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of borrowing, spending and inflation levels**

Kees De Koning

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Introduction

In the U.S. and in other OECD countries, government debt levels as compared to GDP have soared since 2007. According to statistics from the Federal Reserve, the U.S. government debt level reached 62.86% of GDP by Q4 2007 and the debt level has increased to 127.52% by Q1 2021.

Q4 2007 was, of course, just before the Great Recession occurred and Q1 2021 was well after the start of the Corona virus crisis.

There are three questions to be answered: the first one is who bears the costs of servicing the U.S. government debt levels; the second one is about the applicable interest rates and the third one is about Quantitative Easing (QE), which did not exist in the U.S. until November 2008.

Whatever politicians of all convictions claim and however they use budgetary smoke screens to make their tax take look acceptable, it is the household sector that are the ultimate pay masters in whatever country. Households pay in two ways; firstly by suffering from unemployment levels over time and secondly by being the direct and indirect payees of all taxes.

A complicating factor is the level of applicable interest rates, which in the EU has gone down to the extreme level of applying negative interest rates over savings.

Simple accounting rules make a distinction between assets –the monetary value of what one owns- and liabilities -the amounts one owes to others-. Each household in the U.S. may have some assets like home equity or pension savings, but may also have debts for car loans or student debts for instance. Furthermore households hand over a substantial amount of their income to companies for their products and services on top of paying taxes directly to the U.S. government.

The concept that a government owns assets is based on a misunderstanding. The assets are based on savings, ultimately provided by individual households, some of who may live overseas.

The aim of this paper is to illustrate that the actions of the U.S. government, including QE, do not only support economic growth levels at times, but can also create barriers to such growth. How these barriers can be turned into opportunities is the main subject of this paper.

1. The U.S. government debt position

Over the period 2007 to 2021 the U.S. Federal Government expenditure has increased from \$2.988 trillion in Q4 2007 to \$8.201 trillion for Q1 2021. These figures are quarterly figures based on an annual level of expenditure.¹ Over this period the U.S. current expenditure has grown by just over 2.7 times over a 14-year period.

U.S. outstanding government debt has increased from \$8.85 trillion as per Q1 2007 to \$27.7 trillion per Q1 2021.² This debt has increased by 3.13 times over this period.

The U.S. Bureau of Economic Analysis (BEA) produces statistics which show how much the U.S. owns overseas and how much its overseas liabilities are. Over the period 2011 to 2021, the external balance has swung heavily in favour of foreigners owning a growing level of U.S. assets³. At the end of the first quarter 2021 the deficit had grown to \$14.32 trillion, while in 2012 (earliest statistics) the deficit was \$4.66 trillion.

Quantitative Easing by the Federal Reserve (QE) was started in November 2008. Its balance sheet at the time showed assets of \$901 billion. Since that date QE has expanded and contracted, but has ultimately added \$7.3 trillion, when it reached \$8.202 trillion as of the week ending July 12, 2021⁴. The QE amounts have multiplied over this period. The outstanding QE amount of \$7.3 trillion far outstrips the Federal Government tax receipts in 2020 of \$2.076 trillion.

QE exercises provide the U.S. government with funds that it would otherwise have to get from U.S. households and/or from abroad. The Federal Reserve -as a creditor- has claims on the U.S. government, which are equal to 3.5 years of the latest total annual tax receipts of the Federal Government.

What has changed since 2007, is that the two fund providers: overseas lenders to the U.S. Government and the Federal Reserve through QE activities have collectively provided over £17 trillion over the last 12 years. One may also conclude that the U.S. government, irrespective of their political background, decided to keep its tax levels well below expenditure ones.

The hope or expectation that these funding sources will continue to deliver over the next 12 years may or may not come through.

¹ <https://fred.stlouisfed.org/series/FGEXPND>

² <https://fred.stlouisfed.org/series/GFDEBTN/>

³ <https://www.bea.gov/news/2021/us-international-investment-position-first-quarter-2021-year-2020-and-annual-update>

⁴ https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm

2. Changing inflation levels and the U.S. government debt position

Between 2007 and today, the base economic situation for the U.S. has fundamentally changed. U.S. government debt levels have increased significantly; government-funding levels have relied on funding sources such as cross-border funding and on QE, thereby avoiding having to ask private households and corporates to pay higher tax levels. This situation is unlikely to continue and at some stage the fiscal stimulus is likely to slow down and higher tax levels might need to be applied.

On top of this, the possibility that inflation levels will remain low has become increasingly doubtful. The widely held expectation is for an increase in consumer price inflation levels over the coming few years. If such increases are realized, the costs of funding the government debt will go up, not because of a higher level of debt, but on basis that the market price for each borrowed U.S. dollar will be expected to rise.

There are several events that could contribute to such a change in circumstances. The rapid improvement in demand levels after the stagnation period due to the corona virus worldwide is likely to lead to supply shortages. World oil prices are increasing. Shipping costs are rising fast as many containers are in the wrong places. Car manufacturers are experiencing a shortage of semi-conductors. There are other factors, like climate change that may require substantial government resources.

There is also the non-financial sector corporate debt situation as published by the Federal Reserve⁵. Corporate debt has increased from \$3.3 trillion by Q4 2007 to \$7.4 trillion by the end of Q1 2021. A major corporate casualty could quickly spread to others.

A different solution is both necessary and viable.

One might consider the current economic structure first. The recovery in the U.S. economy that currently is happening relies on high levels of debt, of which a major part has been funded from overseas and from QE. To rely on overseas funding for an ever-increasing level creates risks to the stability of the U.S. dollar and thereby to the U.S. economy.

To continue to rely on a forever expanding level of QE might ultimately be counter productive. One cannot possibly foresee that QE would fund five or more years of total government expenditure levels.

⁵ <https://fred.stlouisfed.org/series/NCBDBIQ027S>

3. The savings-borrowing dilemma for the U.S.

The funding strategies of the U.S. government, including the co-operation of the Federal Reserve, has meant that it relied on an increasing level of support from overseas fund suppliers and from the funding via QE from the Federal Reserve.

How sustainable is this? The gap between U.S. government expenditure and tax receipts will need to be reduced at some time in the future. Any substantial fiscal transfer from households and/or companies through increased taxes will lead to a slow down in economic growth levels. Both households and companies will experience reduced cash flows and it is likely to be only a matter of time before companies will reduce the intake of new workers and unemployment levels will likely increase.

There is however one savings instrument that has fared well during the period in question, especially since 2012: the household owners equity level as built up in homes⁶. In Q1 2012 a low point was reached at \$8.27 trillion, but this equity level has grown to hit \$22.735 trillion as at Q1 2021.

In this households' owners equity status lies a potential indirect solution to the funding position of the U.S. government.

The U.S. Government relies for its funding on tax revenues, on QE and on overseas buyers of its government bonds. Tax revenue levels are running far below the needs for the economy. The Houses of Congress might wish to return to a more normalized status, especially after the occurrence of the Corona Virus pandemic. The latter occurrence has led to increased government expenditure levels and a further deteriorating level of U.S. government debt to GDP levels.

At the same time, private household wealth, especially the wealth levels concentrated in homes has seen a 275% growth since 2012.

Would it be too much to ask households to help grow the economy, not by paying higher taxes, but by applying a system that makes it attractive for households to temporarily use some of their own savings incorporated in their own homes?

⁶ <https://fred.stlouisfed.org/series/OEHRENWBSHNO>

3.1 Some weaknesses in economic theories

The annual level of demand in an economy is usually assessed through the adding up of: consumption expenditure, investments, government expenditure and the difference between the import and export level for a country.

So far there is nothing unusual in this.

However, the influence of savings as a postponement of expenditure method is not properly taken into account in this simple adding up formula. The two main sources of household savings are in the form of savings for a future pension and in home equity savings. According to the OECD⁷, the percentage of savings for a future pension in the U.S. was 85.8% of the 2019 GDP of \$21.48 trillion. This represents \$18.4 trillion in pension savings alone. On top of this, as mentioned above, the home equity level had grown to \$22.735 trillion as per Q1 2021.

In 2020, the U.S. economy had a negative growth level of -3.5%, which led to a total GDP of \$20.7 trillion.

The two savings categories: pension savings and home equity together were more than twice the total GDP amount for 2020. In 2020, the U.S. Government expenditure level of GDP reached 44% due to the corona crisis. In 2019 this percentage was 35.68%. One easy conclusion is that 44% of \$20.7 trillion equals \$9.1 trillion. The two savings levels together added up to 4.5 times the total U.S. government expenditure level in 2020.

Hence, it is fair to conclude that the strong financial position of U.S. households in comparison to the U.S. Government's income and expenditure levels indicate that there might be different solutions for enhancing economic growth levels. Such different solution could make a better use of household's savings. The obvious category is home equity levels, as pension savings are clearly for use in the retirement stage of life. In previous papers by this author: MPRA paper 105110, MPRA paper 105708, MPRA paper 106528 and MPRA paper 108239, the concept of Quantitative Easing Home Equity (QEHE) was already introduced.

3.2 Some considerations about QEHE:

The why question

From a macro-economic point of view, using home equity savings as a source of funding for stimulating economic growth levels must have clear advantages over a continued use of government borrowings. The most significant difference is a timing issue. Government borrowings rely on a repayment structure, affecting

⁷ https://stats.oecd.org/Index.aspx?DatasetCode=PNNI_NEW

households and corporates, for a long period in the future. The day that it is decided to raise taxes will inevitably start a process of a loss of incomes for both households and companies. The reverse is true for using home equity savings. These savings were made in the past. Releasing some of these savings in the current period, of course reduces the level of savings built up. However in doing so, households can enjoy the benefits of such savings totally for themselves. Increased tax levels will reduce households and companies' income levels. QEHE will help the U.S. economy to grow, without the overhang of tax rises.

The question should be: What is an appropriate level of home equity release against the background of the absorption capacity of the business sector benefitting from such release. One would not wish to overdo it and create more bottlenecks or higher inflation levels.

The U.S. government has enough economic models at its disposal to forecast the outcome, in case \$1, \$2, or \$3 trillion of home equity would be converted into current spending over a relatively brief period of time.

If the choice would be made to use some of the accumulated home equity levels in the U.S., the question could be raised of how to encourage households to do so. The system, as applied in the U.K. for instance, allows private financial companies to offer loan capital to the homeowner. Such structure basically defeats the purpose of the exercise as it implies handing over home equity and turning it into a mortgage equivalent loan.

In the U.S., the current viable method is to sell one's home and move to a smaller home or to a different State where house prices are lower. Again that is not a viable option for the many households who need to go to work, not too far from where the home is. After the Great Recession, quite a few homeowners, especially the ones in the bottom 50% of households, had to move to trailer parks on the outskirts of cities. It took this 50% group of households some 10 years, -from 2007 to 2017-, before they had returned to the same level of home equity as before the Great Recession. QEHE helps to avoid such long drawn out recovery periods.

The answer to the "why use home equity" question follows easily from the above.

Firstly a tax level increase, whether for corporates or for individual households or for both, is a method that is retroactive. Such taxes will attempt to recoup past government spending levels and thereby will lower the spending power of households in the current period.

The spending by a household out of its own (home equity) savings for its own use will lower the savings levels, but with the result that household expenditures will reach a level above its current income levels, without doing any harm to their current income level.

3.3 The How Question

To turn home equity as a savings amount into a debt title, as is practiced in the U.K., is an economically speaking unattractive method.

The key is to keep households home equity savings as a savings category. The private sector represented by banks and other financial institutions are incapable of achieving such structure. When a household has a cash surplus and deposits such amounts in a bank account, the household accepts that the financial institution uses these funds to on-lend such funds to other households, companies or to the government to make a return on such savings. Banks, as profit oriented private sector companies, cannot operate without such on-lending structure.

This is where the potential role of the Federal Reserve comes in. The Fed can create money as it has done for the U.S. government. The current draw back is that such money creation postpones the moment that tax levels become equal to government expenditure levels again.

If a method were created, whereby the Federal Reserve could turn such home equity savings into cash –albeit on a temporary basis- then households would be able to spend more in the current period. Household's annual income levels would be bolstered by a small part of their home equity savings levels.

The U.S. is in a fortunate position that there are state sponsored entities that have a long experience of dealing with individual households and their home financing. There are the state sponsored 7300 Federal Home Loan Banks for instance, which have as their objective to support mortgage lending and related community investments. Further another three substantial and state sponsored entities are in existence: Freddie Mac, Fannie Mae and Ginny Mae. To seek the help of these organizations will be vital for the success of QEHE.

If the Federal Reserve would shift its focus from QE (funding the U.S. Government) to QEHE and start funding households via the above distribution channels at 0% costs to the household, it would achieve the aim of using some home equity savings for increased personal expenditure over and above a households' income levels. This method would help increase the demand levels, without the threat of future tax increases.

In its new role –if accepted- the Fed will act as the supplier of funds in a quantity and with the speed that it regards to be the optimal level for each coming period. The Fed would naturally oversee the overall management of the program. It could decide how to fund the state sponsored enterprises and when the household obligations need to start resaving. Secondly the rules dealing with existing lenders all need to be worked out.

It is suggested that households wishing to participate in the scheme could apply to any of above state sponsored enterprises. A contract between the household and the enterprise would be the foundation for the action. Three elements need to be decided: the funding of the State sponsored enterprises for this specific task, the level of home equity to remain in a property and the eligibility of the homeowner for the scheme. Should landlords be excluded from the scheme?

4. Some conclusions

In 2020, the Corona virus crisis has accelerated the U.S. government spending levels. The U.S. government deficit grew by \$3.2 trillion at a GDP level of \$20.94 trillion. This gap plus the ones from previous periods has created a government debt level equaling \$27.7 trillion. With 192.7 million households in 2020, the government debt per household can be assessed at \$143,746. In 2020, the U.S. households' median income level was \$ 68,400. Therefore the government debt reflects a multiple of slightly over two years of the total income for households on a median income. At the current tax rates for a U.S. median household family, such median household would pay \$7,813 in Federal tax. With the current tax rates for a median household, it would take over 18 years to pay off the government debt, provided that the U.S. government would stop borrowing.

Of course, companies and households at higher income levels also pay tax but this simple calculation shows the reason why tax increases might not be the solution to the current economic state of affairs.

At this stage of the U.S. economy, one may wonder: Is it wise to reduce household incomes to pay for past government expenditure levels or might it not be better to chose the QEHE method as the best possible macro economic policy. The Federal Reserve could stimulate economic growth levels on basis of households' equity stakes in their homes. This action will help the U.S. Government to lower its levels of borrowings. For the banking sector QEHE will lower the credit risks on companies and households, as the economy will grow faster. The company sector will also be better off with higher demand levels from many households. Households will be better off with more money to spend and last but not least with better job prospects.

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