

ECB Euro Liquidity Lines

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Central bank liquidity lines have been used extensively in the last decade to provide liquidity in foreign exchange markets during periods of distress. When a line is active between a source central bank and a recipient one, the latter can access the source central bank’s currency in exchange for its domestic currency at the spot exchange rate and at a fixed interest rate, which is below the market rate. At maturity, the same amount of money is exchanged among the two counterparties at the same fixed spot exchange rate. In this way, the recipient central bank can inject liquidity in the domestic market, preventing market pressure on its own currency or avoiding to exhaust its own reserves.

After some early precedents in the context of the Bretton-Woods era, a global network of swap lines gained increasing relevance as a cooperation tool across central banks following the September 11th terrorist attack and more extensively

during the Global Financial Crisis of 2007/2008. Also, during the recent Covid-19 pandemic, numerous swap lines were activated. In this context, central banks’ liquidity agreements transformed the Fed into the global lender of last resort, limiting fire sales and helping contain the risk of market contagions. Empirical evidence shows that the Fed swap lines have been effective in lowering dollar borrowing costs and generating positive spillback effects for the US economy (see e.g. Bahaj and Reis, 2021). Aizenman et. al. (2021) provide evidence for a signalling effect, i.e. that the announcement of the line gives confidence to markets without the need of activating it: Liquidity facility announcements during 2020 have led to lower CDS spreads and long-term interest rates in the targeted economies, together with an appreciation of the currency with respect to the USD.

Turning to the ECB, not only does it participate in such network, but between October 2008 and August 2020 it established and/or extended a total of 28 swap and repo lines with 16 counterparties to provide euro liquidity. Counterparts were mostly outside the EA (Bulgaria, Croatia, Czech Republic, Denmark, Hungary, Poland, Romania, and

Figure 1
TIMELINE

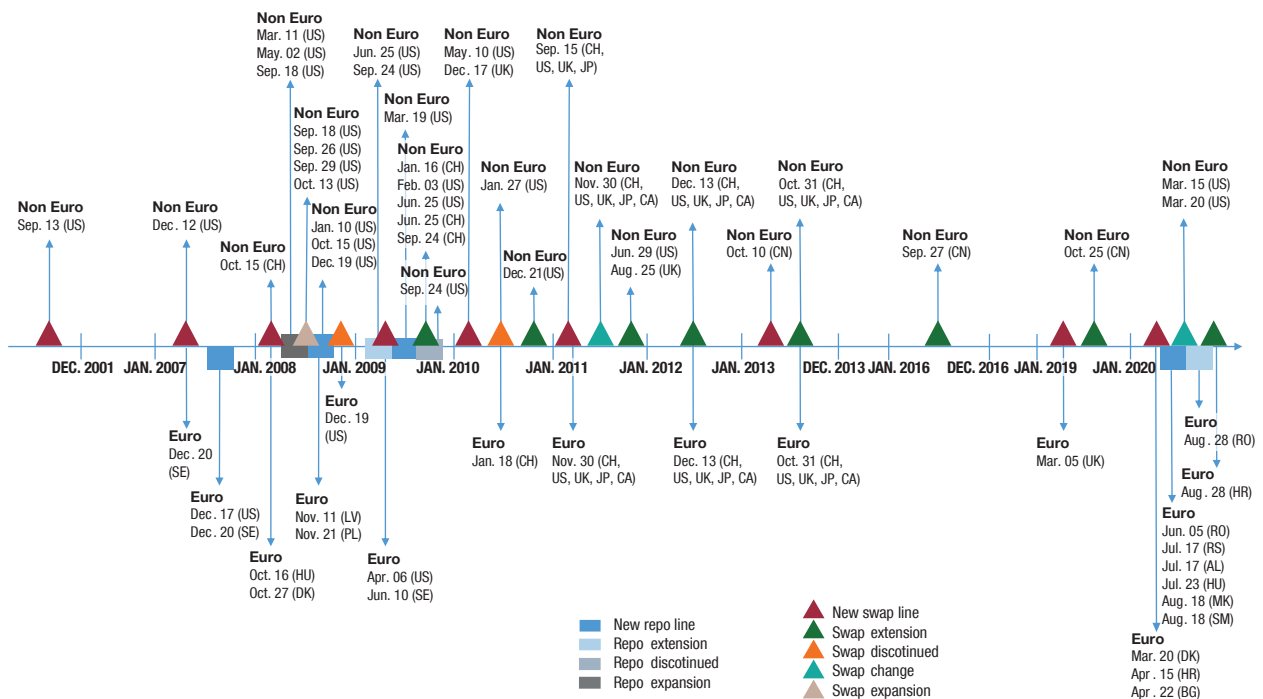
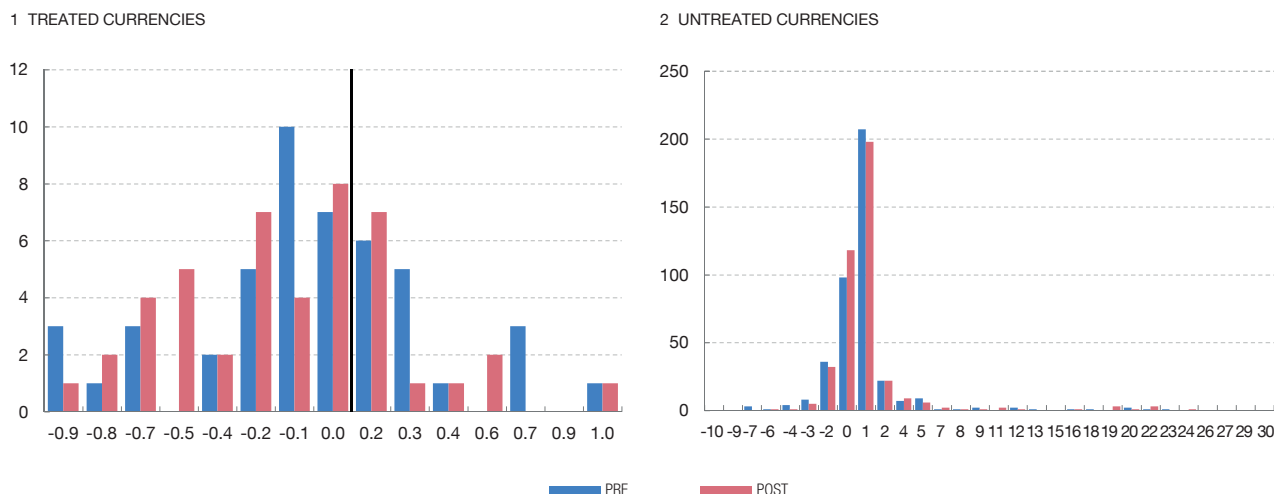


Chart 1

BASIS DENSITY BEFORE AND AFTER ANNOUNCEMENT



NOTE: Frequency distribution in a 4-day window around the announcement. For any announcement, the targeted currency/ies is/are going to be the one/s targeted by the announcement, while the non-targeted currencies in the sample are untreated. Post-treatment is defined as the day of treatment and the day after, while pre-treatment is the two days prior to treatment.

Sweden), but since 20th March 2020 other non-EU countries joined the network (Serbia, San Marino, Albania and North Macedonia). A timeline of these agreements is depicted in Figure 1. In this sense, the role of the ECB can be described as a regional lender of last resort.

Do ECB euro liquidity lines decrease Euro funding costs in the targeted economies? We compare changes in the deviations from CIP for targeted currencies with those of currencies of similar non-targeted countries. Absent frictions, covered interest parity (CIP) holds and the implied euro interest rate in the FX market equals the euro money market interest rate. If the CIP does not hold, the FX swap basis spread provides a measure of the premium paid by foreign agents to borrow euros in the FX market compared to the euro money market.

We consider a short window around the public announcement of the liquidity line. In Chart 1 we observe that the histogram for targeted countries shifts to the left, towards lower CIP deviations, contrary to the non-targeted group. This suggests that ECB liquidity line announcements indeed were effective in decreasing Euro

funding costs in targeted economies. In a more formal assessment, relying on a difference-in-differences framework as in Cetorelli et al. (2020), we estimate that the announcement of a swap line reduces the euro funding cost in foreign exchange swap markets by between 51 and 76 basis points as measured by the CIP deviations. The effect is absent if we move the announcement dates 3 days before the actual one, validating the difference-in-differences approach and indicating that there is no anticipation.

About spillbacks, central bank liquidity line announcements may instill confidence in recipient economies and reduce the risk that financial distress spreads into the source country. To test for such effects, we exploit the fact that some euro area (EA) countries have stronger trade and banking ties with some of the targeted countries.

Comparing the change in average stock prices of banks in EA countries highly exposed to the targeted economies via banking linkages with those EA countries that are less exposed allows us to quantify the benefit of the announcement for EA banks. Our estimates suggest that

domestic bank profitability, proxied by equity prices, increases by 6.7% in EA countries highly exposed upon announcement of the liquidity line.

To conclude, our findings suggest that liquidity line announcements had positive effects for both targeted economies and the EA, making them a valuable policy tool.

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