CENTRAL BANK SWAP STOCK MAY CHANGE IN BOTH DIRECTIONS IN ORDER TO ATTAIN THE TARGETED LIQUIDITY LEVEL

Mihály Hoffmann – Pál Péter Kolozsi

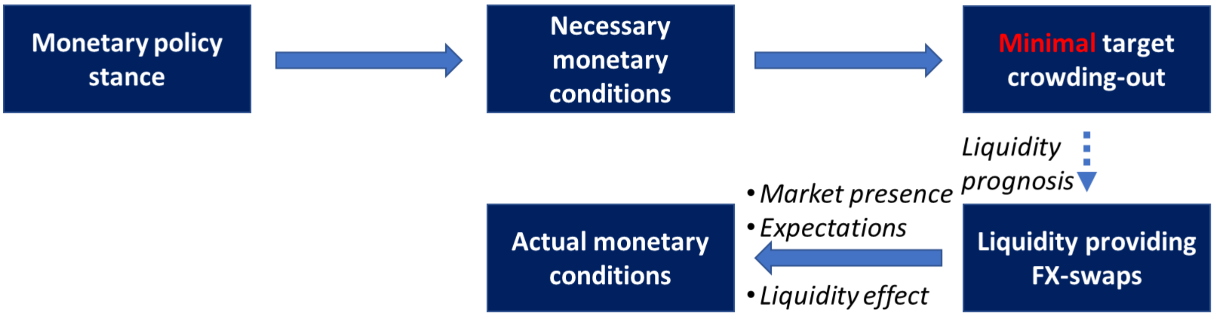
Based on its monetary policy stance, the Magyar Nemzeti Bank (MNB) determines the amount of liquidity to be crowded out every quarter[1]*. The achievement of the targeted crowding-out effect is a key operational objective of the Bank. To achieve the targeted crowding-out effect, the MNB uses the central bank swap facility to offset autonomous liquidity effects. Consequently, a change in the amount outstanding of swaps in itself cannot be interpreted from a monetary policy perspective. Accordingly, the MNB does not determine a target value for outstanding swaps, and depending on the developments in liquidity, their amount may change in both directions in order to achieve the crowding-out effect. In March and June 2019, looking ahead, the MNB twice reduced the quarterly targeted crowding-out effect by HUF 100 billion, which, resulting from exogenous developments in liquidity, was then consistent with the reduction of the swap stock. This co-movement, however, is not inevitable. Moreover, the two factors may even move in opposite directions. A period like that may be the second half of 2019, when developments in liquidity may take place requiring the increase of the swap stock in order to achieve the at least HUF 200–400 billion crowding-out effect determined by the Monetary Council in June. The MNB continuously monitors developments in liquidity looking ahead, and if warranted by the achievement of the crowding-out objective decided by the Monetary Council, it remains ready to change the swap stock in both directions.*

1. FRAMEWORK OF THE OPERATION OF MONETARY POLICY INSTRUMENTS

In the current monetary policy framework, it is in view of the monetary policy stance that the MNB determines the targeted monetary policy conditions and the amount of liquidity to be crowded out in order to achieve them. The quantitative restriction applied since autumn 2016 and, in the current monetary policy framework, the interest rate corridor as well as the amount of liquidity crowded out determine money market yields: the interest rate corridor represents the theoretical band within which the yields may move, whereas liquidity crowded out affects the position of yields within the interest rate corridor. The amount of *minimum targeted crowding-out* – which practically means the minimum liquidity amount reflected in central bank O/N deposits and in excess reserves of the given month – is determined by the MNB on the basis of the *monetary conditions* it intends to maintain, which, in turn, depends on the nature of the *monetary policy stance* (Chart 1).

[1] Beginning from 2016H2, MNB decided to gradually restrict quantity of liquidity deposited in the 3M depo facility, which was also phased out by the end of 2018. In this framework, excess reserves were named as crowded-out liquidity, and in this article MNB uses this notion consistently with the former cap system. Crowded-out liquidity means the quantity of all interbank liquidity that gains less interest than the policy rate, namely the sum of net overnight deposit and excess reserves above the reserve requirement.

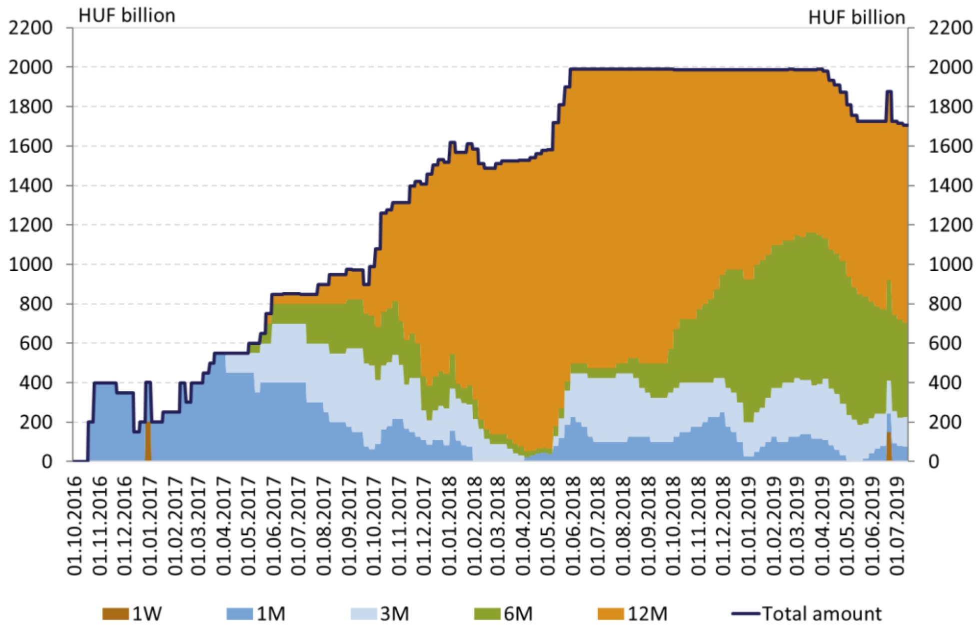
Chart 1: Flow chart of quantitative restriction



Developments in liquidity play a crucial role in changes in actual monetary conditions. In addition to the quantitative limits applied by the Bank, the amount of liquidity crowded out depends on developments in banking sector liquidity: *ceteris paribus*, a decline in liquidity is consistent with a smaller crowding-out effect. Until the end of 2018, the MNB achieved the targeted amount of crowding-out using the quantitative cap determined on the basis of the developments in liquidity. The three-month deposit was phased out from the end of 2018; therefore, the importance of changes in banking sector liquidity and its shaping by the central bank has increased.

Achieving the targeted crowding-out effect is a key operational objective of the MNB; the MNB uses the central bank swap facility to achieve the targeted crowding-out effect. Banking sector liquidity is affected by various factors, of which the following ones had a major impact in terms of the level of liquidity in recent years: (1) the increase in cash holdings, (2) the government deficit and its financing as autonomous factors, i.e. ones that are independent of the central bank, as well as (3) the MNB's mortgage bond purchase programme and (4) the Funding for Growth Scheme (FGS). Accordingly, in autumn 2016 the MNB introduced forint liquidity providing FX swaps to be able to ensure the minimum required level of crowding-out and through that the targeted monetary conditions even in the case of an unexpected decline in banking sector liquidity or one that is contrary to the monetary policy objective. In addition to the quantitative cap of the 3M depo, since 2016 the MNB has reacted to developments in liquidity and the size of the crowding-out effect by driving central bank swap holdings (Chart 2), the monetary policy relevance of which has increased considerably with the decline in the cap on three-month deposits and the phasing-out of the deposit facility at the end of 2018.

Chart 2: Changes in the central bank swap stock (2016–2019)



The Monetary Council made it clear in its communications that it would drive central bank swap holdings for and depending on the achievement of the crowding-out effect. In its June press release the MC stated that (1) it would set the stock of central bank swap instruments by taking into account the targeted crowding-out effect, and (2) it was ready to change the stock of FX swaps in a flexible manner to ensure that interest rate transmission changes in line with the decisions of the Monetary Council and the volatility of interbank yields remains at low levels. Accordingly, in the current monetary policy framework changes in the amount outstanding of swaps alone cannot be interpreted from a monetary policy perspective; any potential change is to be evaluated only on the basis of the targeted crowding-out effect, together with other liquidity developments.

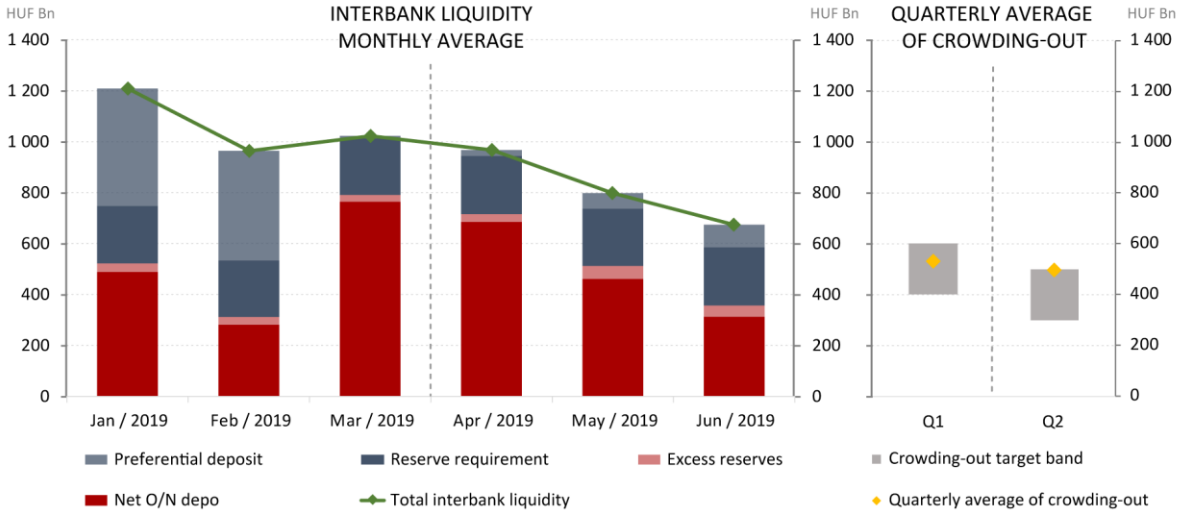
At the same time the above also means that, depending on liquidity developments, the central bank swap stock may change in both directions in order to achieve the crowding-out objective. As not only central bank instruments but other, autonomous liquidity developments also affect the amount of liquidity crowded out, the targeted crowding-out effect and the central bank swap stock do not necessarily move together. If, in each period, liquidity falls to an extent resulting in a crowding-out effect that is even smaller than the target value, which itself may still be declining, it is reasonable to increase the swap stock. However, if developments are contrary to the above, i.e. autonomous liquidity developments and the change in the structure of liquidity result in an excessive rise in the crowding-out effect, the declining crowding-out objective is consistent with falling amount of swaps outstanding. Co-movement of the targeted crowding-out effect and the swap stock is not inevitable. Moreover, the two factors may even move in opposite directions, in a way that it is always the crowding-out objective that determines the necessary level of swaps outstanding.

2. LIQUIDITY DEVELOPMENTS AND THE CROWDING-OUT EFFECT IN 2019 H1

In the first half of 2019, autonomous factors resulted in a decline in banking sector liquidity. At the end of 2018, significant amount of EU funds was credited to the account of the Treasury. However, in early 2019 this did not entail an expansion in banking sector liquidity, but resulted in a permanent rise in the balance on the Single Treasury Account (STA) held with the Bank. In the first half of the year, both developments of general government finances and changes in cash holdings pointed to a decline in liquidity. The change in the financing structure of the ÁKK contributed significantly to the decline in the banking sector's structural liquidity surplus. The introduction of the Hungarian Government Security Plus was a clear success, entailing a major positive macroeconomic effect by raising self-financing and reducing external vulnerability. In the first week, subscriptions to the new retail security amounted to HUF 529 billion, whereas sales in the first one and a half months exceeded HUF 1,200 billion, which is an outstanding result. At the same time, it was a challenge in terms of liquidity that, in parallel with the introduction of the Hungarian Government Security Plus, household holdings of government securities acquired by banks increased significantly. Although the ÁKK held repurchase auctions, these handled the liquidity effect of retail government securities in banks' books incidentally, with delays and only partially. At the end of June, the MNB treated this liquidity effect with an extraordinary, technical one-week swap tender.

Although the general level of banking sector liquidity declined in 2019 H1, the crowding-out effect increased as a result of a change to the preferential deposit facility in March, which meant that the reduction in outstanding swaps was consistent with achieving the decreasing crowding-out effect. The Monetary Council determined the target level of quarterly average liquidity to be crowded out from the instruments bearing interest at the base rate as at least HUF 400–600 for 2019 Q1 and at least HUF 300–500 for Q2. It is important to emphasise that, in addition to a general decline in liquidity, in 2019 H1 the structure of banking sector liquidity was greatly affected by the changing conditions of the preferential deposit facility in March. When it was launched, the new preferential deposit related to the Funding for Growth Scheme *Fix* absorbed much less liquidity than in the past; liquidity amounting to approximately HUF 400 billion crowded out from the instrument this way flowed into O/N deposits. The resulting increase in the crowding-out effect made the reduction in forint liquidity providing swap stock possible and at the same time necessary; the amount outstanding of swaps of nearly HUF 2,000 billion existing since May 2018 fell to HUF 1,725 billion between April and June 2019. First, this reduction was consistent with the Monetary Council's decision to crowd out at least HUF 300–500 billion of liquidity in Q2, and, second, it ensured that changes in monetary conditions took place in line with the MC's decision. Accordingly, although banking sector liquidity declined, the crowding-out effect remained within the target band (Chart 3).

Chart 3: Central bank deposits between January and June 2019 (monthly average)



source: MNB

3. LIQUIDITY DEVELOPMENTS AND CROWDING-OUT EFFECT EXPECTED FOR 2019 H2

At its meeting on 25 June 2019, the Monetary Council determined the amount of liquidity to be crowded out in Q3 as at least HUF 200–400 billion, representing a decrease of HUF 100 billion compared to the Q2 target value. In its press release the Monetary Council explained that a dichotomy remained between the factors determining likely developments in inflation. Buoyant domestic demand was boosting, and, from the second half of the year, weakening external economic activity was restraining the pace of price increase. Due to the high uncertainty surrounding the inflation outlook, it was sensible to maintain a cautious approach in monetary policy decisions. Therefore, in June the MC kept the base rate, the O/N and the one-week collateralised lending rates at 0.9 percent and the O/N deposit rate at -0.05 percent unchanged. At the same time, the Council reduced the average amount of liquidity to be crowded out in Q3 by HUF 100 billion, from the former at least HUF 300–500 billion band to at least HUF 200–400 billion.

In 2019 H2, liquidity developments may take place that could require the increasing of the central bank swap stock in order to achieve the targeted crowding-out effect. Liquidity developments continue to be surrounded by uncertainty. At the same time, of the effects expected for H2, the items potentially tightening banking sector liquidity are stronger. Of them, the following are the most important.

- On the whole, the government deficit, which is low as a result of fiscal discipline and typically concentrated in the end of the year, and strong general government financing that is coupled with that, are consistent with tighter banking sector liquidity.
- In the June–July period, the Treasury adapted to the accumulation of household government securities in banks' balance sheets incidentally, ex post and only partially. Accordingly, it poses a risk that, as a result of the above as well, banking sector liquidity

may be tighter in H2 than what was suggested by forecasts based on previous fiscal and financing plans.

- Changes in cash holdings are fenced by major upside and downside risks. The increase in holdings decelerated in H1 compared to previous years, but the liquidity absorbing effect may be even more significant in H2.

If the aforementioned developments continue and/or the liquidity absorbing risks outlined above materialise, the at least HUF 200–400 billion crowding-out effect determined by the Monetary Council in June can only be achieved by raising the amount outstanding of central bank swaps. In this case, decreasing crowding-out may be coupled with a rising swap stock, as only this ensures the achievement of the crowding-out effect that is in line with the monetary policy stance, as decided by the MC. Nevertheless, it should be underlined again that, if liquidity developments are contrary to the above or happen to reverse, that may, of course, affect the swap stock as well, since the MNB's decisions continue to be determined by the principle that (1) the key operational objective of monetary policy is to ensure the targeted crowding-out effect and (2) the swap stock should be of a size that allows the achievement of the targeted crowding-out effect against the background of given liquidity developments. In order to achieve the crowding-out objective determined by the Monetary Council, the MNB continuously examines developments in liquidity, and, if warranted by the achievement of the objective, it is ready to change the FX swap stock in both directions.