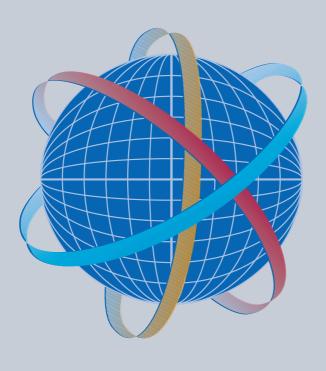


39th ECONOMICS CONFERENCE 2011

The Future of European Integration: Some Economic Perspectives



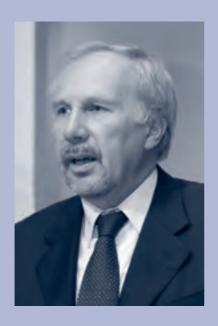
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Ewald Nowotny Governor Oesterreichische Nationalbank



Welcome Address

Ladies and Gentlemen,

I am very pleased to welcome you to the 39th Economics Conference of the Oesterreichische Nationalbank here in Vienna. I am proud that we have once again managed to prepare a highly interesting program featuring distinguished speakers and discussants from different backgrounds in academia, policy-making and policy-commentating who have in common a vital interest in economic issues. I should like to thank all of them in advance for coming to Vienna and for contributing to this year's Economics Conference. I would also like to take the opportunity to thank the staff members of the OeNB for their great efforts in organizing this event.

My particular welcome goes to Federal Minister Rudolf Hundstorfer, who will address the participants of this year's conference as our first speaker. I am very honoured to welcome Olli Rehn, Commissioner for Economic and Monetary Affairs of the European Commission, who will join us today. I am also very grateful that Lorenzo Bini Smaghi, Member of the Executive Board of the European Central Bank, has found the time to be with us today. Lorenzo Bini Smaghi is not only a dear colleague of mine on the Governing Council of the European Central Bank, he has also been one of the most eloquent commentators on the future of the European project over the last few months. Thank you very much for joining us today.

Finally, I would like to add that I am very glad to see such a densely packed audience here today. This confirms that this year's conference topic — "The Future of European Integration" — strikes a chord with many people from different walks of life. As you all know, a conference of this size is not arranged within a couple of days. In fact, the *lags of transmission* between a decision and

its visibility, which are well known from monetary policymaking, are also present in organizing a monetary policy conference. Sometimes a topic that appears to be timely and urgent in the planning phase of a conference has lost some of its appeal by the time the event actually takes place. This year, however, it was almost the exact opposite. When we first thought about a possible topic for the 2011 Economics Conference last fall, we did not expect – and could not have expected – how significant and intensively debated this very topic would be in May. The debt crises and institutional reforms, we have observed over the recent months have moved the topic of the future path of integration to the top of both the European and the international agenda. I am therefore looking very much forward to our discussions, which promise to be lively and – hopefully – also fruitful.



Ladies and Gentlemen, From its beginning, Europe has been characterized by alternating periods of integration and disintegration. This, however, is not to say that every step toward more integration has to be followed by a step in the opposite direc-

tion. Historica progress does not follow such a simple pattern. In the 66 years since the end of World War II, a model of European integration has developed which is - for the first time - neither based on strategic alliances nor on involuntary association. The connections between countries have become closer and closer over the years, even though this process has not been linear but has had its ups and downs, its "speed-ups and slow-downs" so to say. Every setback, however, was typically followed by a further leap forward. If the picture of circular movements is at all accurate, one should think of European integration not as a wavelike process but rather as a spiral stair where each cycle is accompanied by an upward movement.

In recognizing this pattern, I do not wish to diminish the challenges we are facing today. Nor do I wish to suggest that it will be easy to find the right answers to these challenges. We have heard many different assessments of the causes and underlying mechanisms of the current situation and equally many proposals, suggestions and solution strategies. Politicians, economists and commentators are in disagreement on many of the issues currently at stake. It is rather telling that this disparity of positions is also reflected in the public opinion and in noneconomic newspaper articles. Two well-known German-speaking authors, for example, recently expressed their views on the European project — and they have come to almost diametrically opposed conclusions. While one of them talks about the "Gentle Monster Brussels," the other praises the qualification and dedication of its bureaucracy.

In light of the already existing multitude of opinions, let me offer just some brief observations on our current situation and on a possible way forward.

Let me start by saying that I see a "double heterogeneity" as one of the main causes of our present constellation: a heterogeneity of national economic developments and a heterogeneity of supranational institutions. Let me begin with the latter – the heterogeneity of institutions. On the one hand, a majority of EU Member States have handed over the responsibility for monetary policy to an independent supranational institution: the European Central Bank. On the other hand, there is economic policy, which still is - in large part - the responsibility of the individual Member States. This set-up follows from the subsidiarity principle, which aims to respect and support local policy decisions wherever they are reasonable. We have had to realize, however, that it is often not easy to specify the optimal level of policymaking. The lack of more centralized economic governance is especially noticeable when the second heterogeneity – the one between countries – becomes visible, as has been the case in the recent past.

Cross-country heterogeneity is, in the first place, a structural phenomenon. Individual countries have reached different stages in their economic development; they are specialized in different areas of economic production; they are characterized by different sets of institutions and they have different preferences regarding the reach of the market and role of the welfare state. While these structural differences reflect national histories, national institutions and national preferences, they nonetheless not a strictly national affair. They are not, because the idiosyncratic situation in one Member State can easily spill over to other countries and to the EU as a whole. A fiscal crisis typically only breaks out at the end of a longer process of unhealthy and unsustainable development, although budgetary distress is sometimes — but not always — visible earlier on.

Cross-country differences are nowadays clearly reflected in almost any macroeconomic and financial time series, starting from interest rate spreads to economic forecasts. In fact, the signals coming from the most recent forecasts for the European Union are quite positive and the first quarter of 2011 has shown improvements that were larger than expected. The outlook for the global economy has also improved, and this synchronicity might lead to further positive reinforcement effects for the European economy. One cannot exclude the possibility of a slowdown in recovery, but I think that the risks of an L-shaped or a W-shaped development have decreased. The picture is particularly encouraging for Germany and for a number of smaller, export-oriented countries, while some peripheral countries are lagging behind, both in terms of GDP growth rates and of unemployment rates. Although this divergence is of course worrisome, we should not immobilize ourselves by focusing on the problematic cases alone. If we do, we might forget that on average the performance of the EU economy was good both during and after the crisis. The flexible way in which many countries reacted to the unexpected events was certainly facilitated by the past progress of European integration, which was accompanied by structural progress and an intensification of trade. The remaining divergence in economic development, however, is in my view a clear mandate to further reduce the institutional heterogeneity of economic governance.

In order to shape the new institutional landscape in the best possible way, it is useful to look back for a moment and analyze the trends and conditions that made a crisis of this size possible. A correct account of the crisis period is not only important for economic historians. It is even more important for today's policymakers as it enables them to identify the main weaknesses and to tackle them in an adequate way. In many respects the chronology of the recent contraction has followed the prototypical sequence of events characteristic for severe financial crises. The main preconditions were a number of slowly emerging disequilibriums on the real side of the economy, accompanied by suboptimal behavior and regulation in the financial sector. These real factors include, for example, the global imbalances that led to the "paradox" fi-



nancial flows from emerging to advanced economies. This caused a relative abundance of available funds in the advanced economies, which was further amplified by a rapidly growing financial industry and a period of rather low global interest rates. These elements, among others, contributed to an increase in household indebtedness and to low private savings rates. The financial sector, on the other hand, was eager to satisfy the demand for apparently safe assets by designing and selling exotic products. At the same time, one could observe a deterioration of lending standards, excessive leverage ratios and the extension of management contracts

that favored short-term behavior and excessive risk-taking. In the financial crisis, all of these factors worked together to cause a massive fall in asset prices, a wave of fire sales and an almost complete breakdown of the inter-



bank market. These turmoils in the financial market then led to a loss of confidence in the real sector and a plunge in production and trade. The shockwaves finally reached the fiscal sector and have led to a – sometimes huge – increase in deficits and in public debt. This was particularly true for countries which had recorded large imbalances before the crisis and which, in addition, had structural problems to struggle with. Often, these were problems that had been present for some time but had remained hidden in the periods of easy money, credit booms and increasing indebtedness.

This short and necessarily sketchy and incomplete account suggests that there have been weaknesses and failures in at least four areas of economic governance: the governance of the financial sector, of national economic structures, cross-country balances and fiscal policies. We need reforms in all four of

these areas. This is important to stress since the events of the recent months have put fiscal problems and the role of the government to the fore. It goes without saying that national and supranational bodies did not work in the most efficient way before and during the crisis and that it is necessary to improve their functioning. On the other hand, however, this is only one field that calls for reform efforts.

Ladies and Gentlemen,

We have already seen some reform progress over recent months. I do not need to give you a detailed account of all the institutional adaptations and innovations which have been put into place recently or which are scheduled to be implemented in the near future. First, because most of you will have followed these events closely and second, because I am sure that we will hear much more about them in the course of this conference. I just want to mention some of the innovations that are related to all four areas that I identified before as the crucial targets of reform: the modification of the Stability and Growth Pact (to allow for a higher degree of automatism of - and a stricter adherence to – the rules); the Euro Plus Pact, which will improve the coordination of national economic policies and help identify macroeconomic imbalances; the set-up of new supervisory authorities for securities, banking and insurance; and the establishment of the European Systemic Risk Board and the European Stability Mechanism to monitor macrofinancial stability and manage future sovereign debt crises. At the same time we have also seen that some countries have tackled their own specific structural deficiencies to be better able to cope with the current crisis and with future economic shocks.

The biggest challenge for this new institutional architecture is to implement improvements in monitoring and coordination with respect to fiscal policy and macroeconomic imbalances. In both fields, we will have to find rules and regulations to help us decide when a country's budgetary or macroeconomic development looks sustainable and when it seems to be on the wrong track. But this task of identifying fiscal or macroeconomic imbalances is inherently difficult. In most cases, it is not possible to draw a clear line between the states of insolvency and illiquidity or between a macroeconomic divergence that is just the consequence of a catching-up process and one that is the sign of an alarming disequilibrium process.

In this context, I see a number of guiding principles that could be useful in defining a new structure of European economic governance.

First, we tend to be particularly alerted if we see balances in the red, if we see minus signs, negative numbers and apparent deficits. As a consequence, most reform activities normally concentrate on the bad times and on deficit countries. But we should not forget that the fiscal crisis has become so severe because most countries did not manage to restructure and improve their budgets during the good times of rather high growth. As it is much easier to implement far-reaching reforms when the general economic outlook is

positive, we should put much more emphasis on appropriate anticyclical policies during periods of upswing.

Second, given the uncharted territory that we are currently exploring and the many uncertainties concerning the functioning and the effects of each institutional reform, it is probably wise to take a gradualist approach and to gradually add new elements to the already existing and functioning structures. Third, apart from establishing a new institutional architecture, we also have to accomplish the more immediate task of reducing debt levels and securing the sustainability of public finances. Given the exceptional nature of the current crisis, it is necessary to think carefully about a reasonable and balanced reform package to be able to distribute the costs of the crisis in an equitable manner.

Ladies and Gentlemen,

Coming to the end of my remarks, I would like to emphasize that we also need to *improve* — and maybe regain acceptance for — our unique and precious European project. I am confident that European integration will proceed despite the difficulties that we have faced over the past years. I look forward to having a day and a half with you to discuss the future of Europe from a multitude of perspectives. I hope you will find our Economics Conference a useful and an insightful event.

Rudolf Hundstorfer

Austrian Federal Minister
Ministry of Labour, Social Affairs and Consumer Protection



The Future of European Integration – Some Economic Aspects

Good morning Ladies and Gentlemen, I am very pleased to be able to address you today on behalf of Federal Chancellor Werner Faymann, who is sorry for not being here this year and sends his best wishes for a successful conference.

This year's Economics Conference addresses the future of European integration, a topic which is very much at the centre of political discussion these days. While we have managed to make some major steps forward in the integration process lately – such as agreeing on the Treaty of Lisbon – this process has been strongly affected by the financial crisis and its consequences.

Let me start with a few thoughts on some recent developments.

Europe finds itself in challenging times indeed. Greece and Portugal, in particular, are struggling with the requirements of consolidation and massive budgetary restraint. In this difficult situation we must stand by the Greek and Portuguese people, not only because of European solidarity, but also because defending the integration process - and especially the euro - is inour common interest. Greece and Portugal need a perspective for growth and development. Wages are not the enemy of the economy but a key motor, prompting growth and jobs. We must see economic and social policies as connected and equally important areas of European integration.

Consolidation measures must be well balanced, and they must be tolerable for all. They must be fair, and they must not harm economic recovery. Sustainable consolidation will be based on sound economic growth. Drastic cuts in social expenditure may improve the budgetary situation in the short term. But in the long run, economic perfor-

mance would suffer. That's why we need a fair system of burden sharing.

I believe in healthy state budgets, that is to say, budgets that can be flexible in bad times to support the economy, but achieve a surplus in good times to finance the challenges of the future. Having a balanced budget can-



not be our only objective. We also need a fair budget to create jobs and growth. It is clear that the consolidation of national budgets must be tackled in line with the state of the economy. Without growth there will be no budgetary improvement.

Despite some challenges following the crisis, the EU is still in a better position than the USA and Japan, and the euro area is less indebted than these countries. It is true that budget deficits have risen considerably, but in most cases not to an alarming extent. We have managed to preserve the stability of the euro area and that of the EU at large because we remembered what the European idea is all about, and because the concept of European integration is strong and sustainable. However, we still have a lesson to learn here, and we must take political measures to avoid a similar crisis in the future.

Our coordinated approach to boosting the single market was essential in dealing with the crisis. However, we now face considerable challenges in consolidating our budgets while building a socially balanced, sustainable and competitive future for Europe by implementing the Europe 2020 strategy.

This strategy brings together two processes which were separate in the past: the monitoring of budgetary policy in the Stability and Growth Pact on the one hand, and employment, education, social and environmental policies on the other.

I consider this linkage as the goal of our growth strategy: it no longer rests exclusively on an increase in gross domestic product but also on smart, sus-



tainable and inclusive growth. In addition to these very positive elements of the Europe 2020 strategy, budgetary consolidation policy and increased competitiveness clearly continue to be on the agenda. However, two elements should be at the centre of all reforms: firstly, there should be a "symmetric" approach to imbalances, that is, deficit countries as well as surplus countries have to contribute. Secondly, the real economy, people's lives, must be at the centre of all activities. In the case of Greece and Portugal, this means helping these countries to grow out of the

crisis (and not just reducing deficits and public debt).

The Europe 2020 strategy is implemented for the first time this year, using the new framework of the "European semester", which will contribute to improved coordination and monitoring of national economic policies.

Austria's National Reform Programme, which we have just submitted together with our Stability and Convergence Programme, shows our clear focus on the aims of the Europe 2020 strategy, in addition to consolidation.

The Euro Plus Pact, which was recently adopted to promote competitiveness, increases employment, improves the long-term sustainability of public finances and strengthens financial stability, provides for concrete policy measures to be set by individual Member States.

For Austria it was of great importance in this context to ensure the participation of the social partners and respect for collective agreements. Austria will continue to fight for a European economic governance that serves the interests of European people, including qualitative growth, full employment and a strong European social model. We must place more and better jobs at the top of the European agenda and at the heart of EU economic governance.

Regarding pensions, Austria has successfully advocated a focus on the *effective* retirement age. Austria considers the sustainability of pensions and health services to be central to fiscal consolidation. However, focusing on *sustainable* public pension systems is not enough — we also need to make sure that they are adequate.

Austrian pension policy will continue to depend on a strong first pillar, and the recent crisis proves us right in this approach. And let's not forget that

the issues of sustainability and population ageing not only concern *public* pension systems, but they are equally important for company and *private* pension schemes. Effective supervision and regulation of financial markets with a focus on security is what we need here.

Bold steps have been taken in the field of financial regulation with new supervisory structures, the regulation of hedge funds and the Capital Requirements Directive. But a lot of work still needs to be done if we want the financial sector serve the real economy. After all, it was non-transparent financial products that caused the financial crisis. Therefore, we must do more to close the remaining gaps in financial regulation and make every effort to prohibit high-risk financial products. Improved consumer protection needed here, as well as better risk management by stronger and more independent supervisory bodies.

The need for EU action is greater than ever in order to regain the trust of EU citizens. In this context, a financial transaction tax will help to stabilise the financial sector on the one hand and bring in additional revenue for social progress, on the other. Austria sees the financial transaction tax as part of a comprehensive financial market package. I am pleased, therefore, that the European Council noted in March that the introduction of a financial transaction tax at EU level and internationally should be explored and further developed.

It is important to highlight again and again the interaction between general economic policy — including monetary, fiscal and wage policies - and the development of labour markets. As Minister of Labour, I am proud of the fact that, together with the Netherlands, Austria has had the lowest unemployment rate in the EU for several

months now. In this field we are European champions.

Now as the end of the crisis is in sight, but public sectors are still heavily burdened by measures against the crisis, we must not stop pointing out that excessive consolidation measures would slow down the recovery of the labour market and therefore, the entire economy. Special emphasis must be placed on youth employment, which is strongly affected in most Member States. Employment opportunities for young people need to be provided. Austria has created and continues to offer a job guarantee for young people, because young people need a chance of sustainable integration into the labour market, particularly in difficult times like now. And I believe we should also work on giving young people a legal right to get the education and training they need for this.

We still face increasing unemployment in Europe, and many Europeans are still confronted with great social hardship. However, these people who are now under so much pressure did not cause the economic crisis. Consolidation must therefore not mean taking even more from those who have already lost so much.

We must improve working conditions for all European workers and fight against undeclared work, as well as social and wage dumping, by means of legislation and within the social dialogue.

Minimum standards have always been a core element of the European social model, and they are still relevant today. We must work on raising these minimum standards for all European employees so that countries with high standards will not come under pressure. On the contrary, our aim should be a gradual increase in social standards across Europe.

In Austria we have recently passed the law against wage- and social dumping which is aimed at ensuring equal wage conditions for all employees working in Austria. The new law, which was introduced in connection with the opening of our labour market on the 1st of May, will facilitate fair competition among Austrian companies, as well as with companies not established in Austria.

Allow me to say in conclusion that my guiding principle for the future is to secure employment, improve social cohesion and ensure social peace. Only social peace can guarantee democracy and the peace project of the European Union.

Ladies and gentlemen, thank you very much for giving me the opportunity to address you today. I wish you all the best for today's conference.

Session 1: Regaining Fiscal Strength, Restoring Growth

Olli Rehn
Commissioner for Economic and Monetary Affairs
European Commission



Keynote Address

Sehr geehrter Herr Gouverneur, meine Damen und Herren!

Ganz herzlichen Dank für die Einladung zu Ihnen zu sprechen.

In the past decades I have been a frequent visitor to Vienna, in particular when I was responsible for Enlargement, and I am again honoured to speak to such a distinguished and international audience.

Vienna has always been a hub between East and West. While the economic transformation in Austria's neighbouring countries has been a fascinating process, it is equally remarkable how well the Austrian economy was able to adjust to it and to turn it into an East-West success story.

Let me however start with one of the Austrian founding fathers of modern economics, Joseph Schumpeter. In his book "Das Wesen des Geldes" 1 and if I read my German correctly, "Wesen" has a double meaning, first "system" but second "being" — he wrote: "Der Zustand des Geldwesens eines Volkes ist ein Symptom aller seiner Zustände." ("The condition of the monetary system of a nation is a symptom of all its conditions.") And Schumpeter went on to relate this to human condition: "Nichts sagt so deutlich, aus welchem Holz ein Volk geschnitzt ist, wie das, was es währungspolitisch tut." ("Nothing shows as clearly what kind of wood a nation is cut from, than what it does in monetary policy.")

More than 80 years later in our economic and monetary union, you may ask from what kind of fabric Europe is cut. Across Europe, we are seeing a support fatigue on the one side and a reform fatigue on the other. Many ask: "Will this crisis never end, are the support measures necessary, are the re-

forms too demanding — is the European response on the right track?"

Yes, we are on the right track. It has been necessary to take immediate action of financial support and equally of reform and adjustment in the countries facing a sovereign default or a banking meltdown. We must be firm in requiring full implementation of the measures, but also be patient, as some measures may require time to show effect.

To understand our response, let us take a look back in time in the euro area. Over the last decades, the European economy has grown together. Our product and financial markets integrated. The Southern enlargement first and the Eastern enlargement later on implied that the economies in the



South and in the East were catching up, which in turn required economic adjustment in the so-called old Member States.

The introduction of the euro provided further benefits. For the catching-up economies, the euro allowed better access to international capital markets, while for the trade-oriented economies it reduced the transaction costs.

Schumpeter, J. A. 2008. (New Edition). Das Wesen des Geldes. Ed. Mann, F. K. Göttingen: Vandenhoeck & Ruprecht.

In the pre-crisis period, the euro area as a whole enjoyed macroeconomic stability with stable inflation and some improvement in fiscal policy. However, inside the euro area, macroeconomic imbalances were built up over the last decade.

Our integrated financial market channelled the savings from countries with slow growth in domestic demand to countries with current account deficits, where domestic demand was thriving. In some cases, credit flowed into housing and other real estate, resulting in unsustainable leverage and asset prices. Also wages increased faster than productivity, thus weakening the cost competitiveness of some economies.

By 2007–08, the unravelling of the subprime risks triggered the current crisis. At that time, those imbalances in the EU were at their peak. The financial sector in the EU Member States could not absorb the risks it had taken. Subsequently, the public sector stepped in. All parts of the economy benefitted from the public response, because this did not only involve aid to banks, but also to SMEs and to workers, for instance by subsidising shorter working hours. The fiscal stimulus measures were coordinated in the European Economic Recovery Plan.

Our fresh economic forecast confirms that this powerful response has paid and has produced results. The economic recovery of Europe is maintaining its momentum despite turbulence and tensions in financial markets. Its base is broadening from exports to domestic demand, implying that growth is becoming more balanced. In 2012, we will reach the pre-crisis level of production in the EU.

The policy measures made the euro area labour market remarkably resilient during the recession, with employment declining clearly less than output. But it also implies the recovery in production will now be somewhat faster than employment growth.

Ladies and Gentlemen,

Most economists agree that it is the role of the public sector to step in when so-called tail risks materialise, i.e. risks that are very rare but very large. In fact, only the public sector has that capacity. To do so, the public sector needs to be in a healthy condition itself. However, this was not the case in all euro area or EU Member States. The crisis exposed those countries where imbalances were large, where public finances were not in a good shape, and where there was a lack of structural reform.

Therefore, it is not correct to speak of a crisis of the euro and the monetary union. It is a crisis of certain Member States, with the potential of severe economic ramifications for the rest of the euro area.

First, the value of the euro has not changed over the past year; the effective euro exchange rate was last Friday almost precisely the same as in the beginning of May 2010. Second, we have contained the crisis into the three countries in programmes. This is evident both from the sovereign bond spreads and the overall economic recovery in Europe.

While counterfactual scenarios are always difficult to construct, there is in my view no doubt that, without the EMU, the global financial crisis would have unleashed a series of devastating currency crises in Europe. The euro has saved us from that by serving as a protective shield. This has also been the case for Austria.

With the example of Lehman, we have seen what devastating consequences a default can cause, not only for direct creditors but — what is im-

portant — also for third parties who could be hit by spill-over effects in our integrated economy.

Precisely to prevent another downward financial spiral getting out of control, we needed to prevent Greece from defaulting in May last year. The ad-hoc financial assistance package was tied to strong conditionality of reforms and of debt reduction. But we also needed to prevent contagion. A week later, we created the temporary financial backstops – the EFSM and EFSF – to manage any further sovereign financing problems which could threaten financial stability in Europe. Later last year, we also decided on the principles of a permanent stability mechanism, which will replace the temporary ones in 2013.

In December last year, the temporary facilities were brought into action when we needed to grant conditional financial assistance to Ireland. On 16 of May, a similar decision was made on a programme for Portugal.

The decisions, together with the very substantial reform measures taken in programme and in many non-programme countries — particularly on fiscal consolidation — and the very responsible policy approach taken by the ECB, have allowed us to contain the sovereign debt crisis into the three countries.

Some worry that this is not without risks for the creditor countries. But we need to see the vastly greater risk of inaction: if we had not given the comprehensive policy response, devastating risks would have materialised immediately. This is my response to those weary of support: The rationale of our strategy is to prevent the great risk of a financial meltdown. We have contained but not banned that risk yet.

And my response to those weary of reform in the programme countries is

that reducing the excessive level of public debt does indeed require major efforts on several fronts to reach the necessary primary fiscal surplus for an extended period of time.



We have relevant and positive examples that reforms can be done. Belgium in the 1990s was able to maintain a large primary surplus for an extended period of time. Take Latvia and Romania. Both receive financial assistance tied to a programme of conditionality under a Treaty provision.

Latvia faced a collapsing economy after the burst of the construction and financial sectors, an oversized public administration, ballooning deficits, and quickly increasing debt and unemployment. In spite of fiscal consolidation measures amounting to over 15% of GDP since end-2008, growth has picked up in mid-2010, exports are booming and unemployment is quickly decreasing, though it still remains very high.

Romania has for example implemented a far-reaching pension reform. The old system would have led to a gradually increasing fiscal deficit of the pension system that would have grown from 1.3% of GDP in 2009 to 7.6% of

GDP by 2035. The reform, in place since January, stabilizes the fiscal position of the pension system.

Romania has meanwhile been able to access financial markets. For Latvia, we expect this to happen in the second half of this year, ahead of schedule. In view of the engagement of the Austrian banks in Eastern Europe, these are very encouraging developments, and I am glad to add that the banks have contributed to this with their responsible behaviour, especially through the Vienna Initiative.

It is the obligation of the recipients of financial assistance to do their utmost to deliver on their programme. It is clear that Greece has to seriously reinforce the implementation of budgetary savings and the economic reforms before any new steps may be taken. Likewise it needs to implement its privatisation programme. This is a matter of urgency, and I expect new measures to be announced shortly.

It is also clear that financial assis-



tance is a measure only needed when other measures have failed. Its use implies that policies have not been appropriate for a long time before. This has to be addressed and it is being addressed.

It sounds simple but is still essential to recall that prevention is always bet-

ter than correction — not to speak of crisis management.

That is why we are in the process of reforming economic governance in Europe. Last September, the Commission introduced a legislative package consisting of three main elements:

- 1. to strengthen the Stability and Growth Pact in order to prevent unsustainable fiscal positions emerging, and to correct such positions promptly, should they nevertheless emerge,
- 2. to introduce surveillance of macroeconomic imbalances and divergences in competitiveness, with corrective actions recommended if excessive imbalances are identified, and
- 3. to create a more effective enforcement mechanism, with earlier and more automatic sanctions in the case of violation of the rules.

Many people doubt that much will change. I have to disagree. I am fully confident that we will finally end up with tough fiscal rules and with a new emphasis on high debt levels, backed up by a much stronger sanctions mechanism than up until now, and also by an effective framework to deal with broader macroeconomic imbalances.

I trust that the Council and European Parliament can agree on the package in June, so that we will have the new rules in place shortly.

Strong national fiscal frameworks are also a necessary element of the governance reform. Austria provides a good example on this with its national stability pact created in 1999 and improved over time.

Ladies and Gentlemen,

It has also been clear for long already that the current stage of the crisis is a severely intertwined combination of a sovereign debt crisis and banking sector fragilities. It is clear as well that we cannot solve one without solving the other. We need to resolve both in parallel.

That is what we have been doing. To conclude, let me summarise this:

First, we have prevented a financial meltdown.

Second, we have contained the sovereign debt crisis into three countries, whose public finances, banking sectors and growth policies are being totally revamped.

Third, we embarked on fiscal consolidation process across Europe to reduce fiscal deficits and to put the debt ratios on a downward path. Moreover, many Member States are implementing growth enhancing structural reforms that were considered impossible just a year ago.

Fourth, we have created a new architecture of financial regulation and supervision, with tough rules and competent supervisory authorities.

Fifth, we are about to conclude a major reform of economic governance,

in order to prevent imprudent fiscal policies and detrimental macroeconomic imbalances in the EU.

We are not there yet, the work goes on. The coming weeks before the summer recess will be crucial in terms of completing our crisis response, concerning the bank stress tests, the stability mechanism and Greece.

There will difficult decisions ahead. But we are making significant progress. The most telling evidence of progress is the economic recovery that we are now witnessing in the great majority of the Member States, Austria included. I have no doubt that, with perseverance and determination, we will overcome also the remaining challenges.

Hence, my response to Joseph Schumpeter's question "what Europe is made of" is the following:

"Europa ist aus hartem Holz geschnitzt." ("Europe is cut from tough wood.")

Vielen Dank!

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The Euro Area After the Crisis

The list of challenges confronting Europeans is long and intractable. Will the euro area exist, with all its present members and several more, ten years from now? If it does still exist, how radically will it have changed? Will the fast-growing European economies of the past decade or two recover? Or will countries that have been relatively sluggish now outperform them? What sort of financial system should Europe seek? What structural reforms are necessary? should Europe address How multifaceted challenge of demographic change? Can the new members in Central and Eastern Europe (CEE) continue to converge on the incomes of richer older members? The challenges ahead for Europe are, then, many, various and large. Moreover, the rapid rise of China and India, each of which has more than twice the population of the entire European Union, is shifting the balance of the world economy at a rapid rate. The periphery is on its way to becoming the centre, while the centre is, in all probability, on a long journey back towards being the periphery. So which of these issues do I intend to address today? The answer is given in the prospectus for the conference, which refers to "the long-term impact of the crisis on the process of European integration". The euro area, many will agree, needs radical reform. The question is how to carry out those reforms. In the process, I hope also to consider some aspects of another question: how to promote more rapid growth.

It was not logically impossible for the euro area to work well as constructed. But it was contingently unlikely. The attempt was made to impose the 19th century gold standard mechanisms, in a somewhat updated guise, on heterogeneous democracies with generous welfare states, rigid labour markets and government-insured financial systems. That has not worked, because nobody is prepared to accept the implications, which include, above all, labour market flexibility, sovereign default and, perhaps most important, waves of bank failures. If the euro area is to survive, with its current membership, it will need to become a very different union. There are some big choices to be made. The time has come to make them.

I am not surprised by the difficulty. It was as an English-speaking sceptic that I wrote some 20 years ago that the project for a monetary union was an



example of the core principle of Greek tragedy: hubris (pride); ate (folly); nemesis (destruction). The loss of the exchange rate and monetary policy safety valves in moments of crisis would rob national governments – the focus of politics now and in the future – of their freedom of manoeuvre. But in an integrated currency area, the practical consequences of defaults for confidence in the financial system would be too severe to contemplate. Creditors would feel forced to rescue debtors and debtors would be forced to obey creditors. In the process, the euro area would become a machine for exacerbating political frictions among member nations, not reducing them. These worries have surely been vindicated by events. With

this background, I would like to address three questions. First, why did this crisis happen? Second, is the crisis being addressed in a sensible way? Third, what reforms are needed to secure the system in the long run and how do they bear on the needs of long-term growth?

Why Did the Crisis Happen?

Bad diagnosis gives bad medicine. The crisis is not solely due to fiscal indiscipline, with the admittedly important exception of Greece whose fiscal indiscipline was egregious. But among the other Member States, fiscal policy does not demarcate countries that have avoided crises from those that have not. Thus, in the years leading up to the crisis, Greece exceeded Maastricht treaty limits nine times, Italy six times, France, Germany and Portugal five times, Austria, Ireland, Netherlands and Spain four times, Belgium once and Finland and Luxembourg never (chart 1).

In 2007, immediately before the crisis, Ireland and Spain both had budget surpluses and their net public debt was 12% and 27% of gross domestic product, respectively. It is simply wrong, then, to argue that the difference between the crisis-hit countries and those that have been crisis-free is their fiscal policies. More precisely, bad fiscal policy is a sufficient, but not a necessary, condition for a crisis. So long as bank debt is treated as if it were off-balance sheet public debt, a banking crisis will necessarily cause a fiscal crisis. Moreover, so long as banks are the principal financial intermediaries, large current account imbalances are also almost certain to generate banking crises, since they entail private sector financial deficits in deficit countries that are financed by rising bank credit, relative to incomes (chart 2).

In short, large current account deficits generate banking crises that then ultimately generate fiscal crises. This, in case anybody has missed the point, is

Chart 1

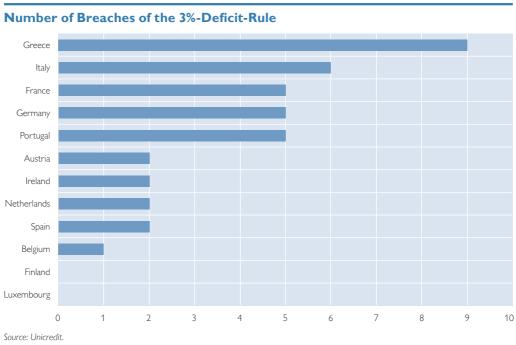
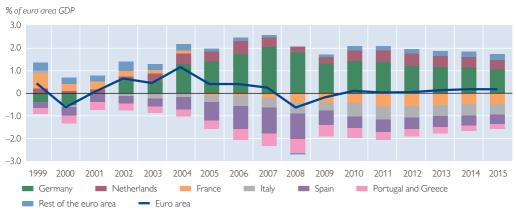


Chart 2

Current Account Imbalances in the Euro Area



Source: IMF, World Economic Outlook database, April 2011.

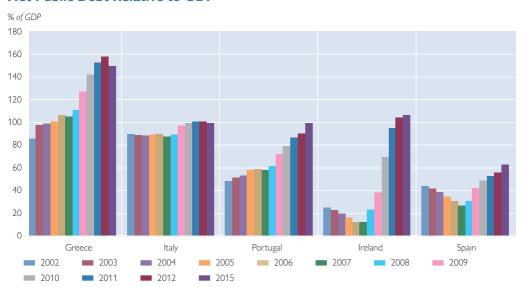
precisely what has happened in Ireland and Spain (charts 3 and 4).

So what did drive the crisis? The answer is huge accumulations of debt in either the private or the public sectors. The notion, central to the design of the euro area, that the private sector's finances would be inherently stable turned out to be totally false, just as it did outside the euro area, in, for example, the USA and UK, to name but two. More precisely, the macroeconomic

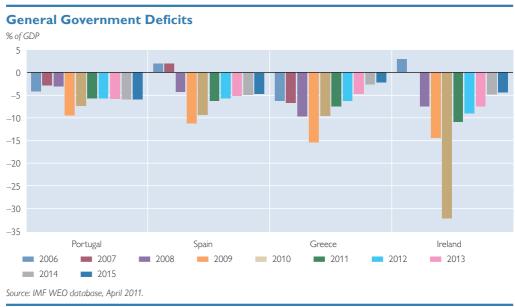
balance of the euro area was based on huge private sector surpluses in some countries, particularly Germany and huge private or public financial deficits in others. In effect, this is how the economy of the entire euro area balanced, given the monetary policy objectives of the European Central Bank. Meanwhile, vast flows of capital flowed from surplus countries into the private and public liabilities of deficit countries via lightly capitalised banking systems.

Chart 3

Net Public Debt Relative to GDP



Source: World Economic Outlook database, April 2011.

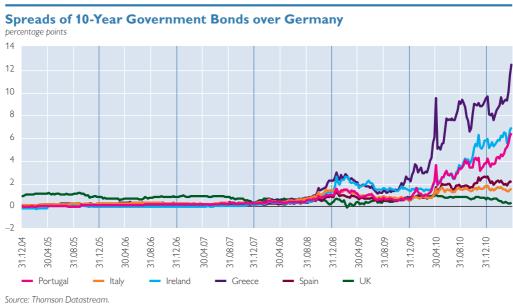


This crisis, then, was created by the intersection between macroeconomic imbalances, defective financial intermediation and bad spending decisions, driven by profligate public or profligate private sectors. In the end, it has made very little difference, if any, whether the private or the public sectors were primarily at fault, not least because

public debt is held by private financial institutions and insolvent private financial institutions are uniformly rescued by the public sector. It is essential, in fact, to forget the idea that, in current circumstances, the private and public sectors are distinct. They are not.

An obvious question is why these cumulative macroecononomic diver-

Chart 5



gences occurred and whether, in particular, this should be viewed as a temporary or a structural difficulty. One reason was that a number of countries found themselves able to borrow on much more favourable terms than ever before (chart 5).

This seems to have led to a "rush of blood to the head". That is a one-off event. A second reason was the failure of markets to differentiate among borrowing countries. Again, that will not be the case again, for at least some time. A third reason, however, is inherent in a currency union: booming economies tend to have high inflation and so relatively low real interest rates and vice versa. So divergences tend to cumulate. Then, when divergences become extreme and the bubbles finally burst, markets find themselves overextended. The result is internally driven regional boom and bust cycles. One consequence of the cumulative divergences of the pre-crisis years should, however, be stressed. Not only did an enormous quantity of bad debt accumulate, but so, too, did huge divergences in competitiveness (chart 6).

These must now be reversed. This is particularly important for countries with

very large current account deficits, despite very weak economies: Greece, Portugal and Spain are the obvious examples. But that legacy makes the postcrisis adjustment far more difficult, since it implies both weak growth and very low inflation for lengthy periods, both of which tend to worsen the debt overhang. In these respects, the predicament of the countries in trouble is far worse than that of, say, Germany during its long period of "competitive disinflation".

How Did the Euro Area Deal with the Crisis?

When it became evident that Greece had lied about its true fiscal position, a panic emerged in the markets. It was quickly agreed that a default would be massively destabilising for the euro area as a whole, because of direct and indirect linkages created via the financial system. In an interconnected currency union, the crisis of one country, however small, is potentially the crisis of all. This, in short, is a system simply riddled with externalities. So bail outs were arranged for Greece, Ireland and now Portugal and the European Financial Stability Fund was created. But we can now see that these efforts have not

Chart 6

Manufacturing Unit Labour Costs Relative to Germany



Source: OECD

restored confidence in the private sector, which clearly still fears insolvencies. This difficulty has, no doubt, been exacerbated by the evident conflicts among Member States over whether sovereign debt restructuring should be considered under any circumstances, with Germany saying "yea" and most others saying "nay". Further difficulty is created by the failure to separate bank debt from sovereign debt, which makes the potential (or actual) debt burden of sovereigns so much worse, with Ireland being far and away the most important case of this concern. In any case, with a decision not to restructure debt now, but to consider restructuring from 2013, on new debt, private sector flows tend to dry up for any country in difficulty: creditors can see quite easily that it will be extremely hard to sell debt to creditors who fear being "bailed in" after that date. That means that it may be impossible to refinance any debt they purchase now. That, in turn, makes it next to impossible to finance troubled countries in the market. As Paul de Grauwe, of Leuven University, has noted, there is a zone of indebtedness where there exists a risk of multiple equilibria. It is extremely easy to fall into a bad equilib-

Table 1

Bank's Exposure to Public Debt End-2009

| | Italy | Greece | Ireland | Portugal | Spain | | |
|-------------|--------------------|--------|---------|----------|-------|--|--|
| | % of tier1 capital | | | | | | |
| Germany | 48.0 | 12.0 | 8.0 | 7.0 | 21.0 | | |
| France | 26.0 | 6.0 | | | | | |
| Italy | 157.0 | | | | | | |
| Greece | | 226.0 | | | | | |
| Ireland | | | 26.0 | | | | |
| Portugal | 6.0 | 9.0 | | 69.0 | | | |
| Spain | | | | | 113.0 | | |
| Belgium | 76.0 | 14.0 | | 9.0 | 11.0 | | |
| Netherlands | 14.0 | | | | | | |
| Cyprus | | 109.0 | 10.0 | | | | |

Source: Nomura and BIS

rium without the right sort of support. Yet providing such support in a multicountry currency union is evidently very hard, since it looks like a blank cheque to the suppliers of the money.

In effect, the choice becomes either debt restructuring quite soon or official funding for the indefinite future. Both alternatives are horrible. The former choice risks a financial, cum sovereign debt crisis, of considerable magnitude. The latter means raising large amounts of money, to finance troubled countries, indefinitely. (Indefinitely, though, is not the same as forever.) It is possible – even likely – that almost all of the debt of countries in trouble will end up on the balance sheets of other Member States and the International Monetary Fund. Moreover, while it is conceivable that the countries in trouble will ultimately be restored to fiscal health, it is far from certain. The political and economic challenges for Greece, Ireland and Portugal are, in different ways, all enormous. It is quite possible that the members who finance them will lose some of their money. That will be hard to explain! Moreover, given the close links between the banking sectors and the governments (table 1), a sovereign default more or less necessitates a banking crisis, as well.

This will involve the European Central Bank or at least the system in politically embarrassing losses and the profound dilemma of what it is supposed to do, after such a crisis, to restore the banking system to some sort of health: is it a genuine central bank or is it the European Monetary Fund?

Lessons of the Crisis

I do not want to comment more on how to deal with the current crisis, except to note the many difficulties. It is not true, for example, that cutting fiscal deficits sharply will necessarily improve the situation of vulnerable countries if the result is to weaken the balance sheets of the private sector and so the fragility of the state-insured banking system. This has to be a concern in, say, Ireland or Spain. But let us consider, in turn, some of the long-term lessons for reform of the euro area. Again, I am not going to look at the specific plans now under way, but the fundamental principles.

First, get the diagnosis right. It is not just a fiscal policy problem. Tighter application of the Maastricht treaty fiscal rules would not have prevented the crises, except, most obviously, in the case of Greece. An essential role was played by the internal imbalances and associated flows of funds, via the banking system, into financing asset bubbles. Thus, private sector imbalances can be as dangerous to stability as public sector imbalances. Effective supervision and regulation of the financial system is essential. So, too, in my opinion, is the possibility of serious discussion of macroeconomic imbalances. Surplus countries need to understand that they have to finance countries in deficit, one way or the other. Otherwise, their surpluses will prove unsustainable. Thus a toughened growth and stability pact will not solve the underlying problem.

Second, fix the problem caused by the symbiosis between banking and the state. The banking sector needs to be able to survive sovereign debt restructuring and sovereign creditworthiness needs to be able to survive bank failures. One of the arguments for Eurobonds up to, say, 60% of GDP is that it would provide banking systems with unimpeachable assets, so protecting themselves against the failure of their own governments. Also crucial is the development of a euro area-wide banking system and that would be far better able to cope with problems in any one country. Moreover, the banking sector as a whole needs to be far better able to cope with shocks. Much higher capitalisation is, in my view, a crucial element of such a strengthening. It would also be very helpful if more of the flow of capital



went outside the banking system and particularly in the form of equity. Financial sector reform is, in short, an essential element in making the euro area system as a whole more robust.

Third, be able to offer substantial liquidity on affordable terms to governments in temporary difficulties. The toughness comes in the conditions imposed not in the interest rates that need to be paid. This is the only way to deal with the evident problem that members of the euro area are more like emerging countries borrowing in their own currencies than countries able to borrow in their own. Along with Eurobonds, this should eliminate the risk of severe sovereign debt crises. But, in the last resort, it will be necessary sometimes to accept debt restructurings. It is crucial, if that is to happen that the reforms of the banking system, to separate it more fully from the state, have also taken place.

Fourth, introduce systems of automatic wage flexibility. In the absence of exchange rate adjustments, the principal adjustment must come via wages. While

big wage falls create severe risks of debt deflation, the alternative is even worse. So it must be possible to adjust wages swiftly when competitiveness is impaired. Whether that is possible in European welfare states is, however, an open question. But many years of painful wage deflation is immensely costly. This sort of process has to be accelerated.

Conclusion

The survival of the euro area with its current membership is very far from certain. It requires movement in three directions simultaneously: towards greater solidarity, greater flexibility and greater discipline over both private and public sector finance. The members are bound together more fully than many may have realised when the project began. But that is now evident. A crisis in one creates problems for all. The question is whether it is politically possible to draw the necessary conclusions.

Panel 1: Reforming Fiscal Policy Rules for the Euro Area

Ernest Gnan Counsel to the Board and Head of the Economic Analysis Division Oesterreichische Nationalbank



Introductory Remarks

From the early beginnings of the idea for European Monetary Union (EMU), it was clear that a common currency needs to be accompanied by adequate mechanisms for fiscal policies. While for the proponents of the *coronation theory*, a common currency should only follow after achieving political union with a centralised fiscal policy. The road actually chosen was the opposite: forming a monetary union, with rather limited transfer of political sovereignty in other areas of economic policy.

For fiscal policy, a three-pronged approach was chosen according to the Maastricht Treaty to ensure sound fiscal policies in individual EMU countries, and thus ensure fiscal flexibility to absorb asymmetric shocks and to avoid negative spillovers to euro area Member States:

- First, market forces were supposed to sanction governments who violated fiscal virtue and to reward those who adhered to it. To this end, monetary financing of governments by central banks, bailouts of governments by other governments and by the EU as a whole as well as privileged access of governments to financial institutions were prohibited by the Maastricht Treaty.
- Second, peer pressure among EU finance ministers, heads of state and government and high-ranking officials represented in the Economic and Financial Committee were expected to ensure fiscal rectitude.
- And third, fiscal rules with rather precise quantitative ceilings for fiscal deficit and debt ratios as well as elaborate procedures in the event of violations were introduced.

To true believers, each of these three mechanisms theoretically should by itself have ensured fiscal discipline. From the beginning, skeptics held against this framework the very fact that employing

all three channels bore witness to a lack of trust in the reliability of any of them.

It seems the critics unfortunately were right: Market forces, including their guideposts such as rating agencies, were late in detecting and appropriately pricing in risks to fiscal unsustainability. Once they did, they acted very abruptly and, as some argue, also excessively. Peer pressure worked incompletely or towards soft implementation of the rules. The rules themselves were relaxed once a sufficiently influential group of countries found difficulties in adhering to them in 2005, and the regulations became de facto not executable in the course of the crisis from 2009 onwards.



Where do we stand now? Belief in the ability of market forces to ensure fiscal discipline early on has vanished because of markets' failure to deliver early warning and because the respective EU rules have been compromised by various emergency measures, since market forces, once hitting, were felt to be overwhelming and damaging. Peer pressure towards fiscal soundness now seems to have been replaced by peer pressure to support fiscal rescue packages for crisis countries, conditional on consolidation and reform packages. So, what about the remaining device: fiscal rules?

A comprehensive package of reform has been presented several months ago. It provides some tightening in the area of fiscal policy as well as some broadening to include macroeconomic imbalances. The European Central Bank has officially and very clearly signaled that reform of the rules is called for but that the reforms envisaged by the European Council fall short of what is required. Currently, the new framework is being discussed by the European Parliament, and also the European Parliament is pushing for extending reversed qualified majority voting to more areas of the legislation, to facilitate decisionmaking and give the rules more bite. On the whole, it seems the lessons from the current crisis have only been learnt to some extent.

The two panelists, Daniela Schwarzer from the Stiftung Wissenschaft und Politik, Berlin, as well as Professor Wolfgang Franz, ZEW, Mannheim and German Council of Economic Experts, will provide a more detailed analysis and assessment of the reformed Stability and Growth Pact, the European Crisis Mechanisms and of the EU's economic governance framework at large. Both contributions make clear that the current reforms, while falling short of some expectations, are in principle useful, but that further and far more fundamental reforms of EU economic governance will likely (have to) follow in the future.



Wolfgang Franz President Centre for European Economic Research German Council of Economic Experts



Reforming Fiscal Policy Rules for the Euro Area¹

Fiscal policy rules have taken centre stage when discussing the origins and consequences of the crisis in the euro area. This is obvious for Greece and Portugal but quite a few other euro area Member States also suffer from a reckless fiscal policy in the past, i.e., before the economic crisis in 2009.

The introduction of the euro demolished barriers between European capital markets, freed from currency risks. In light of the increasing capital movements, especially from rich to poor countries, governments too often showed little fiscal discipline within the euro area in spite of the Stability and Growth Pact. In fact, the Pact has never been taken seriously but has been weakened in the midst of the past decade, not least due to the demands by France and Germany. As a reaction of the crisis in the euro area, the EU enacted several voluminous rescue plans in an ad hoc manner. Not until March 2011, a European Stability Mechanism (ESM) was put in place.

Therefore, two major questions arise:

- How should the Stability and Growth Pact be reformed in order to ensure sustainability of public finances?
- How should an ESM be designed in order to really safeguard the stability of the euro area as a whole?

In what follows, I shall deal with these questions in turn. As a basis of my considerations, I use the annual report 2010/11 of the German Council of Economic Experts (GCEE).

Reform of the Stability and Growth Pact (SGP)

The SGP needs to be tightened in such a way that timely and effective sanctions are imposed on countries pursuing an unsound fiscal policy. This will also necessitate strengthening the European Commission's position vis-à-vis the European Council. The failure of



the SGP to ensure fiscal discipline is the consequence of the dominant role of the Economic and Financial Affairs Council (EcoFin). Members of the EcoFin can block the imposition of sanctions for reasons of political suitability. In fact, until 2010 the records of the European Union show nearly hundred cases (countries and years) of deficits above 3%.2 Only less than one third of these may be attributed to a large domestic recession and could therefore be justified on the basis of the SGP. To put it the other way around, in roughly two thirds of cases the SGP was violated. But sanctions have never been imposed due to several hideouts in the regulations of the SGP and due to

¹ This contribution draws on the annual report 2010/11 of the German Council of Economic Experts. The opinions expressed here are not necessarily shared by all members of the Council.

² European Economic Advisory Group (2011), p. 79.

the fact that potential sinners judged actual sinners.

In order to overcome this major deficiency, the most promising measure would be to reform the SGP by introducing sanctions which are automatically imposed on a country if certain thresholds regarding its public deficit and a deadline to sufficiently reduce it are exceeded. But this first best solution is anything but realistic if not naïve. Therefore, the GCEE has proposed a second best procedure hereby strengthening the role of the European Commission. More specifically, our suggestion rests on a reversed voting procedure: The European Commission proposes sanctions which can only be rejected by the Council with a qualified majority (within a given time period). It can be shown that such a reverse voting rule significantly increases the probability that sanctions are imposed.³

To what extent do the planned reforms of the SGP meet these requirements? In October 2010, the European Council endorsed the recommendations by the Van Rompuy Task Force. With respect to excessive deficits its suggested procedure is the following:

- In the preventive part of the SGP, if the state significantly deviates from the adjustment path foreseen in the SGP and also fails to take appropriate action within five months, the European Council will state this on the basis of a qualified majority. Then, by using a reversed majority rule, an interest-bearing deposit will be imposed.
- In the corrective part of the SGP, if the European Council decides by a qualified majority that the Member State has not taken effective action to correct the excessive deficit within a given deadline, a fine will

be applied, if not ruled out by reverse majority rule.

The most important drawback is that in the first stage the European Council decides by qualified majority whether the state has undertaken effective action. Since Council members know the consequences of this first stage decision there is every reason to expect that they are very reluctant to vote against the state in question, to say the least. By and large, with respect to sanctions we would be back to the present SGP. In a draft report of January 2011, however, the European Parliament is in favour of much more convincing proposals made by the European Commission: The Commission asks for a sanction which can be rejected by the Council only by reverse voting.

This is not to say that the planned reform of the SGP does not have its merits. Most noteworthy is that more weight is put on the public debt ratio. More precisely, both the European Commission and the European Parliament suggest the following rule: An excessive ratio of government debt to gross domestic product is only to be considered sufficiently diminishing if the differential with respect to 60% has been reduced over the previous three years at an average rate of the order of one twentieth per year. What does that mean in practice? Take the Italian debt ratio of 120% as an example. It exceeds the reference value for 60%. Hence, Italy has to reduce its debt ratio at an annual average rate of 3 percentage points, i.e., if starting in 2011, Italy's debt ratio in 2014 would be 9 percentage points lower (111%). But again, the lack of automatic sanctions casts doubt on the effectiveness of this ambitious measure.

³ German Council of Economic Experts (2010), pp. 91 (box 8).

Reforming the SGP in an efficient manner will, indeed, make a new European debt crisis much less likely, but the conclusions of the European Council cast doubt on whether a really tough SGP will be enacted. Moreover, we cannot be sure that neurotic financial markets will attack the euro anyway. Therefore, a crisis mechanism is warranted in addition to measures ensuring a stable private financial system (which is not my topic here). This leads me to my second question, namely how to design an efficient European crisis resolution mechanism.

European Crisis Mechanism

When the European Monetary Union was established, no institutional rules for crisis scenarios were agreed beyond the no-bail-out clause. The SGP was considered sufficient to guarantee stable public finances. This turned out to be a tremendous mistake. Hence, in May 2010 gigantic rescue shields were set up overnight without having been preceded by and based on detailed political and scientific debate. In order to obviate such abrupt and arbitrary operations in the future, it is vital to put in place a permanent European crisis mechanism to replace the temporary protective shields. This by no means is a request for simple bail-outs for countries with a reckless fiscal policy. Such a mechanism should only provide support to Member States if absolutely necessary to safeguard the euro area as a whole, to repeat: as a whole. Moreover, strong conditionality and burden sharing with the private sector are indispensable.

In March 2011, the European Council agreed upon a new permanent crisis mechanism, the European Stability Mechanism (ESM), assuming the European Financial Stability Facility (EFSF) in 2013. At the time of this writing

(1 May, 2011), the European Parliament as well as national parliaments are deeply concerned with the conclusions of the European Council. Hence, those conclusions might be subject to changes. Indeed, serious improvements of the ESM are absolutely necessary. A very brief look at the details of the ESM serves as a prerequisite for an informed discussion.

According to the European Council, the ESM is to be activated if it is indispensable to safeguard the stability of the euro area as a whole. Some emphasis should be put on indispensable and euro area as a whole. While this phrasing is open to interpretation, reinterpretation, and redefining, the intention rightly aims at establishing a useful safety device.

The funding of the ESM amounts to EUR 700 billion with an effective lending capacity of EUR 500 billion. The capital base of EUR 700 billion consists of EUR 80 billion paid-in capital, being phased in between 2013 and 2017,



and of EUR 620 billion callable capital, i.e., the fund can ask shareholders to supply new capital if existing capital gets wiped out. The instruments of the ESM are twofold: Firstly, the ESM Stability Support (ESS) provides loans whose maturity depends on the nature of the imbalances and the prospects of

the beneficiary state regaining access to financial markets. Secondly, there is a primary market support facility to allow the fund to purchase government bonds directly from the state at stake rather than on the secondary market.

On request for financial support by a Member State, both the EU Commission and the International Monetary Fund (IMF) in liaison with the European Central Bank (ECB) assess the actual funding needs and negotiate a macro-economic adjustment programme. The result has to be adopted by the EU Council unanimously. This unanimity serves as a second safety device.

Private sector involvement is carried out only on a case by case basis, depending on the outcome of a debt sustainability analysis. Sustainability requires that the borrower is expected to continue serving their debt without an unrealistic large correction of their income and expenditure. If it is concluded, on the basis of a sustainability



analysis, that the macro-economic programme cannot realistically restore public debt to a sustainable path, the granting of financial assistance will then be contingent on the beneficiary state demonstrating sufficient commitment to ensure adequate and proportionate private sector involvement.

Collective Action Clauses (CAC) will be included in all new euro area government securities.

Taken together, there is good news, bad news, and really bad news.

- Good news: A permanent crisis resolution after the EFSF is a good idea as long as the restrictions indispensable and euro area as a whole are taken seriously.
- Bad news: It is unclear how the problem is tackled if a Member State cannot honour its commitment due to excessive public debt, i.e., the "can't pay, won't pay"-case (Münchau, 2011).
- Really bad news: The regulations concerning private sector involvement are completely insufficient, in all practical cases burden sharing with the private sector is out of question. It is unacceptable to leave this to a case by case basis subject to interpretation due to the choice of words such as realistic, expected, and the like in the conclusion of the European Council.

Therefore, the ESM has to be renegotiated. Some guidance how to overcome the aforementioned deficiencies may be obtained from the German Council of Economic Experts' proposal.

The GCEE sets up a precise framework which does not leave much room for interpretation. The mechanism suggested by the GCEE must provide support to Member States in the event of serious capital market disruptions without giving investors the impression that the Community will always bail out states. More precisely, the GCEE distinguishes three cases:

Case I: The state requesting support is not in an excessive deficit procedure. Financial support can be granted if endorsed by the European Council.

Case II: The state is in an excessive deficit procedure but not subject to sanc-

tions. Financial support can be granted if a majority of the European Council representing at least 90% of the population of the euro area agrees, and strict macro-economic conditions are imposed.

Involvement of the private sector is warranted but not conclusive.

Case III: The state was subject to sanctions during the past four years. In extension to the former case, involve-

ment of the private sector is inevitably required, the magnitude of which depending on the sovereign debt ratio.

The challenge to the euro area is to establish a credible rescue strategy which, on the one hand, strictly binds private investors and, on the other hand, prevents the euro system from turbulences of a grand scale. Despite some progress, the ESM as it stands does not yet meet these requirements.

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Legislative and Institutional Dynamics in Response to the Crisis

As an answer to the financial and economic crisis, the European Union decided first steps to improve the regulation and surveillance of financial markets as early as 2009. In the beginning of 2011, the four new Financial Market Supervisory bodies were able to start their work.

Meanwhile, on invitation of the European Council of March 2010, the so-called Van Rompuy Task Force elaborated a list of suggestions on how to improve economic and budgetary policy coordination. The Task Force was chaired by the new permanent Council President and brought together 27 (mostly) finance ministers. The Task Force delivered its report on improved budgetary and economic policy coordination and a permanent crisis resolution mechanism in October 2010. The European Commission tabled six legislative proposals (the so called "Rehn package") on September 27, 2010, just before the Van Rompuy report in order to make use of its right of initiative.

In March 2011, the European Council agreed that economic governance should be improved by implementing a so-called "Comprehensive Package" which includes the six legislative acts on budgetary, and economic policy coordination and national fiscal rules, the European Stability Mechanism (ESM) and the so-called Euro Plus Pact. The ESM, a permanent stabilization mechanism, is supposed to help solve future sovereign debt crisis in the euro area. Its implementation requires a revision of Art. 136 of the Treaty on the Functioning of the European Union (TFEU). The so-called Euro Plus Pact is an intergovernmental agreement, initially designed to commit the Heads of State and Government of the euro area to an ambitious economic and social reform agenda as well as budgetary austerity. It has meanwhile been signed by 23 out of 27 EU Member States. In parallel to these efforts, further initiatives to improve financial market regulation are being pursued on the European level and in national contexts. Unlike the USA, where most of the measures to reform financial market regulation and surveillance were actually embedded in a single legislative initiative, the Dodd-Frank Act, financial market regulation in the EU is improved through multiple initiatives on different political levels.

The scope and pace of these legislative and institutional dynamics convey the (correct) impression that the euro area's governance rules and procedures are indeed undergoing substantial



change. The question yet is whether the reforms undertaken are capable of eliminating the underlying governance weaknesses of the previous set-up.

¹ The four non-members are the two EMU opt-out countries the UK and Denmark, as well as the likely future EMU members Hungary and the Czech Republic.

2 Reforming an Incomplete Governance and Regulatory Framework

The way the financial crisis has hit the European Union since 2007 has revealed considerable weaknesses in the way its economic governance mechanisms functioned since the start of the European Monetary Union (EMU) in 1999. Weaknesses can be identified both in the way economic governance worked in the run up to the crisis and in the way the euro area handled crisis management.

First, the European Monetary Union was created with an incomplete institutional and regulatory framework. Initially, in parallel to the Intergovernmental Conference (IGC) which negotiated the Maastricht Treaty, a second ICG was held in order to equip the European Community and the future monetary union with a political union. But the latter failed and the European single currency was introduced with an accompanying governance framework. It essentially consisted of rules and procedures for budgetary and economic policy coordination judged at the time as being insufficient by many actors and observers. So several elements of the Maastricht framework were changed in different ways – long before the current reform process was launched and partly even before the euro was actually introduced. These changes include the Stability and Growth Pact of 1997 (and it first reform in 2005), the employment chapter in the Amsterdam Treaty of 1997, the creation of the Eurogroup and the subsequent introduction of the Eurogroup President, and well as the first euro area summit (held in 2008 under the French rotating EU Presidency). None of the initiatives substantially changed the nature of the governance mechanisms. No transfers of sovereignty occurred, and the rulesbased coordination left room for political discretion to the Finance Ministers in the Ecofin Council.

Despite the various efforts to complete the governance framework over the years, it performed below expectations. Even before the crisis hit the EU in the last years, fiscal performance of many Member States did not reach the agreed targets and economic divergence within the euro area visibly built up.

There is of course the case to make that the coordination mechanisms simply targeted the wrong variables. For instance, the recent sovereign debt crises in Ireland and Portugal, would not have been prevented if the Stability and Growth Pact had been applied in every detail, not even in the new form once the "Rehn package" is passed, i.e. with tougher sanctions and swifter procedures. The exploding deficits and public debt levels were rather caused by the fact that the public sector shouldered liabilities of the private sector. Root causes were macro-economic imbalances, a decline of competitiveness and banking crises. The question then is why policy makers were immune to the increasing evidence that economic divergence increased in the euro area and that macro-economic imbalances persisted. The Broad Economic Policy Guidelines and the Macro-economic dialogue could have been used for closer economic policy coordination – had the political insight been there.

A major reason for insufficient policy co-ordination is without any doubt the nature of *incentive structures of national policy makers*. National decision makers in their majority have other interests than being "good EMU governors", they maximize utility in view of their objective to be re-elected in the next national election. Depending on the way the euro area and EU integration is perceived at home, part of their

electoral success in national or sub-national elections depends on their capacity to fend off interference from Brussels and to maintain the largest possible scope for national discretionary action.

If the assumption of short-termism and a focus on national constituencies holds true, this explains that the perception of EMU realities in national policy decisions is underdeveloped. Individual decision-makers either act uninformed because they simply do not grasp the interdependencies between national policy choices and euro area spill-overs, or they are cynic because they prefer to go ahead with solutions bringing shortterm benefits home to domestic constituencies. Hence, for instance the possibilities for closer economic policy coordination that have existed ever since the euro was launched (e.g. through the Broad Economic Policy Guidelines or the Macro-Economic Dialogue) were not made use of by the Member States.

Quite the opposite is the case, national governments throughout the brief history of the European Monetary Union on several occasions stopped "more EU" in policy coordination and hence also limited the impact of supranational actors in pushing EMU logics. Hence, in particular, the European Commission encountered political obstacles in its efforts to implement budgetary policy coordination. While the first three years of EMU gave little reasons for doubt in the institutional set up, as of the year 2002 the Commission's political role in the coordination process actually eroded with the vivid Irish reaction to the criticism of its policies in the Broad Economic Policy Guidelines. In the following years it became increasingly obvious that the Commission depended on the support of the Ecofin, not only in the formal application of the Excessive Deficit Procedure and the Stability and Growth Pact, but also in more informal and subtle processes of policy coordination.



The Member States were unwilling to let their agent assume its role in budgetary and economic policy co-ordination in which the supranational impact was hence limited.

At the same time, *market mechanisms* as disciplining devices proved insufficient under the conditions of the euro area. In the run-up to the crisis, bond spreads for a considerable time did not reflect the respective Member States' fiscal and economic performance. So the basic logics of EMU's architecture, namely that markets would back the rules-based coordination, did not work. In the sovereign debt crisis, markets in a seemingly exaggerated reaction overshot and, once again, the rationality assumption does not hold. Since the crisis sovereign debt crisis and market reactions peaked in April/May 2010, the rescue packages, unclear political messages about private sector involvement and ongoing speculation about the likelihood and costs of sovereign defaults further blurred the conditions for markets to sanction irresponsible policies.

3 Methods and Actors of Economic Governance Reform in the EU between 2009 and 2011

The reform initiatives briefly outlined in the introduction have different legal bases, involve different actors and hence underlie different legal and political restrictions which determine their outcome.

Regarding the legal nature, a large part of the reforms consists of legislative action on the European level. This is for instance so for the "Rehn package", the laws installing the European Financial Market Supervision or the various initiatives to improve financial market regulation. Part of them is



backed-up or completed by national legislation, for instance national law on financial market regulation or national fiscal rules.

Some of the legislative acts are passed under the ordinary legislative procedure which makes the European Parliament (EP) a full co-legislator. The EP has made its influence felt in both the negotiations of the Financial Supervisory bodies and the regulations concerning the Stability and Growth

Pact and the reform of economic policy co-ordination, as it attempts to impose more European views on the Member States. Despite the shock induced by the financial crisis, which has revealed the degree of interdependency in the euro area, national considerations prevail when it comes to questions of sovereignty and interference from the EU level, for instance with the budgetary authority of national Parliaments. From a functional perspective "more European interference and coordination capacity" may seem to be the right way forward in order to reduce externalities and improve policy output. But looked at from the perspective of legitimacy, it becomes more and more obvious that attempts to limit national sovereignty and to transfer competencies to the EU level reach critical limits unless a sound base of legitimacy and democratic decision-making that satisfies Western European norms is guaranteed.

The European Stability Mechanism, in contrast, is based on an intergovernmental Treaty which has been signed by all euro area Member States and now has to undergo ratification in national Parliaments. In order to make the ESM compatible with the EU Treaty, Art. 136 TFEU has been amended — another step that requests national ratification. From today's perspective, it cannot be excluded that the ESM Treaty or the amendment of the TFEU encounter ratification problems in single Member States.²

The Pact for the Euro-Plus, meanwhile is an intergovernmental agreement between the 24 signatory Member States. While coordination in particular with the new policy coordination

² See for instance the political power play in Slovakia which has already opted out of the EFSF. http://spectator.sme.sk/articles/view/43089/10/government_approves_esm_documents_with_sas_party_against.html (retrieved on June 15, 2011).

mechanisms installed with the "Rehn package" and the European Semester is supposed to be close, the Euro Plus Pact still provokes the formation of a new group within the European Council excluding large players such as the UK.

4 The Political Context of Economic Governance Reform in 2010/2011

The sheer number of initiatives undertaken in order to reform economic governance of the euro area and the substance of at least some of the measures show that a window of opportunity has opened with the advent of the financial crisis and in particular with the development of the sovereign debt crisis. While all reservations on political feasibility of far reaching efforts outlined above apply, it can still be argued that the political context for reform has been rather supportive since 2009. But the tide may very soon turn if Member States become even more self-interested, in particular if the economic and social costs of the crisis continue to weigh on governments.

The political context for EMU governance reform in 2011 can hence be characterized as follows. As a general mood, on the EU level, the focus is on risk management and prevention, but there is little ambition for joint policy making. This attitude became apparent when the real economic effects of the crisis hit in 2009 and there was little political will among the Member States' governments to coordinate the fiscal stabilization efforts more closely or launch a European initiative. Moreover, the reluctance to link policy debates, e.g. in connection with the upcoming EU budget negotiations and the European growth strategy "EU 2020", to the question of governance reform and sovereign debt crisis resolution, is telling. Governments continue not to be open

for stronger political coordination, even if the euro area underperforms as a whole.

Declining Solidarity and Rising Polarization

With the growing reluctance to participate in the rescue mechanisms (cp. the case of Slovakia, the True Fins and the concerns about Germany's long-term involvement with the mechanisms) and with a (in key countries) declining support for EU membership, there is a concern that previous assumptions on necessary solidarity and cohesion in the E(M)U could be revised to the bottom. If this is so, this will not only have implications for the creditor countries adherence to the newly installed rescue mechanisms. It would furthermore impact the upcoming negotiations on the EU's multi-annual financial framework and hence the future of the cost-intensive policies such as cohesion and structural policies.

The crisis has provoked unparalleled polarization and polemics between Member States (cp. for instance the polemics both in Germany on the Greek and in Greece on the Germans). If the EU runs into a situation where the donor and recipient countries face each other with hostility and mistrust, the political and normative fundaments of the European integration process may be shattered. This is particularly so as competitive pressures and substantial real devaluations cause political backlash in some countries. Political fragmentation, the inability to construct crossparty consensus on far reaching structural changes and rising populism not only make it questionable whether governments of recipient countries will actually be able to stick to the conditionality they have signed in return for rescue packages. Polarisation will increase if the pain of structural reform and budgetary austerity is increasingly blamed on the "dictatorship of the donors".³

The evolution of public opinion indeed becomes a growing concern. Low growth and high unemployment rates since the beginning of European integration tend to correlate with a decline of support for European integration. Meanwhile, opinion poll data also shows rising expectations of the citizens towards the EU's problem-solving capacity in economic and social policy. Taken together, these two trends bear a risk of frustration with the EU and national politics and hence may feed populist tendencies in moderate parties or (anti-EU) populist movements. There is consequently, in the short term, a rising importance of active opinion leadership and public deliberation.

5 Outlook

Despite the broad economic governance reform agenda of which the major parts will be concluded in 2011, the EU is likely to stay in a transitory phase for further years. The reason is that the current reforms stop short of creating governance structures that are likely to ensure legitimacy on the input and on the output side of the policy cycle. Meanwhile, the crisis management and the new governance structures are a substantial departure from the Maastricht model of EMU in which the ECB exclusively focused on monetary stability while the governments were — at least in theory — assumed to have full liability for budgetary policy making.

So in the long run, the euro area's reform agenda may need to be defined in much broader terms. Both the problems of the political economy of policy coordination discussed above and the problems of legitimacy that the EU will increasingly encounter, make the case for a much deeper questioning of the governance mechanisms than the current reform projects do. In the long run, the conclusion may well be that a European currency cannot survive without an European economic government whose basis of legitimacy is solidly founded in a European democracy.

³ An expression used by Daniel Gros in a public hearing of the Budgetary Committee of the Deutscher Bundestag on March 14, 2011.



Klaus Liebscher Award



Klaus Liebscher Award for Scientific Work on European Monetary Union and Integration Issues by Young Economists

Ladies and Gentlemen,

Today it is the 7th time that we give the Klaus Liebscher Award to three young researchers in economics. As in all the previous years it has been an extraordinarily difficult task for the jury to select among a large number of excellent submissions the two winning papers of this year.

On the occasion of the 65th birthday of Klaus Liebscher, former Governor of Oesterreichische Nationalbank (OeNB), the bank in 2005 established the Klaus Liebscher Award. We did so in recognition of his unrelenting commitment to the cause of European integration and Austria's participation in European Economic and Monetary Union. This award is the highest scientific distinction, the OeNB offers. It is granted every year for two excellent papers on European economic and monetary union and European integration issues. Young economists, up to 35 years from EU member and EU candidate countries are eligible. The award is worth EUR 10,000. The papers are refereed by a panel of highly qualified reviewers.

The OeNB, in response to its integration into the ESCB, has increased very much its research activities and research capabilities in the last years. Meanwhile academic publications and the contributions to the system have been substantial. The efforts to increase the economics and research output certainly also reflect the fact that we now operate in a very different environment, where the role of research for modern central banking has become much more important. The OeNB's support for economic research is visible in numerous activities, like for example the Klaus

Liebscher Award, which we give to three outstanding young researchers today. The support of research and the exchange with other researchers in economics is an important investment of OeNB in its economic expertise.



The first winning paper of this year is co-authored by a team of two young economists:

Frederike Niepmann from the European University Institute in Florence and Tim Schmidt-Eisenlohr from Oxford University. Their joint paper has the title: Bank Bailouts, International Linkages and Cooperation?

Frederike Niepmann is a Ph.D. candidate in economics at the European Research Institute in Florence and currently on exchange at the London School of Economics under the European Doctoral Program (EDP). Her main fields of research are international trade and banking. Tim Schmidt-Eisenlohr is a research fellow at the Centre for Buisness Taxation, University of Oxford, since October 2010. He studied economics in Heiderlberg and Kiel with exchange stays at the University of Illinois Urbana-Champaign, the University of Bergen and New York University. He got his Ph.D. in economics from the European University Institute Florence. His main fields of research are International Trade, Tax Competition and Financial Stability.

The second winning paper of this year is by *Steffen Osterloh* from ZEW Mannheim. The title of his paper is *Can Regional Transfers Buy Public Support?* Evidence from EU Structural Policy.

Steffen Osterloh is a research economist at the Center of European Economic Research (ZEW) Mannheim. He has a degree in economics from Mannheim University and is a Ph.D. candidate in economics at Mannheim. His main fields of research are political economy, European integration and Fiscal Policy.

Session 2: Banking and Financial Architecture in the EU

Andreas Ittner
Executive Director
Oesterreichische Nationalbank



Introductory Remarks

Ladies and Gentlemen,

Good afternoon. I am pleased to open today's afternoon session, and I am particularly pleased to welcome our distinguished speakers, Lorenzo Bini Smaghi and Professor David T. Llewellyn.

This session is entitled Banking and Financial Architecture in the EU. In the course of the recent years, the banking and financial architecture worldwide has been changing considerably as a response to the financial crisis. EU Member States decided on a radical overhaul of Europe's system of financial supervision. The establishment of the European System of Financial Supervision (ESFS) comprising the three European Supervisory Authorities (ESAs) for the banking sector (European Banking Authority, EBA), for the securities sector (European Securities and Markets Authority, ESMA) and for the insurance and occupational pensions sector (European Insurance and Occupational Pensions Authority, EIOPA) as well as the newly created European Systemic Risk Board (ESRB), is an important milestone in addressing many of the shortcomings. While the three European Supervisory Authorities continue their work on micro-prudential supervision in a more comprehensive way, the ESRB is responsible for overseeing risks in the European financial system as a whole, thus focusing on macro-prudential supervision. Successful interaction between the ESRB and the ESAs, in particular to ensure a proper meshing of macro-prudential and micro- prudential instruments, will be challenging. The ESFS will foster a coordinated European approach to financial supervision and it will enhance the integration process of financial markets and supervision, thus strengthening economic growth in the EU.

What challenges does the new European System of Financial Supervisors and especially the European Systemic Risk Board face?

Let me briefly address three major issues:

First, the analytical challenge is high with regard to collecting the relevant data and employing the right tools to measure, analyse and prioritise systemic risk in a way that the ESRB can make warnings and recommendations. The main new avenue to explore is improving our understanding of the interconnectedness in the financial system, both via the direct links between financial institutions and the indirect ones created within the financial system itself.

Second, the ESRB needs to develop a macro-prudential policy framework in the medium-term and coordinate instruments on EU level. However, it is necessary that macro-prudential supervisors have sufficient flexibility on a national level and a wide range of macro-prudential instruments at their disposal to address systemic risk. In this



regard, I see a strong role for the ESRB in organising a coordinated EU approach in order to strike the right balance between additional macro-prudential policy and a harmonised Single Rule Book.

Third, as we have so far only limited experience regarding macro-prudential policy measures and their interaction with other policies and the real economy, the major challenge lies in combining early risk identification and counteracting measures with the medium- and longer-term perspective.

Let me conclude by saying that, in my capacity as Vice Chair of the ESRB's Advisory Technical Committee, I am fully committed to assess the risks for EU financial stability and, more importantly, to act upon them in a coordinated and timely manner.

I am very happy that our first speaker Lorenzo Bini Smaghi, Member of the Executive Board of the ECB, will shed more light on the before mentioned issue concerning the interaction of macro-prudential policy with other policies in his speech *Macro-Prudential Supervision* and *Monetary Policy* — *Linkages and Demarcation Lines*.

Our second speaker, David T. Llewellyn, Professor at the renowned European Loughborough University, will critically address the issue of *Will the New EU Financial Architecture Prevent Future Crises?*; as the challenges and expectations of the new supervisory framework are high and the costs for society – if we fail – as well.



Lorenzo Bini Smaghi Member of the Executive Board ECB



Macro-Prudential Supervision and Monetary Policy – Linkages and Demarcation Lines¹

It is a pleasure for me to contribute to the Oesterreichische Nationalbank's annual Economics Conference on the future of economic integration. In my remarks today, I would like to elaborate on the linkages and the dividing lines between macro-prudential supervision and monetary policy.

I will structure my presentation in two parts. First, I will discuss the interactions between monetary policy and the financial system, showing how monetary policy can create the conditions for financial stability. As a matter of fact, price stability is a necessary condition for financial stability, in that asset prices and financial volumes are bound to reflect and amplify erratic swings in inflation expectations - if and when a central bank allows these to happen. But price stability is not a sufficient condition for financial stability. I will elaborate on this insufficiency paradigm and the corollary that the ECB derives from it. I will also argue, inversely, that financial stability is a necessary precondition for monetary policy, in that it creates the conditions for monetary policy to attain its objective.

In the second part of my presentation I will illustrate the rationale for the main macro-prudential tools and discuss how they interact with monetary policy decisions.

1 Interactions between Monetary Policy and the Financial System

Let me start by briefly considering how monetary policy decisions can influence the financial sector's risk-taking behaviour, before moving on to discuss how the financial sector may itself also affect monetary policy. I will argue that monetary policy can influence such behaviour, for instance, by affecting the overall level of leverage in the economy and the maturity structure of financial liabilities, or by changing attitudes held by those in the financial sector about assuming risk. In turn, this may crucially impact on the likelihood of asset and



credit bubbles forming and inflating, as they did before the global financial crisis.

According to recent studies that have reconsidered the role of financial intermediaries in monetary economics, monetary policy may be regarded as an extremely powerful tool. Those studies indicated that short-term policy rates are important per se – quite independently of their impact on long-term rates and on expectations of future short-term rates.² Of course, this marks a U-turn in monetary policy thinking. Mainstream macroeconomic doctrine had long built on a finance-less construct in which short-term rates matter only to the extent that they determine long-term rates, as risk-adjusted expectations of future short-term rates. The

¹ I wish to thank Lorenzo Cappiello, Marco Catenaro, Massimo Rostagno and Carmelo Salleo for their contributions to the speech. I remain solely responsible for the opinions contained herein.

² Adrian and Shin (2009).

crisis has suggested that finance is not a veil. It is a critical determinant of macroeconomic facts; it is a source of shocks and an intricate — and partly unpredictable — amplifier of disturbances. A new series of studies and models show how finance and the macro-economy interact. In these models, short-term monetary policy instruments seem to be more powerful than previously thought — and therefore, more disruptive if misused.

But why would short-term rates be important in their own right? The bulk of finance for financial institutions, whether banks, broker-dealers, the socalled shadow banking system or hedge funds, is very much short-term. For example, broker-dealers fund themselves primarily in the repo market, mainly at overnight maturities, while shadow banks fund themselves in the commercial paper market and the majority of commercial banks rely on retail finance chequing and savings deposits which usually consists of sight or shortmaturity instruments. Wholesale funding for commercial banks is, typically, very short-term as well. So, when a central bank decides on the short-term interest rate, it directly affects the marginal price of leverage for virtually the entire financial sector.

Problems arise when, due to low interest rates that make short-term funding cheap, the total debt raised by financial institutions goes beyond what may be considered as socially optimal. This is frequently the case for the unregulated or so-called "shadow" banking system, not subject to the stringent requirements of the regulated banking sector.³

Low funding rates can inspire risky business strategies. For example, ex-

treme forms of maturity transformation can become attractive, particularly if the risk adjustment calculus fails to make a proper correction for the expected gains. Business models based on "search for yield" with little or no concern for risk then become popular. In the search for a high nominal return on investment, financial institutions might be encouraged to buy assets, typically with long-term maturity and possibly illiquid, financing them with short-term liabilities, thus generating a large maturity and liquidity mismatch.

Such new and destabilising business models do not apply only to securities. Evidence both for the euro area and the USA shows that banks tend to accumulate risk during economic upturns by optimistically easing lending standards. The same evidence shows that much of the easing comes from supply-side adjustments. In other words, it is not warranted by improvements in the borrowers' risk due to the more favourable economic conditions in which those borrowers operate.⁴ This is particularly true for mortgages and is considered one of the factors that fuelled the real estate bubble.

Furthermore, research has shown that the impact on risk-taking of low short-term interest rates is amplified when securitization activity is high — for it improves banks' capital and liquidity position and reduces borrowers' risk — and when banking supervision standards are weak. As for the euro area in particular, there is some evidence that low short-term interest rates induce banks to lend to borrowers with a poor credit history or none at all. Naturally, such loans also have a higher hazard rate, that is to say a high probability of default. ⁵

³ Stein (2011).

⁴ Maddaloni and Peydró-Alcalde (2010).

⁵ Jiménez, Ongena, Peydró and Saurina (2010).

When financial intermediaries have built large risks into their balance sheet structures, a negative shock to confidence hits the financial system as a whole, in a rather undiscriminating fashion. A negative externality to the whole system will then ensue. This is what researchers have identified as a fundamental market failure - unregulated private money creation can ex post leave the system fatally exposed to a systemic crisis. A systemic crisis is in essence a colossal externality: fire sales and distressed de-leveraging are the correct response that each financial institution in isolation should have to a funding crisis. But in the aggregate fire sales and the concomitant shedding of exposures cause a systemic failure which can damage institutions that would be healthy in different macroenvironments.

In a simple institutional environment, this externality could be addressed with conventional monetary policy, complemented with either deposit insurance or a lender-of-last-resort facility, acting ex post. But for policy-makers to intervene ex post is sub-optimal and exceedingly reliant on instruments whose effectiveness in distress conditions is subject to a great deal of uncertainty. Ex ante policies are required to control the risk factors which can undermine the system. This provides an important rationale for deploying a broad range of measures (e.g. financial stability regulation). I will come back to this point in the second part of my remarks.

What is clear from this narrative is that financial (in)stability has a profound role to play in creating the conditions in which monetary policy operates. Therefore, monetary authorities are very alert to developments that can have implications for financial stability,

although this is not explicitly stated in the mandate of many central banks. As a matter of fact, the original motivation for creating central banks in many countries was to temper the financial crises associated with unregulated "free banking" regimes.⁶

A central bank's task of maintaining price stability is facilitated if there is no financial turmoil and such events are rare. Financial stability contributes to an orderly functioning of the transmission of monetary policy to the economy and, ultimately, to prices — a precondition for a central bank to be able to discharge its primary task of maintaining price stability. Therefore, the respective policy objectives of macro-prudential oversight and monetary policy, that is, contributing to financial stability and maintaining price stability, are mutually reinforcing.

But is there an *ex ante* role to play for the central bank alongside regulatory policies? Can it discourage risk-taking



behaviour by the financial sector before excessive balance sheet risk is created?

The developments in the run-up to the global financial crisis have shown that price stability, while being a necessary precondition, is not sufficient for financial stability. Low and stable inflation

⁶ Goodhart (1988).

rates before the crisis coincided with a build-up of financial imbalances, leading to an increase in systemic risk and, ultimately, serious risks to price stability later on. More generally, as a result of the establishment of credible low infla-



tion environments over the last twoand-a-half decades, with firmly anchored inflation expectations, ample liquidity conditions and unsustainable economic imbalances seem to manifest themselves first in the build-up of financial imbalances rather than in immediate inflationary pressures. One reason for this may be that economic agents find it preferable, under supposedly normal circumstances, to assume that in the future inflation will remain close to the central bank's objective, but will suddenly and — even rather abruptly — revise such expectations once actual inflation edges up and uncertainty about future increases. Due to such stickiness, the potential inflationary pressure in the economy may be stronger than current inflation expectations indicate.

That financial variables could be important for monetary policy settings

In a post-crisis world, the debate has taken a different tack. For one thing, it is not asset prices alone that should enter policy considerations. It is financial and monetary imbalances in general. This includes asset price over-valuations and measures of risk appreciation in financial instruments, of course. But it includes monetary and financial quantities as well: over-leveraging of sectors — and of the entire economy – and excessive creation of cash balances. It is by now established that monetary policy affects financial stability by influencing the leverage, maturity mismatch and risktaking behaviour of the financial sector. One could even argue that, in a nearparadox, it is precisely the success of monetary policy in taming inflation and therefore being able to deliver lower interest rates that introduces an element of instability, due mainly to the financial sector's misperception that low interest rates are associated with a low-risk environment. When a financial crisis erupts, however, there is a risk that monetary policy and financial stability could lead to a so-called "low interest rate trap", in that crises require low interest rates to keep the financial system alive; low interest rates maintained for long, in turn, induce too

was recognised before the crisis and debated — somewhat absent-mindedly — in an academic world dominated by the inflation targeting doctrine. The debate had concentrated on whether asset prices should be included in the central bank's definition of the inflation target, or in their objective function, or at least as an argument, over and above inflation deviations, of their "feed-back rules". The consensus conclusion was that asset prices should be considered only to the extent that they might help predict inflationary pressures.⁷

⁷ Bernanke and Gertler (2001).

much risk-taking, thereby making a new crisis more likely.

How can financial imbalances enter the process of monetary policy setting in a way that makes monetary policy itself less prone to systematic mistakes?

The ECB has long practised a two-pillar approach to policy-making. But note the difference between a monetary pillar and a genuine *lean-against-the-wind attitude*, as was advocated by the early participants in the debate that I was mentioning before. It was discussed in a recent ECB paper.⁸

It is not asset prices per se that a central bank should incorporate in its policy framework. After all, the equilibrium value of assets – particularly real assets, such as claims on companies and houses – is difficult to compute and is certainly state-contingent. So, there is little merit in an unconditional monetary policy response to asset price changes. The policy response should be conditional. And the critical condition that a central bank should ascertain before judging if an asset price trend is policy-relevant is whether the market trend is causing – and/or is being fed by - a concomitant monetary imbalance.

A market bubble that progresses in symbiosis with a credit bubble, and which then spills over into excess money creation, is certainly a policy-relevant event. Being alert to the monetary imbalance means for a central bank being better able to discriminate between benign and less-benign phenomena in financial markets.

This being said, monetary policy needs support in its *ex ante* action to resist the formation and build-up of toxic financial imbalances. There is a clear need for a corresponding policy framework to foster financial stability;

we need to understand how it interacts with monetary policy in order to minimise frictions between the two and exploit possible synergies.

2 Macro-Prudential Policies and Monetary Policy Decisions

The goals of macro-prudential policies can be broadly defined as preserving financial stability by reducing the procyclicality of the financial sector, and improving its resilience to adverse shocks. However, even though the goals are clear in theory, the means to reach them are still open to discussion.

Monetary policy has been at the centre of the debate in economics for almost a century, and there is now a high level of consensus about its goals, its tools, and how to gauge its effectiveness. However, the macro-prudential framework is still fuzzy, and being developed with the benefit of hindsight after the crisis that started in 2007 with the bursting of the sub-prime bubble.

I will describe briefly the main tools that are being developed, dividing them into those that address pro-cyclicality and those that attempt to improve resilience. I will discuss their interaction with monetary policy and the conduct of that policy, and draw some tentative conclusions about how they reinforce each other — and where I see possible problems.

In order to tame the pro-cyclicality of the financial sector, the main tool being devised is the aptly named countercyclical capital buffer. Without going into too many details, the main idea is that as the economy booms and credit is cheap, there is an inherent tendency to relax lending standards, take risks and over-leverage. Subsequently, as the economy slows down, over-extended borrowers go bust, mounting losses at

⁸ Fahr, Motto, Rostagno, Smets and Tristani (2011).

banks result in capital depletion and force them to reduce the loan supply. This can induce a credit crunch that turns a slowdown into an outright recession. Interest rates are generally set anticyclically, but they might not be enough to tame the swings of the financial sector, or might be too blunt an instrument if the boom (and subsequent bust) is concentrated in some specific sector, for example real estate. On the other hand, banks could be asked to build up more capital per unit of risk during the upswing, well above minimum requirements mandated by micro-prudential supervisors. This way, on the one hand, credit would become more expensive and therefore might slow down, while on the other hand, banks would not need to reduce the loan supply during the downswing since they could run down this buffer before reaching the binding constraint of capital regulation. This instrument aims to limit supplydriven credit expansions and to soften contractions.

One instrument which has similar effects but is designed more for demand-driven credit booms is a ceiling on the loan-to-value ratio for collateralised loans (and equivalently on margins and haircuts for securities lending). By forcing the borrower to put up more of its own funds, it makes credit more expensive and reduces demand. When the demand for loans heats up, macro-prudential authorities can decrease the loan-to-value ratio, thus increasing the cost of credit and slowing down or stopping its growth.

Both counter-cyclical capital buffers and loan-to-value ratios increase the cost of credit and thus limit its expansion, as does an increase in interest rates. So why do we need this second set of instruments, and how do they interact with monetary policy decisions?

The issue is one of timing and targets. Interest rates are generally set by looking at prices. Credit developments are also taken into account but mainly to the extent that they forecast an increase in inflation. However, financial stability might be endangered before credit expansion starts spilling over into inflation and might require an action that is both more vigorous and more targeted than an increase in interest rates.

While in normal times the coordination between monetary policy and macro-prudential policies might yield little benefit, when the shock to the financial system is severe there can be substantial gains if monetary policy "lends a hand" and temporarily puts more weight on restoring financial stability than on short-term price stability. This leads towards an institutional framework that involves central banks in macro-prudential decisions, such as the Financial Stability Oversight Council in the United States and the European Systemic Risk Board in the European Union.

While monetary policy and macroprudential policy might gain from coordination, we should also consider whether they affect each other. For example, counter-cyclical capital buffers make banks increase their equity during upswings; however, better-capitalised banks are less responsive to monetary policy.¹⁰ This alteration of the lending channel (and the symmetric effect during the downswings of the economic cycle) should be taken into account when evaluating the impact of changes in interest rates. Conversely, prolonged bouts of low interest rates can so alter the perception of risk by investors

⁹ Angelini et al. (2011).

¹⁰ Gambacorta and Marques (2011).

that, in order to rein in risk-taking, macro-prudential brakes will have to be applied much more vigorously than in a normal business cycle situation. There is a dynamic interaction between the two types of policies that requires a constant assessment not only of how to combine them but also of their respective feedbacks.

Let me move on to measures that increase the resilience of the financial system. I will divide them into those that strengthen institutions taking them as given, and those that seek to change the structure of the industry.

In the first category we have mainly levies on systemically important financial institutions (SIFIs).

SIFIs are deemed to generate negative externalities for financial stability, due to their sheer size and interconnectedness. The failure of one of them would cause a financial crisis; however, this social cost is not borne by SIFIs' shareholders only. Furthermore, moral hazard can result from the fact that they are aware of their systemic relevance. This, and the externality illustrated above, would justify ad hoc regulation to ensure that SIFIs are extra-safe.

At first sight, there should be little interaction between additional requirements for SIFIs and monetary policy. During a crisis, however, SIFIs would be prime candidates for liquidity injections by the central bank.¹¹

In the second category of macroprudential measures that increase the resilience of the financial system, we have market reforms such as a drive towards centralising exchanges wherever possible at central clearing counterparties (CCPs), and structural reforms aimed at separating commercial banking from other activities. Centralising transactions should reduce counterparty risk and allow a better monitoring of financial flows, especially of derivatives, for which little data is available in general. The extra information should be useful for calibrating monetary policy. The concentration of transactions should reduce uncertainty about who holds what — an uncertainty which, during a crisis, can end up freezing entire markets and forcing central banks to intervene. Therefore, the development of CCPs seems beneficial to the conduct of monetary policy.



The separation of commercial banking from other activities helps to protect deposit holders by insulating them from excessive risk-taking activities by banks. It can take the form of a carve-out of some form of narrow bank, 2 or by limiting trading with own funds (something similar to the Volcker Rule adopted by the United States). It is unclear whether this separation reduces the overall amount of risk in the financial sector, or simply shifts it to institutions that are not deemed systemic.

I would argue that if it is a mere redistribution it might be dangerous: how do we know that we will not have a repeat of 2007, when we saw that vast

 $^{^{11}}$ This has more to do with the implementation of monetary policy than with its setting.

¹² As suggested by Kay (2010).

pockets of risk had gone undetected and had grown to such an extent that they threatened the stability of the whole financial system? The whole point of such a separation should be to change the incentives for risk-taking. By separating two fundamentally different business cultures, investment and client services, it should be easier to redesign incentives to make the client part a safer place. ¹³ At the moment, however, this second part of the structural reforms seems missing.

Such a separation would reshape the financial industry and affect the transmission channels of monetary policy in ways that are hard to predict. On the one hand, commercial banks would function in a more traditional way, reinforcing the lending channel; on the other hand, they might become relatively less important within the finan-



cial system, therefore reducing its impact. It would be an issue for empirical, policy-oriented research.

So far, I have dealt mostly with solvency issues. But just as monetary policy affects not only risk-taking (and

therefore solvency) but also general liquidity conditions, macro-prudential policies should also address liquidity risk.

Policies aimed at reducing liquidity risk are lagging behind those that improve the solvency of financial institutions. From a micro-prudential perspective, current proposals target liquidity and maturity mismatches of individual banks. Regulators have suggested that each bank holds sufficient liquidity to survive a sudden, relatively short-lived shock, and that it funds long-term assets with stable sources such as long-term debt and deposits. These requirements reduce liquidity risk for each institution but neglect the systemic dimension of liquidity, and might be very costly in terms of limitations to maturity transformation, an essential function of the financial system for which there is high demand. 14 An alternative proposal would impose liquidity risk charges or levies that penalise short-term funding, still at the individual level;15 to help ease funding pressures on banks during a systemic liquidity crisis one could think of instruments with contingent maturity.16

In fact, at the moment the thinking on the prevention of liquidity crises is still ongoing; to mitigate acute liquidity shocks, as we have seen in the recent past, there is still no substitute for a determined intervention by central banks, even beyond the boundaries of their standard activity.

During a crisis, individual banks' liquidity positions matter since those perceived to be more risky might be excluded from the market;¹⁷ in this case, only the central bank can make the

¹³ Giovannini (2008).

¹⁴ Caballero (2009).

¹⁵ Perotti and Suarez (2009).

¹⁶ Nicoletti Altimari and Salleo (2010).

¹⁷ Heider et al. (2009).

market for liquidity function, by acting as a central counterparty. In the short run, central bank intermediation plays a stabilising role; however, in the medium run it can increase the persistence of the shock by interfering with a market-led adjustment and can lead to moral hazard.¹⁸

The bottom line here is that we need to develop macro-prudential policies that reduce liquidity risk *ex ante* in order to decrease the weight put on monetary policy tools during a crisis, since we don't yet know very well the long-run impact of prolonged, massive non-conventional interventions.

Conclusion

Let me finish with a few remarks on international coordination.

Our experience with the international interplay of monetary policies goes back decades. The degree of freedom given by floating exchange rates allows central banks, especially for large countries or areas, to target domestic inflation rates without the need for much coordination. On the other hand, the high degree of integration of capital markets achieved over the past few decades, while beneficial in terms

of the availability of funds, means that macro-prudential policies cannot be set in each country or region in an isolated way. Limits to credit growth in one country may entail a spillover of funds to another country, and imbalances building up on one side of the Atlantic can drag down the financial system on the other side. As macro-prudential policies are developed and become effective, there will be a need for further international cooperation.

Central banks have a long history of exchanging views and information; since they are very much involved in macro-prudential bodies this is solid ground on which to build effective mechanisms of cooperation in the macro-prudential field. Could there be consequences for the setting of monetary policy? It is too early to tell, but given the various levels of interplay with macro-prudential policies that I have described, and the need to coordinate the latter, we need to think more about the international dimension of monetary policy, which may be driven by financial stability concerns. This will be on our agenda for the coming

Thank you for your attention.

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A Post Crisis Regulatory Strategy: The Road to "Basel N" or Pillar 4?

1 Key Issus and Perspectives

In the wake of the banking crisis, there is likely to evolve one of the biggest ever sets of reforms in the structure and style of the regulatory regime and also in the basic regulatory architecture in the EU. The focus of the paper is on this post-crisis regulatory strategy. As a structure of complex and extensive regulation (most especially enshrined in the Basel Capital Accords) did not prevent the recent crisis, the issue is raised as to whether the failure was due to fault-lines in regulation, or whether the problem lies with the underlying methodology. The paper discusses the "endogeneity problem" whereby, through financial innovations and the incentive structures created, problems such as excessive risk-taking by banks may be partly endogenous to the regulatory regime itself.

It is evident that, prior to the onset of the crisis, most countries did not have clearly-defined resolution arrangements in place which in turn created uncertainty about how governments would respond to serious bank distress. A series of *ad hoc* responses were made which were generally handled well. However, a central issue is the moral hazard created by the massive interventions made by governments and central banks.

The structure of the paper is as follows. This section offers an opening perspective by outlining some of the structural characteristics of the pre-crisis environment, some general principles to guide the regulatory reform process, and makes a distinction between *incremental* and *strategic* approaches to reform. A Regulation Matrix is described based on the two central objectives of any regulatory regime: lowering the probability of bank failures, and minimising the costs of those failures that do occur. The nature of a possible trade-off be-

tween the two objectives is discussed. A summary of the main themes of the paper is also given. Section 2 discusses the *endogeneity problem* and its implications for regulatory strategy. Section 3 considers the instruments in a regulatory regime. Section 4 reviews the alternative means of reducing the probability of bank failures, and section 5 considers options to minimise the costs of bank failures. Section 6 brings together the main themes by outlining a holistic regulatory reform strategy.

The objectives of the paper are to consider the structural fault-lines in the pre-crisis scenario and to establish a general paradigm for regulatory reform. The main themes are summarised at the outset:

- In terms of systemic stability, the two objectives of the reform agenda should be to lower the probability of bank failures (Objective 1) and to reduce the costs of those failures that do occur (Objective 2)
- In particular, potential costs imposed on tax-payers associated with bailouts is to be strictly limited
- To some extent there is a trade-off between the two objectives in that the more the costs of failure can be reduced, the less intensive regulation to lower the probability of failure needs to be
- What will be defined as the endogeneity problem suggests that crises associated with bank failure are partly endogenous to the regulatory regime.
 Because of this, Basel N (the fictitious perfect model) will never be achieved, and attempts to achieve it would generate avoidable costs
- Because of this, regulatory reform needs to be *strategic* (addressing both objectives simultaneously) rather than *incremental* (refining the existing regime).

- Within this strategic approach, more emphasis than in the past needs to be given to minimising the costs of bank failures
- The paper is sceptical about the relevance and practicality of many of the structural measures that have been proposed by some analysts to lower the probability of bank failures
- The case is made for a significant rise (more than is envisaged in Basel III) in the required equity capital ratio of banks. In response to the critique that this would be disproportionate, and would involve a substantial rise in banking and consumer costs, the overall conclusion is that: the costs of higher equity capital requirements is exaggerated by bankers; there is a crucial distinction between private and social costs; the benefits of more stability are an important offset; it is appropriate that consumers pay for the benefits of lower costs associated with more stability, and the costs of low-probability-high-impact can be very high
- In order to mitigate the moral hazard associated with bailouts, particular emphasis needs to be given to creating credible, timely and predictable resolution procedures in the case of failing (failed) banks. Only if the costs associated with bank failure can be minimised will a no-bailout policy bed credible
- In the context of cross-border banks, and increased connectedness of banks, national resolution arrangements have negative international externalities which could be at least partly resolved by adding a Pillar 4 to the Basel Accord

Unsustainable Institutional Features

Several structural features of the precrisis environment proved to be unsustainable and themselves contributory causes of the crisis. An underlying perversity implied that bank profits were privatised and yet, in the final analysis, risks were socialised with the tax-payer effectively acting as an "insurer-of-lastresort" on the basis of an inefficient contract as no ex ante premiums were extracted. Overall, as there was a reluctance to require creditors to absorb a proportionate share of the costs of bank distress and failures, burdensharing was disproportionate with an excessive share borne by tax-payers though it is yet to be determined what the final cost will prove to be. In the absence of explicit resolution arrangements, the perception of banks being Too-Big-to-Fail (TBTF) weakened the incentives for private monitoring. Given the increased cross-border interconnectedness that developed over the decade or so before the onset of the crisis, the absence of agreed cross-border resolution arrangements surfaced as a particular issue to be addressed. The low level of equity capital (and high gearing) of many banks was in part a product of an artificially low cost of debt compared with equity induced by favourable tax treatment of the former.

In the absence of credible and predictable resolution arrangements for failing banks being in place, in many cases there was little choice over whether bailouts and official support operations for TBTF banks should be undertaken. Given the potential costs of bank failures (in the absence of credible resolution arrangements), rescue operations or bailouts may be the leastcost option in the short-run. However, given time-consistency, such bailouts create serious moral hazard for the future. There is, therefore, a distinction between short-run and long-run optimality with respect to rescue operations. Only if the costs of bank failures can be minimised will a no-bailout policy be credible. It is argued that this is a major unsustainable feature that needs to be corrected. In effect, arrangements need to be in place to allow banks to fail without imposing substantial systemic costs or tax-payer liability. Furthermore, the unsustainable "excess financialisation" that occurred in the decade before the onset of the crisis was largely associated with underlying factors which were themselves unsustainable (Llewellyn, 2010): an underestimation of risks, an under-pricing even of underestimated risks, excess gearing, an artificially low cost of equity capital, and a collective euphoria. The growth of securitisation, structured investment vehicles, and the use of credit risk-shifting instruments, also had the effect of inducing an over expansion of banking business and unrealistic perceptions of risk. Combined, these created conditions for banking activity to become excessive which the supervisory process did little to constrain even though supervisory agencies expressed public concern about many of the trends that culminated in the crisis. In this regard, the crisis was as much one of weak supervision as faulty regulation.

Guiding Principles

Before considering regulatory reform, the context is set by outlining some guiding principles:

- The regulatory regime has two key objectives: to lower the probability of bank failures (Objective 1), and to lower the cost of those failures that do occur (Objective 2). Both dimensions need to be considered in future regulatory strategy
- As much (if not more) focus needs to be given to Objective 2 as to Objective 1 and it is in this sense that a *strategic* rather than *incremental* approach to regulatory reform is advocated

- A central requirement of any regulatory reform strategy is to limit claims on tax-payers, and to prevent risks being shifted to them
- As part of this, credible, predictable, and timely resolution arrangements for failing institutions are needed. In particular, banks should be able to fail without causing disruption to customer services, or imposing costs on tax-payers. Special resolution regimes are needed for banks because of their unique characteristics.
- The focus of reform should be on the systemic dimension rather than myopically on the position of individual banks
- The TBTF issue needs to be addressed because of the moral hazard it creates towards excessive risk taking and potential tax-payer liability. The moral hazard of bailouts is to be avoided and arrangements are needed to confer credibility on a "no-bailout policy" which addresses the time-consistency problem



- The perversity of the privatisation of bank profits and the socialisation of bank risk (without *ex ante* insurance being paid) needs to be reversed
- Burden-sharing between the various stakeholders in the event of bank failure needs to be explicit, fair and

coherent. The costs of any bank failure are to be borne by private stakeholders (mainly bank shareholders and unsecured creditors) rather than tax-payers

- Regulatory strategy needs to be based on the principle of competitive neutrality: all institutions (and not exclusively banks) that can potentially create systemic stability problems need to be included within the orbit of regulation: the boundary issue. Systemic risks need to be addressed irrespective of where they emanate. This does not mean, however, that all banks are to be treated in the same way as their potential contribution to systemic problems varies
- The loss-absorbing powers of (at least) systemically important institutions (SIFIs) need to be increased
- Clearly-defined crisis management strategies are needed with an added dimension when cross-border institutions are involved
- The role of market discipline within the overall regulatory regime needs to be enhanced

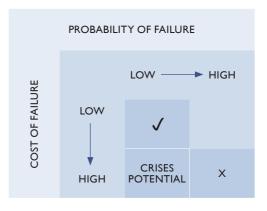
Objectives of Regulation: Strategic versus Incremental

For regulatory reform to be *strategic* rather than *incremental*, a different paradigm is needed compared with incremental reform which restricts itself to refining existing regulatory requirements. Abstracting from issues of consumer protection, the two broad objectives of any regulatory regime are:

- to reduce the *probability* of bank failures, and
- to lower the *cost* of those failures that does occur.

In a Regulation Matrix (chart 1), the probability of a bank failing is measured on the horizontal axis, and the costs of failure are identified on the vertical axis. The costs of bank failures relate to

Regulation Matrix: Probability versus Cost Trade Off



Source: Author's compilation.

those incurred directly or indirectly by, *inter alia*, the system as a whole (the systemic stability dimension), tax-payers who might be called upon to finance rescue operations, depositors, deposit protection funds, and customers in general if banking services are disrupted and uncertainty is created.

The matrix suggests the possibility of a trade-off between the two: if the costs of failure can be lowered, there need be less concern about the *probabil*ity of failures. In the extreme (totally unrealistic) case, if the costs of bank failures could be reduced to zero, the probability of failures would be of no concern, there would be no potential tax-payer liability, no need for bailouts, and no moral hazard attached to bailouts. Furthermore, there would be no need for regulation to reduce the probability of bank failures. Of course, such a utopia is just that! Nevertheless, it serves to illustrate the nature of a tradeoff implicit in the Regulation Matrix.

Historically, the focus has been more on reducing the probability of failures rather than minimising their costs. Indeed, in many countries the second issue has only been addressed in a serious way since the current crisis. There may, therefore, be less need for measures to lower the cost of failures if their probability were to be reduced to a low level. Conversely, if this were to be either impossible (or achievable only with draconian and high-cost regulation), the greater will be the need to have in place measures to minimise the costs of those bank failures that do occur. The central strategic issue in any holistic regulatory reform programme is the positioning to be made on the Regulation Matrix.

Given that all regulatory measures to reduce the probability of bank failures have costs, and that the costs that would arise in seeking to reduce the probability of failure to zero (supposing it were at all possible even with the most draconian regulatory impositions) would be substantial, the trade-off between the two dimensions is central to decisions about the optimal intensity of regulation. Greater emphasis needs to be given to Objective 2: (1) the more intensive regulation has to be in order to lower the probability of bank failures, (2) the greater are the costs of such regulation, and (3) the greater the extent to which the costs of bank failure can be minimised. The central strategic issue in any holistic regulatory and institutional reform is the positioning to be made on the Regulation Matrix. The less confidence there is that the probability of bank failures can be reduced by regulation, the greater is the need for institutional arrangements designed to reduce the costs of failures. In practice, a combined strategy is likely to be optimal.

2 Regulatory Strategy: The Endogeneity Paradigm

Regulatory strategy conventionally assumes that the problems to be addressed (e.g. excessive risk-taking by banks) are *exogenous* to the regulatory

process. In which case a problem is observed and a regulatory response is made to deal with it: i.e. to reduce the probability of it happening. Exogeneity is a bold assumption as problems may be at least partly endogenous to regulation, i.e. caused by the very regulation designed to reduce the probability of problems emerging. This arises as banks seek to circumvent regulation through financial innovation and by changing the way that business is conducted. This in turn calls forth more regulation: Kane's regulatory dialectic (Kane, 1987).

As regulation responds to the endogeneity problem by successive adjustments, the cost of regulation is likely to rise. As the costs of regulation to lower the probability of bank failure rise, the trade-off between the two objectives changes in favour of minimising the cost of bank failures rather than their probability. The endogeneity problem is likely to raise the cost of effective regulation because it engenders a rules-escalation process. By raising regulatory costs, this becomes part of the trade-off between the two core objectives.

As the process of regulatory arbitrage diverts the nature of the problem, regulation is often shooting at a moving target, and the target moves partly because of regulation itself. For instance, the Basel II capital regime (hailed at the time as a decisive breakthrough in the regulation of banks) created incentives to remove assets from banks' balance sheets, for securitisation, the creation Structured Investment Vehicles (SIVs) and other off-balance sheet vehicles, excess gearing, complexity and opaqueness of instruments, and the use of credit risk-shifting derivatives. All of these featured as central aspects of the banking crisis (Llewellyn, 2010). It is evidently the case that detailed rules at the time did not prevent the crisis.

The limits of regulation can be seen in the Basel capital regime. Many of the banks that got into serious trouble entered the crisis with excess regulatory capital: sometimes by as much as 100%. Experience also suggests that capital can disappear very quickly as shown in



the case of Northern Rock which failed within weeks of announcing it would be repaying "excess" capital to shareholders. An IMF study compared successful and unsuccessful banks during the crisis and found no significant difference in capital ratios immediately prior to the onset of the crisis (IMF, 2009). Apart from the potential for regulatory arbitrage, under some circumstances capital requirements may induce banks into more risky business. Blundell-Wignall et al. (2008) show a positive correlation between losses and banks' Tier 1 risk-weighted capital ratio, although a negative correlation between losses and the leverage ratio. This suggests that the risk-weight approach to capital adequacy may induce banks to incur more risk through increased leverage. Regulatory arbitrage will always be a major feature of bank business models. As noted in Haldane, et al. (2010), "risks migrate to where regulation is weakest, so there are natural limits to what regulatory strategies can reasonably achieve."

There is a further danger in detailed and prescriptive regulation in that it tends to create a more homogenous banking model and undermine model diversity which means that all banks will be affected in the same way to particular shocks. Thus, while banks individually may secure the advantages of diversification and the application of new risk and business models, if all change in the same way the system becomes less diversified.

The endogeneity problem can be considered in the context of the history of the Basel Capital Accord. The original Basel regime was established in 1988 and was revised in Basel II and again in 2010 in Basel III. One interpretation is that subsequent adjustments imply moving towards the perfect model (Basel N) by correcting for past errors. An alternative interpretation is that there are fault-lines in the regulatory process itself and that the methodology is flawed because banks will always engage in regulatory arbitrage. In this sense, the view that "regulators are always behind the curve" is not a critique of regulators but is endemic to the regulatory process. Successive adjustments over time have not solved the problem of periodic crises.

This suggests that the traditional incremental approach may not be appropriate, and alternative paradigm might be more fruitful: rather than focus on incremental measures designed to reduce the probability of bank failures, more emphasis to be given to designing features of the regulatory regime designed to reduce the costs of those bank failures that do occur. Given the weaknesses and limitations of regulation, whilst rules may be a necessary part of the regulatory regime, they are not sufficient. An alternative approach is to lower the cost of bank failures by keeping risks private rather than, as has massively been the

case in the recent crisis, socialised by shifting risks to tax-papers.

In practice, both approaches are needed: lowering the probability of bank failure, and limiting the costs of failures. The debate about the role of regulation and supervision for financial stability is about the appropriate weight to be given to the two dimensions. Whilst both approaches are needed, our theme is that more emphasis than in the past needs to be given to Objective 2 than Objective 1. Given that, however carefully constructed, regulation will never prevent bank failures and neither should it attempt to do so.

3 Instruments in a Regulatory Regime

With respect to the two core objectives of reducing the probability of bank failures and lowering the costs of those failures that do occur, eight broad strategic options are summarised in table 1 though not all will be discussed in any detail:

- Structural regulation (such as Glass-Steagall-type measures and Narrow Banks) designed to limit the size and/or allowable business of banks
- Behavioural regulation (such as capital and liquidity requirements) designed to lower the probability of failure
- Supervision by official agencies
- Intervention measures (such as Structured Early Intervention and Resolution (SEIR) regimes) designed to

Table 1

Regulatory Regime Instruments Reduce Costs of Failure Lower Probability of Failure * Glass Steagall Structural Measures * Limits on size * Focus on SIFIs * Narrow Banks * Equity Banks * Glass Steagall * Narrow Bank * Ring Fencing * Capital * Capital Behavioural Measures * Liquidity * Connectedness * Remuneration * Connectedness * Funding rules * Macro-prudential focus Supervision * Interventionist Intervention Measures * Prompt corrective action (PCA)/structured early intervention resolution (SEIR) Taxation and Insurance * Taxation of banks * Ex ante insurance Resolution Measures * Bank insolvency laws * Ring Fencing * Pillar 4 * Private purchase of banks * Bridge Bank * Bad bank * Nationalisation * Business transfers Living Wills * Recovery measures * Resolution measures * Wind-up plans Market Discipline * Disclosure * Use of market metrics Source: Author's compilation.

- maintain a failing bank as a going concern
- Tax and Insurance whereby banks pay ex post to recoup the costs of past bailouts (tax), and/or ex ante to cover possible future interventions (insurance), and to compensate the tax-payer for the implicit subsidy given to TBTF institutions
- Resolution arrangements for closing banks and their subsequent resolution (bank bankruptcy laws, etc., designed to minimise the costs of bank failures
- Living Wills (or Recovery and Resolution plans) designed to make explicit how banks will respond to problems that threaten solvency (Recovery), and how, in the event that a bank fails, different parts of the business are to be separately identified so that some can be rescued while others are not (Resolution)
- Market Discipline which relates not only to transparency and disclosure (Pillar 3) but also to the use of market data in the supervisory process conducted by official agencies

We refer to this eight-fold paradigm, and the instruments within it, as the *Regulatory Regime*. A wider definition (including the role of market discipline) is given in Llewellyn (2001).

4 Objective 1: Lowering the Probability of Bank Failures

The main instruments of policy to lower the probability of bank failures are: regulation, supervision, intervention and market discipline (table 1). Regulation can in turn be categorised as either *structural* or *behavioural*.

Structural Regulation

Structural measures relate to regulation that prescribes the nature, structure and allowable business of banks and other financial firms, rather than the way business is conducted. Only a brief critique of such measures is outlined here as a more detailed review is given elsewhere (Llewellyn, 2011). One in particular is considered: measures to define and limit the allowable business of banks (various versions of the Glass Steagall model). Others are reviewed elsewhere (Llewellyn, 2011).

Our theme is that in practice most of the proposed structural measures are either impractical or largely irrelevant. The evidence of the crisis indicates that a wide range of different types of banks failed: large, small, highly diversified, focused, commercial banks and investment banks. In the UK, for instance, the first bank failure in the recent crisis was that of Northern Rock which was quintessentially a retail commercial bank even though it made heavy use of securitisation and wholesale funding (Llewellyn, 2008). Equally, not all universal banks encountered serious problems in the crisis. This raises three general issues about structural measures: whether, in practice, a clear distinction can be made for regulatory purposes between different types of institution and business; whether it is possible to define institutions that are systemically important, and whether issues of size and business lines are the key issues. Prohibiting commercial banks from conducting some forms of speculative activity would not reduce it in total but shift that activity elsewhere in the system, and there can be little confidence that the institutions conducting this business would not be systemically significant even though they may not be conducting core commercial banking business: Lehman Brothers was not a commercial bank conducting core banking business, and yet its failure clearly imposed substantial systemic costs.

Several problems are associated with structural measures: it is not always clear what an optimal structure is (e.g. the allowable business mix of banks), and arbitrage will often be able to circumvent them (e.g. the various ways around the Glass-Steagall Act). The practical difficulties of making a formal separation are formidable and the distinction between different types of business is fuzzy at the margins. In fluid markets, and with constant financial re-engineering, it is difficult in practice to separate different types of risks. In particular, a Glass Steagalltype approach is based on a faulty diagnosis of the causes of the crisis which were more to do with, inter alia, excess gearing, inter-connectedness, cross-sector contagion which a Glass Steagall approach would not in itself address. Furthermore, it is unlikely that Glass-Steagall would protect against systemic risk between firms when a crisis strikes. In a world of network externalities and high connectedness, even the failure of relatively small banks can create systemic problems.

Some of the proposed structural measures (such as Narrow Banks (Kay 2009 and 2009a), Equity Banks (Kotlikoff, 2010 and Kotlikoff and Leamer, 2009), and measures to drastically reduce maturity transformation by banks, amount almost to solving the problem of bank failures by abolishing banks. Maturity transformation, for example, is an integral part of the functioning of banks in the financial system. The question arises as to whether it is appropriate for regulatory and structural reform to undermine the basic functionality of banks.

Furthermore, there are often superior behavioural alternatives. For instance, differential capital requirements, and reformed resolution and Living Wills arrangements can be superior ways of addressing the issues that

structural measures are designed to address. A higher degree of regulatory intensity could be applied to such banks such as calibrating regulatory capital requirements on the basis of institutions' contribution to systemic risk (Acharya and Richardson, 2009, Brunnermeier et al., 2009 and Bernanke, 2009). The Financial Services Board has also proposed a global capital charge on Systemically Important Banks. The BIS has argued that the rationale of a Systemic Capital Charge would be to create a distribution of capital that reflects the systemic risk posed by individual firms (BIS, 2010). Chan-Lau (2010) suggests a practical methodology for levying capital charges based on degrees of interconnectedness. These would be based on a bank's incremental contribution to systemic risk and its contribution to increased risk of other institutions. The approach is designed as a way of internalising negative externalities associated with too-connectedto-fail institutions.

Objective 1: Behavioural Regulation

Most regulation is *behavioural* in that it imposes requirements that affect the way business is conducted and is designed to create incentives for prudent behaviour. Because of its central importance, we focus on the role of bank (equity) capital.

Bank Capital

A central issue is the extent to which imposed capital requirements are a real cost either to banks or society generally. It is often claimed (mainly by bankers) that to impose higher capital requirements would lead to a rise in the costs of banking and financial intermediation services, lower bank lending, and lower rates of return on equity. We argue the case for a substantial rise in bank (equity) capital as a major con-

tribution to lowering the probability of bank failures. This is based in part on the proposition that many of the concerns about imposing higher equity capital requirements are unfounded when the systemic perspective is adopted, and when a distinction is made between private and social costs.

- Various versions of the standard Modigliani-Miller theorem Admati et al. 2010) suggest that a rise in equity capital ratios should produce an offsetting fall in risk premia (both in equity and debt) as the bank becomes less risky. This in turn lowers the required rate of return on equity to satisfy shareholders. Furthermore, higher equity capital on the balance sheet should, to the extent that it lowers perceived risk, lower the cost of debt for banks. Overall, therefore, the impact of higher equity ratios on the overall cost of capital might be modest. However, the offset is unlikely to be total (Llewellyn, 2011).
- Empirical research (conducted, for instance, by the Basel Committee, the Bank of England, Financial Services Authority in the UK, and the National Institute of Economic and Social Research) supports such an intermediate position. The most comprehensive empirical analysis is given in Miles et al. (2011). Most empirical studies suggest that the macro-economic costs of higher equity ratios are modest most especially when viewed in the context of the trade-off with enhanced systemic stability. However, there is a distinction between the stock-adjustment effect (moving from low to high equity capital) and the new steady-state outcome: the costs of moving from one capital regime to another are likely to be greater than the new steady-state outcome. For

- this reason, a phase-in period is optimal as proposed in the Basel III arrangements.
- Even if there were to be net costs arising from higher imposed equity capital ratios, the benefits of a potentially more stable banking system need to be considered as part of the equation of balancing costs and benefits.
- Such benefits include avoidance of the output losses of bank crises, greater confidence in the banking system which should also contribute to lowering the cost of capital, and lower costs to tax-payers associated with bank failures. This would amount to the consumer paying the higher costs of bank intermediation as the price of a more stable system (Llewellyn, 2010).
- Whilst this might mean that consumers pay more for banking services from such institutions, there would in principle be an offsetting welfare gain by lowering the probability of failure (and hence the costs of failures) of systemically important banks.
- There is a systemic benefit in lowering the cost of bank failures given the higher equity cushion: a higher proportion of potential losses are met by equity shareholders.
- Higher equity ratios are likely to create more powerful incentives for private monitoring as equity holders have more to lose which compensates for the cost of monitoring. Moral hazard in terms of risk-taking should also be moderated to the extent that shareholders have more to lose with high equity capital ratios. Low capital ratios can be an incentive for shareholders to take (or tolerate) high risk strategies.
- Banks could benefit through lower costs of their monitoring of bank

counterparties to the extent that they also have higher equity cushions. There is currently a bias in favour of debt financing of banks because of the different tax treatment of debt and equity, and the expectation of bailouts. A rise in required equity capital ratios can be viewed as a contribution to minimising this perverse bias. Again, while this will be a cost to banks, it is not a social cost to the extent that it corrects for market distortions. Thus, while a reduction in the tax benefit is a cost to banks (and hence one reason why they prefer high gearing) this is not a social cost.

Admati et al. (2010) argue that higher capital requirements are likely to produce more stable returns to bank shareholders albeit lower in buoyant times but higher in distressed times because of a lower appetite for risk.

Bankers have argued that the proposed rise in equity requirements under Basel III is disproportionate and excessive as they are based on low-probability risks, and will result in a disproportionate decline in lending and a higher cost of credit. The argument here is that the costs are exaggerated. It can also be argued that banks were extending too much credit in the years prior to the crisis because risks were being underestimated and under-priced. In any case, the costs associated with low-probability-high-impact (LPHI) risks can be very substantial when they do occur even though may not happen very frequently. The benefits of avoiding these occasional costs may be greater than the higher costs in normal times created by the requirement to hold more equity. The volatility of credit is a further consideration as this also imposes costs. Low capital in banks means that when a bank incurs losses (as opposed to failure) it is likely to cut back on lending.

The key point is that a distinction is made between private and social costs when adjusting regulatory capital requirements. The cost of capital is likely to rise if the perception is that risks are shifted from tax-payers to shareholders. Social costs are not increased if banks are required to pay for the subsidies and implicit guarantees they receive. Our overall assessment is that higher (perhaps substantially higher and in the region of 15%) capital requirements are likely to imply little social cost but significant systemic benefits.

The overall conclusion is fivefold: the costs of higher equity capital requirements is probably exaggerated by bank-



ers, there is a crucial distinction between private and social costs, the benefits of more stability are an important offset, it is appropriate that consumers pay for the benefits of lower costs associated with instability, and the costs of LPHI risks can be very high.

Objective 1: Intervention

A key component of any strategy to reduce the probability of failures is the nature, timing and form of *Intervention* in the event of a failing bank. Intervention strategies can be based on Prompt Corrective Action programmes (i.e. intervention being made early), and SEIR regimes as in the USA. These are similar

to the Recovery and Resolution arrangements within Living Wills discussed in a later section.

Intervention arrangements have incentive and moral hazard effects which potentially influence future behaviour of banks and their customers. These arrangements may also have significant implications for the total cost of intervention (e.g. initial forbearance often has the effect of raising the eventual cost of subsequent intervention), and the distribution of those costs between tax-payers and other agents. The issue focuses on when intervention is to be made. The experience of banking crises in both developed and developing countries indicates that well-defined strategies for responding to the possible insolvency of financial institutions are needed.

A key issue relates to rules *versus* discretion in the event of bank distress: the extent to which intervention should be circumscribed by clearly-defined rules (so that intervention agencies have no discretion about whether, how and when to act), or whether there should always be discretion simply because relevant circumstances cannot be set out in advance. The obvious *prima facie* advantage for allowing discretion is that it is impossible to foresee all future circumstances and conditions for when a bank might become distressed and close to insolvency.

There are, however, strong arguments against allowing discretion and in favour of a rules approach to intervention. Firstly, a rules approach enhances the credibility of the intervention agency in that market participants have a high degree of certainty that action will be taken. Secondly, allowing discretion is likely to increase the probability of forbearance which usually eventually leads to higher costs when intervention is finally made. It

guards against hazards associated with risk-averse regulators who themselves might be disinclined to take action for fear that it will be interpreted as a regulatory failure, and the temptation to allow a firm to trade-out of its difficulty: a policy that amounts to the regulator "gambling for resurrection". Kane (2000) argues that officials may forbear because they face different incentives from those of the market: their own welfare, the interests of the agency they represent, political interests, reputation, future employment prospects, etc. Thirdly, a rules-based approach removes the danger of undue political interference in the disciplining of banks. Fourthly, a rules approach guards against supervisors focusing on the short-term costs of intervention. Fifthly, it guards against a "collective euphoria" syndrome whereby all agents (including supervisors) are swept along by a common euphoria (Llewellyn, 2010). Finally, and related to the first, a rules approach to intervention is likely to have a beneficial impact on ex ante behaviour of financial firms, and create incentives for management to manage banks prudently so as to reduce the probability of insolvency.

Above all, a rules approach is designed to address the time-consistency problem and add credibility to a no-bail-out strategy and thereby create appropriate incentives within banks.

The Prompt Corrective Action (PCA) rules in the USA specify graduated intervention by supervisors with pre-determined responses triggered by, *inter alia*, capital thresholds. Several other countries have such rules of intervention.

Objective 1: Market Discipline

The role of market discipline needs to be addressed and enhanced not only via the elements already within Pillar 3 of the Basel Accord, but also by the use of market metrics and the use of market signals in triggering discretionary supervisory intervention. Market approaches have the advantage of simplicity, transparency, being observable in real time, are model-free, are more timely than many of the indicators currently used by supervisors. In contrast, the quest for enhanced risk-sensitivity of capital requirements has created complexity, opacity and has to some extent impaired the incentives for market discipline. They also create incentives for monitoring and shareholder activism.

The role of market discipline, and the role of transparency and market incentives, is enshrined within the existing Basel regime. In addition, there is a potentially powerful role to use market metrics in the supervisory process. There is some evidence that marketbased capital ratios and measures of Tobin Q yield useful information to supervisors which can be utilised in the supervisory process, and that marketbased measures of capital have higher predictive value than do book-based measures. Haldane (2011) observes that market-based metrics perform well in distinguishing between good and more vulnerable in that they give advance warning of distress.

5 Objective 2: Minimising the Costs of Bank Failures

This section considers measures designed to minimise the costs of bank failures given that however realistically constructed measures to reduce the probability of failures will not guarantee there will no bank failures. With respect to Objective 2, the main elements are: (1) structural measures; (2) ring-fencing within conglomerate banks; (3) taxation; (4) explicit and predictable Resolution arrangements; and (5) Living Wills. Without predictable ar-

rangements for the allocation of losses, resolution will always be delayed.

Some of the structural measures discussed above in relation to Objective 1 are equally relevant for Objective 2 and are not repeated here although they might be more relevant to Objective 2.

Objective 2: Ring Fencing

An earlier section discussed various structural measures including the Glass Steagall model of total separation between commercial and investment banking business. An alternative approach (outlined, for instance, in the Interim Report of the UK's Independent Commission on Banking (ICB, 2011), and subsequently endorsed by the Chancellor of the Exchequer), is to allow the two activities to be conducted within the same bank but to have an internal separation between the two. This would imply, for instance, having dedicated capital assigned to the two parts of the business. Under the ICB approach, any excess capital within either business can be transferred to the other business providing the required minima are kept in each. The principle is that, in the event of distress, the investment banking part of the business would not be rescued though the core commercial banking arm (however that is defined) could be rescued. The central idea is two-fold: commercial banking operations should not be contaminated by the risks in investment banking, and the ring-fenced commercial banking operation would be rescued.

The central advantage of ring-fencing is that commercial banking operations of a financial conglomerate would be rescued whilst the investment bank would not be. This could be achieved while also maintaining any economies of scale and scope advantages that might exist within a financial conglomerate. Specifically, resolution would be made

easier because of a simplified business structure, and there would be no implicit subsidy to investment banking activity by virtue of a bank being judged to be TBTF. In principle, the overall cost of a bank failure is reduced as one part of the bank can be allowed to fail without undermining core commercial banking activity.

Objective 2: Taxation

The wide range of intervention measures applied by governments and central banks in the wake of the crisis involved a substantial tax-payer commitment. Tax payers became what amounted to an "insurer of last resort" but with an inefficient insurance contract in that no ex ante premiums were paid by the insured entities. The contract was implicit. In effect, taxpayers became exposed to bank credit risks that they themselves had no part in creating and for which no ex ante premiums were received. In order to minimise the net cost to tax-payers, banks could be required to pay ex ante premiums and/or ex post for the costs of rescue operations. The distribution implications of such a move would be



difficult to unravel although each bank's liability to pay could in principle be related to a measure of its systemic significance.

The rationale for imposing special taxation on banks is three-fold: (1) to recoup the costs of past bailouts and intervention, (2) to compensate for the effective subsidy received by banks by virtue of possible future bailouts and being TBTF, and, (3) to create incentives to alter funding structures, and perhaps against becoming "too big". The incentive structure with regard to funding is seen in the UK case where a new tax relates to each bank's balance sheet size minus the sum of core capital, insured (retail) deposits, and cash raised against holdings of government bonds: this is, in effect, a tax on wholesale market borrowing. It amounts to a systemic risk levy whereby the tax internalises to banks the social (systemic) costs they potentially create.

The IMF has made two proposals: a *Financial Stability Contribution* and a *Financial Activity Tax*. In the former case, banks would be required to make payments *ex ante* through a levy on their balance sheets. This would imply payments to cover intervention and resolution costs.

Objective 2: Resolution Arrangements

Prior to the onset of the recent crisis, many countries did not have clearlydefined resolution arrangements in place, or a legal structure giving powers of intervention before insolvency is reached. This meant that uncertainty was created about how governments would respond to serious bank distress. Exceptions were Canada, Italy and Norway with the last-mentioned having put in place special resolution arrangements following the banking crisis in the 1990s. To avoid this, credible, predictable, and timely resolution arrangements for failed institutions need to be in place so as to limit the potential

liability imposed on tax-payers, maintains systemic stability, and protects depositors.

The objective is to allow banks to "fail" without disturbing business and customer relationships, and to ensure that the costs of failure fall on private stakeholders (equity and bond holders and other unsecured creditors) rather than tax-payers. Bailouts are to be avoided as they impose costs on taxpayers, create serious moral hazard, may support inefficient banks, and weaken market discipline. Banks need to be put into a resolution procedure if they are unable to survive without public support, and cannot refinance maturing debt. A key objective is to minimise the moral hazard created by bank rescues.

The ultimate objective is for resolution arrangements to be in place to deal with distressed banks with the minimum of costs and disruption. This implies allowing banks to fail without disturbing customer business or compromising systemic stability. A basic principle in reducing the cost of bank failures is for problems of a failed bank to be addressed quickly. This means that insolvency and bankruptcy procedures need to be clear and appropriate for the special position of banks.

Problems emerge when resolution arrangements are not clear. Firstly, it creates uncertainty for all stakeholders including depositors and other banks in the system. Secondly, it creates time-consistency problems (and hence credibility issues) as governments may be induced to behave differently over time. Thirdly, stakeholders are inclined to bargain for economic rents often (if not usually) at the expense of the tax-payer. Fourthly, as argued above, it can lead to political pressures for forbearance and the moral hazard attached to it, and can lead to costly and unnecessary delays in

resolution. Two further considerations in the case of cross border banks is the extent to which countries have different resolution regimes, and how burden sharing is to be distributed.

To address this, we argue for the addition of a fourth Pillar to the Basel Capital Accord: whilst Pillars 1 to 3 focus predominantly on reducing the probability of bank failures, Pillar 4 would focus on resolution arrangements designed to lower the cost of bank failures. Competitive distortions between different nationalities of banks can arise just as much through different approaches to resolution as with different rules and procedures within Pillars 1 to 3.

Given the strong presumption in favour of clearly-defined, explicit and predictable resolution procedures to be in place, a set of key criteria are outlined for constructing such a regime:

- Minimal, or zero, loss or risk to tax-payers
- Banks that cannot survive without public support to be placed in the resolution procedure
- Resolution to be activated before a bank becomes technically insolvent: this should have the beneficial effect of enhancing market discipline
- Resolution procedures to be activated very quickly so as not to jeopardise customers' banking arrangements: there should be no disruption to the business of the bank for its customers
- Any pay-outs to insured depositors to be made with minimal delay
- Shareholders never to be protected
- Non-insured creditors to share in any costs of insolvency
- Resolution arrangements not to create moral hazard for the future
- The arrangements need to credibly sustain financial stability and public confidence

- Minimal distortion to competitive neutrality between banks: for EU Member States this also implies adherence to EU competition requirements
- Large, and systemically significant, banks to be required to construct their own resolution plans (Living Wills as discussed below)
- The avoidance of any potential for stakeholders (most especially banks) to bargain for economic rents

Several elements can be included in resolution arrangements: the facility for private sector purchases of failed banks, transfer of engagements to a Bridge Bank, partial transfer of assets and liabilities to other institutions, temporary public ownership, the ability to restructure claims of an institution (e.g. debt-equity conversions, and the writing down of unsecured creditors' claims), forced merger/acquisitions without shareholder consent, the creation of Bad Banks, and the suspension or termination of powers. Above all, they should allow for resolution even when the bank has positive capital.

A basic principle in reducing the cost of bank failures is that it should be possible for the problems of a failed bank to be addressed quickly. This means insolvency and bankruptcy procedures being clear and appropriate for the special position of banks. There is a strong case for treating banks differently in this regard because the uncertainty surrounding a drawn-out procedure can create uncertainty for the financial system as a whole.

Objective 2: Living Wills

Prior to the recent crisis, most countries did not have in place the necessary tools to wind down their domestic financial conglomerates. Huertas (2010) argues that Living Wills can in theory create a financial system that is

"resilient to shocks and one that assures that banks are not *too big* or *too interconnected* to fail." Living Wills seek to prevent the failure of one bank having broad systemic consequences leading to the failure of other innocent banks. As put by Huertas (2010): "Living wills offer the prospect that society can create a lower impact/lower cost solution to the problem posed by large, systemically important banks."

The two key components of Living Wills are Recovery and Resolution arrangements with the resolution component kicking in when the recovery component has failed. In principle, clearlydefined and credible recovery plans should lower the probability that resolution will be needed because such plans outline how a bank is to respond to distress situations. They are designed to maintain banks as going-concerns. Living Wills dictate that a bank has in place a clear recovery plan by requiring it to outline in advance what is to be done in the event that it falls into extreme stress. As put by Huertas (2010): "The bank is forced to think through in advance what it would do if the bank were to fall under extreme stress." In particular, banks are required to have plans in place to ensure that, in such circumstances, they can maintain adequate capital and liquidity. The requirement to have Convertible Bonds as part of a bank's capital base could be part of Living Will arrangements with the circumstances under which the conversion takes place being specified in advance. Other possible routes to recovery include selling parts of the business, exiting from some business lines, running down the scale of the bank, selling the entire business, etc.

The essence of Living Wills is that there are clearly-defined and credible recovery plans in advance, resolution arrangements are made explicit, and arrangements are in place to enable a bank to be broken up when in distress so as to protect core depositors' business. They amount to a form of SEIR. There are further advantages to Living Wills in the case of complex and potentially systemically important institutions. Firstly, to the extent that they induce simplified structures in complex banks, interconnectedness might be lowered. Secondly, they are designed to lower the probability of failure through the recovery component. Thirdly, systemic costs of any failures that occur should be lowered because clear and credible resolution plans are put in place in advance. Fourthly, the resolution process should be made easier and less complex. Fifthly, they would give more information to supervisors in the process of Resolution operations. Finally, there would be advantages through reducing the need for rescues or bailouts because credible and explicit resolution alternative mechanisms would be in place. This should enhance the credibility of a no-bailout policy.

The ultimate rationale is that the "recovery" component should lower the probability that a bank would require intervention by the regulatory authorities, and the resolution part should lower the costs to society of a bank failure.

Living Wills make recovery and resolution plans more explicit. Banks are particularly complex organisations and generally have more subsidiaries than most other types of company. Banks can be horrendously complex with subsidiaries, structured investment vehicles (SIVs), special purpose vehicles (SPVs), and with complex relationships between different parts of the business. HSBC, for instance, has in excess of two thousand entities although in many cases they are separately capitalised. The structural complexity of

large, conglomerate banks creates particular problems for the resolution regime most especially when the objective is to separate the essential parts of a bank (which are to be sustained) from its other activities. Living Wills can be designed to give information about how any wind-down would be executed in practice. They are also designed to include mechanisms to separate the components of a financial firm that are critical as opposed to those that are not, (Hupkes, 2009): "In particular, deposits, some lending business, and payments services are to be ring-fenced in the event of a resolution." This suggests having simple structures so that parts of the bank can easily be sold (Tucker, 2010). The main purpose is to lower the cost, and speed up the process, of resolution by making it easier to sell different parts of the bank, and to protect the tax-payer by giving an alternative to bailouts. It needs to be clear which parts of a bank's business are to be supported and kept solvent. A key feature is that core business should be effectively ring-fenced in the event of bank distress.

The British government has imposed a requirement on large banks to create Recovery and Resolution Plans (Living Wills) which explain how a bank is to be broken up in the event of resolution. The Group of Thirty has made a similar proposal in order to "develop internationally consistent firmspecific resolution plans" (Group of Thirty, 2009). The UK Financial Services Authority requires that such plans should: be capable of execution within a fairly short period and with a high degree of certainty; be of a size that would have a substantial impact and be capable of turning round a distressed institution, and contain a wide range of alternative options to bolster capital and liquidity when necessary.

Where is Pillar 4?

Many of these issues are particularly relevant in the case of the EU. What might be termed an incompatible trinity has three elements: (1) integrated crossborder banking markets with strong externalities, (2) global financial stability, and (3) autonomous national regulation and supervision. The incompatibility arises as any two can be chosen but not all three. As argued in Masciandaro et al. (2011): "A fragmented supervisory structure is increasingly inadequate to fully internalise the negaexternalities stemming cross-border banking". A central problem in many cases is that banks are cross-border in terms of business operations while resolution arrangements tend to remain national. In this sense the regulatory regime has not kept pace with business structures.

The Basel Capital Accord has three pillars: in essence, regulation, supervision, and market discipline. A crucial element in any regulatory regime (the resolution arrangements) is not explicitly covered in the Basel Accords and yet this is an area which needs as much international coordination as do the three existing pillars. Different national resolution arrangements have as much potential to create competitive distortions between different nationalities of banks as would different capital adequacy rules within Pillar 1. A Pillar 4 in the Basel Accord would contribute to making the overall regulatory regime more competitively neutral as between countries.

There are several problems with not having an internationally agreed Pillar 4 within the Basel Capital Accord:

There is potential for non-competitive neutrality as between countries in resolution arrangements which could, under some circumstances, lead to regulatory arbitrage

- There remains a temptation for national authorities to adopt bailout strategies which create moral hazard
- Banks are global in nature and hence a degree of coordination and compatibility in resolution arrangements is desirable because of the negative externalities associated with interconnectedness
- The international dimension raises difficult issues of burden-sharing when cross-border banks in the absence of internationally agreed resolution procedures
- Resolution requires quick and predictable action which is likely to be difficult in the case of global banks
- Information sharing between different national agencies is essential and yet this is not always practiced
- Uncertainty is created regarding how different countries will react to banks in distress
- Different countries have differing legal powers with respect, for instance, to bankruptcy laws
- Countries are tempted to adopt national interests
- Resolution can be particularly timeconsuming when negotiations are needed about procedures between different countries (this was demonstrated in the case of Fortis bank)

Clearly, difficult political and logistical issues are involved with a co-ordinated approach. Nevertheless, the advantages of more predictability and compatibility in resolution arrangements are clear.

There are currently formidable problems with respect to coordinated resolution arrangements with regard to crossborder banks: some supervisory agencies are constrained in their ability to share information with agencies in other jurisdictions, there are major differences between countries with respect to resolution powers and procedures, legal structures (including with regard to bankruptcy procedures) vary considerably, and co-ordination can be time-consuming. All of these, together with a requirement for there to be a degree of convergence in resolution regimes, need to be addressed if an effective and efficient cross-border resolution and burdensharing regime is to be established.

A set of basic requirements (most especially within the EU) needs to be agreed and enforced with regard to key elements: each country should have effective resolution powers and instruments; a degree of harmonisation of bankruptcy laws; an agreed framework for co-ordination in the case of crossborder banks; a reasonable degree of convergence in resolution arrangements between countries; living wills to simply the resolution procedure; the free exchange of information between national supervisory agencies with the removal of some current legal impediments; a consistent approach to SEIR, and an agreed model to determine burden sharing.

6 Summary of the Argument: A Regulatory Strategy

A central theme has been that several dimensions to regulatory strategy need to be considered which involve more than piece-meal reforms to existing approaches focused on the Basel capital arrangements. Regulatory reform needs to be *strategic* rather than *incremental* and cover the full range of instruments and structures within a regulatory regime to address the twin objectives of lowering the probability of bank failures and limiting their costs. A matrix approach recognises the potential trade-offs between the costs of regulation and the two objectives of the regulatory regime.

The conclusion regarding regulatory strategy is that most, if not all, of the objectives of the regulatory regime can be achieved without major structural measures or ever-more refinements to the existing regime, but through a combination of:



- A significant rise in equity capital requirements based on a simple gearing ratio rather than further detailed refinements to the Basel riskweight methodology. Capital regulation should also include explicit "bail-in" requirements, and contingent capital. Overall, banks need to have greater loss-absorbing power
- Regulation to be based on economic substance rather than arbitrary definitions of institutions. A substantial rise in required capital ratios for banks is likely to induce a process of disintermediation through, for instance, Shadow Banks. This implies that the "boundary issue" needs to be extended to encompass all institutions that are likely to become systemically important
- Differential capital requirements applied to banks that are regarded as systemically significant
- Cyclically adjusted capital requirements and loan-loss provisioning
- More stringent liquidity requirements on banks related both to asset holding and funding positions
- More timely and intensive supervision of banks

- Measures to make Pillar 3 of the Basel Accord more effective including a focus on internal incentive structures within banks, and more use of market metrics in supervisory and intervention processes
- Tax and insurance impositions on banks
- Ring-fencing within banks with a resultant more simple organisational structure. While stopping short of breaking up banks or applying a rigid Glass Steagall-type approach, one structural measure to be incorporated in Living Wills would be "subsidiarisation" whereby banks that are deemed to be potentially systemically significant would have dedicated capital allocated to different areas of the business
- A commitment to PCA and SEIR strategies implying early and decisive direct intervention by supervisory agencies
- The requirement for major banks to have Living Wills incorporating recovery and resolution plans
- Clearly-defined and credible resolution arrangements. The objective is to allow banks to fail without disturbing business and customer relationships, and to ensure the costs of default fall on equity and bond holders and other non-secured creditors

Resolution arrangements at the international level to be covered in a Pillar 4 of the Basel Capital Accord Above all, more emphasis needs to be given to supervision focusing on business models and strategies, the testing and monitoring of risk analysis and management systems of banks, earlier direct intervention by supervisory agencies, governance arrangements of banks, internal incentive structures, and a particular focus on high-impact institutions.

This strategy implies greater emphasis and effectiveness of Pillars 2 and 3, and the addition of a Pillar 4. Pillars 1 to 3 focus predominantly on Objective 1, while the proposed Pillar 4 is relevant for Objective 2.

We have been sceptical about the relevance and practicality of many of the structural measures that have been proposed to reduce the probability of bank failures. Given the "endogeneity problem", more emphasis needs to be given to designing features of a regulatory regime to reduce the costs of those bank failures that do occur. Lowering the cost of failures implies internalising risks rather than, as is often the case if bank distress, passed to tax-payers. Given the weaknesses and limitations of regulation, whilst rules may be necessary as part of an overall regulatory regime, they are not sufficient.

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Panel 2: Enhancements in EU Financial Regulation: Have We Done Enough?

Martin Summer
Head of Division
Oesterreichische Nationalbank



Introductory Remarks

Ladies and Gentlemen,

The recent financial crisis has induced several regulatory changes and initiatives to enhance the current framework and build better safeguards against future crisis. In this session, we want to ask two high profile experts in banking and finance whether they think that we have done enough. Maybe it would also be interesting to pose the question a bit differently and ask: Have we done the right thing?

So what has happened so far?

New institutions were created; the European Systemic Risk Board (ESRB) and the European Banking Authority (EBA) are the two most prominent examples. In the discussions preceding the creation of these institutions one sometimes got the impression that the financial crisis was mainly a problem of coordination and information sharing among supervisors. But was this really at the core of the crisis?

New rules for hedge funds have been initiated. But there is little evidence that this crisis was somehow fundamentally linked to hedge funds.

Charges and taxes on financial institutions have been imposed as if these charges would finance future rescues.

Resolution tools were created in some countries, as for instance in the UK in Germany and in the USA but the international problems in resolution have remained unaddressed.

The Basel framework got an overhaul which does not fundamentally change the approach in place and leads to very modest and small increases in equity requirements for banks.

Does this mean that actually little has happened, are there issues that remain unaddressed, do we need to do more or do we need to do other things?

I am very happy to welcome today two prominent experts who will share their views and discuss these issues with us: Hans-Helmut Kotz and Andreas Pfingsten.

Hans-Helmut Kotz is a Senior Fellow at the Goethe University's Center for Financial Studies as well as an Honorary Professor in the Faculty of Economics and Behavioral Sciences of Freiburg University. During the fall term 2010, he was visiting Harvard University, teaching a course in its Department of Economics and working at Harvard's Center for European Studies. Between 2002 and 2010, he was a Member of the Executive Board of Deutsche Bundesbank, over time in charge of Departments of Financial Stability, Markets, IT, Statistics and Trainingand Education. He was a member of a number of committees of the BIS, the Financial Stability Board, as well as the OECD, where he chaired the Financial Markets Committee. He was also the Central Bank Deputy for the G7 and the G20 process. Between 2002 and 2005, he served in a personal capacity on an Expert Panel of the European Parliament on Financial Markets. He has published widely in scholarly journals and is also a regular



media commentator on financial regulation issues. His current research focuses on monetary policy's role in underwriting financial stability, on sustainable levels of bank profitability and on the politics of international rule making.

Andreas Pfingsten is Professor of Banking and Finance at the University of Münster in Germany. He was educated as an economist and an operation research specialist at the Universities of Karlsruhe and Vancouver, British Columbia. His career started as a professor of economics at the Universities of Siegen and Graz with some times also spent in the private sector as a banker and a controller. In 1994, Andreas Pfingsten took up a chair in

banking at the University of Münster where he is teaching and doing research there since then. From 1998–2004, he was a member of the Oliver Wyman Institute and since 1999 he is a member of the Nordrhein-Westphälische Academy of Sciences.

He has published widely in economics, operations research, banking, and finance and risk management. He is also co-author of a famous textbook on banking together with Hartmann-Wendels and Weber. The book is meanwhile in its 4th edition.



Hans-Helmut Kotz¹

Professor

Albert-Ludwigs Universität Freiburg und CFS Goethe Universität, Frankfurt



Enhancements in EU Financial Regulation: Have We Done Enough?

Nous entrons dans l'avenir à reculons. Paul Valéry (1962).

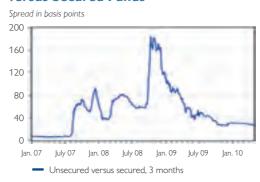
1 Where Do We Come From?1

There had been carefully laid-out plans on how to organize the institutional infrastructure of European financial markets. In fact, the Financial Services Action Plan, a key plank in the Lisbon Program of the early 2000s, was nothing less than a Grand Design. It followed a principled philosophy, the modern one: the perimeter of capital markets should be enlarged. Direct intermediation (between ultimate savers and final users of funds) was to be fostered. Regulators should content with providing the institutional infrastructure for this ever more integrating financial landscape. Supervision, also in the intra-European cross-border dimension, could be delivered effectively in a decentralized mode. This was deemed to be on purpose since rule books were largely harmonized. All of this was, in fact, a process which began with the European Banking Directives and culminated in the Capital Adequacy Directive III.

But then, almost out of blue skies, this story fell apart. In late summer 2008, after a wrenching year of mounting tensions — in officialese, one did not speak of a financial crisis until well into the summer of 2008 — interbank money markets almost ground to a halt. The increased roll-over risk — funding liquidity — had shown up in significantly widening spreads between unsecured versus secured funds (chart 1). This reduced confidence also translated into drastically falling trading volumes.

Chart 1

Interbank Money Market – Unsecured versus Secured Funds



Source: ECB

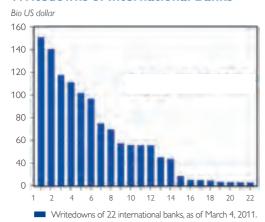
Concurrently, market liquidity evaporated in all but the most transparent assets — which therefore, being held on the trading book, took the largest hits. While Basel II was barely operative — and in some jurisdictions not implemented at all — this, of course, should not have happened, never.

Ever since August of 2007, liquidity demand was rising substantially in the aggregate. This reflected, firstly, a heightened perceived counterparty risk. Write-downs, indicating mounting default probabilities in particular of structured products, were increasing with an accelerating pace (chart 2). Therefore, possible repercussions through the tightly knit net of connections within the banking system made market participants suspicious. Trust was especially undermined as the relation to the off-balance sheet (so-called structured investment vehicles, conduits) and non-bank sphere was opaque. This suggested substantial caution to participants in interbank markets - or less trust. Adding to this, banks also

^{1.} E-mail: kotz@ifk-cfs.de. These notes are written in a purely personal capacity for a panel contribution at OeNB's 39th Economics Conference, Vienna, May 23. I benefited from discussions with Ernest Gnan, Jan Krahnen, David Llewellyn, Peter Mooslechner, Ewald Nowotny, Andreas Pfingsten, Martin Summer and Martin Weber — without any intention to implicate them in positions argued here.

Chart 3

Writedowns of International Banks



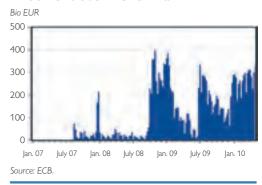
Source: Bloomberg.

maintained higher precautionary balances, in order to be prepared, secondly, to honor the back-up lines they had offered to off-balance sheet entities (in fact, puts they had written, or liquidity insurance they had provided, which ex post had proven hugely underpriced).

It is here, in money markets, where Central Banks in the North-Atlantic region where first forced to intervene in their financial market stability function (see for an excellent overview Turner, 2010). The ECB responded rapidly and forcefully, somehow in a first-mover fashion. Diagnosing things as they evolved early on as a run — in this case, obviously, not of the retail but the wholesale variety – the ECB allotted base money beyond the system's needs under standard conditions (chart 3, see also Kotz, 2008). Initially, in the first phase of the crisis, in order to keep interbank rates in close vicinity of its policy rate, the ECB only frontloaded liquidity supply – but only temporarily, absorbing surplus liquidity over the course of the reserve maintenance period. In the course of the crisis, the dysfunctionality became more pertinent along the yield curve. In response

Allotment over Benchmark

Chart 2



to that funds with longer duration were also made available.

Ultimately, with trading volumes going down strongly, again, in particular in the longer maturities, as well as spreads between secured and unsecured funds widening out to unprecedented levels, the ECB launched in mid October 2008 its policy of satisfying all and any liquidity demand at a fixed rate (full allotment at a fixed rate), given appropriate collateral could be posted. Moreover, the ECB also broadened its - already large - list of eligible collateral and it also reduced the minimum required credit quality from. Essentially, the ECB was accepting an intermediary role using its enlarged balance sheet to underwrite financial market stability. It was somehow substituting a "missing market", missing for reasons of lack of trust or confidence. These "enhanced credit support measures", as the ECB came to call them, were of course *extraordinary* — which implies, as a logical corollary, that the ECB would like get back to normal (ordinary) operational procedures as soon as possible.

Evolutions in money markets are of interest in our case, since it is here, in a stressed and ultimately dysfunctional environment, where the urge for re-considering the regulatory landscape

forcefully emerged. There was therefore a certain Naipaulian Enigma of Arrival in evidence in the fall of 2008 - which led to a fundamental reassessment of rules as well as their institutional delivery. In providing liquidity, the "social function" of which, according to John Hicks, is "to provide time for thinking", central banks gave room of maneuver - to profoundly rethink the prevailing rule-set. It is thus very practical and appropriate to take stock and address, as this panel does, the question of whether we have done enough. This question obviously begs a number of nagging sub-questions, some of which we will try to address, admittedly, in a rather broad-brush way.

Focusing in the following on the reregulation of banking markets, we will first very briefly outline the Basel II philosophy in order to understand why there is now the universally shared view that this needs a reappraisal. Quite directly, this also leads to the second question, namely, what lessons can we draw or what have we learned? Or, in the same vein: Where do we want to get to? How should a robust, cost-effective financial system look like? Thirdly, given the strong integration of financial markets, being most evident in the European domain, the new rules of the game call for a forceful international cooperation - in rulemaking as well as rule-implementation.

with a long phasing-in period. Moreover, in Europe a new institutional infrastructure to control the application of the new rules of the game is in place. This, finally, begs the concluding (as well as the starting) question: Does it all suffice — or is it too much? **2 Basel II – Why Such an Early**

And results are already on display:

Basel III is up for deployment, though

2 Basel II – Why Such an Early Reappraisal?

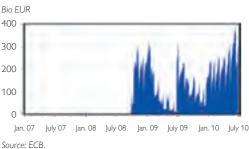
In response to a rule-set being seen as too simplistic and also vulnerable to gaming, Basel II, evolving over a long development period, was more complex and more sophisticated. (Almost by construction this opened arbitrage opportunities, as any set of regulations does.) In short, Basel II was understood



as state of the art and up to the task of delivering stability. It rested solidly on three pillars. The first of them were capital requirements, for the advanced banks finely attuned to the supposed riskiness of assets. In addition, in order to cope with specifics, a structured and disciplined supervisory process was conceived. Then, finally, based on transparent information disclosure, market agents were also enlisted as supervisors. In total, this structure should support a fundamentally sound set of

Chart 4

Deposit Facility



banking institutions. As an immediate corollary Basel II should simultaneously underwrite systemic stability — which thus was seen as a derived product.

The most important building block was the one detailing capital requirements. This emphasis also testified to the underlying philosophy: The objective was to achieve a close alignment between economic (or bank-individual) with regulatory capital. The system was, as industry associations had always called-for, almost on an auto-pilot. This was also very much in line with the prevailing zeitgeist: Supervision was delegated by design. Self-regulation was seen as most effective since, in its most advanced version, it built from sophisticated bank internal



models. Supervisors had but a certifier's role. And how could they be assumed to know better than those highly incentivized to take care of their own fate? What concerned institutions with not as advanced risk-modeling capacities, the second tier banks, they had a robust fall-back option: Rating agencies, mindful of their reputational capital being on the line, would provide them with reliable risk assessments.

While it is true, that Basel II was just barely in force when the crisis broke, banks of course had been implementing the machinery long before. In fact, they had been advising these approaches for a good decade. And the foundation models were in the public domain, very literally: downloadable. Therefore, with this structure in place, what we have seen simply should not have happened. But it did. And it did not happen completely inadvertently. Indeed, most of the issues which are now to be mended with Basel III had been raised before — ever since the debate on Basel II was launched. In particular four points bear repeating since they also come up with Basel III.

purportedly The sophisticated models to compute risk weightings (ultimately, risk-weighted assets) were not only challenged with very significant data limitations. Defaults for most instruments are rather rare events hence the need for data covering at number of credit cycles (de Servigny and Zelko, 2001). But they were simply not available. For this small sample bias, Monte Carlo simulations are no substitute. These risk-assessment models were in particular conceptually fragile. Here, uncertainty referred especially to the flaws of the value at risk approach. By construction, such a perspective implies and underestimation of low probability events (which were in reality of course not as unexpected as the normal assumption would make us believe; Herring, 1999). More importantly, the systemic dimension, arising from the interaction of the joint application of these models, was left unattended. This meant a complete disregard of common downside risks. In the same vein and more generally, the endogeneity of risk was not acknowledged (Brunnermeier et al., 2009).

Moreover, while the criticism concerning pro-cyclicality was accepted early on — it was never addressed in earnest. One reason for this possibly

was that dealing with the issue would have also implied, as far as cycles are not correlated, that the playing field would have been un-leveled along national or regional dimensions. Then, there is quite obviously a very nagging diagnosis problem: How does one conclude on the amount of the cyclical deviation from trend and how does one deploy an instrument to deal with that? Nonetheless, in reality the issue did not remain moot.

Thirdly, and most puzzlingly, liquidity problems were largely ignored in the Basel II environment. Or, to put it more benignly, they were deemed to be sufficiently dealt with indirectly, through sophisticated capital requirements. This argument is of course not completely beside the point. After all, the distinction between liquidity and solvency is somehow elusive, especially in turbulent times. The financial crisis has however palpably shown that capital requirements alone do not suffice. But it was also never expected to be that way.

This reads very much like "We told you so". And, in fact, there is a substantial literature on all points mentioned above, detailing the critique – as it was raised during the consultation phase of Basel II, in the early 2000s, or even before (Danielson et al., 2001; Hellwig, 1996; Gehrig, 1996; Kotz, 2001 etc.). This begs questions about the political economics of rule making which we here only highlight in a very cursory fashion:2 Who has a say and an impact on rules beyond the very diligent and public-minded civil servants? How does one deal with the – not exclusively public-spirited – but completely legitimate influence of industry groups? Their involvement is, of course, legitimate in a pluralistic society and, in light of their comprehensive knowledge about instruments, indispensable. But, given recent experience, one also might think about having more of an involvement of disinterested academics — were it only as a countervailing factor, challenging received wisdom.

3 What Lessons Have We Learned by Now?

Or, before, where do we want to get to? While it appears more than obvious, the financial sector does not find its purpose in itself. Rather, it is quite literally a service industry. Essentially, financial institutions should perform two functions – the allocation of scarce savings and the management of the attendant risk, at acceptable cost. This implies a pertinent question: "...how well is our financial system serving us, and at what cost" (Friedman 2010, p. 9). What is most puzzling: we do not really have a good idea about this indeed fundamental issue: Are society's resources used justifiably? It goes without saying that here a substantial effort has to be made in order to achieve a necessary understanding of the balance of costs and benefits of finance (Haldane et al., 2009).

At a minimum, we have however an idea about the possible destructive potential of dysfunctional financial institutions. These potential side-effects were of course always palpable, in developing as well as developed countries, for too long to ignore (Kindleberger, 1986). Meanwhile it is undeniable: Such a calamity can also happen in the North-Atlantic area. The losses of today's ongoing crisis are inadequately captured if one only looks at write-downs in banking books (chart 2), though they are very substantial. The massive destabilization of numerous public sector budgets, subsequent to the crisis, belongs on the list also. In addition,

^{2.} For a significantly more critical view see Claessens and Underhill (2010).

opportunity cost, of course, also include the gigantic mis-allocation of resources, their wealth-reducing deployment. This is important to recall because against this background and for obvious reasons, rule makers and supervisors have become more conservative.

Now, what lessons have been drawn? Early on, in the fall of 2009, the Financial Stability Board (FSB) has produced a comprehensive list of steps to be taken to make the financial system more safe and effective in delivering on its ultimate purpose, supporting welfare creation (Vinals, 2010). This ambitious program has, most importantly, been endorsed by G-20 leaders. With regard to the banking sector, on which we focus here, rather reassuringly, the agenda list concerning Basel III included all of the above-mentioned critical points. Thus, capital requirements will be reinforced. More specifically, this holds in particular for the quality of capital. Funds last in line, with a claim on the residual only, hence those with the first obligation to take losses, will have to be increased substantially. While it might appear that this is about common equity only, it would not be justifiable if funds equally capable of absorbing losses were not treated identically. Function or substance dominates form. Otherwise, rule makers would be prescribing the institutional set-up of banking systems, determining "the" model: which would then be a private, purely shareholder based one. This, very clearly, would impede the development of public sector savings banks or cooperative banks which, for sure, not only have not been major actors in the crisis but, on the contrary, have been, as a result of their business models, very much a stabilizing force – at least in the German and Austrian case (OeNB, 2009; Deutsche Bundesbank, 2009).

In addition to more conservative capital requirements and cautious risk-weighting coefficients, Basel III also adds an overall leverage constraint. This obviously throws all assets indiscriminately into one risk bucket, hence is avowedly simplistic. However, this garde fou is an honest way of accepting our state of knowledge, given the substantial model uncertainty the purportedly sophisticated bank internal rating models come with.

At least with hindsight, the lack of an appropriate regulatory treatment of liquidity was a glaring flaw. In the runup to the crisis, numerous international banks increased the gap between the duration of their assets and liabilities to unprecedented levels (Shin, 2010). Relying moreover on wholesale markets, what was in former times called: "bought deposits", made these institutions especially vulnerable. Northern Rock, funding almost half of its assets, with a duration above 4 years, in overnight, wholesale money markets was an exemplary case (Shin, 2009). Now, two new ratios should, going forward, contain or limit such threats: The short-term liquidity coverage ratio calls for a stock of high-quality, liquid assets to be larger than the projected net cashoutflow over a 30 day period. With regard to longer-term maturity transformation the net stable funding ratio requires available reliable funding to be greater than cash-flow requirements.

Then, at the interface between the micro-prudential and the macro or systemic dimension, Basel III also copes with problems of pro-cyclicality. Capital adequacy requirements, by necessity based on backward-looking time series of default probabilities and historic market prices, produce positive, self-amplifying feed-back effects. This is also an issue with marked-to market or fair-value accounting, with margin re-

quirements and haircuts — all of them endogenously and as a rule abruptly creating potentially systemic problems (CGFS, 2010).

The most important innovation however is that the macro- or systemic dimension now has been acknowledged. For almost a decade, in particular economists from the BIS had argued this case (Borio, 2003). If need be, the crisis has forcefully made clear that it was a non-negligible fallacy of composition to assume that by underwriting the (apparent) safety of individual institutions problems arising from interaction would fade away. Claudio Borio put this in an enlightening econometric metaphor: Systemic issues arise from cross-sectional as well as time-series interdependencies. Macro problems might, for example, develop when too many institution – the crosses – are engaged in the same activities. Trouble frequently also builds and accumulates over time (CGFS, 2010; Hanson et al., 2010).

4 Why International – Especially European – Cooperation?

Most explicitly, Basel II was - like its predecessor – the result of negotiations amongst the members of the Basel Committee on Banking Supervison (Claessens and Underhill, 2010). The safety and soundness of financial institutions, the bigger one of which are predominantly active in a cross-border dimension, can only be underwritten internationally. Rule-setting as well as rule implementation therefore has to acknowledge "structural interdependence", a phenomenon already diagnosed for macroeconomic policies by Richard Cooper in the 1970s. There are significant and unavoidable spillovers. These externalities arise inexorably from financial institutions responding to rules and their implementation.

In our case, the regulation of crossborder (in particular: intra-European) financial activities, cooperation goes



substantially beyond the exchange of information. It entails the formulation of common policies - against the background of the typical problems of converging on a joint approach: participants pursue objectives, not always completely in line. For example, some would accept a higher risk of financial market instability if it comes, on average, with stronger expected growth of GDP. Then there is uncertainty about the robustness of risk-control models to be applied. And all official negotiators involved, while interacting in a supranational environment, of course have to transport results to a national context. This two-level game aspect is a decisive reason for why the U.S. – though very much part of the negotiation process – never implemented Basel II. But it has promised to apply Basel III.

In the case of the most recent redesign of international rules two institutional aspects deserve an emphasis. There is, first, the new, very much enhanced role of the already mentioned Financial Stability Board (FSB). Its mission is to "coordinate at the international level the work of national financial authorities and international standard setting bodies" (FSB Charter, Art. 1).

This is of course an ambitious objective — in scope, since it goes in the institutional dimension for very good reasons beyond banking, encompassing all standard setting bodies, as well as in the encompassing task, going much beyond coordination. The FSB had an impressive start.

In fact, looking back at its diagnosis from the fall of 2009, also outlining the blueprint for actions to be taken, the



FSB has very much delivered on its targets. But then, quite rapidly, a debate about the "closing window of opportunities" developed. Unsurprisingly, with the immediacy of the crisis fading, there was quite some push-back, for obvious reasons in particular from members of the industry to be regulated. While in public debates the slow process of international rule making was often criticized as almost bordering on inactivity, voices from industry became ever more critical. It was claimed that regulations pondered would be too rigorous and ultimately too costly, implying lost opportunities for growth and employment. We will come back to that.

The second important international as well as institutional innovation is of course what we now have as a new supervisory landscape in Europe. In principle, whilst acknowledging the decen-

tralized set-up of European financial markets, the European dimension gained in importance. Proximity and efficiency strongly argue in favor of the subsidiarity principle, if applied on the basis of a common rule book. To be sure, up to the crisis this decentralized set-up — a mixed-form home-host country control with memorandums of understanding and colleges of supervisors was deemed to be appropriate for Europe's specific context, for reasons of supervisory proximity and effectiveness of information processing but also because Europe's banking markets are still dominantly nationally oriented (Houben et al., 2008). However, in particular the home-host relation was seen as problematic in the case of branches (as opposed to subsidiaries) with a systemic (financial stability) relevance in the host country. But before the crisis this was perceived as an only remote problem, to be dealt with best if and when it arises. Recent events now have however forcefully shown that, reflecting the ever deeper integration of European financial markets, the prevailing set-up of loosely coordinated supervisory institutions was not up to the problems (Bini Smaghi, 2007; Schoenmaker, 2010).

This structural flaw has been convincingly diagnosed in the de Larosière report. And, possibly reflecting the dramatic background, the suggestions of this report have been largely taken on board. Thus, the three European Supervisory Authorities now have a substantially increased influence in the case of conflict between national supervisors. Given the dense network of intra-European repercussions this is a strong positive. Otherwise we would have remained stuck in a situation where the best response of participants, given the expected reaction of others, would on average have generated subpar outcomes. In fact, this is also an improvement for supervisees who now have a dedicated point of reference. Most importantly, however, the creation of a new European Systemic Risk Board (ESRB), charged with the macro-prudential dimension, is a significant step in the right direction (Grande, 2011). The ESRB has an ambitious objective, namely to diagnose possible systemic problems as they arise, and, most importantly, to suggest ways and means how to correct them. This is an important improvement relative to what we had before – when even the problem was not acknowledged. Given that financial stability is inextricably linked to monetary policy (e.g., CGFS 2010), being joint-products, it is also of the essence that the ECB and national central banks are involved in a decisive way.

5 Does It All Suffice – is It too Much?

Putting an overall judgment on the current state of financial rule-making, as we are asked to do, can only be ventured with reference to a yardstick. To reiterate: The financial system should be resilient, efficient and provide its intermediating services in a cost-effective way.

This impact assessment is still quite contentious. There is, on the one hand, the industry evaluation (IIF 2011) which concludes on very high macroeconomic costs: lost opportunities for growth and employment as a result of a reduced systemic capacity to manage risk. The work done by the BIS-orga-Macroeconomic nized Assessment Group does, on the contrary, conclude that macroeconomic costs will be comparatively low - and hence that, set against the opportunity costs from financial market calamities (measured in large underperformance relative to potential), net benefits are significant

(Cecchetti, 2011). A number of academics hold that in particular capital requirements are not demanding enough – by far. More specifically they posit, with reference to the Modigliani-Miller capital-structure indifference argument, almost the foundation stone of modern finance, that a higher capital cushion would not come with the asserted negative social consequences (Admati et al., 2010; Miles et al., 2010). While high operating leverage (in particular as a result of the differential tax treatment of debt and equity) might interesting from an individual rationale (allegedly boosting RoE), as a result of the inexorably implied externalities this could go beyond a collectively rational level – what calls for higher capital requirements (Hanson et al., 2010). This argument is also buttressing a position which, for example, the Swiss National Bank made early on, forcefully arguing for more self-insurance of banks.

There are a number of open issues. They are, on the one hand, micro-prudential in origin and have in particular to do with the level and structure of capital (convertible debt?) and liquidity requirements (sovereign debt?). They also concern their interaction with ongoing regulatory developments in closely related further fields (insurance, accounting), not touched upon here. But the major challenges are systemic. They concern systemically important institutions (too-big/too-interconnected to fail), cross-border bank resolution schemes (living wills, functional subsidiarization). This is, first of all, an analytical problem, for example concerning tractable indicators of systemic importance (where simple indicators of size seem to perform rather well, e.g. Drehmann and Tarashev, 2011). But then it also entails very difficult issues of implementation. Cycles,

in particular such in asset prices, as a rule have a significant regional dimension. They are difficult to diagnose, ex ante. Then, it takes often very long to build a consensus. Which leads, as seen from ex post, to the too-less-too-littletoo-late syndrome. This speaks in favor of simple, automatic rule (not unlike the Spanish statistical provisioning concept). Responding to this a-synchronicity with differentiated capital requirements would moreover imply cost of doing business differentiated along a regional dimension, of course, within Europe's single market. This would obviously not be an unintended consequence but engineered on purpose, as an appropriate response to divergent regional economic background conditions.

While this would, for sure, complicate things for banks, we do have such regionally differentiated effects in many other dimensions, most obviously in the tax field. With monetary policy "Europeanized", a well working EMU always required that functional substitutes to the nominal exchange rate to adapt to regional imbalances would gain in importance. National fiscal policies were explicitly seen in this capacity. We now acknowledge, given that

monetary policy can only deliver one policy rate, that banking policies might serve such a purpose also. With a second objective this obviously calls for a second instrument also. It is unfortunately too easy to imagine the difficulties of a highly political decision-taking process. But, given the experience we made, taking this direction appears to be unavoidable.

As a general upshot, going forward the international financial playing field will probably be less level. The national or regional dimension will again increase in importance — possibly even in Europe and even in EMU, just think of the liquidity ring-fencing which is deemed to be called for in order to cope with challenges arising from emergency bank stabilization measures in the home-host relation. In a way, we are advancing in retreating — to pick-up the *aphorism* of Paul Valéry, which we used as motto.

Be that as it may, one can conclude that innovations in rules, rule-making as well as in institutional implementation, acknowledging previously disregarded externalities (in particular those with a systemic impact), are heading in the right direction. At least when compared to where we are coming from.

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A Critical Assessment of the New Capital and Liquidity Requirements

1 Introduction

Following the collapse of Lehman-Brothers, we have seen an unprecedented effort to save the worldwide financial system from a meltdown. Governments, central banks, and regulators throughout the world have come up with new measures intended to improve the resilience of the financial system with respect to external shocks and endogenous failures. I was asked to contribute to the question whether or not the participants have done enough to reduce the likelihood that the past will not happen again. Yet when curing a disease it is not only an issue of taking enough medicine, but one of choosing the right medication in the first place. Therefore, I will interpret my task a bit more freely and point out some of those implications of the new rules that may give rise to harmful, probably unintended consequences.

At the climax of the crisis, authorities had to act strongly and rapidly. When shaping the new and hopefully more level playing field now, they ought to perform a reasonably detailed cost benefit analysis before implementing the new order. The purpose of my contribution is to raise some concerns. They may simply indicate unavoidable side effects but may also induce us to search for alternative treatments.

2 Capital Regulation

The changes in capital regulation developed by the Basel Committee on Banking Supervision (BCBS) and finally codified in the Basel III agreement (BCBS, 2010a) can be divided into three categories: stricter capital definitions, changes in specific capital requirements, and introduction of the leverage ratio. We will examine these aspects in turn.

The basic idea of capital regulation is twofold. On the one hand, more capital means that owners have more at stake and therefore strong incentives to limit risk-taking. On the other hand, more capital means that in a case of default more funds, other things equal, are available to cover creditors' claims.

The natural first question is how we should define capital in order to serve



both purposes as good as possible. The answer is not obvious, not even easy. The Basel Committee has decided that fewer instruments will be recognised as core capital. A number of properties are required to make a capital instrument eligible as core capital (BCBS, 2010a). The required features sound very reasonable: core capital cannot be withdrawn and it must not receive a fixed income, to name but two of them. Unfortunately, the Basel Committee has chosen a principle based approach, but has not adhered to it completely.

As one example consider the cooperative banks as they exist in Germany. At present, their shares are recallable by the members within certain periods. Thus, one important requirement for core capital is violated. Consequently, the cooperative banks, who as a group have not really been involved in the re-

cent financial crisis, need to make a number of changes in their bylaws in order to make their shares core capital and thereby protect their successful business model.

In another case, the requirements are also not neutral with respect to the legal form of banks. Certain types of capital are, if a number of requirements are met, acknowledged as core capital for example in the case of state banks, but not for listed banks. It seems questionable to treat capital instruments differently depending on the legal form of the bank (Gaumert et al., 2011).

The amount of core capital needed in the future is rather large, unless banks shift their activities towards less capital-intensive lines of business. The increased capital requirements in combination with other restrictions discussed below make it quite likely that returns on bank capital will go down. This may lower capital supply further. However, a countervailing effect should be observed. An increased capital base makes banks less prone to materialising risks.

The Modigliani and Miller (1958) propositions, derived in a setting of perfect markets, need not hold for banks because their mere existence indicates market imperfections. Still, the reduced risk as stipulated by the new Basel-Accord may be such that investors accept lower bank returns in exchange for less risk. Yet if investors do not accept low returns, banks may be tempted to increase returns by engaging in particularly risky activities, i.e. risk shifting à la Jensen and Meckling (1976). In this case, the societal benefits of forcing banks to hold more capital become less visible.

However, even without this risk shifting a major problem remains: Who can supply the huge amounts of capital needed over the next years? Insurance companies and pension funds, within the limits of their regulation, are natural candidates. Alas, increased banking stability may be achieved through more and stronger ties with other players from the financial system. Eventually, enhanced stability of the banking system has to be paid for by reducing the stability of the financial system as a whole.

The shortage of bank capital is further increased by a number of changes in capital requirements for different bank activities. As a general feature, capital required for the credit business increases. Therefore, many more firms than today have to look for other ways of access to the capital markets. For some banks, this means that additional opportunities arise because a number of investment banking activities require less capital than loan origination and also carry less risk. Since capital markets are more likely to provide funds for less risky firms, it is conceivable that the average quality of banks' loan portfolios deteriorates over the next couple of years. This would be clearly at odds with the objective of making banks safer.

Reduced credit availability will certainly put an upward pressure on interest rates. This comes along with the effects known from the Stiglitz and Weiss (1981) model of credit rationing. Some firms will increase their risk taking because low risk projects may not be value increasing anymore if interest rates go up. Similarly, firms with little risk may (have to) withdraw their applications for loans altogether. Their real investments then may go down and the usual negative effects of a decline in real investments on the economic well-being of a country would result. To estimate the impact of the new capital regulation, a Macroeconomic Assessment Group was established by the Financial Stability Board and the Basel Committee on Banking Supervision. Its report (BCBS, 2010d) finds that most likely only minor effects on GDP growth will result. A study for Germany basically comes to the same conclusion (Deutsche Bundesbank, 2010, pp. 112–113).

Much more capital than before is already needed for the banks' own trading books (BCBS, 2009). This obviously will continue to affect banks' incentives for proprietary trading adversely. In my opinion, this is a side effect of the therapy that should not concern us too much. In many of the market segments where bank trading occurs it is not easy to see why and how a particular bank should be able to forecast price changes systematically better than other players in that market. Given the costs of professional trading departments, the net effect is far from obvi-Reduced proprietary trading would only be harmful for the economy as a whole if the time span in which new information permeates the markets increased.

Significantly more capital will also be needed for over-the-counter (OTC) derivatives. This will most likely induce banks to use exchanges and similar central counterparties to a greater extent. Increased transparency and less default risk are among the desirable consequences, for more see Llewellyn (2010, pp. 69–70).

Trading on exchanges requires more standardisation of contracts. The implications are manifold. Firstly, the volume in those products that are finally available at exchanges will probably increase, meaning that bid/ask spreads should come down. This may at least partly compensate the cost increases implied by the integration of a third party, the exchange. Standardised derivatives also mean that perfect hedges will become more difficult, if

possible at all. Therefore, secondly, firms will have to retain and manage more basis risks than before. Thirdly, many of the more exotic derivatives may vanish completely. For pricing and hedging purposes, they were more or less duplicated by standard derivatives anyway. The combination of several basic derivatives into one product did not necessarily make the administration easier, because each and every product has to be included in all kinds of bookkeeping. It is conceivable that some of the more exotic derivatives more or less only exist to exploit regulatory arbitrage or to demonstrate a bank's abilities in financial engineering. The disappearance of such derivatives would not really be a loss.

When assessing the impact of capital requirements, in particular the higher capital charges on OTC derivatives, we must also consider the accounting consequences. Standardised derivatives are less likely to work as perfect hedges, i.e. the efficiency of



hedges declines. Banks following IFRS may not be happy with the resulting effect. In particular, earnings volatility may increase when more and more hedges violate the conditions for hedging effectiveness.

As another measure to increase banking stability, the leverage ratio is about to be introduced as an additional restriction for banking activities. In a nutshell, it says that banking activities may not exceed a certain multiple of its capital. When calculating the relevant activities, among others, collateral and other instruments for risk mitigation are not taken into account. The idea behind this very conservative approach is evident. Before the financial crisis, many banks had invested into different kinds of securities, including CDOs, ABCPs, and so on, which had been assigned AAA-Ratings. These ratings were interpreted as if the correspond-

Germany, for example, specialized banks financing real estate loans would be hit particularly hard because their loans carry relatively little risk but also have low margins such that a high leverage was needed in the past to make this business profitable. Quite generally, holding riskless government bonds (if they should turn out to remain riskless) becomes fairly unattractive, too. It is hard to tell how these effects will eventually rearrange the portfolio compositions of banks, maybe even towards more risk-taking (Gaumert et al., 2011).



3 Liquidity Requirements

ing securities were basically riskless. Over the recent years, we have learned, however, that many of these assessments were wrong. Neither including risk ratings nor accepting risk mitigation apparently is deemed to protect against some kind of model risk. If seemingly riskless facilities for which little capital is needed should once again turn sour largely then the limits posed by the leverage ratio are a second line of defence against bank insolvencies.

On perfect capital markets, liquidity is not an issue. Solvent banks with profitable business models will always have excess to sufficient liquidity. During the most recent financial crisis, however, liquidity was a major issue. It turned out that not the solvency, but the perceived solvency of banks mattered for their access to liquidity. Since the allocation of so-called poisonous securities across banks was not known, banks became sceptical with respect to basically all other banks. The default risk of securities materialised in the form of a global liquidity crisis. Thanks to the prompt and competent reaction of the ECB, flooding the capital markets with liquidity and relaxing the conditions for repos, an illiquidity-induced meltdown of the banking system was prevented.

If risk weighted capital ratios and the leverage ratio have to be fulfilled at the same time, then this opens another arena for regulatory arbitrage (Blundell-Wignall and Atkinson, 2010). Moreover different business models will feel the restrictions in different ways. In Not surprisingly, regulators want to avoid this to happen again. Therefore, they have come up with a set of rules that are intended to make each bank more resilient with respect to liquidity shocks (BCBS, 2010a and 2010b). To this end, two ratios are introduced as measures of short-term and medium-term to long-term liquidity, respectively. In the short run, liquid funds must be suf-

ficient to cover the one-month net outflow under stress conditions. This requirement is captured in the Liquidity Coverage Ratio, which must always exceed 100 %. In the medium and long term, a bank is required to be in some kind of structural financing equilibrium. The Net Stable Funding Ratio implements this idea. The available stable funding must be greater than or equal to the required stable funding.

Without going into any details here, one can of course say that an increase in a bank's liquidity will very likely contribute to a more stress resistant banking system. But again, there is a price to be paid. One of the basic services banks provide to their customers is maturity transformation. This function, in effect one raison d'être for banks, is about to get lost. It is by no means obvious whether or not others are better suited to incur this risk which is the by-product of a higher standard of living (Hellwig, 2009).

The Liquidity Coverage Ratio induces a preference for government bonds over SME loans (Blundell-Wignall and Atkinson, 2010). In addition, the Net Stable Funding Ratio restricts long term lending considerably. For countries like Germany and its SMEs, with a less developed bond market and a long and strong tradition of long-term bank lending, this will most likely be more harmful than for countries where firms directly use the capital markets to obtain long term funding. If the longevity of the funding of real investments constitutes a major concern for firms then the introduction of the Net Stable Funding Ratio may eventually become another obstacle for corporate investments. We do not know yet whether the capital markets, without a financial intermediary between long-term capital demand and short-term capital supply, can fulfil this role of banks in the future.

4 Summary and Outlook

The tone of my contribution is somewhat sceptical. I have a raised a number of more or less serious concerns pointing at potential shortcomings of the new regulatory regime. I am far from sure that the effects on the financial system and the real economy will be as bad as the points I have made suggest and I certainly hope that none of my fears will come true. Indeed, some recent empirical studies (BCBS, 2010c and d; Deutsche Bundesbank, 2010; Slovik and Cournède, 2010) assert that the new regulation will harm economic growth only a little and will overall have a positive net benefit.

Governments, central banks, and regulators had to take a number of actions very fast. They also have come up with a new regulatory setting very fast, maybe too fast. Given the structural changes, which may result from the introduction of new measures, it seems reasonable to me to give the new regulatory framework another close look. Llewellyn (2010) adds a wide range of complementary and substitutional measures, respectively. Some of the proposals, even those that are already part of Basel III, should be reconsidered from a theoretical perspective and backed with more empirical data. If my paper contributes to this endeavour, it has achieved its objective. Issues like a level playing field and the move of previous banking activities to a less regulated or even unregulated part of the financial system are much too serious to be accepted without scrutiny as the necessary price for the restabilisation of the banking system.

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39th ECONOMICS CONFERENCE 2011



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Session 3: Addressing Macroeconomic Imbalances

Wolfgang Duchatczek Vice Governor Oesterreichische Nationalbank



Introductory Remarks

Dear distinguished speakers, dear participants!

I would like to welcome you to the second day of our economics conference. This morning, we will discuss so-called "macroeconomic imbalances". It will be clarified in both following presentations what is meant by this expression. For the moment it will suffice to say that such imbalances are macroeconomic developments that are not sustainable in the medium or long run and that are likely to result in an economic crisis — in a single country, a large region or even worldwide if economic policy does not take action in time.

This session will be dealing with macroeconomic imbalances on a regional scale – the European Union – and on the global level. It is an honor to present our first speaker, distinguished professor Anne Krueger from the John Hopkins School of Advanced International Studies (SAIS) in Washington, DC, who will focus on longer-term and global aspects of macroeconomic imbalances. She will discuss the role of international or multilateral bodies for financial regulation and the question of what lessons can be drawn from the Great Recession in terms of reforming these multilateral bodies and of developing new instruments, e. g. at the IMF or at the level of the G-20 heads of governments.

The consequences of the Great Recession will certainly be on the policy agenda in the years to come. I refer to substantial levels of government debt in many developed countries. There are hotly debated issues such as the U. S. current account balance and Chinese exchange rate policy. And there are further challenges ahead arising from population aging in a number of countries.

Our second speaker is Thomas Wieser who will focus on the European

Union and – especially – on the euro area. Thomas Wieser is Director General for Economic Policy and Financial Markets at the Austrian Ministry of Finance. Until recently, he has been the president of the Economic and Financial Committee (EFC) of the European Union. This body was set up to promote policy coordination among the Member States of the EU. It does preparatory work for the Council of the European Union on a diverse range of matters: assessments of the economic and financial situation of Member States, of financial markets, and the dialogue between the Council and the European Central Bank. Mr. Wieser was thus deeply involved in mitigating the consequences of the great recession



2008/2009 and in developing the policy reactions at the EU and the national level.

Mr. Wieser's speech will cover the history of policy coordination in the European Union. The need for such coordination and economic surveillance to prevent macroeconomic imbalances was always recognized at the central bodies of the EU. However, as he will describe in more detail, actual economic policy at national levels did not match the policy recommendations prepared at the EU level. The great recession and the ongoing fiscal and

financial turmoil show us painfully where such inaction can lead.

Furthermore, Mr. Wieser will discuss the crisis management, especially the creation of the European Financial Stability Facility (EFSF) and the Euro-

pean Financial Stabilization Mechanism (EFSM) as well as the future European Stability Mechanism (ESM). Finally, he will discuss the new instruments of fiscal and macroeconomic surveillance and the longer run policy implications.



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Formulating International Economic Policy in the 21st Century

The entire world has had its most successful growth experience in all of history over the past 60 years. The most spectacular growth performance has been that of some of the emerging markets, but living standards and related indicators (health, education, and so on) have also risen markedly in most low-income countries. Moreover, industrial countries have experienced more rapid growth than they did at any earlier time in their history.

The success of the world economy is due to many things, but the growth of international trade in goods AND in services has certainly been a key factor (e.g. Bordo and Rousseau, 2011, NBER Working Paper 17024).

Growth in international trade spurred economic growth and economic growth spurred international trade. In addition, an important stimulus to the expansion of trade was the lowering of trade barriers (tariff and nontariff). Quantitative restrictions on trade in goods have virtually disappeared and tariff barriers have fallen sharply, not only in the industrial countries, but also in emerging markets.

As a result of trade liberalization (both multilateral and unilateral) and technical change which greatly lowered transport and communications costs and time, the international economy has become increasingly integrated. Interdependence has grown markedly, as parts and components are produced in many different places and shipped to the place of final assembly.

But greater interdependence has increased the importance of a smoothly operating international economy. Trade and finance go together, of course, as the recent Great Recession amply demonstrated. A well-functioning and stable financial system is essen-

tial for trade to flourish. Indeed, the Articles of Agreement of the International Monetary Fund state that a major purpose of the Fund is to "facilitate the expansion and balanced growth of international trade".

The three global multilateral economic institutions - the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO) – have all been important over the past 60 years in enabling the international economy to function as well as it did. The IMF certainly contributed to international monetary cooperation, to the removal of exchange controls (especially on current account under Article VIII) and to international financial stability. The World Bank's role in increasing understanding of the challenges and policies for economic development, and in financing has been important as well. And the World Trade Organization (earlier the GATT) provided a forum for negotiations for multilateral tariff reductions, a locus for setting rules and procedures for



trade (such as uniform customs declaration) and a mechanism for dispute settlement, each of which was crucial for the lowering of trade barriers that contributed so much to growth.

In addition to these crucial functions, each of the three multilaterals provided a pivotal forum in which views could be exchanged, lessons could be learned from comparative experience, and cooperative solutions could be sought. All of these were vital to the successful growth of the past sixty years.

Going forward, the very fact that interdependence in the world economy has increased so much makes these institutions even more important for the 21st century. Each institution has a role to play, and a key determinant of the



progress of the global economy is how well these roles can be carried out. Multilateral solutions are essential for addressing many of the ills that beset the international financial system during the Great Recession. Future growth can be enhanced both by further trade liberalization especially in agriculture and services through the WTO and by accelerated growth of the low-income countries supported by the World Bank. The three international economic organizations are the most promising fora for those issues to be addressed.

Moreover, the effectiveness of each institution will be enhanced by the successful efforts of the other two. A stable and effective financial system permits more rapid growth of trade, while more rapid growth of trade enables acceleration of economic growth and higher growth rates for low-income countries. More rapid growth of low-income countries in itself increases global growth, but it also enables faster growth of industrial countries and emerging markets.

Some of the challenges are specific to individual institutions, while others cut across institutions. I will address the specific challenges first, and then conclude by addressing the two most important common issues, support for multilateralism and governance.

Turning first to the international financial system, no one reading a daily newspaper could fail to be aware of the cracks in the system that were revealed by the Great Recession. Moreover, the cracks cast the spotlight on the importance of multilateralism. Two challenges are the most urgent: determining standards for financial regulation and finding means to contain global imbalances to a manageable level.

With respect to regulation, it is evident to all that if some countries adopt relatively strict financial regulation while others do not, the financial institutions in the countries with weak regulation will have an unfair competitive advantage. Their institutions will have lower capital requirements and be able to extend credit at lower interest rates or make higher profits than their competitors in countries with tighter regulation, but, of course, they will be taking on more risk.

There is widespread agreement that care must be taken so that an appropriate balance is struck between maintaining financial stability and providing competition and incentives for financial innovation. It is not necessary that all countries have identical financial regulation, but a common framework is re-

quired. Such a framework would require agreement across all countries, in part because some will not agree unless others do and in part because when there are significant holdouts the objective of financial stability is less likely to be achieved. To date, despite agreement on the desirability of a global regulatory framework, and steps taken under Basel III, further multilateral agreement has proven elusive.

There are a number of other issues regarding financial regulation, which, while not as significant as the regulatory one, still deserve global attention. These concern understandings regarding the regulation of behavior of crossborder subsidiaries and branches, on the one hand, and of jointly owned banks, on the other. Again, the desirability of such agreement is evident, but achieving such a framework has to date proved elusive.

But if the issue of financial regulation is difficult, it pales in comparison with the difficulty of achieving a meaningful way of preventing global imbalances from recurring. There is widespread recognition that global imbalances at a minimum greatly intensified, and perhaps even were the chief culprit in bringing on the Great Recession.

It has long been recognized that there are far greater pressures on countries with unsustainable current account deficits to adjust than there are on surplus countries. In the case of deficit countries, financing runs out or threatens to run out and the deficit country must take action or else be confronted with a crisis. In the latter case, it may seek support from the IMF or other foreign agencies, but must in return take policy actions designed to prevent a recurrence of the crisis and permit sustainability over time. But when a country runs a surplus, the

pressures take longer to be felt and usually arise mainly through inflation.

When the deficit country was the U.S.A. and the surplus country China (and the oil exporters after about 2004), however, the two sides were mutual enablers. China's willingness to invest the surplus enabled current account deficits to continue without the pressures that would have resulted had the surplus been invested internally or had the rest of the world been more or less in macroeconomic balance. The U.S.A.'s current account deficits would have been far more difficult to finance without currency depreciation higher nominal and real interest rates had it not been for the Chinese surpluses. It is estimated that Chinese consumption is currently not much more than 35% of GDP, surely a record low except during wartime, if then.

The result of these mutually enabling global imbalances was very low (and even negative) real interest rates. Low interest rates always encourage consumers to consume more, and especially to borrow to finance residential housing. They also encourage financial institutions and other investors to accept more risk in a search for yield, thus carrying portfolios subject to more danger when circumstances change. And the search for yield also encourages other risky behavior, through such mechanisms as the "carry trade" as for example when investors borrowed Japanese yen at virtually zero interest rates to invest in New Zealand dollar assets which carried much higher interest rates. At a minimum, a result of global imbalances and the low real interest rates they engendered was a bigger and longer-lasting construction boom and a larger portfolio of nonperforming loans when the downturn came.

Even in 2005-06, the then-Managing Director of the IMF, Rodrigo de

Rato, sought to bring together the large deficit and surplus countries in a process of multilateral consultations with a view to achieving agreement across countries as to how to reduce the imbalances to more sustainable levels. The participating six all agreed that imbalances were dangerous and that action should be taken. Each side, however, believed that the necessary corrective measures should be taken by the other. As a result, nothing happened. The IMF had, and has, no legal authority to bring about any needed adjustments.

For a period during the Great Recession, global imbalances receded. The U.S. current account deficit, which had risen to over 6% of GDP, fell to 2.9% in 2009. But as the upturn has proceeded, it appears that global imbalances are once again starting to increase.

After the initial shock of the Great Recession, the G-20 also sought to find a corrective mechanism for global imbalances. They asked the IMF to undertake a mutual assessment process (MAP), under which the large countries would have their current and prospective macroeconomic policies scrutinized by the others, in the hope that this would bring about the necessary changes.

It is too soon to assess the effectiveness of the MAP. To date, however, there is little evidence that any of the large countries have adjusted any of their macroeconomic policies because of peer pressure under the MAP. The problem is all the more urgent because of the looming demographic pressures on fiscal balances in the countries with aging populations. The least painful policies for addressing these imbalances will be those for achieving more rapid growth; yet the reemergence of global imbalances could bring about the opposite result, and perhaps even another crisis.

There is yet another set of financial issues looming on the horizon in the 21st century, which time limitations prevent me from discussing. That is, at the present time, there is no international regime governing capital flows. Countries are free to discriminate between countries, to tax capital flows, or to impose any regime they wish to upon them. As capital flows increase in importance, and as the world economy becomes increasingly integrated, these issues will become increasingly serious. As yet, they are not at all addressed except in bilateral and plurilateral agreements, many of which are potentially discriminatory.

The increasing breadth and depth of the international financial system served the real economy well, at least for the last half of the 20th century. That, in turn, enabled the rapid growth of trade. International trade in goods and services was spurred by growth, by falling transport and communications costs, and by trade liberalization, both unilateral and multilateral under the GATT, and then the WTO.

Because transport and communications costs had already fallen so much prior to 1950, the biggest spur to increased trade (in addition to growth itself) was the virtual elimination of quantitative restrictions and reduction of tariffs, at least on manufactured goods, to levels less than one tenth of those (even among the industrial countries) prevailing at the end of the Second World War.

That trade liberalization required an international organization, both as a forum for reciprocal tariff reductions and as a means for dispute settlements and agreement on trade rules. The GATT/WTO served the world so well that many countries, now successful emerging markets after having followed protectionist policies in earlier years,

liberalized unilaterally in the past two decades.

However, there is a great deal more to be done. As the global economy has progressed, business services have become increasingly important, and there are huge gains to be made if services trade can be significantly liberalized. This presents a challenge because many of the barriers to trade in services (licensing requirements, domestic regulation of insurance companies, etc.) are not border measures. But the scope for gains is great indeed.

Likewise, while trade in manufactures is now fairly open (although there remain tariff peaks and some countries that have retained fairly high walls or protection), world agriculture is in disarray. The restraints on domestic subsidization, price supports, and other interventions are few. Most agricultural economists believe that this results in great inefficiencies in world agriculture. This in itself is a serious problem for the world economy, but with the emerging concerns about rising food prices and possible food shortages, there is a real risk that, in the absence of international agreements committing exporting countries to continue exporting in times of high prices and importing countries to reduce or remove their barriers to imports, protection in agriculture will actually increase. That would not only exacerbate problems for consumers, but it would likely reduce the growth potential of the overall global economy.

The undoubted potential gains from liberalizing trade in agriculture and services still further were a major reason for starting the Doha Round of trade negotiations under the WTO in 2001. But those negotiations have foundered to date. With the negotiations dragging on (there was a ministerial meeting in Geneva at the end of April

with no evident progress), the authority of the WTO itself is eroded just at a time when it needs enhancement.

Moreover, there are looming problems that will require multilateral solutions that will greatly affect the world and the world economy. Chief among these is concern about the environment. This is intimately linked to trade because of the costs imposed on producers of various mitigation activities. Unless agreements can be reached uni-



versally, producers in countries whose producers experience higher costs because of mitigation requirements will understandably seek protection from foreign imports, arguing that foreign producers have an unfair cost advantage when not subject to the same regime. Attention needs to turn to these 21st century issues, but failure to complete the Doha Round stands as a roadblock to focusing on those important concerns.

It seems evident that the Doha Round should be completed not only because of the gains to be had (including those already negotiated) under the agreement but to move forward to the next set of issues, which will be especially difficult.

Finally, I come to the role of the World Bank. Its greatest contribution lies in supporting efforts by low income

countries to achieve self-sustaining economic growth. For those countries, private capital markets are not willing to invest, often for reasons pertaining to the absence of an appropriate legal framework or because safeguards for investments are inherently unreliable. While, as I said at the beginning, the world economy has been enormously successful over the past sixty years, some countries have been left behind or left out. The challenge for the World Bank (and for the countries themselves, bilateral donors, and all the multilateral organizations) is to improve understanding of the barriers to more rapid development, and to extent the types of support that can accelerate growth in the low-income countries. Success in that endeavor would in itself be a desirable outcome but, in addition, would spur global growth.

Before concluding, let me turn to the two challenges that confront all three multilateral international economic organizations for the 21st century. They are crucial for successfully addressing the challenges, I have already outlined.

The first, and more concrete, is the problem of governance. As China, In-



dia, Brazil, and other countries have achieved more rapid rates of growth, their share of global real income and trade has increased. Yet their shares of the votes in the World Bank and the IMF remained unchanged for a long period. (The WTO is in a different category here because, to date, WTO decisions must be unanimous). Changes are taking place, but relatively slowly. The need for voting power to reflect more appropriately the relative importance of the various member countries is evident

A cry has also been raised about the traditions under which the heads of the IFIs have traditionally been American at the World Bank and European at the IMF. Many have called for an opening of the selection process to nationals of all countries.

Doing this is clearly desirable if a means can be found for insuring that the selection proceed is designed to find the best qualified person, and not simply a person from a given region or nationality. The Bank, the Fund, and the WTO, have survived as well as they have in significant part because they have been, and are, meritocracies. Finding a selection mechanism under which candidates are screened on the basis of qualifications and aptitude for the job, rather than simply on the basis of geographic origin, is eminently desirable, but may be difficult.

However, I have saved the biggest challenge until last. I hope, I have said enough to convince everyone that growth in the 21st century will be much more satisfactory if the multilateral institutions can meet the issues associated with financial regulation, global imbalances, capital flows, trade in services and in agriculture, and much more. Those problems will be difficult, if not impossible, to address satisfactorily in the absence of multilateral agreements and undertakings.

But addressing these issues requires a commitment on the part of countries

and their citizens to the multilateral system. At the present time, and perhaps in part because of the Great Recession, there appears to be considerable disenchantment with multilateralism and a tendency to blame the international economy for many ills.

While the international economy and its governance is far from perfect, the world, and almost all the people in it, are far better off than they were fifty, a hundred, or two hundred years ago. I once attended a meeting where a representative of an African country complained that his great grandfather had moved to work on a plantation in the late 1800s, and that the family's livelihood had come from that plantation ever since; however, because globalization had hurt the country's terms of trade, the ten members of the current generation employed on the plantation had had one month's less work that year than in the past and it was the fault of globalization. Without knowing the particulars, one was left wondering how well off that entire generation - the ten plus their families - would have been had the country's economy

remained entirely concentrated on subsistence agriculture, as had been the case before plantations and would probably have happened in the absence of globalization! To be sure, they would have been better off still if the terms of trade had not deteriorated, but that only says that the gains from globalization had been somewhat reduced, not that they had been negated.

Many of the complaints about globalization seem to be of a similar nature: Things could be better. And that is surely true. But they will be better when globalization is made to work better, and the problems confronting us have been solved.

They will not be better if globalization is reversed. Multilateral solutions and policies have served the international economy very well over the past two hundred years. One can only hope that recognition of this, and support for multilateralism, will enable the international economic institutions to resolve the key issues I have discussed and be prepared to address the future issues that are sure to arise with continued successful world economy growth.

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Macroeconomic Imbalances within the EU: Short and Long Term Solutions

What is an Imbalance?

What is a macroeconomic imbalance? And do macroeconomic imbalances matter? Two easy questions. Put them to an economist and she or he will most likely give you an authoritative description or definition of such an imbalance; and will then proceed to authoritatively tell you that they either matter enormously, or not at all. A pattern will emerge: first, the definitions or descriptions will not be consistent with each other; second: if they matter, then usually abroad.

I will start off with a simple definition: a macroeconomic imbalance is the (negative or positive) position of a domestic, external or financial variable in relation to a certain norm. This position may — if uncorrected over time — make the national savings/investment balance so untenable that it self-corrects abruptly, thereby causing significant adjustment shocks domestically; in the case of large economies also abroad.

Imbalances are caused by economic policies, or by their absence. They are therefore a lagged indicator of other variables that developed at a pace or in a direction that is not commensurate with the overall balanced development of an economy. At stake therefore is the issue of sustainability and liquidity. A deficit or a surplus per se may well be a desirable equilibrium outcome and thus not an imbalance, for instance reflecting an efficient international allocation of capital.

As imbalances influence developments in partner countries they are an important factor in international policy making. At the global level the main task of the IMF has been and is focused on preventing, detecting or mitigating national economic imbalances that may lead to an unsustainable external position of countries, and may have important spillover effects. It has an array of lending instruments at its disposal that can be utilized if imbalances lead to capital flows that are inadequate for satisfying the external financing needs of a country. The G 20 process has rediscovered this issue in the light of global imbalances in current account positions, and has agreed on a surveil-lance exercise.



Addressing Potential Imbalances in the Euro Area

Within the European Union risks of macroeconomic imbalances were recognized in the Treaty. A set of economic policy coordination tools was designed in order to prevent such disequilibria; and a balance of payments support facility was set up in order to assist in overcoming such a crisis.

The design of the euro area as per the Maastricht Treaty followed the principles that

at entry, fulfillment of and adherence to the fiscal, financial, monetary and exchange rate criteria would guarantee that the relevant economic parameters that could engender imbalances were largely in balance,

- market discipline will be sufficient for nudging the public sector towards prudence and sustainability by prohibiting monetary financing and a privileged access of the public sector to the financial sector, and by a rule on not bailing out Member States,
- loose economic policy cooperation and more stringent fiscal policy coordination through the relevant Treaty Article and (later) the Stability and Growth Pact (SGP) would be sufficient for keeping these variables on track, together with an independent monetary policy geared exclusively towards price stability,
- and such was the conviction that no imbalances could emerge that no financial safety net was designed to provide balance of payment support to euro area Member States in difficulties.

When setting up monetary union the question of asymmetric shocks received wide attention, as this was seen as the weak flank of a monetary union with



less than perfect factor mobility across national borders, and autonomous fiscal policies. The issue of divergent developments of competitiveness were less widely discussed, and seen as a lesser order problem. Upon entry into monetary union and the elimination of exchange rate risk, risk premia moved downward with great speed, by a good 800 basis points for some Member States compared to only a couple of years previously. Subsequent developments of rapid credit growth and accelerating private indebtedness were undoubtedly a result of these developments. There is a bright side to this, as increased private sector leverage post-1998 may have had a one-off "convergence euphoria" component.

Economic policy cooperation in the euro area institutionally takes place (only) in the Eurogroup – the (monthly) meeting of euro area Finance Ministers, the ECB President and the Commissioner responsible for Economic and Financial affairs. It is prepared in the Economic and Financial Committee/the Eurogroup Working Group.

For well over a decade the debates were contentious primarily when it came to applying the SGP. Greece acceded EMU on a wrong statistical fiscal basis. Nearly ten years ago the Pact faced its first stern test in view of excessive deficits in Germany and France. With the decisive meetings taking place under Italian Presidency the SGP was watered down.

Beyond fiscal coordination a monitoring of overall economic developments takes place; Ireland in 2002/03 actually received a warning for expansive fiscal policies fuelling inflation that were considered to be untenable if not corrected. This produced political reactions from the Irish side that were so negative that other euro area Member States were possibly shocked into a policy of non-interference especially in non-fiscal policy areas.

In the meantime financial integration was proceeding strongly after the adoption of the euro, and cross-border capital flows into government debt, non-tradeable sectors and interbank markets were significant. The asset price increases in the non-tradeable sectors (mainly real estate) were analyzed and discussed extensively, but with the exception of Spain policy reactions were muted. And even the Spanish reaction to the real estate developments did not suffice, as later developments showed. Stronger reactions were prevented by domestic interest groups or simply due to analytical failure of domestic policy makers. The domestic imbalances were largely seen as constituting a problem of the Member State concerned, not of the euro area as a whole.

The build up of negative current account positions of euro area Member States over the last decade was on the other hand – with a few exceptions – not seen as critical. By contrast, the drifting apart of competitive positions as measured by diverging relative unit labor costs was increasingly seen as a centrifugal issue for the euro area by the European institutions. President Trichet regularly attempted to convince Finance Ministers that these developments were unsustainable, but the Ministers concerned did not act or react sufficiently. The reasons for this complacency were diverse, but could include the following, namely

- that imbalances in a currency area were considered to be self-correcting through medium-term nominal adjustments that would, admittedly, take some time to occur (but occur they would more or less automatically as losses of price competitiveness triggered the appropriate price/quantity adjustments),
- that sovereign risk differentials in a currency union virtually ceased to exist and as there was no risk there would be no punishment,

and, finally, that the euro area had a quasi-coercive policy instrument in the form of the SGP, but no other policy tool at its disposal that could realistically be expected to influence policy behavior of national actors. As all other policies were firmly anchored in national responsibility, from wage to financial policies the incentives were skewed against policy coordination. Policy cooperation in and of the euro area was firmly confined to the Eurogroup meetings of Finance Ministers, and thus reflected the fiscal approach to policy coordination as laid down in the Treaty.

Addressing Imbalances in the EU

In the European Union of 27 economic policies, even though a matter of common responsibility according to the Treaty, were in reality not closely coordinated. ECOFIN work tends to be focused on legislative acts required for completing and deepening the Internal Market. The Treaty based Economic Policy Guidelines, beloved by their authors and drafters, are decided upon by Ministers without substantial discussion, and successfully shelved after the traditional pre-summer decision. Process produces papers, not substance, unless there is a negative externality associated with policy inertia.

The issue of external imbalances actually received increasing visibility amongst policy makers, inter alia in the context of the ERM II procedures as some new Member States prepared for or attempted entry into Monetary Union.

The most visible case of imbalances was that of Latvia, where euro area officials engaged in intensive debates with the authorities on the causes of their current account deficit, and appropriate remedies. Seemingly, there were al-

ways good reasons for the large deficits not being a concern — ranging from idiosyncratic shocks due to the import of railway stock to the nearly tautological effect of growth differentials in the catching up process. In those days every policy maker could recite Balassa-Samuelson effects even if asleep.

Discussions with many New Member States from 2004 onwards focused on:

- External Imbalances: current account positions and real exchange rate movements received closest attention, international reserve positions were hardly ever analyzed;
- Financial imbalances: credit growth and foreign exchange credit growth were addressed, but were intensively discussed only when the sustainability of fiscal and financial positions in CEE were already at the forefront of international attention; there was no meaningful ongoing dialogue between supervisors and macro-economic authorities at the European level at an early stage that could have contributed to crisis prevention or mitigation;
- Structural weaknesses in product and factor markets, linked increasingly to issues of competitiveness
- Fiscal imbalances were continuously monitored, but the policy advice of the EU was not taken seriously by all policy makers to whom warnings were addressed; a good example is Hungary which has remained in an excessive deficit procedure from the outset of its membership without major political problems.

Increasing external disequilibria due to a loss of competitiveness through steadily rising real unit labor costs were seen by national policy makers as being largely caused by growth differentials; increasing indebtedness of the private sector was seen as being a consequence of high growth, and not a cause of overheating and thus unsustainable growth; and increasing contingent liabilities due to forex exposures were seen as providing cheap (long term) finance for private households where domestic capital markets had no long-term instruments available.

In the end, the conditionality in balance of payment support programs addressed these issues, but we could have gotten there more easily with a higher degree of better policy coordination and cooperation.

In these programs, the issue of exchange rate adjustment was a highly contentious one: a traditional approach would have called for a rapid exchange rate adjustment in order to kick start export activity; with balance sheets largely denominated in euro this would have bankrupted many domestic credit holders, and consequently would have significantly increased the write off requirements of the banking system (widely foreign owned). A mixture of economic interests and analytical disagreement produced differing policy prescriptions, but mainly in favor of exchange rate stability. This required rapid internal devaluations through the wage and price mechanism. Ironically, the countries outside the euro adopted similar adjustment strategies to those within the euro area. The obvious exception is the UK where we have seen sterling devalue against the euro area as the UK attempts to address its external and internal imbalances.

What Is New in Our Tool Kit, and Why?

As the financial crisis turned more and more into a sovereign debt crisis for peripheral euro area economies our assessment of weaknesses in our toolkit evolved. Our understanding of the mechanics of the euro area changed as markets also changed their perception of risk differentials within the euro area.

Progress in our toolkit therefore builds on the (relatively new) fact that within a currency area with decentralized fiscal policies there is room for differentiated sovereign risk assessments by markets. This in turn has led to access to markets being contingent on investors being convinced of the sustainability of policies. At the outset of monetary union there had been attempts to produce "shadow" market mechanisms in order to discipline Member States into fiscally and financially responsible behavior. Now, we have what we wanted.

As some examples showed, quite dramatically, fiscal discipline in the EU and especially in the euro area had not been adequately stringent, thus leading to inter-temporally unsound fiscal positions. This was not due to recognition lags (with the one or the other notable exception) but due to the political economy involved in collaborative decision making and the loss of market discipline as sovereign risk became only a lower-order function of debt and deficits.

At the same time the widening of differentials in competitiveness occurred as wage and price developments were not oriented towards stable (notional) real exchange rates within the euro area. National wage and structural policies need to better reflect this, which is especially interesting given the autonomy of decision making of policy actors, especially in the field of wage setting.

And, lastly, the contribution of the financial sector to imbalances shows clearly that financial regulation, but especially supervision need to be geared more to a highly but not completely in-

tegrated financial market with decentralized fiscal backstops and supervisors. Given the "industrial policy" type behavior of national governments towards their financial sectors market based solutions to financial crisis are more difficult in the EU than in other



large economies that have symmetrical responsibilities for financial and fiscal issues.

The Safety Net

As already mentioned the euro area did not have an adequate safety net for Member States facing external financing constraints until 2010. The complete tale of the debates on whether such a mechanism should be based on EU, Community or intergovernmental methods needs to be told separately.

After lengthy and very principled debates Greece received a loan from (most of) the euro area Member States as well as one from the IMF. The policy conditionality was and is strict, and the pricing of the euro area loan was designed so as to prevent moral hazard, i.e. so as not to incite others to enter such a program. These concerns were fairly rapidly seen as naïve. The pricing has been changed in the meantime.

Contrary to some expectations markets were not convinced by the

Greek adjustment program that all that needed to be done had been done, and spreads continued to remain high for many euro area Member States. In May 2010, after lengthy and politically charged negotiations, the EFSF and EFSM were set up. These two facilities were designed to have a volume of EUR 440 and 60 billion respectively. Lending from these two facilities, in conjunction with the IMF, is ongoing for Ireland and Portugal.

Recognizing that these temporary facilities did not answer the need for a permanent and more structured safety net the decision was taken in March



2011 to have, as of mid-2013, a permanent euro area safety net, the European Stability Mechanism. It will dispose of paid-in capital of EUR 80 billion, and an overall lending volume of EUR 500 billion. As its predecessors it is expected to lend in conjunction with the IMF.

The latter issue is an important point in the global discussions on regional safety nets: whilst it appears increasingly necessary to have regional solutions for regional problems it would be politically and economically counterproductive if they were not all linked to a global instrument. This would ensure a hub and spokes system with quality assurance, comparability of ap-

proaches to policy failures and problems, and would ensure that regional solutions did not cause global imbalances.

Fiscal and Macroeconomic Surveillance

Within the EU, and especially within the euro area, a lot of reflection has gone into the design of systems that should ensure that a repeat of the fiscal imbalances of the past decade can be avoided. A set of 6 legislative acts has been agreed on by Ministers, and is presently being negotiated with the European Parliament.

These acts should strengthen the SGP by a variety of measures: it should become more difficult to politicize (and thus bring to a halt) an excessive deficit procedure; there should be a higher degree of quasi-automaticity in some of the procedures and sanctions at an earlier stage; not bringing down debt levels at a steady pace towards and under 60% of GDP should give rise to sanctions; and the quality of national fiscal frameworks should be enhanced. Sanctions should be more easily imposed, and should be gradual in the sense that Member States should not be automatically threatened with the "atomic bomb option" of the highest financial sanctions.

Additionally, the EU has designed a macro-economic surveillance process that should detect the emergence of external and internal imbalances at an early stage. A wide range of indicators will be used in an alert mechanism in order to give early warnings. Such warnings will be issued to the Member State concerned, and in the case of excessive imbalances with an invitation to correct the emerging imbalance through appropriate policy action. If no policy action is taken, sanctions could be applied. This reflects the lessons

learned over the last years that a wide range of policies may have area-wide destabilizing influences, whilst policy responsibility remains firmly at the national level. Producing processes that satisfy both constraints is and will be the challenge as we emerge from the crisis.

Financial Stability Instruments

Within the EU the financial sector is especially closely interconnected, even though financial integration is incomplete and uneven. The growth of cross border activities has been pronounced over the past two decades as a consequence of Internal Market legislation, and later of the single currency. Imbalances in the financial sector have generally been pronounced in industrialized economies in the past years, and especially in the EU the process of cleaning up balance sheets is not over yet. Due to these strong inter-linkages contagion risks play an important role in Europe. Not so long ago this interconnectedness was seen as an important stability factor through risk diversification. Both may be true, though not at the same time.

A specific feature of the EU financial sector is that due to the dense web of branches and subsidiaries the question of fiscal responsibility for banking sector support is less clear than in other parts of the world. Is the home government "responsible" for all activities of its banks? Or is it responsible for activities of its banks, including branches abroad, but not of subsidiaries? Or is it only responsible for domestic activities? As the governments of Iceland, the UK and the Netherlands know, this is more than an academic question!

The issue of burden sharing has still not been completely clarified, and may never be completely clarified ex ante. With the introduction of cross border stability groups we hope to reduce the probability of such occurrences by increasing the quality and timeliness of mutual information across relevant markets.

The myopia of supervisors confined to seeing only small parts of important market developments outside their jurisdiction was an issue in the crisis. Through the establishment of the three European authorities for banking, insurance and securities we hope to achieve better supervisory cooperation, and a larger and more consistent set of single or very similar rules and practices. Over time we will need to move towards a European supervisor, but the politics of Europe are not ready for this step yet. And then the question of burden sharing and back stopping needs to be more clearly solved.

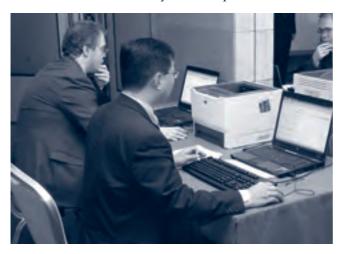
Whilst micro-prudential progress has been achieved by building on existing groups, macro-prudential surveillance in the EU has started from scratch. The European Systemic Risk Board (ESRB) was set up last year, and has become operational as of the beginning of this year. It is closely associated with, but separate from, the ECB. Its function is to detect and warn about emerging imbalances, with a strong focus on financial sector imbalances. But its surveillance function can obviously not be confined to the financial sector, and needs to encompass all those parameters and sectors which could cause such imbalances to emerge. An example would be a real estate bubble which, if uncorrected, would cause imbalances in the real economy and the financial sector of the country concerned. And possibly beyond. We will need to work on the inter-linkage of the work of the ESRB and the EU's macroeconomic imbalance procedure so that they complement each other and do not overlap or underlap. We will need to avoid unnecessary duplications with the IMF FSAPs. And we will need to find an appropriate way of channeling advice to policy makers in a manner that maximizes the probability that they will act.

Does this Suffice? What Are the Politics of the Longer Run?

The EU has reacted impressively so as to decrease the probability of future crisis. It has also set up a safety net that should be available for those Member States that despite all surveillance exercises fail to correct their imbalances in a timely manner. Does this suffice?

As set out above a number of new procedures have been set up. They are administered by Finance Ministers, and in some instances the reports and analysis go the Heads of State. But do they address the root causes of recent imbalances?

The euro area is set up as a decentralized policy space with a single monetary policy. The purpose of many of the new EU policy processes and measures is to incite nominally (largely) independent policy makers to behave in a responsible manner, i.e. to ensure the sustainability of their policies, and thus



also share in the responsibility for the sustainability of the euro area.

One element obviously is that we need better national policies. We now

have the processes at the European level. How do we now get the results?

As we have seen policy areas well outside the domain of central bankers and Finance Ministers have contributed to existing imbalances. Time and again Finance Ministers return from Brussels with advice about their fiscal plans that the Commission and the Council have carefully worked out, and at home they do not have an audience. And for the policy fields that are somewhat removed from fiscal policies this holds even more true.

Better institutions for supervision of a European financial sector will be part of the long term solution, building around a single European supervisor. If this is achieved, the financial sector will increasingly become a sector which can contribute to European growth with lesser risks of regional instability. Then the vision of risk diversification will have become more of a reality than it is at present. The political and fiscal implications of such a solution are complex, and therefore will not come about in the short run.

Looking at wage and price developments in a number of Member States it is clear that external constraints have historically played and still play a smaller role in some countries than, say, in Germany or Austria. This is understandable as the diverse national institutions come from a different background of exchange rate policies, and thus a different tradition of wage and price policies. We will therefore need to develop a common understanding of national actors and institutions of what is required in terms of mutually compatible policies across a large range of policy areas.

It will be necessary that social partners from all Member States share an analysis of prospective developments of growth, productivity and prices.

Wage formation and price developments need to have a clearer focus on stability and sustainability than they have had in the past. In some Member States of the euro area it could be argued that some social partners have not yet joined monetary union. It will be a crucial element of European policy making, with an important role for the President of the Eurogroup to bring about this historic change.

Policy makers responsible for structural policies need to understand the role and function of their policy measures in the context of intra-euro area balances. At present this is still not the case. Policy makers responsible for the design and parametrics of retirement policies for example need to understand the euro area aspects of intertemporal imbalances.

In short: the euro area needs to become a truly political and broadly based policy area. It needs to move beyond the narrow confines of fiscal coordination and start economic policy coordination. The political process needs to be opened up to a larger class of policy coordination other than monthly meetings of finance ministers. Therefore, guidance but also responsibility of Heads of State must become the norm without micro-management, and with a truly broad based and well prepared discussion. If this is achieved the euro area will be able to play an important role at the global level. If this is not achieved, then the processes we have designed will not suffice to stop imbalances emerging in the future through an adequate mix of process and policy.

Panel 3: A New Growth Strategy for Europe

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A New Growth Strategy for Europe?

1 Introduction

Does Europe need a growth strategy? And if so, does it need a new growth strategy? These are the two questions I will address in the following.

In midth of the most severe economic crisis ever since the Great Depression, this year's economic forum in Davos has come up with an astonishingly optimistic scenario. According to a study by the Global Research Division of the Standard Chartered Bank (Lyons et al., 2010), we are about to experience a "super-cycle" of historically high growth over the next decades, propelled by booming trade, investment and urbanization. The 2004 Nobel laureate Ed Presott predicts that the "whole world's going to be rich by the end of this century."

There are reasons to be skeptical of this overly optimistic forecast, but even if we were to believe that a new golden area is ahead of us, pushing average GDP per capita up to unprecedented levels, this does not render thinking about growth strategies irrelevant. An equally distributed outcome is highly unlikely, and the successful post-war growth performance of EU Members States holds no promise for the future. This is not only an economic issue: The EU has a political role to play in this world, and its assertiveness will also depend on its economic weight in the world economy.

Hence, the EU definitely needs a growth strategy to keep its position as a relevant player in the world economy. The question that remains to be addressed is whether the EU needs a new growth strategy. In the following, I will argue that it does not. While I am far from claiming that the field of proper growth strategies is fully researched, I am convinced that we do know enough about where to go. Repeatedly reinventing official growth

strategies does not help. We had better proceeded with the implementation of existing strategies; and certainly more focus is warranted. In the following, I will summarize what I believe we know about a proper EU growth strategy, emphasizing what I regard as particularly important.

2 A Few Words on the Crisis

In the aftermath of the financial and economic crisis, restoring confidence is and remains the top priority. The "longer uncertainty is allowed to linger, the greater the damage to confidence." (Eichengreen, 2010, p. 25). We cannot go on with business as usual. The roots of the financial and economic crisis have not yet been eliminated. The required steps have been spelled out in a recent VoxEU book by a group of leading economists in that field (see Baldwin, Gros, and Laeven, 2010). Since this is not the topic of this paper let me



just restate the key conclusions of the "eurozone rescue" report (Baldwin and Gros, 2010, p. 18):

In the field of monetary policy: i) embedding financial stability considerations into the ECB's policy mix, ii) clarifying the fact that the ECB is not a fiscal institution.

In the field of fiscal policy: i) clarifying the operational and legal frame-

work of the Special Purpose Vehicle, including limits on the amount of fiscal transfers, ii) making the process of longer-term fiscal consolidations credible through the establishment of independent national fiscal boards, which are coordinated at the European level.

In the field of banking and financial market regulation: i) improving transparency by public release of stress tests, ii) acknowledging losses early, recapitalizing financial institutions with appropriate loss sharing by the private sector, ii) improved regulation at a European level to deal with cross-border bank failures, iii) introducing a European Debt Resolution mechanism.

In the field of competitiveness: i) repairing macroeconomic imbalances through wage adjustments, facilitated by labor market reforms, ii) dampening national wage and price developments undermining their competitiveness. And finally, accelerating structural reforms of goods and labor markets to enhance economic growth. This leads me to the key topic of my talk.

3 An Agenda for a Growing Europe

We do need an agenda for a growing Europe but we do not need a new one. Such an agenda has already been worked out in considerable detail by a group of distinguished economists, headed by André Sapir, on request of Romano Prodi, president of the European Commission at that time. The conclusions of the so-called Sapir report are still valid today and call for an active implementation.

The Sapir report lists a six-point agenda for the EU and its Member States (Sapir et al., 2004):

 Make the Single Market more dynamic

- Boost investment in knowledge
- Improve the macroeconomic policy framework for EMU
- Redesign policies for convergence and restructuring
- Achieve more effectiveness in decision-taking and regulation
- Refocus the EU budget.

Unfortunately, it is no exaggeration to say that the report had no substantial impact on policy making of the EU and its Member States. For space constraints, I am not able to address each of its recommendations. Rather I will pick out three of them, which I regard as particularly important, highlight some recent research and consider the current state of the EU's economy policy in the respective field.

3.1 Make the Single Market More Dynamic

The Single Market is and remains the cornerstone of European economic integration. A functioning Single Market fosters competition within the EU, thereby increasing productivity and helping to improve the EU's competitiveness in the world economy. The EU is certainly on the right way here, but it needs to accelerate. The Single Market, launched in the mid-1980s, eventually came into force on 1 January 1993. Evidence suggests that the Single Market had its intended effect in manufacturing industries, but not for services (Badinger, 2007; European Commission, 2002). The EU Services Directive should have been the next step in this respect. A heavily revised version of the European Commission's original proposal was ultimately adopted in December 2006 and came into force at the end of 2009. This is more than 15 years after the Single Market should have

A detailed discussion and priorization of this long list is contained in Baldwin, Gros, and Laeven (2010) and the essays therein.

been in place already! Even worse, recent studies suggest that the macroeconomic effect of the highly diluted Service Directive will be fairly modest (Badinger and Maydell, 2009; Badinger et al., 2008). While I do not want to downplay the achievements in EU integration over the last two decades, I conclude that we are still far from having established a functioning Single Market. A Services Directive II is highly warranted; and we have to speed up significantly. Similar arguments could be made with respect to the state of the European labor market.

3.2 Boost Investment in Knowledge

3.2.1 Human Capital

Let me hightlight the results of some recent research on the growth effects of human capital, which has turned to more elaborate measures of human capital in terms of cognitive skills, drawing on results of the PISA-type studies. Woessmann and Hanushke (2010) harmonize data on individual test scores in math, science, and reading over the period 1964-2003, aggregate them to the country level for a sample of OECD countries, and include these measures in a growth regression framework. Having estimated the growth effects of human capital they do some interesting simulations on the long-run growth effects of educational reforms over the period 2010-2090. In a nutshell, the simulation predicts that a uniform increase in all countries' human capital by a quarter of one standard deviation, would yield a growth rate that is on average 0.47% higher than in the counterfactual scenario of maintaining the status quo. Accumulating these income effects, their present value in year 2010 amounts to 288% of GDP. Bringing all countries to the level of Finland (the best performing country), the gains would be even larger, more than six times of the current GDP. Of course, one can challenge these point estimates, but taking half of the lower bound estimates, the effects are still enormous.

An as a non-negligible by-product, recent research on the non-economic effects of human capital has confirmed what one might intuitively suspect. Education generates numerous benefits that go beyond increases in productivity and economic growth: more education can i) lower crime, ii) improve health, and iii) increase voting and democratic participation (Lochner, 2011).



In the light of these results one would expect policy to have a clear-cut priority. At least in some EU Member States, the opposite is happening: budgets are reduced in real terms; true autonomy is refused to educational institutions, and structural reforms are often hindered by ideological prejudice. The outcome is not unexpected: The EU has achieved only one of its five educational targets laid down in the Lisbon strategy and concludes that EU Member States would need to invest an average EUR 10,000 more per student per year in higher education to catch up with the USA. (Council of the EU, 2010).

I wish to add that installing appropriate budgets for the education system

is only half of the story. Optimizing efficiency and effectiveness of our education system is the other half of it. The results of the literature² suggest several



measures: investments in teachers' quality, autonomy in process and personnel decisions (combined with accountability), introduction of *choice and competition* between schools and universities (and between students). Educational checks are an old idea dating back to Milton Friedman — why not give it a try at the European level? Why not take up recent proposals to finance higher education and educational reforms through deferred graduate retirement? (Barakat, 2011) Some visionary policy perspectives are highly warranted here.

3.2.2 R&D and Innovation

There is a large body of evidence on the growth effects of R&D. To mention just one example, Griffith, Redding, and Van Reenen (2004) provide an assessment of the role of R&D (and human capital) as determinants of TFP growth in 12 OECD countries, and find a dominant role of R&D and human capital. They conclude that the "emphasis on human capital and R&D in modern growth theory is well placed." (Griffith et al., 2004, p. 893).

Where is the emphasis in current growth policies of EU Member States? The Lisbon strategy spelled out the target to raise total R&D expenditures to 3% of GDP and the Europe 2020 strategy sticks with this target. Helmers et al. (2009) consider the evaluation of total and business R&D and R&D capital in EU Member States since 2000 and conclude that R&D expenditures are stable and below target over time. The EU has not moved closer to its Lisbon target. The recent progress report on Europe 2020 does not suggest that this trend is about to change: "The compilation of all provisional national targets indicates an aggregated level of 2.7% or 2.8% of GDP, which is below the expected target of 3% GDP invested in R&D, but which represents a significant effort, particularly in the current budgetary context." (European Commission, 2011, Annex 1, p. 7). Resorting to budgetary constraints is no satisfactory answer. There are resources that could free up by structural reforms that are postponed from year to year, and there are resources that could be rechanneled from projects with much smaller returns.

3.2.3 Human Capital R&D and Technology Transfer

Apart from being the most important propelling forces of economic growth, human capital and R&D are also important determinants of the absorptive capacity of countries and regions, facilitating technology transfer and catching up. Benhabib and Spiegel (1994), Griffith et al. (2004), as well as Kneller and Stevens (2006) provide strong and convincing evidence on this second face of human capital and R&D. In this respect, we should not forget about information and communication technologies. Wolff (2011), using data

² See Woessman and Hanushek (2010b) for a survey on the determinants of schooling quality.

for the USA over the period 1958 to 2007, finds strong evidence that the magnitude of R&D spillovers has increased sizably over time, a result which he attributes to the penetration of the US economy with ICT technologies. No good news from this side as well: "Europe's gap is even larger in ICT and other non-transport equipment industries." (Helmers et al., 2009, p. 42), a fact the EU Commission is well aware of. The "Commission will propose measures to speed up and modernize standard setting in Europe, including for ICT." (European Commission, Annex 1, p. 5). Again, the key question is whether the proposed measures will be implemented by EU Member States.

4 Improving the Macroeconomic Policy Framework, more Effectiveness in Decision-Taking

The uncoupling of monetary policy from short-run considerations by the establishment of independent but accountable central banks is one of the great success stories in recent economic history, and we should work hard on establishing – at least to some extent – a similiar framework for fiscal policy as well. In light of the recent experiences, I think that EU Member States need fiscal rules, established at a constitutional level, not only the ensure sustainability of fiscal policy, but also to limit the room for discretionary fiscal policy, which has been shown to increase output volatility and thereby to reduced economic growth.³ No rule fits every situation, of course. The way forward would be to combine "judgment and discipline" by the establishment of independent fiscal councils and their coordination at a European level (see Fatás and Mihov, 2010; Lane, 2010).

Inevitably, a better macroeconomicpolicy framework with enhanced coordination, monitoring, and enforceement will require more supra-nationality in EU politics. This may still sound utopian, but we should not forget that some decades ago, the present state of the EU would have also appeared utopian at that time. Of course, it is a highly complex question how can we improve the EU's capability to act while at the same time hold up a proper balance of institutions and democratic legitimacy and I do not pretend to have a simple answer on that. This is clearly a field where more interdisciplinary research is needed.

5 Conclusions

Europe needs a growth strategy but it does not need a new one. Apart from dealing with the aftermath of the crisis, there are two main priorities: completing the Single Market and boosting investment into human capital and R&D. These are the key instruments to generate long-run growth and to facilitate positive spillover effects. We should not forget, however, that most "of these measures have to be executed at the national level. The EU - in its current state - can only provide a framework and coordination." (Baldwin and Gros, 2010, p. 25). Hence, we should not blame the EU for the omissions of its Member States. Both the EU and its Member States must commit themselves to act and to "finish the job of restoring stability and prosperity in Europe. The European flotilla may have run aground, but it needs not sink. This will require coordination, teamwork, and discipline. All hands on deck!" (Baldwin and Gros, 2010, p. 21).

³ See the seminal paper by Fatas and Mihov (2004) and Badinger (2008) for evidence on OECD countries.

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A New Growth Strategy for Europe

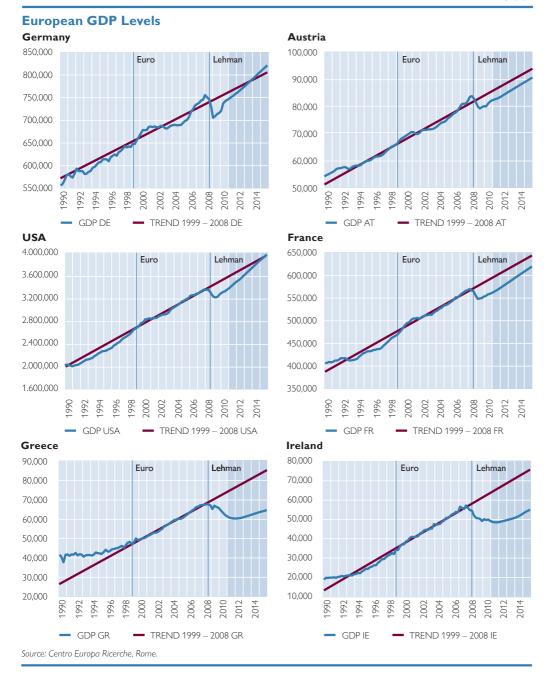
The global financial crisis of September 2008 was the equivalent of an economic earthquake of global dimensions. It has caused subsequently Tsunami-like devastation in the public finances of most industrial economies and in particular in the European Union. Uncooperative behaviour by European governments nearly caused total meltdown

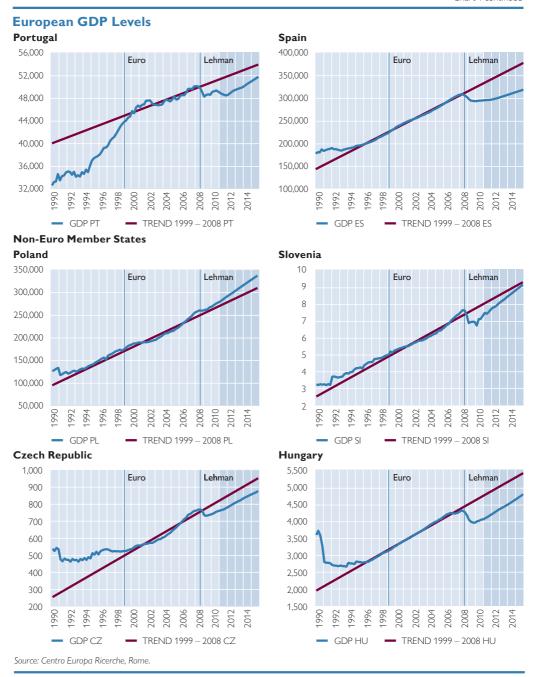
of the euro in 2010. The year 2011 is now the year of cleaning up. How can this be done?

Growth in the Euro Area

The global financial crisis has caused a one-off reduction of income in all major economies. For most countries, the shock lasted from the third quarter

Chart :





2008 to the second quarter 2009. Since then, most economies have started to grow again, although with different dynamics.

We can distinguish three post-crisis adjustment models:

- The reduction in output was sharp, and so was the rebound. Economic growth has accelerated relative to the
- pre-crisis years. This is the case for Germany, the USA and possibly Slovenia.
- After a sharp recession, the economy has returned to previous growth rates, but not managed to compensate for lost output. This is the case for most economies in Europe, including Austria.

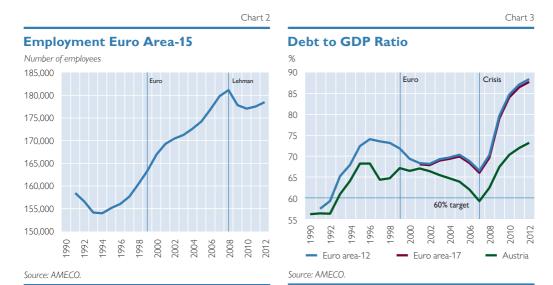


Chart 4

Contribution to the Change in the Budget Position for Greece



Source: Author's calculations, Centro Europa Ricerche.

The reduction of output was not only deep, but also long lasting. The economy did *not pick up rapidly* and the levels of income are still far behind pre-crisis levels. This is the case for the crisis shaken economies in Europe's south (chart 1).

The crisis has two mirror images: high unemployment and rising debt. After adding 15 million jobs in the first decade of the euro (more than ever

before in history), 5 million were lost again in the euro area during the crisis.

Public debt ratios have also exploded everywhere:

The deterioration of public finances has been essentially a problem of revenue and growth. Most spectacularly this is documented by Greece. Chart 4 shows the contribution to the change in budget position for Greece.



Hence, it is clear: accelerating economic growth must be the top policy priority in Europe. Accelerating growth requires the interaction of long term supply side policies and macroeconomic demand policies, which need to define an efficient short to medium term policy mix that defines coherently monetary, fiscal and wage policies. In this context, a new issue has emerged: competitiveness.

Competitiveness

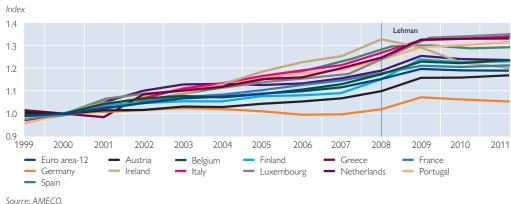
The debate among policy makers suffers from a major category mistake; it measures competitiveness by current account balances. The European Commission even wants to use a target of current accounts for its excessive imbalance procedure. However, this is the wrong indicator. First, the current account is not the same as net exports because it contains factor incomes and transfers. Second, net exports may shift according to comparative advantages in the single market. Third, the current account is a meaningless concept in monetary union.

In different currency areas, the current account positions indicate a change in external indebtedness in foreign currency. Together with capital flows the current account determines the foreign exchange reserves of a country. Loss of reserves makes the maintenance of exchange rate stability unsustainable. As a consequence, investors look at a country risk as a currency risk. This is why monetary union was a necessary complement to the creation of Europe's single market.

In the same currency area liquidity is provided by the central bank. Banks borrow from the central bank and lend to the real economy, namely to firms and governments. Because the ECB is the lender of last resort, solvent banks can always count on obtaining the necessary liquidity from the ECB and no "Member State" can run out of reserves of its own euro currency. Any

Chart 5

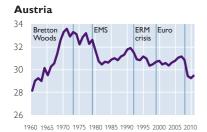




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Average Efficiency of Capital

GDP to capital stock in %



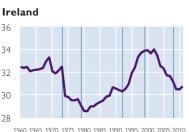


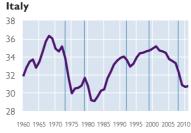




















Source: AMECO.

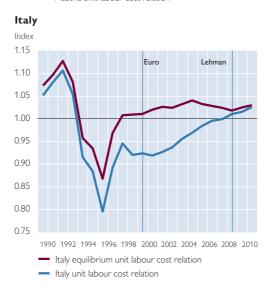
"current account" position between Member States is therefore sustainable. It makes no difference whether the lender is a "domestic" or a "foreign" bank in the euro area. The open and unlimited access to liquidity for Monetary Financial Institutions (i.e. banks) is the defining feature of a monetary union. Hence, European Monetary Union is not a fixed exchange rate area; it is an "economic country".

This does not mean that in a monetary union, borrowing is unlimited and unconstrained or that repayment does not matter. It means that the borrowing risk is debtor specific. The issue is the solvability of debtors. Each debtor must be assessed for solvency in terms of the net present value of future cash flow streams. Hence, it is a category mistake to use the category of Member States and their current accounts in EMU, because

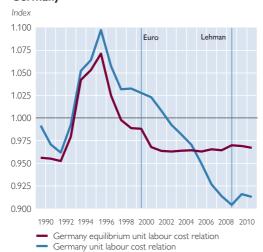
Chart 7

National Levels of Unit Labour Cost Relation

Austria Index 1.15 1.10 1.05 1.00 0.95 0.90 0.85 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 — Austria equilibrium unit labour cost relation — Austria unit labour cost relation







Source: Centro Europa Ricerche, Rome

only banks can borrow from the ECB and not States (Treaty on the Functioning of the European Union art. 123).

If current account positions are not appropriate, how else can we measure competitiveness? What matters for firms are relative prices and relative unit labour costs (ULC). Typically, they are estimated by some index like in chart 5.

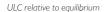
But such an index is also a flawed concept, because what matters are ULC levels, and an index cannot represent these levels. So, what is the right level? Should ULC all be the same in equilibrium? Not necessarily because labour cost is only one element in the total cost of producing output. The other is the cost of capital. In equilibrium, and assuming efficient markets, the rates of return on capital should equalise. Hence, the competitiveness benchmark must depend on ULC and on capital productivity. When capital productivity is low, ULC must fall; when capital productivity is high, ULC can rise.

Chart 6 shows the development of the average capital efficiency in several euro area Member States.

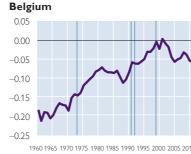
Given the developments of average capital efficiency and labour productivity, we can calculate the equilibrium unit labour cost relation (the red line in chart 7) and compare it to actual ULC (the blue line). The chart is drawn to reflect the national levels relative to the euro area. A value of 1 indicates that ULC in the country of reference are equal to the euro area.

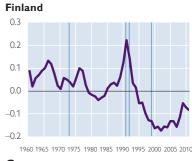
We can then calculate our Competitiveness Index as the difference between actual and equilibrium ULC relative to the euro area. Equipped with this index, we can now try to assess the impact of competitiveness on other variables.

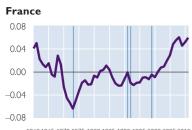
Competitiveness Indicators







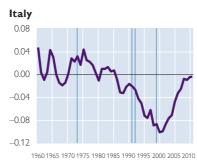




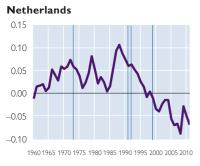




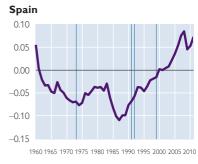












Source: Centro Europa Ricerche, Rome.

Does Competitiveness Matter for Economic Growth in the Euro Area?

To answer this question, we estimate economic growth as a function of private and public investment, the yield curve and competitiveness. We find private investment drives growth, public investment is not significant, but competitiveness and the yield curve have become highly significant in EMU as the table shows.

| Drivers of | Francmic | Growth |
|------------|----------|--------|

| | 1971–2010 |) | | EU-15 Pre-EMU | | | EMU | | | NMS 1993–2010 |
|-------------------------------|-----------|-----------|-----------|------------------|----------|-----------|----------|----------|-----------|------------------|
| Δ InGDP _{t-1} | 0.136 | 0.283* | 0.525*** | -0.054 | -0.090 | 0.310 | 0.100 | 0.672*** | 0.636*** | 0.025 |
| | (1.27) | (1.95) | (3.79) | (-0.30) | (-0.41) | (1.20) | (0.81) | (3.74) | (3.90) | (0.20) |
| Δ (GovI/GDP), | -0.003 | -0.011 | -0.009 | -0.002 | -0.003 | 0.001 | 0.018 | 0.003 | -0.017 | 0.049** |
| /t | (-0.32) | (-1.01) | (-0.85) | (-0.20) | (-0.31) | (0.12) | (1.12) | (0.20) | (-1.24) | (2.01) |
| Δ (PrivI/GDP), | 0.008*** | 0.008*** | 0.005** | 0.009*** | 0.009*** | 0.006** | 0.015*** | 0.013*** | 0.009*** | 0.016*** |
| -(······/ _t | (3.98) | (3.62) | (2.53) | (3.53) | (3.41) | (2.16) | (5.89) | (4.50) | (3.74) | (4.04) |
| Δ yield, | , | -0.002*** | -0.002*** | , , | -0.002** | -0.001 | | -0.003 | -0.004** | , |
| -/·t | | (-2.66) | (-2.63) | | (-2.57) | (-1.48) | | (-1.16) | (-2.23) | |
| Δ InComp. | | , , | -0.308*** | | , , | -0.253*** | | , , | -0.438*** | |
| | | | (-6.28) | | | (-3.54) | | | (-8.32) | |
| time dummies | no | no | no | no | no | no | no | no | no | no |
| R^2 | 0.380 | 0.425 | 0.493 | 0.335 | 0.341 | 0.410 | 0.483 | 0.642 | 0.738 | 0.338 |
| Ν | 511 | 456 | 456 | 315 | 274 | 274 | 196 | 182 | 182 | 152 |
| Under id. | 33.8 *** | 29.7 *** | 30.7 *** | 13.9 *** | 15.1 *** | 9.3 *** | 10.7 *** | 10.2 *** | 9.7 *** | 5.4 ** |
| Weak id. | 15.5 *** | 12.1 *** | 12.5 *** | 5.5 ** | 5.5 ** | 3.1 * | 4.7 ** | 4.9 ** | 4.4 * | 2.0 |

Note: Fixed Effects Instrumental Variables estimates. T statistics in parenthesis; * significant at 10% level; *** significant at 5% level; *** significant at 1% level. Instrument used: lag 1 of DInGDP, lag 2 of govI/GDP and privI/GDP. For under identification and weak identification we report the Kleibergen-Paap rk LM and Wald statistics.

Fiscal Policy and Competitiveness

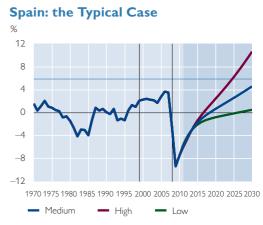
Competitiveness might also influence fiscal policy by raising growth and revenue, by lower revenue through tax cuts and by raising expenditure to subsidise competitiveness. To assess the effect, we have estimated revenue and primary expenditure functions and calculated the expected future primary budget positions. Of course, debt sustainability requires a primary surplus sufficient to service debt.

We look at three scenarios:

- The medium scenario with constant competitiveness and slow growth convergence to the most likely growth rate (see charts above).
- High scenario at a 0.5% higher growth rate and 0.5% competitiveness improvement per annum.
- Low scenario at a 0.5% lower growth rate and 0.5% competitiveness deterioration per annum.

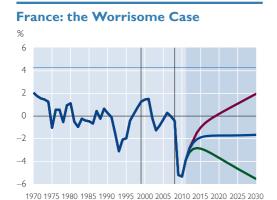
The results are illustrated in charts 9 to 12: Spain is a typical case. One observes the dramatic loss of income after the financial crisis hit in 2008. Primary surpluses have become a deficit and our estimates expect that under normal conditions the primary surplus will return in approximately 5 years time. However, even under those circumstances Spain will not reach a primary surplus sufficient to service its debt. In fact, in the pessimistic scenario it will even take 10 years until it is returning to a balanced primary budget, which means that public debt is unsustainable. However, with the improvement of economic growth in competitiveness

Chart 9



Source: Author's calculations

Chart 10



High

- Low

Medium
Source: Author's calculations

Chart 11

Portugal: the Hopless Case

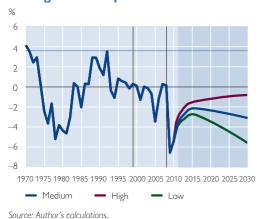
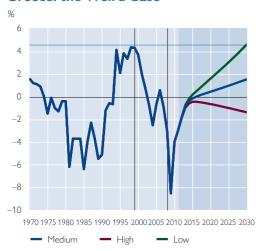


Chart 12

Greece: the Weird Case



public debt becomes sustainable and will stabilize in the early 2020s.

France is a worrisome case. We see that even with the medium scenario this country will not return to positive primary surpluses, and in fact under the low growth-(low) competitiveness scenario they will even deteriorate further. On the other hand, if France would improve its growth and competitiveness under our model assumption, it will not be sufficient to bring French debt dynamics under control. Hence, one has to be concerned about the capacity of France to sustain its public debt position.

Although competitiveness improves the expenditure side of Portugal's budget, it is not enough to yield a surplus sufficient to service the public debt.

We find a negative relation between competitiveness improvements and tax revenues. Presumably, Greece improved competitiveness by keeping wages low or by mitigating tax increases on labour.

Conclusion: What to Do?

Europe needs higher growth. It needs to improve competitiveness, which means higher productivity of capital and labour. However, it is often overlooked that capital efficiency is negatively affected by low interest rates. On the other hand, higher labour productivity depends in the short run on wage increases and in the long run on R&D. To sustain productivity improvements, Europe needs higher investment. That will only happen if uncertainty in capital markets is reduced. This will require more coherent macroeconomic management and ultimately the creation of a deep market of eurobonds.

Source: Author's calculations.

Contributors



Harald Badinger

Harald Badinger, born in 1974, is currently occupied as Full Professor at the Department of International Economics of the Vienna University of Economics and Business Administration, where he also earned his doctorate degree in economics in 2001. In 2009 and until February 2010, he worked for the Oesterreichische Nationalbank at the Economic Studies Division, In 2007 and 2008, Mr. Badinger was employed as research fellow at the Center for Economic Studies (CES, University of Munich). He started his academic career as research assistant at the Europainstitut of the Vienna University of Economics and Business Administration in 1999 and in 2002, Harald Badinger was appointed assistant professor (2007 Associate Professor) at the Europainstitut. In 2010, he was ranked 13 in "Top 100 researchers under 40 years old" and 34 in "Top 100 researchers since 2005" in the Handelsblatt ranking of Economists (Germany, Austria, Switzerland). His main research interests include economic growth, international trade and European economic integration.

Stefan Collignon

Stefan Collignon has been engaged as ordinary Professor of political economy at Sant'Anna School of Advanced Studies Pisa, since October 2007, and as International Chief Economist of the Centro Europa Ricerche (CER), Roma, since July 2007. He is the founder of the Euro Asia Forum at Sant'Anna school of advanced studies. Previously, he was Centennial Professor of European Political Economy at the London School of Economics and Political Science (LSE) from January 2001 to 2005. Between 2005-2007, he was Visiting Professor at Harvard University, Faculty of Arts and Sciences, Government Department and an associate of the Minda de Gunzburg Centre for European Studies at Harvard. He has also taught at the University of Hamburg, the Institut d'Etudes Politiques in Paris and Lille, at the College of Europe in Bruges and at the Free University of Berlin (1997–2000). Stefan Collignon has served as Deputy Director General for Europe in the Federal Ministry of Finance in Berlin 1999–2000. He was also member of the Supervisery Board Glunz AG (1999–2010).

Stefan Collignon received his Ph.D. and Habilitation from the Free University of Berlin. He also studied at the Institut d'Etudes Politiques (Paris), the University of Dar es Salaam, Queen Elizabeth House in Oxford and the London School of Economics. Since 1990 he has



been president of the Association France-Birmanie. He joined the First National Bank in Dallas in 1975, worked with the German Volunteer Service in Tanzania (1977–1979) and was Chairman and Managing Director of Dorcas Ltd. London (1980–1989). From 1989 to 1998, Mr. Collignon was Director of Research and Communication at the Association for the Monetary Union of Europe (Paris). Professor Collignon is author of numerous books on monetary economics, and the political economy of regional integration.

Wolfgang Duchatczek

Wolfgang Duchatczek has been serving as Vice Governor of the Oesterreichische Nationalbank (OeNB) since 2003. He joined the OeNB in 1976 and the Office of the Governor in 1978. He was appointed Chief of the Office of the Governor in 1982 and Deputy Executive Director of the Foreign Research Department in 1987. In addition, he served as Representative of the OeNB on the EC Integration Committee of the Austrian Federal Government. Mr. Duchatczek was appointed Director of the Area International Relations of the OeNB in 1992 and represented the OeNB during Austria's EU accession negotiations. He was nominated Chairman of the European Commission's Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) and served as the OeNB's Second Alternate on the Committee of Alternates of the European Monetary Institute (EMI). In 1997, he was appointed to the OeNB's Board of Executive Directors as Deputy Chief Executive Director of the Liquidity and Portfolio Management and Internal Services Department, and in 1998 he joined the OeNB's Governing Board as Executive Director of the Money, Payment Systems and Information Technology Department. Mr. Duchatczek holds a doctorate in economics and social sciences and has been awarded the Grand Decoration of Honor in Gold for Services to the Republic of Austria.

Wolfgang Franz

Wolfgang Franz was born in 1944 and studied economics at the University of Mannheim. Afterwards, he worked as a research associate at the University of Mannheim and obtained a doctorate in 1974 on a macroeconometric analysis of the German labor market. As a research fellow Wolfgang Franz spent

two years at Harvard and at the National Bureau of Economic Research in Cambridge, Mass. In 1981, he habilitated on the problem of youth unemployment. His career path led him first from a position as professor at the Johannes Gutenberg-University in Mainz to the University of Stuttgart in 1984 before he accepted a chair at the University of Konstanz, where he received an award by the Federal State of Baden-Württemberg for outstanding university teaching ("Landeslehrpreis"). Although, he was offered chairs at the Swiss Federal Institute of Technology Zurich and Humboldt University in Berlin, Franz stayed in Konstanz until 1 April 1997. He then took on the position of president of the Centre for European Economic Research (ZEW) in Mannheim and at the same time accepted a chair of economics at the University of Mannheim. In March 2009, Franz became chairman of the German Council of Economic Experts, which advises the German Government and Parliament on economic policy issues. Franz is a member of the Heidelberg Academy of Sciences and Humanities and also heads the section Economics and Empirical Social Sciences at the Leopoldina, the German Academy of Sciences. Furthermore, he is a member of the Scientific Advisory Board of the Federal Ministry of Economics and Technology. He was key advisor for economics at the German Research Foundation (DFG) and co-editor of several magazines on economics. His main research areas are macroeconomics, labor economics, and empirical methods in economics. Franz has published numerous books and scientific articles on these topics. Franz was conferred with an honorary doctorate by both the European Business School (ebs) and the University of Magdeburg in 2003.

Ernest Gnan

Ernest Gnan has been head of the Economic Analysis Division of the Oesterreichische Nationalbank in Vienna since 1999. He is a member of the European Central Bank's Monetary Policy Committee, and is also an adjunct Professor at Webster University in Vienna, teaching courses on economic analysis. During 1998, Ernest Gnan served as deputy head of the Foreign Research Division of the Oesterreichische Nationalbank, and from 1995 to 1997. as an economist in the Secretariat of Foreign-Exchange Policy Sub-Committee at the European Monetary Institute (a forerunner of the European Central Bank). He is a former national expert in the Directorate General for Monetary and Financial Affairs at the European Commission in Brussels, and a former investment fund manager at Genossenschaftliche Zentralbank in Vienna. Ernest Gnan received a master's degree in commercial sciences and a Ph.D. in economics at the University of Economics and Business Administration in Vienna.

Rudolf Hundstorfer

Rudolf Hundstorfer was born in 1951 in Vienna and started his trade union activities as youth spokesman in the administration of the City of Vienna. As from 1975, Mr. Hundstorfer was responsible for youth affairs in the Union of Municipal Employees (Gewerkschaft der Gemeindebediensteten – GdG) where he became expert on organisational questions in 1983 before being elected secretary general and, in 1998, chairman of the "Landesgruppe Wien" (Vienna's faction at the GdG). In 2001, he was elected executive chairman of the GdG. Mr. Hundstorfer served as chairman of the Social Democratic Trade Unionists (Fraktion Sozialdemokratischer GewerkschafterInnen -

FSG) from 2003 to 2006 and was elected chairman of the GdG in March 2007. Rudolf Hundstorfer was a member of Vienna's Provincial Diet and City Council from 1990 to 2007 and first chairman of Vienna's City Council from 1995 to 2007. In 2003, Rudolf Hundstorfer was elected vice president of the Austrian Trade Union Federation (Österreichischer Gewerkschaftsbund - ÖGB). In 2006, he followed Fritz Verzetnitsch as executive president of the ÖGB and became its president as well as member of the executive committee in 2007 with a key responsibility for social affairs. In December 2008, Rudolf Hundstorfer was sworn in as Minister of Social Affairs and Consumer Protection of the Republic of Austria. Since February 1st 2009, he has also been responsible for Labor Affairs.

Andreas Ittner

Andreas Ittner is a Member of the Governing Board of the Oesterreichische Nationalbank (OeNB). He studied economics and social sciences at the Vienna University of Economics and Business Administration between 1976 and 1980. Mr. Ittner started his



professional career with the Ittner retail business in Vienna in 1978. In 1983, he joined the OeNB and began to

work in the Banking Analysis and Credit Supervision Office. In 1997, he became head of the Secretariat for the President in the OeNB and in 1987, Andreas Ittner was appointed Director of the Financial Stability and Bank Inspections Department of the OeNB. Mr. Ittner is among other engagements an Acting Member of the Banking Supervision Committee of the ESCB, Vice President of the Centre for Secure Information Technology, Member of the Supervisory Board of the Austrian Financial Market Authority as well as Member of the Financial Market Committee established under the Austrian Banking Supervision Act.

Hans-Helmut Kotz

Hans-Helmut Kotz is a Senior Fellow at Goethe University's Center for Financial Studies as well as an Honorary Professor in the Faculty of Economics and Behavioral Sciences of Freiburg University, where he received the 2010



University Teaching Award. During the fall term 2010, he was visiting Harvard University, teaching a course in its Department of Economics and working at Harvard's Center for European Studies. Between 2002 and 2010, he was a Member of the Executive Board of Deutsche Bundesbank, over time in charge of Departments of

Financial Stability, Markets, IT, Statistics and Training and Education. He was a member of a number of committees of the BIS, the Financial Stability Board, as well as the OECD, where he chaired the Financial Markets Committee. He was also the Central Bank Deputy for the G7 and the G20 process. Between 2002 and 2005, he served in a personal capacity on an Expert Panel of the European Parliament on Financial Markets. He is also a member of the board of the Konstanz Seminar on Monetary Theory, of the Conseil d'Orientation, Revue d'Economie Financière, Paris, of the Advisory Board, Blekinge Institute of Technology, Sweden, of the Conseil Scientifique, Centre Cournot pour la Recherche en Économie, Paris and of the Scientific Council of the Hamburg World Economic Institute (HWWI), Hamburg. He has published numerous articles in e. g. the Revue d'Economie Financière (recently editing two special issues on Systemic Risk), Kredit und Kapital, Zeitschrift für Betriebswirtschaft, Wirtschaftsdienst and Intereconomics – Review of European Economic Policy. He has also written for a number of newspapers (e.g. Frankfurter Allgemeine Zeitung) and he is a long-standing columnist with the French weekly Option Finance. His current research focuses on monetary policy's role in underwriting financial stability, on sustainable levels of bank profitability and on the politics of international rule making.

Anne O. Krueger

Anne Krueger is Professor of International Economics at the School for Advanced International Studies, Johns Hopkins University. She is a Senior Fellow of the Stanford Center for International Development (of which she was the founding Director) and the Herald L. and Caroline Ritch Emeritus

Professor of Sciences and Humanities in the Economics Department at Stanford University. Anne Krueger was the First Deputy Managing Director of the International Monetary Fund from 2001 to 2006. Prior to that, she had taught at Stanford and Duke Universities. From 1982 to 1986, she was Vice President, Economics and Research at the World Bank. She had earlier been Professor of Economics at the University of Minnesota. Professor Krueger has held visiting Professorships at a number of universities, including the Massachusetts Institute of Technology, Northwestern Bogazici University, University (Istanbul), the Indian Council for Research on International Economic Relations (ICRIER), Monash University and the Australian National University, and the Stockholm Institute for International Economics. She holds a B.A. from Oberlin College and a Ph.D. from the University of Wisconsin. Professor Krueger is a Distinguished Fellow and past President of the American Economic Association, a Senior Research Fellow of the National Bureau of Economic Research, and a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the Econometric Society, and the American Philosophical Society. She has published extensively on economic development, international trade and finance, and economic policy reform. In addition to her writings on these topics, she has written a number of books and articles on economic growth, international trade, and economic policy in India, South Korea, and Turkey.

David T. Llewellyn

David T. Llewellyn is Professor of Money and Banking at Loughborough University, Honorary Visiting Professor at the CASS Business School in London, Visiting Professor at the Swiss Finance Institute in Zurich and at the Vienna University of Economics and Business Administration. He is Consultant Economist to ICAP pic. Recently, he has been working with several central banks on aspects of the global financial crisis and resolution strategies. Previous career appointments include serving as an economist at Unilever (Rotterdam), HM Treasury (London) and the International Monetary Fund (Washington). Between 1994 and 2002, he was a Public Interest Director of the Personal Investment Authority. He serves as a consultant to financial firms, management consultancy firms and regulatory agencies in several countries. In addition, Mr. Llewellyn has been a consultant to the World Bank and the International Monetary Fund, and is currently a member of an IMF international advisory committee on governance in supervisory agencies. He is a member of the Advisory Board of the European Banking Report at the Italian Bankers Association. Since 2004, he has been a member of the Banking Panel of Bank Indonesia. In addition, he was a member of the Pricewaterhouse Coopers team investigating the macroeconomic impacts of the Basel II Accord for the European Commission. He is a member of the Council of Management of SUERF – The European Money and Finance Forum and was President thereof between 2000 and 2006. David T. Llewellyn has written extensively on the analysis of banking and financial markets and their regulation.

Ewald Nowotny

Ewald Nowotny is the Governor of the Oesterreichische Nationalbank (OeNB) and a Member of the Governing Council of the European Central Bank (ECB). Before taking on his current position in September 2008, Ewald

Nowotny held a number of high-level positions in financial institutions. He was CEO of the Austrian BAWAG P.S.K. banking group from 2006 to 2007, served as Vice President and Member of the Executive Board of the European Investment Bank (EIB) in Luxembourg from 1999 to 2003 and, between 1971 and 1979, he was a Member and then President of the Governing Board of Österreichische Postsparkasse (P.S.K.). Moreover, from 1992 to 2008 Ewald Nowotny served as member of the supervisory board of several banks and corporations and was a member of the OeNB's General Council from 2007 to 2008. Ewald Nowotny was born in Vienna, Austria, in 1944. He studied law and government sciences at the University of Vienna and economics at the Institute of Advanced Studies in Vienna. In 1967, he received his doctorate in law from the University of Vienna. After working as assistant to Professor Kurt W. Rothschild at the Economics Department of the University of Linz, Austria, from 1968 to 1973, Ewald Nowotny received his postdoctoral qualification (Habilitation) in General Economics and Public Economics in 1973 and subsequently held research tenures and professorships at Harvard Technische University, Universität Darmstadt, Germany, and the University of Linz, Austria. From 1981 to 2008 Ewald Nowotny served as Full Professor at the Vienna University of Economics and Business, where he also held the position of Vice Rector from 2003 to 2004. In 2008, Ewald Nowotny received a honorary doctorate in Social and Eco-Sciences from Alpen-Adria nomic Universität Klagenfurt, Austria. Ewald Nowotny has published numerous articles in refereed journals. He is also the author or coauthor of nine books; the fifth edition of his internationally renowned

textbook Der öffentliche Sektor — Einführung in die Finanzwissenschaft was published in 2008. Ewald Nowotny was an elected Member of the Austrian Parliament from 1979 to 1999 and served as chairman of the parliamentary Finance Committee from 1985 to 1999. Ewald Nowotny is married and has a son.

Andreas Pfingsten

Andreas Pfingsten has been Professor of Business Administration and chairman of the Institute of Banking (Finance Center Münster) at the University of Münster since 1994. In the years between 1997 and 2002, he was also involved in additional engagements as for example as visiting scholar at the University of Illinois, as visiting professor at the University of Calgary, as Dean of the Münster School of Business and Economics. Mr. Pfingsten studied Industrial Engineering and Management at the Karlsruhe Institute of Technology (1977-1982) and economics at the University of British Columbia (Canada). Between 1983 and 1988, he was engaged as research assistant and later as assistant professor at the Department of Economic Theory and Operations Research at the Karlsruhe Institute of Technology. Mr. Pfingsten holds a doctoral degree (1985) from the Faculty of Economics and Management at the Karlsruhe Institute of Technology and habilitated in 1988. Subsequently, he started working as deparment manager for academic relations, controlling and strategic planning at Fiducia IT AG in Karlsruhe. In 1990, he was appointed Professor of Economics at the University of Siegen. Andreas Pfingsten has been awarded with numerous honors during his career e.g. most recently with the Finnish Economic Papers Prize (2011) and the Best Paper Award at the 2nd Rostock Conference on Service Research.

Olli Rehn

Olli Rehn (born 31 March 1962) is currently serving as European Commissioner for Economic and Monetary Affairs. He had previously served as Commissioner for Enlargement. He has held a variety of political positions in European institutions as well as in Finland. From 2003 to 2004, Mr. Rehn was Economic Policy Adviser to the Prime Minister of Finland. Before, he held the position of Professor and Director of Research at the Department of Polictical Science & Centre of European Studies at the University of Helsinki. His career at the European level started in the years between 1995 and 1996 as a Member of European Parliament, later (1998–2002) as Head of Cabinet of the European Commission. Mr. Rehn studied economics, international relations and journalism at Macalester College, Saint Paul, Minnesota, USA. He took a master's degree in political science from the University of Helsinki in 1989, and a Ph.D. from the University of Oxford in 1996 on the subject of Corporatism and Industrial Competitiveness in Small European States.

Daniela Schwarzer

Daniela Schwarzer is currently the Head of the Research Division EU Integration at the German Institute for International and Security Affairs, Stiftung Wissenschaft und Politik (SWP) in Berlin. She joined the Institute in 2005. In 2010, she became a member of the team of academic advisors to the Polish Secretary of State for European Affairs in preparation of Poland's EU Council Presidency in 2011. In 2007/2008 she was a member of the working group Europe of the Whitebook Commission on Foreign and European Policy in the French Foreign Ministry and a visiting researcher at the

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Lorenzo Bini Smaghi

Lorenzo Bini Smaghi has been a Member of the Executive Board of the European Central Bank since June 2005. Before becoming a Member of the ECB's Executive Board, he held also the position of Deputy Director General for Research at the ECB in 1998. Between 1998 and 2005, Mr. Bini Smaghi served as Director General for International Relations at the Italian

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nomics from the University of Chicago in 1988. In 1982, he started his professional career with an Internship at the Central Banking Department of the IMF; subsequently in 1983, he began to work as an economist for the International Section of the Research Department of Banca d'Italia. Lorenzo Bini Smaghi is the author of several articles and books on international and European monetary and financial issues.

Martin Summer

Martin Summer is Head of the Economic Studies Division at the Austrian Central Bank (OeNB). Before joining the OeNB in 2000, he worked as a lecturer at the University of Vienna, the University of Birmingham and the University of Regensburg. He also

worked as a visiting researcher at the Bank of England and the Financial Markets Group of the London School of Economics in 2004. His research interests are banking regulation and systemic risk, financial stability and financial economics.

Thomas Wieser

Thomas Wieser was born 1954 in Betheseda, Md. USA. He holds a degree in economics from the University of Innsbruck and completed his studies with post-graduate studies at the University of Colorado, Boulder (Fulbright scholarship) and at the Institute for Advanced Studies, Vienna. He started his professional experience at the Internationale Bank für Außenhandel as Head of Export Financing in 1982. In 1984, he began his research work on industrial policies in Austria in cooperation with WIFO. From 1986 to 1989, he was employed as economist at EFTA (Geneva), where the main focus of his work was on macro-economic country analysis, trade questions and state aid questions. Since 1989, Mr. Wieser has been employed at the Austrian Ministry of Finance, where he was contracted as a senior economist dealing with international economic policy questions. In 1995, he became Deputy Director General responsible for economic policies, international financial institutions and EU affairs. Subsequently in 1999, he became Director General for International Affairs, Economic Policy, Customs and Excise and in 2002 Director General for Economic Policy and Financial Markets.

Martin Wolf

Martin Wolf is Associate Editor and Chief Economics Commentator at the Financial Times, London. He was awarded the CBE (Commander of the British Empire) in 2000 for services to financial journalism. Mr. Wolf is an honorary fellow of Nuffield College, Oxford University, of Corpus Christi College, Oxford University and of the Oxford Institute for Economic Policy (Oxonia), a special Professor at the University of Nottingham and a member of the Board of Governors of the Ben Gurion University of the Negev, in Israel. He has been a forum fellow at the annual meeting of the World Economic Forum, in Davos, since 1999 and is a member of its International Media Council. He won the RTZ David Watt memorial prize 1994, granted annually "to a writer judged to have made an outstanding contribution in the English language towards the clarification of national, international and political issues and the promotion of their greater understanding". He won the Accenture Decade of Excellence at the Business Journalist of the Year Awards of 2003. He won the Newspaper Feature of the Year Award at the Workworld Media Awards 2003. On

1st December 2005, he was given First Magazine's Special Advocacy Award at its annual Award for Responsible Capitalism. In January 2008, Mr. Wolf won the AMEC Lifetime Achievement Award at the Workworld Media Awards for 2007. He won the Commentator of the Year award at the Business Journalist of the Year Awards of 2008. He was also placed among the world's 100 leading public policy intellectuals by the British magazine Prospect and the US magazine Foreign Policy in May 2008. He was placed 15th in Foreign Policy's list of the Top 100 Global Thinkers in December 2009 and 37th in the same list for 2010. He was appointed a member of the UK government's Independent Commission on Banking in June 2010. His most recent publications are Why Globalization Works and Fixing Global Finance. China Business News named Fixing Global Finance its Financial Book of the Year for 2009. Mr. Wolf was educated at Oxford University.

The Economics Conference hosted by the OeNB is an international platform for exchanging views on monetary and economic policy as well as financial market issues. It convenes central bank representatives, economic policy decision makers, financial market players, academics and researchers. The conference proceedings comprise all papers.

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