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## The ECB's Monetary Policy: Stability Without "Safe" Assets?

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#### AT A GLANCE

The ECB's very expansionary monetary policy is showing positive effects. Interest rates declined further, bank lending is improving and the euro depreciated. However, inflation remains much too low and aggregate demand too weak for the output gap to close rapidly. Further weakening the euro is not a feasible option. A weaker euro would aggravate global imbalances and impact negatively on less-than-robust global growth. Expansionary fiscal policy therefore needs to add to the effects of monetary policy.

The euro area, moreover, suffers a key problem that not only impedes monetary policy effectiveness but also constrains fiscal policy and puts the future stability of the euro area at risk: With the decision to give up on the safe-asset quality of euro area sovereign bonds, the euro area is losing a fundamental stability anchor.

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### MONETARY POLICY HAS POSITIVE EFFECTS BUT ...

Despite heavy criticism, the ECB's very expansionary monetary policy has not been without effect. Short-term and long-term loan rates have fallen further and the divergence of interest rates between euro area countries has continued to decline (Chart 1). Loans to non-financial corporations, which declined between mid-2012 and June 2015, have since increased somewhat with the annual rate in February 2016 reaching 0.9%, and loans to private households are no longer stagnant, currently expanding at an annual rate of 1.9% (February 2016). Furthermore, the ECB's quarterly Bank Lending Survey indicates an improvement in lending conditions. Loan standards in the euro area were relaxed in every quarter since early 2014.

An important monetary transmission channel is the exchange rate. Since mid-2014, the euro has depreciated against the US-dollar by 20%. The lower external value of the euro stimulates external demand and causes domestic demand to shift from expensive imports to cheaper domestic products. However, as the rest of the world is experiencing less-than-robust growth and the euro area already in 2015 recorded a current account surplus of almost 4%, a weaker euro contributes to global imbalances. Therefore, this channel of economic stimulation has been largely exhausted.

Despite the fact that policy rates have been close to zero for more than two years and the ECB

has repeatedly added new policy instruments, capacity utilization in the euro area remains low. As also noted by ECB president Draghi, the reason behind the poor economic performance of the euro area is that monetary policy has until recently been the only expansionary macro policy (Draghi 2016a). Moreover, until 2015 the fiscal policy stance was restrictive despite high unemployment, thus further depressing aggregate demand. Accordingly, already-low inflation declined further.

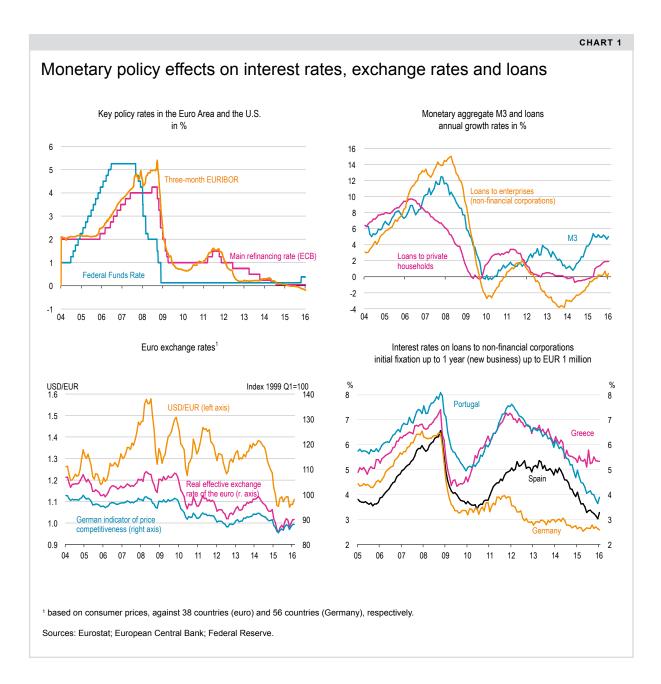
### ... INFLATION TARGET IS STILL OUT OF REACH

Already in November 2014, Draghi had promised the ECB "will do what we must to raise inflation and inflation expectations as fast as possible..." (Draghi 2014b). More than one year later, in January 2016, headline inflation at 0.3% was as low as it had been in November 2014 and in February 2016 inflation was once again negative (-0.2%).

Low inflation partly results from the steep decline in oil prices since mid-2014 to less than one-third of their initial level; between February 2015 and February 2016, oil prices declined by 45% (Brent, U.S. dollar). Low inflation is thus in part the result of temporary factors. Analogously, the steep increase in oil prices in the period 2010-2012 caused headline inflation to be substantially higher than underlying inflation generated by domestic factors.

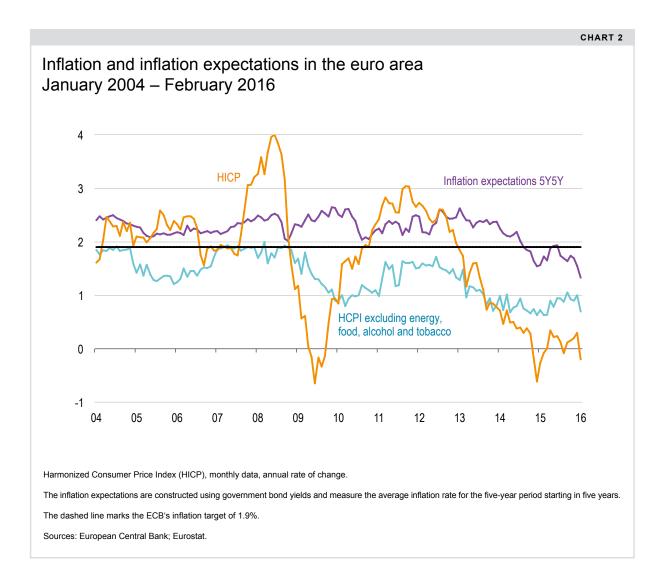
During the past three years, the ECB lowered its inflation forecast practically every quarter. In December 2012, the ECB expected inflation to be at 1.4% in 2014, the realized inflation rate was 0.4%. The projection for 2015, initially at 1.3% (December 2013), was repeatedly lowered to reach 0.1% in December 2015. Currently, the ECB expects an inflation rate of 0.1% for 2016 (Draghi 2016b) compared to an initial forecast of 1.5% in March 2014.

Fluctuations in inflation caused by exogenous factors are in general without consequence for



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monetary policy. This is why the ECB aims to maintain price level stability – inflation of "below, but close to 2%" – over the medium term. The current rate of -0.2% is therefore less relevant from a monetary policy perspective than the underlying inflation rate caused by domestic factors. Underlying inflation can be proxied by the inflation rate excluding energy, food, alcohol and tobacco. However, this rate has also been clearly below target since mid-2009 and in February 2016 stood at only 0.8%.



Prolonged undershooting of the inflation target destabilizes the economy as much as prolonged overshooting. Therefore, central banks aim to stabilize inflation at a specific low level, the inflation target. The inflation target serves as an anchor for expectations. A prolonged undershooting of the inflation target results in lower-than expected profits and higher real interests rates, i.e. heavier debt burdens, and can lead to second-round effects that reinforce low inflation and entail the danger of downward price-wage spirals.

In the euro area, second-round effects are discernible in wage developments and in expectations. The increase in unit labor costs declined in the first three quarters of 2015 and most recently stood at 0.5% (3rd quarter 2015)

compared to an average of 1.1% in 2014. This is more than 1 percentage point below the rate that is compatible with the ECB's inflation target. In addition, inflation expectations as reflected by bond yields have been markedly below their long-term average since February 2014. Inflation expectations initially recovered after their low in early 2015 but started declining again in the summer of 2015, reaching an all-time low of 1.3% in February 2016 (Chart 2).

Some economists view the persistent undershooting of the inflation target as an opportunity to reduce the target itself (Stark 2014, Rürup 2015). However, there are good reasons why the ECB's inflation target was defined as "below, but close to 2%": firstly, because quality

improvements cannot be fully captured, so that measurement problems cause the official inflation rate to overstate the actual increase in the price level, and, secondly, to enable real interest rates to be noticeably negative despite the lower bound of around zero for nominal interest rates.

Medium-term inflation of substantially below 2% is therefore not beneficial but rather a symptom of weak economic growth and a stability risk.

### PERSISTENCE OF UNEMPLOYMENT: HYSTERESIS

Persistent underutilization of capacity and labor negatively affects euro-area potential output. Long-term unemployment tends to result in diminished human capital as expertise is lost or not kept up-to-date and the unemployed do not participate in innovations at the workplace. Furthermore, the stigma of being unemployed may reduce the chances of being hired. At the same time, lower investment causes production capacities to decline or to increase at a lower rate and fewer innovations to be implemented.

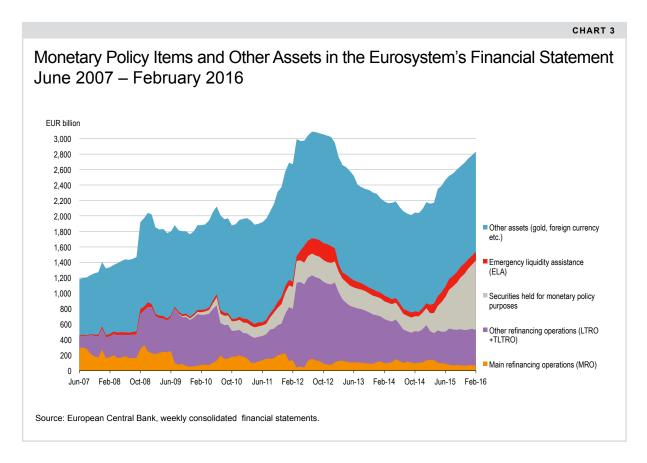
At the end of 2015, ECB president Draghi stated that the expansionary policy measures adopted since early 2014 would raise GDP by one percentage point in the years 2015 to 2017 (Draghi 2015b), i.e. a mere one-third percentage point per year, on average. Estimates of the output gap are highly uncertain but given an unemployment rate of 10.9 % in 2015 and a level of GDP that is only 0.3% higher than in 2008, it is safe to assume a large output gap, the OECD's most recent estimate being 2.7%. The longer the output gap remains open due to insufficient aggregate demand, the more supply-side effects will erode potential output (Logeay and Tober 2006; Draghi 2014).

Given hysteresis, it is all the more important that macro policies react to weakening demand in a timely manner to limit the negative impact on potential output. It is obviously too late for preemptive policy action at this point, but a strong economic upswing could give rise to hysteresis effects in the opposite direction, thus strengthening potential output and providing job opportunities for the long-term unemployed and discouraged workers.

### MAIN MONETARY POLICY TOOL: BOND PURCHASES

Against the background of persistently high unemployment, weak economic growth and declining inflation expectations, the ECB has repeatedly expanded its monetary policy measures since the fall of 2014. The interest rate on banks' excess reserve holdings in the Eurosystem, which has been negative since June 2014, has been lowered further and currently stands at -0.4%. In September 2014, the ECB introduced a third covered bond purchase program and, in March 2015, started its public sector purchase program. The duration of the programs has been extended, the eligibility criteria widened and the volume increased. According to a decision taken in December 2015, bonds that fall due are to be replaced, bringing the planned asset purchases to a total of almost 2000 billion euros over the 25-month period. Already today, the bond purchases are the main source of central bank liquidity in the euro area; the volume of refinancing operations has hardly changed since June 2014 in spite of the introduction of longerterm refinancing loans (Chart 3). By the end of February 2016, the Eurosystem had purchased securities worth 921 billion euros, an increase by 712 billion since June 2014. 78% of the securities purchased were securities issued by the public sector.

As a result, security purchases for monetary policy purposes – first introduced in 2010 – now make up 64% of the Eurosystem's monetary operations on the asset side of the financial statement. The remaining 36% are the more traditional refinancing operations. On the liabilities side, banknotes and deposits of monetary



financial institutions including minimum reserve requirements are monetary policy instruments. The increase in excess reserves was particularly pronounced, amounting to 543 billion euros since June 2014. Excess reserves are not a normal feature of the euro area's banking system but rather a symptom of exceptional circumstances.

These exceptional circumstances have persisted already for 8 years. That is how long the euro area and the ECB policies have been in crisis mode – first, in response to the international financial crisis 2008/2009, then as a result of the crisis in the euro area. Usually, banks' reserves held in the Eurosystem roughly correspond to the required minimum reserves. This was the case until 2007. Currently deposits exceed reserve requirements by 670 billion euros. Furthermore, banknotes in circulation have also increased rapidly since 2007, by 6 % on annual average, which may in part be due to the lingering euro crisis as well. The ECB has been in crisis mode since 2008 and with interest rates near zero its

monetary policy consists mainly in increasing central bank liquidity.

At first glance it appears puzzling that central bank liquidity (banknotes and bank deposits of euro area credit institutions) increased by more than the asset positions related to monetary policy (refinancing operations and security purchases). At second glance, however, the difference of 48 billion euros since 2007 is relatively small, given that several central banks have since extended almost 115 billion euros in emergency liquidity assistance (ELA) to the domestic banking system which is not considered a monetary policy operation. ELA is a component of the net financial assets (NFA) which were the center of a controversy in late 2015 prompting the ECB to publish a previously confidential agreement between the national central banks and the ECB (ECB 2014). An agreement about the expansion of net financial assets exists because they are an additional source of central bank liquidity unrelated to monetary policy. Net financial assets

amounted to 268 billion euros in early 1999, increased to 357 by January 2007 and 493 billion euros by the end of 2015 and decreased to 405 billion euros until the end of February 2016.

The fact that emergency liquidity assistance to credit institutions of the euro area is not considered monetary policy but belongs to the realm of investments by individual central banks highlights the central problem of the euro area as do the current modalities of security purchases for monetary policy purposes: The euro area is not a unified economic and monetary area and confidence in the fiscal solidity of individual member states is low.

The Bundesbank, in particular, insisted on the absence of risk sharing in the "public sector purchase programme". As a result, the Bundesbank purchases German government bonds with minimal yields, whereas Banca d'Italia acquires Italian government bonds with higher returns. The behavior of the Bundesbank at first appears curious, especially because risk sharing could still occur if a country suffered a loss of confidence and the OMT-program were activated. The latter would involve selective purchases of the respective government bonds by the Eurosystem as a whole (Draghi 2015a). From this perspective, it appears short-sighted to insist on nationalizing the risks associated with the current purchase program and take the corresponding yield loss.

However, nationalizing the risk of public sector purchases appears to be part of a more extensive scheme for the euro area which introduces sovereign default into the toolkit of economic policy and uses default risk to discipline national fiscal policies. Using risk perceptions in financial markets to discipline national policy makers is more effective if national banks do not share the risk of default as had been the case in the securities market program of 2010 and 2011. In the event of default, only the national central bank would incur losses.

Against this background, the monetary policy options are limited. Policy rates cannot be lowered significantly anymore. Security purchases

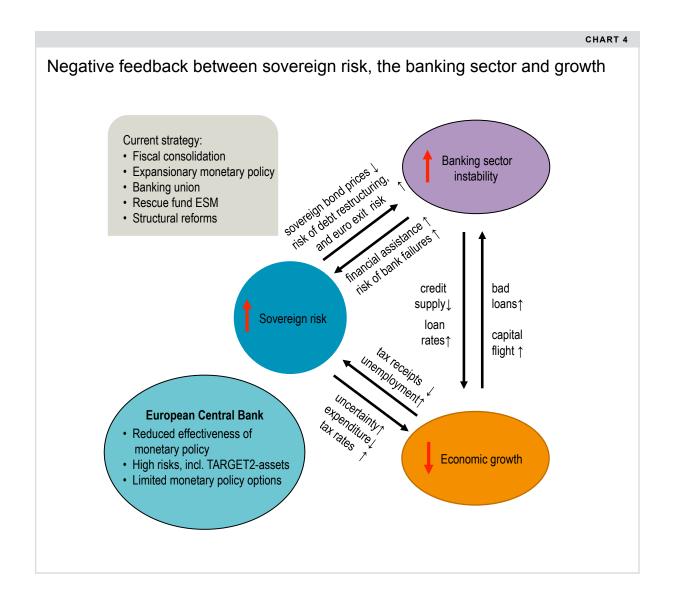
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increase liquidity and could be expanded further, but their effect on aggregate demand is indirect and, in the current climate of high uncertainty, insufficient to close the output gap and raise inflation to target.

A long-lasting period of low interest rates is furthermore not without risks for financial stability. The low and in part negative interest rates are likely to have limited negative effects on banking profitability for the meantime because refinancing costs have also declined and loan rates have remained positive. However, risks are likely to increase in the shadow banking system and, once the ECB starts raising rates, for the banking system as well (BIS 2015, Theobald et al. 2015).

# THIRD-WORLD EURO AREA: MACRO POLICY IN THE ABSENCE OF SAFE ASSETS

It is not a coincidence that the confidence crisis has not spread to other developed economies like the United States, the United Kingdom or Japan but rather remains confined to the euro area. The reason is not that public debt is particularly high in the euro area as a whole or in the countries hardest hit by the crisis. The debt ratio in the euro area was at its highest in 2014, reaching 94% of GDP, compared to 105% in the U.S.



and 246% in Japan. When Spain was drawn into the downward spiral in 2011, its public debt ratio was 70% (2011), Portugal's was 114%.

The reason for the euro crisis is that the euro area is not a stable economy from a monetary perspective. A key feature of a stable developed market economy is that its currency and its sovereign bonds are relatively safe stores of value. In times of heightened uncertainty, domestic sovereign bonds serve as a safe haven. The two stability anchors "price level stability" and "safe government bonds" make the economy better able to deal with negative shocks because they indicate economic agents' confidence in the stability of the economy. The two stability

anchors make macro policies more effective and vicious cycles less likely. A temporary deviation of inflation from target would in this case have no effect on longer-term inflation expectations, and a loss of confidence in financial sector profitability might lead to financial market turbulence but not to a flight from domestic sovereign bonds or the domestic currency. The United States, the UK and Japan are examples of stable developed economies, Argentina and Venezuela are counterexamples.

The euro is a stable currency, but not all sovereign bonds of euro area countries are viewed as risk-free. The main reasons for the lack of trust are the risk of debt restructuring and the

risk of exit from the euro area. It is obvious that bonds subject to the risk of default are not a reliable store of value. Bonds of a government that may default do not contribute to economic stability but rather to instability. Negative feedback loops between the state sector and the banking sector may give rise to a vicious cycle that, in turn, is reinforced as the economy falters (Chart 4). Higher sovereign risk increases economic uncertainty which negatively impacts on investment and consumption. If the government attempts to regain investors' trust by lowering expenditure and raising taxes, it thereby further depresses economic activity. Higher sovereign risk negatively impacts on the banking sector because higher yields imply lower bond prices and therefore a deterioration of bank assets. This in turn leads to rising financing costs as bank risk premia increase. The risk of euro exit has similar effects. Banks pass the higher financing costs on to their customers and increase their margins in view of the faltering economic leading to higher loan rates. This negatively affects economic activity and bank balance sheets as more loans become non-performing and capital flight sets in. The economic downturn generates lower tax revenues and increases expenditures such as unemployment benefits. The worsening fiscal balance and the risk of bank bailouts increase sovereign risk.

The current policy strategy on the euro area level rightly consists in addressing stability in all three areas: fiscal, banking and growth. However, the measures are devised in such a way as to neither invigorate and fortify the economy in the short run nor deliver stability in the long run. Monetary policy as the only expansionary macro policy is not enough. Banking union may increase the stability of the banking sector but the risk of sudden shifts and vicious cycles will remain because the euro area does not have an adequate supply of safe assets. Reducing the weight of euro area sovereign debt in bank balance sheets may lead to more diversified bank portfolios, making banks more resilient to non-

systemic shocks. However, the risk of all banks' portfolios does not decline as a result of diversification, only of individual portfolios (Tasca and Battiston 2014). At the same time, diversification results in greater linkages across the financial sector that increase systemic risk.

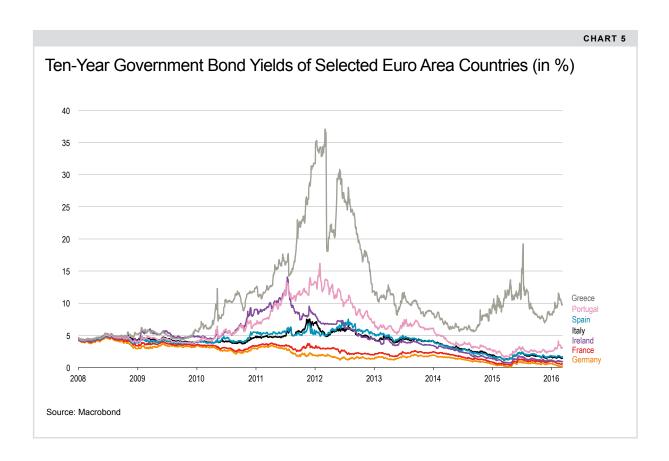
Safe assets are able to reduce systemic risk and sovereign bonds are the only assets that have the potential of being risk-free. Government bonds differ from privately issued bonds in that governments have the power to tax. Given a well-designed tax system and debt denominated in the national currency, a state can withstand even large shocks. The central bank furthermore serves as a backstop and its existence as a potential buyer lowers the risk of a loss of confidence in the government's debt.

Diversification can create assets that appear to carry low risk but as the international financial crisis showed, this illusion is shattered when they are put to a real test. In times of heightened economic uncertainty, the prices of privately created safe assets react to new (bad) information and thereby help to stoke instability.

To overcome the current crisis and promote the economic and financial stability of the euro area it would therefore be of great advantage if a strategy could be devised that restored the quality of safe asset to all euro area countries without creating incentives for unsound fiscal policies.

### **DECEPTIVE CALM**

A certain dissonance currently exists between, on the one hand, the lingering risk of euro area break-up and calls for further monetary action like helicopter money and, on the other hand, relatively low yield differentials between euro area sovereign bonds (Chart 5). The relative calm can be attributed to the "Whatever it takes"-speech by ECB president Draghi in the summer of 2012 and the announcement of the OMT program. Furthermore, fiscal policy has turned slightly expansionary, there is the chance that



the EU Commission will allow for greater fiscal flexibility and countries with fiscal space such as Germany may adopt more expansionary policy thus supporting the ECB's attempts to stabilize the economy.

The changing status of sovereign bonds in the euro area, however, gives cause for a more pessimistic outlook. The proposition of changing the regulatory requirements for sovereign bonds - initially put forth by the German Bundesbank is gaining ground (Juncker et al. 2015). It would be the next political step in eroding the status of government bonds as safe assets. The first step was the political approval of private sector involvement in euro-area sovereign debt restructuring, the second, the mandatory inclusion of collective action clauses in euro area sovereign bonds as of 2013. Already in 2010/2011 lack of governments' mutual trust and support prevented the ECB from nipping the euro crisis in the bud (Tober 2014). Although the ECB bought sovereign debt of Greece, Ireland, Portugal,

Spain and Italy, the purchases were very limited because the premise of euro area bonds as safe assets lacked political backing. At the time, governments were discussing the possibility of sovereign default. Their concern about creating adverse incentives may have been in part justified, but their analysis rested on the faulty premise that the euro crisis was rooted in profligate public spending. In mid-2012, it was again the ECB that restored stability in the euro area – this time not by selectively buying bonds but by promising to do so if needed. In doing so, the ECB came close to overstepping its mandate.

Meanwhile, risk sharing no longer applies to a large part of monetary policy, be it the public sector purchase program or emergency lending assistance provided by the national central banks. Under these conditions, it is questionable whether the ECB will be able to calm the markets when the next big shock hits. Given very high unemployment in the countries worst hit by the crisis and the recent experiences of Greece,

#### **INFOBOX 1**

### **EUROPEAN SAFE BONDS (ESBIES)**

European Safe Bonds (ESBies) were first proposed by Brunnermeier et al. in 2011 to sever the negative feedback loop between banking sector risk and sovereign risk (Brunnermeier et al. 2016).

ESBies are structured bonds – created by a European debt agency – that are constructed in such a way as to be relatively safe. They are senior bonds based on a diversified portfolio of euro-area government bonds. Their low risk is based on two pillars: diversity and seniority which ensures that they are repaid before other creditors receive payment. Their counterpart are junior bonds (EJBies) based on the same diversified portfolio but as sub-

ordinate debt. In the case of default, EJBies would take a loss. EJBies therefore they carry a higher yield.

The negative feedback loop between sovereign risk and banking risk is severed because banks have to substitute their sovereign debt holdings – which usually have a home bias – with ESBies. Banks would either not be allowed to hold subordinate EJBies or would have to hold adequate capital against these bonds.

ESBies would not only provide a large volume of highly liquid, safe assets. At the same time, EJBies would carry relatively low risk or would even be risk-free provided that fiscal shortfalls only occur unsystematically, because the link between sovereign risk and the banking sector would be eliminated by the introduction of ESBies.

countries on either side of the table may not be willing to sign an ESM program as prerequisite for selective bond purchases under OMT. The ESM program itself may reduce the positive impact on expectations causing the perceived risk of euro area breakup to rise.

The safe-asset shortage in the euro area and the latent risk of financial instability in the euro area might be resolved by introducing so-called ESBies (Brunnermeier et al. 2011, Brunnermeier et al. 2016). ESBies are conceived as structured bonds consisting of euro area government bonds. As senior bonds the ESBies would constitute safe assets, whereas the corresponding junior bonds would be subject to losses in case of default. The proposal has similarities with the Blue Bonds proposal by Weizsäcker and Delpla (2011) but does not require joint and several liability. Blue bonds, on the other hand, would carry a guarantee of all euro area countries but could be issued only up to a volume of 60% of GDP (corresponding to the public debt limit set down in the Maastricht Treaty). Debt above this threshold would be issued individually by national governments (red bonds) and subject to default risk. A third proposal, in contrast, aims to increase the stability of the euro area by creating a debt redemption fund and eliminating the sovereign default risk altogether (SVR 2011; Parello/Visco 2012). The debt redemption fund would cover the existing debt that exceeds the threshold of 60% of GDP. This debt would be joint and severally guaranteed and redeemed by the respective country over a period of 20 to 30 years.

All three proposals aim to increase financial market stability by turning government bonds

A CREDIBLE BAN OF SOVEREIGN DEFAULT WOULD GO A LONG WAY TOWARDS STABILIZING THE EURO AREA into safe assets. To succeed, all three proposals require an institutional framework to monitor and influence national fiscal policies of euro area countries to ensure fiscal sustainability. Such an institutional framework exists in today's euro area, even if it currently lacks fiscal flexibility. Against this background, a statement of euro area heads of state vowing to ban sovereign debt restructuring with public sector involvement from the policy toolbox would produce at least as big an effect as Mario Draghi's "Whatever it takes" promise. (The effect would be the opposite of the one produced in 2010/2011 by the announcement of possible haircuts on sovereign debt.) In other words, a credible ban of sovereign default would go a long way towards stabilizing the euro area.

The crisis years have demonstrated the confidence-enhancing effect a central bank can have even against headwinds produced by governments. However, the ECB's monetary policy cannot be applied selectively. As long as the euro area does not have a centralized fiscal institution, it would further enhance macroeconomic stability if euro area countries were able to counter asymmetric shocks fiscally without risking a confidence crisis. In the current situation in which not only the euro area a whole but also the country with the lowest unemployment rate is experiencing a persistent undershooting of the inflation target and second-round effects are setting in, fiscal policies in general should provide a significant expansionary impulse. Unlike monetary policy, fiscal policies could boost aggregate demand directly and positively impact on private investment and potential output by raising investment in infrastructure.

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