Is it possible to experiment with a universal income?

By Guillaume Allègre, @g_allegre

In a blog entitled "Revenu universel, l'impossible expérimentation" [Universal income, the impossible experiment], I underlined the limits of current and future experiments with a universal income[1]: samples that are too small and unrepresentative; the limits intrinsic to a lottery (absence of balancing effects on the labor market; an absence of "peer effects"[2]). Clément Cayol responded to my piece on the website of the Mouvement Français pour un Revenu de Base [French Movement for a Basic Income] ("M Allègre : les expérimentations de revenu de base sont un chemin possible vers l'instauration [Mr Allègre: Experiments with a basic income are one possible path towards establishing it]. Cayol proposes experimenting with a universal income on "saturation sites" (for example, an employment catchment area). The idea would be to select certain employment catchment areas as a treatment group (e.g. Toulouse and Montbéliard) and to use areas with similar characteristics as control groups (Bordeaux and Besançon?). By comparing differences in behaviour between the two groups (in terms of employment, part-time work, wages, etc.), we could identify the impact of a universal income. An experiment like this has taken place in a Kenyan village.

The idea of experimenting on a saturation site may seem attractive and does meet some of my criticisms (we can measure balancing effects on the labor market and peer effects). But it does not respond to others: an experiment like this is by its very nature temporary (and people will not react in the same way to a temporary incentive as to a permanent incentive); the financing side of a universal income cannot be tested (and a universal income is expensive: it will have to be financed by, for instance, income tax, which will have an

impact on financial incentives to return to work).

Experimenting on a saturation site has its own limits: it is necessary to find a control group with characteristics similar to those of the treatment group; migration has to be controlled (could I benefit from the universal income by moving from Montbéliard to Besançon?). And above all it poses legal and ethical issues [3]: can we give 500 euros per month to all the inhabitants of Toulouse and Montbéliard and have the French taxpayer finance this experiment[4]? The law allows local authorities to experiment, but only for the purpose of extending the scale of a trial, yet extending a universal income to the entire French territory is not on the cards.

[1] Also see Guillaume Allègre, 2010: « L'expérimentation du revenu de solidarité active entre objectifs scientifiques et politiques », [Experimenting with France's RSA in-work income benefit between scientific and policy objectives], *Revue de l'OFCE*, no.113.

[2] Here the peer effect refers to the fact that an individual will stop working more easily if their friends also stop working: my leisure time is complementary to that of my friends.

[3] See: https://www.senat.fr/rap/l02-408/l02-40810.html

[4] It is not easy to believe that experimentation creates losers among the treatment group, so funding is necessarily national.

The Janus-Faced Nature of Debt

by Mattia Guerini, Alessio Moneta, [Mauro Napoletano](#), Andrea Roventini

The financial and economic crises of 2008 have been intimately interwined with the dynamics of debt. As a matter of fact, a research by [Ng and Wright (2013)](#) reports that in the last thirty years all the U.S. recessions had financial origins.

[Figure 1](#) shows that both U.S. corporate (green line) and mortgage (blue line) debts have been growing steadily from the sixties to the end of the century. In the 2000s, however, mortgage debt increased from around 60% to 100% of GDP in less than a decade. The situation became unsustainable in 2008 with the outburst of the subprime real asset bubble. The trend in debt changed since then. Mortgage debt declined substantially, while the U.S. public debt-to-GDP ratio (red line) skyrocketed from 60% to a level slightly above than 100% in less than 5 years, as a consequence of the Great Recession.

Figure 1. Private and public debt-to-GDP series
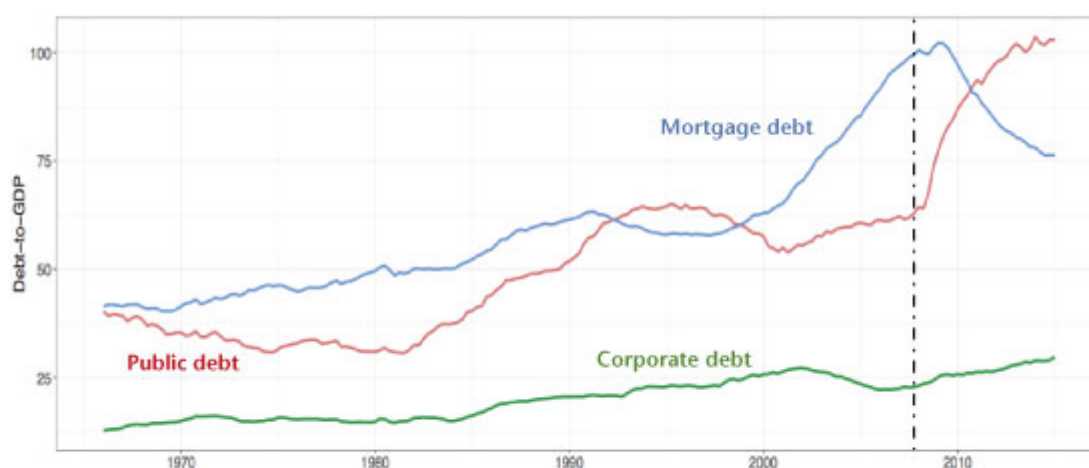
The vertical dashed line represents 2007 (Q4).
Source: autors.

This surge in public debt has been raising concerns about the

sustainability of public finances, and more generally, about the possible detrimental effects of public debt on economic growth. Some economists argued indeed that there exist a 90% threshold after which public debt harms GDP growth (see Reinhart and Rogoff, 2010). Notwithstanding a large number of empirical studies contradicting this hypothesis (see Herdon *et al.*, 2013 and Égert, 2015 as recent prominent examples), the debate is still open (see Ash *et al.*, 2017 and Chudik *et al.*, 2017).

We have contributed to this debate with a new empirical analysis that jointly investigates the impact of public and private debt on U.S. GDP dynamics and that will appear on *"Macroeconomic Dynamics"* (see Guerini *et al.*, 2017). Our analysis keeps the *a priori* theoretical assumptions as minimal as possible by exploiting new statistical techniques that identify causal structures from the data under quite general conditions. In particular, we employ a causal search algorithm based on the Independent Component Analysis (ICA) to identify the structural form of the cointegrated VAR and to solve the double causality issue.[1] This has allowed us to keep an "agnostic" perspective in the econometric analysis, avoiding restrictions on the model, thus "letting the data speak".

The results obtained suggest that public debt shocks *positively* and *persistently* affect output (see Figure 2, left panel).[2] In particular, our results provide evidence against the hypothesis that upsurges in public debt hamper GDP growth in the U.S. In fact, increases in public debt—possibly channeled through an increase in public spending in investments—crowd-in private investments, (see Figure 2, right panel) confirming some results already brought to the fore by Stiglitz (2012). This implies that government spending and, more generally, expansionary fiscal policy spur output both in the short- and in the medium-run. In that, austerity policies do not seem to be the appropriate policy answer to overcome a

crisis.

Figure 2. Effects of public debt on output and investment

Output

Investment

Source: autors.
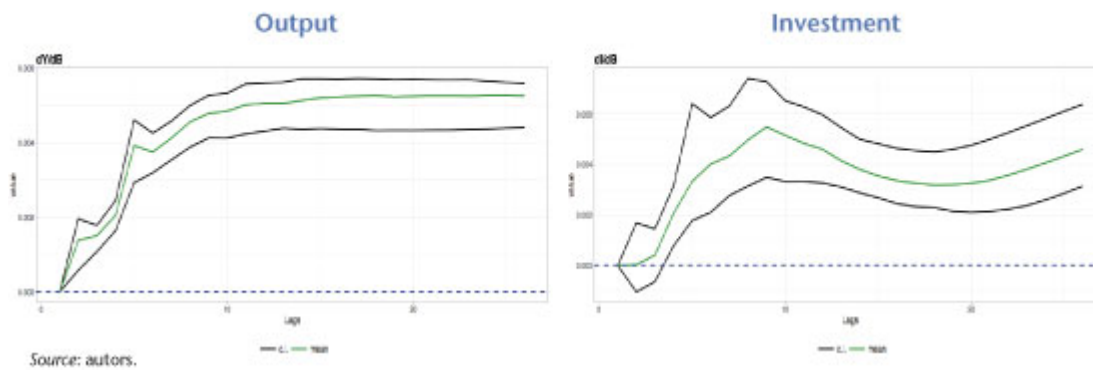
On the contrary, these positive effects are not fully observed when we look at the effects of private debt and in particular when we focus on mortgage debt. More specifically, we find that the positive effects of private debt shocks are milder than public debt's ones, and they fade out over time. Furthermore, increasing the levels of mortgage debt have a negative impact on output and consumption dynamics in the medium-run (see Figure 3), while their positive effects are only temporary and relatively mild. Such a result appears to be fully consistent with the results of Mian and Sufi (2009) and Jordà *et al.* (2014): mortgage debt fuels real asset bubbles, but when these bubbles burst, they trigger a financial crises that visibly transmit their negative effects to the real economic system for longer periods of time.

Figure 3. Effects of mortgage debt on output and consumption

Output

Consumption

Source: autors.
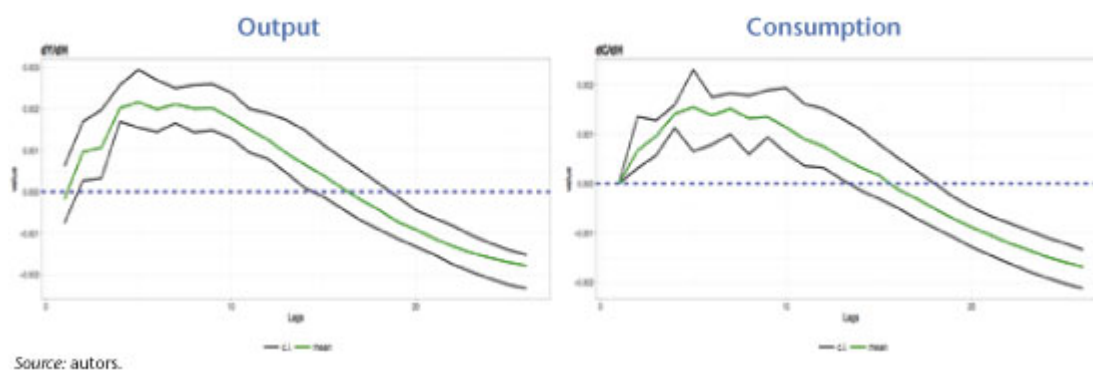
Another interesting fact that emerges from our research, is that the other most important form of private debt—*i.e.* non-

financial corporations (NFCs) debt—does not generate negative medium-run impacts. As a matter of fact (as it is possible to see in Figure 4) surges in the level of NFCs debt seems to have a positive effect both on GDP and on gross fixed capital formation, hence directly increasing the level of investments.

Figure 4. Effects of corporate debt on output and investment
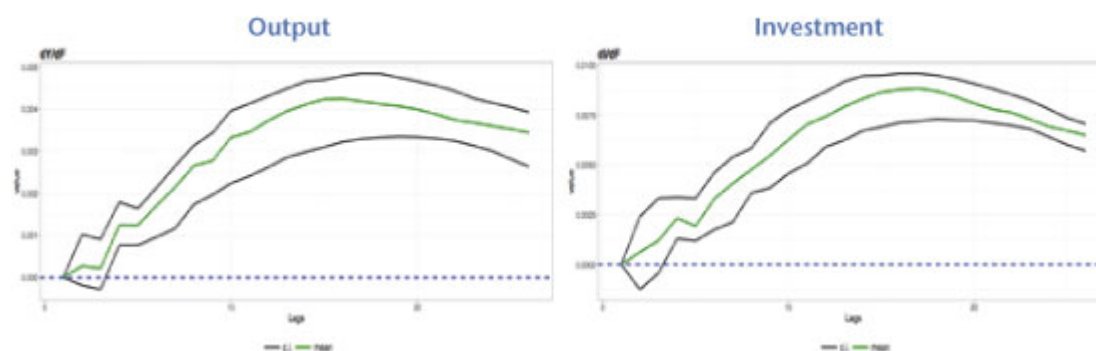
Source: autors.

To conclude, our results suggest that debt has a *Janus-faced* nature: different types of debts impact differently on aggregate macroeconomic dynamics. In particular, possible threats to medium- and long-run output growth do not come from government debt (which might well be a consequence of a crisis), but rather from increasing too much the level of private one. More specifically, surges in the level of mortgage debt appear to be much more dangerous than the building up of corporate debt.

[1] For details about the ICA algorithm see Moneta *et al.* (2013); for details about its statistical properties see Gourieroux *et al.* (2017).

[2] When computing the Impulse Response Functions, we apply a 1 standard deviation (SD) shock to the relevant debt variable. Hence, for example, on the y-axis of Figure 2, left panel, we can read that a 1 SD shock to public debt has a 0.5% positive effect on GDP in the medium run.