Corporate Bond Secondary Market Scheme

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Abstract

In late 2008, at the height of the global financial crisis, increased liquidity premia and risk aversion in the secondary market hindered companies' ability to issue corporate bonds. In response, in January 2009, Her Majesty's Treasury authorized the Bank of England to establish a facility to purchase commercial bonds through the Asset Purchase Facility. In March 2009, the Bank of England published details on the Corporate Bond Secondary Market Scheme, in conjunction with its quantitative easing program. Under the scheme, the Bank acted as a market maker of last resort in the secondary bond market, making regular purchases of a wide range of high quality, sterling-denominated corporate bonds. In doing so, the Bank hoped to improve functioning of the secondary market, thereby removing barriers to credit for UK companies. The purchase program was augmented in 2010, when the Bank began to sell corporate bonds through similar frequent auctions. Purchases through the scheme peaked in the second quarter of 2010, at £1.6 billion. Citing improved liquidity in the secondary market and the related decline in usage of the scheme, the Bank began phasing out the Corporate Bond Secondary Market Scheme in 2013, and it was officially closed in August 2016.

Keywords: Corporate bonds, market maker of last resort, liquidity, Bank of England

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Corporate Bond Secondary Market Scheme

At a Glance

During the global financial crisis, dealers in the corporate bond secondary market withdrew from the market, thereby constraining access to corporate credit, or charged increasing liquidity premia, raising the cost for primary issuers.

To address this liquidity crisis, the Bank of England initiated the Corporate Bond Secondary Market Scheme under its Asset Purchase Facility in March 2009. Through the scheme, the Bank aimed to act as a market

Summary of Key To	erms	
Purpose: To improve mar	ket liquidity in order to	
remove obstacles to corporate access to credit		
Announcement Date	March 19, 2009	
Operational Date	March 25, 2009	
Expiration Date	August 4, 2016	
Peak Utilization	£1.6 billion	
Participants	HM Treasury, Bank of	
	England	

maker of last resort, to improve price discovery and transparency, and to revitalize the secondary market, rather than to replace it. It conducted multiple purchases of small quantities of corporate bonds each week in the secondary market. Bonds were required to be issued by corporations that made a material contribution to economic activity in the UK. In 2010 the scheme was extended so that the Bank could sell, as well as purchase, corporate bonds.

The scheme was utilized throughout 2009 and 2010, with purchases peaking at £1.6 billion in the second quarter of 2010. In 2013, the Bank announced that regular sales would stop, and that the scheme would only be utilized if there was market demand. No such demand materialized, and in August 2016 the scheme was formally closed.

Summary Evaluation

The Corporate Bond Secondary Market Scheme is generally viewed as successful, but its effects are difficult to isolate from those of the larger APF and quantitative easing program which were initiated by the Bank simultaneously.

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I. Overview

Background

During the Global Financial Crisis, the cost of issuing new debt rose as investors demanded increased liquidity premia. In addition, increased cost of funding inventories of corporate bonds caused banks to withdraw from the secondary market (Pattani et al. 2011). In early 2009, the Bank of England deemed that poor liquidity in the secondary corporate bond market could negatively affect the primary market, further constraining the availability of credit in capital markets. Spreads in the primary market over gilts were already wide, and widening further as issuance increased (Figure 1). (Fisher 2010)

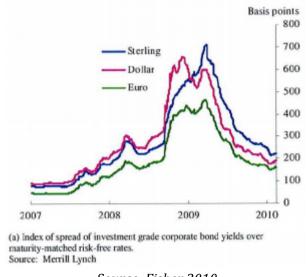


Figure 1: Investment Grade Corporate Bond Spreads(a)

Source: Fisher 2010

Program Description

The framework for the Corporate Bond Secondary Market Scheme (the Scheme) was laid out in the exchange of letters between the Chancellor of the Exchequer and the Governor of the Bank of England that established the Asset Purchase Facility (APF). It was formally introduced through a Bank of England Market Notice on March 19, 2009, and became operational on March 25. Through the scheme, the Bank proposed "to provide a back-stop offer to purchase modest amounts of a wide range of investment-grade sterling UK corporate bonds with the aim of improving secondary market liquidity, initially by facilitating market-making by banks and dealers." It hoped that the purchase would reduce liquidity premia on high-quality corporate bonds, and thus remove obstacles to corporate access to capital markets. (Bank of England, "Market Notice: Asset Purchase Facility," March 19, 2009).

Similar to the Commercial Paper Facility (CPF), in order to be eligible, bonds had to be investment grade and issued in sterling by companies that made a material contribution to economic activity in the UK. Reverse auctions were held multiple times a week where counterparties submitted bids for the price they were willing to sell specific bonds. The Bank did not buy every bond at each auction, since it privately established a minimum spread at which it would purchase each bond (Benford et al). The Bank would readily purchase up to £5 million of each bond in a given auction, depending on the amount of the issuer's outstanding debt. For issuers with under £250 million outstanding, the bank would stand ready to purchase up to £2 million of each bond, and for those with over £250 million outstanding, the Bank would stand ready to purchase up to £5 million (Bank of England, "Market Notice: Asset Purchase Facility," March 19, 2009)

The Bank regularly posted traded prices on its wire service and its website. Following each reverse auction, around 1 PM, the Bank published information on the successful yield spreads and quantities purchased in individual eligible bonds. Additionally, each Friday the Bank published the total amount of corporate bonds purchased the previous week as well as the sum of corporate bonds purchased, less redemptions, through the scheme (Bank of England, "Market Notice: Asset Purchase Facility," March 19, 2009).

As part of the larger APF, the purchases were financed by central bank reserves through the Bank's quantitative easing program, which was announced by the Monetary Policy Committee on March 5, 2009. By injecting money into the economy through the purchase of public and private sector assets, including corporate bonds, the Bank aimed to stimulate spending to reach the 2% inflation target (Bank of England, "Market Notice: Sterling Monetary Framework; Asset Purchases," 2009). On February 4, 2010, however, the Chancellor authorized the Bank's purchases under APF to be financed by the issuance of Treasury bills (Bank of England APF Quarterly Report 2010 Q2).

In January 2010, the Bank decided to extend the APF by offering to sell, as well as purchase, corporate bonds through the Corporate Bond Secondary Market Scheme. The scheme opened to sales on January 8, 2010. The Bank planned to sell each security in which it had a nominal holding over £1 million every Friday. However, it reserved the right to not sell any security, and determined how much of each bond to sell (between £1 million and £5 million) by "tak[ing] into account a number of factors, including the size of the Bank's existing holdings of the issuer's bonds." Similar to the purchase program, the Bank published information on the successful yield spreads and quantities sold for each individual bond following the auction (Bank of England, "Market Notice: Asset Purchase Facility - Corporate Bond Secondary Scheme" December 22, 2009).

Rather than target a specific amount of corporate bond purchases, and later sales, the Corporate Bond Secondary Market Scheme was designed to last only until normal conditions returned to the primary and secondary markets (King). The ultimate goal of the scheme was "to be catalytic, helping to reinvigorate the market, rather than replace it," ("Markets and Operations" 2009).

Outcomes

Purchases through the scheme peaked in the second quarter of 2010, at £1.6 billion.² This represented a small percentage of the overall bond market, which before the crisis totaled around £70 billion (Fisher 2010). In 2013, the Corporate Bond Secondary Scheme was moved to operating only if warranted by market demand. Since none was indicated through mid-2016, and because at that point the Bank introduced a new Corporate Bond Purchase Scheme, the Corporate Bond Secondary Scheme was formally closed on August 4, 2016 (Bank of England, "Market Notice: Asset Purchase Facility: Corporate Bond Purchase Scheme" August 4, 2016).

² Any data available anywhere about the types of issuers whose bonds were sold, or the identities of dealers that transacted with the BofE?

II. Key Design Decisions

1. The Scheme was launched to provide a backstop offer to purchase small amounts of a wide range of high-quality sterling corporate bonds in order to aid secondary market liquidity.

The purchases were expected to assist market-making by banks and dealers, to reduce liquidity premia on high-quality bonds, and therefore remove obstacles to corporate access to capital markets. The Scheme was also expected to complement purchases of commercial paper under the CPF. (Bank of England, "Market Notice: Asset Purchase Facility," 2009)

2. The Scheme was announced without a size limit and an end-date.

The Scheme was a part of an Asset Purchase Facility (APF) which had a ceiling initially set at £50 billion. However, for the Scheme, rather than setting a specific timeline or target purchase amount the Bank of England designed the facility to last, for as long as the highly abnormal conditions in corporate credit markets that were impairing finance of real economic activity persisted. (Bank of England, "Market Notice: Asset Purchase Facility," 2009)

3. The Bank consulted with the industry in the design of the Scheme

Before the operation of the Scheme, a market notice announcing the program requested feedback from the industry. The request included invitation for detailed comments from all interested parties - existing and potential new issuers, investors, intermediaries and infrastructure providers, including issuing and paying agents and ratings agencies. (Bank of England, "Market Notice: Asset Purchase Facility," 2009)

4. The Scheme purchased eligible corporate bonds from market making firms in the secondary market.

Unlike the CPF, the Corporate Bond Secondary Market Scheme specifically targeted secondary market liquidity. The goal of the scheme was to improve impaired market liquidity that had resulted from dealers' capital constraints and risk aversion during the crisis ("Markets and Operations"). Secondary market illiquidity in turn restricted the strength of the primary market, impairing access to credit. To improve secondary market liquidity, the Bank purchased corporate bonds exclusively from market makers (Bank of England, "Market Notice: Asset Purchase Facility," March 19, 2009).

These design decisions reflected the Bank's desire to act as a Market Maker of Last Resort (MMLR). As an MMLR, the Bank hoped to, "aid improvements in the liquidity of the market, including by reducing the inventory risk to 'market makers,'" (Tucker 2009). Though the Bank only purchased bonds in the secondary market, it believed that establishing itself as an MMLR would reinvigorate both the secondary market and the primary market (Fisher 2010).

5. The Scheme conducted the purchases via frequent reverse auctions with a maximum amount of £5 million per bond per auction.

In each auction, the Bank was restricted to buying up to £5 million of each bond, depending on the amount of the issuer's outstanding debt. Though that amount was relatively small,

the frequency of the auctions, which at the beginning of the scheme occurred four times a week, was intended to signal to bond holders that they could sell bonds if necessary. The Bank believed that this would lower the interest rates counterparties charged for holding corporate bonds (Benford et al. 2009).

Purchasing small quantities of corporate bonds also aligned with the MMLR framework, which the Bank specified involved transacting in "modest quantities," (Fisher 2010). Purchases through the scheme were much smaller than the gilt purchases undertaken through the APF. Initially, critics of the scheme pointed to the small amount of bonds purchased as a sign of failure. However, the Bank insisted that this reflected a misunderstanding of the Scheme's intent, which was to improve the process of price discovery and encourage private sector demand. (Fisher 2010) In addition, Bank officials noted that though large scale corporate bond purchases may have helped drive down market spreads, it also may have displaced private sector demand, asserting that "the problem was in the functioning of the market, not a lack of demand for the assets," (Fisher 2010).

6. Pricing information was made publicly available.

As previously discussed, the Bank made pricing information publicly available after each reverse auction. This was critical to improve price discovery and transparency and to establish pricing points ("Markets and Operations"). This transparency aimed to reduce uncertainty over the market value of corporate bonds, in turn reducing the risk aversion that contributed to market illiquidity (Benford et al. 2009).

7. The Scheme was extended to sales of corporate bonds in 2010.

Despite improvements in the primary market throughout 2009, dealers in the secondary market were still reluctant to trade in corporate bonds. Illiquidity in the market was attributed to an absence of buyers as well as dealers' fears that they would be unable to buy back bonds from the APF ("Markets and Operations"). This led to the Bank's decision in early 2010 to open up the scheme to sales as well as purchases of corporate bonds (Fisher 2010). Bank documents confirm that the extension of the scheme to sales was specifically aimed towards "catalys[ing] secondary market liquidity," (Bank of England, "Market Notice: Asset Purchase Facility – Corporate Bond Secondary Scheme" December 22, 2009).

III. Evaluation

In 2010, Bank officials pointed to record issuance of sterling corporate bonds (Figure 2), diminished spreads for eligible bonds (Figure 3), narrowed bid offer spreads, and a contracted bond-CDS basis as evidence that the scheme increased access to financing in the primary market (Fisher 2010). This was attributed to the Corporate Bond Secondary Market Scheme's impact on illiquidity premia. Counterparties also reported anecdotally to the Bank that the publication of pricing information and auction results "reduced the uncertainty for investors in valuing their portfolios and established, for dealers, a price at

which others were willing to sell," ("Markets and Operations" 2009). Despite these improvements in the primary corporate bond market, illiquidity remained in the secondary market. This led to the Bank's decision to modify the Scheme in order to sell, as well as purchase, bonds (Fisher 2010).

25
2009
2009
20
15
Average 2003-08
5
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Source: Dealogic and Bank calculations

Figure 2: Cumulative Gross Issuance of Sterling Bonds by UK PNFCs

Source: Fisher 2010

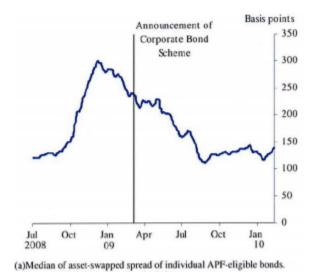


Figure 3: Median 'APF eligible' Corporate Bond Spreads(a)

Sources: UBS Delta and Bank calculations.

Source: Fisher 2010

In their comparative study of four quantitative easing programs, Fawley and Neely assert that by acting as a MMLR, the Bank "quickly restored market functioning and the price floor established by the purchase programs did not bind for long." While purchases through the CPF peaked quickly, the secondary corporate bond market took longer to recover. Figure 4

depicts the facility's continued use through 2012 and its peak in purchases, at £1.6 billion, in the second quarter of 2010 (Fawley and Neely 2013).

Figure 4: Usage of the CPF and the Scheme

NOTE: Both panels show the outstanding balance of assets held in the APF of the BOE. The top panel distinguishes between total net purchases of public assets (gilts) and private assets (corporate bonds and commercial paper). The vertical lines mark asset purchase announcements; the newly announced size of the APF is shown to the right of the lines. The bottom panel shows the net purchases of private assets separated into commercial paper and corporate bonds. The solid lines show total net purchases; the dashed lines show net purchases funded by central bank reserve issuance. All gilt purchases in the top panel were funded by reserve issuance.

SOURCE: Bank of England Asset Purchase Facility Quarterly Reports.

Source: Fawley and Neely 2013.

It is difficult to isolate the effects of the Corporate Bond Secondary Market Scheme from the broader impact of quantitative easing. For example, in the primary market, quantitative easing "is estimated to have been a significant factor in lowering gilt yields, and may in turn have increased corporate bond issuance," ("Markets and Operations" 2009). In examining the success of the Bank in "invigorating corporate credit markets," officials also acknowledged that private sector purchases, including those through the Corporate Bond Secondary Market Scheme, were aided by the larger quantitative easing program, the low Bank Rate, and large monetary stimulus within the UK and abroad (Fisher 2010).

IV. References

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V. Key Program Documents

Summary of Program

Asset Purchase Facility - Corporate Bond Secondary Market Scheme (2009-2016) - Bank of England overview of Corporate Bond Secondary Market Scheme http://www.bankofengland.co.uk/markets/Pages/apf/corporatebond/default.aspx

Bank of England Market Notice: Asset Purchase Facility (March 19, 2009) – Bank of England Market Notice detailing structure and implementation of Corporate Bond Secondary

Scheme

under

APF

http://webarchive.nationalarchives.gov.uk/20170726163834/http://www.bankofengland.co.uk/markets/Documents/marketnotice090319.pdf

Bank of England Market Notice: Asset Purchase Facility, Corporate Bond Secondary Market Scheme (December 22, 2009) – Market notice detailing extension of Corporate Bond Secondary Market Scheme under APF to sales of corporate bonds http://www.bankofengland.co.uk/markets/Documents/marketnotice091222.pdf

Bank of England Market Notice: Asset Purchase Facility Corporate Bond Secondary Market Scheme (September 20, 2012) – Market notice that consolidates the purchasing side of the Corporate Bond Secondary Market Scheme with the selling side http://www.bankofengland.co.uk/markets/Documents/marketnotice120920cons.pdf

The Corporate Sector and the Bank of England's Asset Purchases (Fisher) – Speech given by Paul Fisher on the rationale behind the Bank's purchase of private assets http://www.bankofengland.co.uk/archive/Documents/historicpubs/speeches/2010/s peech423.pdf

Implementation Documents

Terms and Conditions for Counterparties in the Bank of England's Asset Purchase

Facility – Terms and conditions governing the Corporate Secondary Market Scheme, dated

March 5, 2009

http://www.bankofengland.co.uk/markets/Documents/apf/termsandconditions09030

5.pdf

Settlement Procedures for Counterparties Participating in the Bank of England's Asset

Purchase Facility (APF) – Settlement procedures governing the Corporate Secondary

Market Scheme dated March 5, 2009

http://www.bankofengland.co.uk/markets/Documents/apf/settlementprocedures.pdf

Legal/Regulatory Guidance

Press Releases/Announcements

Bank of England Market Notice: Asset Purchase Facility: Corporate Bond Purchase Scheme (August 4, 2016) -- Market notice for closing of scheme http://www.bankofengland.co.uk/markets/Documents/marketnotice160804apfcbps.p

Media Stories

Key Academic Papers

<u>Four Stories of Quantitative Easing (Fawley and Neely 2013)</u> – comparative study of the quantitative easing programs of the Federal Reserve, Bank of England, European

Central Bank, and Bank of Japan https://files.stlouisfed.org/files/htdocs/publications/review/13/01/Fawley.pdf

Reports/Assessments

<u>Markets and Operations</u> – article in Bank of England Quarterly Bulletin reviewing developments in sterling financial markets and Bank's official operations; see in particular p. 269 https://core.ac.uk/download/pdf/6309899.pdf

Going Public: UK Companies' Use of Capital Markets – article examining bond and equity issuance during global financial crisis including the Bank of England's intervention through the Corporate Bond Secondary Market Scheme https://search.proquest.com/docview/919185117?pq-origsite=gscholar