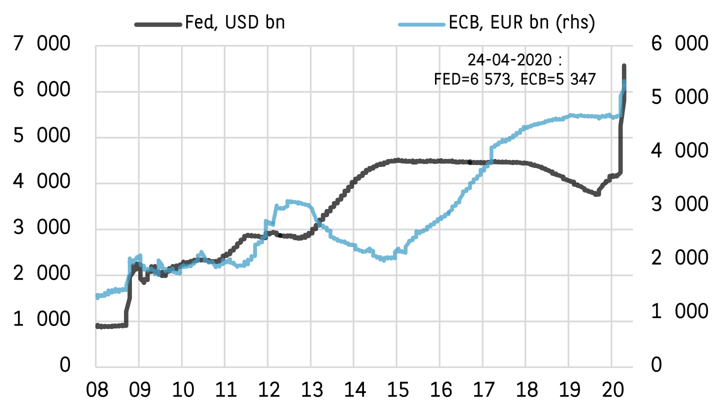
CENTRAL BANK BALANCE SHEET EXPANSION: THE SKY IS NOT THE LIMIT

Major central banks have stepped up their efforts to attenuate the economic impact of the pandemic, raising the question whether there is a limit to balance sheet expansion. An asset purchase program (QE) can continue for a long time, given the possibility to broaden the investable universe. Quite likely, asset price distortions and concern about the riskiness of the central bank balance sheet will act as the true constraint. For this reason, a central bank could decide to finance the budget deficit directly, considering that this should have a bigger growth impact for a given expansion of the balance sheet. The real challenge under such a strategy is to keep inflation under control once the output gap is closing.

Monetary policy is playing a key role in the efforts to attenuate the impact of the Covid-19 pandemic on the economy[1]. A key consequence is the significant increase in the size of central bank balance sheets, which raises the question of whether there is a limit to this expansion. The answer is important because the existence of such a limit would imply that, at some point, central banks would become powerless in influencing final demand. Reaching full employment –if this is an objective- and the inflation target –via the traditional relationship between unemployment, wage growth and inflation- would then become extremely difficult. In answering the question of the limit, one should start by taking the perspective of how the balance sheet is increased. In traditional refinancing operations, the central bank provides liquidity against collateral provided by the banking system. The amount of available eligible collateral together with the average haircut applied to this collateral thus creates an upper limit. This can be very high because, if need be, the criteria may be broadened by incorporating riskier instruments –admittedly subject to bigger haircuts. Quite likely, another constraint will kick in earlier: the demand of the banking system for central bank liquidity. The introduction of new liquidity requirements has hugely increased the needs for reserves with the central bank in the aftermath of the financial crisis. But at some point, banks will consider having enough reserves to meet their regulatory requirements whilst being able to meet the demand of their clients for extra credit. It implies that balance sheet expansion based on traditional refinancing operations is not under the final control of the central bank. It's a pull strategy: banks are enticed to ask for more liquidity but, at the end of the day, it's the banking system and regulatory requirements which can limit the expansion of the central bank's balance sheet[2].

For this reason, central banks have introduced quantitative easing, which is a push strategy of injecting liquidity. Their decision to buy certain assets causes an increase of the reserves of the banking system held at the central bank, unless the assets would have been sold by foreign investors who subsequently invest the proceeds in their own jurisdiction. If banks have sold bonds to the central bank, there is a substitution between reserves and bonds on the asset side of the banking system. In case bank customers have sold bonds, their bank deposits will increase, as a counterpart of the increase of bank reserves at the central bank. Under QE, central banks have full control of the size of their balance sheet. If need be, it can be boosted by extending the range of assets that can be bought. This would imply however a greater sensitivity of the central bank balance sheet to the business cycle and asset price swings. It could even lead to negative equity on a marked-to-market basis which would put into doubt the independence vis à vis the government should the state be called upon to recapitalise the central bank. It could also start buying foreign assets[3]

CENTRAL BANK BALANCE SHEET (FEDERAL RESERVE, ECB)



SOURCE: FEDERAL RESERVE, ECB, BNP PARIBAS

1. For an overview of measures taken by central banks and governments to address the economic consequences of the pandemic, please see *BNP Paribas Ecoflash, COVID-19: Key measures taken by governments and central banks.* This document is updated on a weekly basis.

2. In normal times this will be different because a central bank can limit how much liquidity demands it is willing to meet.

3. This possibility was mentioned by Ben Bernanke in his famous speech *Deflation: Making Sure "It" Doesn't Happen Here*, Remarks by Governor Ben S. Bernanke, before the National Economists Club, Washington, D.C., November 21, 2002

Central banks can expand the size of their balance sheets to a very considerable degree but the sky is not the limit. At some point a constraint will kick in because of major asset price distortions, capital outflows or a general loss of credibility.

Clearly, such a move would be considered, quite rightly, as starting a currency war, as a beggar-thy-neighbour policy. It would also trigger massive capital outflows and a jump in import price inflation. Sticking to a domestic menu of assets for QE implies a risk of distorting the prices of assets purchased by the central bank as well as those by investors who reinvest the proceeds in a 'quest for yield' strategy. This would seriously complicate the effort, which is supposed to occur at some point, of reducing the size of the balance sheet.

All in all, this implies that under a policy of QE, the balance sheet can grow very significantly but there will still be limits in terms of the availability of enough low-risk assets to purchase and the distortions in asset prices.

The size of the central bank balance sheet is obviously not an objective per se. Rather, it is a means to an end and what counts is what happens to growth, unemployment and inflation. For this reason, the monetary financing of budget deficits is considered by some as an attractive alternative[4]. Rather than buying bonds in the secondary market, the direct financing of government expenditures should have a bigger effect on growth for a given expansion of the balance sheet. As before, the constraint will be imposed by the market reaction: worries about loss of central bank independence would lead to rising inflation expectations and capital outflows, causing currency depreciation and imported inflation. The loss of credibility would make it extremely difficult to bring inflation back under control.

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4. In case of the ECB, this explicitly forbidden by the Treaty (article 104).