

Comment on “Exchange rate floor and central bank balance sheets: Simple spillover tests of the Swiss franc” by Adrien Alvero and Andreas M. Fischer

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This ambitious paper addresses a very challenging question about the effectiveness of Swiss monetary policy in the recent financial crisis. On the one hand, the question consists in testing the relationship between variables that have limited variability. In the crisis, most developed countries (the US, the euro area, Switzerland) have experienced very low, and even negative, short-term interest rates. In addition, the Swiss National Bank has introduced a floor on the EUR-CHF rate. To address the limited variability, the authors proceed as follows. Instead of using short-term interest rates, they rely on unconventional monetary policy (UMP), which is measured by the expansion of the central bank’s balance sheet. Instead of using the exchange rate as the monetary policy objective, the authors use EUR-CHF risk reversals. Risk reversals capture the market expectations of the future exchange rate.

On the other hand, the paper investigates a new field of research on the effectiveness of UMP. Quantitative easing has been implemented using different approaches across countries, depending on the objectives and the tools available to the central banks. Interpreting UMP in terms of the size of the central bank’s balance sheet allows the authors to compare the performance of the SNB and the ECB. In addition, the test is described in a context where central banks compete against each other to attain the desired exchange rate.

Using UMP measures to test the effectiveness of the Swiss monetary policy in the recent period raises some empirical issues. First, liquidity provision can take many different forms, such as the purchase of government bonds (the ECB) or the exchange of swap lines between central banks (the SNB). All of these measures imply an expansion of the balance sheet, which is used by the authors as a measure of quantitative easing. An inconvenience of using balance sheet information is the availability of data. While interest rates are known in real time, the size of the balance sheet is revealed only at a monthly frequency for the ECB and the SNB. Therefore, it is more difficult to identify the actual impact of the UMP on the exchange rate and to deal with endogeneity, notably because of the valuation effect within the month.

An important contribution of the paper relates to the competition between central banks. ECB measures tend to decrease the euro-franc exchange rate (spillover)

effect, whereas SNB measures tend to increase the exchange rate (spillback) effect. The test is specifically designed to measure the relative effectiveness of the central banks. As the SNB has introduced the floor on the EUR-CHF rate, risk reversals are used to measure how the Bank's measures have changed the expectations of financial markets on the parity.

Empirically, the authors find that UMP measures indeed affect risk reversals (i.e. market expectations) in the expected way. Increasing the ECB balance sheet implies a decrease in risk reversals (an expected depreciation of the euro), whereas decreasing the SNB balance sheet implies an increase in risk reversals (an expected appreciation of the euro). The authors reveal results that are more robust for the SNB spillback effects. These effects seem to be relatively weak, however, probably due to the conflicting objectives of – and therefore the lack of cooperation between – the central banks.

I would like to make three additional comments on the test implemented in the paper. First, the paper identifies two channels through which spillover effects can operate, namely the signaling and the portfolio channels. The authors argue that their test can only inform on the portfolio channel because the balance sheet cannot capture forward-looking information. However, as risk reversals are by nature forward-looking, they are able to capture some changes in market expectations due to changes in monetary policy. Therefore, it is likely that the test also captures some part of the signaling channel.

Second, as highlighted by the authors, the increase in the size of the balance sheet has been more pronounced for the SNB than for the ECB. However, the increase in the value of the assets, once expressed in euros, has been more limited for the SNB than for the ECB. For this reason, I would have expected a more limited effectiveness of the Swiss central bank policy relative to the euro area, whereas the empirical evidence suggests the opposite. However, it should be noted that the SNB has specifically targeted the EUR-CHF rate, whereas the ECB has pursued other objectives such as the expansion of credits or the EUR-USD rate. It is possible that the specific focus of the SNB on the EUR-CHF rate could explain its relative success.

Finally, it would be interesting to consider the effectiveness of the competing monetary policies from a complementary point of view. In the paper, the balance sheet expansion is expressed in its growth rate, meaning that the expansion of liquidity is relative to the size of the balance sheet. In contrast, financial markets may be more sensitive to the actual amount of money injected by the different central banks.