2021 when Households Owners Equity in real estate reached $23.608 trillion.

Another statistic from the Fed shows how outstanding mortgage debt levels evolved over the same period[2]. In the first period mentioned above, the outstanding mortgage debt moved from $2.67 trillion by Q4 1990 to $4.52 trillion by Q1 2000. In the second period to Q4 2005, the outstanding mortgage level increased to $8.94 trillion. Over the third period to Q1 2017, the outstanding mortgage level barely grew to $9.73 trillion. Over the period Q1 2017 to Q2 2021 the mortgage amount grew to $11.07 trillion, while the home equity amount reached an all time high at $23.608 trillion.

The conclusion out of the above is that the current home equity net worth is about 6.5 times the total U.S. government tax revenues in 2020.

2.1 Government debts versus households home equity levels.

Over the past 15 years, U.S. government debts to GDP levels[3] have increased from 60.64% by Q2 2005 to 125.5% by Q2 2021. In actual amounts from $7.836 trillion by Q2 2005, to $28.529 trillion by Q2 2021. These figures do not yet include the proposed spending plans by the Biden Government.

On the other hand, home equity savings have increased over the same period from $13.456 trillion as of Q2 2005 to $23.608 trillion per Q2 2021.

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1. https://fred.stlouisfed.org/series/OEHRENWBSHNO, September 24, 2021.

2. https://fred.stlouisfed.org/series/Households and Nonprofit Organizations; One-to-Four-Family Residential Mortgages; Liability, Level(HHMSDODNS)

3. https://Total Public Debt as Percent of Gross Domestic Product (GFDEGDQ188S)

As a main effect of the Great Recession period, households experienced a substantial drop in home equity values. It took 10 years for the lowest 50% of income earners to get back to their 2008 net worth level. For the top 10% by wealth level it took 5 years and for the group 50-90% by wealth level it took 5 years and six months. However for the number of employed persons to reach 4.4% again, it took from October 2006 to March 2017. The corona virus crisis has caused unemployment levels to rise again. The current level is still above 4.4%.[4]

The result of all these mutations is that home equity levels have reached an all time high and at the same time government debt to GDP reached an all time high as well. However, home equity is an asset class and government debt is a liability obligation.

3. **The Dual Interest Rate structure; potential participation**

To state the obvious: the economic history of the U.S. shows that home equity levels have reached an all time high and so has the U.S, Government debt position.

In a previous paper[5], the writer already pointed out that the gap between outstanding U.S. government debt –a liability level- and the U.S. home equity savings levels –an asset based level- has reached exceptional proportions over the last two decades.

The U.S. government debt level compared to GDP did more than double between 2005 and 2021 and the debt level now stands at $28.5 trillion. It is an even more striking figure if one sets it off against the U.S. government tax revenues expected for 2021. The latter are $3.42 trillion. U.S. Government debt to income level is currently 8.3 years, provided that no new expenses are going to be incurred over this future period; a totally unrealistic scenario.

If one assumes that U.S. households are directly and indirectly responsible for the total debt of the U.S. government, then a government debt per household can

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4 Unemployment Rate (UNRATE) | FRED | St. Louis Fed

U.S. Bureau of Labor Statistics, Unemployment Rate [UNRATE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE, October 6, 2021.

5 De Koning, Kees, 2021. "**U.S. Government debts, a dangerous cocktail of borrowing, spending and inflation levels**,"MPRA Paper 109105, University Library of Munich, Germany.

be calculated. With $28.6 trillion government debt and 132 million households by the end of 2021, the debt per household can be assessed as $216.666 per household.

Against this background, one may wonder whether Quantitative Easing has been a success? What it has done and still does is to postpone the day of collecting taxes to make up for past expenses. Of course, it did help in some years, but where is the limit and what are the consequences for future years?

What is important, however, is to seek a method that can help the U.S. economy to move forward. A gradual lowering of the QE injections makes sense. Equally using some of the $23.6 trillion in home equity savings makes even better sense; both from a macro economic point of view and from an individual household's perspective.

The logic goes as follows: U.S. households have saved $23.6 trillion in home equity, but the same households have no mechanism to convert a small percentage of such savings into readily available cash, other than using lenders facilities, which comes at a cost.

There are at least two private sector home equity release methods available from the U.S. banking sector: the home equity loan and the Heloc line of credit. The first one is usually a 10 or 15-year loan to be repaid over this period. One major bank in the U.S. quotes an interest rate of 3.80% annually for either loan. Heloc is a line of credit to be drawn within a certain time limit and to be repaid over time.

A key question could be: Why would the Fed be interested in home equity funding to individual households?

The reason could be the cyclical nature of such funding. When the Fed tightens its interest rates levels, banks will follow and raise their levels. Does this deliver the right results from a macro economic perspective? The costs of borrowing will go up at a time that households have accumulated $23.6 trillion in home equity. An interest rate increase for households will not induce them to spend more from their accumulated home equity levels, unless they are in a dire financial position. This represents a negatively based selection system. Especially younger households will be most affected, as they are at their start of their savings accumulation period. Unemployment levels are also likely to go up.

The macro economic aim could be to use a small share of the $23.6 trillion to increase consumer demand levels. How could this be achieved?

The first objective is to select a cluster of households that need the extra spending power. The most likely ones are homeowners with a home equity value up to a fixed amount. In 2020, a U.S. country wide median home price came to

$374,900. One might suggest that the upper value limit for participation in the Quantitative Easing Home Equity Scheme (QEHE) could be $750,000 and that the scheme would only be available to homeowners' occupiers. Such homeowners are likely to use the funds provided in order to increase their consumption levels. One could imagine that the limits for home prices are assessed separately for each U.S. State. The selection process should include the value of the accumulated home equity in a home.

Once the household cluster has been selected, the application process needs attention. The simplest method is that existing state and government owned financial institutions would be the agencies to have the direct contact with households. Such institutions could be Fannie Mae and Freddy Mac and other designated conversion candidates.

The temporary Home Equity conversion method could apply to households with a maximum gross income of $112,000 per annum per household. Such limit would cover 73% of U.S. households. By the end of 2021, forecasters have indicated that there will be 132 million households in the U.S.; 73% of such households would amount to 96 million households. This facility could potentially be made available to about 96 million households; nearly all of them lower and median income households. The amount to be allocated per household will depend on their level of home equity in their homes. Macro economically, for all eligible households together, one might consider a $1trillion boost to the economy. Assume that 25% of households would have an interest in the scheme. Assume that this covers about 24 million households. To reach a target of $1 trillion extra spending, each household would get a temporary income boost of about on average $41,000.

The aim of the scheme is to encourage households to spend this money on goods and services; to achieve this, a clause could be included in the contract. This clause could state that households cannot use such funds for increasing their home equity levels. Secondly a second restriction could be included in the contract, which stipulates that the funds cannot be used to buy shares or bonds. New cars, home improvements, travel, entertainment, helping children are all activities that fit into the definition of current spending.

3.1 The applicable interest rate

Of course, the commercial banking sector offers overdrafts, short and median term loans; however releasing home equity can only be done by this sector as a loan facility and thereby charging interest over such facility. When the interest rate levels go up, only savings on call can be withdrawn at 0% costs to the holder. The financial sector cannot, due to its set up, provide funds to households at a loss for the banks. A transfer of a small share of home equity to a financial institution does not bring in cash at no costs to the homeowner. Hence this

proposal suggests that the funds come from the Federal Reserve at 0% costs to the customer. The Federal Reserve acquires a small stake of the existing home equity level from the homeowner, in exchange for cash at the Economic Recovery Rate (ERR), which could be set at 0%. This facility will continue until the Fed judges the economic circumstances to have improved. From that moment onwards the Fed will encourage households to start the "resave" period. If this is not done within a reasonable period, the funding should loose its attraction for the QEHE participant and put at a bank lending rate equal or higher than the market rates.

4. The macro economic benefits

The current process of building up home equity does not facilitate a temporary use of such equity, other than at a substantial charge. This is not the fault of the banking sector; they need borrowed funds to provide for a home equity facility. The latter method is suitable for mortgages, but clearly unsuitable for temporarily turning a small part of an existing home equity into cash.

Selling or part selling some of the stock and bond holdings can usually be done in a few days. Also cash held in a cash account with a financial institution can be withdrawn at short notice. The U.S. banking sector cannot achieve the objective that some home equity will be temporarily converted at no costs to the homeowner. When mortgage and other interest rates go up, the case for helping households on basis of a part home equity conversion into cash becomes stronger.

Macro economically speaking, a short-term conversion from home equity into cash and after a few years back from cash into home equity again, offers the best prospects for turning the U.S. economy around. Using savings wisely, not just for a single household, but also for the collective of households, offers the best prospects of managing economic growth levels, without a government having to add more and more debt to their already high debt levels. Such a savings based approach could stimulate the business sector and reduce the need for a more rapid growth in government expenditure.

The macro-economic choice could be: Is it better, macro economically speaking, to use household savings in homes for consumer expenditure or should the U.S. government expand its activities over and above its tax income levels? Home equity is based on past accumulation of wealth while the second method is based on spending first and collecting taxes (equals reducing the potential for future savings) later. If the ERR method had been used in 2008, the length of the adjustment period would certainly have been shorter; the unemployment level would not have reached 10% and the lowest 50% income group of households

would not have had to wait to 2017 before they had recovered their level of employment and wealth as in 2007.[6]

The Fed, through Quantitative Easing exercises, is saving the U.S. government from having to raise tax levels in the current period. The actions do increase economic activities in this period. However, the costs of doing so, is that such action postpones the day that taxpayers are being charged for such expenditure.

Home equity represents savings made in the past. Assume for example that $1 trillion out of the $23.6 trillion of home equity is cashed in and used for current consumption expenditure by the household sector. Sales will increase, unemployment levels will reduce, company profits will go up, tax payments will go up and finally the banking sector will experience a lower risk profile over their outstanding loans. This method represents a win-win situation for all, just because it uses existing home equity savings, rather than government borrowings.

Finally, in case the Fed accepts QEHE, the Fed will be in total control of the cash flows to households as applications can be staggered in line with economic developments. Import bottlenecks can be taken into account; actual inflation levels can be used to slow down or speed up the program. The opportunity and the management tools are there to make Quantitative Easing Home Equity a success.

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[6] https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/table/

References

1.Households; Owners Equity in Real Estate; Level

https://fred.stlouisfed.org/series/OEHRENWBSHNO, September 24, 2021

2.Households and Non-profit Organizations; One-to-Four Family Residential Mortgages; Liability, Level

https://fred.stlouisfed.org/series/Households and Nonprofit Organizations; One-to-Four-Family Residential Mortgages; Liability, Level(HHMSDODNS)

3. Total Public Debt as Percent of Gross Domestic Profit

https://Total Public Debt as Percent of Gross Domestic Product **(GFDEGDQ188S)**

4. Unemployment rate in the U.S.

U.S. Bureau of Labor Statistics, Unemployment Rate [UNRATE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/UNRATE, October 6, 2021.

5. De Koning, Kees, 2021. "**U.S. Government debts, a dangerous cocktail of borrowing, spending and inflation levels**,"MPRA Paper 109105, University Library of Munich, Germany.

https://De Koning, Kees, 2021. "**U.S. Government debts, a dangerous cocktail of borrowing, spending and inflation levels**,"MPRA Paper 109105, University Library of Munich, Germany

6. Board of Governors of the Federal Reserve System; U.S. Wealth distribution over the various household groups

https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/table/