



## [QE in the Future: the central bank's balance sheet in a financial crisis](#)

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Ricardo Reis<sup>1</sup>

<sup>1</sup>London School of Economics

In the last few years, central banks have dramatically increased the size of their balance sheets and the maturity of their asset holdings through quantitative easing (QE) policies that issue bank reserves to buy long-term bonds. Typically QE should be neutral on macroeconomic outcomes, since it simply exchanges one government liability for another. Yet, in the last few years it has been argued that a financial crisis disrupting usual no-arbitrage relations between different assets and/or if interest rates are stuck at zero requiring other policies to signal future interest rates, then QE may be an effective policy tool. This paper asks whether QE is also useful in a future fiscal crisis, modeled as a situation where the fiscal outlook is inconsistent with both stable inflation and no sovereign default.

A fiscal crisis can lower welfare through two channels. The first is by leading to unexpected inflation that lowers the real value of the public debt, but also causes a recession because of nominal rigidities. The second is by inducing losses to banks that hold government bonds and by leading to a shortage of safe assets to use as collateral, both of which lead to contractions in credit and disruption in financial markets. This paper shows that managing the size and composition of the central bank's balance sheet can interfere with each of these channels, stabilizing inflation and economic activity.

The power of QE comes from interest-paying reserves being a special financial asset with 4 distinct properties:

1. Reserves are held exclusively by banks, as only they can hold these deposits at the central bank.
2. Reserves are supplied exclusively by the central bank, so it can freely set what interest to pay on them.
3. Reserves are default free, since the central bank can retire them at will or exchange them one to one at any time with fiat currency.
4. Reserves are the unit of account in the economy, so their nominal value never changes.



As long as these are true, then QE in a fiscal crisis is an effective policy tool, and its function cannot be substitutable either by currency nor by government debt. QE is conceptually different from both monetary financing of the deficit and from Treasury management of the maturity profile of the public debt.