Does monetary policy lose effectiveness when economies are more indebted?

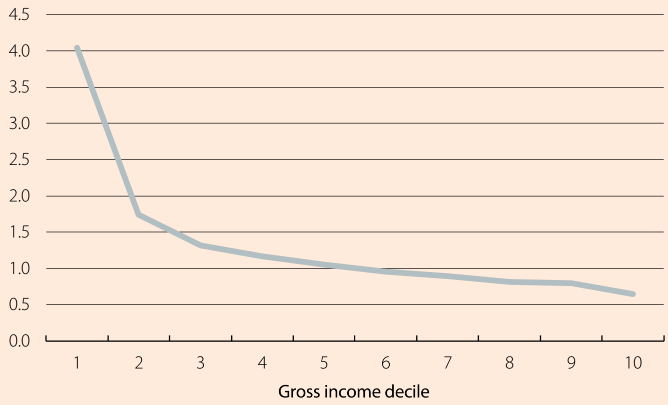
The economic recovery of the last decade was slow, despite the fact that monetary policy remained anchored in extraordinarily accommodative territory, with interest rates close to 0% or even negative.[1] Was this the fault of the heavy burden of debt we inherited from the financial crisis and the great recession? If the COVID-19 crisis is generating a sharp increase in debt, how will the effectiveness of monetary policy be affected in the coming years?

From debt to monetary policy: transmission mechanisms

One possibility is that it could become even more effective than before: various studies document that the macroeconomic impact of monetary policy largely stems from its impact on indebted households and firms.[2] This is reasonable: when interest rates fall, the burden on those in debt is relieved and resources are freed up to be used for consumption or investment. In contrast, the other group that can be particularly sensitive to interest rates – savers – tends to have a lower marginal propensity to consume:[3] while monetary policy may produce large changes in the value of their assets, this will end up having a relatively smaller impact on macroeconomic variables such as aggregate consumption.

Propensity to consume based on income group

(Ratio between annual household spending and net income)



Note: *Data relating to US households in 2019.*
Source: *CaixaBank Research, based on the Consumer Expenditure Survey conducted by the US Bureau of Labor Statistics.*

However, experience from the past 10 years suggests that the relationship between debt and monetary policy is more complex. Indeed, there is evidence that the slow pace of the economic recovery following the financial crisis and the great recession is explained, at least in part, by the burden of debt inherited from the crisis.[4] This debt burden held back the recovery in demand due to several reasons. On the one hand, household consumption was constrained by the need to devote resources to repaying the debt[5] and by the desire to rebuild savings buffers (for instance, for precautionary reasons or for retirement). On the other hand, in an uncertain and risk-averse environment, the more indebted firms and families could not increase their consumption and investment by taking on even more debt. Furthermore, the fall in financial asset and real estate prices following the crisis lowered the value of the collateral that firms and households need to borrow and finance their consumption and investment.[6] Thus, although monetary policy remained heavily dovish, the debt burden limited the capacity of demand to respond to the low interest rates.

Overall, there are mechanisms that support an enhanced monetary-policy effectiveness and others that suggest that the debt burden on the economy can cause central banks to lose traction. What do the data say? Empirical studies find that monetary policy remains effective but loses strength in periods of high debt: its impact on GDP growth, consumption and investment is diminished.[7] In addition, in the current environment the impact of monetary policy will also depend on the scars that the COVID-19 crisis leaves behind for investment opportunities, the desire to save and the redistributive effects of debt. If it damages productive capacity, the increase in precautionary saving persists or the debt burden falls on households and firms with fragile balance sheets, then the effectiveness of monetary policy will be more likely to be eroded.[8]

1. The euro area and Spain took 6 and 9 years, respectively, to recover and consolidate the economic activity levels of 2008.
2. See J. Cloyne, C. Ferreira and P. Surico (2020). «Monetary policy when households have debt: new evidence on the transmission mechanism». The Review of Economic Studies, 87(1), 102-129.
3. The chart shows how the marginal propensity to consume decreases as income increases. Households with higher incomes (and less propensity to consume) also tend to be those with greater accumulated wealth.
4. See K. Dynan (2012). «Is a household debt overhang holding back consumption?». Brookings Papers on Economic Activity, 299-362.
5. See M. Di Maggio *et al.* (2017). «Interest Rate Pass-Through: Mortgage Rates, Household Consumption, and Voluntary Deleveraging». American Economic Review.
6. See N. Bhutta and B. Keys (2016). «Interest Rates and Equity Extraction during the Housing Boom». American Economic Review.
7. See S. Alpanda and S. Zubairy (2019). «Household debt overhang and transmission of monetary policy». Journal of Money, Credit and Banking, 51(5), 1265-1307.
8. The erosion of investment opportunities and the increase in precautionary saving can be reflected in a further decline in the natural rate of interest. The lower this rate is, the more the central bank must reduce the observable rates – something that is becoming increasingly difficult with rates that are already negative or close to 0%.

Faced with a loss of traction... is there room to shift up a gear?

A loss of effectiveness can force central banks to pursue a more aggressive monetary policy. In a way, this is already what banks such as the Fed, the ECB and the Bank of England have been forced to do in the last decade, and the Bank of Japan for even longer, with unconventional measures such as asset purchases (especially purchases of public debt). To mitigate the risk of a further loss of traction following the COVID-19 crisis, it is important that the bulk of the effort does not once again fall exclusively on monetary policy. Other spheres of economic policy must continue to take a step forward, both in the COVID-19 containment phase and later in the phase of boosting the recovery.

After all, with the rise in debt that the COVID-19 crisis will trigger, it will become increasingly difficult for monetary policy to shift up a gear. For instance, both in Japan and Europe, it has been documented how the combination of an increase in debt and accommodative financial conditions associated with the dovish monetary policies that have been applied can erode long-term economic growth: an accommodative financial environment enables the survival of highly indebted and unproductive firms, which slows down the reallocation of resources to emerging sectors and depresses aggregate productivity.[9]

Finally, there is another major risk that is more fundamental: fiscal dominance. This refers to the risk of the monetary authority feeling obliged to adapt monetary policy to suit the needs of fiscal policy. Any monetary action has fiscal consequences (rate hikes increase payments on public debt, while rate cuts allow those payments to be reduced). However, the more public debt central banks have on their balance sheets the greater the fiscal consequences of their decisions, and this could result in them becoming excessively restricted in their actions. Faced with this situation, all spheres of economic policy must share the effort to stimulate economic activity in order to avoid pushing monetary policy to even more extreme positions. Having robust institutions that protect central banks' independence will also be key. Otherwise, the COVID-19 crisis could also have repercussions for central banks' actions in the medium term and for the future performance of our economies.

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9. See V. Acharya *et al.* (2020). «Zombie credit and (dis-)inflation: evidence from Europe». NBER Working Paper nº 27158.