

## **Benoît Cœuré: Embarking on public sector asset purchases**

Speech by Mr Benoît Cœuré, Member of the Executive Board of the European Central Bank, at the Second International Conference on Sovereign Bond Markets, Frankfurt am Main, 10 March 2015.

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*I would like to thank Marie Hoerova, Peter Hoffmann and Andreas Moser for their contribution to the speech. I remain solely responsible for the opinions expressed herein.*

### **Summary**

*On 9 March the Eurosystem launched its public sector purchase programme (PSPP). On that day the ECB and the national central banks of the euro area purchased €3.2 billion of public sector bonds, putting the programme on track to reach a total of €60 billion in March. Monetary policy is implemented in normal times in money markets. Stepping into bond markets creates challenges and might have unintended consequences. One key principle underlying the implementation of the PSPP is the minimisation of unintended consequences, which can be ensured by obeying the concept of market neutrality. We do want to affect market prices but we will not suppress the price discovery mechanism. The Eurosystem will ensure a high degree of transparency around its interventions and will closely monitor their impact on market liquidity and collateral availability. Some market reports have suggested that we may not be able to buy the intended amounts of government bonds. While the effective supply of eligible securities is undoubtedly lower than the total amount outstanding, it will still be substantially higher than the amounts we intend to purchase. If this is the case, there will be a price at which we can buy the quantities needed to meet our monthly targets. In other words, we may face a scarcity of bonds, but we won't face a shortage. And there are good reasons to expect that scarcity will materialise first and foremost in those market segments with a higher duration, potentially helping to maximise the economic impact of our operations.*

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Ladies and gentlemen,

It is a great pleasure for me to speak to you tonight.

As you all know, the Eurosystem launched its public sector purchase programme (PSPP) yesterday, 9 March. On that day the ECB and the national central banks of the euro area purchased €3.2 billion of public sector bonds, putting the programme on track to reach a total of €60 billion of public and private sector bonds in March, as intended by the Governing Council. The PSPP is the latest of a suite of asset purchase programmes (APP), which include asset-backed securities (ABSPP) and covered bonds (CBPP3).

The PSPP is a new programme for the euro area, but it can hardly be called a revolution in central banking. Central banks around the world have relied on large-scale asset purchase programmes to further stimulate the economy and fulfil their mandates after hitting the zero lower bound. Accordingly, when the Governing Council decided on 22 January to launch the PSPP, it agreed unanimously that it is a monetary policy tool in a legal sense, although views differed on the timing of such a programme. In our case, the ultimate goal of these operations is to bring back medium-term inflation in the euro area to levels close to, but below, 2%, in line with our price stability mandate.

Monetary policy is implemented in normal times in money markets by buying and selling short dated securities or, in the case of the ECB, by lending to banks against adequate collateral. While the ultimate goal is the same, when the lower bound is reached the actual implementation of monetary policy also has to take place in bond markets, which central

banks in normal times only affect indirectly. Stepping into this new domain creates certain challenges and might even have unintended consequences. These, however, should not be interpreted as constraining the effectiveness of monetary policy. But they do provide guidelines and a framework for defining the operational features of the PSPP. And outlining these features is the topic of today's speech.

## 1. Transmission

The PSPP is designed to strengthen the impact of our asset purchases already under way. Conceptually, large-scale asset purchases by a central bank may have an effect through a number of channels.

First, large-scale security purchases mechanically reduce the supply of securities available in the secondary market, which results in higher prices and lower yields through the creation of scarcity. Importantly, this effect is by no means limited to the individual bonds that are purchased. Instead, the existence of “preferred-habitat investors” – agents with a preference for securities with a specific maturity – gives rise to “local” spillovers that also compresses the yield of bonds with a similar maturity.<sup>1</sup> In addition, asset purchases also reduce the overall duration risk borne by the market as securities are exchanged into central bank reserves. This lowers the interest rate risk borne by investors and accordingly affects the entire term structure, despite having a more pronounced effect on long-term bonds.<sup>2</sup> Notice that these two effects just mentioned have different implications for the effectiveness of asset purchases – local versus global impacts – and therefore need to be taken into consideration when implementing the PSPP.

Second, our asset purchases will also affect the prices of riskier securities. In particular, the compression of interest rates creates incentives for investors to re-balance their portfolios away from riskless securities.<sup>3</sup> In the context of the euro area economy, which is largely bank-based, we would expect banks to shift their portfolios from bonds to riskier investments such as loans to firms and households. This would provide further stimulus to the economy, eventually helping us achieve our price stability mandate, and *ex post*, decreasing the overall level of risk in the economy.

Finally, our intention to expand the central bank balance sheet until end-September 2016 also constitutes an important signal of our expansionary monetary policy stance over an extended horizon. In this sense, the PSPP also complements our forward guidance on interest rates. Forward guidance has proved very effective in shielding euro area financial conditions from global shocks. Thanks to PSPP, it now extends over a longer horizon. This effect may be further amplified by an increase in investor confidence, which in turn will further reduce heterogeneity across the euro area countries.

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<sup>1</sup> In this case, the idiosyncratic behaviour of such investors influences the yield of a particular bond; see Vayanos, D. and J. L. Vila, 2009, “A Preferred-Habitat Model of the Term Structure of Interest Rates,” NBER Working Paper No. 15487. For an empirical assessment of preferred habitat models in the case of US large-scale asset purchases, see Carpenter, S., S. Demiralp, J. Ihrig and E. Klee, 2013, “Analyzing Federal Reserve Asset Purchases: From whom does the Fed buy?” Federal Reserve Board Finance and Economics Discussion Series 2013-32.

<sup>2</sup> See Adrian, T. and H.S. Shin, 2010, “Liquidity and leverage,” *Journal of Financial Intermediation* 19, 418–437. Large-scale asset purchases can ease investors risk constraints, and thus lower the market price of risk; see Greenwood, R. and D. Vayanos, 2014, “Bond supply and excess bond returns,” *Review of Financial Studies*, forthcoming.

<sup>3</sup> For an empirical assessment of this transmission channel for the US and UK purchase programmes, respectively, see Carpenter, S., S. Demiralp, J. Ihrig and E. Klee, 2013, “Analyzing Federal Reserve Asset Purchases: From whom does the Fed buy?” Federal Reserve Board Finance and Economics Discussion Series 2013-32, and Joyce, M.A.S., Z. Liu and I. Tonks, 2014, “Institutional investor portfolio allocation, quantitative easing and the global financial crisis”, Bank of England Working Paper No. 510.

It is important to stress that some of these mechanisms are already at work. Following the announcement of the expanded asset purchase programme on 22 January, we saw a decline in the forward interest rates across all maturities, as well as a decline in government and corporate debt yields, and a rise in equity prices. For example, 10- and 20-year government debt yields declined overnight by 14 and 19 basis points, respectively, in the case of France, and by 17 and 32 basis points in the case of Spain.<sup>4</sup> Note that a relatively more pronounced effect on longer-term government yields suggests that the duration channel is at work. Similarly, corporate bond yields (7–10 year maturity) declined by 10 basis points in case of AA-rated bonds and by 13 basis points in case of BBB-rated bonds, showing that the lower risk-free rate and the portfolio rebalancing effect were already at play.<sup>5</sup>

## **2. Design and implementation**

Let me now turn to the implementation of the PSPP.

### ***What is the Eurosystem buying?***

The spectrum of securities covered by the PSPP includes (i) nominal and inflation-linked central government bonds, and (ii) bonds issued by recognised agencies, international organisations and multilateral development banks, provided they are located in the euro area. Of these, only securities with a residual maturity ranging from two to 30 years will be eligible. In terms of overall breakdown, we intend to allocate 88% of the total purchases conducted under the PSPP to government bonds and recognised agencies, and 12% to securities issued by international organisations and multilateral development banks. An initial list of the international organisations and multilateral development banks whose securities are eligible for the PSPP has been published on the ECB's website<sup>6</sup>.

### ***How is the Eurosystem buying?***

Purchases are to be split across eligible euro area jurisdictions according to the ECB's capital key, and within each jurisdiction we will purchase securities roughly according to the nominal amount outstanding. To preserve normal secondary market functioning, our purchases will be subject to a security-specific limit of 25% and an issuer-specific limit of 33% in terms of nominal value. The issue share limit of 25% prevents the Eurosystem from forming a blocking minority in the event of a debt restructuring involving collective action clauses. Moreover, we will apply a blackout period around the issuance of new securities on the primary market.

In line with our regular monetary policy operations as well as ongoing purchase programmes, the PSPP will be coordinated centrally by the ECB, but implemented in a decentralised fashion. To this end, the ECB will directly buy 8% of the total amount and limit its purchases to government bonds and agency securities across all eligible jurisdictions. The remaining 92% will be purchased by national central banks, and follow a specialisation scheme whereby each national central bank restricts its activity to domestic bonds issued by the local government and recognised agencies. Purchases will be allocated across issuers from the various euro area countries on the basis of the ECB's capital key.

In case the envisaged amounts to be purchased in a jurisdiction cannot be attained, national central banks will conduct substitute purchases in bonds issued by international organisations and multilateral development banks located in the euro area. These purchases

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<sup>4</sup> Cumulative change between the end-of-the-day value on 21 January and 23 January 2015.

<sup>5</sup> Cumulative change between the end-of-the-day value on 21 January and 23 January 2015.

<sup>6</sup> See <http://www.ecb.europa.eu/mopo/liq/html/pspp.en.html>.

will be subsumed under the 12% allocation to international organisations and multilateral development banks, which will be purchased by some national central banks and be subject to loss sharing.

Purchases of government bonds by national central banks will not be subject to loss sharing. As I recently said, we have taken into account the specificities of the euro area, meaning that we operate in an environment of decentralised national fiscal authorities, and the ECB has no mandate to engage in large-scale pooling of fiscal risks.

I am sure you are well aware that a substantial fraction of the euro area securities market is currently trading at prices which imply a negative nominal interest rate. The German yield curve, for instance, now trades at a negative yield almost out to the seven-year maturities. More than half of the outstanding stock of nominal German sovereign bonds with maturities between two and 30 years trades at a negative yield. However, we will still purchase such securities as long as their yield to maturity exceeds the rate on the ECB's deposit facility, which currently stands at -20 basis points.

This decision has two implications. First, it provides a strong commitment by the Eurosystem to implement the PSPP in all eligible jurisdictions. Second, it curbs expectations about future government bond yields falling below the deposit facility rate, which could ultimately have a negative effect on banks' incentives to sell government bonds.

The transactions under the PSPP will be conducted via institutions eligible for participation in the Eurosystem's regular monetary policy operations as well as other regular counterparties used by the Eurosystem for the investment of its euro-denominated investment portfolios.

### ***Will the Eurosystem be able to meet its quantitative targets?***

Some market reports have suggested that the Eurosystem may not be able to buy the intended amounts of government bonds in the market. Let me state firmly that at this point there are no signs of issues in respect of sourcing the bonds. There were similar concerns in other countries at the time they launched large-scale asset purchases and yet they had no problems meeting their quantitative targets. And as so often in economics, the question boils down to an issue of supply and demand, and whether there will be a market clearing price.

The concerns can be justified only if there is a mismatch between the effective supply of securities and the intended scale of our purchases. If that is the case, there will be no price that can clear supply and demand, and this would prevent us from buying the desired amounts.

Concerns about the potential scarcity of bonds are based on **three main** factors.

**First**, there are expectations that net issuance from euro area jurisdictions over the life of the programme will be modest. Indeed, the European Commission forecasts that the aggregate euro area public budget deficit will fall to -2.2% in 2015 and -1.9% in 2016.

As a result, the net issuance<sup>7</sup> of medium- and long-term securities by the euro area debt management offices (DMOs) in 2015 is expected to be around €200 billion. Looking at individual countries, a large majority will have a positive net issuance in 2015, but there are a few countries, e.g. Germany, where net issuance is expected to be marginal or even negative.

Note, however, that the average weighted price of bonds for the two to 30-year maturity range is well above par, which should mitigate concerns about the reduction of net issuance to some extent, as the purchase target refers to settled (rather than nominal) amounts.

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<sup>7</sup> Net issuance is defined as new debt minus redemptions.

Furthermore, in the defined maturity range of two to 30 years, the nominal outstanding volumes are around €4.6 trillion for central government bonds, €277 billion for agencies and €400 billion for supranationals. This is way above the combined target amount of the purchases to be conducted under all our asset purchases programmes of €60 billion each month, at least until September 2016.

The discussion therefore reaches a totally different conclusion depending on whether one looks at net flows or at stocks, or to put it differently, whether the Eurosystem will face the marginal seller or the average seller in the market. And indeed, concerns expressed are not only about the *overall* supply of assets, but also about the size of the *effective* supply.

In fact, some asset holders may not be willing to sell. This may happen because of external constraints linked to specific business models or regulations imposed on them.

This **second** concern result from the assumption that, for instance, insurance companies, pension funds or banks are unwilling to sell government bonds in order to comply with regulatory requirements.

These concerns seem to be overrated, at least for banks. For several reasons.

First, when banks sell a bond to the Eurosystem, they will receive central bank reserves, which in the current low interest rate environment can be viewed by banks as close substitutes for government bonds, and which count towards fulfilling e.g. the required liquidity ratios. Second, banks can realise a capital gain on the sale of their government bonds and, in doing so, bolster their capital position and therefore their capacity to extend loans. Third, irrespective of the desirable review of the current regulatory framework of sovereign exposures<sup>8</sup>, it is in the best interest of banks to reduce their exposure to their respective government, which should increase their willingness to sell.<sup>9</sup>

Finally, the **third** factor that could reduce effective supply is the potential lack of attractive investment alternatives in an environment of compressed credit spreads and the buy-and-hold nature of much of the investment community. But note that, at least in the initial phases of the PSPP, international banks and asset managers are the most likely sellers of their euro area government bond holdings. And these investors are generally felt to have more flexible mandates.

So, while the effective supply of eligible securities is undoubtedly lower than the total amount outstanding, I do believe that it will still be substantially higher than the amounts we intend to purchase. If this is the case, there will be a price at which we can buy the quantities needed to meet our monthly targets. In other words, we may face a *scarcity* of bonds, but we won't face a *shortage*. Scarcity is a fact and not a problem *per se*. Allocating scarce resources through prices is the way our economies work. And in the light of the factors I have just listed, there may be good reasons to expect that scarcity will materialise first and foremost in those market segments with a higher duration, potentially helping to maximise the economic impact of our operations, as outlined in the section on transmission mechanism.

### 3. Minimising the unintended consequences

As outlined in the introduction, one key principle underlying the implementation of the PSPP is the minimisation of unintended consequences. This can be ensured by obeying the concept of market neutrality of our operations.

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<sup>8</sup> See the "ESRB report on the regulatory treatment of sovereign exposures", March 2015.

<sup>9</sup> Fitch Ratings (2014), Protecting Eurozone banks from the Sovereigns, 17 November. See also Barwell, R. (2015), "Two birds with one stone: Sourcing QE bonds and solving the sovereign bank nexus", Der Querdenker, RBS Research, 27 February.

By this we do not imply that we do not want to have any impact on the market. Monetary policy decisions always and everywhere have an impact on market prices. I have already mentioned the potential channels through which the programme might have an impact, and we have already seen a substantial decline in interest rates following our January announcement. In fact, interest rates had already fallen substantially prior to the January announcement, and previous experiences with QE suggest that they will continue to do so in the coming months.<sup>10</sup>

The concept of market neutrality means that, while we do want to affect prices, we do not want to suppress the price discovery mechanism. ***We will operationalise this principle by ensuring a high degree of transparency around our interventions and by closely monitoring their impact on liquidity and collateral availability.***

### ***Transparency***

Transparency plays a crucial role in the successful implementation of the PSPP. It has been a key element in other jurisdictions where large-scale asset purchases have been introduced, and it is likely to be even more important in the euro area. This is because we are facing the task of communicating our actions to market participants in 19 different countries with heterogeneous market structures and investor clienteles. In order to ensure a sufficient degree of transparency, we will publish the aggregate amount of securities purchased on a weekly basis. The residual maturity of securities held per jurisdiction will be communicated once a month.

We have also announced that within each jurisdiction securities will be purchased in proportion to the total amount outstanding, which will be done with certain degree of flexibility to accommodate counterparty offers in a smooth manner. This should prevent significant dislocations along the yield curves and other similar undesirable market distortions. It also creates a certain, albeit imperfect, degree of predictability for market participants, which enables them to accumulate inventories in order to satisfy our demand. Finally, the Eurosystem's presence in the market will not be erratic, but smooth and consistent over time, which should further preserve orderly markets and mitigate excessive short-run volatility.

### ***Market liquidity***

Another important issue concerning the successful implementation of the PSPP is market liquidity.

Currently, the market for euro area government debt constitutes one of the most liquid segments of global financial markets, and investors can transact large amounts of securities without moving market prices to a significant degree. The Eurosystem is committed to preserving this situation by ensuring that the transactions underlying the PSPP are conducted in a way that minimises any negative side effects on market functioning.

In fact, a smooth and efficient execution will guarantee the programme's efficiency because liquidity is strongly correlated across markets, especially those for assets with similar characteristics.<sup>11</sup>

Indeed, our experience shows that the negative impact of non-standard measures, provided they are properly designed, on market liquidity is at most temporary.

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<sup>10</sup> See D'Amico, S. and T. King, "Flow and stock effects of large-scale treasury purchases: Evidence on the importance of local supply," 2013, *Journal of Financial Economics* 108, 425-448, and Krishnamurthy, A. and A. Vissing-Jorgensen, "The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy," 2011, *Brookings Papers on Economic Activity*, Fall 2011, 215-265, among others.

<sup>11</sup> See Cespa, G. and T. Foucault, "Illiquidity Contagion and Liquidity Crashes," 2014, *Review of Financial Studies* 27, 1615-1660.

A case in point is the ECB's fixed rate full allotment policy, introduced end of 2008, which was considered by certain market observers as having a persistent negative impact on money market activity.

Recent data, however, indicates that the euro money markets are in a healing phase<sup>12</sup>. Aggregate turnover for all instruments in the euro money market expanded by 4% to €79 trillion in the second quarter of 2014 alone compared with the second quarter of the 2013, following an increase in turnover by 6% for the whole of 2013. The gradual recovery in money market activity and the overall improvement in market functioning in 2013 were therefore confirmed in 2014.

Accordingly, the preservation of market liquidity can be considered as a prerequisite for the proper working of the portfolio rebalancing channel that is at the heart of our asset purchase programmes. To this end, we will take particular care to avoid exacerbating any existing market frictions. More specifically, we will try to avoid, to the extent possible, purchasing specific securities such as current cheapest-to-deliver bonds underlying futures contracts, securities commanding "special" rates in the repo market as a sign of temporary scarcity, and other assets displaying significant liquidity shortages.

The practical experiences from similar purchase programmes conducted by other central banks, such as the Federal Reserve, the Bank of England and the Bank of Japan, indicate that such steps are very effective in safeguarding a well-functioning market. This is also corroborated by recent academic research.<sup>13</sup>

#### ***Collateral availability: securities lending***

Still, purchases of securities by a central bank following a buy-and-hold strategy are likely to reduce the effective supply of purchased securities available to market participants.

In the case of the PSPP, securities purchased by the Eurosystem may be valued by market participants not only for their coupons but also for collateral services they provide. For instance, one of the papers presented today at the conference shows how purchases of government bonds under the Securities Market Programme increased the scarcity of certain Italian government bonds in 2011 and 2012, with the impact being more pronounced for securities that were already in high demand.<sup>14</sup> Demand for collateral securities may be further amplified by incoming regulation, for example by the moving of over-the-counter derivatives trading towards central counterparties.<sup>15</sup>

Concerns regarding reduced availability of collateral are evident in specific segments of the repo market. For example, term repo in German collateral for maturities longer than three months has traded below the deposit facility recently, at around -25 bps. That said, let me emphasise once again that there is a difference between scarcity and shortage. The problem would be a shortage of collateral and/or an impaired price mechanism. To avoid any shortage of assets that are used as collateral, especially at the high end of the credit spectrum, PSPP securities (as well as CBPP3 and SMP securities) will be made available to the market through securities lending. This will enable securities purchased by the Eurosystem to be used in private transactions and relieve frictions in the functioning of the market, such as failed repo deliveries, which may arise from our purchases.

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<sup>12</sup> See "European Central Bank: Euro Money Market Survey, October 2014".

<sup>13</sup> See Song, Z. and H. Zhu, "QE Auctions of Treasury bonds," 2014, Finance and Economics Discussion Series, Federal Reserve Board.

<sup>14</sup> See Corradin, S. and A. Maddaloni, "The Importance of Being Special: Repo Markets During the Crisis," 2015, working paper.

<sup>15</sup> See Committee on the Global Financial System (2013), "Asset encumbrance, financial reform and the demand for collateral assets", Publications No 49, May.

Other central banks that have conducted large-scale asset purchases instituted such securities lending facilities. For example, the Bank of England made their entire gilt holdings available to the UK's Debt Management Office, which then lent them to market participants on demand. A similar arrangement may be more challenging to implement for the Eurosystem as there are 19 different jurisdictions to deal with and 19 DMOs. Being mindful of the institutional set-up of the euro area, we will implement securities lending in a decentralised fashion.

Securities lending will not only be important to ensure collateral availability but also for market liquidity in general. The ability to borrow securities from the Eurosystem will allow intermediaries to continue quoting competitive prices, as it gives them more time to subsequently cover their open positions in the market. By supporting market liquidity, securities lending will be an essential element for the success of our asset purchase programmes.

Thank you very much for your attention.