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**Save the date – 2017 EVENTS**

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**The Financial System of the Future**
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- Location: Vienna, Austria
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- Date: 8 June 2017
- Location: Milan, Italy
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**Shadow Banking: Financial Intermediation beyond Banks**
- Date: 14-15 September 2017
- Location: Helsinki, Finland
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Rethinking Capital Controls and Capital Flows

Report on a conference jointly organised by SUERF/PSE/CEPII
Held at Amphithéatre SCOR, Paris on 16 September 2016
Sponsored by Banque de France, CEPREMAP, Ouvrir la Science Economique, SCOR

Conference Report

By Morten Balling

International capital flows have a strong impact on foreign exchange markets, monetary policy and macroeconomic performance. The organizers of the Paris conference had therefore invited experts on these topics from American and European universities and from central banks and international organizations as speakers on September 16, 2016.

As a prelude the evening before, Benoît Coeuré, Member of the Executive Board of the ECB gave a dinner speech “The case for rethinking international capital flows”. He said that the global financial and the European sovereign debt crises had shattered the consensus among economists that financial globalization is unconditionally desirable. A reduction of financial integration and more restrictions on capital flows would, however, in his view alleviate the symptoms without addressing the root causes of financial instability and boom and bust cycles. He warned against financial protectionism. We have to redefine the concept of globalization. Policymakers should ensure that financial globalization is efficient, enduring and equitable. Making financial globalization efficient involves channeling capital flows to productive uses, rather than fueling inefficient consumption-led booms and busts. Making financial globalization enduring involves monitoring and where necessary tilting the composition of flows towards less volatile types and avoiding risky gross positions, reducing the likelihood of sudden stops. And making it equitable involves addressing its distributive impact, both across and within countries. The topic is particularly pertinent to the euro area. Freedom of movement of capital is one of the four basic freedoms of the single market. Increasing financial integration by completing the capital markets union will help ensure that capital flows to where it can be most productively used to boost growth and employment while minimizing its side effects. Financial globalization should be underpinned with institutional, regulatory and structural reforms that strengthen domestic financial markets, improve their resilience and increase their capacity to efficiently allocate funds to productive uses. A key element of the necessary institutional framework is legal certainty. An efficient intermediation of foreign savings into productive domestic uses can only occur with a proper and enforceable legal framework in place. In the case of banks, the latter should include reliable legal frameworks for corporate insolvency and for the resolution of non-performing loans (NPLs), which hold down credit growth and economic activity, in particular in Europe. The quality of capital flows must be improved. Their composition should be tilted away from short-term debt flows towards more enduring longer-term and state-contingent flows. While the academic literature is more favourable in its assessment of the benefits of trade than for financial globalization, it also stresses the distributional implications of trade openness. Ideally, the gains of trade globalization are redistributed by taxation from those made better off to those made worse off. But the current public skepticism, if not outright hostility, towards free trade agreements and the surge in trade restrictions documented by WTO suggests that such redistribution is not effective, if at all achieved. Financial globalization has made it increasingly easy for multinational corporates to shift their profits to low-tax countries and for wealthy individuals to move funds to undeclared bank accounts in offshore tax havens. Tax avoidance facilitated by financial globalization has reduced government tax bases worldwide and limited their ability to redistribute gains from trade integration. Governments need to cooperate better. Such cooperation will not imply loss of sovereignty but will allow them to regain sovereignty over their ability to redistribute wealth equitably. Both the European Commission and
OECD have developed action plans aiming at strengthening of cooperation against tax base erosion and profit shifting.

Session I – Capital controls and foreign exchange interventions was chaired by Marc-Olivier Strauss-Kahn, Banque de France.

Márcio Gomes Pinto Garcia, Pontificia Universidade Católica do Rio De Janeiro, gave a presentation: “Banks make sterilized FX purchases expansionary”. The speaker referred to the experiences of Central Bank of Brazil and other central banks applying inflation targeting regimes. He argued that sterilized interventions do not immunize the domestic economy from the expansionary effects of capital inflows. In much of the literature, FX purchases by the central bank are implicitly assumed to keep aggregate demand unchanged as contractionary open market operations are supposed to fully mop up the liquidity created by the FX purchases. The speaker showed in a simple model that keeping the interest rate constant is usually not enough to mop up all liquidity created. This result hinges on a portfolio balance effect on banks. After sterilization, the share of bonds, vis-à-vis loans, increases in banks’ assets. Given imperfect substitution between loans and bonds, the higher bond share requires a higher relative yield on bonds. Since sterilization keeps the market interest rate on bonds constant, the loan rate has to fall. With the fall in the loan rate, loan demand (and supply) increases, and output increases. Higher income at the same interest rate, increases money demand. Therefore, banks make sterilized FX purchases expansionary, even without any effect on the exchange rate. Empirical evidence from Brazil supports the existence of this effect.

Fabrizio Perri, Federal Reserve Bank of Minneapolis, called his presentation: “Exchange rate policies at the Zero lower bound”. After 2008, some developed economies have experienced large capital inflows and sustained exchange rate appreciations, large accumulation of foreign reserves and low (or zero) interest rates. The speaker referred in particular to evidence from Switzerland. He presented a simple model of exchange rate policy with limited international arbitrage and a zero lower bound (ZLB) constraint for nominal interest rates. He distinguished between monetary equilibria away from the ZLB and at the ZLB. He argued that there are considerable costs at the ZLB. If negative interest rates are applied, costs will be lower. Interest rate parity theory assumes that domestic and foreign investors cover their open exposures in the spot market by opposite exposures in the forward market. Evidence based on data in euro and Swiss francs demonstrate deviations from covered interest rate parity in periods with turmoil on the foreign exchange market. Deviations from covered interest rate parity are associated with strong demand for assets denominated in Swiss franc. A diagram showed the timing of
respectively deviations from covered interest rate parity and the FX interventions by the Swiss National Bank. When on January 15, 2015 the SNB decided to abandon its peg on the euro/swiss franc exchange rate, the Swiss currency appreciated strongly and investors with assets in that currency gained.

Alessandro Rebucci, Johns Hopkins University Carey Business School, gave a presentation: “Optimal capital controls and real exchange rate policies: a pecuniary externality perspective”. In response to the global financial crisis and its costly aftermath, a new policy paradigm emerged in which old-fashioned government policies such as capital controls and other restrictions on credit flows became part of the standard crisis prevention policy toolkit. A few large emerging market economies experimented with these tools. The key rationale for the use of capital controls is financial stability. According to the speaker, the scope for policy intervention arises because of a pecuniary externality stemming from the presence of a key relative price in the collateral constraint faced by private agents. Agents might internalize the consequences of this externality in their individual decisions. Capital controls in this setting can discourage financial excesses, reduce the amount that agents borrow, thereby lowering the probability of financial crisis, and hence enhance welfare. Based on a simple model for an open economy with two sectors, the speaker argued that policies that support the real exchange rate during a financial crisis dominates by a large margin controls on capital flows.

Anton Korinek, Johns Hopkins University and NBER, gave a presentation: “Currency wars or efficient spillovers? A general theory of international policy cooperation.” In a globalized world, national economic policies frequently create international spillover effects. Important examples are quantitative easing, exchange rate management, capital flow management and fiscal policy. In an interconnected world, spillover effects frequently trigger calls for global cooperation. The speaker presented a model framework of spillovers and international policy cooperation. He argued that inefficient spillovers arise from three categories of problems: monopoly power, imperfect external policy instruments or international market imperfections. If these problems are absent or addressed, global allocation is Pareto efficient and there is no further scope for global cooperation. He outlined guidelines for how policy cooperation can address the three problem areas. Within a simple model he discussed spillovers of respectively current account intervention, export stimulus policy, capital controls and exchange rate stabilization. He concluded that international cooperation is indispensable in the three problem areas: ensuring competitive behavior, dealing with imperfect external policy and addressing imperfections in international markets.

The Policy Panel – Capital flows and the international dimension of monetary policy was chaired by Francesco Giavazzi, Bocconi University.

Kristin J. Forbes, MIT Sloan School of Management and Bank of England, gave the first contribution to the
policy panel. She said that capital flows can hinder adjustments to monetary policy by generating domestic adjustments that make it more difficult to increase interest rates. Capital flows can also help or facilitate international adjustment to allow monetary policy to focus on supporting the domestic economy. The speaker illustrated these effects by using British 2014-data on actual and predicted consumer price inflation and exchange rate pass-through. The hedging ability of a flexible exchange rate depends on the currency distribution of foreign assets and liabilities and on the sensitivity of the current account to exchange rate movements. Capital flows and exchange rate adjustments can mitigate risks related to large current account deficits if a country meets certain criteria. Most major OECD economies with flexible exchange rates (that are not reserve currencies) meet many of these criteria. Therefore monetary policy can respond to a weaker domestic economy and worry less about supporting capital flows to finance the current account deficit. The bottom line is that international capital flows can be a help and a hindrance to monetary policy.

Jonathan D. Ostry, IMF’s Research Department, said in his presentation that the concept globalization has been under attack in recent years. We should, however, not forget that there are much higher benefits than costs associated with globalization and international trade. We should try to make globalization more effective. Financial instability is reflected in volatile indicators of global risk aversion. Fluctuating asset prices and exchange rates impact on macroeconomic risks. The structure of international capital flows is important. Cross-border transactions in bonds, bank deposits, shares and direct investments give rise to different problems. Monetary authorities should maintain foreign reserves at an appropriate level and use their policy tools in a countercyclical fashion. They should also develop safer financial structures and implement structural measures to mitigate risks.

Kevin Noel Cowan, Inter-American Development Bank, talked about the significant changes in the composition of international capital flows in recent years. Increasing capital requirements for banks in the developed countries and deleveraging exerted a negative influence on cross-border bank intermediation. Foreign direct investment had been less affected by the financial crisis and the post-crisis economic policy.

Karim El Aynaoui, OCP Policy Center, works as managing director of the Moroccan think tank. He wanted to provide a perspective from the South on globalization. In recent years, capital flows to emerging markets had not produced the expected gains. Monetary authorities in emerging economies had to manage their foreign reserves cautiously and to strengthen financial supervision. Exposures to foreign exchange risk were a serious concern. Volatile capital flows raised many open questions that academics should study.
Catherine L. Mann, OECD Chief Economist, started by asking: How do policies affect the probability of a crisis and shifts in the mean economic growth potential? Authorities can apply two types of policy: external and/or domestic. Trade-offs must be made. She illustrated the trade-offs in a diagram with potential economic growth on the vertical axis and crisis probability on the horizontal axis. The chosen combination of trade openness and capital account openness has an impact on both potential growth and crisis probability. A line in the first quadrant illustrated that higher growth might be associated with higher crisis risk. So, one should distinguish between good and bad risks. Capital account openness should perhaps be welcome due to the potential gain in economic growth. The OECD Code of Liberalization of Capital Movements is from 1961. A review of the Code is under way in cooperation with G20.

Olivier Blanchard, Peterson Institute for International Economics, presented the paper: “Are capital inflows expansionary or contractionary? Theory, policy implications, and some evidence”. There are two dramatically different views regarding the expansionary or contractionary effect of capital inflows. Standard models along Mundell-Fleming lines conclude that for a given monetary policy rate, inflows lead to appreciation, and thus a contraction in net exports, and, in turn, a contraction in output. Only if the policy rate is decreased sufficiently, can capital inflows be expansionary. Emerging market policy makers have a completely different view. They see capital flows as leading to credit booms and an increase in output, which can only be offset by an increase in the policy rate. They point to a policy dilemma: While the direct effect of an increase in the rate is to limit the increase in output, it may lead to even higher capital inflows, and this second effect may dominate the first. The evidence appears to support the beliefs of policy makers. In order to reconcile theory and reality, the speaker and his co-authors extend the set of extent also on the impact on capital flows. Bank of Japan and the ECB also followed international capital movements closely and they have in recent years applied negative interest rates in order to counteract appreciation of the yen and the euro. The business cycle in Europe seems often to be behind the cycle in the US. The speaker compared the leading central banks with a train. When the first car moves, all other central banks have to follow. The whole world is concerned about what the Fed is going to do.

Session II – Capital flows and macroeconomic performance was chaired by Philippe Trainar, SCOR.

Lorenzo Bini Smaghi, Société Générale, referred to the American interest rate policies followed by respectively Allan Greenspan, Ben Bernanke and Janet Yellen. They had all focused on the impact of short-term interest rates on economic activity in the US but to an increasing
assets included in the Mundell-Fleming model to include both bonds and non-bonds, reducing the cost of financial intermediation and potentially offsetting the contractionary impact of appreciation. The authors look at empirical evidence from a sample of 19 major emerging market countries. It turns out that the effect of bond flows is negative and insignificant, while the effect of non-bond flows is positive and significant. The analyses has important implications for the use of policy tools to deal with inflows.

Hélène Rey, London Business School, called her presentation: “World asset markets and the global financial cycle”. She addressed the questions: What are the consequences of financial globalization on the workings of national financial systems? What are the effects of large flows of credit and investments crossing borders on fluctuations in risky asset prices in national markets and on the synchronicity of credit growth and leverage in different economies? How do large international flows of money affect the international transmission of monetary policy? Data on leverage of global banks illustrate the transmission of financial conditions around the world. A global financial cycle in risky assets can be documented. US monetary policy plays an important role within the global financial cycle as illustrated by data on credit risk premia, capital flows and real activity. The effects can be discussed within a simple model with global banks and asset managers. Returns of risky assets depend on wealth-weighted risk aversion. In a world financial market dominated by global banks asset prices are a function of global factors, which are determined by global market variance and the aggregate degree of risk aversion in the market, itself a function of the risk taking attitude of investors. The US effective federal funds rate is the key monetary policy instrument in the model. US monetary policy is a driver of the global factor in asset prices, of the term spread and of measures of the risk premium. It is also a driver of US and European banks’ leverage, credit growth and cross-border credit flows.

Frank E. Warnock, Darden Business School, University of Virginia, presented the paper: “Decomposing international portfolio flows”. Capital flows to emerging market economies were sizable before the 2008/2009 global financial crisis, they plummeted during the crisis and rebounded strongly after the crisis. The question is if the observed pattern of the flows was the result of active portfolio decisions by US investors to reallocate their portfolios to and from emerging market equities. The drivers behind the pattern can be better understood, if it is recognized that portfolio flows have two components: Baseline flows unrelated to recipient country conditions and more active reallocations. Investors’ behavior can be characterized by inertia and influenced by transaction costs. Institutional features of the financial intermediation industry can also explain a relative passive portfolio policy. Portfolio weights can change for passive reasons (relative price changes) or from active decisions. Isolating the active reallocations requires good returns data. A considerable part of capital flows to emerging market economies can be characterized as relatively stable portfolio growth flows. Reallocation flows are more volatile, sometimes positive sometimes negative. If in an empirical analysis a relative weight measure is applied, it suggests that the increase of emerging market equities in US portfolios was due not to active reallocations. The robust equity inflows from the US experienced by the emerging market economies were due more to portfolio growth related to US savings than to active reallocations.
Natacha Valla, EIB and SUERF, called her presentation: “Domestic and international sectoral portfolios: network structure and contagion effects”. She and her co-authors use a unique comprehensive dataset on French portfolio assets and liability holdings to study the dynamics of domestic and international sector portfolios, to understand their network structure and to estimate a model of contagion through intersectoral security linkages. The net external portfolio position of France deteriorated between 2008 and 2014 from a creditor position of 4.7 percent of GDP to a debtor position of –35.7 percent of GDP. This dramatic change had been driven by banking sector retrenchment on the asset side and foreign expansion on the liability side. The foreign liabilities of the public and corporate sectors increased but was mitigated by the expansion of domestic and foreign assets of the insurance sector. The financial sectors of the economy are strongly affected by financial contagion. The public sector and the corporate sector do not in the same way propagate shocks through their balance sheets. The financial sectors are exposed to balance sheet contagion. Protide is a database on security holdings by French residents collected by Banque de France. By two-stage GMM applied on data from Protide, the speaker and her co-authors have estimated sectoral vulnerabilities. She compared sectoral networks in respectively 2008 and 2014. At the end of the presentation, the speaker presented a balance-sheet contagion model, which in a flexible way can be used to quantify balance sheet contagion at the sectoral level.

Pierre-Olivier Gourinchas, University of California, Berkeley, gave a presentation: “Global imbalances and currency wars at the ZLB”. Partly due to declining oil prices, global imbalances have fallen considerably since 2008. Global interest rates have declined substantially since 1980. In the US, Eurozone, UK and Japan output gaps fell in 2008 and are still significantly below the pre-crisis level. Economic growth is low. The speaker presented a simple model to shed light on these developments. He characterizes the zero lower bound on interest rates (ZLB) as the tipping point for global imbalances. At the ZLB, recessions are propagated via current account adjustments. His model includes liquidity traps both at the local and global level. Traps in one country can propagate to other countries. Exchange rate policies affect the distribution of traps. If a country’s currency is expected to appreciate in bad times, the country is more likely to experience a liquidity trap. A diagram showed so-called net safe positions in recent years for a sample of big countries. The positions are defined as the sum of official reserves (minus gold), portfolio investments and other assets abroad minus portfolio debt and other liabilities. Spectacular positions reflect Chinese holdings of US government bonds. The observed pattern put the reserve currency paradox and the exorbitant privilege of the US into perspective.

Romain Rancière, Paris School of Economics, concluded the conference. He thanked the speakers for their contributions, which had given the audience important knowledge about ongoing research in international capital flows and their policy implications. He thanked the sponsors for their generous support and SCOR for being a wonderful host. Finally, he thanked the staff of SUERF and CEPII for efficient organization.

The conference report and the conference presentations are available online at: www.suerf.org/paris2016
Investing in productivity growth in Europe

Report on a conference jointly organised by EIB and SUERF
Luxembourg, 17 November 2016

Conference Report

By Laurent Maurin and Atanas Kolev
European Investment Bank

The SUERF – EIB Conference on “Investing in productivity growth in Europe” took place on November 17th in Luxembourg, at the EIB headquarters. A whole day conference, organised in 3 panels, was the occasion for the launch of the EIB Annual Investment Report and for an in depth discussion of investment and investment challenges in Europe, with focus on an understanding of investment dynamics and constraints, an assessment of financial sector issues and a more in depth discussion of the finance-investment nexus, investigating how financial frictions impact investment decisions of firms. Welcoming remarks from the President of SUERF, Urs W. Birchler, were followed by opening speech by EIB President, Werner Hoyer.

President Hoyer stressed that in order to improve the economic environment for investment a concerted action is needed in three directions: (i) structural reforms to strengthen competitiveness; (ii) financial sector reforms to improve banking sector resilience and further develop capital markets; (iii) public support for investment. The EIB plays a key role in supporting and complementing efforts of Member States and European institutions to provide public support for investment. It helped realise investment projects worth roughly 230 billion euros last year. This has a big impact: preliminary estimates suggest that this may increase the EU’s GDP by around 1.1% by 2030, adding about 1.4 million jobs.

The Investment Plan for Europe undertaken by the European Commission and the EIB further enhances the EU policy response to relaunch investment and restore EU competitiveness. It consists of three main pillars: (i) the first is support for regulatory and structural reform to remove bottlenecks and ensure an investment-friendly
environment; (ii) comprehensive technical assistance in the sourcing, preparation and development of investment projects; (iii) enhancing the EIB Group’s capacity to address market failures in risk-taking that hold back investment.

The first panel, *Investment in Europe – a matter of supply and demand*, chaired by Debora Revoltella, Director of the Economics department was devoted to discussing recent developments in European investment and, in particular, the factors that continue to hold down private and government investment in Europe. Debora presented the key findings of the new EIB annual report on investment and investment finance. The report is developed as a tool to regularly analyse and monitor investment and investment finance dynamics in Europe. A special feature of this year included an analysis of the interaction between financial frictions and allocation of resources through the recent crisis, as well as the preliminary results of the new EIB survey on Investment in Europe, which covers on an annual basis some 12,500 firms, being representative for each and every of the 28 EU member states.

The EIB Investment report shows that Investment is recovering, but at a slow pace. Investment dynamics are also very divergent among countries in Europe and among asset classes. Throughout Europe, Government infrastructure investment is stemming out as lagging behind in the recovery largely impacted by the way in which the fiscal consolidation was implemented in various countries, largely penalizing gross fixed capital formation. Corporate investment is the driver of the investment recovery, but is growing slowly, particularly when the current monetary conditions are taken into account. Interestingly, there seems to be a gap in quality of capital rather than quantity. Low return on investment and low total factor productivity suggest the need of pushing for more reallocation of resources, innovation and work on impediments that present efficiency of the system (structural reforms at the national and EU market level).

The report suggest a number of policy conclusions, ranging from completion of the banking union and capital market union, advancement with structural reforms, as well as targeted public support to productivity enhancing investment. The first panelist to speak on this panel was Catherine Mann, Chief Economist of the OECD. She has reiterated the findings of the EIB investment report that investment recovers very gradually and linked this weak performance with declining growth of potential output and productivity. Drawing on recent work in the OECD on productivity performance, she explained that productivity growth has been slowing down because productivity advances do not diffuse throughout the economy: most of the firms fail to adopt existing and readily available cutting edge technologies that could increase their productivity. This so-called diffusion gap manifests itself in growing wage dispersion that further increases social inequality. The problems in the financial system further aggravated diffusion gap as they suppressed the growth of small and young firms. The firms on the two sides of the growing diffusion gap differ in their ownership of knowledge-based capital and managerial quality.

Catherine Mann argued that strengthening competition and economic dynamism of firms should reduce the diffusion gap. Housing policies that promote geographical reallocation of people and thus encourage labour mobility may act as an additional catalyst to reducing the diffusion gap. Tackling the reasons that allow non-viable firms to continue operating will further improve resource allocation and reduce the diffusion gap. Regulatory certainty, or lack thereof, has a huge impact on deployment of digital innovation.
The OECD sees historically low interest rates as an opportunity to create additional fiscal space especially for high-debt countries. They estimate that by rolling over government debt to make use of declining interest rates will result in substantial budgetary gains. These are expected to have substantial gains, both in the short and the long term, provided that governments carefully choose the areas where they employ the gained fiscal space. Public investment has seen as having a significantly positive growth impact.

Catherine Mann thought public spending related to EFSI should not be included in the calculations for SGP. She noted that pro-cyclicality of public spending in Europe remains a wide-spread problem and should be addressed. Special exceptions granted by the Commission in its fiscal surveillance exercises further exacerbate the problem. She believes that the Commission should condition increases of public spending on the margin on regulatory harmonization with the EU. Finally, she expressed the view the public investment targeted to encourage private investment that addresses climate change should be seen as way to provide public support to corporate investment.

Servaas Deroose, Deputy DG ECFIN, provided an overview of the investment outlook, the factors that have the most significant impact on investment, the Juncker plan and the necessary public policies. The EC corroborates the view that the interplay between several supply and demand factors has resulted in a weak investment recovery. On the demand side, the investment accelerator might have had not only short run effects during the crisis, but also longer term effects due to post-crisis hysteresis. Falling general government investment has reinforced this effect. Deleveraging and overcapacity that was built-up before the crisis have had negative impact on investment demand as well as uncertainty, both economic and policy. Supply side factors relate to bottlenecks to investment and structural rigidities of EU economies. These have been present already before the crisis, but their effect may have been exacerbated since 2008. Finally, the banking sector and, high NPLs in particular, have also had negative effect on investment both during the crisis and in the recovery phase.

EFSI shows positive results but there are still some drawbacks in Commission’s view. These relate to an uneven geographical coverage, low or no additionality of projects and too little technical assistance. Contrary to the OECD, EC does not see viable options to increase fiscal space. Deroose, stressed nevertheless that fiscal space should be used where available. He expressed reservations to excluding investment from the constraints of the stability and growth pact (SGP) as this may create wrong incentives for governments to relabel other spending as investment.

Policy measures to improve regulation, competition and efficiency of administration are seen as the most important to address bottlenecks in investment. Special focus on network- and energy-related industries is seen as a priority. Regarding public support for corporates, Deroose suggested that increasing public investment will improve the overall economic environment which should impact positively corporate investment.

Jeffrey Franks, Director of IMF Europe Office, offered the view of the IMF, with interesting benchmarking of Europe vs the US. He reiterated that investment recovers but is weak and the recovery varies widely across countries. Public investment is seen as one of the stumbling blocks for investments, but fiscal space does not allow for a significant increase so governments should carefully review spending priorities and adjust the composition of public spending to reflect the need for higher public investment.

NPLs are seen as a substantial constraint to credit growth. NPL levels in European countries are much lower than in the US.
higher than in the US, while the write-off rate is much lower. Given that most of European SMEs are dependent on bank credit, they have contributed disproportionately more to the decline of investment in Europe and have been a drag to the investment recovery since 2012. Sebnem Kalemli-Özcan noted that comparisons between the US and Europe should also reflect the much higher dependence of the European corporate sector on bank lending.

Productivity is seen as a much bigger problem in Europe than in the US. European productivity compares unfavourably to global peers and this divergence is explained mostly by a larger gap in productivity of the services sector.

Public policy should address the composition of government spending, address problems in the banking sector and make the services sector more dynamic, thereby raising its productivity.

Efficiency of the European financial sector in allocating finance was the topic of the second panel during which four presentations took place.

Natacha Valla opened the session with a presentation on credit conditions in Europe. Despite very accommodative monetary policies, EU countries are on a slow recovery path during which investment seems to underperform compared to previous recoveries. Banks and NFCs look stronger now that deleveraging has taking place. However, the current level of rates is likely to be not sustainable for the financial system and there is a need for more structural policy, such as those contributing to the capital market union.

Philipp Hartmann, ECB DG-Research, presented the results of an analysis on cross border financial risk sharing in the euro area. He stressed the welfare properties of private risk sharing, especially in a monetary union. Given that in the euro area, countries are sometimes hit by asymmetric shocks but that monetary policy is symmetric and fiscal risk sharing is absent, private risk sharing is especially important. It enables private agents to diversify, to smooth shocks on domestic income stream with external income stream. But going beyond, the presenter introduced the notion of quality of risk sharing. In this regard, more equity is even better as, compared with debt, such asset is more state contingent. Also, longer-term assets are better than shorter-term assets as they reduce the rollover risk. P. Hartmann then presented a tool to monitor risk sharing in the euro area. The estimations show that risk sharing increased after the launch of the euro but has been going down since the crisis. In this context, EC initiatives on retail credit (the green paper) and capital market (which address issues primarily related to pension system, contract enforcement, and insolvency harmonisation) are very welcome.

Mario Nava, EC FISMA, recalled the role of the EFSI package at the current juncture, with the EC president having managed to structure such a program only three weeks after entering in function. He emphasized that the plan is well on track for meeting the targets. He described it as a tool for risk sharing between the EIB and the EC (where the latter takes three quarter of the loss piece and the former the remaining). Somewhat differently from the traditional presentation of the program as a demand support tool, he presented the program as providing a safety trap and structuring a safe asset, especially relevant at the current juncture. He stressed the complementarity between capital market and banks. At this occasion, he reminded the key role the CMU had to play, especially given that banks, highly leveraged institutions had acted as shock amplifiers rather than absorbers. Reducing the incompleteness of market and increasing risk sharing in Europe would improve the allocation of resources, and therefore increase TFP.

Reza Moghadam, Morgan Stanley, supported the view that challenges of CMU has grown up with the Brexit. He recalled that London is the first financial centre in the world, larger than New York. 80% of the firms which use passporting do it from London. One of the reasons is the legal framework provided by English law. Indeed, there is an ecosystem in London with all the compartments of the financial sector present. In this regard, the potential for a fragmentation would result in a loss of expertise (for example in the case of model validation).There is a need to coordinate the strategy to rethink the European financial system and reduce competition across candidate centres. Moving the balance sheet of financial institutions is costly and the transfer will pump up the cost of capital.

Boris Vujčić, Governor of the Croatian Central Bank, emphasized the improvements in Europe. He suggested that the low interest rate environment was conducive to the maintenance of NPL. In Croatia, supervisory policy provided a strategy and timetable to achieve NPL resolution, with a planned increase in provision each six months. Two years after, coverage ratio was high enough
so that NPL portfolio could be sold and the NPL ratio declined from 16% to below 10%. Looking ahead, Europe has to develop a culture of equity financing. Incentivising it is already happening through low deposit rate which pushes investment towards equity funds. Finally, the presenter concluded on the need to solve overbanking. The banking sector may be too large and not concentrated enough, so that its overall profitability remains slow and the price to book ratio of bank stocks is low. Banks and borrowers may benefit from an orderly restructuring.

Making European NFCs more resilient – lessons from the financial and sovereign debt crisis, was the topic of the last panel of the Conference. Pedro de Lima opened the session, pointing out that productivity growth in the EU was undermined by the credit boom before the financial crisis and the binding financial constraints and reduced efficiency of the financial system in the post-financial crisis period. He stressed that the big challenge is how to make Europe’s financial system fit for the future. Sebnem Kalemli-Özcan argued that the structure of corporate balance sheets matters for the observed investment weakness, regardless of supply and demand factors. Excessive debt holdings lead to debt overhang and banks refuse to refinance it, which results in lower investment. In addition, if debt is predominantly short-term the firms also face rollover risk, which reduces investment. This effect is worse in periods of low demand and high uncertainty. Due to financial constraints, too much debt creates capital misallocation, lowering aggregate TFP. Too little equity financing, on the other hand, endangers cross-border equity ownership, reduces risk sharing and increases uncertainty.

In her paper for the EIB Annual investment report, she argues that in order to capture the detrimental effects of debt overhang one has to focus on average rather than aggregate developments, because developments of a few large firms may obscure the dynamics of smaller firms that make for a large part of the European economy. Before the crisis there was a big increase of financial debt in the euro area, which was predominantly long-term in the core and short-term in the euro area periphery. This resulted in too much debt, especially short term, and too little equity financing in Europe. These patterns amplified the recessionary effects of the financial crisis regardless of the impact of other demand and supply factors. In the absence of pan-European risk sharing these recessionary effects got worse: the decline in output translated one-to-one into lower investment, income and consumption.
Gianmarco Ottaviano illustrated the post-crisis productivity slowdown using the case of Italy. GDP in most large European countries recovered, following the sovereign debt crisis, except in Italy, where productivity growth also slowed down more. This slowdown may be because most firms experienced slower growth or because of composition effects – resource misallocation. In Italy, both within- and between-sector resource misallocation have been rising over time, but within-sector is quantitatively more important. The effect on the economy from these developments is substantial. If resource misallocation were the same in 2015 as it was in 2005, aggregate productivity would have been about 20% higher. This gain is systematic across firm-sizes in manufacturing.

The rise of within-sector resource misallocation is associated with ownership structure, access to finance, workforce composition, internationalization, innovation, cronyism, and euro effect. As an example of innovation impact, firms with higher share of intangible assets are more productive and more affected by resource misallocation.

Reinhilde Veugelers observed that R&D intensity is stagnant in the EU. As a result, in 2015 China overtook the EU and the innovation gap versus global peers is growing on all indicators. Fiscal consolidation across the EU resulted in lower public spending on R&D and has worsened challenges after the crisis. Inside the EU, the divide on innovation has increased after the crisis. Why does Europe have difficulty to improve innovation? A major reason is the industrial structure of EU economies. They fail to specialize in activities that are most suitable to innovation-driven growth – digital, pharmaceutical, biotechnologies, aerospace, etc. In addition, the EU misses the young world leading innovators or yollies. The smaller share of such companies in Europe explains about 33% of the R&D intensity gap with US, while another 55% is explained by the fact that European yollies are less R&D-intensive than their US counterparts.

The reason for having so few young global leading innovators in the EU is systemic. The structure of European financial markets is not geared to this type of risk-taking financing necessary for such companies to develop. Higher entry and exit costs reduce economic dynamism and business experimentation. Inflexible productive and labour markets put additional barriers to rapid scaling up and down of companies. Insufficient linking in and “innovation system” is another reason for a lower number of yollies in the EU. Finally government policy regarding funding and regulation plays a role.

As a result of all these problems EU yollies are more financially constrained and have lower rates of return from innovation. In order to effectively address the problem with access to finance, European economies need a broader innovation policy to ensure sufficient supply of profitable projects to fund. Then an interconnected set of policy instruments at each stage of the funding escalator is necessary, i.e. complementarity with R&D grants, support for business angels, loans, etc. In other words, governments should not replace or crowd out the private sector, but leverage private market forces. Develop a thick, integrated and open venture capital (VC) market across Europe that allows VC firms to grow.

Eric Bartelsman discussed the role of the European financial system in stimulating investment in intangible, or knowledge-based, capital. He observed that many existing superior technologies are not adopted by the majority of firms, despite the fact that this will make them more productive. Among the reasons for the relatively low investment in intangible capital are that there exist adoption costs that are related to the availability of digital infrastructure, skilled workers and of financial capital. The benefits counterbalancing these
costs are high uncertainty of outcomes from combining intangibles in production chains and the ability to scale labor and reallocate capital.

Intangible investment is difficult to finance from external sources because few lenders accept intangible assets as collateral. Recent bank regulation lays further impediments for banks to accept intangible assets as collateral. Capital market integration across Europe, co-financing and leveraging of public funds should help address the problems of finding external funding for intangible investment.

The financial sector may also have indirect effects by affecting resource reallocation, by financing the exit of less productive, unviable firms, financing the firms to catch up with the technological frontier and financing growth leaders.

In order that economists help boost economic growth, they should first get rid of the mantra that it is all about structural reforms. In practice, economists need to find evidence what works. Help identify winners and losers from policies and discuss trade-offs.

Policy makers, in turn, should be clear in stating to voters the policy goals. They should embrace experimentation in order to find what best works in an economy. Most importantly experimentation should always go together with evaluation of whether a given policy works. If it does not work, then adjust and continue.

Policy makers should stimulate a change towards experimentation and innovation, building them into the education system. Lack of experimentation in Europe reduces the number of successful innovators.

Jan Svejnar observed that while it is important to improve resilience of firms, there are also negative aspects of resilience: no-one wants resilient zombie firms. The financing mix of firms is particularly important in financial crises.

Regarding the gap in the innovative capacity between US and Europe, Jan Svejnar singled out the importance of the more risk-taking attitude in the US. The importance of regulation, quality and function of the legal system has also grown and contributed to this gap.

Closing remarks

To bring the conference to a close, Andrew McDowell, Vice President of the European Investment Bank, reflected on many of the key messages and topics of discussion in the course of the day. “The crisis has impacted the ability of our financial sectors to allocate resources efficiently to the most productive firms,” he said, picking up on the theme of the third and final session. “This may be contributing to the persistent slowness of productivity growth, undermining our competitiveness. To compensate, we need to see strengthened public support for investment, making the best use of available EU and national financing capacities to address investment gaps, particularly through investments that enhance productivity and deepen market integration.”

Vice President McDowell expressed his thanks, on behalf of the EIB, for the excellent collaboration enjoyed with SUERF, as co-organisers of the conference. He congratulated all speakers and participants for their informative and challenging contributions and thanked them for their part in the constructive and fruitful discussions that took place.

The conference presentations and a link to the EIB Annual Investment Report are available online at:

www.suerf.org/luxembourg2016
SUERF/UniCredit & Universities Foundation Research Prize

4th SUERF/UniCredit & Universities Foundation Research Prize & Workshop

**Asset management at crossroads**

Vienna, 26 January 2017

Inaugurated in 2013, the SUERF/UniCredit & Universities Foundation Research Prize annually rewards outstanding papers submitted on a specific topic by researchers under the age of 35, who are citizens or residents/students of the EEA, Switzerland, and non-EEA countries in which UniCredit is present. We are pleased to announce the winners of the 4th SUERF/UniCredit & Universities Foundation Research Prize on the topic “Asset management at crossroads”:

**Heiko Jacobs**
Beta and Biased Beliefs

**Mancy Luo**
Financial Product Design and Catering: Evidence from the Global Mutual Fund Industry

Heiko Jacobs and Mancy Luo will present their papers in a half-day workshop to be held at WU Wien (Vienna University of Economics and Business).

For the workshop programme and registration, please visit: [www.suerf.org/vienna-uuf2016](http://www.suerf.org/vienna-uuf2016)

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**Call for Papers & Marjolin Prize**

SUERF and the Bank of Finland invite researchers to submit papers for the 33rd SUERF Colloquium and Bank of Finland Conference, which will take place in Helsinki on 14–15 September 2017, on the topic of “Shadow Banking: Financial Intermediation beyond Banks”.

- Abstract and Paper submission deadline: 30 April 2017
- Kindly note, papers published prior to the Colloquium are not eligible
- Papers selected via this call will be presented in a poster session during the Colloquium

Please see the following link for detailed submitting information: [www.suerf.org/shadowbanking2017](http://www.suerf.org/shadowbanking2017)

**The Marjolin Prize**
The author(s) of the paper selected by the SUERF Council of Management for having made the best contribution to the Colloquium will be awarded the Prix Marjolin (EUR 2,500). To qualify for the prize, the author(s) must be no older than 40 on the day the prize is awarded.

[www.suerf.org/research-prizes](http://www.suerf.org/research-prizes)
This one-day conference, organised by SUERF and hosted by EY in London, will bring together academics, officials, and industry representatives to examine the likely effects on financial institutions of Great-Britain’s decision to leave the European Union.

**Preliminary Programme**

**Thursday, 23 February 2017**

08:00  Registration and welcome coffee

08:30  **Opening and welcome remarks**

Omar Ali, EY

08:40  **Brexit: Economic and financial backdrop for Europe**

Peter Praet, ECB

Nicolas Veron, Bruegel and Peterson Institute

Charles Grant, Director, Centre for European Reform (tbc)

12:45  **Lunch**

13:00  **The internal market versus single market**

Baroness Sharon Bowles, former MEP

10:00  **The regulatory environment after Brexit**

Andrea Enria, Chairman, EBA

Charles Roxburgh, HMT (tbc)

10:40  **Coffee break**

11:00  **The effects of Brexit on markets**

Franklin Allen, Professor, Imperial College

Brexit impact on future integration of markets, funding sources, across Europe

Jon Danielsson, Director, Systematic Risk Centre, LSE

11:40  **Panel on Stock exchanges and Euro clearing; Derivatives; FX; Bonds**

Anthony Belchambers, Member of the Financial Services Negotiating Forum, NED NASDAQ

12:45  **Lunch**

13:00  **Pressures on business models - Brexit as a catalyst, but including cost pressures, digital**

13:30  **Keynote speech**

Frederic Drevon, Moody’s

13:50  **Panel on investment banks and commercial banks**

15:00  **Coffee break**

15:15  **The effect of Brexit on Insurance, hedge funds and asset management**

William McDonnell, RSA (tbc)

Menno Middeldorp, APG Capital (tbc)

Jorge Morley-Smith, Investment Association

Hugh Savill, ABI

16:30  **Closing remarks**

17:00  **End of conference**
Modern economies need a functioning financial system. The financial system has in principle four main functions: Providing a system for making payments, matching borrowers and lenders, enable people to manage their personal finances across their lifetimes and between generations and the sharing and management of risk. Despite a long list of reforms implemented in 2010 including enhanced capital requirements for banks, new bank resolution legislation and centralizing derivatives markets there is an ongoing debate about the question whether the financial system today is fit for the future. Critics claim that it looks today still very similar to before the financial crises has started in 2007. Is the financial system fit for the future? Will its current structure allow it to fulfil its main functions? Do we need further structural change? If so, what kind of change? Is tighter bank regulation, an increasing role for shadow banking and the EU’s project of capital market union the way forward, what opportunities and potential risks does this involve? How will technological developments like Fintech and digital money shape the future financial system?

Scientific Coordination:
Ernest Gnan, SUERF Secretary General and Head of Economic Analysis Division, OeNB
Martin Summer, Head of Economic Studies Division, OeNB

Confirmed Speakers:
Sebastian Haas, MEP Mobile Equity Partners Vienna
Nikolaus Hautsch, University of Vienna
Korbinian Ibel, ECB
Patricia Jackson, Atom Bank and EY
John Kay, Economist
Christian Kern, Austrian Federal Chancellor
Michael Kumhof, Bank of England
Ewald Nowotny, Governor, Oesterreichische Nationalbank
Thomas Puschmann, University of Zürich
Helmut Stix, Oesterreichische Nationalbank
François Velde, Federal Reserve Bank of Chicago
Axel Weber, Chairman of the Board, UBS
David Yermack, New York University

www.suerf.org/vienna2017
SUERF/BAFFI CAREFIN Centre Conference

New Challenges in Central Banking: Monetary Policy Governance and Macroprudential Issues

Sponsored by Intesa Sanpaolo

8 June 2017
Baffi Carefin Centre, Bocconi University
Milan, Italy

Which are the new frontiers in the central banking? The aim of the workshop is to discuss two new fields, which explore the role of two different set of rules - monetary policy committees and new prudential responsibilities - in influencing the central banking decisions.

Thursday, 8 June 2017

9:00  Welcome Address
Donato Masciandaro, Bocconi University

Keynote Speech
New Challenges in Central Banking
Athanasios Orphanides, MIT Sloan School of Management

Session I - MONETARY POLICY: GOVERNANCE
Chair: Sylvester Eijfinger, Tilburg University, CESifo and CEPR
Estimating the Preferences of Central Bankers: an Analysis of four Voting Records
Sylvester Eijfinger, Tilburg University, CESifo and CEPR
Louis Raes, Tilburg University
Deliberation in Monetary Policy Committees
Alessandro Riboni, Ecole Polytechnique, Paris
Francisco Ruge-Murcia, McGill University
Central Bankers as Supervisors: Do Crises Matter?
Donato Masciandaro, Bocconi University
Davide Romelli, Trinity College Dublin

11:30  Coffee break

12:00  Session II - MACROPRUDENTIAL POLICY: THEORY, INSTITUTIONS AND EMPIRICS

Chair: Ernest Gnan, Oesterreichische Nationalbank and SUERF
Macroprudential Policies and Banking
Dimitrios Tsomocos, University of Oxford
Use and Effectiveness of Macroprudential Policies: New Evidence
Eugenio Cerutti, IMF
Bank Capital Regulation with Unregulated Competitors
David Martinez-Milla, Carlos III University

15:00  Lunch

15:30  Session III - MONETARY POLICY AND MACROPRUDENTIAL POLICY: NEW DSGE MODELS
Chair: Tommaso Monacelli, Bocconi University
Macroprudential and Monetary Rules in a DSGE Setting
Margarita Rubio, University of Nottingham
Monetary and Prudential Policies in a DSGE Setting
Jorge Ponce, Banco Central de Uruguay
Optimal Macroprudential and Monetary Policy in a Currency Union
Sergeyev Dmitriy, Bocconi University
The Eurozone Debt Crisis: A DSGE Model with Default Risk
Mathilde Viennot, Paris School of Economics

17:30  End of Conference

www.suerf.org/milan2017
Shadow banking is a broad concept. A possible definition is that it comprises non-bank institutions which do bank-like activities. Another characteristic, to which the word “shadow” refers to, is that the sector is less regulated. Shadow banks can increase competition and spur new innovation in the financial sector. The benefits could come in the form of i) improving efficiency and quality of financial services, and ii) offering better returns and risk diversification opportunities, especially for institutional investors and wealthy individuals. Markets may also become more liquid. On the downside, opacity and risks may increase. The lack of regulation implies that it is difficult to monitor and prevent the build-up of leverage and concentrated risks in the shadow banking sector. Hence, the sector can be a source of systemic risks. Further, traditional banks may utilize the shadow banking sector for regulatory arbitrage. Hence, a big question is whether regulation should be extended to the shadow banking sector, to make it come “out of the shadows”? Will new regulatory loopholes between banks and non-banks develop? Will risks simply pile up in the shadow banking sector now that banks are more heavily regulated? Or will market discipline suffice to do the job of regulation in this sector? Is the growth of shadow banking this time more about FinTech; the provision of financial services making use of technological innovations? What are the fundamental problems of financial frictions they might have solved differently? Are new digital technologies key to finding solutions to the traditional financing frictions? Or are we experiencing just another boom in novel-looking financial services which ultimately share the same problems and risks as more traditional banks?

Confirmed Speakers:

2017 Marjolin Lecture by Danièle Nouy, Chair of the Supervisory Board of the Single Supervisory Mechanism

Bengt Holmström, Nobel laureate 2016, MIT
Tobias Adrian, Federal Reserve Bank of New York
Gabriel Bernardino, EIOPA
Nicola Gennaioli, Bocconi University
Dong He, IMF
Stan Maes, European Commission
Risto Murto, Varma Pension Fund
Urs Rohner, Credit Suisse
Antti Suhonen, Alto University

Colloquium registration fees

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<tr>
<th>SUERF Member Registration</th>
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<tr>
<td>Personal Members and staff from SUERF Member Institutions – Central Banks, Corporate and Academic Institutions</td>
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<tr>
<td>Non-member Registration</td>
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<td>Student Registration</td>
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www.suerf.org/shadowbanking2017
SUERF HIGHLIGHTS 2016

by Ernest Gnan, SUERF Secretary General, and Dragana Popovic, Executive Secretary

2016 was a busy and highly productive year for SUERF, with a large number of activities and innovations. SUERF spotted key issues and trends in monetary and finance, offering practitioners, policymakers and academics a chance to debate openly. The list of 2016 speakers, conference partners, sponsors and conferences attendees shows the very high interest on SUERF’s topics and activities.

SUERF’s Council of Management would like to take this opportunity to thank all co-organizers, sponsors, speakers, members and conference participants for their contributions!

Events

We have successfully held a total of six high-profile conferences. For the first time in its history, SUERF reached out across the Atlantic, with a conference held in New York ahead of the IMF Annual meetings to discuss “Global Implications of Europe’s Redesign”.

Around 1200 participants and guests attended this year’s events program. We were very fortunate to have a large group of distinguished and well-known academics, economists and financial experts as speakers. Their involvement provided highly interactive forums for the exchange of views, insightful keynote speeches, panel debates and poster sessions.

At the 32nd SUERF Colloquium in Frankfurt, Mario Draghi, President of the ECB, delivered the 2016 SUERF Marjolin Lecture on “How central banks meet the challenge of low inflation”. The Annual Lecture was delivered by Jan Smets, Governor of the National Bank of Belgium, on “FinTech and Central Banks”.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>3-4 February 2016</td>
<td>32nd SUERF Colloquium &amp; Deutsche Bundesbank/Stiftung Geld und Währung Conference</td>
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<tr>
<td>Frankfurt</td>
<td>The SSM at 1</td>
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<td>14 April 2016</td>
<td>SUERF/BAFFI CAREFIN Centre Conference</td>
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<tr>
<td>Milan</td>
<td>Central banking and monetary policy: Which will be the new normal?</td>
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<td>16 September 2016</td>
<td>SUERF/PSE/CEPII Conference</td>
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<tr>
<td>Paris</td>
<td>Rethinking Capital Controls and Capital Flows</td>
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<tr>
<td>5-6 October 2016</td>
<td>SUERF•Columbia</td>
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<tr>
<td>New York</td>
<td>Global Implications of Europe’s Redesign</td>
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<tr>
<td>17 November 2016</td>
<td>SUERF &amp; EIB Annual Economics Conference</td>
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<tr>
<td>Luxembourg</td>
<td>Financing Productivity Growth in Europe</td>
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<tr>
<td>9 December 2016</td>
<td>SUERF/Belgian Financial Forum/Eggsplode Conference</td>
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<tr>
<td>Brussels</td>
<td>FinTech and the Future of Retail Banking</td>
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We would like to thank most warmly all speakers, panellists and all chairs and moderators, who skilfully guided the sessions.

The conference presentations and conference reports are available for download at www.suerf.org/past-events.

Publications

SUERF produced and distributed a number of topical publications in 2016: four conference reports, four SUERF Conference Proceedings (SCPs), one SUERF Occasional Paper (SOPs) and six SUERF Policy Notes (SPNs). Detailed information about SUERF’s publications can be found on the SUERF website at www.suerf.org/studies, www.suerf.org/policynotes, www.suerf.org/newsletters. The SUERF Conference Proceedings (SCPs) continue to be published by Larcier Group and are available for free download in PDF format.

2016 SUERF Conference Proceedings and Occasional Papers

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<tr>
<th>Date</th>
<th>Title</th>
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<tr>
<td>March</td>
<td>Cash on Trial edited by Christian Beer, Ernest Gnan and Urs W. Birchler</td>
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<tr>
<td>April</td>
<td>Banking Reform edited by Patricia Jackson</td>
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<td>April</td>
<td>The state as an intermediary to foster long-term investments: the case of the targeted European savings account by Hans-Peter Burghof and Carola Müller</td>
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<tr>
<td>June</td>
<td>The SSM at 1 edited by Jens Ulbrich, Carl-Christoph Hedrich and Morten Balling</td>
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<td>August</td>
<td>Central Banking and Monetary Policy: what will the post-crisis new normal? edited by Ernest Gnan and Donato Masiandaro</td>
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2016 SUERF Policy Notes (SPNs)

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<tr>
<td>No 4</td>
<td>Gender Diversity and Monetary Policy by Donato Masiandaro, Paola Profeta and Davide Romelli</td>
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<tr>
<td>No 5</td>
<td>Some seeming paradoxes or interesting points of the Russian economy and its banking sector by Stephen Barisitz</td>
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<td>No 6</td>
<td>Bank Secrecy in Offshore Centres, Capital Flows and Blacklisting: It Takes Two to Tango by Donato Masiandaro</td>
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<td>No 7</td>
<td>Ten myths in the Brexit Debate by David T. Llewellyn</td>
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<tr>
<td>No 8</td>
<td>Doves, Hawks and Pigeons: Behavioral Monetary Policy Making by Donato Masiandaro</td>
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<tr>
<td>No 9</td>
<td>Two turbulent centuries: Lessons from Austria’s monetary policy, 1816–2016 by Ernest Gnan and Clemens Jobst</td>
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SUERF Homepage - The traffic on our website continued to increase over the previous year.

Country (Visitor)
1. Germany
2. Italy
3. United Kingdom
4. Russia
5. Austria
6. France
7. United States
8. Switzerland
9. Belgium
10. Netherlands

Among past and most recent SUERF publications the following top 10 were most downloaded in 2016.
1. 2016/1 Cash on Trial
2. 2016/2 Banking Reform
3. 2009/1 The Failure of Northern Rock: A multi-dimensional Case Study
4. 2016/4 Central Banking and Monetary Policy: what will be the post-crisis new normal?
5. SOP No 1 The state as an intermediary to foster long-term investments: the case of the targeted European savings account
6. 2015/2 Asset-Liability Management with Ultra-low Interest Rates
7. 2016/3 The SSM at 1
8. 2015/3 Liquidity and Market Efficiency – Alive and well?
9. 2015/1 Challenges in Securities Markets Regulation: Investor Protection and Corporate Governance
10. 2014/3 Banking After Regulatory Reforms - Business as Usual?

Research Prizes

The 2016 Marjolin Prize was awarded to Sascha Steffen, University of Mannheim, and Josef A. Korte, Goethe University Frankfurt, for their paper “Zero risk contagion - banks’ sovereign exposure and sovereign risk spillovers”.

The 4th SUERF/UniCredit & Universities Foundation Research Prizes were awarded to Heiko Jacobs, University of Mannheim, and Mancy Luo, Ph.D. candidate in finance at Tilburg University.

Membership

Membership levels remained stable. Total Institutional Membership now stands at 91 members including, 26 Central Bank and Supervisors, 45 Corporate members and 20 Academic Institutions.
SUERF Members (in alphabetical order)

ABN AMRO Bank NV
ACPR - Autorité de Contrôle Prudentiel et de Résolution
Aktia Bank Plc
Allianz SE
APB - Associação Portuguesa de Bancos
ASSONIME - Associazione fra le Società per Azioni
Austrian Federal Economic Chamber
Banca d'Italia
Banco de España
Banco de Portugal
Banco Santander S.A.
Bank Austria AG
Bank for International Settlements (BIS)
Bank Julius Bär & CO. AG
Bank Nederlandse Gemeenten
Bank of England
Bank of Finland (Suomen Pankki)
Bankárképző, International Training Center for Bankers - ITCB
Banque Centrale du Luxembourg
Banque de France
Banque Nationale de Belgique
BNP Paribas Fortis - BE
BNP Paribas - FR
BWG - Austrian Society for Bank Research
Central Bank of Hungary
Central Bank of Iceland
Central Bank of Ireland
Central Bank of Malta
Centre for European Policy Studies (CEPS)
Charles University Prague
CNMV - Comisión Nacional del Mercado de Valores
Commerzbank AG
Crédit Agricole SA
Credit Suisse Group AG
Danish Bankers' Association (Finansrådet)

Danish Financial Supervisory Authority (FSA)
Danmarks Nationalbank
De Nederlandsche Bank NV
Deutsche Bank AG
Deutsche Bundesbank
DZ Bank AG
Erste Group Bank AG
European Banking Federation (EBF)
European Central Bank (ECB)

European Bank for Reconstruction and Development (EBRD)
European Investment Bank (EIB)
EY LLP

New members 2016 in green

Federal Ministry of Finance (AT)
FEDERCASSE
Finansinspektionen, Sweden
FMA - Austrian Financial Market Authority
German Insurance Association (GDV)
HEC Canada
INTESA SANPAOLO S.P.A.
KU Leuven
La Caixa
Loughborough University
Mckinsey & Company
Municipality Finance PLC
National Bank of Poland
National Bank of Slovakia
Neufilze OBC Investissements
NWB Bank
Nykredit
OECD
Oesterreichische Nationalbank
Oesterreichische Kontrollbank AG
Poznan University of Economics
Rabobank Nederland
Raiffeisen Bank International AG
Rijksuniversiteit Gent
Sampo Group
Schweizerische Nationalbank
Société Générale Corporate & Investment Banking
SWU "Neofit Rilski"
Tapiola Group / Keskinäinen Vakuutusyhtiö Tapiola
Technical University of Lisbon (ISEG – School of Economics and Management)

The Bank of New York Mellon SA/NV
The Institute of International Finance (IIF)
UBS AG
UniCredit & Universities Foundation
Università Bocconi
Université du Sud Toulon-Var
University LUISS Guido Carli
University of Birmingham, Birmingham Business School
University of Namur
University of St Gallen - Schweizerisches Inst. Für Banken und Finanzen
University of Zürich
Warsaw School of Economics
Wiener Institut für Internationale Wirtschaftsvergleiche (WIIW)
Wirtschaftskammer Österreich - WKÖ

Thank you for renewing your membership and continued support of the Association!
Financial Situation

SUERF’s financial situation remains steady. The 2016 membership renewals amounted to €121,393.96. In addition, all events were generally sponsored by co-organizers and partners. SUERF’s finances are audited annually by the Accountancy D’hooghe, Belgium.

**Membership renewals 2016**

<table>
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<th>Membership Type</th>
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<td>Corporate Members</td>
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<tr>
<td>Academic Institutions (AIM)</td>
<td>6,600.00</td>
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<tr>
<td>Personal Members</td>
<td>9,000.00</td>
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</table>

We would like to take this opportunity to extend our gratitude to all members, co-organisers and sponsors who support the Association financially, thus showing their trust and interest in SUERF’s activities.
Please join us in extending best wishes to Magda Verbeke. She has been devoted to SUERF over the last twenty years, where she has provided outstanding accounting services. May her new journey be filled with joy!

Council of Management

SUERF’s Council of Management, Editorial Board and Colloquium Working Group met on four occasions in 2016 to plan upcoming SUERF activities, publications and to regularly review SUERF’s finances.

At the General Assembly held on 4th February 2016, in Frankfurt, Christian Upper (Bank for International Settlements) was elected to the SUERF Council of Management for a three year period from 1 January 2016 to 1 January 2019. In addition, the mandates of Ernest Gnan (Oesterreichische Nationalbank), Ryszard Kokoszczynski (National Bank of Poland), David Llewellyn (Loughborough University) and Natacha Valla (EIB) were extended for a further term of three years from 1 January 2016 until 1 January 2019.

Our special thanks go to Alain Duchâteau, who stood down from Council of management at the end of the year. SUERF has been very fortunate to have his active support and contribution.

Information about SUERF’s Council of Management members can be found on the homepage at www.suerf.org/council-of-management.

Honorary Members

We would like to congratulate SUERF Honorary Member Niels Thygesen on his appointment as Chair of the European Fiscal Board.

Secretariat

SUERF’s Secretariat continues to be run efficiently by Dragana Popovic, Executive Secretary (full time) and Heidrun Kolb, Secretary (part-time).

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