Box 2
The corporate bond market and the ECB's corporate sector purchase programme

On 8 June 2016 the Eurosystem started to make purchases under its new corporate sector purchase programme (CSPP). The CSPP was announced by the ECB's Governing Council following its meeting on 10 March and aims to further strengthen the pass-through of the Eurosystem's asset purchases to the financing conditions of the real economy. The CSPP is part of the Eurosystem's asset purchase programme (APP)[1], under which purchases are intended to run until the end of March 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its aim of achieving inflation rates below, but close to, 2% over the medium term. This box describes the CSPP and considers its initial impact on the corporate bond market.

Under the CSPP, the Eurosystem purchases securities issued by non-bank corporations in both the primary and the secondary market. To be eligible for purchase, securities must, as a necessary condition, be eligible as collateral for Eurosystem credit operations. In particular, they must have a minimum first-best credit assessment of at least credit quality step 3 (investment grade) according to the Eurosystem credit assessment framework from an external credit assessment institution. In addition, the securities must be denominated in euro; the eligible maturity spectrum ranges from a minimum remaining maturity of six months to a maximum remaining maturity of 30 years at the time of the purchase; the securities must be issued by a corporation established in the euro area; and securities issued by credit institutions are not eligible for purchase. The Eurosystem applies an issue share limit of 70% per security.[2]

Between the start of CSPP purchases on 8 June 2016 and 15 July, the Eurosystem bought €10.4 billion of non-bank corporate bonds.[3] 7% of the purchases were made in the primary market and 93% in the secondary market. The amount purchased is published on a weekly basis and the split between primary and secondary markets is published each month on the ECB's website. The corporate bond market is generally less liquid than the government bond market, as corporate bond issues are much smaller in terms of outstanding amount than most government bond issues, the market is dominated by long-term investors and banks usually do not serve as dedicated market-makers. Therefore, trades of less than €10 million make up the majority of the volume under the CSPP (see Chart A) and trades are

1 The APP also comprises the asset-backed securities purchase programme (ABSPP), the third covered bond purchase programme (CBPP3) and the public sector purchase programme (PSPP).

2 However, in specific cases a lower issue share limit applies, e.g. for securities issued by public undertakings, which are dealt with in a manner consistent with their treatment under the PSPP.

3 All data on purchases refer to purchases settled by 15 July 2016.

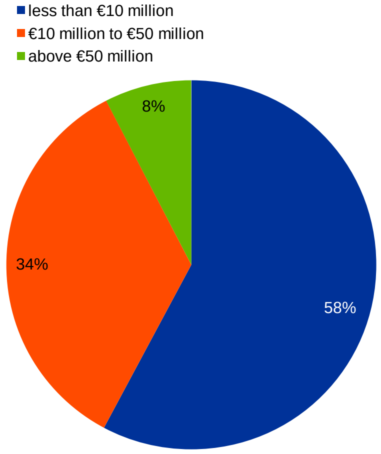
typically larger in the primary market than in the secondary market. Average trade sizes under the CSPP are broadly comparable to those under the third covered bond purchase programme (CBPP3) and smaller than trades under the public sector purchase programme (PSPP). The corporate bond repo market likewise tends to be less liquid than the government bond repo market. To support market liquidity, the Eurosystem has since 18 July made its CSPP bond holdings available for securities lending via the national central banks conducting purchases.

CSPP purchases are well diversified across ratings, sectors, countries and issuers. Owing to the large number of eligible corporate issuers, purchases have so far been spread over 458 different bonds issued by 175 different issuers. Yields of the purchased bonds have ranged from around -0.3% to above 3%, with just above 20% of the purchases being made at negative yields above the ECB's deposit facility rate of -0.4%. The ratings of the bonds range from AA to BBB- and the distribution of purchases broadly mirrors the rating distribution of the universe of eligible bonds. The purchases are well diversified across corporations in many economic sectors (see Chart B) and across the euro area countries where bonds are outstanding.

Chart A

Trade sizes under the CSPP

(percentage shares)

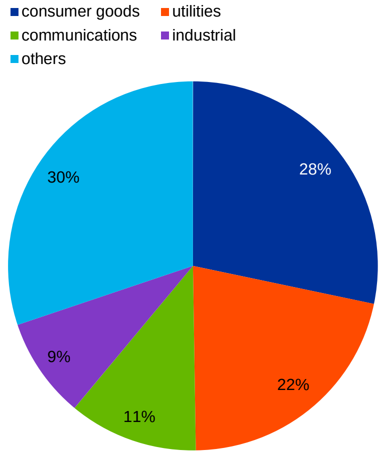


Source: ECB.
Note: Secondary market trades.

Chart B

Sectoral distribution of purchases

(percentage shares)



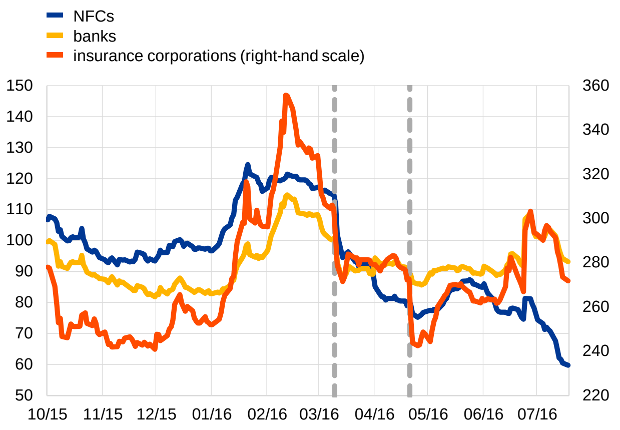
Sources: Bloomberg and ECB.
Note: Based on the Bloomberg sector classification.

The announcement of the CSPP on 10 March was followed by a significant contraction in the spread between yields on bonds issued by non-financial corporations (NFCs) and a risk-free rate. NFC bond spreads declined sharply on the day of the announcement and continued to decline subsequently, interrupted only by temporary bouts of volatility in May and June relating to the referendum on the United Kingdom's membership of the European Union (see Chart C). When the CSPP eligibility of insurance corporations was confirmed on 21 April, they also recorded a sizeable spread contraction. The subsequent developments in corporate spreads are to some extent related to the uncertainty generated by the UK referendum.

Chart C

Investment-grade corporate bond spreads

(basis points)

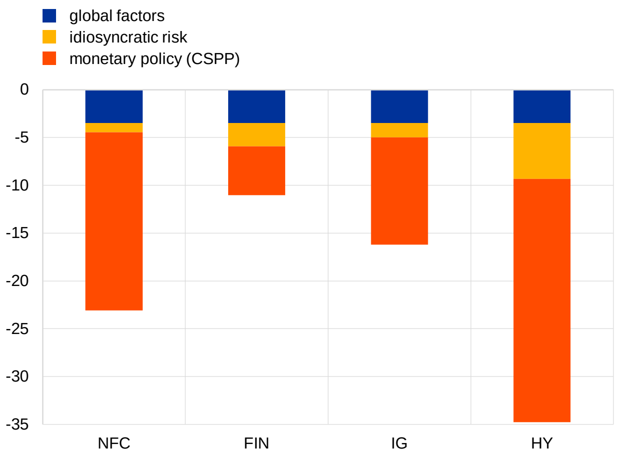


Sources: Markit and Bloomberg.
Notes: Corporate bond spreads are measured by asset swap spreads. The vertical lines indicate the Governing Council meetings on 10 March and 21 April. The indices also contain subordinated bonds. The latest observation is for 18 July 2016.

Chart D

Contributions to changes in corporate bond spreads in the two-week period after the CSPP announcement

(basis points)



Sources: Merrill Lynch and ECB calculations.
Notes: Corporate bond spreads are measured by asset swap spreads. NFC denotes bonds issued by non-financial corporations; FIN denotes bonds issued by the financial sector; IG denotes investment-grade bonds; HY denotes high-yield (non-investment grade) bonds. For more details of the analytical approach taken to derive these results, see footnote 5 and De Santis, R. A., "Credit spreads, economic activity and fragmentation", Working Paper Series, No 1930, ECB, July 2016. The latest observation is for 24 March 2016.

Econometric analysis suggests that the CSPP announcement accounts for a large share of the decline in euro area corporate bond spreads in March 2016. Following the current practice in the literature, the impact of the CSPP announcement is assessed through an event study approach focusing on the two-week period after the announcement. The empirical analysis suggests that the monetary policy decisions announced in March, which include the launch of the CSPP, the cut in the ECB deposit facility rate and the new series of four targeted longer-term refinancing operations (TLTRO-II), have improved the external financing conditions of firms. Providing precise estimates of the impact of the policies is most likely not feasible. However, focusing on the spread between the individual corporate bond yield and the risk-free rate of the same maturity might help to identify more directly the effects of the CSPP.

A time-series panel analysis of the determinants of corporate bond spreads estimated over the October 1999-March 2016 period shows that, over the identified period from 10 to 24 March, 11 basis points of the total decline of 16 basis points in the spreads of euro area investment-grade corporate bonds was related to the monetary policy measures announced in March, more specifically the launch of the CSPP (see Chart D).[4] Most of these bonds are eligible for CSPP purchases. However, the same analysis also identifies a notable impact on the corporate bond market segments dominated by ineligible bonds. In particular, it shows an impact of 25 basis points on high-yield bonds, i.e. bonds with a rating lower than investment grade, and an impact of 5 basis points on corporate bonds issued by financial institutions, which include both ineligible bank bonds and eligible bonds issued by insurance corporations. The evidence of a decline in corporate credit spreads owing to the CSPP is corroborated by the sizeable spread contraction for bonds issued by insurance corporations when it was confirmed on 21 April that

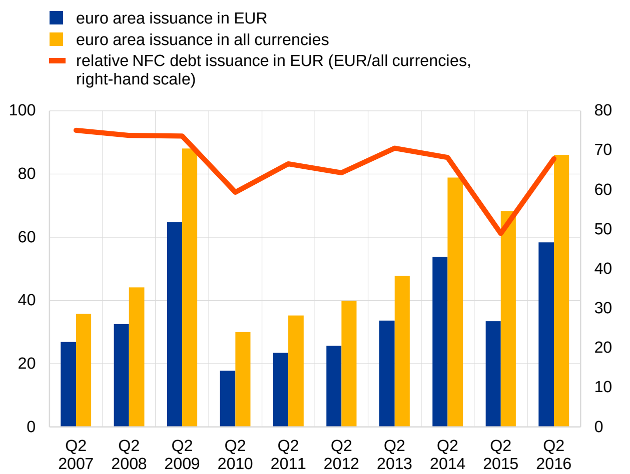
[4] The results are based on a panel data analysis where spreads of 4,750 individual euro area corporate bonds are disaggregated into their driving factors by means of a two-step procedure. In a first step, the idiosyncratic risks of individual bonds are disentangled from a systematic or aggregate factor equally affecting all corporate bonds together over the period October 1999-March 2016. The second step considers the determinants of this systematic component, i.e. global factors, such as oil prices and the VIX (the Chicago Board Options Exchange volatility index), and monetary policy. For more details about the identification of idiosyncratic and systematic risks, see De Santis, R. A., "Credit spreads, economic activity and fragmentation", *Working Paper Series*, No 1930, ECB, July 2016.

these bonds are eligible (see Chart C).

Issuance of corporate bonds denominated in euro increased after the CSPP announcement. While issuance was subdued at the beginning of the year amid elevated financial market uncertainty, it rebounded significantly after the CSPP announcement. Preliminary data (see Chart E) suggest that issuance in the second quarter of 2016 was well above the average seen in previous years. Moreover, the share of new bonds issued by euro area corporations in euro relative to issuance in all currencies rebounded to a level broadly similar to the share recorded in the past, i.e. about 70% (see Chart F). Foreign companies with headquarters located outside the euro area have not thus far increased their bond issuance in euro.

Chart E
Debt issuance by euro area NFCs

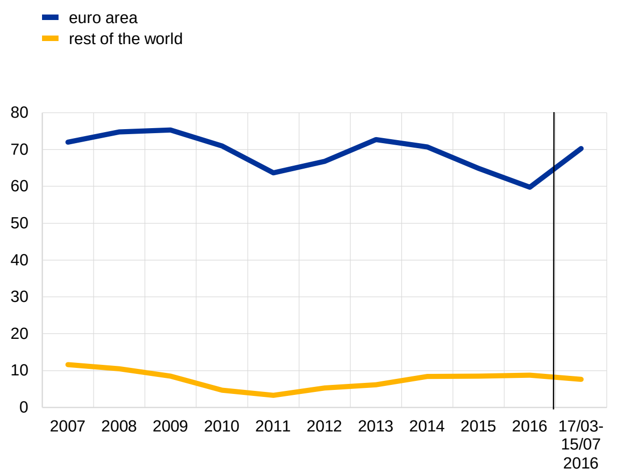
(EUR billions; percentage shares)



Sources: Dealogic and ECB calculations.
Notes: The data include both investment-grade and non-investment grade bonds. “Issuance in euro” denotes new issues denominated in euro by NFCs headquartered in the euro area. “Issuance in all currencies” denotes all new issues by NFCs headquartered in the euro area.

Chart F
Share of NFC debt issued in euro

(percentage shares)



Sources: Dealogic and ECB calculations.
Notes: The data include both investment-grade and non-investment grade bonds. “Euro area” denotes new issues denominated in euro relative to total new issuances by NFCs headquartered in the euro area. “Rest of the world” denotes new issuances denominated in euro relative to total new issuances by all NFCs headquartered outside the euro area. The year 2016 includes observations up to 15 July 2016. The period from 17 March to 15 July 2016 does not capture a large (€15 billion) transaction in the second week of March 2016, which was agreed before the CSPP announcement.