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CENTRAL BANK OPERATIONS IN GOVERNMENT SECURITIES DURING THE PANDEMIC

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Central Bank Operations in Government Securities During the Pandemic

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Abstract

With economic activity severely disrupted by the coronavirus crisis, many governments have been supporting peoples' incomes and keeping businesses alive by means of income support programmes financed by borrowing. This paper describes how the borrowing is being done in the United States and the United Kingdom, and how central banks are in practice managing not just short-term interest rates but also yields on government bonds.

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1. Introduction

With economic activity severely disrupted by the coronavirus crisis, many governments have been supporting peoples' incomes and keeping businesses alive by means of income support programmes financed by borrowing. This paper describes how the borrowing is being done in the United States and the United Kingdom, and how central banks are in practice managing not just short-term interest rates but also yields on government bonds.

In the United States, the Federal Open Market Committee (FOMC) announced on 15th March 2020 that it would increase its holdings of US Treasury securities by at least $500 billion over coming months, in order 'to support the smooth functioning of markets [...] that are central to the flow of credit to households and businesses'.[1] The Bank of England, in announcing its purchasing programme for gilt-edged securities (UK government bonds) on 19th March 2020, said that it would 'set and vary the pace of its gilt purchases in response to market conditions and to support market functioning'.[2]

2. Developments since mid-March

In the United States, the Fed bought $205 billion of Treasury coupon securities in the week after the announcement of 15th March (

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Figure 2

Figure *2*). On 9th April, the government announced that it would extend the use of its Ways and Means facility at the Bank of England. This is simply an overdraft facility,

[1] FOMC (2020).
[2] Bank of England (2020).

which enables the government to borrow directly from the central bank, without selling securities in the market.

Figure *1*). The daily purchases were increased during the week, and on Friday 20th they amounted to $72 billion. After the limit on purchases was removed on Monday 23rd March, the daily purchase rate remained about the same for eight working days, until 1st April, after which it began to decline: in the three days 6th – 8th April it averaged $52 billion. The Treasury sold $113 billion of coupon securities at auctions held on 24th – 26th March, and $82 billion in the quarterly refunding auctions on 6th – 8th April. The Fed bought Treasuries every working day from 16th March to 8th April, during which period Fed purchases exceeded Treasury sales by just over $1 trillion (

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Figure *1*). In addition, there have been $106 billion of redemptions of coupon securities held by the public, and a further $79 billion is due on 15th April.[3]

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[3] Sources: Federal Reserve table H4.1, https://www.treasurydirect.gov/instit/instit.htm , https://www.treasurydirect.gov/instit/annceresult/press/press_cashpydwn.htm .

government securities. The Debt Management Office (DMO) revised its borrowing plans and announced its intention to sell £45 billion of gilt-edged securities in April.[4] As in the United States, purchases in the United Kingdom by the central bank have greatly exceeded sales by the Treasury, though by a smaller multiple (

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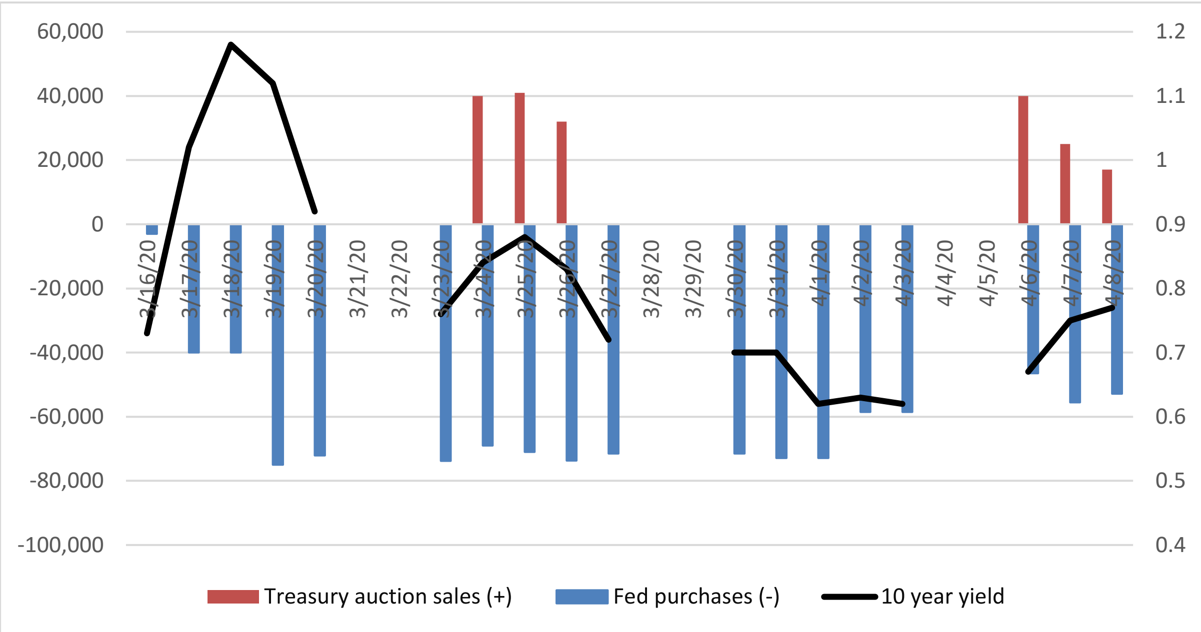
Figure 1: Fed purchases and U.S. Treasury sales ($ million, lhs) and yields (%, rhs)



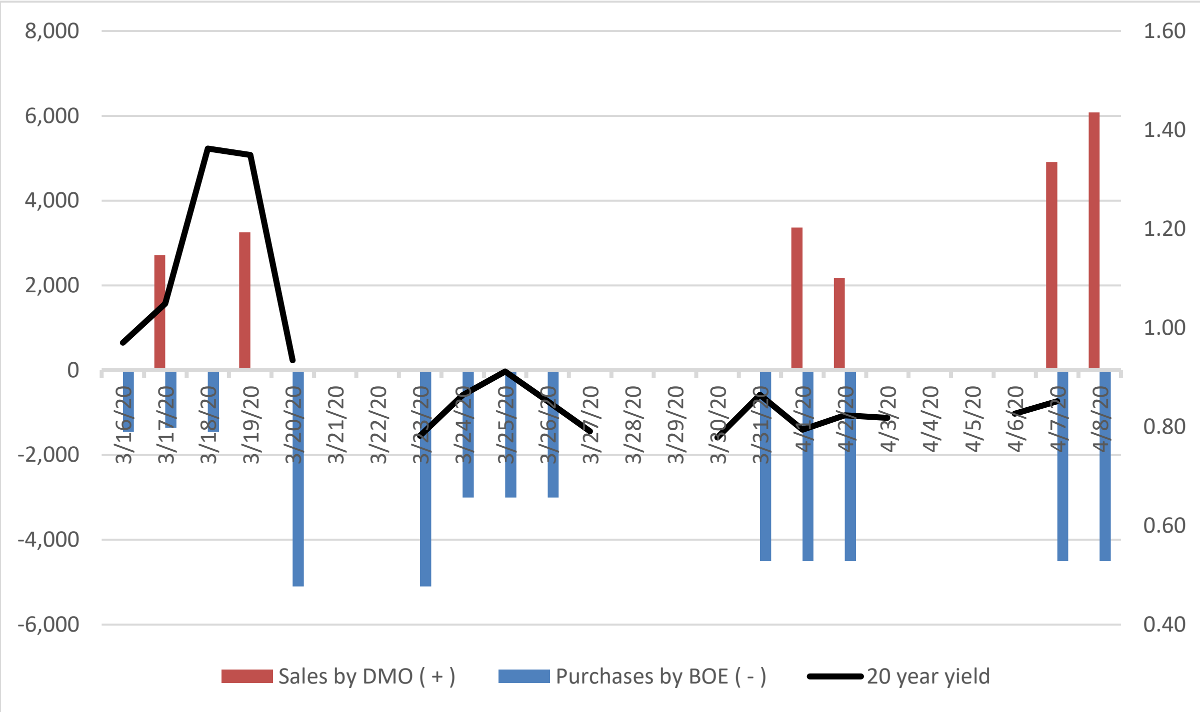
Sources: Fed purchases: https://www.newyorkfed.org/markets/pomo/operations/priorTwoWeeks.html ;

Treasury auction sales: https://www.treasurydirect.gov/instit/annceresult/press/press.htm; yields:

[4] DMO (2020).
[5] H.M. Treasury (2020), Fisher (2009).

https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield

Figure 2: Bank of England gilt purchases and DMO sales (£ million, lhs) and yields (%, rhs)



Sources: BOE purchases: https://www.bankofengland.co.uk/markets/bank-of-england-market-operations-guide/results-and-usage-data; DMO sales: https://www.dmo.gov.uk/data/gilt-market/results-of-gilt-operations/; yields https://www.bankofengland.co.uk/statistics/yield-curves .

3. Interpretation

Both central banks referred to 'market functioning' in announcing their purchasing plans, and it seems reasonable to suppose that they are concerned about deteriorating market liquidity, including the risk that governments will not be able to sell bonds at auctions to meet their borrowing needs.[6] They are acting as market-makers of last resort. In 2008, the Fed acted as market-maker of last resort in assets such as mortgage-backed securities; then, however, the Treasury securities market remained liquid without help from the Fed.

Both central banks have avoided appearing to fix yields by adopting the reverse auction technique for purchases, in which the quantity to be purchased is pre-announced and the yield determined by the auction process. They hold several reverse auctions every week, each for securities in a defined segment of the market. However, the amounts to be bought in each segment are decided at short notice: purchasing schedules are now announced each Friday for the following week. The considerations that influence these decisions have not yet been disclosed, but it may be assumed that they include the incidence of forthcoming Treasury auctions, and the inventory positions of the commercial market makers. The central banks and Treasuries may also be concerned about the solvency of the commercial market makers, on whom they depend, and about their continued willingness to act as market makers.[7] It is probably significant that the net long positions of primary dealers in U.S. Treasury notes and bonds fell from $222 billion to $199 billion between 18th March and 25th March.[8]

It is certain, however, that the central banks react to fluctuations in market yields. The increase in the Fed's rate of purchases in the week beginning 16th March was quite likely influenced by the rise in yields on the first two days of the week. Nevertheless, the Fed was not deterred from making large purchases in the week beginning 30th March by declining yields; they were perhaps anticipating the forthcoming U.S. Treasury refunding. At some reverse auctions, particularly for index-linked bonds, the Fed has bought fewer securities than its pre-announced intention, even though the auction was fully subscribed: this shows that the Fed had views about appropriate minimum yields. The announcement on 19th March of the Bank of England's purchasing programme is likely to have been influenced by the rise in bond yields (

Figure *2*); its heavy purchases in the two weeks beginning 30th March were probably in anticipation of the large DMO auctions in April. The Ways and Means announcement

[6] Quarles (2020).
[7] This was a serious concern for the Bank of England between the 1950s and the 1980s (Allen 2019).
[8] Source: https://www.newyorkfed.org/markets/gsds/search# .

of 9th April implies that the government is reluctant to contemplate additional gilt sales.

The recent data suggest that these central banks, out of concern for the functioning of the government securities market, have become the dominant influence on the pricing of government securities, and that their very large purchases, and in the British case, the resort to direct borrowing from the central bank, have perpetuated the pre-pandemic government bond yield levels.

This, however, may turn out to be problematic. The disruption which the pandemic has wrought is very likely to affect the equilibrium yield levels. Aggregate supply in the world economy has fallen very sharply while demand has been supported by government spending. Yields are likely to rise. The central banks' large purchases have probably simply postponed an inevitable adjustment and, in doing so, facilitated bondholders' exit from the market at high prices.

Central banks, having taken on the role of market-maker of last resort, cannot pretend to be price-takers and deny responsibility for making decisions about yield levels. In the new situation, they should form a view about desirable yield levels and direct their operations in the government securities markets to bringing those levels about, in the interests of meeting their statutory objectives.[9] It is an extremely difficult task, not least because central banks need government securities markets to function satisfactorily if they are to meet their statutory objectives, and therefore need to avoid damaging them unduly in their operations by imposing losses on the commercial market makers. However, there is no way of escaping the task. Perpetuating current yield levels is a decision in itself, and a risky one. Moreover, central banks should work out how to extricate themselves from making markets in government securities as soon as circumstances allow.

[9] The new Governor of the Bank of England has reaffirmed the Bank's commitment to its price stability objective (Bailey 2020).

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