

## Event Wrap-Ups

# The Future of Sovereign Borrowing

Key Findings of a Conference Jointly Organized by SUERF, OeNB and BWG on March 8, 2013, in Vienna

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*In March 2013 around 130 participants from academia, banking and finance, governments and central banking gathered at the premises of the OeNB in Vienna for a conference jointly organized by the European Money and Finance Forum SUERF, the OeNB and the Österreichische Bankwissenschaftliche Gesellschaft to discuss “The Future of Sovereign Borrowing in Europe.” The financial, economic and sovereign debt crisis has fundamentally changed the rules of the game in sovereign debt markets, particularly in the euro area, but also beyond its borders. Sovereign bonds are no longer widely perceived as “risk-free” assets. Even the sovereign bonds of safe-haven countries have come under close scrutiny or lost some of their prime ratings. Yet crisis countries have seen dramatic downgrades of their sovereign debt ratings so that they face soaring risk spreads and unsustainably high financing costs (or even a loss of access to bond market financing), pushing them towards shorter financing or forcing them to rely on financial support from other countries and the international community, or massive intervention by central banks. Against this backdrop, the conference focused on three aspects: first, how issuers and lenders have reacted to the changed environment (session 1); second, implications of the current and likely future state of public finances and debt markets for financial stability, monetary policy and central banks (session 2); and third, ways to improve risk management and foster prudence in future sovereign borrowing (session 3).*

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## Framing the Discussion on the Future of Sovereign Borrowing

In opening the conference, OeNB Governor **Ewald Nowotny** emphasized the importance of the topic, given that the ability to borrow centrally affects governments’ ability to conduct counter-cyclical policies, with direct operational and strategic ramifications for monetary policy, particularly in a monetary union. Dysfunctional sovereign debt markets hamper the monetary policy transmission mechanism and may seriously threaten financial and banking system stability. While the virtually zero sovereign risk premiums among euro area countries in the years up to the crisis did not properly reflect true risks, the very large spreads over the past two years were exaggerated, too – and both conditions are signs of market failure. The Eurosystem’s decisive measures to break the vicious circle between sovereign bond market runs, financial

system instability, dysfunctional monetary policy transmission and deep real economic impacts, together with the reform measures taken by EU governments, managed to calm the situation. While central bank independence is crucial for credibility, crisis management at the same time requires close coordination between the various legs of economic policies. Accordingly, the Eurosystem’s readiness to undertake Outright Monetary Transactions (OMT) in secondary sovereign bond markets is firmly linked to economic reform programs agreed by recipient countries and approved by political authorities. At the same time, many open issues are yet to be evaluated, such as lessons from the debt crisis for debt management, the future perception of risk associated with sovereign bonds and, related to that, the optimal treatment of sovereign debt in banking supervision and regulation. Clearly, the fact

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that some economics textbooks bemoan the loss of a risk-free asset should not prompt us to ever again succumb to such an illusion.

SUERF President **Urs Birchler**, University of Zurich, thanked the co-organizers for the invitation and smooth joint preparation of the conference as well as for hosting SUERF's Secretariat and providing its General Secretary.

### Questioning the Conventional Wisdom on Debt Sustainability

The Keynote Address on “The Future of Sovereign Borrowing,” chaired by **Ernest Gnan**, SUERF Secretary General, was given by **Alessandro Missale**, Debt and Development Finance branch (UNCTAD) and University of Milan. He addressed three issues. First, he questioned the conventional wisdom on sovereign debt sustainability, based on the view that sovereign debt is sustainable as long as creditors are prepared to buy and hold it. Creditors are not concerned with debt levels as such but with debtors' perceived ability to pay. This is confirmed by financial markets' assessment of Japanese, U.S. or U.K. government debt as opposed to their assessment of Italian or Spanish government debt. Debt sustainability cannot be adequately captured by a single debt ratio as it depends on a mix of expectations about future fiscal surpluses, economic growth, interest rates and their interactions. This introduces an important self-fulfilling element: market panics can lead to self-fulfilling debt runs. Hence, sustainability is ultimately a matter of market sentiment. Using an indicator of “fiscal proximity” (which captures the similarity among countries in terms of deficit and debt ratios), Favero and Missale (2012)<sup>2</sup> show that

the impact of fiscal fundamentals on Italian and Spanish bond yields reflects the significant volatility of global market sentiment over time. When global market participants consider risks to be low, fundamentals have no effect on yield spreads; yet in periods of high risk aversion, market overreaction may itself become a source of instability.

Second, Missale argued that, in order to prevent debt runs, debt management should aim to match fiscal surpluses with maturing debt, and that debt with longer maturities reduces default risk and risk premiums. Therefore, debt maturities are important fiscal fundamentals and should be taken into account as such in sustainability analysis. Swap contracts may conceal the “true” maturity and should therefore be subject to greater transparency. The reinforced EU fiscal rules had failed to trigger positive market reactions, indicating low credibility. Fiscal austerity may become self-defeating but is unavoidable in crisis; to reduce its negative growth impact, fiscal consolidation should be pursued softly. Fiscal surpluses benefit sustainability more through expectations than through direct debt reduction effects. Growing out of debt is a very long process.

Third, Missale argued in favor of central banks acting as lender of last resort for governments in order to provide insurance to markets. EMU is special in that the Eurosystem is more clearly separated from national fiscal authorities than the central bank of a single nation state. The ECB's OMT program reduces the likelihood of a panic equilibrium, but the conditionality attached to it reduces its effectiveness as a deterrent against market runs, and its use comes with a stigma.

<sup>2</sup> Favero et al. (2012). *Sovereign spreads in the eurozone: which prospects for a Eurobond?* In: *Economic Policy* 27(79). 231–273.

### Reacting to the Changed Environment

Session 1, chaired by **Ernest Gnan** and entitled “*Sovereign Borrowing – Adjusting to the New Environment*,” brought together the three perspectives of investors, issuers and policymakers. **Christopher Marks**, BNP Paribas, provided the market perspective with his presentation entitled “From the Sacred to the Profane.” Markets are well aware that the crisis has initiated a structural change in financial markets. Despite low yields and even negative real interest rates, funds continue to flow into global bond markets. The increase in stock prices over the past couple of months (the “Great Rotation”) does not reflect an outflow of funds from bond markets. In a very long-term perspective spanning three centuries, going back to 1700, nominal long-term bond yields moreover appear to be at normal levels. Currently, the European Union is undergoing a major reform process, which is very fast and far-reaching by historical standards. Given their complexity, the sum of these developments is difficult to price for financial markets, which is also why these developments have not been fully priced in as yet. Marks argued that European politicians had a poor understanding of bond markets, with the exception of ECB President Draghi and Italy’s former Prime Minister Mario Monti, who are very much aware of the fact that small pieces of information can make a big difference. Draghi’s announcement in July 2012 made the rules of the game very clear, namely that it is pointless to bet against the euro because the euro is here to stay. This has paved the way for stabilizing the markets, and is also the reason why recent political uncertainties in Italy have had very minor effects on Italian bond yields. Government investors clearly group euro area coun-

tries by liquidity and credit risk, which currently yields four groups: core, subcore, peripherals, and distressed peripherals. When investing in euro area bonds, they consider commingled European sovereign risk, reflecting rescue mechanisms (ESM, EFSF, SMP, OMT), the limits of these mechanisms (conditionality), individual countries’ political risk and contingent liabilities due to ailing banking systems or large industrial firms, and market liquidity and functioning more generally. Bond market developments have led to strongly diverging developments in the duration of euro area countries’ bond issuance: While the core countries (Netherlands, Belgium, Germany) used their prevailing low yields to also issue long-term debt, Italy and Spain were forced to shorten durations dramatically. The financial transactions tax will sharply increase borrowing costs for European sovereign issuers (one debt management agency estimated that this tax would raise annual borrowing costs by 20 basis points). Some hedge funds consider banning trading euro area government bonds with European counterparties. Tighter provisioning rules may increase the cost of holding sovereign bonds for financial institutions. The broader definition of high quality liquid assets in the new Basel framework reduces the relative advantage of holding government bonds. Multi-asset funds increasingly take the place of old-style pure sovereign bond funds. Current public finance problems will take a whole generation to solve. Central banks will in one way or another (have to) play a role in this and will have to manage their independence very prudently.

**Hans Blommestein**, OECD and Tilburg University, offered key insights from the OECD’s “Sovereign Borrowing Outlook 2013” published a few days

prior to the conference. Euro area government gross borrowing was not very large over recent years by international comparison. The sovereign debt crisis has emphasized rollover risk and brought a return of home bias. Many sovereign debt management agencies try to reduce rollover risk, but not at all costs. Highly indebted countries in Europe and elsewhere should indeed lengthen the maturity of their sovereign debt. That said, they should not switch opportunistically between markets and maturities for short-term motifs. Between 2007 and 2012, many European countries have actually increased the average term to maturity of outstanding debt, and in the case of Italy and Spain, the average term to maturity has dropped only slightly. Moreover, central government marketable debt as a fraction of GDP, while having increased substantially since 2007, is not high in the euro area countries compared to G7 countries. Nonresident holdings of Spanish and Italian sovereign bond holdings have gone down markedly over the past two years. ECB President Draghi's announcement of the OMT program brought Spanish and Italian yields down considerably across the entire yield curve, particularly at the short end. Finally, the crisis has also highlighted the difficulties associated with measuring sovereign risk – market rates such as bond spreads or CDS spreads have turned out to be very unreliable predictors of fundamental difficulties. Market mispricing is linked to various sources: disagreement and uncertainty on how to define and measure sovereign risk, dysfunctional debt markets, and animal spirits. Therefore, market discipline does not work consistently but spasmodically. As a result, the criteria for estimating the “supply of safe sovereign assets” have been relaxed in the latest

edition of the Sovereign Borrowing Outlook: Now assets are considered “safe” if a sovereign is rated AAA or AA by one of the major rating agencies. Despite this conceptual change, the share of safe sovereign assets has declined markedly between 2007 and 2012. The decline was stronger for EU countries than for the OECD as a whole.

**Juha Kilponen**, Bank of Finland, gave a presentation on the “European Debt Crisis and European Crisis Resolution Policies.” He started out by recalling that the Werner Report of 1970 for the creation of a monetary union had, for good reason, envisaged a parallel creation of fiscal and monetary union, with full centralization at the Community level also of fiscal policy, including decision-making on budget size, fiscal balances, methods of financing and utilization of funds. By contrast, in the Delors Report of 1989 monetary union was designed to discipline other areas of economic decision-making. The outcome was a monetary union without a centralized fiscal policy. The current crisis was the result of several developments, including unified interest rates causing exuberance and credit bubbles, lax fiscal policies in several countries, strong private capital flows from core to peripheral countries (reflecting underpriced risks and the global savings and liquidity glut), a lack of incentives for deep economic reform, and the failure of both market and political disciplinary mechanisms. The crisis triggered a number of policy reforms, extending to fiscal policy, financial regulation and supervision, as well as monetary policy. An empirical estimate shows that the results of these policy measures on bond yields were significant for SMP and OMT programs, mixed for the EFSF and ESM, and negligible for the reforms of EU economic governance. Recent developments

are encouraging: Ireland and Portugal are returning to capital markets, and investor sentiment towards Spain has also improved markedly over recent months, the EFSF and ESM have established themselves as supranational issuers able to refinance themselves at low rates, and the ECB's OMT announcement has successfully removed redenomination risk. In the post-crisis new market environment, increased market sensitivity should be good for fiscal discipline. By contrast, fiscal rules lack credibility given that they are constantly subject to renegotiation, and fiscal decision-making remains largely decentralized. The increasing home bias implies market fragmentation detrimental for the smooth functioning of the single monetary policy, possible crowding out of private investment and increasing real economic divergence. The environment for sovereign borrowing remains challenging. Monetary policy currently bears too large a share of the burden to cope with the crisis.

### Reviewing the Role of Sovereign Debt for Monetary and Financial Stability

Session 2, chaired by OeNB chief economist **Peter Mooslechner**, addressed the interlinkages between "*Sovereign Debt, Monetary and Financial Stability*." The session's first contribution, "The Role of Sovereign Debt in Monetary Policy Implementation – An International Comparative Perspective" by **Ulrich Bindseil**, European Central Bank, discussed the importance of sovereign debt for central banks' outright holdings and repo operations. Central banks hold sovereign debt outright for several reasons. In normal times, sovereign debt holdings aim to secure low credit risk for the central bank and a slim aggregate balance sheet for the state sector. In crisis times,

sovereign debt is additionally held to influence asset prices, sovereign yields and long-term rates at large. Besides actively selecting the composition and size of outright holdings, central banks can steer the influence of sovereign bonds in monetary policy implementation by choosing the eligible collateral framework for repo operations. A broad collateral framework has the advantage of supporting high liquidity of the financial system while a narrow approach reduces risk-taking by central banks and prevents moral hazard in the sense of an undue reliance of commercial banks on central bank credit. The different treatment and use of sovereign debt in monetary policy implementation by the major central banks may reflect two different doctrines. Considering outright holdings, the Bank of England, the U.S. Fed and the Bank of Japan seem to follow a "consolidated state sector doctrine," which views the central bank and government balance sheet in tandem; thus they do not see a major problem in buying large amounts of sovereign debt. By contrast, the ECB may be seen to follow a "central bank independence doctrine," which sees the balances sheets of currently 17 euro area member states and the Eurosystem as distinct, and views central bank purchases of government debt as a potential risk to price stability; thus, the Eurosystem buys relatively small amounts of sovereign debt, even in the event of crisis, with these purchases being strictly limited to secondary market transactions and, in the case of the OMT program, subject to strict conditionality.

**Martin Hellwig**, Max Planck Institute for Research on Collective Goods, started his contribution "On the Treatment of Sovereign Borrowing in Banking Supervision and Regulation" with a review of the developments and

origins of the sovereign debt crisis, where he focused on the lack of credible commitments by EU institutions and EU governments towards sustainable, stability-oriented policies, with a special reference to the violated SGP targets and no-bail out clause. Banking supervision and regulation played a key role in the evolution of the sovereign debt and financial crisis through the zero-risk treatment of sovereign bonds. The risk-free treatment of sovereign assets induced banks such as DEXIA and HRE to blow up their balance sheets, which implied extensive vulnerability to sovereign risk. While Basel II principles had already demanded sovereign debt to be backed by capital as well, the room for discretion left to national regulators by the EU Capital Requirements Directive supported the zero-risk treatment of sovereign debt. Treating sovereign debt as risk free also implied that the existing exposure rules for single assets were not applied to sovereigns, an issue that has been explicitly addressed by the Basel III principles but experiences strong opposition. The existing link between banks and sovereigns makes the current problems hard to solve for central banks, forcing them to fund governments to secure financial stability. Therefore, in addition to the two doctrines identified by Bindseil, Hellwig sees a potential third doctrine which includes not only the consolidated state sector but also the banking sector. The insufficient loss-absorption capacity of banks and the missing account for correlated risks call for an adjustment of the capital requirements framework. According to Hellwig, the paramount precondition for reversing capital outflows from peripheral countries would be to regulate large sovereign asset exposure. Furthermore, a banking union should by all means include a banking resolution authority.

**Eric Leeper**, Indiana University, who was prevented from attending the conference in person due to weather-induced flight cancellations, transmitted a video of his presentation entitled “Thinking about Fiscal Sustainability,” which focused on the definition and implications of fiscal limits, the point at which countries’ surpluses can no longer adjust to stabilize government debt. At the fiscal limit, countries that lack control over the debt-denomination currency – which is also the case for euro area member states – have no other option than to default. Sample calculations for the probability distribution of the fiscal limit for Greece showed that higher productivity, stable growth in transfers and credibility of consolidation efforts lower the probability of reaching the fiscal limit at a given debt ratio. Regarding the current situation in the United States, this time *is* different. In the past, society was willing to accept shared sacrifices, e.g. to reduce a very high public debt burden. With political polarization being at all-time highs, the costs connected to the aging of the society imply increases of the future debt burden. Therefore the fiscal limit of the United States, which is ultimately always a political decision, might be lower than in the past. At the fiscal limit, countries controlling the currency of their issued debt have the additional policy option of devaluing real debt by means of inflation. At the fiscal limit, monetary policy has to prevent the debt service from exploding by keeping real interest rates low. It therefore loses its ability to prevent “fiscal inflation.” The tradition of assigning inflation control and short-run stabilization to monetary policy rests on the assumption that fiscal policy fulfils the task of ensuring solvency at all times. These assignments are currently questioned by the fact

that political outcomes might no longer support fiscal policies that can keep the economy sufficiently far from its fiscal limits. Recent research has already picked up this idea and shown that reversing the assignments can generate welfare nearly equivalent to consensus assignment.

### Improving Risk Management and Prudence of Sovereign Borrowing

Session 3 chaired by **Martha Oberndorfer**, Federal Financing Agency of Austria, focused on potential steps “Towards More Prudent Sovereign Borrowing.” By reviewing the strategies of Italian debt management over the last three decades in her presentation “Risk Management of Debt Portfolios,” **Maria Cannata Bonfrate**, Italian Treasury, identified various forms of risk associated with the extensive reliance on certain debt management instruments and argued for a medium- to long-term perspective which protects against the temptation to make use of short-term market developments. Past experience, such as the excessive reliance on T-bills which contributed to the explosion of Italian sovereign debt in the 1980s or the increased reliance on long dated floaters implying high levels of interest rate risk which materialized after the monetary crisis in 1992, highlight the potential of debt management strategies to cause severe problems. As a reaction to these problems the Italian Treasury constantly increased the average life and the duration of the debt portfolio over time to allow for a temporary shortening of maturities in difficult times (e.g. second half 2011 and 2012). Yet sovereign debt issuance strategies face trade-offs. A strategy that minimizes rollover risk by smooth redemption profiles is challenged by markets’ preference for concentration in coupon cycles and common expiring

dates for nominal debt and inflation linkers. Despite the fact that the debt manager can make use of buy-backs and exchange operations (e.g. EUR 5 billion in 2011) debt redemption pikes cannot always be prevented. For 2013 the Italian Treasury has scheduled a further lengthening of the average life and duration of Italian debt. Moreover, following the successful launch of inflation-linked bonds in 2012, a new 30-year government bond indexed to Italian inflation (“BTP Italia”) will be issued when market conditions appear to be favorable. The usual hedge of currency risk via currency swaps will be continued.

The presentation entitled “GDP-Indexed Bonds: A Tool to Reduce Macro Risk?” by **Guido Sandleris**, Universidad Torcuato di Tella (Buenos Aires), focused on the benefits and design of GDP-indexed debt contracts. Besides collective action clauses and seniority clauses, debt indexation can be seen as a possibility to reduce the cost of sovereign debt renegotiations. Real-indexed debt contracts further make debt crises less likely, allow for better risk-sharing and counteract procyclical fiscal policy. In the past only a few countries have issued indexed debt, either in the form of GDP indexation (Costa Rica, Bosnia-Herzegovina, Bulgaria, Argentina and Greece), commodity price indexation (United States, France, Mexico, Nigeria and Venezuela) or fiscal revenue indexation (Spain). Index variables that are under the control of the issuer, such as government revenues or expenditures which would provide the best insurance, may give rise to moral hazard problems. Variables that are harder to manipulate but still correlated with revenues or expenditures are therefore preferable (GDP or commodity price indexation). A simulation of debt servicing costs for

Argentina showed that, with reliance on GDP-indexed bonds, debt servicing costs would have been much lower than actually observed before the crisis, but substantially higher following the crisis, from 2001 onwards. So if GDP-indexed bonds are conceptually so appealing, why do we not see widespread use of the instrument? Possible answers include large fixed costs of market set-up, incentives to misrepresent data, unattractiveness during good times and alternative hedging options that already exist, such as simple variable interest rate bonds.

Representing UNCTAD, which launched an initiative to promote responsible sovereign lending and borrowing practices in 2009, **Juan Pablo Bohoslavsky** presented the current status of the “UNCTAD Principles of Sovereign Lending and Borrowing.” These principles, which emerged from contributions of a group of experts in law and economics and which are still open for discussion, highlight that both the borrower and the lender have responsibilities and duties. Lenders should be obliged to provide all necessary information to allow for a proper evaluation of the risks and benefits of the financial products they offer. Lenders also have to evaluate the capacity of borrowers to repay a given credit and have to comply with UN sanctions imposed against a governmental regime. In case of debt restructurings all lenders must behave in good faith and with cooperative spirit to reach a consensual rearrangement of obligations. In the context of project financing, sovereign borrowers should also conduct *ex ante* investigations into the financial, operational, civil, social, cultural and environmental implications of the project and its funding. Borrowers have to act in the interest of their citizens and honor binding

obligations. Further principles include transparency, disclosure and publication of debt obligations and liabilities as well as adequate management and monitoring of debt portfolios. Governments further have a responsibility to perform a cost-benefit analysis for their investments financed by liabilities. If restructuring is unavoidable, it should be undertaken promptly, efficiently and fairly.

### Conclusions

In sum, the conference on “The Future of Sovereign Borrowing in Europe” established that European sovereign debt markets have indeed undergone, and are still undergoing, substantial and lasting changes as a result of the crisis, with important consequences for governments’ fiscal scope and debt management, for monetary policy and for financial stability.

There is no uniform definition of fiscal sustainability, which in turn has implications for adequate crisis management measures. Some economists emphasize the possible self-fulfilling nature of market forces impacting on debt sustainability and consequently call for massive intervention in the event of sovereign debt runs, in particular by central banks. Others emphasize that governments share a substantial part of the blame for the sovereign debt crisis, having neglected principles of good fiscal governance and provoked banking system vulnerability through prudential rules that encouraged large exposures to individual sovereign borrowers. Hence, they call for a stricter enforcement of fiscal rules and for non-preferential treatment of government debt in bank regulation.

That sovereign debt is not a risk-free asset was in principle already reflected in the Basel II framework; however, the room for discretion left to national supervision and regulation by

the EU Capital Requirements Directive prevented an enforced treatment of sovereign debt as a risky asset. The application of risk weights and of a leverage ratio for sovereign assets were identified as necessary conditions for breaking the adverse feedback loop between banks and sovereigns.

Central banks' interventions in sovereign debt markets may reflect different doctrines (possibly related to the difference between single states with a currency of their own and the euro area, where a "consolidated view" of central bank and government balance sheets is difficult or impossible) or different aims of these interventions (influencing risk-free long rates versus correcting for excessive risk premiums in some bond market segments). In terms of effectiveness to counter the crisis, the SMP and OMT programs were generally seen as most successful, while the reformed EU fiscal rules framework was not found to have gained credibility so far.

Given the problems to secure political majorities for painful but necessary fiscal adjustments, including substantial reductions of debt ratios even over the medium to long term, the consensus division of tasks between fiscal policy and monetary policy is currently challenged. Central banks may come to feel substantial pressures in coming years to facilitate debt reduction in one or the other way.

There was general agreement that markets have generally failed to fulfil their signaling and disciplinary func-

tion by ignoring sovereign risk in the run-up to the crisis, while subsequently over-reacting with panic during the crisis. It is not enough, however, to criticize markets' herd behavior. Instead, on the one hand, issuers should learn to take possible nonlinear behavior of markets as a given and stay safely clear of the limits to fiscal sustainability. Prudent fiscal behavior should go beyond a narrow view of current (headline) fiscal balances and debt levels, but must take due account of contingent liabilities from the financial system and the economy at large. On the other hand, markets in their investment behavior and risk evaluation should take into account nonlinear behavior of electorates in democratic societies as an integral and normal part of democratic decision-making processes, both at the level of single countries and the European Union or euro area.

The crisis induced changes in issuing techniques and funding strategies. Several European sovereign debt managers engaged in short-term debt issuance, for cost advantages or due to problems of access to longer maturities. This stands against the notion that longer-term financing would render public finances more robust against sovereign bond runs. Hedging strategies such as linking interest to real economic variables such as GDP growth have so far rarely been employed, not least because it may be difficult to newly introduce such new instruments to the markets, or because of the higher financing costs in good times.