Reply to Romar Correa

As regards the importance of $i \leq i^M$, where i^M is the average nominal interest rate on base money and i is the same duration risk-free nominal interest rate on non-base money financial instruments the Central Bank can hold as an asset, the weak inequality is a necessary condition for the existence of a monetary equilibrium in virtually any well-specified monetary model. The strict inequality is a necessary condition for the profitability of monetized balance sheet expansion by the Central Bank (interpreting i^M as the marginal nominal interest rate on base money; an extension to three types of base money, cash/currency, required reserves and excess reserves, with policy rates, respectively, i^C, i^R and i^E is straightforward). I am happy to live with this inequality.

Far from have provided as long and eloquent testimony to the strict positivity of i, I have written extensively on ways to achieve negative risk-free nominal interest rates - abolishing cash, taxing currency à la Gesell or introducing a variable exchange rate between cash and bank reserves held with the Central Bank à la Eisler - and on the consequences of doing so). Links to at least 15 papers on the issue can be found on my website http://willembuiter.com/public.htm.

As regards base money being backed by Treasury bonds, this is incorrect. Base money is irredeemable, so it is not a liability in any meaningful sense to its issuer (the Central Bank) or to the beneficial owner of the Central Bank, the Treasury. Base money is backed by nothing, because the only claim that the holder of a given amount of base money has on the issuer (the Central Bank) is for that same amount of base money held by the owner. The holder cannot force the issuer ever to exchange it for anything else. The asymmetric treatment of the PDV of the terminal base money stock in the intertemporal budget constraints of the State (the consolidated Central Bank and Treasury) (in equation (22)), and of the private sector (in equation (18)) formalizes the irredeemability of fiat base money.

Non-monetary liabilities of the consolidated Central Bank and Treasury (the State) are ‘backed’ by State assets (valued in terms of the present discounted value (PDV) of their future cash flows, by future taxes or by future seigniorage (profits from base money issuance). All this is made clear in my paper through the intertemporal budget constraints of the Central Bank (equation (35), the Treasury (equation (34), and the State (equation (22)).

The beneficial ownership of the Central Bank by the Treasury is sometimes explicit, as. in the UK where the Bank of England is legally a joint stock company all of whose shares are owned (since 1946), by HM Treasury. The reality that the Treasury gets the profits of the Central Bank is sometimes obscured by rather weird, legacy, formal ownership structures of the Central Bank. Member banks ‘own’ the regional Reserve Banks of the Federal Reserve System. Italian commercial banks own ‘stock’ in the Banca d’Italia, and Bank of Japan ‘equity’ is traded on the Japanese stock market.

The fact that the Treasury is the beneficial owner of the Central Bank is compatible with many different degrees of target independence and operational independence of the Central Bank in the design and conduct of monetary policy. Whether a Central Bank can act as an overt fiscal principal (engaging in helicopter money on its own) depends on the prevailing legal and political norms and rules. Taxes and subsidies are generally viewed as a Parliamentary prerogative in most electoral democracies This would make Central Bank solo helicopter money drops politically illegitimate and most likely also unconstitutional or illegal. Of course Central Banks, especially during periods of financial turmoil, engage in large-scale quasi-fiscal activities, through the terms and conditions on which they make collateralized funding available to counterparties and through the prices they are willing to pay in asset sales and purchases. But even such hidden or quasi-fiscal principal actions undermine the political legitimacy of the Central Bank, which is viewed as usurping a parliamentary privilege. This is especially clear in the Eurozone, where the quasi-fiscal redistribution activities of the ECB redistribute wealth and income across the national boundaries of its 19 member states.

There is a long literature on what happens when the objectives and/or perceptions of the economic environment of the Treasury and the Central Bank are in conflict. The traditional view is that 'Fiscal Dominance' prevails: the Central Bank caves in when the politically more legitimate elected authorities (the Treasury) insist. This may well be plausible when a single national Treasury plays a game of chicken with a single national Central Bank. Whether the same outcome is as likely to prevail when a single supranational Central Bank (the ECB) confronts 19 national Treasuries, as is the case in the Eurozone, remains to be seen.