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Savings: the least understood economic concept;

The U.S. example

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Introduction

Savings, in a financial sense, can be defined as postponed consumption. This definition implies that a household has to have an income first, before contemplating whether to spend such income in the current or in a future period.

In the U.S., the two largest accumulations of savings are in pension savings and in the net worth of homes. In 2019 the total pension savings added up to \$32.3 trillion and the net worth in homes to \$ 19.656 trillion; a combined savings of nearly \$52 trillion. There are other household savings: in bank deposits and in shares and bonds. The current other debts by households are \$4.6 trillion (car loans, student loans, personal loans).

The Federal government's financial power derives from its tax income of \$3.706 trillion plus its borrowings of an additional \$1.1 trillion. These are no match for restoring a savings and spending equilibrium. The combined U.S. households are asset rich, but can, at times, be cash poor.

Should the U.S. government with the help of the Federal Reserve come to the rescue of the economy? It would need to borrow huge amounts. It would also need to create many new projects to spend such money. The result would be a substantially increased government debt, which at the moment is already at 106.9% of GDP or in other words already more than six times current government revenues. Future tax income will need to be used just to get the level of borrowings down, rather than for general expenses.

Would it not be better to use a small share of households' own savings currently locked up in homes? The Federal Reserve, as a QE activity, could fund the scheme at 0% interest. Such a Tessa scheme: a Temporary Spend and Save Again method could release some equity out of a home, to be used for consumption in the current period. Current savings are turned into cash and future incomes can be used to replenish the stock of savings and repay the Fed.

The experiences from the last financial crisis in terms of adjustments are: the unemployment crisis took 10 years, before the number of unemployed was back to the level of December 2006. The recovery period over the losses made on the housing stock took nearly 10 years. Perhaps it is worth considering using household savings for household benefits. Such method can shorten the adjustment period dramatically.

1. Putting households first

1.1 The last financial crisis

One may use the experience of the last financial crisis in the U.S. (2006-2016) to illustrate what can be done to solve the current crisis.

The total number of unemployed individuals was 6.762 million in December 2006. From then on, till October 2009, the number of unemployed increased by 127% to 15.352 million. Only for the first time, by November 2017 did the number of unemployed individuals drop just below the December 2006 number when it reached 6.697 million persons. The U.S. unemployment crisis lasted for a period of ten years!¹

Increased unemployment levels have a devastating effect on income levels; severely affecting both consumption and debt payments.

In 2007, the 47.5 million U.S. households who had a mortgage had borrowed \$10.613 trillion in total; on average these households had an outstanding mortgage amount of \$223,431 per household. Over the period 2006-2014 22.4 million households got into financial difficulties as foreclosure proceedings were started against them.

Table 1: U.S. Foreclosure statistics 2006-2014²

	Foreclosure Filings	Completed Foreclosures	Home Repossessions
2014	1,117,426	575,378	327,069
2013	1,369,405	921,064	463,108
2012	2,300,000	2,100,000	700,000
2011	3,920,418	3,580,000	1,147,000
2010	3,843,548	3,500,000	1,125,000
2009	3,457,643	2,920,000	945,000
2008	3,019,482	2,350,000	679,000
2007	2,203,295	1,260,000	489,000
2006	1,215,304	545,000	268,532

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

²<http://www.statisticbrain.com/home-foreclosure-statistics/>

What the above statistics clearly show is that 22.4 million U.S. homeowner households were forced to alter their spending patterns, once they fell behind with their mortgage payments.

This, plus the substantial increase in unemployment levels, did lead to the chain reaction of reduced new home start-ups and a serious drop in house prices. The home equity net worth in U.S. homes dropped from \$14.260 trillion in Q3 2006 to \$8.213 trillion in Q2 2012³: a drop of 42.4%! It took to Q2 2016 for the net worth to be restored to just over the Q3 2006 level when it reached \$14.389 trillion. The latest data indicate that the home equity level for Q1 2020 was \$19.656 trillion.

Two major lessons can be drawn from the U.S. financial crisis experience over the period 2006-2016. The first one is an obvious one: Collectively households lose incomes when made redundant. They experience more difficulties in servicing their debt commitments and of course can spend less on consumption.

The second one is that the adjustment period for households took much longer than the return to economic growth. For unemployment levels, the return to the same level as in December 2006 took 10 years. For households to re-build up the net worth position in their homes took from Q3 2006 to Q2 2016, or also practically 10 years!

1.2 The corona virus pandemic linked crisis

It is obvious that the corona virus pandemic is not an economic phenomenon. It is a national and international health issue but with wide ranging effects on many sectors of the economy. One of these is the sharp increase in unemployment levels. In February 2020, the U.S. had 5.787 million unemployed. The U.S. registered 17.750 million unemployed by the end of June 2020 and this was already a major improvement over the April 2020 level when 23.078 million workers had registered as unemployed.

The key question is what to do in economic terms to avoid another ten-year adjustment period with all the drawbacks caused by increased deficits of the U.S. government; on households defaulting on mortgages and other borrowings and on companies getting into financial troubles as well.

What the U.S. government has done is having a series of programs that altogether pumped \$3.7 trillion in the U.S. economy this year so far. This spending level was partially accommodated by money created by the Federal Reserve: Quantitative Easing.

³ <https://fred.stlouisfed.org/series/OEHRENWBSHNO>

The philosophical theory behind all these programs- not just in the U.S., but also in many other western countries-, is that governments including central banks are the only ones that can save households from the economic impact of recessions. In the next sections of this paper this philosophy will be questioned.

2. What are savings?

Investopedia defines savings as the money a person has left over when they subtract their consumer spending from their disposable income earned over a given period of time.⁴

U.S. households have been avid savers over the years, notwithstanding the drop in home values over the period 2006-2012 and the slow recovery to Q2 2016. The two main households' assets are pension savings and home values. In 2019 the total level of pension savings in the U.S. reached \$32.3 trillion⁵ and the net worth embedded in privately owned homes was \$19.656 trillion.

These savings levels do not include private households' bank savings levels and privately held shares and bonds. The net worth in homes has been calculated after the outstanding level of home mortgages was deducted.

Other -non mortgage- debt by households, according to a report by the Federal Reserve Bank of New York, stood at \$4.6 trillion at the end of 2019.⁶

The two savings values (pension savings and net worth in homes combined) make up to practically \$52 trillion. This can be compared to the 2019 nominal GDP level of \$21.43 trillion,⁷ and to the U.S. government expenditure level in 2019, which the U.S. Bureau of Economic Analysis put at \$7.3 trillion or 34% of 2019 GDP.

When savings are at a level of practically seven times all U.S. government expenditure levels -Federal and State- one has to start wondering about how economic crises can be overcome. Should it be done just through government action and with the help of the Federal Reserve? Or could one envisage a shift to a different pattern and involve the savings levels of households?

The U.S., like many other developed nations, does not lack savings assets. However, the country lacks a system that can use these savings in a manner that corrects the downturns in employment levels as and when such upheavals occur.

⁴ <https://www.investopedia.com/terms/s/savings.asp>

⁵ <https://www.statista.com/statistics/940498/assets-retirement-plans-by-type-usa/>

⁶ <https://www.newyorkfed.org/microeconomics/hhdc.html>

⁷ <https://www.bea.gov/news/2020/gross-domestic-product-fourth-quarter-and-year-2019-advance-estimate>

The U.S. is an asset rich country, but on occasions it is simultaneously cash poor!

3. A self help scheme to correct economic downturns

The tax levels in the U.S. help fund the Federal government expenditure. For the 2020 tax year, the two major taxes are income taxes for \$1.8 trillion (equal to 49% of all tax revenues) and payroll taxes for \$1.3 trillion (35% of tax revenues) and total tax revenue of \$3.7 trillion, with an expected expenditure of \$4.79 trillion. The expected expenditure is already running at 29% above Federal government income and this before more programs are likely to be approved as a consequence of the corona virus pandemic.

Another aspect is the action of the Federal Reserve. Up till the 20th of August 2008, the balance sheet of the Federal Reserve had been very steady at around \$898 billion.⁸ By July 8, 2020 the balance sheet had expanded by 770% to \$6.920 trillion. These are not savings in the ordinary sense. Savings originate from postponed consumption. In the Fed's case one can better describe such balance sheet items as: "Artificial Money" or A.M.

The injection of A.M. into the U.S. economy does put more liquidity into circulation. Such action replaces the savings of others who held government bonds in the past or held state sponsored mortgage bonds in their portfolio. A.M. cannot replace income and does not represent postponed income levels: i.e. actual savings levels. In buying up such savings titles, the need for an ultimate repayment of government or mortgage bonds does not diminish. If the sellers of such liabilities decided to consume more and preferably to the full extent of their transfer of debt titles, then A.M. would have had a positive economic growth contribution. However the main holders of such debt titles are institutions like pension funds, other institutional investors or wealthy individuals. Usually all these categories of investors would be looking to reinvest the amounts received rather than spend the proceeds on consumer goods and services.

A recession brings with it a lower government tax income and an increased expenditure level. The budget deficit grows even if a government does not take additional measures to stimulate an economy.

Should it therefore be the U.S. government's action plan that helps the country out of the recession? Could it be done differently?

In principle, all holders of savings could be asked to spend a relatively small amount of their savings to consume more in the current period and save a bit less. In some cases, like for the collective pension funds, this is made more difficult as the life risks are calculated for all savers together in such pension

⁸ <https://fred.stlouisfed.org/series/WALCL>

fund. A withdrawal of money, early on, affects the future benefits of all policyholders. In 401 K retirement savings plans based on individual savings, withdrawal of some money could potentially be done, but it would imply a sell-off of financial assets at a time that such assets will be under price pressures due to a recessionary trend.

For these reasons, a far simpler solution would be to use some of the savings embedded in homes owned by the owner-occupiers. This can be done with the help of a Tessa system, which has been described in a previous paper⁹. Tessa stands for: Temporary Spend and Save Again system.

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 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.

⁹ <https://mpra.ub.uni-muenchen.de/id/eprint/100813>

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.

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 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 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.

13. The Tessa account could be an account to be setup by the household's principal bank on the request of the homeowner occupier. The costs of maintaining such accounts –over which the banking system does not run a credit risk only an operational one- will be at the costs of the Government as the scheme is in the macro-economic national interest.

4. Some conclusions

One conclusion that may be drawn from the above is that the savings levels, especially in pension savings and in home equity ones, were reached in whatever circumstances of the state of the economy. Home equity savings are based on the contractual agreements between the lenders and the borrowers about the mortgage amounts due over the whole period of a mortgage loan outstanding. Home mortgages are not regarded as a savings category, notwithstanding that

they have created the \$19.656 net equity position according to the latest statistics, compared to a loan amount outstanding of \$10.682 per Q1 2020¹⁰.

Homes have become an essential asset base; in other words a savings vehicle. Current savings in homes far outstrip the liability base in a composition of 2 versus 1.

To select home equity savings as the vehicle to rescue the U.S. economy has great merits. Using individual household savings to help create demand levels does not require debt servicing like in the case of U.S. government debt. In linking the “re-saving” to a future income level –fixed as a percentage, but variable as to the level of income- creates a cyclical payment structure, tying in with the economic development stage. A grace period for “re-saving” will further help boost demand levels.

Using households own home equity to his or her own benefit and at their own choice should be a preferred method over the method of using future tax receipts in the current period to be repaid by general and indiscriminate tax rises.

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¹⁰ <https://fred.stlouisfed.org/series/HHMSDODNS>

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