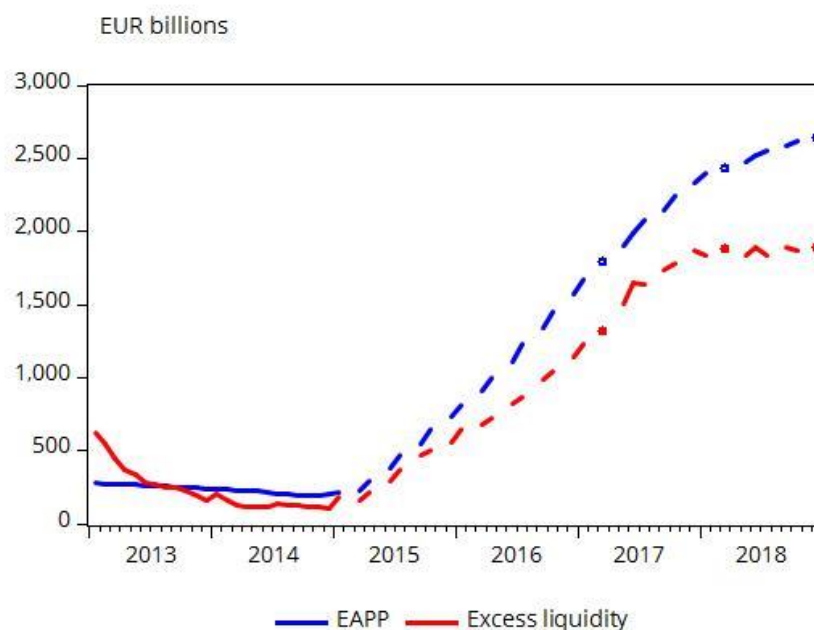


# Will “autonomous” money demand affect monetary policy normalisation?

By Pierre Guerin, [Adrian Penalver](#) and Pierre-Francois Weber

*Excess liquidity in the euro area has risen by less than the liquidity created by unconventional monetary policy measures. This is because much liquidity has been absorbed by non-monetary deposit accounts held by national central banks. As monetary policy normalises, liquidity will become scarcer. At what point this scarcity will cause interbank rates to drift above the deposit facility rate will depend on whether this “autonomous” demand remains high.*

**Chart 1: Excess liquidity at extraordinary high levels due to unconventional monetary policy**



*Source: ECB Statistical Data Warehouse. Broken lines correspond to the period in which the Eurosystem switched to 8 from 12 maintenance periods per year. EAPP: Expanded Asset Purchase Programme*

Monetary policy implementation is about managing the amount and price of liquidity that banks exchange in the interbank market. In practice, the central bank supplies or rations the liquidity available by managing its own balance sheet. Yet parts of its balance sheet – the so-called autonomous factors such as, for instance, banknotes or non-monetary policy deposits – are not fully controlled by the central bank. These autonomous factors will have to be monitored carefully

to ensure a smooth exit from unconventional non-standard monetary policy measures and hence avoid volatility in short-term market interest rates.

### **The liabilities of the Eurosystem have tripled since 2007 ...**

In January 2007, the consolidated liabilities of the Eurosystem were around EUR 1.2 trillion. Just over half of these liabilities, EUR 620 billion, were banknotes. Autonomous factors such as accounts held by general government (EUR 45 billion) and liabilities in euros to non-euro residents (EUR 17 billion) were relatively small. Banks held current accounts of EUR 175 billion to cover required reserves of EUR 174 billion so excess reserves were less than a billion euros.

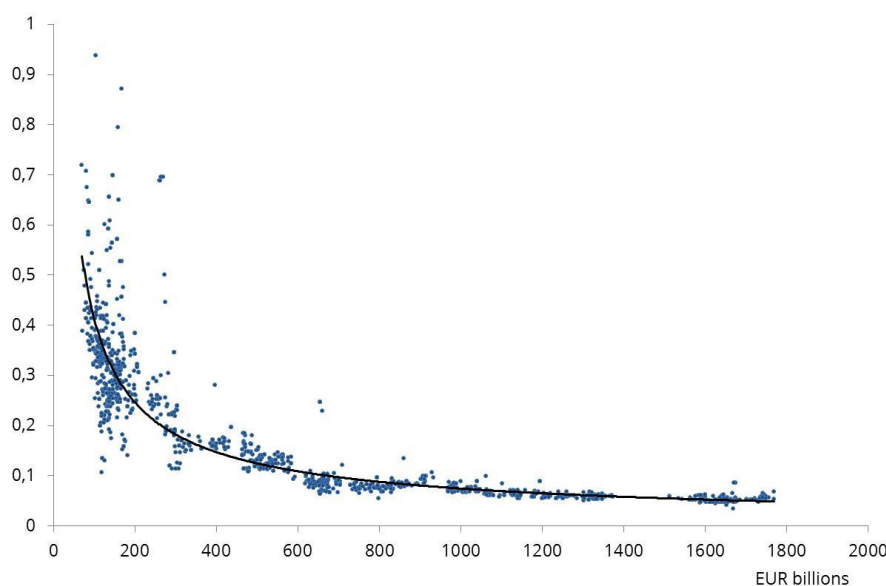
This meant that the banking system had just enough reserves in total and banks could lend or borrow their daily cash surplus or deficit in an active interbank market. Use of the deposit and marginal lending facilities were negligible and the overnight interbank interest rate (EONIA) hovered around the middle of these two rates which usually coincided with the main refinancing operations (MRO) rate. Central bank liquidity managers would estimate the likely change in autonomous liquidity demand and offset it through refinancing operations so that liquidity conditions were largely balanced and short-term interbank interest rates stayed close to the MRO target set by the Governing Council of the ECB.

Fast-forward to December 2018 and the consolidated liabilities of the Eurosystem were EUR 4.7 trillion. This tripling of the balance sheet is the result of unconventional monetary policy measures such as the Expanded Asset Purchase Programme (EAPP) (around EUR 2.6 trillion) and the Targeted Longer-term Refinancing Operations (around EUR 730 billion).

As a result, excess liquidity – the sum of bank reserves in excess of the minimum reserve requirement and funds held in the deposit facility - has grown from just over EUR 1 billion in January 2007 to EUR 1.9trillion in December 2018 – see Chart 1.

### **...keeping interbank rates close to the deposit facility rate**

All this excess liquidity is more than enough to keep interbank interest rates very close to the deposit facility rate (DFR). From mid-2015 to December 2018, the spread between EONIA and the DFR was around 10 bp – see also Chart 2.

**Chart 2: Very large excess liquidity pushes the EONIA - DFR spread towards zero**

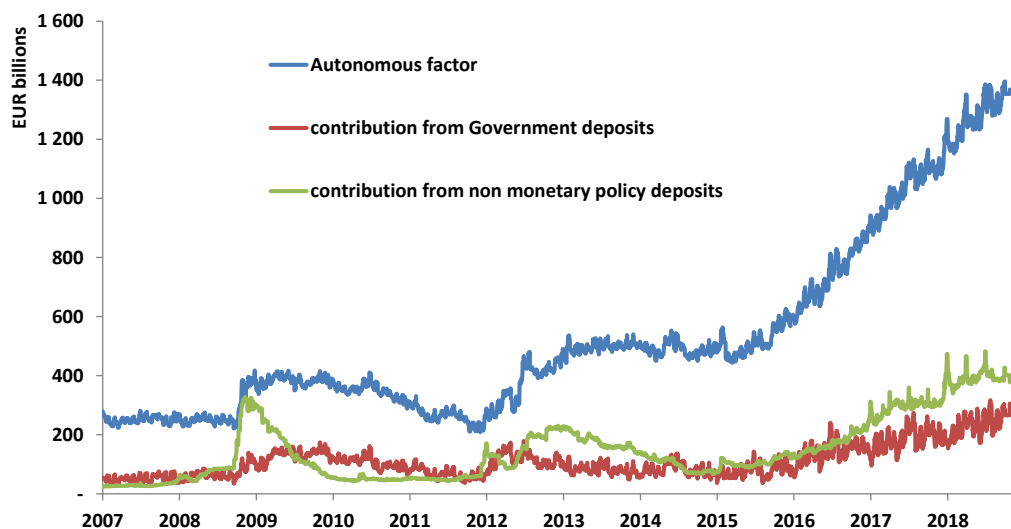
*Source: Banque de France. Normalised spread between Eonia and Deposit Facility rates on the Y-axis, excess liquidity level on the X-axis. Period: Nov 2013 – Sep 2017; weekly data.*

### When interbank rates may drift above the deposit facility rate?

A recent [IMF study](#) estimates that EONIA becomes anchored at the DFR plus 10 basis points whenever excess liquidity exceeds about EUR 400 billion. Assuming this is broadly accurate, aggregate excess liquidity will be still well above this threshold even once the TLTROs are repaid in 2020 and 2021 so there would be little pressure for interbank interest rates to rise above the DFR. However, this excess liquidity is held in only a small number of euro area countries (see [Grossmann-Wirth and Hallinger \(2018\)](#)) and does not flow smoothly across jurisdictions.

After the expiry of the TLTROs, at what point during the run-off of the balance sheet (if and when the [Governing Council decides to stop full reinvestment](#) of maturing assets in the EAPP) will excess liquidity fall below this EUR 400 billion threshold and interbank interest rates start to drift above the DFR? [Peter Praet](#) has discussed various scenarios.

This will depend partly on the future behaviour of the autonomous demand for liquidity which has also grown rapidly (in net terms) from EUR 277 billion to EUR 1,519 billion from 2007 to December 2018 (see Chart 3). This autonomous demand includes deposits held on behalf of non monetary counterparties, i.e. central governments, supra-national organisations and foreign central banks less net foreign assets of the Eurosystem. Central government deposits have risen to EUR 216 billion and liabilities to non-euro residents to EUR 459 billion. These liabilities to non-euro residents in euro are largely owed to other central banks and international financial institutions. So these two autonomous factors have absorbed about 10 months of liquidity injected by the EAPP at EUR 60 billion per month.

*Chart 3: Autonomous factors increased fivefold between 2007 and 2018*

*Source: Banque de France.*

### **This also depends on whether autonomous factors are really autonomous**

Will the growth of these two autonomous factors unwind as monetary policy normalises or has there been a permanent rise in autonomous demand for liquidity? Are these autonomous factors still really autonomous or will they also react to interest rates?

There is no clear-cut answer, although the rapid increase from early 2015 suggests some of the liquidity injected through EAPP has come back to the central banks as non-monetary policy deposits, even if the Eurosystem remunerates such deposits at non-competitive rates. It seems that non-monetary counterparties see an advantage in holding their most liquid reserves as central bank deposits rather than commercial bank deposits or (scarcer) short-term sovereign securities.

Once interbank interest rates start to rise above the DFR, these autonomous factors will likely diminish as market rates will become more attractive relative to Eurosystem administered non-monetary policy deposit rates. This return of liquidity to the market could even happen sooner as the main alternatives for risk-averse non-monetary counterparties are short-term T-Bills and reverse repos against core sovereign collateral. Reverse repo rates could start to increase as soon as the run-off of the EAPP portfolio reduces the relative scarcity of safe euro-denominated sovereign bonds. As a result of these effects, some of the liquidity absorbed by the autonomous factors will return to the banking sector thereby dampening any incipient rise in short term interest rates.

In all events, the Eurosystem has a broad range of instruments to manage liquidity in the banking system and thereby to steer the level of short-term interest rates. These instruments can be deployed to ensure that monetary conditions in the euro area are consistent with the monetary policy stance set by the Governing Council.