

Quantitative tightening: another driver of higher interest rates?

By Nobukazu Ono and Álvaro Pina, OECD Economics Department

Policy rate increases are not the only lever for monetary policy tightening. As discussed in the latest OECD Economic Outlook (OECD, 2022), some central banks have started to reduce the amount of bond holdings on their balance sheets, a policy action known as quantitative tightening (QT). In some respects, this is the opposite of quantitative easing (QE), the large-scale asset purchases undertaken by central banks on several occasions since the global financial crisis. However, QT is generally expected to take place at a slower and more predictable pace, leaving holdings of securities by end-2024 at a higher level than before the pandemic. While QE lowered long-term interest rates, QT is likely to increase them, but the impact over the next two years should be moderate in most countries. However, given scant previous experience with QT and the many different transmission channels involved, these estimates are uncertain.

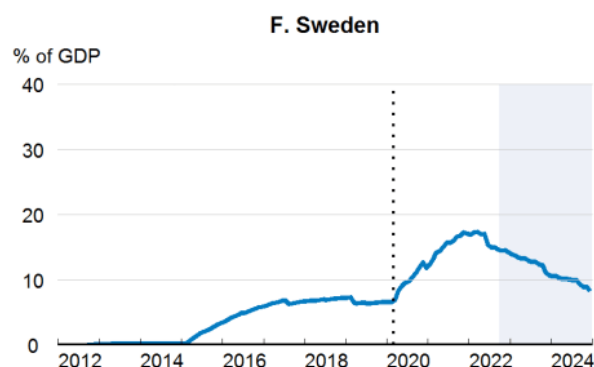
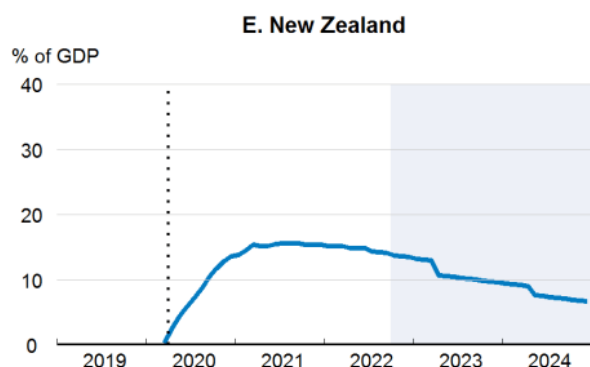
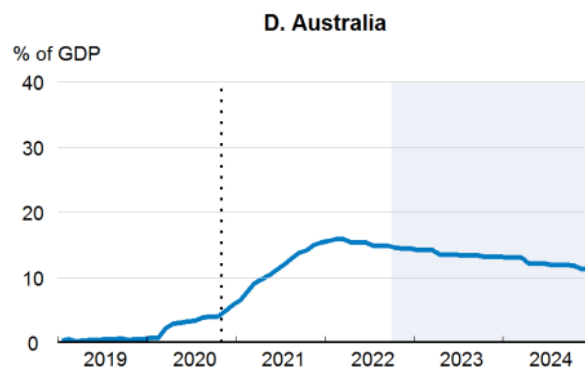
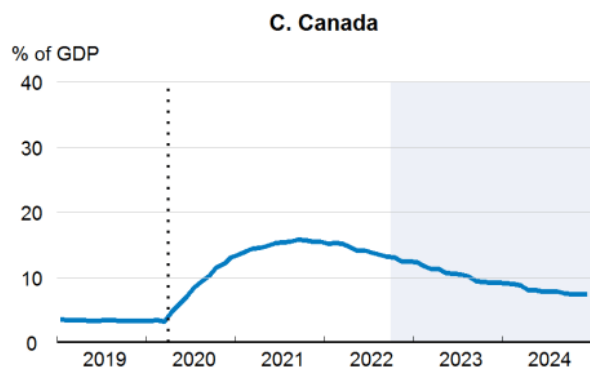
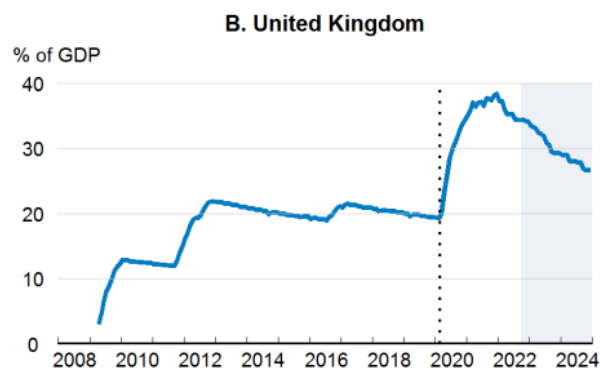
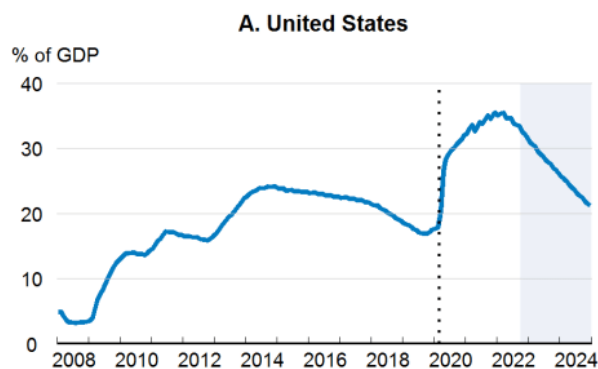
QT: how and how fast

Central banks can reduce their balance sheets without selling securities (active QT). They can choose to not (or not fully) reinvest the proceeds of maturing bonds (passive QT), in which case the pace of decline in bond holdings depends on the maturity structure of the bond portfolio and on the extent of partial reinvestment. Based on announced central bank policy decisions, the maturity structure of bond holdings, and the projections for GDP in OECD (2022), declines in the range of 3 to 11 per cent of GDP are projected in balance sheets between November 2022 and the end of 2024 in six advanced economies

(Figure 1; Japan and the euro area are not included as they have not yet announced plans for QT).

Approaches to QT vary among these countries, with Australia and Canada pursuing passive QT with no reinvestment throughout, Sweden and the United States making some partial reinvestment (at least initially) and New Zealand and the United Kingdom also resorting to active QT (for further details, see Box 1.3 in OECD, 2022). In all six cases, QT is expected to take place at a slower pace than the post-March 2020 QE programmes, leaving bond holdings by end-2024 still above pre-pandemic levels, both in nominal terms (OECD, 2022) and as a share of GDP.

Figure 1: Projections of central bank balance sheet reduction



Note: The charts show different definitions of central bank securities holdings divided by GDP (sum of the four latest quarters). Other aspects of central bank balance sheets are not included. A vertical dotted line indicates when the central bank started quantitative easing programmes in response to the COVID-19 shock. See Box 1.3 in OECD (2022) for further details.

Source: Board of Governors of the Federal Reserve System; Office for National Statistics; Bank of Canada; Reserve Bank of Australia; Reserve Bank of New Zealand; Sveriges Riksbank; OECD Economic Outlook 112 database; and OECD calculations.

QT is likely to raise long-term interest rates, but the size of the impact is uncertain

As QE helped to lower long-term interest rates, QT should increase them. But estimating the magnitude of the possible impact is difficult, given the different contexts in which the policies are being implemented and the various channels through which they operate. For both QE and QT, the absolute and relative importance of different transmission channels depends on specific circumstances (Bank of England, 2022). For instance, when policy interest rates were at their effective lower bound, QE episodes reduced interest rate expectations by signalling a commitment to maintain low policy rates for a longer period. This signalling effect is less important when policy can be tightened by raising interest rates and QT takes place in a gradual and predictable way (Bullard, 2019; Lane, 2022). Asset purchases or sales may also affect different components of the risk premium on long-term yields, by changing the average maturity and the duration risk of private portfolios (portfolio balance effects), impacting liquidity conditions, or mitigating market stress.

Given the scant past experience with QT, essentially limited to the US in 2017-19, the estimated effects on long-term yields from QE programmes may help to gauge the possible order of magnitude of the impact of QT. As a rule of thumb, bond purchases of 1% of GDP have been found to reduce long-term yields by about 5 to 10 basis points on average (Gagnon, 2016; Finlay et al., 2021; Bank of England, 2022; Crawley et al., 2022), with impacts tending to be stronger at times of market stress. Applying this simple rule to the amounts of QT projected to occur from the start of bond holdings reduction in each country to the end of 2024 tentatively suggests an impact on long-term interest rates ranging from 15-30 basis points in Australia to between $\frac{1}{2}$ and 1 percentage point in the United States, with values for the other four countries in the 30-80 basis points interval. These impacts are several times smaller than those from recent and ongoing policy rate increases.

However, the impacts of QT and QE on longer-term interest rates could turn out to be asymmetric. With policy rates clearly above zero and balance sheet size being reduced gradually and predictably, signalling effects should be (much) smaller in QT than for QE. On the other hand, the liquidity effects from QT could prove stronger, leading to a substantial increase in liquidity premia. For instance, evidence for the United States suggests that QE made bank liabilities increase and become of shorter maturity, which 2017-19 QT did not reverse to a commensurate extent. Banks could thus become more sensitive to liquidity shocks now that QT is again underway (Acharya et al., 2022).

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