The unique benefits of a Tessa system: the U.S. case

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Introduction

In the U.S., the previous financial crisis of 2008 can be interpreted in two ways. The first one is that economic growth –defined as two consecutive quarters of expanding GDP- was achieved in Q3 and Q4 in 2009. However, the second one -households' equity in their homes- showed that the households' financial crisis lasted from Q3 2006 to Q2 2016. The net worth level –the owners' equity in their homes- reached a peak in Q3 2006 with a level of $14.260 trillion. Between Q3 2006 and Q1 2012 households lost collectively $6.048 trillion in net worth savings; a savings loss of 42.4%. It took to Q2 2016 before this loss was overcome and the homeowners' net worth had returned to $14.392 trillion. The latest data show a further savings level increase to $18.715 trillion as per the end of Q4 2019.

The unemployment levels in the U.S. show a similar pattern as the home net worth picture. In October 2006 the unemployment level measured 6.727 million unemployed persons. By October 2009 15.352 million persons were unemployed. It took to September 2017 to return to 6.841 million unemployed persons.

The savings losses and gains made -reflected in the collective households' net worth in homes- show that overcoming a financial crisis is not a short term but a much longer-term process. The same applies to the rise and falls in unemployment levels.

Perhaps the conclusion may be drawn from these data that the financial health of households is closely related to the savings embedded in their homes, as well as to being employed or unemployed. Economic growth levels do not reflect such variations properly.

With the latest corona virus pandemic, unemployment levels have gone through the roof. The latest data show that there were more than 40 million applicants for unemployment benefits in the U.S. over the last ten weeks. 21 million actually received benefits.

The main economic objective is to shorten the downturn. The adjustment period could be shortened by making it possible for households to have access to some of their equity embedded in their homes. The quicker such system can be implemented, the shorter the recession period will be. In a previous paper the author has already explained how a Tessa system- a Temporary Spend and Save Again system- can be applied. This paper will develop the concept further.

1. The previous crisis: the 2006-2016 U.S. households' financial crisis

How savings accumulate in one's own home should not be a subject of mystery or luck, but one that can and, may I say, should be guided by government rules. The main reason for this is that an individual homebuyer has no power in this process apart from accepting what is on offer from the financial sector. Borrowers did not invent a below market interest rate or 100% mortgage loans; borrowers did not invent subprime mortgages or their securitization. Some capital rich borrowers were able to speculate on house prices by buying up multiple properties and rent them out; only to be frustrated when their gamble turned against them. However these borrowers were able to sell at a loss, while millions of owner-occupiers were forced into foreclosures with many losing their homes and thereby their savings embedded in their homes.

The previous households' financial crisis did last from Q3 2006 to Q2 2016. This period is based on the Federal Reserve of St. Louis statistical series of Households Owner's Equity in Real Estate Level.[1]

One can study the same phenomenon with the help of the statistics on median house prices sold in the U.S. The latter reached its peak at $297,400 in Q1 2007. Only by Q4 2015 did the median house prices exceed the Q1 2007 level for the first time when it reached the level of $302,500.[2] This house price development ties in closely with the level of foreclosures over the same period. Statista collects the U.S. foreclosure details.

What is striking is that between 2008 and 2020 the money amount of home mortgages outstanding has not changed. In Q4 2007 the level of home mortgages reached a high of $10.6 trillion and by Q4 2019 it was at a level of $10.6 trillion again. In the period from 2007-2019, the level of $10.6 trillion was not exceeded.[3] What happened over the period 2007-2020 to home equity, to house price levels and to unemployment and employment levels are key elements in understanding the causes and effects of the last economic and financial crisis.

The Fed assessed the collective U.S. homeowners' equity level at $14.260 trillion as per the end of Q3 2006. By Q1 2012 the equity level had dropped to $8.212 trillion, representing a savings loss of $6.048 trillion or 42.4% of the Q3 2006 level. By Q2 2016 the equity level became slightly higher than the Q3 2006 level as it reached $14.392 trillion. As per Q4 2019 the current Fed's assessment is that the home equity level did increase to $18.715 trillion; a gain of $10.387

[1] https://fred.stlouisfed.org/series/OEHRENWBSHNO
[2] https://fred.stlouisfed.org/series/MSPUS
[3] https://fred.stlouisfed.org/series/HHMSDODNS

trillion over the years 2012-2019. What is very clear is that households collectively did not borrow more over the period 2007-2020. They saved more in two ways: the most important way was by servicing their outstanding home mortgage loans on time and secondly by benefitting from average house price increases of 8.1% over the period Q4 2015 to Q1 2020.

For U.S. households, their financial crises did not stop when two quarters of economic growth were recorded in the U.S. economy. The latter happened in Q3 and Q4 of 2009.[4] To overcome the $6.048 trillion loss in home equity, homeowners had to save more and with the help of some gradual median home price recovery equalized their status by Q2 2016. For households owning their own home, Q2 2016 was the end of their household's financial crisis: a ten years adjustment period!

2 The current crisis is related to the corona virus pandemic.

The current crisis has been caused, not by the financial sector, but by a health related issue: the Corona Virus Pandemic. The effects have already had and will have a devastating impact on employment levels and thereby on income levels. Households will be hit hard. There is a great likelihood that a new home mortgage crisis will reappear, just when the home equity level had reached a peak.

The response of the Federal Reserve and the U.S. government has been to support the economy in various ways.

Starting with the Federal Reserve, its balance sheet total was $909.982 billion on August 25, 2008. By September 9, 2019 its balance sheet had expanded to $3.769 trillion and the most recent level was on May 18, 2020 when the total came to $7.037 trillion.[5] The Fed's two main items on its balance sheet are U.S. government securities to the extent of $3.7 trillion and mortgage backed securities issued by the three government sponsored financial institutions Fannie Mae, Freddy Mac and Ginny Mae to the extent of $1.6 trillion.

By April 2010, during the last crisis, the maximum number of unemployed reached 15.325 million individuals. As of the 29th May 2020, over 40 million workers had registered for unemployment insurance benefits; just in the previous nine weeks! The actual number of recipients of unemployment benefits was around 21 million at the same date. This magnitude alone should send shockwaves to anyone interested in the economic future of the U.S. Is a new housing crisis to be expected, as many households will lose a

[4] https://fred.stlouisfed.org/series/MSPUS
[5] https://www.federalreserve.gov/monetarypolicy/bst_recenttrends.htm

part or most of their income? According to the Fed[6], 39% of the newly unemployed were within the annual income brackets of up to $40,000.

This group is highly vulnerable to income fluctuations in relation to its outgoings. Equally vulnerable are young people under the age of 35, who have nor had a chance to save up enough for a mortgage or have just started to repay a mortgage.

On May 15th, 2020, the U.S. House of Representatives did approve a $3 trillion Heroes Act, which looks likely to be passed by the Senate and signed by the President. This came on top of a program of $2.4 trillion in previous relief packages.

With the financial help from the Fed and from the U.S. government programs, the U.S. economy should benefit to the extent of over $10 trillion. With a GDP of $21.2 trillion in 2019, this surely must be the highest level of state support to an economy in peace times.

3. Economic choices

A normal mortgage is both a borrowing and a savings instrument. A normal mortgage pays the interest due, but it also gradually reduces the debt level over time. The mortgagee creates a savings element in their home. Mortgages are long-term facilities. In the U.S. nearly 70% of all mortgages have been funded by the three government-sponsored enterprises: Fannie Mae, Freddie Mac and Ginny Mae.

History from the 2008 financial crisis has shown how long it took before households collectively were in the same financial position as in Q3 2006: practically ten years.

The current health crisis is affecting the U.S. population as no other crisis has done over the last century. The data in section 2 illustrate the enormous impact the corona crisis has already had on the U.S. economy.

The economic choices made by the Fed and by the U.S. government have one element in common. They rely on either money printed by the Fed or on funding by the financial markets. Both only fund debt titles. The drawback of the $10 trillion U.S. support program is that one day such programs need to be repaid, most of it by the taxpayers. This may be spread out over many years and it may be shared between households and companies, but ultimately any repayment will take away disposable incomes from households and companies and their

[6] https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf?wpisrc=nl_daily202

stakeholders, including pension funds. Such taxes will reduce future demand levels.

There is one choice that has not yet been considered: a program based on household's equity in their own homes. As indicated in the above there is the option of using some of the $18.715 trillion home equity to stimulate demand in the U.S. economy. Home equity is a savings amount owned by many individual households –regretfully not all- that can be used in the current period to create economic demand.

3.1 The Tessa System

In a previous paper: "Tessa: a new economic tool" the concept of what Tessa stands for was elaborated upon.[7] The three elements of a Tessa are that (1) it is an individual household's bank account with a special purpose: the purpose of converting some of the savings built up in a home into current cash. (2) A Tessa account is also a savings account to "re-save" the equity withdrawn after a grace period and is based on saving 28% of current income, whatever the level of income is. (3) Tessa is equally a tool of macro economic management, combining the actions of individual households into a collective action plan to help speed up economic growth levels; during and after the corona virus pandemic has been eliminated.

The Tessa method is an equity based conversion method of an asset –i.e. savings embedded in a home- into cash with the help of the Federal Reserve through Quantitative Easing.

Some ground rules could be set for such equity conversion:

1. The request for such conversion has to come from an owner-occupier in a home. It is a freedom of choice method.

2. Such request cannot come from homeowners who rent out properties as they are basically running a business.

3. The request cannot be approved if it lowers the equity level in a home to less than 10% of its value. Any value above 10% can potentially be considered, but the 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

[7] *RePEc:pra:mprapa:100182* Tessa a new economic tool; a Temporary Equity Spend and Save Again system

house prices might be "affected" by the occurrence of the corona virus; a non economical influence.

4. Many young persons and low-income earners face the greatest hardship as a consequence of the corona virus. 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 QE 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 net income level for the purpose of re-saving.

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 (70% 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 executed on basis of income levels.

9. Linking the re-saving level with the income level will imply 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 again, 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 decide about the eligibility of households to participate in the Tessa System. Should the maximum income level eligible for the Tessa system be set at twice the median income level of $65,000[8] i.e. at $130,000? Should there be regional variations?

11.The U.S. government may also need to decide to what extent it wants the Tessa 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

[8] https://www.census.gov/library/stories/2019/09/us-median-household-income-up-in-2018-from-2017.html

money is converted into demand levels, the facility may be closed to newcomers until a new economic crisis occurs.

12. The Tessa system allows the U.S. government 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 require it to do so.

3.2 How do the economic choices compare and what are Tessa's strong points?

The first point to make is that the Tessa System is an equity conversion method. It is based on past savings levels and not on creating current and thereby future debts and repayment obligations: i.e. tax increases over future incomes.

The current quantitative easing (QE) exercises are either aimed to help fund government spending or aimed at taking over outstanding debt on home mortgages funded by the state sponsored mortgage institutions. Neither of these QE actions has an automatic repayment mechanism built in. Quantitative Tightening (QT) will need to be based on government surpluses in future years. The current QE portfolio of bonds issued by state sponsored mortgage institutions has an average maturity level of over 10 years. QT cannot easily be executed if the U.S. economy does not pick up any time soon.

One may conclude that there is a vast difference between using past savings levels as opposed to future tax increases. Releasing equity from homes in order to stimulate economic demand will do what the U.S. government is trying to achieve. It will increase demand levels. It will thereby increase job opportunities. It will improve the profit levels of companies. It will thereby support the stock market values of companies. This in itself will help pension funds in their performance. Banks will be better off as there will be a lower level of doubtful debtors, both among its retail customers and among its corporate clients.

A main difference with the currently approved programs is that such Tessa system does not cost the government a dime apart from some administrative costs; it also will not create a future tax transfer obligations.

Tessa implies a freedom of choice for the household. It is their choice that counts. No one is forced to participate. However the proceeds will help households to spend more. Helping grown up children in meeting their financial obligations will be one effect of the Tessa System. This will reduce the occurrence of foreclosures and home repossessions. It will also help the financial sector in having to make

lower provisions for doubtful debtors. It will furthermore help the real estate market in that less foreclosed properties will come on to the market, thereby preventing a loss situation for all households through house price drops.

Finally the U.S. government will benefit, as its tax receipts will increase. More stimuli with the help of the Tessa System will reduce the need for financing government debt. The Tessa system does not rely on taxpayers to pick up the bills in the years to come.

In summary, the Tessa system is based on self help by individual households to use their savings embedded in their homes, use those savings to consume more on a temporary basis and re-save again after a grace period. The best system facilitator is likely to be the Federal Reserve. It can create the temporary funding at no cost to itself and therefore it can accept a 0% interest on its facilities to individual households. What is also important is that a Tessa system combines the QE cash outlay made by the Fed with QT: the principle of money out and money back in.

Finally the U.S. government may wish to decide to what extent it wishes to allow the Tessa system to take over the role of some of the other stimuli programs.

The U.S. was chosen for this case study as it represents the worlds' largest free market economy. If the U.S. choses to apply such Tessa System, other countries might follow, which will quicken the speed of the economic recovery worldwide.

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References:

Federal Reserve Bank of St. Louis; Households, Owner's Equity in Real Estate, Level; various years; https://fred.stlouisfed.org/series/OEHRENWBSHNO

Federal Reserve Bank of St. Louis; Median Sales Price of Houses Sold for the United States; https://fred.stlouisfed.org/series/MSPUS

Federal Reserve Bank of St. Louis; Households and Non Profit Organizations; One to Four Family Residential Mortgages; Liabilities; Level; https://fred.stlouisfed.org/series/HHMSDODNS

Federal Reserve Bank of St. Louis; Gross Domestic Product; Seasonally Adjusted Annual Rate; https://fred.stlouisfed.org/series/GDP/

Board of Governors of the Federal Reserve System, Washington D.C.; Credit and Liquidity Programs and the Balance Sheet; https://fred.stlouisfed.org/series/GDP/

Board of Governors of the Federal Reserve System, Washington D.C.; Publications: 2019 Report on Economic Wellbeing U.S. Households
https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf?wpisrc=nl_daily202

De Koning, Kees; 7 May 2020; Tessa: A new economic tool; A Temporary Equity Spend and Save Again system; *RePEc:pra:mprapa:100182* Tessa a new economic tool; a Temporary Equity Spend and Save Again system

U.S. Census Bureau; Maryland, U.S; U.S Median Household Income 2018-2019;
https://www.census.gov/library/stories/2019/09/us-median-household-income-up-in-2018-from-2017.html