States, Banks, and the Financing of the Economy

Main findings from the 30th SUERF Colloquium held in Zurich on 5–6 September 2012

By Morten Balling and Ernest Gnan

(l-r) Jean-Pierre Danthine (SNB), Axel Weber (UBS AG), Jean-Charles Rochet (University of Zürich)

On 5-6 September 2012, **Urs W. Birchler**, SUERF President and Professor at the Department of Banking and Finance, University of Zürich, opened SUERF's 30th Colloquium on "*States, Banks, and the Financing of the Economy*". Around 120 participants gathered at the University of Zürich, Switzerland, to discuss the complex interrelations between states and financial systems, which have developed over the past five years of the economic, financial and sovereign debt crisis. Instability in banking has spread to states and vice versa, with failures in both sectors looming. Economic and political fragility are feeding each other. The crisis increasingly hurts the real economy. This in turn further worsens public finances and bank balance sheets.

The opening plenary session was chaired by **Ernest Gnan**, Oesterreichische Nationalbank and SUERF Secretary General. **Jean-Pierre Danthine**, Vice-President Schweizerische Nationalbank, called his keynote speech "*Taming the financial cycle*". The US subprime crisis has had lasting consequences. The ongoing financial crisis has very high costs. There is no room for complacency. Systemic risk arises because an optimising financial institution does not take full account of its influence on other financial institutions. Banking is a high-levered activity and there is a tendency to excess risk taking in good times. During down turns, pro-cyclical behaviour is reflected in the sale by banks of risky assets in order to maintain the capital base in line with regulations or internal risk measures. This implies asset price declines and further worsening of the banks' capital situation etc. A more comprehensive financial stability framework is needed. It should strengthen the resilience of the financial system and prevent the build-up of imbalances in line with the principle of "Leaning against the wind". In Switzerland, the interest rate instrument is not available to put a brake on the upturn in the property- and mortgage market due to the situation in the foreign exchange market with upward pressure on the Swiss Franc. So, in June 2012 a new package of measures including counter cyclical buffers (CCBs) was introduced. In boom periods additional capital buffers can be built up, and they can be diminished in down turn periods. The Swiss National Bank can propose to the Swiss Federal Council to activate CCBs, when there is a need to do it. The goal is to smoothen the cycle, but realistically not to remove it. The availability of a tool such as the CCB is a significant step forward. It can and will be used in a balanced and flexible way to deal with specific cyclical risks to financial stability. In the following discussion, it was argued that political disagreement about the need for increasing capital buffers during up-turns could be expected, that it was very difficult to forecast house prices and that there might be a conflict between micro and macro policies.

Axel Weber, Chairman of the Board of Directors, UBS AG started his speech with an evaluation of the current global economic outlook. Growth perspectives are very uncertain. The biggest uncertainty of all concerns the pricing of political risk. Only if the current actions by the ECB succeed, will markets move towards more risk-taking. The downturn in the summer of 2012 is the second leg of a double-dip. European countries lack fiscal space to counter the recession. The US economy is in the process of a cautious revival. But there is high political uncertainty up to the presidential election. The situation may improve after the election. Emerging markets now face inflation problems. They are not able to sustain growth at rates experienced over the past decade. So, the rest of the world cannot draw Europe out of the recession. There are no quick fixes to the European

problems. Europeans are divided about a possible banking union. Structural reforms are urgently needed. Central bank intervention can only buy time. Ultimately, a fiscal union should supplement the monetary union, but it is difficult to see how EU countries would accept the required harmonisation in their budgets. In the financial industry, funding for banks remains scarce. Banks under pressure are backtracking to their home turf. To an increasing extent, domestic banks will finance domestic firms. Cross-border bank business is declining. Banks are cutting costs. The cost of credit will go up. The market for corporate bonds will develop at the expense of direct bank credit. Merchant banking in the traditional sense will be strengthened. Banks will offer their clients corporate equity services. In the years to come, the development of financial markets will depend on a reduction of political uncertainty, better cooperation between regulators and banks and better designed regulation. There is a challenging decade ahead. During the following discussion, the movement of banks back to their core business and to, as Weber argued, "merchant banking" as seen in the 1990s, the difficult search for safe assets, the need for a dialogue between regulators and banks and the fact that some solid corporations can borrow at better terms than their banks and other topics were raised.

Jean-Charles Rochet, Professor of Banking, University of Zurich talked about "*Liquidity and interbank markets*". Repo markets have played a big role during the financial crisis. Central banks have established temporary repo facilities in order to provide liquidity to market participants. In the US, a few large institutions have a dominating position in the interbank market. There is a risk of contagion through OTC derivatives dealers. In Europe, there is fragmentation of settlement procedures. The traditional role of banks is maturity transformation – short-term deposits are transformed to long-term opaque loans. We need a new model for dealer banks. In the Northern Rock case, the run was lead by wholesale depositors. There is a complex nexus of OTC transactions, where market participants do not know who their counterparties are. There is uncertainty about loss-sharing rules. A solution could be to adopt a Central Counterparty Model for vital market participants. This would reduce contagion risk and provide more transparency. But of course the centralised clearing process should be regulated.

The 2012 SUERF Marjolin Lecture on "*Money and banking in times of crisis*" was given by **Lorenzo Bini Smaghi**, Harvard University. He compared Europe with a journey. The Common Market, EMU and maybe a forthcoming fiscal union are bringing people closer together. The journey entails further political integration. In the US, Alexander Hamilton convinced the Congress to merge the debts of the states. This was vital for the formation of the United States of America. Perhaps something similar could happen in Europe. In solving the current European problems the key questions are: What shall be done? Who should do it? And how? The ECB can only aim at the average economic situation in the euro area as a whole, but there is wide dispersion in the Eurozone. Seventeen governments are accountable to their citizens. The ECB has adapted its monetary policy during the crisis. The move to a system where counterparties can apply for liquidity was intended to be temporary. The unlimited provision of liquidity allowed banks to postpone needed structural changes. With the benefit of hindsight, the ECB Governing Council underestimated the full extent and long-lasting nature of the crisis and initially insisted too much on the temporary nature of non-conventional measures. Cross-border money market flows have declined. Banks refrain from placing funds in stressed countries. We no longer have a single euro area money market. The ECB plays a large role as intermediary in the money market. Claims are safe if channelled through the ECB. More supervisory powers should be transferred to the ECB. In the bond markets, the prevailing spreads are out of line with equilibrium in the Euro area. The monetary policy transmission mechanism needs to be fixed. Markets must be convinced that the ECB and governments will do what is needed. Politicians cannot at the same time ask for more "Europe" and more "sovereignty". The euro area crisis has reached a stage where member states must commit themselves to deeper European integration and transfer of sovereignty. During the discussion the issue of the exit strategy from unconventional monetary policy was raised. The speaker answered that the ECB will exit from the market, once market functioning and the functioning of the monetary policy transmission mechanism have been re-established. The precautionary demand for liquidity by banks must come down first. When interest rates are raised, the incentives of banks to use the Eurosystem's facilities will fall. The ECB should not, however, communicate that it is ready to exit tomorrow. Another participant questioned whether we can just wait and see. The speaker agreed that the ECB and governments do not have plenty of time left: There is an urgent need to act.

Lorenzo Bini Smaghi (Harvard University)

In line with SUERF's tradition, a considerable part of the Colloquium work took place in three parallel commissions, which reflect three key areas of interest in the current crisis: the role of monetary and fiscal policy, the role of markets and financial institutions, and the role of regulation and resolution rules.

Commission 1 on "*The role of monetary and fiscal policy*" was chaired by **Morten Balling**, University of Aarhus and **Peter Egger**, ETH, Zürich.

Harald W. Stieber, European Commission, explained the complex legal foundation of economic governance Economic and Monetary Union (EMU). The incomplete architecture has contributed to uncertainty in markets about the finality of economic and financial integration in Europe. The speaker focussed on the concept "enhanced cooperation". In the 2012 Fiscal Compact, the contracting parties express their wish to make more active use of enhanced cooperation. In a diagram, the speaker explained the various methods available to implement economic governance in Europe. Changing the treaties is the most inclusive method, but also the slowest. The intergovernmental method is faster and flexible as it can function with few participants but the flexibility is paid for by lack of enforceability. Opt-out clauses, however, introduce some variable-geometry even in Treaty changes.

Stavros Vourloumis, Athens University of Economics and Business, offered a critical view of the Stability and Growth Pact (SGP). The sanctions that should strengthen the SGP have not been implemented adequately. An important step in changing the framework for coordination and surveillance of fiscal policies is the "European Semester", put into practice for the first time during the first half of 2011. In December 2011, the "Economic Six-pack" entered into force. It covers fiscal surveillance and the surveillance of macroeconomic imbalances. The package includes increased EU surveillance of national budgets, a new enforcement regime, and an early warning system based on a scoreboard of ten indicators. The principal change introduced by the "Fiscal Compact" is the obligation of member states to maintain balanced budgets or budgets in surplus. The new framework for fiscal policy represents a move from "soft" to "hard" policy coordination. The reforms of the framework were evaluated by the speaker in the three dimensions of governance: obligation, delegation and precision.

António Afonso, ISEG School of Economics & Management, called his presentation "*Fiscal policy and growth in the EU*". Government deficits have increased in virtually all countries during the crisis since 2007, and so have debt to GDP ratios. The speaker presented an analysis covering a large number of countries and showed that government size has a significant negative effect on growth. Institutional quality, by contrast, influences GDP per capita positively. When government expenditures are decomposed, the author observed that public wages, interest payments, subsidies and government consumption affect output growth negatively, while government spending on education and health boosts growth. In the following discussion, the increasing demand for public services played a considerable role.

Franco Bruni, Bocconi University focussed on the Italian sovereign debt problem. He listed seven ingredients of a recipe which can contribute to a solution and increase the credibility of national policy makers and European institutions. 1) there should be domestic rules and incentives to adjust fiscal disequilibria, 2) there should be supranational centralisation of economic policy decisions, 3) the central bank should provide collateralized short-term financing, 4) the EU member state governments should, through various technical channels, provide medium to long financing, conditioned by the adoption of economic policies and measures agreed with the Commission, 5) an adequate degree of solidarity should be developed reflecting the fact that financial and economic stability is a collective international good, particularly so in a single currency area, 6) a clear set of appropriate rules for euro-sovereigns' defaults should be adopted, and 7) European regulation for bank resolutions should be adopted. The need for a credible recipe is underlined by the fact that many European banks continue to have large portfolios of sovereign debt and that the debt levels of several European governments have been, or might be, increased towards unsustainable levels by the costs of bailing out failing banks.

Maartje Wijffelaars, Antwerp University, focussed on the linkages between banking sector performance and government fiscal sustainability. She presented an equation with the factors that influence the current sovereign debt/GDP ratio: the interest to be paid on the debt, the previous debt/GDP ratio, the GDP growth rate, the primary balance to GDP ratio and stock flow adjustments. The interest burden on government debt can have a "snow ball effect". There is a two-way causal relation between bank weakness and government weakness. Banks' own government bonds and measures by governments to support the financial system contribute to the growth of the sovereign debt/GDP ratio. The speaker presented a table showing the impact of financial sector crisis support on government debt as a percentage of GDP in some euro-area countries. On top of the recorded sovereign debt there are contingent liabilities related to government guarantees. Her conclusion was that only a full banking union can break the link between banking and sovereign weakness in the euro-area.

Séverine Menguy, Université Paris Descartes, gave an overview of the literature of the advantages or drawbacks of issuing Eurobonds. Partial mutualisation of European sovereign debt could contribute to reducing the risks of speculative attacks against a highly indebted

country, it could reinforce financial stability, and it could contribute to the creation of a deep and liquid market for European sovereign bonds. Mutualisation could, however, also encourage budgetary laxity and create moral hazard problems in some member countries. Common Eurobonds would prevent financial markets from exerting discipline through higher interest rates, and they would undermine the "no bailout clause" that protects member states from liability related to the debt obligations of other governments. Eurobonds seem therefore to necessitate tighter accompanying rules for budgetary discipline. In a model presented, equilibrium of the interest rate on public debt requires very restrictive conditions. The implication is that only "healthy" countries should be allowed to participate in the issuance of common government bonds.

Thorvald Grung Moe, Norges Bank, presented a chapter from recent American economic, financial and fiscal history. The chairman of the Board of Governors of the Federal Reserve System from 1934 to 1948, Marriner S. Eccles, was a close adviser to President Roosevelt and played a key role in the reforms of the Banking Act 1935. He was the main architect of the new Federal Reserve System. After the Second World War under President Truman, he was deeply involved in a conflict over coordination of monetary and fiscal policies between the US Treasury and the Fed and also in the formulation of the Accord in March 1951, which solved the conflict. The speaker gave an overview of some lessons from the 1951 Accord with relevance for the current fiscal and financial crisis in Europe: There is a permanent need for coordination between fiscal and monetary policies. Central banks should not be omnipotent. Central banks should fight inflation but also prevent deflation. Central banks need to regain control of the money supply. Central banks should support fiscal policy in a depression. Against this background, the speaker concluded that a change in the current central banking paradigm is needed; according to him, is time for a more balanced central banking paradigm supporting compensatory policies – in the spirit of Eccles.

Georg Erber, German Institute for Economic Research, Berlin, raised the issue of *"What is unorthodox monetary policy?"* The speaker explained how the ECB and Fed gradually have been involved as lenders of last resort to distressed governments, which could no longer refinance their deficits in private capital markets. Central banks have provided easy credit to finance unsustainable public deficits. The ECB has lowered its standards for repo operations and is running a risk of losses from toxic assets accepted as collateral. The ECB has become a stakeholder in a possible Greek default. Mario Draghi's plan for the purchase of sovereign bonds is a high-risk strategy. Its success depends on the willingness and ability of the crisis countries to get their economies back on track. The plan faces strong resistance from Germany. The Bank of England and the Fed have already become institutions to finance public deficits on demand.

Allard Bruinshoofd, Rabobank presented a paper by Wim Boonstra, who is a member of the European League for Economic Cooperation. It contained a proposal for a temporary programme of short-term Eurobonds (euro T-bills). He argued that the introduction of effective Eurobonds could restore calm to financial markets without introducing moral hazard. The fragmentation of bond markets means that financial markets have the possibility of speculating against the continued existence of the euro zone. This fragmentation is one of the euro zone's biggest design flaws. Eurobonds are bonds issued by a central European agency in order to finance participating member states' national debt. In order to be successful, a Eurobond programme should: 1) give all countries access to funding under reasonable conditions, 2) produce notable benefits for all participating states, 3) have a disciplinary effect on policymakers, 4) preferably be self-funding, 5) break EMU member states' strong financial links between national governments and local banking systems, and 6) free the ECB of its interventions in national sovereign debt markets. The programme should be open to all solvent member states

Francesco Passarelli, University of Teramo, treated systemic financial risk as a pollution issue. He compared financial regulation with taxation. In the real world, dominated by uncertainty and asymmetric information, policymakers usually choose financial regulation to curb investors' risk taking, while taxation is used to a lesser extent. Measuring the toxicity of financial instruments is difficult. Rules and taxes are applied to differently distorted measures of toxicity. He considered a tax on financial transactions. A political distortion may occur when the decision about taxes is made by voting. This may cause inefficiency losses. However, the distortion is considerably different when voting concerns a tax instead of a rule, especially if there is a problem of measurement bias. Too restrictive rules are more likely to emerge than too restrictive taxes. The cost of regulation tends to be concentrated on high risk investors. The burden of a tax on transactions will to a large extent be carried by small risk investors. This helps us to understand reality, in which taxes on risky financial instruments are usually rare and low, whereas financial regulation is much more frequent.

Dieter Wirth, PricewaterhouseCoopers, Zürich, called his presentation "Taxation as a threat to banks: FTT as example". Statistics on taxes borne and taxes collected by industry show that the banking industry carries a relatively heavy tax burden. Using an international perspective, the speaker mentioned corporation tax, withholding tax, securities transfer tax, value added tax, and several other tax types. He gave a survey of securities transaction tax systems in selected countries. On top of the collection of

the various tax types, the financial industry carries the cost of tax compliance. So, taxation is a threat to banks.

Commission 2 on "*The role of markets and financial institutions*" was chaired by **Catherine Lubochinsky**, University Paris 2, and **Bertrand Rime**, Schweizerische Nationalbank.

Malgorzata Pawlowska, National Bank of Poland, looked at the substitution between trade credit and bank credit during credit rationing. The econometric model used panel data for 2001 to 2009 from information reported by Polish enterprises. The study shows that substitution of bank credit by trade credit is intensified in times of financial crisis (2008 and 2009). Companies for which access to credit is limited raise funds through trade credit, i.e. they borrow from their suppliers of goods and services. Small companies are influenced by restrictive credit policy to a greater extent than large companies.

Simone Westerfeld, University of Applied Sciences Northwestern Switzerland, presented a study of credit assessments for 3542 small businesses by nine Swiss banks using an identical rating model over the period 2006-2011. The aim of the study is to assess loan officers' use of discretion to smoothen credit ratings of their clients and to assess whether this use of discretion is driven by information about the creditworthiness of the borrower or by the insurance of clients against fluctuations in lending conditions. The study shows that loan officers make extensive use of their discretion to smoothen clients' credit ratings across all rating classes. Discretionary rating changes seem to have limited power in predicting future loan performance, indicating that the smoothing of credit ratings is only partially driven by information about creditworthiness.

Jana Ohls, Deutsche Bundesbank, presented a paper on "*Banks and Sovereign Risk: A Granular View*". Sovereign bonds play an important role for the risk management of banks and were typically considered to be the safe assets by banks and regulators. But the European sovereign debt crisis has shown that this assumption might be violated, and there may be negative feedback loops between sovereign stress and risk in the banking sector. The authors analyzed bank-level incentives for investments into sovereign bonds and the impact of these investments on bank performance. Using detailed bank-by-bank data taken from the Deutsche Bundesbank's Securities Holdings Statistics, the authors investigated the determinants and effects of investments into sovereign bonds before and during the sovereign debt crisis, as well as contagion from sovereign risk to risk in banking working through banks' sovereign bond holdings. They found, first, that larger banks and banks with a greater securities portfolio invest more into a particular country, and sovereign bonds issued by larger countries attract higher average volumes of investment. Second, banks with a low degree of capitalization (and in this sense more risky banks) invest more into sovereign bonds. Splitting the sample into different banking groups, the authors found that for the smaller savings and cooperative banks, sovereign bond holdings seem to have an impact on performance. Third, banks have restructured their portfolios away from relatively risky assets in the European periphery to relative safe assets from France and Germany. Thus, the determinants of banks' foreign assets change over time.

Per Östberg, University of Zürich, looked at the connection between the interbank market for liquidity and the broader financial markets. The existence of this connection has been documented by the recent financial crisis, which saw both a breakdown in the interbank market and a collapse in the prices of financial assets. The focus of the presentation was, however, rather on the day-to-day interaction between the interbank market for liquidity and financial market activity. The so-called liquidity pull-back hypothesis addresses how demand for liquidity by banks influences financial market activity.

Pierre Pessarossi, University of Strasbourg, presented a study of debt choices by Chinese firms between bonds and syndicated loans. Floating costs, asymmetries of information, and renegotiation and liquidation costs influence the choice of debt in line with former studies in the context of regulatory influence in the bond market. The role of central state ownership on debt choice is included in order to assess to what extent corporate debt choices are politically or economically driven. On the basis of a dataset of 220 listed Chinese firms the authors conclude that central state owned firms are more likely to issue bonds. Financial factors seem to play a minor role in corporate debt choices compared to other countries.

Zeynep Önder, Bilkent University, Ankara, looked at the lending activities of respectively state-owned and privately owned banks during the period 1992-2010. The aim of the study is to find out whether the credits these banks provide affect local economic growth in Turkey during crisis periods and in election years. The share of state-owned banks in the credit market is found to be significantly higher than the share of private banks in crisis periods and local election years. Although state-owned banks might issue loans for political reasons during election periods, they can still have an important role in offsetting the adverse effects of economic shocks, especially in developed regions, and in smoothing credit cycles.

Mohammed Omran, Arab Academy for Science and Technology, Alexandria and IMF, presented a study of 12 Egyptian banks from 1996 to 1999, during which control was transferred from the state to the private sector. The aim was to analyse the impact of bank privatization, which is an important issue for the Egyptian economy. The results from post-privatization provide strong evidence that banks with higher private ownership involvement are associated with a better performance.

Kjell G. Nyborg, University of Zürich, presented a Swiss Finance Institute Paper *"The Euro Area Sovereign Debt Crisis: Secure the Debt and Modify Haircuts*". The speaker criticised the low level of haircuts applied by the ECB in connection with Spanish and Italian government bonds. He argued that the rules for setting haircuts should be reviewed.

Peter H. Egger, ETH Zürich, analysed regional policy in the European Union. He presented an analysis of EU structural funds transfers to regions of EU member states below a certain income level. It turns out that only a minority of the regions is able to turn transfers into faster per-capita income growth and per-capita investment. The speaker argued that differences in the absorptive capacity of the recipient regions to a large extent explain differences in the effectiveness of such transfers.

Commission 3 on *"The role of regulation and resolution rules*" was chaired by Patricia Jackson, Ernst & Young and Ernest Gnan, Oesterreichische Nationalbank.

Lev Ratnovski, IMF, looked at the link between bank bailouts and bank risk taking. The expectation of government intervention in favour of failing banks creates moral hazard and encourages risk-taking. However, when a bank's success depends on both its idiosyncratic risk and the overall stability of the banking system, a government's commitment to shield banks from systemic risk may increase their incentives to invest prudently. The issues are explored in a model of financial intermediation where a bank's survival depends on another bank's success. The positive effect from systemic insurance may dominate the classical moral hazard effect when the risk of contagion is high.

Andrew Gimber, European University Institute, looked at the design of bank resolution regimes. He presented a theoretical model in which a government must decide how much to invest in the efficiency of its resolution regime. In the presence of moral hazard, the optimal policy can depend on whether or not the government can costlessly commit not to bail out failed banks. The benefits of improved bank resolution regimes and similar reforms may be greater than a consideration of their ex post benefits alone would suggest. At the end of the Colloquium, the author was awarded the Marjolin Prize 2012 for having made the best contribution to the Colloquium by an author below the age of 40.

Rajna Gibson-Brandon, University of Geneva, examined the relationship between banks' lobbying activities, their size, financial strength, and sources of income. Banks are, according to the study which uses US data, more likely to lobby when they are larger, have more vulnerable balance sheets, are less creditworthy, and have more diversified business profiles. There is also a tendency that banks engaged in securitization, trading and insurance, hire more lobbyists and spend more on lobbying.

Laurent Weill, University of Strasbourg, presented a study in which the influence of bank ownership on credit supply in Russia is examined. It seems that bank ownership affected credit supply during the recent financial crisis. Foreign-owned banks reduced their credit supply by more than domestic private banks, while state-controlled banks reduced their credit supply less than private banks. One interpretation is that foreign banks are "less loyal" to domestic customers during a crisis. Another interpretation is that state-controlled banks are more inclined to support the domestic economy during economic downturns.

Linh Nguyen, Monash University, Australia, examined the association between government ownership and bank stability over the years 1997-2010 across a sample of 103 countries. The background is that the share of banks owned completely or partly by governments globally has increased somewhat in recent years. The association seems to depend on a country's economic development and regulatory quality. In rich developed countries, the degree of government ownership is positively associated with bank distance to default. Contradictory findings are reported for developing, middle and low-income countries. Bank distance to default is positively associated with efficiency and bank capitalization.

Leonard Nakamura, Federal Reserve Bank of Philadelphia, tested whether, as is commonly assumed, the riskiness of bank loans is fully captured by bank internal ratings. The data are drawn from the interagency Shared National Credit (SNR) Review, which has been performed annually from 1977 to 2010. The study suggests that while the banks in the US whose loans are observed do appear to generate private information about the riskiness of their loans, the riskiness of these loans is not fully captured by bank internal ratings and may be improved by adding information from bond rating agencies despite the fact that the ratings of the latter are public information.

Anna Hryckiewicz, Goethe University, Frankfurt and Kozminski University, Warsaw, asked whether government interventions restore or destroy financial stability in the long run. She argued that in general, government interventions have a negative impact on banking sector stability, increasing its risk significantly. According to the evidence presented, government involvement in the banking sector exerts a negative effect on credit supply, reducing its availability to borrowers. Nationalizations and asset management companies contribute most to these effects. The evidence strongly encourages regulatory authorities to rely on market mechanisms for resolving systemic banking crises.

Mark Mink, Dutch National Bank and University of Groningen, studied the relationship between bank risk-taking and the existence of a "Lender of Last Resort"(LLR). Banks are stimulated by the LLR to increase leverage, diversify, and lower their lending standards. When competing banks pass on the gains from maturity transformation to their customers, lending standards deteriorate. The interplay between these factors can put at risk systemic financial stability. The provision of illiquidity insurance by the LLR is a particularly important institutional arrangement. This is demonstrated by use of a stylised approach. Banks can effectively borrow at a lower cost than their shareholders such that bank leverage increases shareholder value.

Alex Cukierman, Berglas School of Economics, CEPR and Tel-Aviv University, gave a presentation about regulatory reforms and the independence of central banks and financial supervisors. One beneficial effect of the crisis is that it induces institutional changes designed to reduce the likelihood of systemic crises through reforms of the regulatory and supervisory systems. The short-run response of monetary policy, and subsequently of fiscal policy, has created a new state of affairs in which the central bank holds a large share of debt in the economy and in which the share of public debt in GDP is expected to increase substantially. When the economies emerge from the crisis, this new state of affairs may create a painful trade-off between price stability and financial stability. The central bank's role as owner of many sovereign bonds and its potential role as macroprudential regulator have implications for central bank independence and the independence and professionalism of other financial regulators.

Andreas Pfingsten, University of Münster, presented a model to analyze the regulatory risk assessment of individual banks. The model uses a unique database on German banks' supervisory risk profiles from the years 2006 to 2008. It uses both quantitative and qualitative factors. The quantitative factors are based on the so-called "Camel Rating": A bank specific CAMEL-vector contains the financial profile components: Capital Adequacy, Asset Quality, Management, Earnings and Liquidity. The qualitative factors are taken from the German supervisors' partial grading of the banks' internal governance, its internal capital adequacy assessment process (ICAAP), interest rate risk, and other qualitative risk categories. Better capitalization and bank reserves, higher profitability and large asset growth increase the likelihood for a bank to be graded in a better risk profile category.

Edward J. Kane, Boston College, discussed gaps and wishful thinking in the theory and practice of financial regulation and supervision. Safety-net subsidies were characterised by the speaker as the favourable side of an implicit political contract that allows regulators at their discretion to transfer losses incurred by large and politically powerful institutions to ordinary taxpayers. There exists in fact a shadowy "taxpayer put", which is not reported in government or bank accounting statements and therefore not understood clearly by those who are obliged to pay the bill for its exercise (i.e. taxpayers). The speaker proposed that banks and their regulators should be obliged to measure and disclose variations in the size of the taxpayer put, when the safety nets are adjusted, and to strengthen regulators with technical expertise and sufficient ethical commitment to control the regulated on behalf of the public.

The closing plenary session, chaired by **Haig Simonian**, most recently Swiss Correspondent for the Financial Times, featured four speakers from the central banking and financial practitioners' community.

D. Wilson Ervin, Senior Advisor to the Chief Executive Officer, Credit Suisse, opened the session with a presentation of Bail-in, an idea launched by him in early 2010, Bail-in is a way to resolve banks safely and handle cases of financial difficulty. He pointed out the multitude of solutions on the table to solve the current crisis and to prevent future crises. Some of these proposals are good, many are irrelevant, and some are outright detrimental. The Financial Stability Board has devised three options in case a bank becomes insolvent: first, to sell the bank – this solution is useful only for small banks and may cause severe challenges as a consequence of the takeover. Second, bridge banks are a time-tested and useful tool but often the bridge bank relies on some sort of state protection. The third idea, which works without resorting to taxpayers' money, is to recapitalise banks through a bail-in of stock and bond owners. In effect it amounts to a high-speed recapitalisation of banks without the injection of government funds, while systemic functions and customer activities are unaffected, thus preserving the bank's franchise value for creditors. It may be seen as a US Chapter 11 procedure adapted to banks. Using the example of the Lehmann failure, he showed that a bail-in could have saved Lehman Brothers at a much lower cost to stock and bond owners, while in addition avoiding the huge systemic consequences caused by the failure of Lehman. Bail-in should work not only for individual situations, but also in the case of a larger systemic event. Bail-ins would solve many moral hazard problems associated with state-sponsored bank rescue actions, while at the same time avoiding contagion effects to be expected in the event of failure. Bail-in is now in effect official US policy, not least since there is no more public willingness to use any further public funds to rescue banks. Also in the euro area, bail-in is actively discussed. Switzerland was a very early mover in this discussion; contingent capital can be thought of as a structured, contractural form of a bail-in mechanism. The issue currently discussed actively is whether the mechanisms should only relate to Switzerland itself or whether a global approach should be taken. In the view of the speaker, the latter route would clearly be preferable.

Stephen Cecchetti, Chief Economist, Bank for International Settlements, raised the issue as to whether, in the light of the crisis, we need to reassess the impact of finance on growth. On the one hand, well developed financial systems contribute to growth by reducing transaction costs and by improving the allocation of capital and risk. On the other hand, there is also a "darker side": the financial sector can detract resources from other important tasks. It can create vulnerability and misallocate resources. Thus, the current consensus is that the relationship between financial development (proxied e.g. by financial sector employment or financial sector value added) and labour productivity growth is inversely u-shaped. I.e. beyond a certain point, further development of the financial sector becomes detrimental to growth, and therefore also undermines a state's tax base. The negative externality from over-developed financial systems would call for the introduction of a Pigovian tax to internalize these costs. In other words, one could argue in favour of something like a carbon tax on excessive finance. According to BIS estimates, the turning point may be in the order of magnitude of 3.2 % of employment and 6.5 % of value added by the financial sector in the total economy. Clearly, prior to the crisis, financial sectors in countries like Canada or Ireland were too big by this measure. Action by Switzerland and other states to reduce their financial sectors thus seems to be appropriate. On the other hand, Ervin pointed out that financial sectors may also be seen as an important export industry, which may justify big financial centres.

Martin Maurer, Secretary General, Association of Foreign Banks in Switzerland, pointed out the great uncertainty about banks' and other financial intermediaries' behaviour during the transition to tighter financial sector regulation. Herd behaviour may ultimately just move, rather than reduce, risk. He also argued for simpler supervisory rules. Current regulation also pushes out small banks. The current discussion of breaking up too-big-to-fail banks should also be seen in conjunction with the experience that most recent large bank mergers ultimately failed. Shareholders' interests should gain more weight compared to managers' in such far-reaching decisions.

Yves Robert-Charrue, CEO Switzerland, Bank Julius Baer, remarked that his institution is a mid-sized bank, "small-enough-to-fail", which focuses on private banking and operates globally. Any bank needs to sometimes balance conflicting interests of clients and shareholders. The larger the bank, the more difficult this trade-off may become to solve. Currently, there is too much credit in the financial system, an issue that needs to be resolved as a precondition for lasting economic recovery.

In the ensuing discussion, Haig Simonian asked the panellists about how worried they were about the current situation, in particular in Europe. After all, history – including the more recent examples of Iceland and Ireland – has shown that, albeit after severe downturns and with huge costs incurred, ultimately economies recover after financial crises. Ervin emphasised that there are important outstanding issues to be solved before financial markets become more confident. Before this, there may well be several further cycles of hope and disappointment. Cecchetti stated that regulation is never final, and will always provoke reactions by market participants, and thus needs to evolve continuously. Charrue expressed deep concern about the further development of European crisis countries.

Regarding the relationship between governments and banks, and government intervention to rescue banks, Simonian pointed out many possible examples of successful bank rescues. According to Robert-Charrue, more state intervention and regulation implies higher costs for banks, which ultimately will end up with customers. Maurer had no big concern about more post-crisis state involvement in banks. According to Cecchetti, states' involvement in banks varied across countries, but there has always and generally been substantial state involvement in banks, as part of industrial policy. This also reflects, according to Ervin, banks' involvement in money creation, but now, state involvement has gone too far.

With regard to the impact from financial markets on the real economy, Robert-Charrue saw substantial effects from the financial sector, both prior to and during the crisis (bubbles, recessions etc.). The coming challenge will be inflation. Maurer raised SMEs' insufficient equity in Switzerland which may hamper their credit financing as well. Cecchetti emphasised much further need for balance sheet repair both among banks and borrowers from the real economy. Ervin pointed out a tendency towards renationalisation of banking, with banks refocusing on their home core markets and, if squeezed, withdrawing from foreign markets.

Andrew Gimber and Urs Birchler

After having awarded the 2012 SUERF Marjolin Prize to **Andrew Gimber**, the President of SUERF, Urs Birchler concluded the Colloquium and thanked the sponsors for their support, the University of Zürich for hosting the event and taking care of the local organisation, the speakers, the co-authors and the participants.