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# **Quantitative Easing Home Equity An Alternative Economic Management Tool**

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Management Tool

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## Introduction

Home equity levels play a key role in the economic experiences of countries. The example of the U.S. situation is very informative. In 2005, the home equity level stood at \$14.4 trillion. U.S. government expenditure in the same year was \$4.4 trillion. As a consequence of the Great Recession, the combined home equity levels dropped to \$8.2 trillion by Q1 2012. This was a not inconsequential loss for many homeowners. By Q3 2020 the level of home equity had risen to \$20.4 trillion. The total U.S. home value level rose to \$31.2 trillion by Q3 2020. One may compare this to 2020 GDP of \$20.924 trillion and more importantly to the share of GDP that flowed to the U.S. government (Federal, State and Local) in 2020 of an estimated amount of \$ 7.63 trillion. In 2020, the total home values in the U.S. were just more than 4 times the combined income level of the U.S. Federal, State and Local governments! Even taking away the outstanding housing debt level of \$10.2 trillion, the \$20.9 trillion home equity level still represents a multiple of 2.74 times of the combined U.S. government tax level in 2020.

There are at least three methods to stimulate an economy:

1. Monetary policy is executed by lowering the short-term interest rates so that savers are encouraged to spend more and borrowers can afford to borrow slightly more than at a higher interest rate level.
2. Fiscal policy works in that a government can borrow more in order to spend above its tax income level. This implies that a debt is created that in future years need to be paid back by all households.
3. There is a potential third option: the Home Equity Policy. A government can encourage home equity to be used on a temporary basis to stimulate the economy. "Re-savings" can be made out of future income levels. The beauty of this system is that it is an individual household's decision and the benefits of more spending go directly to the household that participates in the scheme. The replenishment of the home equity savings level is totally to the benefit of the individual household.

The aim of all three methods is the same: increase demand levels and lower unemployment levels without accelerating inflation levels. Why method three might prove to be the most effective is explained in this paper.

## 1. The Great Recession period

An analysis of the Great Recession period may lead to some interesting conclusions.

As a consequence of the lending pattern of the U.S. banking sector, especially related to home mortgages, the liquidity levels in mortgage-backed securities came to a grinding halt in 2007. Subprime mortgages turned out to be the Achilles' heel of the U.S. financial sector. Some major banks and insurance companies got into trouble and the U.S. government rescued most of them.

One aspect of these events is that one may wonder who was responsible for the households' loss of \$6.2 trillion in lost home equity values between 2007 and Q1 2012 and thereby created one of the most severe recessions in U.S. history.

The first aspect is to study the total U.S. government debt level. In 2007 a level of \$ 9.007 trillion was recorded,<sup>1</sup> and by September 30 2012 the debt had grown to \$16.738 trillion; an increase of \$7.731 trillion over this period. The fiscal policy expansion to compensate for lower economic growth levels was certainly followed.

The second one is the Fed Funds rate developments over the period 2007-2012.<sup>2</sup> A rate of 5.31% was fixed on June 25 2007. A rapid reduction between 2007 and 2012 was made and on March 5, 2012 the rate was lowered to 0.12%. The (short-term) interest rate policy followed the developments of the slowing down economic growth path over this period. In 2008, the Federal Reserve started its Quantitative Easing (QE) Program<sup>3</sup> with has as one of its objectives to lower longer-term interest rates. One may conclude that the monetary policies of the Federal Reserve were very accommodating, both for the interest rate picture and for the funding of U.S. government debt levels.

However, the effects of both monetary and fiscal policies were unable to quickly overcome the deterioration in the financial position of many U.S. households. This position had deteriorated by \$6.2 trillion in home equity values and by an increase in unemployment levels from 7.116 million unemployed by January 2007 to 15.352 million unemployed by October 2009.<sup>4</sup>

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[https://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt\\_histo5.htm](https://www.treasurydirect.gov/govt/reports/pd/histdebt/histdebt_histo5.htm)

<sup>2</sup> <https://www.macrotrends.net/2015/fed-funds-rate-historical-chart>

<sup>3</sup> <https://www.federalreserve.gov/econres/feds/quantitative-easing-and-the-quotnew-normalquot-in-monetary-policy.htm>

<sup>4</sup> <https://fred.stlouisfed.org/series/UNEMPLOY/>

## **1.1 Why the policies applied were slow in addressing the households' economic and financial crisis.**

The deterioration in the individual households finances began in 2007, when the home mortgage market was turned around from an excessive lending program by the U.S. banking sector to a very restrictive one with a lot of pressure exerted to get households to pay up. When many households could not keep up with the demands from the banking sector -after the same banking sector had earlier enticed these households to borrow excessively for house purchases during the period 2004-2007, the reverse process began. The banking sector's aim is and was to reduce their doubtful debtor levels. The sector tried to reclaim as much as possible from the outstanding mortgage portfolio. Loss limitation was very much every bank's or other financial institution's aim.

Between 2007 and 2013 21.228 million households were confronted with Foreclosure Filings and 5.5 million homes were repossessed.

One may compare this to the new housing starts in the U.S. In January 2006, the new housing starts levels were at a top of 2.273 million new homes on an annual basis. In April 2009 this level had dropped to 478 thousand, again on an annual basis. The next highest level was reached in December 2020. The new housing starts were 1.680 million on an annual basis.

Another measurement is through average U.S. house prices<sup>5</sup>: the Case-Shiller index. In June 2006, the national housing price index was 184.6 and by February 2012 it had dropped to 133.99. Only by January 2017 did it reach the June 2006 level again.

The repossession process caused a sharp drop in new housing starts, with house prices dropping and new housing starts rapidly slowing down. Also, the slow down in building activities had a sizeable impact on employment levels and on construction related economic activities. During the same period, unemployment levels more than doubled between January 2007 and October 2009. It took to April 2017 before the number of unemployed reached the same level as in January 2007 (7.196 million). Just as an additional figure: the January 2021 level of unemployment stood at 10.130 million individuals unemployed.

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<sup>5</sup>S&P Dow Jones Indices LLC, S&P/Case-Shiller U.S. National Home Price Index [CSUSHPINSA], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CSUSHPINSA>, February 25, 2021

## 1.2 The uneven adjustment process

The usual definition of economic growth is that a recession period is over when two consecutive quarters of economic growth have occurred. A better definition could be that such recession period is over when households divided by groups show a positive improvement in their employment and net wealth position. The Federal Reserve has excellent statistics on both subjects<sup>6 7</sup>. From these statistics one may observe that for the top 10% of households by wealth level, this group took from Q1 2007 when their wealth level stood at \$43.9 trillion to Q1 2012 when it exceeded this level for the first time at \$45.38 trillion. For the top 50-90% group it took six months longer to Q3 2012 when their level reached \$20.88 trillion, just above the \$20.81 trillion of Q1 2007. However for the bottom 50% of households it took more than five years longer. In Q1 2007, their net worth was \$1.41 trillion and only by Q4 2017 did this group reach the same level of \$1.41 trillion again.

Of course, in theory, can one declare a recession to be over when two consecutive quarters of economic growth have passed. As the above data showed, was it not premature to do so when 50% of all U.S. households were still in a loss position? Three factors played a key role:

1. The first factor was linked to employment and unemployment levels. In May 2007 the number of unemployed was 6.766 million persons. Only by November 2017 was this “low” level of unemployment reached again when the number of unemployed became 6.759 million.
2. The U.S. national Case-Shiller house price index was 184.609 in July 2006 and it only reached this level again by January 2017, when it measured 184.717
3. It would have been more logical to accept that the recession period did finish, when, in 2017, the 50% of the collective households got back to the same unemployment levels as in 2006 and they also got their net worth back up to the same level as in 2006.

In my view, households’ losses –both in income levels through unemployment and in wealth levels through, among others, lower house prices- becomes only an event of the past when the data show that the loss has been overcome. For the bottom 50% of U.S. households this was by Q4 2017 for employment levels and by Q1 2017 for wealth levels.

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<sup>6</sup> <https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/table/#ra>

<sup>7</sup> <https://fred.stlouisfed.org/series/UNRATE/>

Perhaps economic growth levels on their own do not really reflect unemployment levels, losses in wealth or future losses on income. The latter occur when a government first borrows and spends more than its tax income. Subsequently, the U.S. government at one stage will have to increase its tax levels and thereby reduces the net income levels of the private sector.

## **2. A Federal Reserve sponsored Home Equity Release and Resave Method.**

In the U.S. the possibility to obtain a reverse mortgage exists. How this system works is explained in a document from the U.S. Federal Trade Commission<sup>8</sup>. Such reverse mortgages are generally expensive as they are based on commercial interest rates terms.

This FTC system is not linked to economic developments and to reverse a reverse mortgage action would set a household back by a considerable percentage of the original amount obtained. In some cases reverse mortgages carry a government guarantee for the amount obtained.

The experience from the Great Recession did show that a vital difference existed between different groups of households in recovering their jobs and their wealth levels. The top 10% of wealth holders recovered fastest, quickly followed by the 40% second richest group of households. However, the bottom 50% of households took over 10 years to get back to the same levels of unemployment as in 2007 as well as to “resave” up to their original wealth level as it was in 2007.

One may start with whatever was done. The U.S. government had a debt level of \$8.849 trillion in Q1 2007. By Q1 2017 this debt had grown to \$19.846 trillion, an increase of \$11 trillion over these years. In 2017 its tax income (Federal, State and Local) was about \$7.1 trillion. Its debt to income level had grown to 2.8 times its income. The corona virus crisis has worsened this position even more. The latest U.S. government debt level is just over \$28 trillion with a GDP level of \$20.93 trillion and a fiscal income level of \$6.7 trillion.

Since the Federal Reserve adopted Quantitative Easing as a strategy in 2008, the amounts involved have grown dramatically. According to its latest balance sheet, over the years, it has purchased about \$6.5 trillion in U.S. Government Treasury Bonds and other related bonds. It also has maintained its interest rates at very low levels.

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<sup>8</sup> <https://www.consumer.ftc.gov/articles/0192-reverse-mortgages>



## **2.1 Home equity savings**

There is one aspect of the U.S. economy that has not gotten enough attention. This aspect involves the home equity savings made by many U.S. households. These are true savings built up often over many years and such savings really represent a net worth for a household.

The character of the monthly mortgage payments, usually to a financial institution, represents both a debt and a home equity element. Gradually over the years, the debt level reduces and the equity element grows. The home equity element represents the own equity a homeowner has in his/her property. For the time being, the equity element is highly illiquid. It is a savings amount and should be considered as such. However, it can –as yet- not easily be converted into actual cash without encountering punishing interest rates. There exists no “monetization method” yet to give households some of their home equity savings in cash on a temporary basis. The only method is the FTC’s one, which is funded by private sources. Such sources have two drawbacks: firstly the organizations involved need to borrow the funds they lend to households and secondly they aim to make a profit out of such transactions.

## **2.2 Why use home equity savings?**

There are several reasons to use home equity to stimulate demand levels in an economy.

The first one is that there is an age gap between older and younger households resulting in often a higher or lower level of home equity. Older households have had more time to save up home equity, especially households that are in the bottom 70% of households by income levels. In any recession period many of the younger generation are more exposed to repossessions than the older generation.

The second one is linked to being employed or unemployed. Households in the top 50% of wealth usually can survive for a longer period of time with the help of their savings. They collectively managed \$ 64.8 trillion in assets, compared to the bottom 50% who had \$1.41 trillion in assets at the start of the Great Recession.

The third reason is that if the U.S. can set up and manage a temporary access to home equity at no cost to the holder (QEHE), then for each U.S. dollar provided under such scheme, it will need a dollar less in government debt increases. In other words such scheme works best when government debt is already at high levels. Not only that, job creation will be accelerated, which in itself shortens a recession period, especially for the bottom 50% of households who more than the others depend on an employment income. QEHE will also dampen the

downward spiral of house prices, which has affected the bottom 50% of households the most; both in ownership and in rent levels. A further, probably unintended, consequence of this system is that it will help the banking sector in having to make lower provisions for doubtful debtors.

### **3. How to set up such a system of Quantitative Easing Home Equity (QEHE)**

There are a number of potential rules that could be applied. They are:

1. The request for such conversion might have to come from an owner-occupier in a home. It is a freedom of choice method. Such requests can be made at the main bank of the potential participant and subsequently forwarded to a unit of the Federal Reserve for approval.
2. Requests can also originate from homeowners who rent out properties. However there need to be limits regarding such equity conversion. It is probably wise to limit such cash withdrawal to less than 30% of the net equity position in a home.
3. For homeowners-occupiers the request might not be approved if it lowers the equity level in a home to less than 10% of its value. Any value below 10% might encourage households to walk away from their obligations under the agreement with the Fed. Any value above 10% can potentially be considered, but the combined households collective requests have to fall in line with the government's assessed need for economic stimulus. Any home value assessment should be based on February 2020 data. Any later date would not reflect normal supply and demand levels as house prices might have been "affected" by the occurrence of the coronavirus; a non economical influence.
4. Many young persons and low-income earners face the greatest hardship as a consequence of the coronavirus. Parents' help should be encouraged as the latter have had the longest time period to build up their home equity level. Zero tax on such transfers between generations would be an obvious method.
5. The person or family withdrawing the equity from their home will also be responsible for "re-saving" the amount withdrawn. A contract between the Fed and the individual household will stipulate such obligation.
6. To enable households to re-save in line with the economic situation, a grace period for such re-saving needs to be set. The Federal Reserve may also decide to make QEHE funds available at 0% interest rate for the homeowner as the home equity conversion is done in the national macro-economic interest.

7. The re-saving needs to be based on a household's income level. It is suggested to set aside 28% of a household's annual net income for the purpose of re-saving.

Q.E. Home Equity© Kees de Koning

8. If, like in many cases, the household still has a mortgage to service, it is suggested that the re-saving gets priority, so as to strengthen the equity base in the home again. It would imply that mortgage lenders (about 50% are funded by state sponsored enterprises anyway) could be temporarily paid the interest margin on the mortgage loan only. The principal amount of re-saving could be started when the economy has reached its desirable growth level again.

9. Linking the re-saving level with the income and growth level implies that the re-saving will be done at a slower pace, when the economy is still in a recession period. Only when the U.S economy is booming, will the speed of re-saving be accelerated until the full amount of home equity that was provided has been replaced. At that moment the outstanding mortgage facility is reinstated to the agreed interest plus principal payment facility.

10. The U.S. government might need to determine the eligibility of households to participate in the QEHE System. Should the maximum income level eligible for the QEHE System be set at the median income level of \$65,000 or at twice this amount at \$130,000? Should there be regional variations?

11. The U.S. government may also need to decide to what extent it wants the QEHE system to contribute to the U.S. economy; in other words how large a share of home equity is required to help improve the current situation. If enough money is converted into demand levels, the facility may be closed to newcomers until a new economic crisis occurs. One has to watch closely to what extent homeowners convert the savings cash received into other savings types. The purpose of the QEHE facility is to increase consumption; not to invest in the stock markets or in additional pension pots.

12. The QEHE system allows the U.S. Fed to turn the tap off when releasing home equity is no longer needed and turn the tap back on when it judges the economic circumstances are appropriate. Such tap management is an important mechanism for managing inflation levels. In case the amounts provided cannot be absorbed by the commercial sector without causing undue inflationary pressures, then the Fed could accept household's applications, but manage the pay-outs in line with the propensity of the commercial sector to absorb the increased demand.

13. The QEHE account could be an account set up by the household's principal bank on the request of the homeowner. The costs of maintaining such accounts – over which the banking system does not run a credit risk only an operational one- could be at the costs of the Government given that the scheme is in the macroeconomic national interest.

14. Some homeowners might abuse the QEHE account. Therefore, if a homeowner does not fulfil his or hers contractual obligations in “re-saving” the principal amount when

due, he or she may be penalized by turning the facility into an ordinary mortgage with penalty interest rates.

15. In line with previous arrangements, the U.S. Government could give a guarantee to the Fed for potential losses made on the scheme for 10% of the outstanding amount.

16. In order to implement the above, the U.S. Congress may have to draft a new law that gives the powers to the Federal Reserve to start a QEHE program.

17. The QEHE system allows the economy to be managed by region, by inflation level, and by the state of the economy. It represents economic growth for all, but especially for the bottom 50%. The only additional action needed might be to regulate that households cannot use the funds to speculate on the stock markets, as this means moving funds from one savings category into another.

#### **4. Some conclusions**

The main difference between the current Quantitative Easing (QE) activities and the QEHE one is that QE activities fund debt levels of either the U.S. government or government related entities. The effect of QE is that it postpones the day that debt has to be collected from private households and companies. The main advantage of QEHE is that it does not rely on debt market funding; it relies on existing savings levels. The temporary monetization of some of such savings creates a cash demand for goods and services, with as beneficiary the household that participates in the scheme. The “re-saving” after a period of time brings the savings level in home equity back to previous levels.

Where as QEHE can be a scheme that, if widely accepted, it can potentially replace U.S. government debt creation. The household will be at the center of the action, not the government. The government will not need to think about how to spend the money in the first place; the individual households chose their spending level on basis of income level plus its home equity savings level. Repaying existing government debt levels can be spread out over a longer number of years, as the household sector becomes the new driver in the economic adjustment process.

Managing economic growth and inflation levels as well as the shortening of the adjustment periods will all become realistic opportunities. The bottom 50% of U.S. households deserves it.

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