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# Geldpolitik und Finanzmarktstabilität Monetary Policy and Financial Stability



EUROSYSTEM

INHALT  
CONTENTS

KLAUS LIEBSCHER	
Tagungseröffnung	4
Keynote Address	
SVEIN GJEDREM	
The Macroprudential Approach to Financial Stability	10
Tagungsblock 1: Wirtschaftspolitik und Finanzmarktstabilität	
Session 1: Macroeconomic Policies and Financial Stability	
CHARLES A. E. GOODHART	
The Links between Fiscal and Monetary Policies on the One Hand, and Financial Stability on the Other	22
THOMAS WIESER	
Comments on Charles A. E. Goodhart, “The Links between Fiscal and Monetary Policies on the One Hand, and Financial Stability on the Other”	38
Keynote Address	
TAKATOSHI KATO	
The Financial Stability Assessment Framework of the IMF: Experience in Europe	48
Klaus-Liebscher-Preis	
Klaus Liebscher Award	60
Tagungsblock 2: Institutionelle und aufsichtsrechtliche Fragen	
Session 2: Institutional and Regulatory Issues	
KAREL LANNOO	
Capital Adequacy versus Liquidity Requirements in Banking Supervision in the EU	62
HENK J. BROUWER	
Comments on Karel Lannoo, “Capital Adequacy versus Liquidity Requirements in Banking Supervision in the EU”	80
DANIELÈ NOUY	
Ensuring Financial Stability through Supervisory Cooperation	86
JUKKA VESALA	
Which Model for Prudential Supervision in the EU?	98
Comments on Danièle Nouy, “Ensuring Financial Stability through Supervisory Cooperation”	

## Kamingespräch Evening Discussion

KARL-HEINZ GRASSER

Kamingespräch	106
---------------	-----

## Tagungsblock 3: Herausforderungen für Finanzinstitute auf der Mikroebene Session 3: Micro-Challenges for Financial Institutions

WOLFGANG DUCHATCZEK

Introductory Remarks	116
----------------------	-----

## Keynote Address

JAIME CARUANA

Monetary Policy and Basel II	120
------------------------------	-----

## Podiumsdiskussion: Herausforderungen für Finanzinstitute auf der Mikroebene Panel Discussion: Micro-Challenges for Financial Institutions

FRANCO BRUNI

Introductory Statement	134
------------------------	-----

KURT PRIBIL

142

KARL SEVELDA

146

EVA SREJBER

The Divorce between Macro-Financial Stability and Micro-Supervisory Responsibility: Are We Now in for a More Stable Life?	152
--	-----

ISABEL SCHNABEL

Comments on Eva Srejber, "The Divorce between Macro-Financial Stability and Micro-Supervisory Responsibility: Are We Now in for a More Stable Life?"	164
---	-----

JOSEF CHRISTL

Concluding Remarks	172
--------------------	-----

DIE VORTRAGENDEN  
SPEAKERS

178

KLAUS LIEBSCHER



## Tagungseröffnung

Ich begrüße Sie zur 33. Volkswirtschaftlichen Tagung der Österreichischen Nationalbank (OeNB) und heiße Sie alle hier in Wien sehr herzlich willkommen.

Ich freue mich, dass Sie so zahlreich gekommen sind, um am Meinungsaustausch mit den vielen namhaften internationalen und österreichischen Experten, die wir für diese Tagung gewinnen konnten, mitzuwirken. Wir alle können von ihrer Expertise und ihren Erfahrungen im Bereich des diesjährigen Tagungsthemas „Geldpolitik und Finanzmarktstabilität“ lernen, und daher sehe ich einer angeregten Diskussion dieses wichtigen Themas während der nächsten beiden Tage mit großem Interesse entgegen und bedanke mich bei allen Vortragenden und Teilnehmern der Podiumsdiskussionen sehr herzlich für ihre Mitwirkung im Voraus.

Der Herr Bundeskanzler, der traditionell in den letzten Jahren unsere Tagung eröffnet hat, musste sich heuer leider kurzfristig aufgrund von politischen parlamentarischen Verpflichtungen für die Eröffnung entschuldigen. Ich bitte um Verständnis dafür. Er hat mir aber eine kurze Grußbotschaft übermittelt, die ich sehr gerne vortrage.

### Grußworte des Herrn Bundeskanzlers

*Die alljährlich stattfindende Volkswirtschaftliche Tagung der Oesterreichischen Nationalbank hat sich zu einer sehr beachteten und äußerst wertvollen Diskussionsveranstaltung unter Teilnahme von international anerkannten und renommierten Wissenschaftlern, Nationalökonomern und Bankern entwickelt.*

*Die heurige 33. Tagung, die unter dem Titel „Geldpolitik und Finanzmarktstabilität“ steht, verspricht ebenfalls anregende Diskussionen, ist das Thema doch von enormer wirtschaftspolitischer Relevanz. Beide Faktoren – Geldpolitik und Finanzmarktstabilität – bilden eine fundamentale Voraussetzung für eine gesunde und effiziente gesamtwirtschaftliche Entwicklung und ein nachhaltiges Wirtschafts- und Beschäftigungswachstum.*

*Zu meinem außerordentlichen Bedauern ist es mir aufgrund eines kurzfristig angesetzten Termins nicht möglich, persönlich hier anwesend zu sein. Ich wünsche aber den Veranstaltern und allen Teilnehmern eine anregende Diskussion und ein gutes Gelingen.*

Es ist mir eine besondere Freude, Herrn *Takatoshi Kato*, stellvertretender Managing Director des Internationalen Währungsfonds, Herrn *Svein Gjedrem*, Gouverneur der Norges Bank, sowie Herrn *Jaime Caruana*, Gouverneur der Banco de España und Vorsitzender des Basler Ausschusses, der morgen die Keynote Speech übernehmen wird, ganz besonders herzlich zu begrüßen. Vielen Dank, dass Sie nach Wien gekommen sind, und ein herzliches Willkommen.

Mein herzlicher Gruß gilt auch den zahlreichen Medienvertretern, die unserer Einladung gefolgt sind. Und last, but not least erlauben Sie mir in eigener Sache, allen Damen und Herren der OeNB, die an der Organisation dieser Veranstaltung sowohl inhaltlicher als auch ablauforganisatorischer Natur mitgewirkt haben, einen herzlichen Dank auszusprechen.

Das diesjährige Tagungsthema „Geldpolitik und Finanzmarktstabilität“ berührt zwei zentrale Notenbankthemen.

Die zahlreichen, oft sehr komplexen Zusammenhänge zwischen diesen beiden Bereichen haben viele ökonomische Debatten angeregt und manchmal auch den verantwortlichen Entscheidungsträgern in den Notenbanken das Leben ziemlich schwer gemacht. Ich glaube daher,

dass das diesjährige Thema sehr gut in die Tradition der Volkswirtschaftlichen Tagung der OeNB passt.

War es doch stets unser Ziel, aktuelle Themen aufzugreifen, die sowohl für akademische Experten als auch für Praktiker und wirtschaftspolitische Entscheidungsträger wichtig und relevant sind.

Das Programm der Tagung nähert sich den Zusammenhängen zwischen Geldpolitik und Finanzmarktstabilität von mehreren Seiten. Der *erste* Abschnitt widmet sich den Zusammenhängen zwischen Geldpolitik, Fiskalpolitik und Finanzmarktstabilität und untersucht das Financial Sector Assessment Program des Internationalen Währungsfonds, das in der Finanzmarktstabilitätsanalyse internationale Standards gesetzt hat.

Im *zweiten* Abschnitt unserer Tagung wenden wir uns regulierungspolitischen Fragen zu, die sich in einem internationalen Umfeld mit einem globalen Finanzsystem stellen. Hier berühren wir sowohl die Frage der Prävention von internationalen Finanzkrisen als auch das wichtige Thema der internationalen Kooperation von Finanzmarktaufsichtsbehörden.

Schließlich werden wir uns im *dritten* Teil der Tagung mit den Konsequenzen des institutionellen Wandels in der Bankenaufsicht und

dem neuen regulatorischen Rahmen für Banken, Basel II, befassen.

Das primäre Ziel der Geldpolitik ist die Gewährleistung von Preisstabilität. Die fundamentale Rolle der Preisstabilität rührt daher, dass diese in mehrfacher Hinsicht eine zentrale Voraussetzung für langfristiges, nachhaltiges Wachstum ist. Preisstabilität erhöht die Effizienz der Allokation von knappen Ressourcen, unterstützt das Konsumentenvertrauen, reduziert Unsicherheit und erzeugt damit ein günstiges Umfeld für Investitionen und Wachstum. Schließlich stellen stabile Preise für die Arbeitsmärkte einen wichtigen nominellen Anker zur Verfügung, der hilft, Lohnanpassungen mit dem allgemeinen Produktivitätswachstum konsistent zu halten.

Die Geldpolitik des Eurosystems hat sich bislang unbeirrt und in vorausschauender Weise am Ziel der Preisstabilität orientiert. Dieses sieht mittelfristig eine Preissteigerungsrate von unter, aber nahe 2% vor. Seit dem Beginn der dritten Stufe der Wirtschafts- und Währungsunion war das Eurosystem in seiner Politik – wie ich meine – durchaus erfolgreich und hat sich in einem schwierigen weltwirtschaftlichen Umfeld bewährt und damit Glaubwürdigkeit in der Bevölkerung wie auch auf den Finanzmärkten erarbeitet.

Die Unabhängigkeit des Eurosystems, seine dezentrale Struktur und die damit verbundene Effizienz sowie seine bewährte geldpolitische Strategie sind dabei wesentliche Erfolgsfaktoren, die die Politik der Europäischen Zentralbank (EZB) auch in Zukunft leiten werden.

Während Preisstabilität also stets im Zentrum der einheitlichen Geldpolitik stand und steht, war es auch immer klar, dass die erfolgreiche

Umsetzung dieses Ziels auf ein Umfeld der Finanzmarktstabilität angewiesen ist. Die Erfahrung lehrt uns, dass beide Ziele im Zusammenhang gesehen werden müssen.

Finanzmarktinstabilität könnte zu schwerwiegenden Störungen der Finanzintermediation führen, die Fähigkeit des Finanzsystems beeinträchtigen, den Zahlungsverkehr reibungslos abzuwickeln, und eine adäquate Bewertung und Allokation finanzieller Risiken wesentlich erschwe-



ren. Sie könnte damit auch die Preisstabilität untergraben. Daher hat das Eurosystem Fragen der Finanzmarktstabilität auch immer entsprechende Beachtung geschenkt.

Dass den Fragen der Finanzmarktstabilität in jüngerer Zeit größeres Augenmerk geschenkt wurde als in der Vergangenheit, liegt aber neben den bereits angeführten prinzipiellen Gründen auch an den wesentlich veränderten Rahmenbedingungen der letzten Jahrzehnte. Denn das Umfeld streng regulierter, national abgeschotteter und wenig wettbewerbsintensiver Finanzsysteme – ohne nennenswerte Währungs- und Zinsrisiken und begleitet von strikten Kapitalverkehrskontrollen – veränderte sich mit dem Zusammenbruch des Bretton Woods-Systems relativ rasch zu einem globalen, hoch kompetitiven Finanzsystem. Dieses ist gekennzeichnet durch enge Intermediationsmargen und höhere Währungs- und Zinsrisiken, die neue Techniken des Risikomanagements erforderten.

Der Prozess der weltweiten Finanzmarktkliberalisierung schuf zusätzlich zahlreiche neue Finanzierungsmöglichkeiten für Unternehmen und eröffnete neue Möglichkeiten zur Risikoallokation und Diversifizierung. Es wurden auch viele strukturelle Ineffizienzen, die mit einem Regime von Kapitalverkehrskontrollen einhergehen, beseitigt. Gleichzeitig wurden durch die Dynamik dieses Strukturwandels Bankenaufseher und Zentralbanken häufiger als in der



unmittelbaren Nachkriegsperiode mit Situationen von Finanzmarktinstabilität und bisweilen sogar mit Banken Krisen konfrontiert.

In langfristiger historischer Perspektive sehen wir, dass die Zeit von 1945 bis 1970 eher der Ausnahme als der Regel entsprach. Umso wichtiger ist daher die Diskussion der Themen, die im Rahmen dieser Volkswirtschaftlichen Tagung behandelt werden.

Ein tieferes Verständnis kann uns eine wichtige Hilfestellung bei der Frage bieten, wie wir die aufeinander verweisenden und zusammenhängenden Ziele von Preisstabilität und Finanzmarktstabilität in einem globalen und wettbewerbsintensiven Umfeld auf eine optimale Weise erreichen können.

Die EZB und das Eurosystem haben von Beginn an der Entwicklung der Finanzmarktstabilitätsanalyse breites Augenmerk geschenkt. Nach Art. 105 Abs. 5 des Vertrags zur Gründung

der Europäischen Gemeinschaft hat das Eurosystem die Aufgabe, „zur reibungslosen Durchführung der von den zuständigen Behörden auf dem Gebiet der Aufsicht über die Kreditinstitute und der Stabilität des Finanzsystems ergriffenen Maßnahmen“ beizutragen.

Das Eurosystem hat darüber hinaus eine beratende Rolle im Entwurf von Gesetzen, die das Finanzsystem betreffen, und ist verpflichtet, die Kooperation zwischen Notenbanken und Aufsichtsbehörden in der EU zu fördern. Es nimmt diese Aufgaben durch Entscheidungen des EZB-Rats wahr.

Die Aufgaben der EZB und des Eurosystems im Hinblick auf Finanzmarktstabilität umfassen sowohl Krisenprävention als auch gegebenenfalls Krisenmanagement. Das Eurosystem wird dabei durch das Banking Supervision Committee (BSC) unterstützt, das sich aus Vertretern der Notenbanken und Bankenaufsichtsbehörden aus den nunmehr 25 EU-Mitgliedstaaten zusammensetzt.

Die EZB und das Eurosystem beobachten systematisch zyklische und strukturelle Entwicklungen im Bankensystem und in anderen Bereichen des Finanzsektors im Euroraum bzw. in der EU. Diese Aktivitäten werden gemeinsam mit den Notenbanken der EU und den Aufsichtsbehörden, die im BSC vertreten sind, durchgeführt. Ziel dieser Aktivitäten ist es, problematische Entwicklungen im Finanzsystem frühzeitig zu erkennen und die Schockabsorptionsfähigkeit des Finanzsystems regelmäßig zu beurteilen.

Sowohl bei der Formulierung von Gesetzen, die das Finanzsystem betreffen, als auch in aufsichtsrechtlichen Fragen wird die EZB oft um Rat und technische Unterstützung gebeten. Dies erfolgt meist durch formelle



Konsultationen zu Gemeinschafts- und nationalem Recht in den Bereichen Finanzmarktstabilität und Aufsicht oder durch Partizipation in den relevanten internationalen und europäischen Foren (z. B. Basler Ausschuss für Bankenaufsicht, European Banking Committee, European Securities Committee, Committee of European Banking Supervisors).

Die EZB fördert gemeinsam mit dem Eurosystem die Kooperation zwischen Zentralbanken und Finanzmarktaufsichtsbehörden in der EU. Eine gut funktionierende Kooperation und der häufige Informationsaustausch sind eine wesentliche Voraussetzung für die Aufrechterhaltung von Finanzmarktstabilität.


Dies geschieht hauptsächlich durch das BSC des Europäischen Systems der Zentralbanken (ESZB). Aus diesem Informationsaustausch resultieren beispielsweise gemeinsame Absichtserklärungen. Diese Erklärungen werden regelmäßig im Lichte von Marktentwicklungen und institutionellen Entwicklungen neu überprüft.

Die Erfahrung hat gezeigt, dass Finanzmarktstabilität zwar keine hinreichende, sehr wohl aber eine not-

wendige Bedingung für Preisstabilität ist. Dass in der fruchtbaren Integration beider Bereiche in der Vergangenheit große Erfolge erzielt wurden, sollte uns aber nicht dazu verführen, uns auf den Lorbeeren auszuruhen. Die ungeheure Dynamik der globalen Wirtschaft und des internationalen Finanzsystems macht es notwendig, dass wir uns der Frage der optimalen Integration von Geldpolitik und Finanzmarktstabilitätsanalyse stets aufs Neue widmen und die Konse-



quenzen moderner Entwicklungen für Regulierung und Finanzmarktaufsicht im Lichte des Bewährten stets neu reflektieren.

Ich hoffe, dass uns die diesjährige 33. Volkswirtschaftliche Tagung der OeNB dabei unterstützt, und wünsche Ihnen und uns allen eine erfolgreiche Konferenz. 

SVEIN GJEDREM



# The Macprudential Approach to Financial Stability

## Introduction

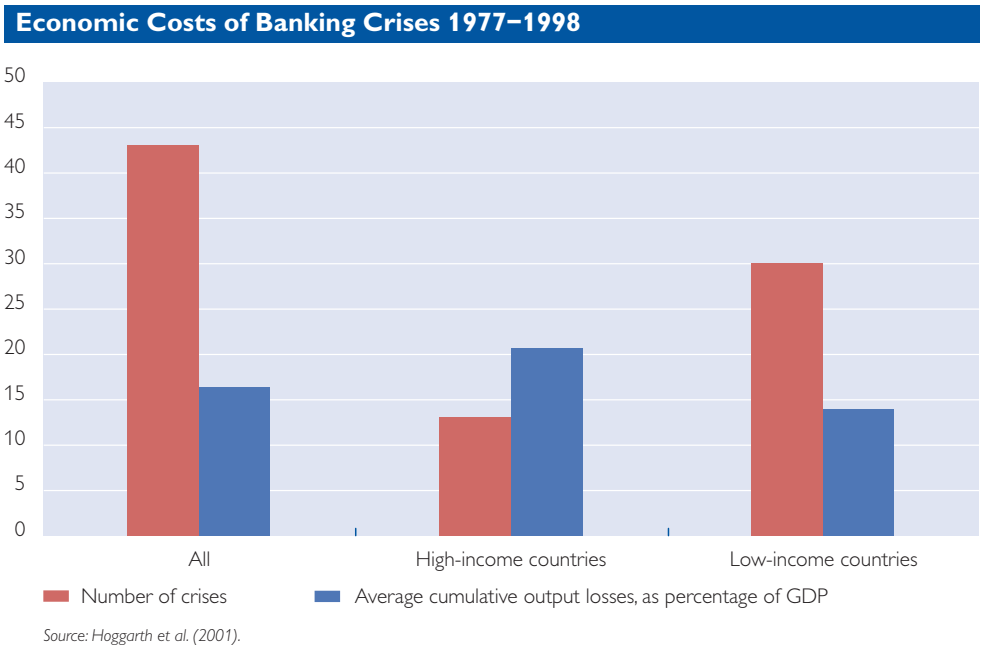
First of all I would like to thank the organisers for inviting me to this conference. It's a great pleasure to be given the opportunity to share with you some views on financial stability issues.

Financial stability has become an increasingly important objective in economic policymaking during recent decades.

In the 1980s, direct regulation of credit markets and capital flows was dismantled in many countries. This has prepared the ground for an expansion of the financial system at a faster pace than other parts of the economy. In this process, the financial system has gone through important structural changes and become more complex. The instruments have become more intricate, the activities more diversified and the risks more mobile. As a result of increasing cross-industry and cross-border integration, financial systems have also become more interwoven, both nationally and internationally.

In parallel with the strong growth of the financial system, we have seen more frequent instances of widespread financial distress. The resulting macroeconomic costs have often been sizeable. Financial crises have typically been associated with boom and bust cycles in asset prices and credit.

Chart 1



Due to sharp growth in house prices and household debt in several countries in recent years, the question of whether monetary policy should be used to mitigate such developments has received increased attention.

In the light of these developments, I would like to address four main questions. What do we mean by financial stability, how do we analyse it, how do authorities cooperate in order to support it, and finally, what instruments are available to secure financial stability?

**What Do We Mean by Financial Stability?**

Despite increasing focus during the last decades, uncertainty about how best to define the concept of financial stability remains.<sup>1</sup>

In order for households and enterprises to obtain optimal consumption and investment over time there has to exist a well-functioning financial

system that can intermediate between savers and borrowers, carry out payments and redistribute risk in a satisfactory manner. This promotes an efficient allocation of real economic resources across different activities and over time. From this point of view, financial stability can be defined as a situation where the financial system is able to meet these requirements, and thereby enhance economic performance and wealth accumulation

A more narrow approach is to define financial stability in terms of what it is not, that is a situation in which financial instability impairs the real economy. This definition is more passive in terms of implying how one should act under normal circumstances, but has the advantage of focusing on the situations we attempt to avoid.

The latter definition is related to the high costs of financial instability in the last few decades. Costs in terms

<sup>1</sup> See for example Schinasi (2004).

of loss of GDP can be substantial. A study of the economic costs of banking crises concluded that even though such crises have been less frequent in high-income countries than in low-income countries, they have persisted over a longer period and average total output losses have thus been higher.<sup>2</sup>

The preferred definition of financial stability varies across countries. Recognizing the need for a relevant operational definition regardless of the current situation in the financial system, the Central Bank of Norway has chosen to adopt the broad definition of financial stability.

### How Do the Authorities Analyse Financial Stability?

Given an understanding of what financial stability should imply, the authorities can analyse potential threats to financial stability. There are two complementary approaches:

In the first approach, we need to focus on risk factors originating *within* the financial system. Institutions, markets and infrastructures are continuously faced with risk factors such as credit, liquidity and market risks. Analyses have become even more challenging in recent years as the financial system has become more complex and interwoven both across industries and borders.

The increased complexity of the financial system is illustrated by the rapidly expanding market of credit derivatives. This is a relatively new financial instrument that comes in many and complicated forms. While contributing positively to greater flexibility in risk management, there is also the possibility that risk is more easily concentrated, and that economic

agents can take on risks without being fully aware of their ramifications.

Analysing risk originating inside the financial system, it can be useful to divide the approach into two areas.<sup>3</sup> The *microprudential* analysis focuses on the developments within individual institutions, and is concerned with limiting the distress of individual institutions, thereby protecting depositors. The *macroprudential* analysis focuses on the financial system as a whole, and aims at limiting system-wide distress



and avoiding output costs. An important concept here is *systemic risk*; the risk that liquidity or solvency problems in a bank may cause liquidity problems or insolvency in other institutions. Thus, correlation and common exposures across institutions are important in the macroprudential approach.

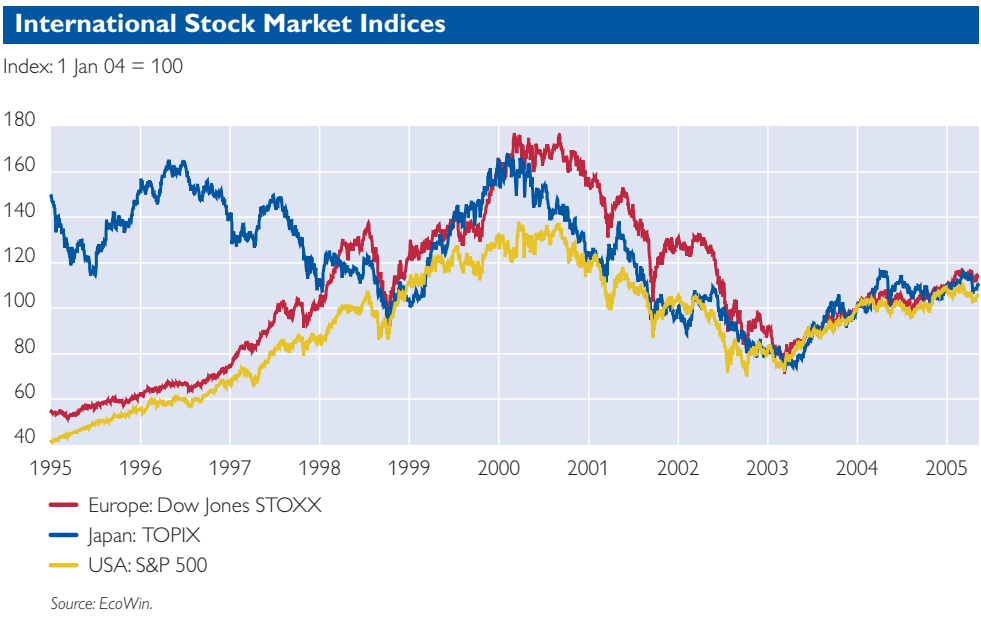
The second approach deals with risks originating from *outside* the financial system. This field has increasingly been recognized by researchers and policymakers in later years. Strong growth in debt and asset prices, as well as macroeconomic disturbances like a surge in commodity prices or the unwinding of large imbalances in the world economy, can ultimately affect financial stability in a negative way.

To identify potential sources of instability, we need indicators that contain useful information. With an estimate of the equilibrium values of

<sup>2</sup> Hoggarth et al. (2001).

<sup>3</sup> See for example Borio (2003).

Chart 2



debt ratios or asset prices, for example, we can study the gap between their current value and their equilibrium value.<sup>4</sup> If the gap is wide, the danger of a significant consolidation is present. However, the results must be interpreted carefully. Equilibrium values are inherently difficult to determine, and it is not obvious that there is a stable and significant relationship between gaps and future economic activity. In addition, decisive factors in the judgement of the financial situation, like agents' confidence in the financial system, are also difficult to incorporate in the analysis.

A related approach is to analyse the potential impact of adverse macroeconomic shocks on financial stability. Stress tests are commonly used for this purpose. Such tests investigate banks' ability to withstand different types of shocks under various economic conditions and with different monetary policy responses. When conducting stress tests, macroeconomic models

have proven to be valuable. However, considerable work remains to be done in order to capture the behaviour of economic agents in the case of extreme macroeconomic events.

Financial markets and institutions have become more interdependent. The possibility of contagion across borders thereby increases.

Cross-border capital flows have increased considerably in recent decades. Equity markets have moved more in tandem, particularly since the mid-1990s. This also applies to bond markets. Investors are increasingly spreading their investments across countries. They are both diversifying risk and seeking high returns. In parallel, governments, banks and companies are issuing more debt externally.

The corresponding development in financial institutions, towards an increasing share of large cross-border banks, makes it essential to go beyond a purely national analytical focus. However, this can be a difficult task,

<sup>4</sup> See for example Borio and Lowe (2004).

as cross-border banks are complex and often part of an even more complex financial conglomerate.

Examples:

- The Iceland-based Kaupthing Group is present in 10 countries and the group's total asset holdings at the end of 2004 were almost twice the size of Iceland's GDP.
- The Sweden-based Nordea Group has substantial market shares in all four Nordic countries. While Nordea's home country is Sweden, Nordea has its largest market share in Finland.
- The HSBC Group has 110 million customers worldwide.
- Citigroup is present in about 100 countries and territories.

The central bank has a special responsibility for analysing and monitoring the financial system. The examples of cross-border integration show how important it is to have a strong international focus in financial stability analysis. Generally, the increasing range of analytical challenges has forced central banks to be more innovative. This is reflected in the increasing number of financial stability reports published worldwide.

### **How Do Authorities Cooperate in Order to Support Financial Stability?**

Closely connected to the question of analytical focus, is the question of division of responsibility for maintaining financial stability, both on a domestic level as well as between authorities in different countries. The task of ensuring financial stability within a country is in most cases divided between the ministry of finance, the central bank and a financial super-

visory authority, with the ministry of finance having the overall responsibility. To promote efficient cooperation, the regular exchange of information between these authorities is crucial and some formal framework for cooperation should be established.

The evolution towards larger cross-border banks makes the issue of responsibilities more complicated. In the event of a crisis, central banks, supervisory authorities, political authorities as well as deposit guaran-



tee funds in several countries will be involved.

In contrast to the national banking crises in Norway, Finland and Sweden in the early 1990s, a similar crisis today would most likely involve authorities from all four Nordic countries. Therefore, it is important to establish guidelines in advance to ensure effective crisis management. A special challenge will be to establish leadership. With four ministries of finance involved, the choice of leadership will not be straightforward.

The traditional view is that the host-country authorities are responsible for subsidiary banks, while home-country authorities are responsible for branches.<sup>5</sup> This view is closely linked to the legal difference between subsidiaries and branches. Subsidiaries are independent legal entities, while branches are not legally independent from their parent bank.

<sup>5</sup> See Borchgrevink and Moe (2004).

However, host country authorities have little influence over foreign banks’ crisis management. One of the key issues is whether the home country authorities, in a crisis situation, should be obliged to take into account the effects of the crisis in other countries where a bank has branches with extensive activities.

There are arguments to suggest that home-country authorities should have more responsibility for host banks also in a subsidiary bank structure. This would reduce the number of authorities that banks have to relate to. It is also in line with developments in banking where an increasing number of cross-border banks are organised as global firms with subsidiary structures under central management.

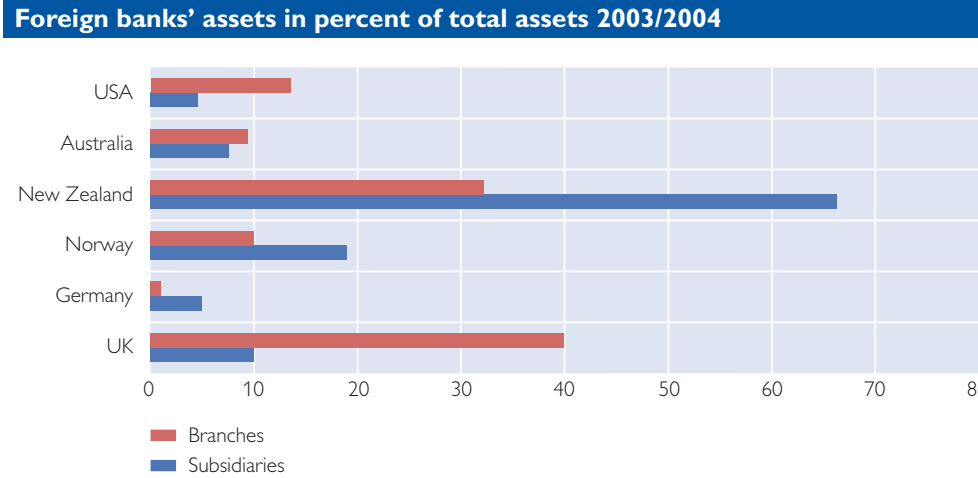
The question of coordination is far from being solved. One possible way forward is to transfer some responsibility to supranational institutions. As transfers of responsibilities imply transfer of control, this solution is not a simple one in political terms. In the EU, the idea of a European supervisory authority has so far met resistance. A fundamental problem – especially in the case of a financial crisis – is the lack of a corresponding supranational

fiscal institution. Today, any financial support must be granted by national authorities. Without formal supranational solutions in place, it is all the more important to ensure cooperation between the central banks and supervisory authorities involved. The fact that a large share of the financial institutions in the new EU Member States is foreign-owned makes this issue even more relevant.

In June 2003, the governors of the Nordic central banks signed an agreement on the management of a potential financial crisis in a Nordic bank with activities in two or more Nordic countries. The agreement contains procedures for the coordination of crisis management between the central banks. The Nordic supervisory authorities have drawn up a similar cooperation agreement.

One particular problem in the Nordic region is the differences in the countries’ deposit guarantee schemes. The different schemes vary both with respect to guaranteed amount and type of deposit covered. However, these differences are also widespread across Europe and some convergence of rules and operating procedures is certainly long overdue.

Chart 3



Sources: ECB, Reserve Bank of New Zealand, Australian Prudential Regulation Authority, Federal Reserve, Norges Bank.



### **What Instruments Are Available to Secure Financial Stability?**

Monitoring and analysis of the financial system result in an assessment of the current situation regarding financial stability. This leads to the question: what instruments are available to enforce and secure financial stability? We can distinguish between preventive measures and measures for crisis resolution. Of relevance to the latter is the role of the central bank as the lender of last resort. In some countries this role was the main reason for establishing the central bank in the first place. Today it remains an important task of central banks, but is reserved for very special situations where financial stability may be threatened. In this address, I will focus on preventive measures.

As a general measure, the authorities use surveillance and regulation in order to enforce financial stability.<sup>6</sup> Surveillance of markets, institutions and infrastructure may in itself contribute to sound financial risk management.

Effective and appropriate prudential regulation will reduce risks and promote sound financial institutions. For instance, an important motivation behind the Basel II agreement is to increase the efficiency of financial institutions by revising existing standards of capital requirements for banks. Prudential regulation can also be used by the authorities as a special measure to curb undesirable developments. Countercyclical variations in capital requirements (or collateral requirements) can respond to potential imbalances. However, there are several arguments against using this instrument.

First, it is very difficult to decide the appropriate timing and size of a policy response. Also, while authorities may regulate financial institutions, market outcomes are difficult to control. Risks may be transferred through the market, away from the regulated institutions, only to show up somewhere else.

Financial agents need to operate on a level playing field. In many countries, branches and subsidiaries of foreign banks have large market shares. If one country decides to increase the domestic capital requirements for banks, this creates competitive distortions in the national markets between domestic banks and branches of foreign banks, the latter complying with the regulation of their home country authorities.

Clear and concise communication, verbally or in writing, from the authorities to the public on risk factors they consider to be the most pressing could also be used as an instrument in the event of rising financial imbalances. For central banks, a suitable arena could be financial stability reports, an increasingly common publication. These reports can be described as a signalling device. However, there are limits to how effective signalling and information can be in curbing financial imbalances.

Fiscal policy also contributes to financial stability, for example through a stable tax system built on well-founded economic principles. Some have argued in favour of countercyclical changes in the tax system, for example adjustments in tax deduction on interest rate expenses or property tax. However, such changes can prove to be difficult to adopt and implement for institutional and political reasons.

<sup>6</sup> For further discussion, see Houben et al. (2004).

**Financial Stability and Monetary Policy**

In recent years, the relationship between monetary policy and financial stability has received increased attention. Monetary and financial stability are two intermediate goals for public policy. In my view, these goals are often mutually reinforcing.

Financial stability has a positive influence on price stability. First, it promotes a stable credit supply and capital flow, which is crucial to balanced economic development. Second, financial stability supports the transmission mechanisms of monetary policy. A stable financial system ensures that changes in the monetary policy instrument have the intended effects on market rates. Hence changes in monetary policy will affect the behaviour of consumers and enterprises and, eventually, inflation and economic activity.

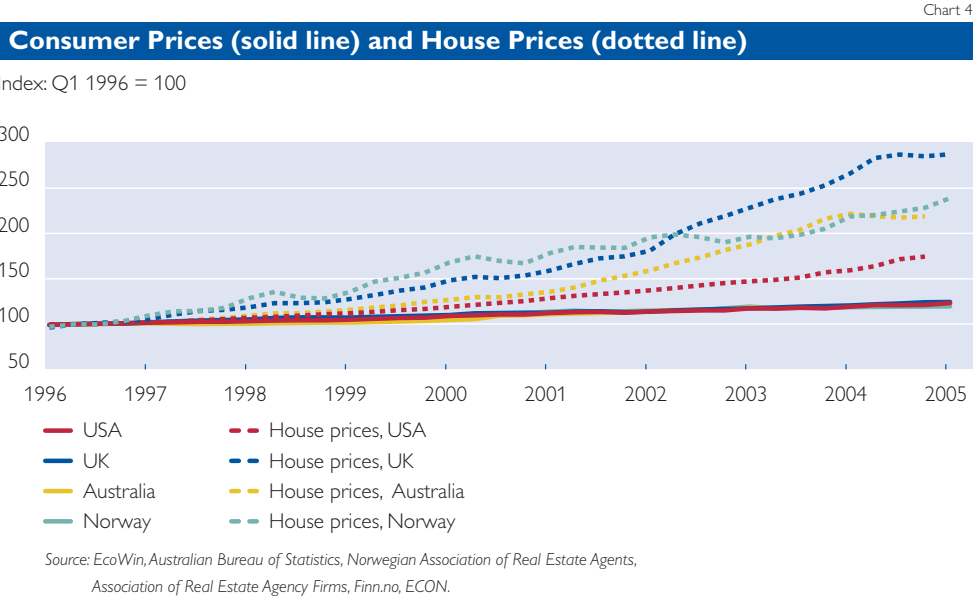
Moreover, price stability has a positive influence on financial stability. A successful monetary policy will support financial stability by removing distorted price signals associated with high and volatile inflation. Low

and stable inflation provides households and enterprises with a clear indication of changes in relative prices. Allocation of resources will then be more effective.

It is easy to identify situations where the objectives of price stability and financial stability imply the same medicine. For instance, expansionary periods are often accompanied by stronger inflationary pressures and asset price increases, both implying a need for tighter monetary policy. There are, however, examples of situations where the consideration is more complex.

As chart 4 illustrates, surges in asset prices and a low and stable general price level of goods and services can appear simultaneously. There can be several reasons for this.

First, a highly credible monetary policy results in low inflation expectations among economic agents. Explicit or implicit long-term price and wage contracts can be more common. It may then take more time for higher demand to translate into higher inflation. Asset prices on the other hand, will not be constrained by expecta-



tions such as those for consumer prices and may well react strongly to changing economic activity.

Second, periods of higher productivity growth may lay the basis for high corporate earnings, heightened optimism and reduced risk awareness. At the same time, with strong productivity growth, inflation remains low. Banks that record low losses and solid results can increase lending without eroding their capital. Debt-financed investments may then lead to a faster rise in property prices.

Third, strong international competition may contribute to curbing inflation during a period of strong economic expansion.

Given that a conflict between the two goals may arise; how are financial stability considerations incorporated into monetary policy decisions?

There seems to be widespread agreement among central banks, that extreme events which could threaten financial stability should be met by resolute use of monetary policy. For example, leading central banks made an effort to ensure continued liquidity in the markets in the aftermath of the terrorist attack on the World Trade Center on September 11, 2001. As a consequence, the risks confronting the financial system were limited.

However, risks to financial stability due to evolving financial imbalances are likely to develop over a long period of time. From this perspective, the question of whether financial stability considerations should be explicitly included in monetary policy is heavily debated, both in academia and within central banks. The answers diverge and international consensus has not yet been reached.

One view is that an explicit and proactive monetary policy response to financial imbalances is neither desirable nor feasible. A number of concerns have been raised to explain this view.

First, it is well documented that asset price bubbles and financial imbalances are very difficult to identify *ex ante*. Second, the appropriate timing of a proactive monetary response is likely to be difficult to determine, given the lags in the impact of monetary policy.

Third, even in the case where the central bank knew that financial imbalances were build-

ing up, the size of the interest rate rise needed to reduce the imbalances might be so large that it could lead to a severe economic downturn.

A more general concern is the potential moral hazard risk of a systematic proactive response of monetary policy to financial imbalances. For example, investors may “undervalue” the risks they take on if they expect that the central bank will act to offset future financial instability concerns.

In later years, the idea of using monetary policy to prevent a build-up of financial imbalances has received increased attention.

Several central banks can be seen as supporters of taking into account the impact of financial imbalances on future output and inflation. The selected quotes in the box below are examples of the attention given to financial imbalances in conducting monetary policy, based on slightly different justifications. Mr. Bernanke’s quote recognizes the channel between



the stock-market boom and incipient inflationary pressures.<sup>7</sup> Mr. Issing focuses attention on financial imbalances on the grounds that strains in the financial system may conflict with price stability in the long run.<sup>8</sup> Mr.

Heikensten calls attention to the possible repercussions of financial imbalances on the real economy in a situation where the household debt burden is high and interest rates are increasing rapidly.<sup>9</sup>

### Quotes from Different Countries

*“For example, to the extent that a stock-market boom causes, or simply forecasts, sharply higher spending on consumer goods and new capital, it may indicate incipient inflationary pressures. Policy tightening might therefore be called for – but to contain the incipient inflation, not to arrest the stock-market boom per se.”*

Ben S. Bernanke, Governor, US Federal Reserve Board, October 2002

*“Truly optimal monetary policy cannot avoid that, at times, strains in the financial system might be such that deviations from the desired inflation rate during shorter periods of time have to be accepted, in order to preserve price stability over the medium to long run.”*

Otmar Issing, Member of the ECB Executive Board, March 2003

*“...the developments in credit and house prices are one argument against looser monetary policy. A rate cut followed by a faster hike could bring about problems through their effects on household indebtedness and consumption.”*

Lars Heikensten, Governor, Central Bank of Sweden, March 2005

Seen from an institutional perspective, flexible inflation targeting is becoming an increasingly common monetary policy regime. With a target horizon that is forward-looking and sufficiently flexible, it is possible to take into account the impact of potential financial imbalances on future inflation and output. However, it is important to keep in mind that the unwinding of financial imbalances may lay many years ahead, well outside the horizon for the inflation target. Some situations may require a careful weighting of the probabilities and costs of not reaching the inflation target within a medium-term horizon against possible economic turbulence further ahead. In the worst case, this turbulence may result in the actuation of a financial crisis.

Another interpretation of the role of monetary policy is that it demands

that financial instability is taken into account beyond its impact on inflation and output. For instance, structural costs may arise as a result of incorrect decisions by economic agents, based on incorrect information in the period characterised by financial imbalances. The Reserve Bank Act in New Zealand explicitly states that the Bank, in formulating and implementing monetary policy, should “have regard to the efficiency and soundness of the financial system”.

In Norway, a flexible inflation-targeting country, we have chosen to incorporate financial stability considerations into the monetary policy decision process. This is partly because financial balances are important for inflation and output and partly because this will secure sufficient attention to potential risks to financial stability. In addition, departments dealing with

<sup>7</sup> Bernanke (2002).

<sup>8</sup> Issing (2003).

<sup>9</sup> Heikensten (2005).

financial stability gather structural and empirical information about the financial system and the financial position of households and enterprises. In my view, these are important inputs to the monetary policy process.

### Challenges Ahead

There has been substantial development in the way we think about financial stability. From viewing it as a state merely distinguished by the absence of a financial crisis, we now see it as



a state where the financial system's favourable qualities are allowed to function in an efficient and proper manner.

At the same time, the financial system in itself has changed. Its instruments have become more numerous and more sophisticated. Positive welfare effects are gained because of greater efficiency and more opportunities in the market. The flip side of the coin is that increased complexity makes the system less transparent and harder to follow.

This development is bound to influence the way authorities pay attention to financial stability issues. New challenges have been brought to our attention, new questions have to be raised and new scenarios have to be analysed. As a consequence, new solutions may be required.

We should use the opportunity to plan ahead now, while the outlook for financial stability internationally is benign.

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# The Links between Fiscal and Monetary Policies on the One Hand, and Financial Stability on the Other

## 1 Introduction

When non-performing loans mount and asset values fall at an individual bank, (and within the banking system more widely), bringing on financial fragility, we may classify the contributing reasons under four main headings. Thus the decision-makers at the bank(s) were either:

- (1) *Fools*, i.e. they mis-estimated the risks;
- (2) *Unlucky*, i.e. they estimated the risks correctly, but a bad draw from nature occurred;
- (3) *Knaves*, i.e. they knew that the purchase of the asset would provide negative present value, but other considerations made them do so nevertheless;
- (4) *Fall-guys*, i.e. they knew that the asset purchase was unwise, and would not have done so voluntarily, but they were forced to do so by some external force majeure.

Or, more likely, there was some combination of several of these factors, since it is extremely rare for a severe crisis to be generated by one factor alone. For example, in the Barings failure in 1995, Leeson was certainly a knave, and arguably both unlucky and foolish, while his superiors were undoubtedly foolish in failing to estab-



lish appropriate internal controls. I do not believe that it is possible, or sensible, to try to make an *empirical weighting* of the elements in the above taxonomy in causing financial crises. Nevertheless we will consider each of these factors in turn, in reverse order starting with banks as fall-guys.

## **2 Banks as Fall-Guys: The Role of Governments and Fiscal Deficits**

Within a bank, a junior loan officer, who correctly assesses a potential loan as having a negative net present value (NPV), may of course be over-ruled by a more senior bank executive, who is a fool or a knave. Turning, however, to cases where the bank as a whole is pressurised into decisions that it knows to be sub-optimal by external forces, there are some cases when powerful private sector clients, with overall market power, can do so. Large companies, like Enron, can persuade banks, (e.g. by threatening to withdraw other business), to agree to deals that they would not have done for a smaller client.

But the main source of external force majeure on a bank has predominantly been its own government. This was seen in its most extreme form in communist countries where the direction of credit was (almost) entirely state controlled. But even in capitalist countries, the state has often indicated that a certain specified proportion of a bank's assets be invested in its (the state's) own liabilities (e.g. treasury bonds and bills), and that other required proportions of loans be made to certain specified sectors of the economy (e.g. state-owned enterprises, the agricultural community, slum-housing, etc.). As a reasonable generality, if a government needs to force a bank to lend

to a particular sector, such loans are likely to be less profitable, have a lower expected NPV, than those that the bank would do anyway. In particular, the non-performing loans (NPLs) with which the big four 'commercial' banks in China are saddled largely arose from pressure from government (at all levels, frequently provincial or municipal governments) that the (so-called 'commercial') banks not only extend, but continue to roll-over and 'evergreen', loans to failing state-owned enterprises. In effect in China, in India, and elsewhere, commercial banks are required to undertake a quasi-fiscal role, providing subsidised funding for purposes decided by government, which purposes can run the whole gamut from corruption to the most noble social aims.

Making such state-directed loans in most cases weakens the banks (lower profitability). In countries where state-direction of loans has been a major factor, there has, however, been often a quid-pro-quo. The state protects the existing banks from competition in financial intermediation, whether from international or domestic competitors, and allows, and even encourages, a domestic bank oligopoly, with interest spreads set in a cartelised format at levels that generate sufficient profits to keep the banks in reasonably good shape (normally) despite some, often quite large-scale, NPLs on required loans.

Besides requiring banks to direct credit to certain sectors, (in public sector terminology, they are often described as 'less-favoured sectors' which should be interpreted as requiring banks to make them 'more favoured'), banks are often forced to hold certain minimum levels of government debt. Since these assets are, in the context that we shall



describe further, not subject to credit (default) risk, and are liquid, in the sense of having large, broad markets, such regulations can be described as prudential, ensuring that banks have sufficient safe, liquid assets that can be sold, or used as collateral in borrowing, e.g. from the central bank, in order to meet large negative clearing balances, e.g. arising from a run by depositors.

Up to a point such requirements can be regarded as 'prudential', and supportive of liquidity. 'Sufficient' holding of government debt can strengthen a bank. Yet some countries, for example Argentina in recent years, have required their banks, and other financial intermediaries, to take on a growing proportion of their own debt. Most debtors have two alternatives, to raise sufficient funds, (by running a surplus or by borrowing elsewhere), to repay the due amounts to be repaid, or to default. Sovereigns, who can issue legal tender fiat money, have a third alternative, to use the printing press. That means that such sovereigns never *need* to default; they can always meet the coupon and principal payments by creating money. Even then it is not clear that a sovereign, forced to choose between fiscal tightening, inflationary monetisation, and default, will *never* choose default. Russia in 1998 is a good counter-example. After all, (unexpected) inflation is a form of default on the real value of the outstanding debt. Depending in part on the (social and political) characteristics of the holders of the debt and of the national currency respectively, a government could sometimes rationally choose to default on its own-currency debt, rather than go further down the road to hyper-inflation.

In any case an 'excessive' deficit which is met by monetisation, rather

than by default, is hardly a life-line for the banks. Monetisation will raise expected inflation, and hence nominal interest rates. The market value of existing government (and similar denominated private sector debt) will fall towards zero. While banks are in a more balanced position than most other creditors, their holding of longer-term fixed rate assets and shorter-term variable rate liabilities leaves them at risk and endangered by government-generated inflation. So,



the conclusion is that 'excessive', (i.e. tending towards unsustainability and/or inflationary monetisation), deficits cause financial instability.

Walter Wriston of Citibank is notorious for having claimed that "sovereigns never go bankrupt." As we have seen, this is not necessarily so, even when the sovereign offers debt denominated in its own currency. When, however, a sovereign, or subsidiary layer of government, issues debt in the currency of another party, then the choice on the debtor reverts to two, i.e. raise the requisite funds or default. That raises the potentiality for default considerably.

Most emerging market economies (EMEs) find it hard to borrow much in their own domestic currencies. Lenders fear the temptation for such government borrowers of subsequently inflating away the real value ('original sin'), and the markets for such debt are thin, with large bid-ask spreads and sizeable other transaction

costs. The roll-call of EMEs who have defaulted on their foreign currency debts is long, and needs no repeating.

But just as EMEs cannot issue debt denominated in their own currency, nor can subsidiary governments, at regional, provincial, state, local, municipal levels. When federal control of subsidiary-level deficit financing is weak, as has been the case in Argentina and Brazil, for example, then this tends to work back to weaken fiscal control at the federal centre. There are several reasons for this:

- (1) *Financial*: Many local banks and other financial intermediaries hold so much local government debt that they would also be driven into default by the failure of their local government. So the initial public sector default could/would generate a wider financial sector debt/default spiral. So the subsidiary government cannot be allowed to default and must be bailed out.
- (2) *Political*: The collapse of a major subsidiary government with large outstanding debts would adversely affect so many other stakeholders (beyond the banks and other financial institutions) that it would adversely impinge on the standing of the political party in office at the federal centre.
- (3) *Reputational and Contagion*: The default of a major local governmental body would cause an immediate review, and re-rating of all other possibly similar-based bodies, and indeed very possibly of the federal government itself.

For all these reasons there has usually been an (implicit) contract between

the federal and the provincial (subsidiary) layers of government. On its side the subsidiary (state) government agrees to some fairly stringent (often federally imposed) constraints on its ability to run deficits. On the other hand the federal government implicitly (or even explicitly) guarantees the debt of the lower level governments, *and*, partly through automatic stabilisers and partly directly, offsets adverse asymmetric shocks affecting differing regions by a system of inter-regional fiscal transfers.

### 3 The Stability and Growth Pact and Excessive Fiscal Deficits

There is no basis for such a bargain amongst the major countries and the federal institutions in the euro area. The federal institutions in the EU have neither the ability, nor the wish, to guarantee the deficits of the subsidiary state governments. The European Central Bank (ECB) is admonished *not* to support failing state governments, and there is no fiscal competence at the federal level either to make inter-regional transfers in response to asymmetric shocks<sup>1</sup> or to support the ECB in meeting the burden of bailing out a failing state government. So the federal government in the EU neither can, nor wants to, carry out its part in the kind of implicit bargain observed in other federal systems.

Since there is no quid-pro-quo from the federal side, it is not surprising that the (large) nation state governments in the euro area chafe at the constraints imposed on their freedom of fiscal action by the Stability and Growth Pact (SGP), despite the

<sup>1</sup> I had tried to devise just such an instrument in Goodhart and Smith (1993), one of the background studies to the EC paper “Stable Money – Sound Finances” (European Commission, 1993). That report, and its recommendations, were first pigeon-holed and then rejected by the Member States of the EU.

fact that the SGP gives them more fiscal flexibility than available to subsidiary state governments in many other federal countries, e.g. in the USA. Absent observance of the SGP, excessive deficits in the EU could be a major potential source of financial fragility.

An additional problem is that the financial regulators, being mostly public sector bodies themselves, are prone to be ‘captured’ by, to be unduly concerned with, their masters, and their masters’ concerns, in ministries of finance. Thus regulators are inclined to give low risk weightings to nation state debt irrespective of whether such debt is in foreign currency or domestic currency form. The independent ratings agencies are better in this respect, but may still be somewhat swayed by political pressure. In particular, there is no appropriate risk weighting for concentrations of (bank) holdings of the debt of a single obligor. Thus Belgian banks hold vast quantities of Belgian government debt; Italian financial intermediaries massive holdings of Italian government debt, etc. In the absence of a strict, and strictly observed, SGP, this is a source of danger.

If the SGP is found to unenforceable, or so relaxed as to be ineffective, this danger would need to be recognized. What should be done is then to relate the risk weighting to the proportion of the portfolio represented by any single obligor’s debt, where that debt was denominated in foreign currency form, (remembering that the euro is effectively a foreign currency for the member nation states, in the sense that no member nation state has any control over the printing press). Thus a bank might hold up to, say, 2½% of its assets in the debt of any one such obligor, at the risk weighting

applied to that obligor. Beyond that, and on an increasing scale, the risk weighting applied to concentrations of such risk would rise. The idea would be effectively to limit the holdings of, say, Greek government debt in Greek banks and other Greek financial intermediaries.

The purpose would be to try to ensure that, if a euro nation state defaulted, it would not drag down its own financial system into a messy collapse with it. By the same token a



euro nation state government which was increasing its debt would have to persuade the wider market, beyond its own domain, to buy that debt. There would no doubt be transitional problems. Nevertheless imagining the counterfactual of thinking through what would happen if the financial intermediaries in the highly indebted euro area countries were induced to lighten their holdings of such debt significantly indicates what a powerful mechanism of market control this could be.

Ignoring the real transitional problems, could one impose appropriate prudential requirements on concentrations of foreign currency government debt, and then leave the control of euro area fiscal deficits to market mechanisms alone, junking the SGP entirely into the dustbin, alongside other failed institutional devices? The main problem is that the market’s penalty for ‘excessive’ deficit/debt is to push up required yields, and this leads

to a knife-edge (saddle-point) condition. If fiscal conditions appear good, default risk is perceived as low, which helps to keep interest rates low, which in turn helps to keep down the deficit, which keeps fiscal conditions looking good. Then assume some adverse event occurs which raises perceived default risks. Then required yields rise, which raises the deficit further, which makes fiscal conditions look worse. In one of the key supporting papers of the Delors Committee, Lamfalussy (1989)



argued the need for an accompanying fiscal constraint to the single currency on the grounds that markets do not move continuously. They appear to move late, (in response to a worsening fiscal position), but when they do, to do so abruptly and, perhaps, excessively.

Moreover, even if the *financial* reason (1 above) for bailing out a financially-failed nation state was removed, or at least much mitigated by this proposal, that would still leave reasons (2) *political* and (3) *reputational and contagion*. Nevertheless, the apparent problem is not one of deficits, or debt levels, per se, but rather one of fiscal (un)sustainability and potential default. What is fiscally sustainable, or not, is a hideously difficult question because it depends on future configurations of growth, real interest rates, demography, the balance of state/private commitment to pensions, education, health, etc., which are inherently unknowable. One poten-

tial institutional suggestion, which might be valuable, (whatever the balance between market mechanisms of control over euro area nation state government deficits and SGP-type mechanisms), would be to establish at the central EU level an independent, academic body of economists, to assess the long-term sustainability of each nation state's fiscal sustainability, and to report. To ensure such independence, and academic standing, appointment would be made by the leading economic society in each country, *not* by ministers.

That covers the relationship between fiscal policies and financial stability, with particular reference to the euro area and the SGP.

#### **4 Bankers as Knaves: How to Deal with Fraud and Looting**

A large proportion of recent banking problems have involved fraudulent activity to a greater, or lesser, extent. Besides *Crédit Lyonnais* in France, the best known banking crises in the UK in recent years, *Johnson Matthey Banking* (1984), *BCCI* (1991), *Barings* (1995), all involved activities that were clearly fraudulent in two cases, and verged on that in the third (*Johnson Matthey Banking*).

Moreover, fraud may not just arise as an unwanted consequence of the combination of the immorality of a subordinate bank officer and lax internal controls; it may suffuse the whole bank as an institution. Not only *BCCI*, but many of the private commercial banks established in Russia in recent years, were established in order to benefit the owners, and their associates, by siphoning depositor's money to themselves. Besides rogue bank officers, it is possible to have rogue banks.

How can the regulators/supervisors best prevent and control such knavery? Any suggestion that it could be prevented by requiring more ‘operational’ capital is ludicrous. Clearly the scale of capital held by the bank would have no effect on the incentives for individual bank officers to act fraudulently. If the bank as a whole intends to be fraudulent, capital will be obtained by a disguised chain of borrowing, often ultimately from the bank itself. In EMEs where accounting skills are underdeveloped, corruption is commonplace and the rule of law is weak, capital can be artificially ‘manufactured’, and the relationship between reported capital ratios and financial strength is weak.

Admittedly the larger the capital that a bank has, the greater the loss from fraud that the bank can absorb without failure. Even so, the need to *require* operational capital on this account is not fully made out. The loss primarily falls on the shareholders of the bank affected. One source of externality, that of a high risk correlation with other banks, is low for fraud undertaken by individual bank officers; and for the reason already indicated (that capital can, and will, be artificially constructed by fraudulent banks) is not best met by extra capital requirements in the case of rogue banks. The idea that the additional requirements for operational capital, as contained in Basel II, would play any significant beneficial role in containing knavery is misplaced. It is not clear just what is the market failure, or externality, that leads to an official requirement for operational capital, certainly not as a purported remedy against fraud.

The standard economic calculus relates the benefit to the fraudster against the probability of detection

(another banking PD?) and the penalty given detection (PGD). PGD is set by the legislature and society. So what bank regulations, and banks in the case of rogue bank officers need to do, is to raise the likelihood of detection.

As I wrote in an earlier note (Goodhart, 2001) on operational risk: *“Perhaps a key issue is to devise a better and more encompassing set of incentives to detect, control and limit fraud. This subject has been addressed in the article on ‘Securities Fraud’ by Instefjord, Jackson and Perraudin (1998).*

*Their conclusions, which I would endorse, are as follows:*

1. *Regulators should encourage firms to improve their control environments. This facilitates the efforts of managers to monitor their subordinates and prevents firms from declining into equilibria in which irregularities are pervasive.*
2. *Regulators should adopt ex post penalty structures which allow them to penalise managers at different levels in the hierarchy. Few regulators do so at present.*
3. *Simply imposing heavy penalties on dealers will not necessarily reduce fraud. In our simple models, strong substitution effects are present in that fines imposed on dealers lead to offsetting reductions in monitoring, leaving the prevalence of fraud unaffected. Incentives for those who monitor are very important.*
4. *Firms should reward managers who discover actual or potential control lapses and avoid (to the extent that this is possible) too close an alignment between the pay of managers and profits reported by the dealers they manage.”*

This, however, leaves to one side the question of how to deal with a whole bank whose *raison d’être* is, or may have become, or may be believed



to be, fraudulent. Such banks (as with other fraudulent institutions) frequently use two tactics. First, they persuade eminent, and often elderly, politicians or publicly renowned people to take a distant, but well remunerated, role in their operations (non-executive director, board member, etc.). These then lobby their erstwhile political colleagues, and the regulators, for licences, etc. Second, they use highly-paid lawyers to threaten whistle-blowers and public accusers



with libel actions, and to hinder and to delay attempts by the regulators to get at the truth.

A partial remedy here is to make the regulators/supervisors independent of political control, to provide them with sufficient resources to carry out their function (for example to carry out on-site inspection without prior notification), and to protect them against civil suit so long as they carry on their job reasonably sensibly. Nowadays there may be no window of opportunity left between a supervisor being sued by the owners for closing a bank too soon, and being sued by the depositors for closing a bank too late.

Fraudulent banks attempt to prevent any independent outsider (accountant/auditor, supervisor/regulator) observing the affairs of the bank as a whole by making them complex, with myriads of subsidiaries, linked and holding companies, not to mention special purpose entities (SPEs). In this respect the Basel

Committee on Banking Supervision has done an excellent job, requiring that there should be an audit of the consolidated accounts of every bank, and a 'lead supervisor' appointed to ensure that that is done, and to review the results, and, if necessary, to take appropriate action.

## 5 Unlucky Banks

Bad luck plays a role in almost all failures, even those where fraud is involved. Is there much to say about it?

A useful distinction is that between idiosyncratic and systemic risks. When a risk is of the former kind, it is not correlated with those affecting others of the same category elsewhere, e.g. a computer glitch, a fire at head office, the sudden incapacity of a CEO, the failure of a large client, etc. Against such idiosyncratic risk some form of insurance is usually possible, though that insurance, e.g. spare capacity, pre-arranged delegation of responsibility, diversification of lending, etc., often has to be done internally rather than through a formal insurance contract. One of the roles of a supervisor is to check whether contingency planning has been undertaken to deal with such idiosyncratic risks.

A more difficult problem arises with systemic risks, those that occur not just to the one bank but to all of a set of banks. For example, assume that something disrupts power in the City of London, affecting everyone there. Should all key institutions have back up individual sources of power (generators) and for how long should they be able to work? After 9/11 questions about the availability and adequacy of back-up facilities at a distance have become more pressing. How extensive should such facilities be? And who should pay for the cost of installing them?

More specific to banking, the probability of client failures, ratings declines, and NPLs depends on systemic factor(s)<sup>2</sup>, notably the aggregate macro-economy. But just how far the aggregate economy might fall into depression (slump) will not depend on an individual bank, but on those who decide on overall policy (demand management and structural reform). Is it sensible to require banks to hold so much capital that they could survive a re-run of the inter-war debacle? If so, they could take on very little risk. Potentially risky business, and borrowers would be forced to search for external non-bank sources of funds, or to rely on such internally generated funds as may accrue. Systemic risk exists, but beyond some point it is, I would contend, the responsibility of those in charge of the system as a whole, i.e. the government, to respond to really bad draws, not for the individual banks themselves.

A somewhat similar point arises in the design of stress tests. All too frequently, the parameters of stress tests, an  $x\%$  decline in asset prices, a  $y\%$  rise in interest, a  $z\%$  shift in exchange rates for example, are held constant over time. But when an asset market, say the equity or housing market, has been appreciating rapidly recently, then asking what would happen if it fell back by  $x\%$  is no more than to enquire what would occur if the market partly retraced its steps, (and the answer is usually that nothing much would then happen to banking profitability and solvency). Whereas if that asset market had already plunged, a stress

test of an exactly similar quantitative amount may be effectively enquiring about eventualities in the worst-ever conditions for that market. Do the authorities want to force banks, when already in bad times, to protect themselves against worst-ever conditions? Conventional stress tests only sometimes take notice of the current conjuncture. This is understandable, since there is little stationarity, no clear-cut fundamental equilibrium in most asset markets, but, even so, those setting stress tests do need to take explicit consideration of exactly against what potential market conditions they want the banks to self-insure.

The authorities cannot ask the banks to insure against complete systemic collapse. They need to ask themselves, against what exactly do they, (and more generally we), want banks to self-insure.

## 6 Foolish Banks

Banks which voluntarily take on what subsequently appear as excessive risks may be categorised under three, or possibly, more headings, as follows:

- (1) risk-choosing;
- (2) ignorant;
- (3) over-optimistic.

### 6.1 Risk-Choosing Banks

Risk-choosing banks (bankers) are those that can correctly assess that their selection of portfolios lays them open to a significant chance of failure, but nevertheless go ahead and do so. This is often largely because of a (poorly structured) incentive system, in which the downside is limited (e.g.

<sup>2</sup> *Basel II is effectively based on the assumption of a single systemic risk factor (see Gordy, 2003). This single systemic risk factor may be equated with the state of the domestic economy in which the bank has its main business. This ignores the potential advantages of diversification across sectors, industries and geographical areas. With respect to this latter, it is particularly unfortunate to ignore the benefits of international diversification, given that Basel II is meant to set a framework for internationally competitive banks.*

by limited liability) but the upside is not.

Similarly if the market and the prospect of remuneration require meeting some target rate of return, then conditions which make such a return harder to meet will lead to an acceptance of greater risk. Important among conditions that make profits harder to earn is competition. Greater competition amongst banks is *intended* to put downwards pressure on profits, and thereby reduce the return on



assets (ROA) and on equity (ROE). In order to restore profitability, banks will chase yield, i.e. by selecting a riskier portfolio.

So, by cutting profitability and raising the incentive to adopt risk, enhanced competition raises the risks of financial fragility. This was one of the conclusions of those who, at the time, tried to discover the causes of the financial collapse in the inter-war years. They blamed that, in some large part, on ‘excessive’ competition; almost all the resulting regulatory and structural ‘reforms’, both in the USA (Glass-Steagall Act; regulations on interest rates, etc.), and in Europe, were consciously anti-competitive, and encouraging the formation of cartels and cartelised pricing, (e.g. amongst the London Discount Houses).

Subsequent historical revisionists have tended to ignore, or to decry, the argument that enhanced competition can cause financial fragility, and have ascribed the inter-war regula-

tory/structural responses as due to capture by the industry, or just to plain error. The pendulum has swung right back in favour of the promotion of unbridled competition, (especially so when American interests are seeking to promote the entry of US banks into foreign countries). There is, of course, much to be argued in favour of such competition, in terms of static and dynamic efficiency, technology transfer, etc., but it seems obtuse not even to recognise the counter-argument in terms of financial fragility. One facet of this is that, in several recent World Bank studies of banking, an index of the well-functioning of banking systems across countries is taken to be the interest rate spread between deposit rates and loan rates; this is treated monotonically; so the lower the spread, the higher rated quality is given to the banking system. The concept that profits and interest rate margins can be too low for the health of a banking system seems to be alien to too many economists.

Another more commonly appreciated cause for consciously choosing higher risk levels is a desire to grow the book of assets, i.e. when growth as well as (risk adjusted) profitability enters into the utility function. This again is often due to the pattern of incentives. A loan officer receives up-front fees for making initial arrangements, and expects to have moved on by the time that they (fail to) pay-off. The respect and remuneration awarded to a bank president is often a function of the size of the bank, not just its profitability. To achieve greater growth, than competitors, entails accepting either a lower expected return on assets or higher risk (or some trade-off of the two). Either way, financial fragility will result. When a large number of banks are



simultaneously ‘going for growth’, the systemic risk is magnified. As already argued, conditions of enhanced competition can lead to a general dash for growth (as in the UK in 1972/73 after the liberalising reform of Competition and Credit Control in 1971, for details see Bank of England, 1971).

A preference for riskier assets may be promoted (usually inadvertently) by regulation. One example that is sometimes advanced is that banks may seek growth in order to become ‘too big to fail’. I doubt this. Asset management strategies are taken by bank executives. Banks may become too big to liquidate, but size should never preclude the sacking of a failing large bank’s chief executives. Indeed the larger the bank, the longer the cast-list of prospective successors. What is becoming more troublesome, (notably in the aftermath of LTCM) is that financial intermediaries may become ‘too complex to fail’, (Herring, 2003). Even so, I am sceptical of suggestions that bank managers would consciously choose complexity, (e.g. Enron-type special purpose vehicles, exotic derivatives, etc.) on the grounds that this would protect them from dismissal in the event of failure.

What, instead, did happen is that greater international competition, post-liberalisation, led to falling profit margins, and this was one of the factors causing declining capital ratios. The regulators responded, (the Basel I Accord in 1988), by requiring higher capital ratios, and succeeded in achieving such higher ratios. But the higher ratios imply a lower rate of return on such capital, *ceteris paribus*. In order to restore profitability, the banks will be induced to chase yield. Moreover to restore profitability, banks will have to raise interest rate spreads. That will drive higher-quality borrowers to the

capital markets, leaving the banks with lower quality clients. All this was compounded in Basel I by the adoption of a common, broad risk-bucket for bank lending to corporates. This encouraged the securitisation of high quality loans and regulatory arbitrage. This was, of course, one of the main rationales for the adoption of Basel II. Credit risk weighting on high quality corporate loans is now to be reduced in line with economic capital. But the proponents of Basel II did not want to accept any general lowering of capital ratios, so they injected the new concept of operational risk, which has its own complexities and deficiencies.

Several economists, Hellmann et al. (2000), Repullo (2005a and b), and Repullo and Suarez (2004), have made the point that capital requirement, taken on their own, could shift banks towards the choice of riskier assets, though this depends on the effects of CARs on banks’ franchise values. It is also one of the implications of work that I have done with Tsomocos, Sunirand and Zicchino (e.g. Goodhart et al., 2004a and b, 2005, 2006). As penalties on infringing capital adequacy ratios rise, bank profitability increases, but at the expense of higher interest margins, more customer default and slightly lower growth.

## 6.2 Ignorant Banks

A bank (banker) that cannot assess risk accurately will misprice it, and hence is likely to become stuffed with higher-risk assets than planned or expected. Since experience provides much training in risk assessment, such mispricing is particularly likely when the bank (banker) first enters unfamiliar territory, notably after a regime change, so that the bank (banker) takes on new functions. It has long been known that a liberalising regime

change, allowing banks and bankers more scope to do additional business is a moment of particular danger. Not only is the banker unpracticed in risk assessment in the new fields, but also, as noted earlier, new entry is likely to enhance competitive pressures. While the liberalisation of the commercial banking regimes in China and India is highly desirable, this will nonetheless be a perilous passage, and needs to be accompanied by a reinforcement of the infrastructure of control mechanisms.



There is also, (Berger and Udell, 2003), some evidence that a prolonged experience of benign

macro-economic conditions can lead to a failure to appreciate how much could go wrong in a downturn. Whether this counts as ignorance, or over-optimism, is perhaps a semantic issue, and leads directly on to my final category.

### 6.3 Over-Optimism

There is considerable evidence (Segoviano, 2005; Borio, 2005; Borio and White, 2004) that one of the most reliable predictors of future systemic financial crises is the rate of expansion of broad money and bank lending. It is beyond the scope of this paper to detail, or to add to, this evidence in any depth.

Irving Fisher (e.g. 1933), Kindleberger (e.g. 1996) and Minsky (e.g. 1982) have all outlined the framework of financial cycles, and Kiyotaki and Moore (1997) have given it a modern analytical dressing. A monetary cycle can amplify a real cycle. Often the upswing starts with a beneficial technology (or other supply) shock (canals,

railways, electricity, cars, computer technology). This raises economic growth, profits and asset prices. This provides a better basis for lending, e.g. more collateral. More lending raises growth, profits and asset prices, and so on, until over-investment leads to profits falling below expectations, and then the downwards cycle begins (on this, also see von Peter, 2004).

This, however, raises the question why, if such cycles are such regular phenomena, they do not become expected, and hence smoothed out by rational efficient agents. There are several answers to this. First, such cycles are not regular, but occasional. Moreover it is difficult to distinguish changes in trend from cycles, until after the event. Irving Fisher notoriously saw Wall Street prices as justified by an improved economic trend. Alan Greenspan changed tack from concern about 'irrational exuberance' in 1996 to a belief in an upwards shift in US productivity growth later on. Others saw improved economic management lowering equity risk premia sufficiently to justify Dow at 40,000, plus an extrapolation of (implausibly) high earnings forecasts.

Asset markets are only weakly mean-reverting, and price/earnings and house price/income ratios are only stationary at low frequencies. Asset allocations and performance assessments are undertaken at much higher frequencies. It is not much comfort to be proven correct in the long run, if you have been fired from your job in the short run. Once again the structure of remuneration incentives is crucial. Bonus rewards are usually based on performance over the last year, not on an average of, say, 15 years.

What matters, therefore, for asset allocation is where the economy, and asset markets, are perceived to be

heading in the near term, *not* on uncertain long-run fundamentals, in so far as these latter provide any clear anchor. It is notoriously difficult to predict turning points, for the economy or for asset markets in advance. Given the uncertainty about whether, and if, a turning point will occur in the next year, there is a tendency to extrapolate recent performance. Good past performance leads to expectations of future good performance, and so on.

In the event, and with hindsight, good times lead to a degree of over-optimism, and vice versa. In a world of weak stationarity, uncertain turning points, and rewards based on high frequency performance, it would be hard to call this irrational. Can the regulatory/supervisory authorities do any better? Perhaps. Their reward structure is more strongly related to an absence of financial crises, so their concerns are more closely attuned to the risks of reversals, and of the danger of collapse attending prior booms.

That said, regulators have consistently failed to introduce counter-cyclical prudential controls. Indeed, there are widespread concerns that Basel II will further amplify procyclicality. But how, and why, this has been allowed to occur, and what could be done to reverse this, is beyond the scope of this paper.

## 7 Macro-Monetary Policies and Financial Stability

The subject allocated to me for this conference was the influence of fiscal and monetary policies on financial stability. The inter-relationship between fiscal policies and financial stability was discussed earlier in sections 2 and 3. I have tried to consider the factors causing banks to choose assets involving greater default risk in sections 4 to 6. That discussion had the follow-

ing implications for macro-monetary policies:

- (1) Conditions which lead to declining interest rate margins and falling profitability are dangerous.
- (2) Attempts to protect the system by higher required capital adequacy ratios, without appropriate risk weightings, could lead to extra risk being taken on.
- (3) Liberalisation, and regime changes, are moments of peril.
- (4) Excessive risks are likely to be




taken on in the upswing, and realised in the subsequent downturn.

- (5) One of the best measures of these dangers is the rate of growth of bank balance sheets, especially when they are rising relatively fast in relation to the underlying macro-economic conjuncture. Thus the fast rate of growth of M3 and bank lending in the euro area might be a harbinger, not necessarily so much of future inflation, but of forthcoming financial fragility in those Member States where such growth has been particularly pronounced.

By the same token, during downturns, expansionary monetary policy, to achieve price stability, will often have to face headwinds from an (over) cautious, contractionary banking system.

In part because financial regulators/supervisors have failed to introduce counter-cyclical effects, and may even have re-inforced a natural procyc-

clicality, there is even more pressure placed on macro-monetary policies to stabilise the system, an extra pressure which in the case of Japan was beyond their capacity to meet. 

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THOMAS WIESER



# Comments on Charles A. E. Goodhart, “The Links between Fiscal and Monetary Policies on the One Hand, and Financial Stability on the Other”

Charles Goodhart has presented a paper on the influence of fiscal and monetary policies on financial stability. I would summarise the stylized facts as follows:

- Dirigiste governments force banks to extend loans to specific sectors, and to hold government paper. This increases the danger of monetising debt, and thus financial instability through high deficits.
- Without observance of the Stability and Growth Pact (SGP) financial regulators, under pressure from their governments, have no appropriate risk weighting for concentrations of bank holdings of debt of a single obligor. Thus, in the case of default of a euro area Member State its financial sector would thus be overexposed to this asymmetric risk.
- Fraud in or even by banks cannot be contained by additional capital requirements, and only partly by independent supervisors.
- Systemic risk beyond a certain point should be covered by governments.



- Enhanced competition leads to falling profit margins, then to lower capital ratios, thus to even lower profit margins, thus to excessive search for yield, and thus to financial fragility.
- Money supply and credit growth tend to overshoot with relation to cyclical developments through extrapolation of prevailing trends. Regulators, however, have consistently failed to introduce countercyclical prudential controls, and
- financial regulators equipped with the instruments and the political independence in order to
- assess risk of excessive borrowing/lending, and concentrations of such risk;
- analyse portfolio changes in household net lending/borrowing and their links to interest rate movements;
- understand shifts between internal and external financing of nonfinancial corporations.



Basel II may further amplify procyclicality. Present growth of M3 may foreshadow financial fragilities.

I will deal with the most important of these points in turn. I will do this in the context of what I consider to be the policy areas most in need of attention. I will in general confine myself to a European perspective.

*First, what is financial stability?* We define this as a financial system capable of absorbing severe shocks without triggering a financial crisis, i.e. financial stress that has cross-sectoral spillovers with negative macroeconomic effects. Conditions (though none of them is in theory necessary and sufficient) for achieving financial stability in the context of this paper are

- fiscal policies that satisfy sustainability constraints, also in intertemporal terms;
- monetary policy conducive to a low inflation environment with stable expectations;

Stress in the financial sector matters for two principal reasons. First, it hinders growth because it may lead to poor allocation of resources within an economy. The real rate of return falls. Japan is a particularly striking illustration of this, in part because of the length of time over which its financial sector weaknesses have inflicted harm on the economy. Japanese deflation has, of course, made the problem far worse.

But, as the Asian crisis showed, financial sector stress also increases vulnerability to a crisis. Research has shown that a country with a weak financial sector is more at risk from contagion effects.

Second, at the domestic level, governments must take steps to ensure a sound banking system, since a weak banking system may lead to large negative feed-back-effects (e.g. liquidity shortages). That means addressing issues such as non-performing loans, capital adequacy ratios and effective regulation. It means ensuring there is proper competition within the banking sector. And it means ensuring that there are incentives in place so that financial institutions develop the appropriate skills needed to assess and manage credit risks and returns.

There appears to be positive correlation between growth and financial



sector development (empirical evidence is mixed as there may be reverse causality).

In a European context increasingly integrated financial markets should reduce the possibility of major shocks through diversification on both sides of the balance sheet, though once a crisis occurs there is a higher risk of spreading beyond national borders.

### **What Is the Role of Fiscal Policy?**

I have yet to meet an economist who has anything good to say about the SGP. One half says that it inhibits countercyclical fiscal policies, keeps deficits at too low levels, and thus there is no role left for aggregate demand management. The other half says the Pact has been an abysmal failure because it failed to curtail deficits. So, obviously, deficits are too high and too low simultaneously.

In a best of all possible worlds free of political cycles and with intertemporal constraints fully respected there need not exist limits on annual deficits, neither for nation states with national monetary policies, nor for euro area Member States. It would obviously suffice if governments respected an upper limit for national debt levels. The 60% limit of the Maastricht Treaty, as any number, is obviously arbitrary, and was conditional on a certain constellation of growth and inflation. Today, the same calculation would yield a lower number.

Debt sustainability is essential not only for rating and pricing of government paper, and the level of long-term interest rates, but also for overall financial stability through portfolio effects. As we do not live in a best of all possible worlds, deficit constraints are necessary, however, due to policy myopia. Thus, the SGP.

Recently, discussions on market-based mechanisms as substitutes for the SGP have re-emerged. Analysis undertaken a few years ago on their feasibility was not encouraging, however.

An additional feature of monetary union where politicians (and many economists) have been unwilling to engage in an economic debate is that tax rates have clearly taken over the role of exchange rates. Changing corporate rates has the same effect as a de/revaluation of a national currency, albeit with different sectoral impact and transmission channels. The consequences of this are still little understood by most, unfortunately.

The mythology of unconstrained national sovereignty in tax matters will have consequences on financing conditions in the medium term. Most governments are and will be ill equipped to deal with this issue when it becomes more pressing.

At present, yields have not reacted to deficit levels in Germany, and not even to debt levels in Italy. This may be because sustainability conditions are still satisfied. Alternatively, the reaction function of markets may not be continuous, and could kick in at deficit levels beyond say 4% or 5%. A logical consequence is that also spreads have not reacted; some analysts have speculated that this could be changed by the European Central Bank (ECB) not taking all government debt as collateral at the same conditions. This would make a difference, though the ECB on its own is not likely to go this route.

Goodhart suggests an independent panel of economists analysing the debt sustainability of countries: this is something any economist is free to do. The difference in this model would presumably be that these

economists' pronouncements through the authority invested in them would be expected to

- produce market reactions (little likely, see above);
- make governments through naming and shaming produce better policy outcomes (also little likely, as there are even less consequences than under the SGP).

The linkages to financial market fragility in Europe could thus be as follows: As markets tend to react excessively



and abruptly (and sometimes too late), and here I fully agree with Goodhart, financial market stress could follow from a constellation where

- debt levels are high and rising in country A;
- financial markets at some unknown level of debt, or debt increase, suddenly expect pricing changes in government A's paper uncorrelated to the euro area average;
- because of expected declining perfect substitutability of government bond A for government bond B in investors' portfolios bond holders will incur losses on stocks of A;
- which, if heavily concentrated in certain institutions' portfolios will lead to distress in the balance sheets of these institutions. The Feldstein-Horioka puzzle on home bias lends support to this hypothesis, though it is doubtful that concentration rates in portfolios are as high as implied. Furthermore, default risk in the European Union

may be presumed, despite all the academic discussion about default, no bail-out and the like, to be zero. Political institutions in all Member States can safely be assumed to be adequately mature to provide adequate reactions in times of real crises. They are obviously often ill equipped to deal with secular problems that are not an imminent crisis.

How likely is this to happen, and what are the dangers of contagion? And what is the danger of default? The answer is that we do not know how likely this is; the dangers of contagion would under this model of transmission of effects be limited, as for most institutions with an otherwise healthy return on equity (ROE) holdings of such paper can be assumed to be a manageable part of the portfolio. If such a scenario were to include two or more major euro area Member States the results may well be less benign. And default does not seem likely.

### **What Is the Role of Monetary Policy?**

An independent central bank with one monetary policy ("one size fits all"), liberalised movement of capital and goods (and labour and service markets that are not fully liberalised), and an area-wide average inflation target form the background to a monetary policy that has to contend with

- differing stances of fiscal policies;
- differing stages in the cycle;
- differing productivity developments; and
- differing wage developments.

Thus, we logically have asymmetric monetary policy consequences if national inflation rates are not highly correlated with the euro average inflation rate. Actually, we had expected a higher degree of price and cyclical

convergence from monetary union at the outset. The conclusion at present would seem to be that structural policies and productivity shocks may be more important for inflation – and growth – than monetary policy.

Goodhart argues that *“one of the most reliable predictors of future systemic financial crises is the rate of expansion of broad money and bank lending.”* He goes on to argue that the present growth of M3 may thus foreshadow financial fragilities. Is this addressed to the ECB, or at regulators? To me it would seem to be more aimed at regulators, though these are often not easy to distinguish from the European System of Central Banks (ESCB). Is this a potential conflict of interest? Opinions differ.

A monetary policy aimed at price stability would be hard pressed to shifting its policy stance on the basis of evidence that certain real cycles are amplified by monetary cycles. The monetary stance is obviously correlated to growth in M3 and bank lending, but over the decades the correlation has sunk dramatically. Monetary policy, even if it wanted to and even if we better understood the causes for high growth in some monetary aggregates would face an assignment problem it is not equipped to deal with.

Goodhart succinctly describes the problems of monetary policy in dealing with signals that may herald financial fragility, even though conventional banking wisdom sees them as leading inflation indicators.

The present state of affairs of M3 growth seems to be, however, less induced by overoptimism and relaxed credit controls, but more due to increased uncertainty and higher risk aversion. The way I read the data is that 2001 to 2003 portfolio shifts may

thus have been a more logical reason for M3 growth. And in 2004 the low interest rate environment.

Loan growth relative to growth would appear to be a better indicator for Goodhart’s theory, though one would have to factor in past and present savings rates of private households and the enterprise sector in order to see whether we are witnessing

- a change in the quality of loan portfolios; or
- the beginning of an upswing in consumption that begins to reverse past under consumption by households in many European economies; or
- the increased availability of other financing instruments.

The evidence of credit growth to private households in the euro area at an annualised rate of 8% in the last months may herald a return to self-sustained domestic demand rather than a deterioration of the quality of loan portfolios. In some European economies with highly leveraged households, and collateral highly concentrated in the housing sector, the situation may be different. Again, monetary policy can do little to counteract these issues where they exist or loom on the horizon.

If such shocks were to occur, the risks for contagion appear to be containable as long as we have national bubbles. Financial stress through portfolio deterioration through excessive credit growth compared to the quality of collateral will remain for the foreseeable future a phenomenon that will not be euro area wide.

This leaves central bankers with an obligation to observe closely, but I would draw no policy conclusions for monetary policy proper. In terms of cooperation with policymakers in order to make them observe emerging

bubbles and other problems our experience with the ECB is, though little publicised, very positive.

### What Is the Role of Supervisory Policy?

The international financial system in the last years has been relatively stable, and most analysts concur that this has to do with more advanced risk management techniques. Obviously, one always guards against the causes of the last crisis, and not against the next



one. But we have learnt lessons that go beyond anecdotal evidence.

This does not mean there will be no

next crisis; this would actually be unhealthy.

One of Goodhart's main contentions with respect to regulators and their responsibility for financial stability is that they require too high capital ratios with respect to risk-taking (*"require banks to hold so much capital that they could survive a re-run of the inter-war debacle? If so, they could take on very little risk."*)

Furthermore, market driven processes undermine the stability of the system according to Goodhart. In a highly competitive environment profit margins decline, capital ratios fall, search for yield produces excessive risks, and thus we are vulnerable to – or actually have – financial sector fragility.

What is the core problem here? Is it that competition reduces (excess) profits? This is the case in every sector, and the underlying rationale of our economic system driving for efficiency through competition.

Or is it a problem germane to the financial sector? If so, what are the underlying reasons? Are they to be found in the specific structure of the sector that fragilities are carried into other parts of the economy through monetary linkages? Or that pricing of risk and taking of risk is inherently different than in other sectors?

It would seem that it is the nature of the sector that causes these troubles in Goodhart's model. The conclusion would thus be to

- limit competition (take the case of certain still protected national markets in Europe); or
- regulate the risks you can take and how you provision for them.

I have a strong sympathy for the latter, and actually believe that with all its shortcomings Basel II is a step towards a more risk sensitive financial sector. But we should not forget that it is not the regulator who is at fault in the first instance, it is the management of the financial institution. And any calls to governments to socialise the risks of excessive credit expansion will produce exactly these effects we are trying to regulate away. Governments with deposit insurance schemes socialise part of the risk at present, and even there we are confronted with aspects of moral hazard.

I fully agree with Goodhart as he speaks of "over-optimism" in good economic times, and in theory that we need stronger incentives for more "counter-cyclical policies", which may prove difficult as I have yet to meet a policymaker intent on dampening an economic upswing.

Financial markets tend to over- or undershoot, because they are driven by expectations – rather linear interpolations – and herd-behaviour exists. We will therefore continue to have to accept some form of financial market

swings, as markets react to new economic data and permanent change of expectations. We do need sound financial supervision to prevent and manage systemic risk and contagion. But calls on regulators to produce anti-cyclical supervision practices will fail for all the reasons that anti-cyclical fiscal policies were not a huge success. Know your automatic stabilisers and let them work, should be the motto.

Where have regulators and the European Union more work to do? One issue is that there are still certain Member States who do not adequately enforce the rule that beneficial owners of financial institutions should be known. The European Commission and the Council seem to be oblivious to this problem.

What can the market do? Financial institutions with highly diversified product groups (corporate clients, retail customers, wealthy customers, bonds, equities, derivatives) are obviously better equipped to escape prolonged market declines. The downside is that such financial conglomerates can also lead to a series of unmanageable conflicts of interest as recent cases have shown (AIG, Citigroup).

Also, management needs to be in a position to take a long term view on profitability of their institution. This is not state of the art. Shareholder value is, though often maligned nowadays, a sound economic principle; but it is long-term shareholder value that should be pursued. Instant gratification is bad for children and for markets.

Risks need to be better understood by institutions, and long-term potential consequences factored into decisions. Here, Goodhart has a more than valid point.

### **What Is Left for National Economic Policies and What Can Policy Do for Financial Stability?**

*What is left for national economic policy in order to influence variables which also have a bearing on financial stability?*

Despite all the dire warnings that there is no room left for national policies to function we still have numerous areas where the quality (or lack) of policies count:

- wage policy (inflation);
- iscal policy (sustainability);
- structural policy (productivity);
- education/innovation (human capital); and
- inancial markets policy (financing conditions).

Whilst increasing financial market integration may indeed limit national room for manoeuvre, more integration is a precondition for more competitive pressures in the sector.

*What is the role of economic policy in supporting financial stability?*

There emerge a number of central propositions:

- no unexpected policy changes (no stop-go-policies): time-consistent economic policy (stabilising of expectations, setting of long-term economic goals);
- no procyclical fiscal policy, and subscribe to sustainability of fiscal policy;
- monetary policy cannot be overburdened with aim of financial sector stability, though policy dialogue with regulators and policy-makers is vital;
- financial markets work best, when all actors are well informed (better education concerning financial market issues to prevent asymmetric information distribution);
- availability of liquidity in case of crises (“the quicker the better”);



- consolidation of financial sector in Europe not a policy goal per se, but act against monopolistic behaviour (concentration ratio of banks should be analysed) and segmented national markets;
- continue work on question of European financial sector supervision;
- clearing/settlement very important for cost efficiency of financial services; there are huge differences for the provision of basic retail



banking services per year across Europe (according to recent data from Capgemini they range from 25 EUR in the Netherlands to 113 EUR in Italy): more competition in retail banking seems necessary;

- high flexibility of the economy to absorb shocks more easily (higher labour force mobility and more competition in service sector in Europe);
- stronger global economic coordination to prevent unilateral measures which hurt world trade growth (and weaken domestic economies);
- especially under the auspices of the International Monetary Fund in relation to the Fund's work on transparency and financial stability; and
- more coordination in EU tax policy, otherwise tax revenues will decline due to tax competition (this may lead to new taxes which

may impact negatively on financial markets).

## Concluding Remarks

Charles Goodhart has produced a thought-provoking paper. Some of the conclusions are obviously aimed at emerging markets, and not at the European Union, see the discussion on monetising debt.

The need for independence of regulators is underlined by the picture that Goodhart paints about captured regulators forced to accept large holdings of national debt, and thus increasing dangers of contagion. For the Economic and Monetary Union (EMU), this seems to rest on assumptions that are not realistic, though for emerging markets they would appear to hold.

The dangers of profligate fiscal policies are well described, though the conclusions on the SGP and possibilities of sovereign default within EMU are a bit overdone. The transmission channels may be slightly different, but the end-result is the same: we need fiscal discipline in order to contain spillovers through differing channels.

The pro-cyclicality of supervisors would appear to me to be a pro-cyclicality of the sector that supervisors only to a degree can be called upon to regulate away. Markets and management need to bear the consequences of myopic behaviour.

All in all, the paper implicitly shows up numerous areas where further research and even more policy advice is needed – from academia to policymakers, and from regulators to markets.

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TAKATOSHI KATO



# The Financial Stability Assessment Framework of the IMF: Experience in Europe

Governor Liebscher, distinguished guests, ladies and gentlemen, good morning to you all. It is a great pleasure for me to be here with you today, at the 33<sup>rd</sup> Economics Conference hosted by the Oesterreichische Nationalbank – and, I must add, it is a delight to visit again this beautiful and historic city. I have been asked by the conference organizers to speak to the issue of financial sector stability and the IMF's work in this area – and I will seek to stay close to this topic in my remarks.

Financial sector stability has been described as the issue that central bankers worry about when they are not worrying about price stability. Experience regularly reminds us that there is a solid basis for this worry. The East Asian crisis during the late 1990s provided a striking example of how financial sector weaknesses can trigger economic turmoil and amplify the effects of adverse shocks on the economy, with severe economic and social consequences. Several industrial countries, including Japan and some of the Nordic countries, also experienced financial crises that had significant macroeconomic consequences during the decade.

Maintaining financial sector stability is clearly vital, but striking the right balance in financial regulation is not a simple task. On the one hand, we need effective regulatory oversight that limits systemic risk. On the other, we want to ensure that the environment remains conducive to competition and innovation. And getting the balance right is a task that is being made more difficult by the broader processes of innovation and change in the international financial landscape – such as the



expansion of large and complex financial institutions, the rapid introduction of new financial instruments, and the process of monetary unification across regions.

Regulators have been responding to the challenges posed by the changing financial environment. They have intensified their dialogue with the financial institutions they oversee, and are developing closer partnerships with regulators in other countries – who confront similar problems and, in many cases, the same financial institutions. The IMF has sought to help national authorities in this area by introducing its Financial Sector Assessment Program, known by its acronym “FSAP.” The FSAP is a tool for conducting systematic assessments of a country’s financial sector, and benchmarking regulatory efforts against international best practice.

In my remarks today, I will provide an overview of the FSAP exercise – why it was introduced, what it does,

how we see it evolving in the future – and discuss some of the key findings of the FSAP exercises conducted to date in Europe, distinguishing between the high-income industrial economies and the rapidly growing economies of Central and Eastern Europe.

### Overview of the FSAP Exercise

The Financial Sector Assessment Program (FSAP) was introduced in May 1999 by the IMF and the World Bank in response to the financial crises of the 1990s. It was designed with the goals of identifying the strengths, risks, and vulnerabilities of financial systems in member countries and highlighting financial sector development needs. From the outset, the FSAP was designed to analyze the linkages between macroeconomic and financial sector policies and help national authorities design appropriate policy responses.

Given the complexity of financial systems, the FSAP covers a wide spectrum of topics. These include, for example:

- the main sources of macro-financial risk and their potential impact – typically analyzed by means of stress test exercises that gauge the resilience of the banking system to adverse shocks;
- the institutional and regulatory frameworks for banking, insurance, and capital markets; and
- the functioning of the payment systems, and other aspects of the supporting infrastructure and related areas.

A key component of the FSAP is the assessment of compliance with international standards and codes in the financial sector – including the Basel Core Principles of Banking Supervision (BCP), the Insurance

Core Principles put forward by the International Association of Insurance Supervisors, the International Organization of Security Commissions (IOSCO) Objectives and Principles for Securities Regulation, the IMF's Code of Good Practices in Monetary and Financial Policies, and the FATF 40+8 Recommendations on Anti-Money Laundering and Combating the Financing of Terrorism. The assessments draw attention to institutional weaknesses in various sub-sectors of the financial system and also provide peer review in these areas. The teams that conduct these assessments typically consist of a mix of IMF and World Bank experts and specialists drawn from other national central banks and supervisory agencies.

The FSAP is designed not as a test to be passed or failed, but as a means to assist national authorities in diagnosing potential vulnerabilities in national financial systems and regulatory frameworks. The outputs of the exercise include detailed reports that are provided to the national authorities. From these reports, a summary of findings – a Financial System Stability Assessment – is provided to the IMF's Executive Board. This summary assessment covers the analysis of stability, development issues and related recommendations, and it reports on the observance of the relevant standards and codes. With the member's authorization, the assessment is published by the IMF. Given that the corrective measures needed to address regulatory weaknesses often require mobilizing broad-based public support for legislative and/or administrative reforms, the IMF's policy is to strongly encourage the publication of these assessments.

Some two-thirds of the IMF's 184 members have participated in

an FSAP assessment, covering countries at all stages of development and most systemically important countries. European countries embraced the FSAP exercise early on and by now most EU member countries have either completed the FSAP process or are in the process of conducting one. FSAPs have also been conducted for most of the Balkan countries, and for Russia and Ukraine. I am pleased to note that, with only one exception, all of the 28 financial stability assessments



completed for European countries to date have been published on the IMF's website – [www.imf.org](http://www.imf.org) – providing a valuable information resource for those interested in analyzing financial sector issues in Europe.

### **Lessons from FSAPs in Europe**

Let me now summarize some of the themes that have emerged from the FSAPs completed for European countries, focusing on two distinct groups of countries: (a) the high income economies of what used to be called Western Europe – the pre-enlargement EU, plus Switzerland, Iceland, and Norway; and (b) the economies of Central and Eastern Europe, now either members of the European Union or well on the road to membership. Given the diversity of the various reports, and the fact that they were conducted at different points in time over the past 5 years, I will keep my presentation at a broad level, stressing

common issues and focusing on the main findings in the two key areas of *banking sector soundness* and the *quality of banking supervision*.

### **FSAP Findings in Western European Countries**

Let me begin first with the findings from FSAPs in high-income industrial countries, with particular emphasis on the smaller countries, and using Austria as a specific example. FSAPs have been completed for 12 of the 18 countries in this group, with 3 currently underway (Italy, Belgium, Greece) and 3 to commence shortly (Spain, Portugal, and Denmark).

#### **Bank Soundness**

On the issue of banking sector soundness, the FSAPs have typically concluded that the systems are healthy and resilient to shocks, characterized by strong capital positions, good asset quality, good profitability, and very sophisticated risk management systems.

But the FSAPs also pointed to potential vulnerabilities in some areas.

1. A first issue is the increasing exposure of domestic banking systems to economic cycles and developments in other countries, as banks extend their operations outside their home bases. In some cases, stress tests conducted during the FSAPs found that depreciation of the dollar combined with a global slowdown could be a source of significant risk to the loan portfolios; in other cases, growing exposure to transition economies in Central and Eastern European countries, while important for boosting profitability, was identified as a potential source of risk.
2. A second risk factor is the sizeable exposure of banking systems to

what appear to be substantially over-valued property markets in several countries. This point has been flagged by the IMF in its regular analyses of global economic developments in recent years.

3. A third risk factor is conglomeration across financial sectors and, in particular, between insurance and banking – an issue flagged in a number of FSAPs. Insurance companies and banks generally maintain very different risk profiles, on both the asset and the liability sides of their balance sheets. Insurance companies often have relatively high exposures to commercial real estate, equities, and long-term bonds among their assets. Banks, on the other hand, face more credit risk from their lending activities and liquidity risk from the short-term nature of their liabilities. Although conglomeration can help spread risks, it can also give rise to new ones, including reputational risks – an important factor in a business where public confidence is a pre-requisite for doing business. The complexity of conglomerates can also make effective supervision and proper corporate governance more difficult. I shall return to some of the challenges posed by the development of financial conglomerates in the region later.

#### **Supervisory Frameworks**

Turning to the issue of supervisory frameworks, the FSAPs have indicated that banking supervision in the smaller Western European countries is, by and large, anchored in a well-developed institutional infrastructure, an adequate and longstanding body of commercial and banking laws, and a respected judiciary. In some countries,

the surveillance of the banking system has been entrusted to a supervisory authority located outside the central bank, but mechanisms are generally in place to ensure close cooperation and exchange of information between the central bank and the supervisor. National central banks and supervisory authorities enjoy a high degree of operational independence, and in most countries there is adequate legal protection for individual supervisors discharging their duties in good faith. Licensing regimes and the processes for regulating ownership of significant shareholdings in banks are quite robust – although the presence of industrial-financial conglomerates is a source of concern in a few cases.

The level of compliance with the Basel Core Principles of Banking Supervision is generally high – although in some cases there is scope for enhancing supervisory oversight of banks' risk management and internal controls and bolstering market discipline through better disclosure and transparency. Off-site analysis carried out by supervisors is of high quality and most supervisors have well qualified personnel that are highly respected by market participants, including the regulated institutions themselves. Nevertheless, given the relatively small size of the supervisory bodies, supervisory resources seem to be quite constrained. This limitation is only partially compensated for by focusing resources on the larger systemically important institutions and relying on external auditors.

The rapid development of new financial instruments and the integration of financial markets across sectors and across borders raises a number of issues to be dealt with. In general, the FSAPs found that the smaller Western European countries

have sound regimes for cross-border supervision. In most cases, information sharing with overseas supervisors is open and cooperative, and seems to work satisfactorily even in cases where formal agreements are not perfected due, for example, to differences in legal systems.

In all the FSAPs conducted in Western Europe, the supervisory authorities were able to assess the risks associated with the overseas subsidiaries of large international banks, although in some cases on-site supervision of overseas subsidiaries was limited. Countries have been



also responding to the supervisory challenges posed by increasing concentration in the banking industry and the rise of large and complex financial institutions by implementing systems of consolidated supervision, transposing the European Commission Directive on Financial Conglomerates into their national laws, and assessing internal risk transfers within the conglomerates.

### **FSAP Findings for Austria**

Let me briefly mention the main conclusions of the Austria FSAP, completed in July 2004, which reflects a number of the broader themes already mentioned.

- The banking system was found to be generally sound and resilient, with high asset quality and strong capitalization. Expansion into Central and Eastern Europe had substantially enhanced bank profitability – an important benefit because profitability and efficiency

in the home market are low compared with other industrialized European countries. Stress tests confirmed the strong capitalization of the banking system and its resiliency to large but plausible shocks.

- There was a high level of observance of international standards in the areas of banking, insurance, securities, and anti-money laundering, based on strong institutions and a comprehensive legal framework. The consolidation of supervision in the new Financial Market Authority in 2002 was found to be smooth, supported by an effective inter-institutional cooperation with the Oesterreichische Nationalbank and the Ministry of Finance.
- Issues warranting the attention of policymakers included: (a) the supervision of financial conglomerates (where ongoing reforms and EU directives in the pipeline would address most concerns); (b) the unusual prevalence of foreign currency lending to un-hedged domestic borrowers, especially for house mortgages; and (c) the need for continued monitoring of the growing exposure to Central and Eastern European countries. I understand from the IMF mission that visited Vienna a few weeks ago that the authorities have been tracking these issues closely.

### **FSAP Findings for Central and Eastern European Countries**

#### **Banking Soundness**

Let me turn now to the situation in the countries of Central and Eastern Europe. These countries have been implementing wide-ranging financial reforms as part of the transition pro-

cess to market-based economies and integration into the European Union. These reform programs share many commonalities – including the privatization of publicly-owned banks, the strengthening of prudential and supervisory frameworks, and the passage of new legislation across a range of areas, including central banking, commercial banking, insurance, and securities markets.

With implementation of the reform agenda largely in place, and aided by significant inward foreign direct investment, financial sectors in Central and Eastern Europe have become more diversified. Insurance companies and pension and investment funds have become important players, and strong foreign strategic investors now own key shares in banking and insurance. All this has facilitated the development of new instruments and markets and improved the health and resilience of financial institutions.

That said, the various FSAPs pointed to a number of risks, including those stemming from rapid credit growth in new and potentially riskier sectors. In nearly all the Central and Eastern European (CEE) countries, credit risk in loan portfolios, including that arising from exchange rate fluctuations, remains the main systemic vulnerability, although sensitivity analysis suggests, in many cases, considerable banking system resilience to a deterioration in credit quality. Another risk factor is that growing banking competition in CEE countries, and the ensuing pressure on profit margins, may encourage some banks to venture into more risky lending in order to protect returns.

To a large degree, the trends in bank behavior reflect normal financial sector deepening and the extension of intermediation as systems develop.



However, they are also changing the risk profile of the system, straining the capital adequacy of some banks, and posing a challenge both to their internal risk management systems and to the supervisory authorities.

### **Supervisory Frameworks**

Turning to the supervisory frameworks in Central and Eastern Europe, certain common themes emerged from the various FSAP assessments. The major structural changes and liberalization in banking sectors in these countries during the 1990s uncovered significant weaknesses in many banks, including in their internal control and external audit systems. At the time of the FSAP assessments, the authorities in these countries were seeking to strengthen regulatory and supervisory frameworks, enhancing the disclosure requirements, and setting stricter requirements for the audit function.

In general, the public infrastructure supporting financial sector oversight has been improving in CEE countries, but further reform efforts are needed. Most CEE countries have been adapting their prudential regulatory frameworks to conform to Directives of the European Union, which has required the overall realignment of the commercial and bankruptcy laws. Despite progress, the implementation mechanisms and court procedures to support contract enforcement and creditor rights remain an important priority area for reform.

At the time of the assessments, the operational areas requiring most attention from supervisory agencies were the conduct of day-to-day supervision and development of the capacity to identify emerging threats. In many countries, there was a need for more qualitative assessments of bank safety and soundness, management practices,

and risk management. In other cases, the FSAPs pointed to the need to increase supervisory powers to ensure accurate regulatory reporting, validate supervisory information, and take remedial actions against banks failing to report accurately. In this important area, the supervisory work needs to be supported by improved and more transparent accounting practices and increased market discipline through strengthened governance and disclosure rules.

On consolidated and cross-border supervision, the FSAPs found implementation gaps in most CEE countries. Due to the increase in foreign participation, this is an important area, and many supervisors from CEE countries were actively pursuing formal agreements with a number of foreign supervisors at the time of the assessments. However, the capacity to conduct supervision on a consolidated basis, both domestically and internationally, suffered from implementation problems. In some cases, this was hampered by secrecy requirements that restricted information sharing with foreign supervisors. In other cases, there was a need to build supervisory capacity and reputation to support cooperative arrangements with domestic and foreign supervisors. The authorities, however, were generally aware of these limitations and moving expeditiously to address them.

In closing this part, let me emphasize again the need to enhance supervisory skills. The build-up of technical capacity and supervisory tools seemed to be a common medium-term challenge in CEE countries. In recent years, extensive training programs and technical assistance – including from the IMF – have enhanced the expertise of the banking supervisors, but work remains to be done in some areas, such

as the assessment of risk management systems and market risks.

### Issues Going Forward

To conclude my presentation, I would like to point to the policy issues that need to be addressed to strengthen the financial supervision framework in Europe – against a backdrop of continuing integration of European, and indeed global, financial markets. The key actors in this regard are the European Union and the national

supervisors in individual member countries

Over the last few years, the European Union has been respon-

sing to the process of increasing financial integration with various initiatives to promote regulatory and supervisory convergence. These include the Financial Services Action Plan, the ongoing adoption of International Financial Reporting Standards, the streamlining of rule making under the Lamfalussy process, and the common scheduled introduction of Basel II. Despite the substantial progress made, the supervisory systems still rely on exchanges of information and allocations of responsibility that could be severely tested, especially in a crisis situation. It will be important to ensure that financial sector supervisory structures keep up with the rapid evolution of financial conglomerates and the integration of European financial markets. I will emphasize three areas that require continuous attention:

- First, cross-border consolidation and supervisory cooperation need further strengthening. As the European single market in

financial services develops and financial institutions increasingly operate in multiple jurisdictions, national supervisory authorities need to cooperate effectively on an ongoing basis. In this context, the EU has been putting in place a number of mechanisms to facilitate cross-border consolidation and supervisory cooperation, for example, the Lamfalussy supervisory committees and the bilateral Memorandum of Understanding between different supervisory agencies. However, there is substantial scope to further strengthen information sharing and coordination between host and home country supervisors.

- Second, the supervision of financial conglomerates needs to keep up with market developments. In this area also, the EU has been making progress, including through the Financial Conglomerates Directive, which introduced supplementary supervision of financial conglomerates on a group-wide basis and the establishment of the European Financial Conglomerates Committee. But the task is complicated by the differing structures and frameworks of various financial activities, and further work is needed to ensure that similar risks are equally treated across sectors.
- Third, putting in place an efficient cross-border crisis management mechanism remains a top priority. At the EU level, after a slow start, a working group has been created and there have been some practical real time exercises involving the supervisors of multiple countries and a hypothetical banking sector problem. But more progress needs to be made with this effort before a real case has to be handled.




Finally, let me comment on the prospects for the IMF's FSAP program, where some fine-tuning is needed to respond to the experience to date. In particular, efforts are underway:

- to establish a pattern of well-targeted FSAP updates, adapted to the needs of individual countries and timed to capture important changes in the financial sector structure or risk environment;
- to place stronger emphasis on the assessment of cross-sector and cross-border linkages;
- to introduce projects covering regional financial sector issues, such as the supervision of regional financial conglomerates; and
- to develop new means to provide more continuous financial sector

surveillance as part of the Fund's on-going policy dialogue with its member countries, and to integrate our financial sector work with our macroeconomic and specifically our monetary analysis.

The latter is particularly important given the emphasis of the Fund's shareholders – its 185 member countries – on the integration of financial stability issues into Fund surveillance. The presentations and discussions at this conference will stimulate our thinking on how the FSAP can evolve to suit the needs of our members and shareholders.

Thank you for your attention, and my thanks to the Oesterreichische Nationalbank for the opportunity to speak with you today. 

FSAP Participation in Europe				
Country	Status (Article IV Board Date)	FSSA Document Number	FSSA Document Date	Published
<b>EU 15 (Big five)</b>				
France	10/20/2004	SM/04/335	9/24/2004	Yes
Germany	11/3/2003	SM/03/342	10/6/2003	Yes
Italy	Underway	Pending	Pending	...
Spain	Pending	Pending	Pending	...
United Kingdom	2/26/2003	SM/03/60	2/10/2003	Yes
<b>EU 15 (Small ten)</b>				
Austria	8/2/2004	SM/04/226	7/8/2004	Yes
Belgium	Underway	Pending	Pending	...
Denmark	Pending	Pending	Pending	...
Finland	11/9/2001	SM/01/291	9/25/2001	Yes
Greece	Underway	Pending	Pending	...
Ireland	8/1/2000	FO/Dis/00/88	7/20/2000	No
Luxembourg	5/22/2002	SM/02/130	5/3/2002	Yes
Netherlands	9/8/2004	SM/04/277	8/10/2004	Yes
Portugal	Pending	Pending	Pending	...
Sweden	7/31/2002	SM/02/212	7/11/2002	Yes
<b>EU 10</b>				
Cyprus <sup>1</sup>	...	...	...	...
Czech Republic	7/26/2001	SM/01/189	6/27/2001	Yes
Estonia	6/30/2000	FO/Dis/00/73	6/15/2000	Yes
Hungary	5/4/2001	FO/Dis/01/52	4/20/2001	Yes
Latvia	1/18/2002	SM/02/1	1/2/2002	Yes
Lithuania	1/14/2002	SM/01/368	12/26/2001	Yes
Malta	8/18/2003	SM/03/256	7/31/2003	Yes
Poland	3/9/2001	SM/01/74	2/27/2001	Yes
Slovak Republic	8/9/2002	SM/02/251	8/7/2002	Yes
Slovenia	5/11/2001	SM/01/129	4/24/2001	Yes
<b>Other Western Europe</b>				
Iceland	5/2/2001	SM/01/106	4/11/2001	Yes
Norway	6/3/2005	Pending	Pending	...
San Marino	Pending	Pending	Pending	...
Switzerland	5/29/2002	SM/02/143	5/14/2002	Yes
<b>Others (including Balkans)</b>				
Albania	Underway	Pending	Pending	...
Belarus	6/17/2005	Pending	Pending	...
Bosnia and Herzegovina	Pending	Pending	Pending	...
Bulgaria	7/22/2002	SM/02/221	7/15/2002	Yes
Croatia	8/5/2002	SM/02/244	7/26/2002	Yes
Israel	7/30/2001	SM/01/217	7/11/2001	Yes
Macedonia, FYR	10/17/2003	SM/03/336	10/1/2003	Yes
Moldova	2/7/2005	SM/05/13	1/18/2005	Yes
Romania	11/1/2003	SM/03/330	9/23/2003	Yes
Russia	5/2/2003	SM/03/134	4/14/2003	Yes
Serbia and Montenegro	Underway	Pending	Pending	...
Turkey	Pending	Pending	Pending	...
Ukraine	5/14/2003	SM/03/148	4/23/2003	Yes
<b>FSAP Updates</b>				
<b>Completed</b>				
Hungary	5/22/2002	SM/02/131	5/6/2002	Yes
Iceland	8/22/2003	SM/03/268	7/31/2003	Yes
Slovenia	5/7/2004	SM/04/152	4/27/2004	Yes
<b>Ongoing</b>				
Hungary	6/15/2005	Pending	Pending	...
<b>Planned</b>				
Ireland	Pending	Pending	Pending	...
Poland	Pending	Pending	Pending	...

Source: IMF.  
<sup>1</sup> Has not participated in an FSAP.  
Note: Pending means that the country has accepted to conduct an FSAP but the work has not yet started, in which case it would be labeled Underway.



KLAUS-LIEBSCHER-PREIS  
KLAUS LIEBSCHER AWARD



### First Presentation of the Klaus Liebscher Award

At the 33<sup>rd</sup> Economics Conference of the Oesterreichische Nationalbank (OeNB), OeNB President Herbert Schimetschek for the first time presented the Klaus Liebscher Award, which was established on the occasion of the 65<sup>th</sup> birthday of OeNB Governor Klaus Liebscher to honor his achievements in Austria's participation in Economic and Monetary Union (EMU) and European integration. The prize, which is to be awarded annually, totals EUR 20,000. This amount will be shared out equally among two young economists from EU Member States or candidate countries for excellent scientific work on the topics European integration and monetary union. The Klaus Liebscher Award is the highest scientific prize the Oesterreichische Nationalbank awards.

This year's two prize-winning papers, which were selected from 21 high-quality submissions, deal with particularly topical economic policy issues.

1. "Financial Differences and Business Cycle Movements in a Currency Area," by **Ester Faia** from the Universitat Pompeu Fabra in Barcelona. This paper shows that greater financial diversity should reduce cyclical correlation under a given monetary regime and that moving from independent monetary policies to a common currency should increase it, for any given degree of financial diversity.



2. "The European Monetary Union as a Commitment Device for New EU Member States," by **Federico Ravenna** from the University of California at Santa Cruz. This paper shows that for those new EU Member States whose national monetary policy poses credibility problems, pegging their exchange rates to the euro may – from a welfare perspective – be more favorable than maintaining independent monetary policies. 📄



KAREL LANNOO



# Capital Adequacy versus Liquidity Requirements in Banking Supervision in the EU

The focus of the debate on banking supervision over the last decade has been largely on capital requirements and solvency of financial institutions. The interaction between solvency and liquidity, defined as the ability of an institution to meet its liquidity providing obligations under normal conditions, has been much less debated. Traditionally, it was assumed that once the solvency is under control, that the liquidity should be no problem. Banks which have sufficient capital should be able to get extra liquidity from the central bank against adequate collateral in case of problem. Furthermore, the focus of the New Basel Accord on a better alignment of the regulatory capital with the risk to which banks are exposed, and the stronger focus on diversification, should reduce eventual mismatches between solvency and effective liquidity.

In day-to-day banking supervision, control is also exercised on the liquidity of banks, as an additional assurance to safeguard the stability of the financial system. This can be done in different ways. The central bank, as lender of last resort, may levy a

<sup>1</sup> CEPS is an independent European policy research institute, based in Brussels. I acknowledge comments from Rym Ayadi of CEPS.

reserve requirement. The banking supervisor can impose specific liquidity requirements. The way in which the latter is exercised in the EU today is not harmonized, it is left to the host country and is a matter of supervisory discretion. In the context of the difficult home/host discussions surrounding the implementation of the New Basel Accord in European law, it would be useful if the Committee of European Banking Supervisors (CEBS) could start some standardization process of what liquidity control encompasses. The longer-term ambition would be to have a strengthening of the home country control regime in an EU context.

This paper discusses the approach to be taken with regard to control of liquidity in the EU. To put the subject into perspective, we will first review the developments in financial market liquidity overall, and discuss the possible impact of the New Basel Accord on the liquidity of financial institutions. The assumption behind liquidity control is that banks primarily invest in illiquid assets (loans). However, market liberalization, product innovation, and technological developments, have radically increased financial market liquidity. Furthermore, the new Basel capital adequacy framework profoundly modifies the current prudential framework. The third part analyses liquidity control in the context of EU financial regulation, and discusses whether liquidity control should be harmonized in the EU, and if so, how this should be done. The paper concludes with some recommendations for policy.

### **Developments in Financial Market Liquidity**

There can be no question that financial markets are *structurally* far more liquid

today than they were in the past. By *structurally* liquid is meant that, abstracting from the occasional episodes of market stress, when liquidity freezes across several broad asset classes, asset markets generate greater trading volumes at reduced transaction costs than in the past if and when the market mechanism operates smoothly. Technological progress, coupled with global capital flows and the worldwide de-regulation of the financial sector, has enhanced the liquidity of individual assets and markets alike. In particular, recent technological breakthroughs, particularly in the realm of informatics, have contributed greatly to enhancing market liquidity. Electronic trading platforms have transformed the nature of secondary market activity by transforming largely illiquid assets into very liquid ones. Search costs before their introduction were certainly not insignificant, particularly when looking for counterparties to handle large orders or illiquid assets; in some cases, prior to the invention of the internet, finding a counterparty was so costly as to prevent trades from occurring in the first place. O'Hara (2004) gives the example of how eBay transformed the market for second-hand goods, including highly illiquid exotic collectibles.

Securitization is also an excellent example of how financial innovation, by packaging illiquid securities (e.g. mortgages or loan portfolios) into tradeable ones, has transformed secondary markets in some existing instruments and, in other cases, has effectively created a market where none existed previously. Besides the intrinsic value in rendering securities more liquid, thereby facilitating resource allocation, greater liquidity in existing products and the introduction of liquidity-creating products

also means that hedging opportunities increase, which facilitates and enhances the efficiency of risk management.

Finally, one cannot ignore the role of regulation in the design of markets. Regulation affects market quality, an important component of which is liquidity. Great strides have been made in improving market design in recent years, as a result of both more effective self-regulation and better targeted government regulation, with positive consequences for liquidity. Confidence-enhancing market rules, such as best execution and price transparency requirements, and competition among market makers, leading to reduced transaction costs from trading, are but just two examples of how market structure can influence liquidity.<sup>2</sup>

So much for the impact of innovation and market microstructure on liquidity. Yet, there also exists a broader macroeconomic interpretation of liquidity, which relates to how real economic activity, in particular monetary and fiscal policy impulses, coupled with behavioral anomalies such as herding and similar risk-management strategies, translates into and influences the creation, destruction, valuation and price volatility of financial assets. According to this view,

liquidity, defined as the creation and mobilization of previously unexploited financial capital, or re-allocation of capital to other usage, moves into and out of markets in conjunction with macroeconomic fluctuations, conditioned by expectations (broadly writ) and on the available supply of assets, which itself is determined (in part) by monetary and fiscal policy.<sup>3</sup> Certainly monetary policy, like fiscal policy, has a key role to play in the creation of financial assets. Chart 1 (see annex)



shows the rapid acceleration of liquidity in recent years as a consequence of lax monetary policy, in particular global spillovers from the generous Japanese, and, more recently, U.S., stances.

The ability of investors to acquire/liquidate positions rapidly across assets (market breadth) and in an asset (market depth) has traditionally been viewed, by macroeconomists at least, as potentially destabilizing. “Excess” liquidity can have damaging

<sup>2</sup> The central issue in the debate on the EU’s recent Directive (2004/39/EC) on Markets in Financial Instruments was the need to enhance liquidity and price discovery in European equity markets. For this reason, also brokers are required to advertise the prices for shares in which they are “systemic internalizers.” See Levin (2003) for a discussion of this issue.

<sup>3</sup> For example, in 2001, the U.S. Treasury announced that it was retiring and discontinuing 30-year debt issues. This was a direct consequence of the fiscal consolidation that prevailed under Robert Rubin’s tenure as Treasury Secretary, because if such a policy had been continued, it would have led to very significant budget surpluses. The projected surpluses led the Treasury debt management office to reconsider their strategy. At the time, there was an active debate on the consequences of the great U.S. fiscal consolidation on financial markets. Market participants in particular were concerned about the liquidity effects of the deficit reduction. Such a reduction would mean obviating the need for relatively less liquid issues, such as the 30-year bond, which nevertheless played a key role in determining inflationary expectations and in establishing a benchmark risk-free rate for long-term corporate bond and project valuation. The reversal in fiscal policy in the U.S. since 2001 has meant that the projected surpluses are nonexistent. As a result, U.S. taxpayers would not be penalized as a consequence of Treasury emitting long-term bonds, because servicing 30-year bonds would no longer be disproportionately expensive. In addition, there is an enormous demand for long-term sovereign (and even corporate) debt, driven by the need of pension funds and insurance firms to generate steady streams of incomes over extended periods of time to match their long-term liabilities.

consequences for financial stability by leading to speculative feedback loops, such as momentum trading, that prevent the reversion of asset values to their true economic values. Because of the destabilizing property of liquidity, in times of financial duress at least, liquidity must be constrained or harnessed. By arguing that liquidity begets financial stability, O'Hara (2004) and microstructure theorists take a contrarian view. Liquidity for them is the grease that oils the market mechanism. In a similar manner, liquidity has been compared to the "lifeblood" of financial markets by Fernandez (1999).

According to the macroeconomic approach to liquidity, markets are (in part) more liquid today because the growth in the efficiency of financial intermediation, combined especially with rapid rates of capital growth, has outpaced growth in good investment opportunities in the (largely slow-growing) real economy. Very rapid credit creation, fueled by a lax monetary policy stance and coupled with large-scale capital inflows, means that the domestic monetary base is growing very quickly – too quickly for truly sound and profitable investments to mature, thereby saturating the existing opportunities in the real economy. As a result, in the quest for higher returns, financial institutions take on more risk and turn increasingly to speculative investments in asset markets, hoping that they will be able to liquidate their positions first when signs of a crisis begin to emerge. It is precisely the creation of excess "liquidity" in the macroeconomic sense that eventually leads to dangerous financial imbalances. Thus, it would seem that there is a certain tension between the microstructure view of liquidity (a good thing) and the macroeconomic view of liquidity (a potentially dangerous thing).

Among the biggest risk-management challenges of the future is finding a way to respond effectively, and preferably to prevent, financial instability that arises *endogenously*, as a result of market participants' behavioral patterns, rather than due to some asset-specific characteristics or to an individual institution's position. The emphasis that has been placed on capital requirements reflects the continuing bias towards the old paradigm that places institutional stability (the microprudential approach) at the heart of financial market stability, as opposed to focusing on broader correlations between institutions' returns, reactions to market stress and risk-taking positions (the macroprudential approach). According to the old paradigm, institutional stability is a precondition for market stability, that is, systemic crises find their origin in insolvent individual institutions. While this "classical" type of financial crisis can still occur, the combination of capital account liberalization and the introduction of innovative financial products such as asset-backed securities and derivatives have connected what previously had been largely segmented markets, leading to "correlations between previously independent asset classes," as noted by Andrew Large (2004). Greater correlations in prices, returns and volatility between asset classes have important ramifications for the stability of markets in times of duress. For example, liquidity shocks to one asset class can nowadays be transmitted with much greater ease and speed to other asset markets, that is, the potential for contagion has risen greatly as a by-product of the growing inter-dependence of asset markets.

Part of the challenge is to discover the determinants of market liquidity. While there is little doubt that the

liquidity of individual assets has been enhanced through financial innovation and technological progress, market liquidity can still be susceptible to mysterious vagaries, or “liquidity black holes,”<sup>4</sup> the determinants of which largely remain a puzzle to economists. The inability of economists to properly calibrate liquidity risk no doubt has given rise to one of the most pressing outstanding challenges in risk management today.

Exposure to common liquidity shocks has become an increasingly important source of vulnerability to market risk today. Whereas in the past, the concept of liquidity focused more on asset-specific liquidity or institutional liquidity (the ability of a bank to effectively manage its liabilities without inducing excessive funding gaps), recent research points to aggregate, or market, liquidity effects, since the characteristic liquidity of assets is seen to co-vary (Porter, 2003). Regulatory attention has turned to banks, because they are increasingly vulnerable to wider fluctuations in market liquidity. The composition of banks’ portfolio holdings, as well as the very nature of their risk-taking activities has changed dramatically in the past two decades. Tradable instruments represent an ever-greater percentage of a bank’s assets. Banks must therefore pay increasing attention to market liquidity, because their changing nature means that their traditional approach to liquidity management, which are intimately tied to asset-liability management) is no longer sufficient.<sup>5</sup>

### **The Limits of Setting aside “Liquidity Capital”**

Since liquidity is a major component of risk, it would seem logical that banks should set aside reserves of capital to mitigate this risk. In fact, there is evidence that they already do so. Hartmann (2004), citing some studies, argues that if banks endogenize the capital decision, they will keep capital reserves above those required by the minimal regulatory capital amount in order to have a buffer against shocks



to asset prices. But the fact that banks set aside “liquidity reserves” abstracts from the difficulties of implementing a common regulatory approach to managing liquidity risk. There are several limits to the benefits of setting aside “liquidity capital:”

First, market liquidity risk is more difficult to quantify than individual security liquidity. First, there is no consensus on a definition of liquidity, or on a variable that would satisfactorily proxy it. The most commonly used proxies are bid-ask spreads and trading volumes. Liquidity risk is also difficult to price because the liquidity premium varies significantly over time. In addition to variability, the interaction between liquidity and expected returns may be non-linear (Amihud and Mendelson, 1986). Thus, liquid-

<sup>4</sup> By “liquidity black holes” we mean how the liquidity of certain assets, which, under “normal” circumstances are very liquid, suddenly dries up.

<sup>5</sup> Traditionally, poor liability management resulting from a maturity mismatch would lead to a level of illiquidity that would undermine the confidence of depositors. These in turn would seek an exit for their deposits, or the typical bank run.

ity risk management is complicated by the fact that liquidity is notoriously difficult to forecast. Although liquidity no doubt has an important autoregressive component, for example when measured as trading volumes, it is likely that this component decays rather quickly and has little predictive power over longer time horizons.

Second, there are probably instances when liquidity can be “too much of a good thing.” This old debate gained a renewed vigor following the wave of financial crises that swept around the globe from 1997 to 2000. It fits into the general negative perception of liquidity of macroeconomists. A very liquid bank portfolio could lead to financial instability by possibly providing a perverse incentive to bank management to undertake greater risk (Wagner, 2004). The logic is that the more liquid a bank’s assets, the more likely that bank management will be tempted to put a fair amount of that liquidity to good work by converting liquid assets into riskier, less liquid assets that yield higher returns. In this sense, bank management is impervious to the fact that market liquidity can quickly dry up and that closing those positions will be enormously costly to the bank as they sell assets at deep discounts. Paradoxically, requirements for banks to set aside more reserves to act as buffers against liquidity shocks could encourage greater risk-taking with the residual capital of the bank.

Third, assets that are liquid today are not necessarily going to be liquid on the date that bank management expects them to be liquid. Risk man-

agement strategies based on historical data are unlikely to be very useful in the face of extreme events. The *perceived* tradability of assets, or their “structural liquidity,” based on historical data, does not guarantee that they will be marketable at a time of duress when the bank will seek to liquidate them to generate the needed cash to fund liabilities.<sup>6</sup> In fact, markets themselves are prone to a host of unpredictable malfunctions, which can be technical in nature (operational risk), or due to any other sources of distress, whether linked to the specificities of the existing market architecture or to the behavioral patterns of market participants. Due to the vagaries of market liquidity, what liquidity there is in the market today may in fact be a very poor indicator of the liquidity that remains in the market tomorrow, highlighting the risks inherent to liquidity management. These difficulties point to the ever-increasing importance of extreme value theory. In this sense, the techniques used to measure liquidity risk might be similar in methodology to those used to evaluate operational risk. The lack of contingency planning in the wake of very rare but severe occurrences can have very serious consequences, as the LTCM case demonstrated.<sup>7</sup>

But if one agrees that contingency planning against sudden “liquidity black holes,” may be necessary, particularly in light of recent financial crises, what precisely does this entail for banks? What does it mean for a bank to be “liquid?” Of course, liquidity is intrinsically linked to a time variable and

<sup>6</sup> A good example of this is the impact the 1998 LTCM crisis had on U.S. Treasuries, the most liquid securities in the world. Very quickly, the liquidity which had traditionally characterized U.S. debt securities as the safest in the world, suddenly vanished.

<sup>7</sup> Leveraged over 50:1, the LTCM’s collapse had serious consequences for the world economy in 1998 and could have been a lot worse had the Federal Reserve not coordinated a bailout.



suggests a short-term horizon, a certain immediacy. It makes little sense today to worry about the liquidity of a traded asset that has to be liquidated at a fixed date in the distant future, since its liquidity is likely to vary significantly in the meantime. That is why liquidity requirements as such will not do terribly much to ensure the smooth operation of markets. This is due not only to structural features, but also to the nature of regulations. While attention on Basel II has focused on the dangers of pro-cyclicality, less attention was given to the impact and risks of financial institutions adopting identical risk capital requirements, which could propel herd movements (Persaud, 2000).

The bottom line for policy is this: there is no point in holding reserves if, at times of crisis, they cannot be liquidated. On the other hand, the lack of proper contingency planning has proven tremendous costly in the past. Most economists agree that *something* must be done, without knowing precisely *what*. One thing is sure: regulators ought to carefully study the behavioral changes in risk management that any liquidity requirements could induce, because paradoxically, further reserve requirements for Liquidity at Risk could entail greater risk-taking by banks.

### **The New Basel Accord and Liquidity Risk**

The new Basel capital adequacy framework, which was finalized in June 2004, profoundly modifies the current prudential framework. The 1988 Basel Accord, as embodied in EU law through the own funds and solvency ratios directive, set very crude risk weightings of assets, depending on the perceived riskiness of the creditor. The New Capital Accord goes for a much

more refined risk management framework, which should also reduce the overall liquidity risk of financial institutions. In addition, Basel II introduces the concepts of supervisory review (Pillar 2) and market disclosure (Pillar 3), which should further contribute to liquidity control. Basel II does not specifically discuss liquidity requirements, but the Committee addressed the subject in a separate paper, which is discussed below.

With regards to Pillar 1, the minimum capital requirement, the New Basel Accord offers alternative approaches to credit risk measurements, ranging



from the standardized approach to a more sophisticated form in the internal ratings-based (IRB) approach. While the standardized approach is the simplest, it incorporates a finer gradation of risks based on the assessments of external rating agents of the different weighting categories of claims. Whereas before, Basel applied grosso modo four groups of weightings, there are now seven in the standardized approach.

The IRB approach ranging from the foundation to the advanced approach allows banks to adopt their internal rating systems to measure credit risk and this after a proper validation by the relevant national supervisory authorities. These risk sensitive approaches are supposed to reflect the real risk profile of the banks while taking into account the entire body of credit portfolio assessment criteria. As such, the IRB approach represents a considerable amount of complexity but permits a fine and efficient internal risk assessment.

The New Basel Accord also introduces a new regulatory framework to credit risk associated to securitization. To measure the associated risk, banks can either apply the standardized approach or the IRB approach with the additional distinction between the ratings-based approach (RBA, in which some risk-weighted inputs are provided by the supervisors and others by the bank) and the supervisory formula approach (SFA, in which all the risk-related inputs are provided by the bank based on its internal data and modeling systems).

Another major novelty introduced by the New Basel Accord is to set a capital requirement for operational risk.<sup>8</sup> To measure this type of risk, three approaches that vary in sophistication are provided by the Accord: a) the basic indicator approach, b) the standardized approach and; c) the advanced measurement approaches. Hence, capital requirements should be much better calibrated under the New Basel Accord, and closer correlated to the effective risk profile of a bank.

The expected use of the IRB approaches by the systemically important banks, as compared to the standardized approach by smaller banks should enhance the resilience of the financial system. Banks using the IRB approach of Basel II would have to hold higher capital charges for higher-risk segments, such as low-rated SMEs, low-rated sovereigns, asset management or custody activities, sub investment grade securitization transactions (risk weights ranging from 100% to 650% for securitized transactions rated BBB– to BB– under the RBA and the requirement in various instances,

typically for below investment grade and unrated transactions, to deduct a securitization position from regulatory capital<sup>9</sup>). These activities require less capital under the SRB approach because of their limited sensitivity to risk. However, capital charges for retail loans, consumer credit, mortgage or leasing activities, all of which can be considered illiquid, will decrease in both approaches.

The New Basel Accord has been widely debated over the last years. Two critical elements are relevant in the context of this paper: the pro-cyclicality and the impact of expected reduction in levels of regulatory capital. The expected increased pro-cyclicality of the Accord follows from its increased risk sensitivity, with the use of rating agencies assessments under the standardized approach, and, even more, the use of probability of default under the IRB approaches. Risk weights will thus become more cyclically sensitive and capital requirements more influenced by the state of the economy. In addition, the use from 2005 onwards of international accounting standards (IAS), which are based on the principle of fair value, will further exacerbate economic cycles. Both elements may further aggravate general liquidity crisis in times of stress and render the setting of liquidity requirements even more difficult. Pressure to increase the capital requirement in times at stress may increase volatility on banks more liquid asset items. It has therefore been suggested to introduce a system of dynamic provisioning, as is in place in Spain (Dierick, 2004).

Another element of concern is the impact of the expected reduction

<sup>8</sup> Regulatory capital is defined by the Basel Committee as “the risk that flaws in a bank’s own systems or human resources, as well as external events, may cause unexpected losses, such as those related to mass litigation, fraud or natural catastrophes.”

<sup>9</sup> When this happens, such capital must be taken 50% from tier 1 and 50% from tier 2.

in overall level of regulatory capital. The EU's 3<sup>rd</sup> Quantitative Impact Study forecasted a regulatory capital reduction of up to 20% under the IRB approach (Ayadi, 2004, p.18). U.S. authorities recently came out with a study predicting a reduction of 26% (Bies, 2005). Seen in combination with the increased pro-cyclicality, the financial system overall could be less sound, and a liquidity requirement less relevant, as it would function less of a buffer in times of stress. The question thus is how supervisors will approach this problem as part of the supervisory review process.

### **Basel Committee Guidelines on Liquidity Requirements**

In February 2000, the Basel Committee issued its Principles for the Assessment of Liquidity Management in Banking Organisations. This paper is an update of its September 1992 paper on the subject. According to the Committee, liquidity management is one of the most important activities conducted by banks. Since liquidity shortfalls at the level of one individual bank can have serious systemic repercussions, also supervisors are concerned.

The principles largely focus on the management of a bank's liquidity, although they also speak briefly about the role of supervisors and public disclosure. The paper does not set any quantitative thresholds for liquidity regulation, neither on the side of the banks nor on the regulators.

On the management side, the principles require the bank to have:

- a strategy to manage liquidity on a day-to-day basis, agreed by the board, effectively implemented and backed-up by a internal control system;
- a process to measure and monitor net funding requirements;
- a contingency plan to handle liquidity crisis, including public relations management;
- a specific analysis of foreign currency exposure and eventual mismatches which may occur;
- an adequate level of disclosure in order to manage public perception of the organization and its soundness. Banks should provide an adequate amount of information to the public on an ongoing basis.

Supervisory authorities should conduct an independent evaluation of the implementation of these principles by a bank, and of the internal control system. As part of that, supervisors should also consider a bank's liquidity risk in conjunction with its capital adequacy. In this sense, the role of supervisors falls under Pillar 2 of the new Basel capital adequacy regime, since:

*“appropriate supervisory responses to a bank with higher liquidity risk may include requiring the maintenance of higher levels of capital and repositioning the asset portfolios or funding arrangements to reduce liquidity risk. As part of this supervisory process, supervisors may also want to consider implementing regulatory requirements for certain liquidity limits or ratios”*  
(Basel Committee, 2000, p. 20).

Seen in combination with the implementation of the New Basel Accord, higher (macro) liquidity risk, which results from the pro-cyclicality and the lower capital levels of the New Basel Accord, may result in higher liquidity requirements for banks, or increased use of the powers of discretion by supervisors under Pillar 2.

### **The EU Framework**

The introduction of the euro has indirectly done more for the alignment of liquidity requirements in the EU, or at least in the euro area, than EU financial market regulation. The start of Economic and Monetary Union (EMU) led to the introduction of minimum reserve requirements for all credit institutions in the euro area. The ECB also harmonized the list of acceptable collateral for liquidity providing operations by the central bank and payments through the TARGET system. But liquidity requirements have not been harmonized under EU financial law.

### **The Euro Area Framework**

A reserve requirement is the minimum amount of deposit a credit institution is required to hold on accounts with the central bank. The amount is calculated by multiplying the reserve ratio with the reserve base, which are most short-term liability items of banks. Although the reserve requirement is essentially used for monetary policy purposes, i.e. to stabilize money market interest rate, it is also used to monitor the liquidity needs of the banking sector, and thus to steer financial stability. The reserve ratio was set at 2% since the start of EMU, and the holdings are remunerated at close to money market interest rates.

Before EMU, reserve requirements differed largely in the euro area countries. They differed in the base, the ratio and remuneration. In several EU Member States, they were not remunerated, and thus functioned as a form of levy on the banking system.

A second element through which the ECB contributed to easing the liquidity needs of the banking sector was the harmonization of acceptable collateral for liquidity providing

operations. Eligible assets comprise tier 1 and tier 2 collateral. Criteria for tier 1 are harmonized, tier 2 assets are defined by the national central banks (NCBs), based upon minimum standards set by the ECB. Tier 2 comprises less or non-marketable assets (commercial loans) that are of particular importance for national financial markets and banking systems. Collateral is held in 18 securities settlement systems. All assets (tier 1 and tier 2) can be used on a cross-border basis. In this sense, the euro area has contributed to easing liquidity constraints in the euro area banking system, certainly for smaller Member States.

The same list of eligible collateral is used for participation in the high-value payment system of the ECB, TARGET. Minimum reserve holdings are requested from participating banks for settlement purposes during the day and the Eurosystem provides unlimited (collateralized) intraday credit free of interest to its counterparties. The Eurosystem furthermore has standing facilities to provide liquidity and absorb in exceptional circumstances. The marginal lending facility provides overnight loans from the central bank against collateral at a rate which has been about 1% above the main refinancing rate.

The Eurosystem's definition of acceptable collateral is also used in the private repo market, which plays an important role in providing temporary liquidity to financial institutions. The private repo market has been growing at a high rate over the last years. Data from the private sector showed a growth of over 20% in the year 2004, standing at EUR 5 trillion (ISMA, 2005).

## The Single Market Framework

EU financial markets regulation says little about liquidity requirements. The core pieces of legislation are the first banking directive, the second banking directive and the related solvency ratios directive, and the draft capital requirements directive.

The first banking directive (77/780/EEC) introduced the freedom of establishment and national treatment for banks in the EU. The directive required national authorities to cooperate closely to supervise the activities of credit institutions operating in several Member States, amongst others the monitoring of the liquidity and solvency (Art. 7.1). It therefore created the Banking Advisory Committee, the precursor of the CEBS.

The second banking directive (1989) introduced the free branching and provision of services in the EU, subject to authorization and final control by the home country. The directive however leaves a few powers in the hands of the host country, such as the supervision of the liquidity of branches. Art 14. (Art. 41 in the consolidated banking directive, 2000/12/EC) says:

*“Host Member States shall retain responsibility in cooperation with the competent authorities of the home Member State for the supervision of the liquidity of the branches of credit institutions pending further coordination. Without prejudice to the measures necessary for the reinforcement of the European Monetary System, host Member States shall retain complete responsibility for the measures resulting from the implementation of their monetary policies. Such measures may not provide for discriminatory or restrictive treatment based*

*on the fact that a credit institution is authorized in another Member State.”*

The monetary policy argument was used by France against the introduction of interest bearing current accounts by Barclays Bank on its territory in 1997. Today, however, this does no longer make any sense.

A related area where some harmonization has been undertaken by the EU is in the deposit guarantee directive. Although strictly speaking no liquidity regulation, since it is external



to the bank, and comes into force ex post, it should be at least mentioned, as it is part of the preventive measures the debate on whether to fully harmonize deposit protection schemes in the EU will be similar for liquidity regulation. Today, the responsible authority for deposit protection for branches is the home country, but a “non-export” provision applies for branches of countries with higher levels of depositor protection, and a “topping up” option for branches of countries with lower levels. Subsidiaries fall under the responsibility of the host country.

## Liquidity Requirements in the EU Member States

Different countries have seen it necessary to regulate liquidity in the banking sector and have adopted a variety of approaches to liquidity regulation, from quantitative to qualitative, or a mixture of both. This typically involves setting some form of liquidity ratio as a minimum requirement,



Table 1

Liquidity Requirement Systems in the EU Member States and the U.S.A.		
Quantitative only	Mix	Qualitative only
Germany Austria	Belgium Denmark Finland France Greece Italy Netherlands U.K.	Spain Sweden U.S.A.

Source: CEBS, Bank of England, own investigations.

complemented by broader systems and controls related to management of liquidity risk.

Within the quantitative requirement, national approaches differ between a stock and a maturity mismatch approach, or a combination of both. A stock approach prescribes a minimum level of cash or high quality liquid or marketable assets in relation to the stock of deposits and other liabilities. The definitions of what constitutes a stock, or liquidity, thereby differ from country to country. Maturity mismatch analysis involves the classification of expected inflows and outflows of funds into time-bands according to their residual maturity, subject to minimum criteria. Some regimes also include a degree of internal estimation of likely liquidity stress impact and analysis, generally limited to a floor.

Furthermore there is considerable variation in the scope of national regimes, whether it is applied on a consolidated (group) or unconsolidated (solo) basis. The U.K. and the Netherlands apply liquidity regulation on a consolidated basis, in Germany and France the focus is on the unconsolidated deposit-taking entity. A fundamental question is, given the

increasing number of internationally active banks, and bank’s global liquidity management policies, whether the solo approach still makes sense, whether local entities can be ring-fenced from overall liquidity problems in a bank (Bank of England, 2004). On the other hand, it could be argued that, even if banks *monitor* liquidity globally, they should diversify it globally as well, taking into account differing liquidity needs arising in different locations. This would also make sense from systemic stability point of view. As one major global bank puts it:

*“Diversification of our funding profile in terms of investor types, regions, products and instruments is an important element of our liquidity risk management framework. Our core funding resources, such as retail, small / mid-cap and fiduciary deposits as well as long-term capital markets funding, form the cornerstone of our liability profile. Customer deposits, funds from institutional investors and interbank funding are additional sources of funding. We use interbank deposits primarily to fund liquid assets.”*<sup>10</sup>

Such an approach would fit with the New Basel Accord, which emphasizes the need to diversify the risk exposure of a bank, to classify assets according

<sup>10</sup> Extract of the chapter on liquidity risk in the Annual Report 2004 of Deutsche Bank, available from: <http://annualreport.deutsche-bank.com/2004/ar/riskreport/liquidityrisk.php>

Table 2

### Liquidity Levels in the EU-15 and the New Member States

	All banks	Large	Medium	Small	Foreign
<b>EU-15</b>					
Liquidity asset ratio 1 (cash and T-bills)	2.2	2.0	2.6	4.6	1.3
Liquidity asset ratio 2 (ratio 1 + loans to credit institutions)	18.0	18.1	17.8	17.5	27.8
Liquidity asset ratio 3 (ratio 2 + debt securities by public sector bodies)	25.8	27.5	22.2	19.5	35.4
Depositor liabilities	41.9	38.8	46.8	64.9	29.1
Ratio 3 to deposits	61.6	71.0	47.5	30.1	121.8
<b>New Member States</b>					
Liquidity asset ratio 1 (cash and T-bills)	14.9	16.7	17.5	14.3	14.1
Liquidity asset ratio 2 (ratio 1 + loans to credit institutions)	31.5	30.9	29.3	36.1	31.8
Liquidity asset ratio 3 (ratio 2 + debt securities by public sector bodies)	36.8	39.4	38.0	43.9	35.6
Depositor liabilities	65.7	70.0	69.5	71.3	63.7
Ratio 3 to deposits	56.0	56.3	54.6	61.6	55.9

Source: ECB (2004)

to their riskiness and liquidity and stimulates banks to move towards internal methods to measure its capital needs, while giving supervisors the discretion to intervene depending of the risk profile of the bank.

A survey on liquidity regulation by the Euribor ACI Money Market and Liquidity Working Group of the international association of foreign exchange dealers ACI (Association des Cambistes International) calls for internal liquidity management models. It learns that most major banks in the euro area have such models in place for the management of their liquidity, even in countries which benefit of a very light liquidity regulation. The internal liquidity models are based on Best Market Practice and the “Sound Practices for Managing Liquidity in Banking Organisations” published by the Basel Committee. However, the association sees an inconsistency between the domestic regulation of liquidity and the integrated money market at the level of the euro area. National regulations lead to distortions in liquidity and securities pricing,

and hamper the level playing field of banks (De Vidts, 2005).

Data of the ECB show that large EU-15 banks have 27.5% of their assets in liquid financial market instruments, compared to 22.2% for medium-sized banks, 19.5% for small banks and 35.4% for foreign-owned banks. This compares to depositor liabilities of on average 41.9% for all banks (see table 2). The liquidity ratio in the new Member States is on average higher, but with a lower ratio to deposits.

### Any Need for EU Intervention?

The current liquidity control framework, whereby the responsibilities are left with the host country supervisory authorities, is consistent with the broader framework for financial supervision, as put forward by the Basel Committee and contained EU law. The home country is in charge of exercising consolidated supervision of a banking group which is active in the EU, and will decide on the validation and final shape of the IRB model, under the Basel II framework. The



host country authorities are in charge of controlling financial stability and managing the deposit protection system, and are accountable to local tax payers.

Liquidity requirements are a first line of defense in case of a bank run, and can in the current circumstances better be monitored locally, by those which have a knowledge of the local requirements and the local banking market, rather than at home country level. This does however not mean that certain actions cannot be undertaken at EU level, to stimulate the exchange of information and trust among supervisors, and come to some level of standardization of what can be considered as liquid assets and what the ratio should be. The CEBS forms the ideal forum to pursue initiatives on this subject, following up on steps undertaken before by the Groupe de Contact.

We would certainly not argue for a full harmonization of liquidity requirements at EU level. The capital requirements directive, implementing the New Basel Accord in EU law, already requires banks to implement a much more calibrated risk management framework, based on external credit agencies assessments for smaller banks, and on internal ratings for larger institutions. In addition, it allows supervisors to intervene promptly in case a financial institution falls below the capital requirements, by requiring an institution to hold more own funds, to apply a specific provisioning policy and to restrict its activities. Furthermore, it requires financial institutions to have internal controls in place to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital to be adequate to cover the nature and level of risks to which they are exposed

(Art. 123). Internal control requirements are also set in most, if not all Member States, for all listed companies in company law or corporate governance codes. This should also be the approach for liquidity requirements: banks should have the internal mechanisms to monitor their liquidity requirements, subject to some general guidelines.

What could be done is, pending further market integration, to come to mutual recognition of national liquidity requirement systems. This could already be done today for the countries of the euro area, given the existence of a single currency and the harmonization of collateral. Hence the home country's liquidity requirement system would be applicable all-over the EU, although funding requirements monitoring could be done in a cooperation with the host country authorities. Given the existence of the Basel Guidelines on liquidity requirements, and market integration, a convergence of liquidity requirements could be expected in the EU.

To come to that objective, the CEBS could continue the work undertaken by the Groupe de Contact and set standards of best practice for liquidity requirements in the EU. In addition, to strengthen trust amongst supervisory authorities, the creation of an EU clearing house for supervisory information could be considered. Today, the home-hosts relationships are run on a bilateral basis, which does not necessarily improve trust among supervisory authorities.

## Conclusion

Liquidity requirements on financial institutions could reduce endogenous liquidity shocks. At the same time, however, regulators should bear in mind that more liquid bank assets

could contribute to risk-taking by banks. Moreover banks are increasingly vulnerable to wider fluctuations in market liquidity, against which liquidity requirements are of limited use.

Any initiative to harmonize liquidity requirements at EU level should therefore be carefully balanced. As long as financial stability, depositor protection and supervisor's accountability are host country responsibilities, there is no immediate reason to change the present framework. What could be advocated is to set minimum guidelines for liquidity requirements in the EU, based upon the Basel Committee's principles, and to strengthen the home country rule in the implementation of liquidity requirements, certainly within the euro area.

In normal circumstances, maintaining a minimum of liquidity on a decentralized basis should be a standard practice within well-run banks. The implementation of the New Basel Accord will largely strengthen the internal appreciation of risk and risk diversification, away from the very crude asset weightings which are in place at present. Moreover, financial market liberalization, innovations and technological developments have rendered markets significantly more liquid over the last 15 years.

The latter developments may however also strengthen global financial instability. Liquidity requirements will in such circumstances be of little help, they can only be considered as a first line of defense against a bank run, to prevent a single banking problem from becoming systemic. Regional or global systemic instability will require immediate and large scale action by the authorities, but is beyond doubt that the strengthening of the international financial architecture, which has been

undertaken over the last decade at the initiative of the G-7, has largely come to meet such potential problems. ■

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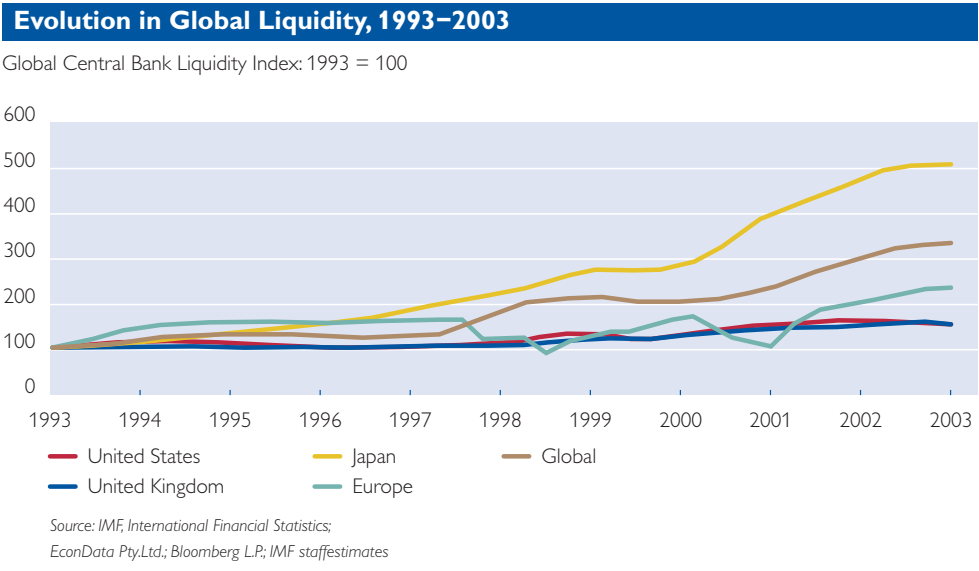
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Annex

Chart 1





HENK J. BROUWER



# Comments on Karel Lannoo, “Capital Adequacy versus Liquidity Requirements in Banking Supervision in the EU”

I believe the choice of topic for Karel Lannoo’s presentation is excellent. The discussion of liquidity risk and liquidity requirements is not only highly relevant it is also timely. Liquidity is now at the forefront of the policy agenda. Liquidity is also a complex issue. Regarding my presentation, in light of the rather limited preparation time I was given, my comments today should be seen more as thoughts to provoke discussion than as balanced opinions. I have based my remarks on a draft paper provided to me by Karel Lannoo.

Let me start my comment with a definitional matter. What is liquidity? Four types of liquidity appear in the draft paper. It starts with discussing the liquidity of an institution, then moves on to the liquidity of a specific market and to the liquidity of an asset, and ends with the liquidity of the market as a whole, or “macro liquidity”.

I believe it would be useful to find one single definition of liquidity. For my discussion today, I have thought of one such definition. It is by no means perfect but it more or less can be applied to all four types of liquidity. I will actually define *illiquidity* as being the degree to which the prices of financial instruments move in order to meet cash demands. That

means an institution is liquid if it can meet its cash demands without causing substantial price movements to the assets being sold to do so. A specific market or asset is liquid if the price moves little when cash is exchanged for the asset traded. And the market as a whole is liquid if this condition applies across markets.

I will now use this definition to raise some questions about the three main claims of Karel Lannoo's presentation. These are first that liquidity



requirements may be necessary, second that the increased liquidity of financial markets may have increased financial stability risks, and third that liquidity requirements need not necessarily be harmonised at the EU level.

### **Liquidity Requirements May Be Necessary**

Let me start with liquidity requirements. The author claims that "the bottom line for policy is that there is no point in holding capital reserves if they cannot be liquidated in times of stress". This seems to make sense. After all, financial crises often are related to cash flow problems, not insolvencies. Reserves are meant to shield against bankruptcy, so surely then they should shield against a crippling liquidity shortage. This in turn, implies that one should be able to liquidate reserves.

Actually, I think the claim is too bold. First, capital reserves *are* useful, even if they themselves cannot be liquidated, for three reasons:

- (a) they still reduce creditors' losses in case of a bankruptcy;
- (b) capital reserves reduce moral hazard induced excessive risk taking; and
- (c) even if the reserves themselves cannot be liquidated they could be used as collateral to obtain liquidity elsewhere.

Second, and this is a more fundamental question about liquidity requirements, I see banks as the main source of liquidity for the financial system. One of their principal roles is liquidity provision to the financial system and economy. They achieve this via maturity transformation. Does this not intrinsically limit the liquidity one should require of banks? To illustrate the point, imagine a 100% liquidity requirement on a bank. All recallable deposits should now be matched by immediately recallable loans. This would drastically reduce the liquidity of companies relying on bank credit and the liquidity in the financial system as a whole. That is, in a financial system comprised of creditors and debtors, in a way someone's liquidity is someone else's illiquidity.

Now, I think we also need a definition of financial stability. At De Nederlandsche Bank we speak of financial stability when a financial system is capable of efficiently allocating resources and absorbing shocks, preventing these from exercising a disruptive effect on the real economy or on other financial systems. I believe the banking system would not be performing this role very well if it were not engaging in liquidity provision through maturity transformation. In other words, whilst requiring banks to be more liquid can increase their own resilience to liquidity shocks, it might reduce the resilience of the rest of the financial system and the real



economy they service. This appears to undermine the very purpose for which banks exist.

Of course, I do not want to say that banks should be illiquid. In fact, at De Nederlandsche Bank we pay a lot of attention to liquidity levels at the banks we supervise, through our liquidity reports. We even require banks to stress test against liquidity shocks and to ensure that their liquidity management is resilient to them. The only question that I would like to raise is to what extent requirements on the *level* of liquidity of banks' assets actually increase financial stability?

### **Increased Market Liquidity Harms Financial Stability**

Whereas I could imagine that increasing the liquidity of banks at some point would start to hurt financial stability, I believe the opposite is true of improvements in liquidity of financial markets. Here, I can combine my definitions of liquidity and financial stability to drive this point home. Markets that are liquid should quickly reflect fundamentals. This means there should be little over- or undershooting when shocks cause sudden sales and purchases, which are by definition matched by demands for cash. This means that liquid markets absorb shocks well and that they allocate resources efficiently. They do not experience excessive price fluctuations when subjected to shocks. This view is similar to that of Borio in a paper published by the BIS last year.<sup>1</sup> He thereby notes that an evaporation of liquidity in markets can act as an amplifying mechanism. In this regard, I therefore do not believe in the supposed tension between growing market liquidity and financial stability.

I can imagine, however, that the liquidity of the system as a whole can be increased by more than is necessary to facilitate the transactions in the real economy and the financial system. In such a situation of "excess liquidity", too much money might end up chasing too few goods leading either to CPI inflation or asset price inflation. As such, "excess liquidity" might be a risk to monetary and financial stability. I still, however, believe this is not the same as the increased liquidity of financial markets we have witnessed due to technical innovations etcetera. As I explained, I believe this type of liquidity actually helps financial stability.



### **Liquidity Requirements Need not Be Harmonised across the EU**

Karel Lannoo suggests that liquidity requirements need not be harmonised across the EU because "the capital requirements directive already requires banks to implement a much more calibrated risk management framework". But did the author not suggest earlier that capital reserves are useless if illiquid at times of stress? Even if this claim is too bold, it still correctly implies that the capital reserves perspective is not enough. Then if we agree that liquidity requirements may be necessary, the capital accord cannot suffice.

Then there is the issue of the "level playing field". The draft paper cites a study claiming the current practice of

<sup>1</sup> Borio, C. 2004. *Market Distress and Vanishing Liquidity: Anatomy and Policy Options*. BIS Working Paper 158.

national liquidity requirements (or no requirements at all) harms the level playing field. I wonder whether a system with home country requirements monitored by hosts would do much to resolve this problem. The Joint Forum, in a report published last year, also highlighted the fact that inconsistent regulations, at least in theory, could actually hinder firms' liquidity management.<sup>2</sup> At De Nederlandsche Bank we believe that banks should manage liquidity at the group level. This



can indeed be more difficult when regulations differ across the countries in which the bank is active. So on the question of whether there should be harmonisation, I believe that at the very least, there should be a step-by-step approach to convergence of requirements. And convergence of

regulation, or harmonisation for that matter, I think should rather be dealt with by the Basel Committee than within the EU. Liquidity is, after all, a truly global affair.

So let me wrap up. I believe the discussion of this topic is well timed and the questions asked in the presentation are the right ones. I am however still unsure about the answers. Should there be requirements on the *level* of liquidity or only on the *management* of liquidity? If so, what sort of requirements should there be? Then, I do not believe in the tension between improved liquidity of markets and financial stability. There may be a relation between financial instability and “excess liquidity”. But even if this is the case, what are the implications for liquidity requirements for banks? Finally, in my view, the claim that liquidity requirements need not be harmonised across the EU, or rather globally, has not been sufficiently argued for. ■

<sup>2</sup> The Joint Forum. 2004. *Report of the Sub-Group on Liquidity Risk. Preliminary Findings on the Management of Liquidity Risk*.



DANIÈLE NOUY



# Ensuring Financial Stability through Supervisory Cooperation

## **What Are the Pre-Conditions for Financial Stability?**

Among the necessary conditions for financial stability are: a sound and stable macroeconomic environment, robust payment, clearing and settlement systems and, last but not least, sound financial institutions. Macroeconomic stability and payment system robustness are carefully monitored and discussed in various institutions and committees. Sound financial institutions require efficient banking supervision, convergence of supervisory practices as well as ongoing supervisory cooperation. A disruption or failure of one of these elements may entail market confidence and consumers' trust.

The CEBS has started operating in January 2004, and its structures have been fully up and running in October 2004. According to the Lamfalussy process, the principles of which have been enshrined in the CEBS' charter, it has three main tasks:

- to provide advice to the European Commission;
- to ensure consistent implementation of Community legislation in the banking field and convergence in supervisory practices; and
- to promote supervisory cooperation and exchanges of information.

These three tasks are phrased exactly in the same way as for the sister Lamfalussy Committees, CESR and CEIOPS, but the three committees are in quite different phases of the regulatory cycle. In the insurance field, the major efforts are focused on the technical work supporting the Community legislation on capital adequacy. CEIOPS' main task at this stage is therefore the preparation of advice on what, in the "Lamfalussy jargon", is called Level 1 legislation, i.e. framework legislative principles. CESR became active while the wave of FSAP directives was being finalised, and the main efforts so far have been centred on advice at Level 2, i.e. on technical implementing measures. The CEBS started operating while the proposal for the capital requirements directive (CRD, also called Basel II or CAD III) was being finalised and submitted to the Council and Parliament. For the time being, the CEBS' focus is therefore mainly on the second and third tasks, i.e. on implementation issues: convergence in supervisory practices and networking between authorities. The CEBS is of course also active in the other areas mentioned in the charter. But it is clear that its contribution – in particular to financial stability – will be assessed primarily on the basis of the progress delivered in the implementation of the CRD.

Why do we need enhanced supervisory cooperation and convergence of supervisory practices in Europe? European integration has increased the depth and liquidity of financial markets and has strengthened their resilience against shocks; nevertheless, it has also increased the risk of banking crises spreading across national borders. To reduce this risk, banks supervisors have been improving their cooperation for quite a long time and

are now harmonising their supervisory practices. Such convergence is also needed to promote an efficient implementation of new, sophisticated regulations such as Basel II, to disseminate banks' and supervisors' best practices, to improve the level playing field across Europe (which is crucial, as EU is a single market and even a single monetary zone for many countries), to avoid supervisory arbitrage, and to limit administrative burden for banks. All these elements mean better banking supervision and therefore more financial stability in Europe.

In fact, Basel II/CRD provides an unprecedented window of opportunity for delivering concrete results regarding supervisory convergence in Europe. Too often, moving to common standards is costly. Changes must be introduced, which impose to each and every bank to adopt a new reporting framework, to ensure compliance with new requirements and to be scrutinised according to new criteria. But when the whole framework is changing, it makes a lot of sense for supervisors "to converge before they diverge", as stressed by José Maria Roldán, the CEBS' Chair. This is a unique opportunity to promote convergence.

The task is nevertheless daunting: The CEBS has to progress towards common approaches on very complex issues; and it has to do it very quickly, as banks need guidance already by the end of 2005, in order to take decisions early enough for the implementation of the new framework.

### **Why Is Enhanced Supervisory Cooperation Particularly Needed in Europe?**

Basel II represents a paradigm shift in banking supervision. For decades banking supervision consisted of a

series of wide-ranging and intrusive administrative constraints, coupled with large discretionary powers attributed to the supervisory authority. Until the early 1980s product and geographic markets were segmented by law or administrative provisions, the opening of branches had to be authorised in order to avoid excessive competition, price controls and quantitative constraints to credit growth were often in place, large loans had to be authorised on a case-by-case basis, etc. Basel I was the first major breakthrough. The Accord brought us to a different stage, in which level playing field was sought on a new key tool for prudential supervision, the solvency ratio. The international layer of banking supervision was quite simple: all banks had to calculate this ratio and stay above it. Wide discretion was left to national authorities to determine other components of the supervisory toolbox, including the concrete actions to be taken in relation to the capital ratio. For instance, in some countries a prompt corrective action framework was built up, which envisaged the activation of some supervisory interference when certain trigger levels of the ratio were hit. In some countries, authorities could impose additional capital requirements, while in others this was not legally feasible. In the EU, of course, a much higher degree of harmonisation was achieved with the second banking coordination directive and the creation of the Single Market, but supervisory practices remained, to a large extent, diversified across Member States. First, with the amendment on market risk, and now on a much wider scale with Basel II, supervisory requirements have moved towards a growing reliance on the internal measures and safeguards developed by the banks themselves for

controlling risks. The new framework is risk-focused. It cannot be treated as a compliance exercise; it is intended as an integral part of the management and governance of the banks. The most remarkable feature of Basel II is that it does not put forward a rigid framework, a straightjacket of requirements superimposed on bank practices. The new capital adequacy framework is expected to evolve with best industry practices; it provides incentives for improving, refining and innovating in



risk management. More than a static framework, it represents an evolutionary approach to banking supervision.

This change was mostly brought about by the shortcomings of the previous approaches. More intrusive approaches to supervision, by dictating the areas of business in which banks could and could not expand, and by constraining a sound pricing and, in some cases, hedging of risks, showed all its weaknesses with the developments of international banking and with the crises of the 1980s. The approach based on broad-brush requirements led to an easier and easier circumvention of the rules, as information technology and financial innovation supported a growing ability of banks to unbundle and repackage risks in such a way to minimise the regulatory capital.

Now the supervisory framework is much more in line with industry practices, and it was very reassuring to see that, after extensive rounds of



consultations, the proposed directive received support from banks of all types and sizes. Nonetheless, some parts of the framework are complex and there are growing concerns about its implementation.

In a cross-border environment, there is indeed a concern that such a complex package could be implemented into national legislations and then into operational supervisory practices that may differ across countries. If this were to occur, the compliance



burden for cross-border groups would be increased, as they would have to report to a number of different authorities,

convince them of the adequacy of their capital, satisfy at the same time somewhat different criteria.

Under Basel I, the international dimension of cooperation was mainly focused on the exchange of information and on agreements between supervisors on the division of tasks in the monitoring of international banks. The simple structure of the capital requirements did not leave space for much interpretation. Now for the first time supervisory practices are at the core of the new framework: consistent implementation has to be addressed at two levels, the transposition of the Accord into national legislation and the supervisory practices that will translate the new rules into day-to-day supervision. At the global level, beyond EU, the Accord Implementation Group of the Basel Committee is extremely active in supporting an affective and consistent implementation of Basel II.

### **What Is the Role of the Committee of European Banking Supervisors in Promoting Financial Stability?**

As far as the CEBS is concerned, the main challenge is consistent implementation. As the adoption of the directive is coming closer to an end, the attention starts focusing on the transposition of the new framework into national legislations. The CRD is still a pre-Lamfalussy directive: Although it will be possible to revise extensive parts of the directive, in particular the technical annexes, via “comitology procedures” (thus enhancing the ability of the regulatory framework to adapt to changes in market structures and practices), there is no distinction between framework principles and technical rules, between Level 1 and Level 2 measures. This means that there is no room for assessing whether, for some technical measures, regulations – directly binding in all Member States – would be a more suitable legislative tool than directives – which need to be implemented in national legislation in all Member States. As the Lamfalussy report noted, reliance on directives rather than regulations “... leaves more latitude for Member States to implement Community Law but too often leads to uneven transposition and different interpretations”. There is in fact a widespread perception that notwithstanding the huge effort in harmonisation, common rules have been often implemented in slightly different ways in national rulebooks and this may have prevented the Single Market to deliver its full benefits. Institutions operating on a cross-border basis have to comply with a set of slightly different requirements on supposedly harmonised supervisory tools, with the result that compliance costs increase – and

are perceived by regulated entities as dead-weight, useless costs.

Besides differences in the transposition of common provisions, there is also the concern that Member States could adopt layers of regulatory additions that go beyond the provisions of the directive, so that the benefits of a harmonisation become less evident and the costs of cross-border compliance increase.

Finally, there is the issue of visibility of the EU layer of common rules and practices. There is quite a lot of attention devoted to Community legislation when it is being discussed and finalised. But after this stage, the set of rules banks have to comply with in the Single Market remains a collection of national rulebooks. In particular, the visibility of a common EU regulatory framework vanishes as soon as banks move into the concrete provisions they have to comply with.

There are eight main streams of work that have been activated by the CEBS to tackle these issues and, as a result, improve financial stability in Europe.

#### **Common Reporting (COREP)**

A common framework for the reporting of the solvency ratio (Basel II or CRD) has already been submitted to public consultation and the CEBS is working on assessing and incorporating the comments received. This COREP common reporting framework covers credit risk, market risk and operational risk as defined in the CRD. It is applicable to all EU credit institutions and investment firms. The “COREP package” consists of common templates as well as a common XML/XBRL-based technology platform, inclusive of a taxonomy to be used as a reference library. The proposal pursues the highest level of standardisation across

the EU, leaving each supervisor free to decide the scope and the level of aggregation required within the common framework. Moreover, in order to increase standardisation, the number of templates has been minimised. As a result, it is expected that banking groups operating on a cross-border basis will face a lower administrative burden, while small, local banks will not be imposed additional costs as the reporting framework had to be updated in any case. Also the exchanges of information between supervisors should be facilitated, with increased cross-border comparability.

#### **Common Financial Reporting (FINREP)**

The CEBS has prepared a common EU response to the new accounting standards (IFRS). The so-called common “prudential filters” (i.e. special prudential treatment of certain items as well as certain latent profits or losses) have been developed in order to limit the volatility of prudential own funds resulting from the IFRS introduction. Moreover, the CEBS has developed an EU harmonised financial reporting framework that includes a balance sheet, a profit and loss account as well as annexes adapted to the IFRS.

#### **Supervisory Disclosure**

The CEBS has no enforcement powers and can only make use of soft tools crafted via consensus between national competent authorities. But the disclosure of supervisory information will allow for a proper discussion of differences. It will provide market participants with information as to the scope for divergent implementations and with a tool for exercising pressure towards more consistent choices, if they are considered necessary. As disclosure of information by banks is

expected to support market discipline, supervisory disclosure is expected to act as a disciplinary device towards consistent implementation.

Article 144 of CRD requires that competent authorities disclose a set of information related to the directive implementation. The disclosure framework must provide a comprehensive set of supervisory rules, tools and guidance and permit meaningful comparisons in four specific areas:

- any kind of national rules and guidance;
- the ways national discretions are exercised;
- the supervisory review, (namely the criteria and methodologies used by national authorities in the Supervisory Review and Evaluation Process (SREP) and the Individual Capital Assessment Process (ICAAP); and
- some aggregate statistical data on key aspects of the implementation in each Member State.

The framework proposed by CEBS will be based on a set of tables, containing both qualitative and quantitative information, and organised around the four sections corresponding to the four areas indicated in Article 144 of the CRD. It adopts a user-friendly approach using the same ways to disclose, via the Internet, as it is the best way forward to avoid unnecessary administrative burden for supervisors. The CEBS website will be the point of entry, giving an overview at European level and will provide links to national websites where the detailed information will be accessible. This two tier structure should allow for easy comparability and for access to detailed information at the national level, in “clones websites”, with similar structure in order to favour easy consultation and navigation. The reliance

on common formats and the use of a common language, English, should support meaningful comparisons.

Allowing for cross-border comparisons is not only positive in order to track and foster progress towards consistent implementation. It also provides for a clearer visibility of the EU layer of rules, as the common elements will be visible, together with the country specific ones. Supervised entities should gradually become more aware of the tiered structure of the rulebook they have to comply with: common framework principles, (embodied in directives) common technical rules and supervisory guidance, (enshrined in the more flexible components of the CRD and in CEBS’ guidelines) as well as the national component, which should reflect specific aspects and practices of local markets and banking sectors.

### **The Reduction of the National Discretion Options**

With reference to national discretions, the CEBS has conducted an attempt to cut down the number of options and discretions in the directive text.

Following a request for advice, CEBS proposed to delete 23 discretions and almost all the proposals were accepted in the text approved by the Council. The tight timeline did not allow however for a careful review and for extensive consultation with the industry. Therefore, as a second step, the CEBS asked its Consultation Panel to help identifying those options and national discretions that could have a significant impact on the conduct of cross-border business and on the level playing field. In fact, there might well be discretions that reflect a specific feature of some local markets and do not have any material effect on institutions operating throughout

the Single Market. For instance, several discretions refer to transitional periods, needed to adapt national legislation and move to the new setting. This exercise should allow the CEBS to identify priority areas for further work.

In a third step, the CEBS will then try to develop a consensus on possible further reductions of such discretions. As most national discretions are contained in the annexes to the CRD, this would still be possible without burdensome legislative revisions via co-decision, as changes could be introduced via comitology procedure. If deleting significant options or discretions would not be possible, efforts should be made to reduce their impact via convergence in the practices adopted in exercising it.

It is not as much as it was expected when the CEBS started this work; but it is not un-significant, and national options will probably go more easily after the implementation of the CRD. Hopefully supervisory disclosure will exercise further pressure in this direction.

#### **The Validation of Internal Approaches for Credit and Operational Risk (IRB and AMA)**

Regarding validation, the work is being focused on the definition of common quantitative and qualitative criteria for discrimination and calibration of rating systems, estimates of the probabilities of default, losses given default, exposures at default and AMA parameters. Furthermore, the CEBS is developing minimum standards for the review of the methodologies applied by credit institutions and investment firms. The CEBS is not aiming at detailed guidance, de facto setting up new requirements: The objective is to clarify what the supervisor expects.

#### **The Implementation of Pillar 2**

This is the area in which more leeway is left to discretionary evaluations of supervisory authorities, thus opening room for potential different approaches adopted by national supervisors. As to Pillar 2, the CEBS has already issued a first consultation paper in 2004, receiving a rather positive feedback. The three core principles developed in that paper were:

- a clear statement that the ICAAP is the responsibility of the supervised



institution;

- the definition of the SREP as a challenge to the internal assessment put forward by the bank, thus starting a necessary dialogue between the institution and the supervisory authority; and
- the principle of proportionality, according to which the intensity and depth of the dialogue should be proportionate to the systemic importance, nature, scale and complexity of the institution.

Following the comments received in the consultation, the CEBS has developed further work and intends to submit soon to public consultation a second version of the paper. The new paper will further flesh out the respective responsibilities of supervisory authorities and institutions, and the interaction between the ICAAP and the SREP. Further work is being started on specific risk factors, such as concentration risk and interest rate risk in the banking book, also with a view

to developing common principles. In general, the approach adopted is not prescriptive and focus on processes; it aims at reaching more clarity and commonality in the approaches that will be used by supervisors, without putting forward too specific requirements.

### **The Home/Host Issue**

The CEBS is preparing the issuance of principles governing the cooperation and the two-ways exchange of information between home and host authorities. These guidelines are being prepared with the objective of providing a framework which would deliver an easy and straightforward division of labour between all the authorities involved, with a common understanding of:

- Who should activate a process?
- Which information should, as a rule, be channelled? And when?
- How different steps in a risk assessment process should be shaped?

The restructuring of large groups has produced an increased misalignment between the legal and operational structures; organisational choices are often made at the firm level. The legal entity is not anymore a self-contained body performing all the functions connected to the services provided in that jurisdiction and directly controlling all the related risks. This creates a serious challenge for a risk-focused supervision, as supervisory responsibilities are allocated on the basis of the country of residence of the legal entity, although the monitoring of the risks incurred by such entity may well require access to information available outside the jurisdiction of the supervisor. This aspect could give rise to higher compliance costs, if in order to reconcile the legal entity approach with the functional one controls end up to be duplicated by several authori-

ties involved in the supervision of a cross-border group. In the absence of convergence in supervisory practices, this might even determine conflicting supervisory requirements.

The provisions introduced in the proposed CRD reflect awareness of this issue. It enhances the tasks of the consolidated supervisor and creates a coordination mechanism between competent authorities, which should minimise the scope for duplications and additional compliance costs. But all these provisions, and in particular those asking for a joint decision for the validation of IRB and AMA approaches, call for the definition of supervisory guidelines, which better define the respective tasks of all the parties involved.

There is therefore a need for principles governing the cooperation and the two-ways exchange of information between home and host authorities. Such guidelines are being prepared with the objective of defining a clear framework of the basis of which more specific, tailor-made agreements could be defined by the authorities involved in the supervision of specific cross-border groups. The intention is to provide a framework which should articulate a clear division of labour between all the authorities involved, with a common understanding of who should activate a process; which information should, as a rule, be channelled and when; how different steps in a risk assessment process should be shaped; etc.

An important point is the recognition that the degree of involvement and cooperation should be defined according to the significance of an entity, with respect both to the group business and to the local markets in which it operates.



A very important chapter of this guidance will concern the specific issues that need to be addressed to ensure a smooth approval process for the validation of IRB and AMA approaches. Following the innovative provisions that have been introduced in the proposed CRD, all the authorities are required to come to a joint determination and, if within a certain time frame this does not happen, the consolidating supervisor has to take the final decision.

Before submitting this delicate piece of work to public consultation, the CEBS has “road tested” it with reference to some specific cross-border groups, in order to identify possible unresolved issues and further refine the criteria.

An interesting question concerns the possibility, envisaged in the directive, to delegate supervisory responsibilities to the home/consolidating supervisor. This provision was already present in the consolidated banking directive, but it has not been activated very often (mostly for the supervision of liquidity risk, for which there was already a large contrast between the old supervisory framework and the increasingly centralised treasury management of banks). Here a distinction should be made between delegating responsibilities and tasks. While delegation of tasks seems to be easily workable, provided that there is the appropriate trust between authorities and a sufficient commonality of approaches, delegation of responsibilities may raise some difficult legal issues. For instance, in case the consolidated supervisor is delegated the responsibility of supervising a subsidiary in another Member State, how would the enforcement of some hard supervisory measures take place? According to which legal framework

such supervisory procedures could be initiated?

Moreover, there might be cases in which home and host authorities maintain different views, for instance with reference to the significance of a group component, or to the optimal distribution of capital within a group. Different views are more likely when home-host issues are addressed at a general and abstract level, while when concrete issues are addressed it is probably easier to come to a shared view, especially when there is a habit to cooperate and rely on each other’s assessment. However, the possibility cannot be ruled out that in some cases different positions have to be reconciled. In such cases, it is the legal attribution of responsibilities that has to determine the final decision.



### **Crisis Management**

The CEBS is, and will increasingly be, a leading actor in crisis prevention and management. It has been working to define guidelines regarding cooperation between supervisors in emergency situations according to the CRD:

*“Competent authority responsible for the exercise of supervision on a consolidated basis of EU parent credit institutions shall carry out the following tasks (...) planning and coordination of supervisory activities in going concern as well as in emergency situations.” (Article 129)*

In such circumstances, the distribution of responsibilities is less precisely defined, in light of the constructive ambiguity that dominates the arrangements for crisis management and the


role exercised by other authorities, including central banks, deposit guarantee schemes and, in extreme cases, ministries of finance.

This new guidance is being incorporated in bilateral Memoranda of Understanding (MoUs) between supervisors, allowing better crisis management through an increased role of the consolidated supervisor.

The CEBS takes part in the High Level Working Group on Crisis Management; its work is focused on the definition of a joint MoU with national ministries of finance, with the objective of crisis resolution. It will be a MoU distinct from the 2003 Supervisors MoU on Crisis Management and Resolution (not to

increase moral hazard), that will complement the supervisors' MoU.

### **Conclusion**

The traditional supervisory cooperation has become a more pro-active process. For the CEBS and EU national supervisors, it is a “succeed or perish situation“! The ultimate target is to develop a common supervisory culture in Europe, i.e. to make sure that it does not make any difference for a bank to be supervised by an Austrian, a Finish, a French, ... supervisor, because they all do the same job with the same tools. This can be developed by common training of supervisors, staff exchanges, joint on-site examinations, etc. 





JUKKA VESALA



# Which Model for Prudential Supervision in the EU? Comments on Danièle Nouy, “Ensuring Financial Stability through Supervisory Cooperation”

The starting point for a discussion of the topic seems clear: A fragmented system of national supervision would not deliver a good safeguard against financial instability in the face of deepening integration in the EU. Supervisory cooperation has been developed in the EU for some time already, and Danièle Nouy’s presentation describes very well how the Committee of European Banking Supervisors (CEBS) has taken further impressive steps in a short period of time towards – what she labelled as – “... a more formalised, and very efficient banking supervisory framework: some kind of EU decentralised model“. A large part of the new activity has been associated with the pressing needs to step up cooperation related to the implementation of the Basel II rules in Europe.

While a lot has been already done, many important questions seem to deserve further attention as regards supervisory convergence and alloca-

tion of supervisory powers. I will discuss, first, the basic models to develop the EU supervisory structure, and, second, some key specific issues.

### Problems of Fragmented Supervision

It is useful to recall at the outset the main problems of uncoordinated national arrangements when there is deeper integration and significant cross-border institutions. They are twofold from the perspective of optimal institutional



design:<sup>1</sup> First, there are questions about the effective supervision of cross-border institutions, when the incentives and

interests of home and host authorities could be misaligned (barring any questions of resources). Second, spill-over effects (externalities) of a crisis on other countries may not be duly observed.

In theory, two solutions can be envisaged: Designing an appropriate “contracting” mechanism among supervisory authorities (“an EU supervision model”), or establishing a supranational European supervisory authority for large cross-border institutions.

Discussing the modalities of the second solution – e.g. whether to have an ESCB-type of a system, or a single institution – is beyond the scope of this brief paper. It would solve the above two problems of institutional design more neatly than the first solution, but arguments against have also been presented. In my view, the case

for a European authority will become stronger with the emergence of a larger number of pan-European institutions, but it will be feasible only in the long run due to many unresolved, for instance legal issues.<sup>2</sup>

Hence, a practical and immediate solution continues to be based on national competence. In what follows, I will discuss two alternative models: “lead supervision” and “a network of competent supervisors”. Fragmented, weakly cooperative model is not feasible. As Danièle Nouy put it: “For the CEBS and EU national supervisors, it is a succeed or perish situation”.

In evaluating the models, the crucial issues from the financial stability angle are again: ensuring effective supervision of cross-border institutions, and providing for effective crisis management. I think that, here, a crucial and unavoidable question is: Who picks up the bill when a systemically relevant entity in the host country runs into trouble?

### Model 1: “Lead Supervision”

Cross-border institutions are strongly behind a “lead supervision model”, under which the home country (lead) supervisor is responsible for prudential supervision (capital adequacy and liquidity) of the whole group and all its entities irrespective of their legal status (subsidiary or branch). The lead supervisor would decide autonomously on the supervisory measures and reporting requirements, both at the group and local level. In the purest form, there would be limited role for the host authority even to obtain

<sup>1</sup> An analysis of these issues can draw on the economics of mechanism design (see e.g. Milgrom and Roberts, 1992). These insights can be used to analyse the incentives and interests of home and host authorities to promote the overall “European good”. See further discussion in Enria and Vesala (2003).

<sup>2</sup> See e.g. Schoenmaker and Oosterloo (2005); and Schilder and Knot (2005).

information (as often already the case in foreign branches).

The model would imply a transfer of the current formal responsibilities of the host authorities with respect to the solo-supervision of subsidiaries to the lead supervisor. With respect to branches (and “European Company banks” operating via cross-border branches), such a model is already embedded in the EU framework, as the formal responsibilities of the host authorities are very limited.

The lead supervision model is in line with the concept of an EU internal market and would reduce the burden of international institutions. But does it best ensure effective supervision of cross-border institutions, or is it in line with national crisis management arrangements?

I take the second issue first. Consider a solvency crisis in a cross-border bank. There will be negotiation between the home and host ministries of finance. Even if all depositors were protected by the home country deposit guarantee system, it would be very difficult for the host country to allow an unordered failure of the bank, if the bank made up a substantial part of the host country’s banking system. In the case the bank is not systemically important and is “replaceable” in the home country, the conflict of interest would be strong and the host country would have to consider alone some sort of a rescue operation (likely trying to confine it to the local activities of the institution). If deposit guarantee funds were not sufficient, there would be pressure on the host country to protect local small savers as well.

Hence, there can be host country public money at stake, while there would be no corresponding supervisory competence in the lead supervision model. It can be considered illogical

that a country could be obliged to pay for a crisis in an institution that is not under any supervision of that state. Moreover, the academic literature sees the basic rationale of prudential supervision as preventing the excessive risk taking (moral hazard) incentives arising from the special public safety net extended to banks. Clearly, it is in the host country’s vital interest to have available preventive supervisory measures, e.g. demand higher level of capitalisation in order to reduce the risk of failure. In the EU, one can much rely on the competence of the home supervisor, but it would be inappropriate to leave the host supervisor without any role.

The pure lead supervision model could entail problems concerning the effective supervision of cross-border groups as well. For example, the home authority might put less importance on supervising the foreign activities of a financial institution or group (or even the whole group) than the host authority would wish – especially if the institution were more important for the host market than the home market. Such cases can be envisaged in reality. In turn, the host authority may lack incentives (or ability) to deliver relevant information to the home authority, as the host authority is not responsible for the overall consolidated supervision (or has shortage of information). Host supervisors can, for instance, monitor the areas of growing risks in their markets and make cross-institution comparisons, which can be important for assessing the overall risk profile of the institution in question.

## **Model 2: “A Network of Competent Supervisors”**

A model of “a *network of competent authorities*” entails effective home-host

cooperation and maintains an active role also for host authorities, especially if foreign entities are of systemic relevance in the host country. The first main element of the cooperation is effective exchange of information in both ways: From home to host on the overall condition of the cross-border institution – frequent ongoing information and timely information in times of stress – and from host to home on the risks accrued in local markets. The second main element is the effective allocation of operational supervisory tasks between the home and host.

The network model would allow observing financial stability concerns in all Member States better than in the lead supervision model, and would ensure the host input to the overall supervisory process of cross-border institutions. This approach could also be actually favourable to further integration as it could prevent protective host country policies motivated by financial stability concerns. Finally, it could entail a lower risk of supervisory arbitrage (as long as supervisory convergence is incomplete). The risk of supervisory arbitrage could become larger in the future as the European Company Statute allows an easy transfer of corporate seat in the EU.

A controversial point is whether the role of the host supervisors should be recognised in case of major cross-border branching operations (like now in the case of subsidiaries). In my view, the stark distinction in the original EU legal framework between subsidiaries (host responsibility) and branches (home responsibility) should be diluted.

First, the risks and significance of host market businesses can be very similar in both cases, and the group can in both cases have substantial centralisation in internal organisation and risk management.<sup>3</sup> Second, a move to a European Company form by major cross-border banks can result in systemically relevant branches, entailing a legitimate host country financial stability concern and possible crisis management and financing responsibility, which should be combined with available, preventive supervisory tools.<sup>4</sup> Such cases were not envisaged when the Single Market legislation was crafted.

### **Efficient Solution: Coordination by the Home of the “Network”**

The network model is less streamlined and more burdensome for international institutions than the lead supervision model. However, duplications should be avoided through close coordination between the home and host authorities (e.g. joint supervision plans and common reporting structures), full information exchange, and further convergence at the EU level of supervisory requirements.

To support an efficient supervisory process geared to monitor the overall condition of cross-border institutions, the overall coordination responsibility should be clearly allocated to the home authority, also as regards subsidiaries. Developing the network model in this way could be the most balanced way to proceed towards “European supervision”. It would obtain the efficiency benefits of the lead supervision model,

<sup>3</sup> The main difference is that the host country might be able to ring-fence the liquid and sound assets of a subsidiary, and – at the same time – prevent their use to stabilise the condition of the entire group.

<sup>4</sup> If Nordea turned into a European Company, a cross-border branch would cover 30% to 40% of the Finnish banking market depending on the product. Such cases could emerge also elsewhere, e.g. in the new Member States.

while preserving the financial stability benefits of the network model. Supervisors can still work a great deal to enhance the efficiency of supervisory cooperation. The principles of home-host cooperation and the consistent reporting frameworks (COREP and FINREP) being developed by the CEBS are very helpful to avoid duplications and to reinforce cooperation and information exchange.

### Refinements to the Model

There are several issues, which will need further consideration when developing the model of supervisory cooperation. I will address a few of them in the interest of discussion.

First, there is a tricky issue of final *decision-making power*: Whether it should rest with the coordinating home supervisor, or with the full “college” of home and host supervisors of a cross-border institution? In any case, host authorities should be able to participate in decision-making, especially if there were (legal or de facto) host country crisis management responsibility. For instance, there could be an agreement that the home authority should consult the host authorities on major supervisory measures that would be adopted on the whole institution.

Cooperation among supervisors will likely proceed in good spirit in most of times and without really the need to have the coordinating supervisor to decide at the end. But what to do when the “college” strongly disagrees, or a host country has a vital issue at stake? If a mediation mechanism lacked within the supervisory community, the host supervisor might have to turn to its local ministry and demand negotiation with the home country.

To resolve issues among supervisors themselves, one could consider developing a *mediation function* at the

EU level under the auspices of the CEBS. This option faces the problem that the CEBS cannot issue legally binding decisions upon national supervisors, but it could exert effective “peer pressure” on its member institutions.

Second, one could think that cooperation among authorities could be effective without explicit agreements. But, in light of economic theory, relying on “implicit agreements” may not guarantee a good outcome. Namely,



when actions are not observable and information is asymmetric – such as supervisors’ activities and information – the parties to such an implicit contract may choose to pursue their own private interests. For instance, the home authority may be reluctant to reveal unfolding problems in an institution to other authorities, because it may fear that widespread knowledge gives rise to the risk of adverse market reactions. This may not leave sufficient time for the host authorities to assess the actions needed to preserve their local financial system stability.

To avoid this type of problems, *explicit ex-ante agreements among authorities* (i.e. MoUs) can be used to clearly delineate each others’ responsibilities and clarify expected behaviour. The CEBS might promote the principle that explicit MoUs underpinning supervisory cooperation should be further developed to allocate supervisory duties. They should also contain binding requirements (possibly even



trigger points) and time frames for information exchange and consultation in times of crisis.

The agreements could also benefit from *standardisation* by making the further development of the bilateral relations more agreeable to all authorities, since it would allow for *reciprocity*. For example, an authority might not provide information to another supervisor if a third authority does not agree to behave in the same way under similar circumstances.



Third, agreements among authorities could be effective without any legal obligation under the EU legislation governing supervisors' cooperation and convergence, provided that there is some other mechanism in place to *check and enforce compliance* with the agreements (see e.g. Padoa-Schioppa, 2004, chapter 7). Irrespective of any formal mechanisms, "reputational penalties" as a result of a breach of widely known agreements may be higher under a system where there is explicit pre-commitment and strong *peer review* among authorities.

The disclosure framework for supervisory authorities' decisions and regulations – being developed under the leadership of Danièle Nouy – can go a long way towards fostering the *peer review*. Other activities and instruments might also be devised to this end. The CESR has considered, for instance, the use of "mission teams" to collect information about possible inadequate convergence or cooperation.

Fourth, the CESR has concluded that supervisory convergence can take place effectively only if the relevant authorities have *equivalent and adequately strong powers* to supervise and sanction institutions. It might be worthwhile to investigate whether differing legal powers of supervisors is an obstacle to further convergence also in the prudential supervisory field.


Fifth, strengthening of the coordinating role of the home (lead) authority might need *changes in EU legislation*, as well as apparently creating of an adequate role for the host authorities vis-à-vis foreign branches of systemic relevance. Such legal changes could be needed to back up home and host authorities' activities, clarify industry's expectations, and support CEBS' further work in developing supervisory cooperation. If unaltered, the EU legal framework could even constrain supervisors' cooperation, which should not be the case. In addition, supervisory cooperation may not be equally effective across the EU to prevent competition in supervisory laxity and supervisory arbitrage, unless its main features are stipulated in the EU legislation.

The EU legislation should then probably make a distinction between significant and non-significant subsidiaries and branches. This might be left to home and host supervisors' judgement, based on a list of elements of significance.

Finally, the *consistency of supervisory and crisis management* arrangements is a key issue, as discussed above. Such inconsistencies could also constitute obstacles to integration. To this end, the CEBS has started useful work as regards cooperation among supervisors and other relevant authorities, and will advise the European Commission on a needed reform of the EU deposit guarantee arrangements.

## Concluding Remark

I have discussed issues related to cooperation among supervisors with hindsight to the core point that efficient banking supervision is the main policy instrument to safeguard financial stability – as clearly embedded in Danièle Nouy’s presentation.

Banks’ weakness and failure can lead to financial instability (i.e. systemic risk) through contagion via interbank credit, payment system or market exposure links between banks. But recent very interesting research conducted here in Austria has shown that the exposure of many banks simultaneously to common external shocks may be a more predominant risk to financial stability than contagion from single bank failures.<sup>5</sup> Monitoring such common exposures is the very important macro-prudential aspect of financial stability surveillance. It is and should be developed in cooperation among central banks and supervisors, bringing together information of banks’ exposures in various economies and markets with the potential macro-economic and financial market sources of risk. At the EU level, the Banking Supervision Committee and the ECB conduct very valuable work in analysing the stability of the EU banking and financial system and pooling together information from national sources. 

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<sup>5</sup> See Elsinger et. al. (2004). A recent study by Gropp and Vesala (2004), obtained similar results for a set of EU banks.

KARL-HEINZ GRASSER



## Kamingespräch

Ich darf mich ganz herzlich für die Einladung hierher zur 33. Volkswirtschaftlichen Tagung der Österreichischen Nationalbank bedanken. Ich bedanke mich auch, weil der Gouverneur gesagt hat, dass unsere Beziehung zwischen Finanzministerium und Notenbank so gut ist. Ich kann das von meiner Seite nur unterschreiben. Als Finanzminister nimmt man den Ausspruch von Allen Greenspan „Central Bankers are always right“ am Anfang nicht wirklich zur Kenntnis, aber im sechsten Jahr sagt man dann, es dürfte doch so sein. Vor allem dann, wenn man sich nicht zur Zinspolitik äußert, ist man immer einer Meinung mit dem Gouverneur, und das habe ich in den letzten Monaten und Jahren wahrscheinlich fast immer so gehalten. Jedenfalls nochmals herzlichen Dank für das gute Verhältnis, ich glaube, es ist wirklich eine Freude; gemeinsam beim Währungsfonds, in der Weltbank, auch bei den informellen Treffen des ECOFIN-Rats, sehen wir immer wieder, dass es hier ein gemeinsames Verständnis einer stabilitätsorientierten Makropolitik gibt.

Damit, meine Damen und Herren, darf ich überleiten, und Sie zuerst über die Schwerpunkte der österreichischen Fiskal- und Wirtschaftspolitik informieren. Ich denke, dass wir seit dem Jahr 2000 erfolgreich und konsequent einen Kurs gegangen sind, der drei

wesentliche Schwerpunkte gesetzt hat. Der *erste Punkt* ging von einer Situation aus, in der man uns in Europa gesagt hat: Österreich erfüllt nicht die Kriterien des Europäischen Stabilitäts- und Wachstumspakts, verbessert eure Finanzpolitik! Wir waren in Richtung eines 3-prozentigen Defizits unterwegs. Unsere Regierung hat damals eine ganz wesentliche Trendwende eingeleitet und hat immerhin schon 2001 das erste Mal seit mehr als 25 Jahren einen Überschuss im österreichischen



H a u s h a l t  
e r r e i c h t .  
2002 waren  
wir fast aus-  
geglichen,  
für 2005  
haben wir  
ein Defizit  
von 1,9%

und für 2006 von 1,7% des Bruttoinlandsprodukts beschlossen. Nach den ersten vier Monaten heuer kann man sagen, dass der Budgetvollzug sehr gut läuft und dass ich nicht wie andere Länder Probleme sehe, diesen Vollzug zu schaffen: Keine Lücken auf der Einnahmenseite, keine wesentlichen Mehrausgaben auf der Ausgabenseite, also keine Bedrohung der Stabilität. Diese Ausdehnung des Defizits auf 1,9% haben wir nur deshalb, weil wir eine sehr große Steuerreform in der Größenordnung von 1,2% bis 1,3% des Bruttoinlandsprodukts umgesetzt haben. Zum richtigen Zeitpunkt, wie ich meine, weil unsere Strategie eben war: zuerst Haushalte konsolidieren, dann Steuersenkungen. Für mich ist es vollkommen erwiesen, dass es darum geht, sowohl solide Staatsfinanzen zu haben als auch höheres Wachstum, bessere Beschäftigungswerte, Reduktionen bei der Arbeitslosigkeit zu erreichen, und dass es nicht um ein

Entweder-oder geht, wie das einige sagen.

Der *zweite Punkt*: Wenn man in der Lage ist, den Haushalt zu konsolidieren, dann geht es für ein Land wie Österreich, das auf einem skandinavischen Weg war, in Richtung staatlicher Einfluss in vielen Bereichen, staatliches Eigentum, hohe Steuer- und Abgabequoten, um eine Trendwende. Wenn man diese erreichen will und nachhaltige Entlastung, nachhaltige Reduktion bei den Steuern und Abgaben anstrebt, dann musste man eben zuerst den Haushalt konsolidieren, um das möglich zu machen. Wir haben seit dem Jahr 2001 in Österreich die stärksten Rückgänge bei der Abgabenquote in ganz Europa, es sind also mehr als 4% in der Abgabenquote zurückgenommen worden; und damit sind wir noch nicht zufrieden. Wir werden weiter gehen mit diesem Weg einer nachhaltigen Entlastung als Frage der Wettbewerbsfähigkeit und der Qualität des Wirtschafts- und Arbeitsstandortes. Und der *dritte Punkt* ist natürlich für Österreich wie für ganz Europa wichtig: Was tun wir für mehr Wachstum? Wie schaffen wir es, Zukunftsinvestitionen seriös zu finanzieren? Wir haben das im Bereich Forschung und Entwicklung, im Bereich Bildung, im Bereich Infrastrukturinvestitionen geschafft, wo wir auch jetzt versuchen zu beschleunigen, weil gerade die Verbindungen zu unseren mitteleuropäischen Nachbarn besonders wichtig sind. Wir gehen seit Beginn der Neunzigerjahre sehr stark in die osteuropäischen Märkte hinein: Banken, Versicherungen, Industrie, mittelständische Betriebe. Ich bin sehr froh, dass dieser erfolgreiche Weg gegangen wurde. Es ist ein Weg, bei dem man stolz sein kann, wenn das kleine Österreich, diese kleine, offene Volkswirtschaft, es schafft,

mit unseren Betrieben Nummer Eins bei den Direktinvestitionen in Rumänien zu sein, Nummer Eins in Bulgarien, Nummer Eins in Kroatien, Nummer Eins in Slowenien, Nummer Drei in der Slowakei, in Ungarn und in der Tschechischen Republik. Wenn Sie die gesamten *Foreign Direct Investments* nehmen der internationalen Staatengemeinschaft in den zwölf neuen Mitgliedstaaten, wenn ich hier Rumänien und Bulgarien bereits hinzurechnen darf, dann hat es die österreichische Wirtschaft geschafft, einen Anteil von etwa 10% zu erreichen. Das ist eine besondere Leistung unserer Betriebe und wirkt sich sehr positiv für unser Land und auch für die Zielländer aus, denn es wird in diesen Ländern investiert und wir können wiederum durch deren höhere Wachstumsraten (je nach der konjunkturellen Situation 3%, 4%, 5%, 6% reales Wachstum) auch entsprechend profitieren. Ich denke, dass wir es letztes Jahr geschafft haben, der Export-Europameister zu sein – mit steigenden Raten bei den Exporten um etwa 13%, und das in einer Zeit, in der sehr viel über den US-Dollar/Euro-Wechselkurs geredet worden ist und man sich im Hinblick auf die Wettbewerbsfähigkeit europäischer Produkte Sorgen gemacht hat. Wir haben heuer ein Wachstum in der Größenordnung von 2% bis 2,3% zu erwarten. Die IWF-Delegation, die eben in Österreich ist, war sehr erstaunt und hat angesichts der Prognosen gesehen, dass Italien ein Wachstum von etwa 1,2%, Deutschland von 0,8% bis 1%, die Schweiz ein Wachstum von 1,2% erwarten, und Österreich, eingebettet in diese Länder, einen Forecast von über 2% hat. Kann das wirklich stimmen? Sie haben die Zahlen nochmals hinterfragt und sind zum Schluss gekommen: Ja, das ist realistisch. Sie

glauben auch nach neuerlicher Analyse, dass wir heuer über 2% reales Wachstum haben werden.

Meine Damen und Herren, was ich also sagen wollte, ist, dass es eine außerordentliche Situation ist, wenn das kleine Österreich, eingebettet in die Staatengemeinschaft, ein deutlich höheres Wachstum zustande bringt. Wir werden im nächsten Jahr ein sinkendes Defizit haben, wir haben das ehrgeizige Ziel – und ich halte es für sehr realistisch –, dass wir



im Jahr 2008 wieder einen ausgeglichenen Haushalt haben werden. Das ist unser Commitment: Wir wollen zurück zu einem ausgeglichenen Haushalt, weil wir auch wissen, dass wir die steuerliche Entlastung weiter treiben müssen. Es gibt einen Steuerwettbewerb in Europa, zu dem ich mich als Grundprinzip Europas und seiner Integration bekenne. Und daher meine ich, dass es nicht sinnvoll ist, Investoren, Unternehmer, die Milliarden Euro in unsere Länder investieren, als Heuschrecken zu bezeichnen, sondern wir müssen uns fragen: Wie schaffen wir es, unsere Länder zu Globalisierungsgewinnern zu machen. Das sollten wir im 3. Jahrtausend, in einer schnelllebigen Zeit, bei globalisierten Märkten zu unserer Priorität machen. Und ich denke wir sind Globalisierungsgewinner, wenn wir es ehrlich nehmen. Wir müssen darüber eine seriöse Debatte führen, wie wir Missbräuche und Probleme lösen können, aber so, dass soziale Kohäsion



auf der einen Seite, Wachstum und wirtschaftliche Integration auf der anderen gemeinsam erfüllt werden können. Daher glaube ich, dass wir mit einer zurückgehenden Abgabenquote, mit einem zurückgehenden Defizit, mit einer zurückgehenden Finanzschuldenquote, mit einem vernünftigen Wachstum im internationalen Vergleich, mit einer Arbeitslosenrate von 4,5% gut liegen. Auch wenn die Arbeitslosenquote nach dem kleinen Irland und Luxemburg



die drittniedrigste in der gesamten EU-25 ist, ist es doch unser wichtigstes Ziel zu sagen, wie wir es schaffen, über höheres Wachstum und damit auch über mehr Beschäftigung gleichzeitig auch die Arbeitslosigkeit zu reduzieren. Wir haben zu dem Zweck am Tag der Arbeit, am 1. Mai, die Sozialpartner und Experten eingeladen, um zu diskutieren, wie wir das machen können.

Damit kann ich überleiten zur europäischen Agenda, zum Lissabon-Prozess. Sie wissen, dass nach dem heurigen Frühjahrsgipfel die Entscheidung getroffen wurde, dass wir nationale Reformpläne entwickeln müssen und sie heuer im Herbst erstmals vorlegen werden. Wir haben am 1. Mai mit einem breiten Dialog in Österreich begonnen, einen solchen nationalen Reformplan zu erarbeiten, und haben hier vor allem wieder einen Schwerpunkt auf Forschung und Entwicklung gesetzt. Historisch betrachtet sind wir 1999 in Österreich

etwa bei 1,8% Forschungsquote des BIP gestanden – jetzt haben wir es geschafft, auf 2,35% des BIP zu steigern, und das Ziel für 2010 ist eine 3-prozentige Forschungsquote, weil die Strategie für mehr Wachstum nur auch über mehr Forschung und Entwicklung, über eine angebotsseitige Wirtschafts- und Finanzpolitik und damit über neue Produkte, über Innovationen, über neue Verfahren führen kann. Und daher haben wir bereits am 1. Mai ein Paket geschnürt, das eine Forschungsmilliarde in den Vordergrund gerückt hat, das gleichzeitig versucht hat, die Forschung in die Breite zu führen, zu der breiten Masse der Klein- und Mittelbetriebe in Österreich, womit wir wesentliche Wachstums- und Beschäftigungseffekte erreichen können. Wir müssen ehrgeizig sein, wir müssen einfach im Wettbewerb bestehen und daher war das ein Versuch, hier ein Paket aufzuschnüren, von dem wir glauben, dass wir im nächsten Jahr – vorsichtig gerechnet – 0,25% bis 0,3% des BIP an zusätzlichen Wachstumseffekten bekommen werden und das mittelfristig Beschäftigungseffekte von durchaus 20.000 zusätzlichen Beschäftigten auslösen kann. Ich denke, es ist ein wichtiger Schritt gewesen, dass man zu nationalen Aktionsplänen kommt. Dies ist eine Grundvoraussetzung, damit wir den Lissabon-Prozess erfolgreich gestalten können. Der Kok-Bericht hat ja auch gezeigt, dass wir in Europa bei der Midterm Review bei weitem nicht dort sind, wo wir sein sollten. Dass wir im Vergleich zu den USA und im Vergleich zu Asien Wachstumsprobleme haben. Und wenn man das Ziel hatte, wettbewerbsfähigster Wirtschaftsraum der Welt zu werden, und man zur Halbzeit erkennt, dass man nicht auf einem gutem Weg ist, man dieses Ziel bis



zum Jahr 2010 nicht erreichen wird, dann muss man überlegen, was man besser machen kann. Dann halte ich es für einen Fortschritt, wenn man diesen Prozess fokussiert und Wachstum und Beschäftigung an die Spitze der Prioritätenliste des Lissabon-Prozesses stellt.

Ich hoffe, dass es uns als Mitgliedstaaten gelingt, die Verantwortung in der Fiskalpolitik wahrzunehmen, damit eine Kohäsion der Volkswirtschaften zu erreichen und es auch der Europäischen Zentralbank in ihrer Geldpolitik leichter zu machen, als das heute der Fall ist; dass es uns gelingt zu sagen, wo die größten Prioritäten in jedem einzelnen Land liegen. Was sind, zum Beispiel, die wichtigsten fünf strukturellen Reformen, die jedes einzelne Land umsetzen muss, damit man zu einer Matrix mit Prioritäten und Zeitplan kommt und dann diese Agenda abarbeitet. Über den Fortschritt Einzelner müssen wir ganz Europa nach vorne bringen, wettbewerbsfähiger machen, die Wachstumspotenziale entsprechend erhöhen. Das muss unsere Zielsetzung sein und weniger ein Ausreden auf die Europäische Union, auf die Kommission, auf wen immer, warum wir in Europa nicht so gut sind, wie wir es eigentlich sein wollen. Ich glaube es geht nur dann, wenn jeder von uns seine Hausaufgaben wahrnimmt und seine Strukturreformen erledigt. Daher bin ich optimistisch, dass diese Fokussierung des Lissabon-Prozesses auch tatsächlich dazu führen kann, dass wir mittelfristig eine Kohäsion der Volkswirtschaften sehen und das Wachstumspotenzial erhöhen können. Als weiterer Punkt wurde von Gouverneur Liescher die Verfassung angesprochen: In Österreich haben wir gezeigt, dass wir nicht nur die Beschlussfassung in Europa bei den

Staats- und Regierungschefs und bei den Außenministern mitprägen und mittragen, sondern dass wir auch in der Lage sind, diesen Prozess dann nationalstaatlich auf einer sehr breiten Basis, über die Parteigrenzen hinweg, umzusetzen. Wir haben die Verfassung ratifiziert. Ich hoffe sehr, dass es gelingt, dies auch in den anderen Ländern erfolgreich umzusetzen: da braucht es Überzeugungsarbeit, da braucht es umfassende Information gerade dort, wo es Referenden gibt.

Ein für uns wesentliches Thema ist der Finanzrahmen 2007 bis 2013. Sie können sich vorstellen, dass wir in



einer sehr intensiven Diskussion zu dieser Frage stehen. Ich hoffe sehr, dass es Jean-Claude Juncker, in seiner EU-Ratspräsidentschaft und als Präsident des ECOFIN, gelingt, diesen Prozess fertig zu stellen – angesichts des Fensters, das nach der Wahl im Vereinigten Königreich aufgegangen ist. Ich sage offen in dieser Runde, ich bin nicht sehr optimistisch, dass es gelingt, will aber alles tun und dazu beitragen, dass es möglich wird. Ich denke, dass es wichtig wäre, wenn es Klarheit über den Finanzrahmen der Europäischen Union gäbe. Ich sage sehr deutlich, dass wir ein Nettozahler sind, dass wir daher auch die Position sehr klar vertreten haben und auch vertreten werden, dass, wenn die Europäische Kommission von den Mitgliedstaaten verlangt Ausgabendisziplin zu halten, die eigenen Haushalte in Ordnung zu bringen und zu konsolidieren, dass man dann mit allem Nachdruck und Recht auch von der Europäischen

Union selbst verlangen kann, dass sie eine Ausgabendisziplin hat – und dass man nicht immer nach einer sehr, sehr deutlichen Ausdehnung bei den Ausgaben in der Europäischen Kommission selbst ruft. Daher werden wir die 1-Prozent-Linie nachhaltig vertreten. Wir sind der Überzeugung, dass die Zeit für einen Rabatt für das Vereinigte Königreich vorbei ist, wenn man sieht, welches Wachstum hier in den letzten Jahren erreicht worden ist. Das ist eine andere Situation als unter der Zeit Margaret Thatchers. Ich hoffe, dass man hier einen gemeinsamen europäischen Weg gehen wird, der auch nur dann für mich Solidarität signalisiert, wenn es uns gelingt, die Strukturfonds, die Kohäsionsfonds auf die zwölf neuen Mitgliedstaaten auszurichten. Es muss uns auch klar sein, dass wir diese Mittel umschichten müssen aus den bestehenden Mitgliedstaaten hin zu unseren osteuropäischen, südosteuropäischen Nachbarn. Dieses Bekenntnis lege ich ab, denn diese Länder haben den größten Aufholprozess vor sich – und wir als Union werden alle von diesem Aufholprozess, von dem höheren Wachstum in diesen Ländern

profitieren. Und insofern hoffe ich, dass es gelingt, hier einen ganz klaren Schwerpunkt bei diesen Mitteln, bei den zwölf neuen Mitgliedstaaten zu legen. Insofern stehen uns hier sehr spannende, sehr intensive Verhandlungen bevor. Wir hoffen, dass dieser Prozess jetzt gelöst werden kann, denn die nächste Präsidentschaft hat das Vereinigte Königreich, das gewisse Eigeninteressen hat. Es könnte Probleme haben, diese Frage zu lösen. Danach kommt Österreich, und wir scheuen uns natürlich nicht, diese Frage zu verhandeln. Es ist eine große Herausforderung, wir würden das mit großer Ambition und Ehrgeiz angehen. Das Problem, das man nur sehen muss, meine Damen und Herren, ist, dass man 2006 z.B. auch Wahlen hat, Bundeswahlen in Deutschland nicht zuletzt. Ich denke wir sollten es vermeiden, dass derart wichtige europäische Fragen zu einem Spielball eines Wahlkampfes gemacht werden können. Insofern wollte ich betonen, je früher diese Frage gelöst wird, desto besser für Europa, für die europäische Idee, für den europäischen Zusammenhalt. Ich danke Ihnen vielmals für Ihre Aufmerksamkeit. ☛





# 33. VOLKSWIRTSCHAFTLICHE TAGUNG 2005







WOLFGANG DUCHATCZEK



## Introductory Remarks<sup>1</sup>

Financial institutions currently face a number of challenges; among these, the implementation of “Basel II”, the new capital adequacy rules for banks (and, within the EU, for investment firms as well) is probably the most obvious.

As of 2007, Basel II will start replacing the so-called “Basel I” regime, that is the current Basel Capital Accord dating from 1988. Basel II will take into account changes in risk management practices and reflect the sophistication and complexity of today’s financial transactions and products. The new three-pillar approach, comprising minimum capital requirements (Pillar 1), the supervisory review process (Pillar 2) and specific disclosure requirements aimed to encourage market discipline (Pillar 3), will further strengthen the stability and soundness of the banking system by promoting stronger risk management practices, introducing more risk-sensitive capital requirements and covering risks more comprehensively.

After drawing up numerous consultation papers and impact studies, in June 2004 the Basel Committee on Banking Supervision (BCBS) adopted a revised capital adequacy framework. At the EU level, the discussion process is continuing: In December 2004, the

<sup>1</sup> The author wishes to thank Karin Hrdlicka and Michael Würz for their valuable comments on this contribution.



Ecofin Council unanimously agreed on the general approach taken toward the proposed Commission Directive, and in the European Parliament, the Committee of European and Monetary Affairs has just started its own debate on the issue. However, there is a good chance that the so-called Capital Requirements Directive (CRD) will be adopted in the first reading in September.

In any case, this extensive and intensive dialectic process of putting forward proposals, considering, and – where justified – incorporating, received comments and taking



into account the results of impact assessments suggests that the observation by the ancient Greek philosopher *Aristotle* that “Law is mind without reason” does not hold true for the regulations laid down in Basel II and the CRD. Indeed, as already noted, there are good reasons for introducing a more refined regulatory capital regime, not least the increasing awareness that the broad-brush approach to risk measurement which characterized the Basel I regime gave banks ample room to circumvent the rules and to engage in regulatory arbitrage.

Basel II, as a more general regime of banking regulation, is relevant from both a micro- and a macroperspective, given the close link between banking stability and systemic stability and the potential effects of capital adequacy rules on the economy (lending to SMEs, procyclicality, etc.). Accordingly, both perspectives have to be considered, and central banks have therefore been heavily engaged in

developing the new capital adequacy framework. Moreover, the European Commission’s proposed directive for transposing Basel II into European Community law likewise contains a specific provision stating that the European Commission has to periodically monitor whether the directive has significant effects on the economic cycle, and that the European Central Bank has to contribute to these monitoring activities.

With a view to Basel II implementation, substantial investments are currently being made by the banking industry and preparations are being carried out in an extensive dialogue between banks and their supervisors in order to ensure a smooth transition to the new regime. In this sense, the term “micro-challenge” used in the title of this session certainly needs to be put into perspective.


However, besides Basel II, there are a number of additional aspects posing challenges to financial institutions. For example, on May 3, 2005, the “Green Paper on Financial Services Policy,” in which the European Commission sets out its preliminary financial services policy priorities for the next five years, was published. Even though the European Commission’s focus will be on implementation and consolidation, it is also considering several new targeted legislative initiatives. In particular, the area of retail financial services has been identified as requiring specific attention in order to make the vision of an integrated financial services market a reality for EU citizens. It is obvious that any initiatives in this area would very likely have a substantial impact on the institutions involved. Moreover, some of the concepts considered, e.g. the introduction of a “26<sup>th</sup> regime,” in which optional European standards would be designed for cer-

tain products in parallel to the existing national rules, probably leave more questions than answers.

Moreover, regulatory developments are not the only source of micro-challenges for financial institutions. Against the background of less favorable market conditions and the search for profits, strategy, competitiveness and efficiency considerations have gained importance over the past few years, leading major banking groups to rethink their internal organization structures. The main features of this reshaping include the increasing centralization of certain functions (e.g. liquidity management and risk management) at the group level on the one hand and the outsourcing of other lines of business, particularly support activities, to nongroup companies on the other hand. At the same time, several banking groups have begun to refocus on their core business activities, reduced their staff and downsized their distribution networks in order to create shareholder value and increase their efficiency. Moreover, it is also argued that there may be scope for another wave of consolidation.

These examples of micro-challenges are only intended to give a preliminary idea of the topical issues for financial institutions. The panel discussion will provide the opportunity to further reflect on these issues from the perspective of supervisors and central bankers, academia and the industry by addressing, among others, the following questions: What are the main challenges for the financial industry, and how are they impacting on institutions' risk profile, their resources,



strategies and business models? How can financial institutions best respond to these challenges? Finally, what role are supervisors expected to play in this respect? 

JAIME CARUANA



# Monetary Policy and Basel II

## **1 Introduction, Reflections on the Topic and Outline of the Talk**

Let me first express my gratitude for the invitation to participate in this Economics Conference. I am honoured to address so many leading representatives of the political, academic, business and finance arenas, in one of the most renowned forums for economic discussion around the world.

Governor Klaus Liebscher suggested I should focus my address on the links between monetary policy and the revised capital framework, known as Basel II. This is a very relevant topic but also a risky one. Testifying to its relevance is the increasing attention which is recently being paid to the interaction between financial and macroeconomic stability. The risk stems from the very fact that we still lack a sufficiently solid conceptual framework to address all the key issues in the field and, particularly, to tackle the cross-implications between financial regulation and monetary policy-making. Yet there are few interesting topics that can be addressed without a significant measure of analytical uncertainty.

Why is it worth pondering on the links between monetary policy and Basel II? Let me illustrate my own reflections on this point by drawing a simple analogy. In a way, liquidity is for an advanced economy much

like blood for a living being. Financial market participants pay considerable attention to the monetary policy decisions made by central banks, for these are, in a broad sense, the “guardians” of liquidity.

Excessively expensive liquidity is likely to result in a suboptimal volume of investment and, in turn, in an inefficient under-use of society’s productive resources. Likewise, when monetary conditions are excessively lax, some liquidity may be directed to financing projects with poor returns. If this situation prevails for some time, inflation arises, the average productivity of investment declines, asset prices deviate from their normal or fundamental values and the economy as a whole loses its ability to maintain a sustained growth path.

When deciding on monetary conditions, central banks must understand the mechanisms underlying the workings of the economy in order to react to potential dangers and opportunities in due manner and course. No diagnosis could ever be complete without a careful analysis of how the entire circulatory system is behaving.

From that standpoint, central banks can then be thought as of being the heart, initially controlling the price of the transactions conducted in the money market. Commercial banks would naturally fit into this analogy as the veins and arteries, for they have the last word on the destination of the funds they are being endowed with, a decision that pertains greatly to the sphere of banks’ credit management. Furthermore, as the final outcome of this task is necessarily uncertain, it is no exaggeration to say that much of the success of the entire process hinges critically on how banks cope with the risks they face when deciding how to allocate resources.

I have tabled some of the main elements on which I will base my subsequent arguments, which may be summarised as follows. The overall effects of monetary policy decisions cannot be meaningfully understood without previously assessing how the banking system is performing the job of channelling the original impulse of the central bank in the money market into the rest of the financial system and, ultimately, into the whole economy. Thus, a continuous assessment of the *norms of behaviour* and the *overall conditions* of the banking industry is a key input for any central banker wishing to be in the best position to foresee and evaluate the potential outcome of policy choices.

In my address, I will focus on the general question of how Basel II may affect the way monetary policy influences some key financial and real variables. In doing so, I will follow a strategy that is very familiar to the economics profession, in the sense that I will regard the application of Basel II as an “exogenous shock” that will eventually unleash some spillover effects into an otherwise unchanged current monetary policy framework.

My task here will thus boil down to highlighting some of the special novel features of Basel II that will potentially exert some influence on the dimensions of monetary policy. Hopefully this analysis, while necessarily brief, will highlight not only those elements of Basel II which are contributing directly to a cleaner and, perhaps, safer scenario for conducting monetary policy, but will also pay due attention to the – in my view – often overly exaggerated debate on procyclicality. To this end, let me first introduce the most salient aspects of the revised capital framework.

## 2 Basic Features of Basel II

In 1988 the Basel Committee launched a pioneering Capital Accord that contained the first internationally accepted definition of regulatory bank capital and provided clear-cut and simple standards to measure it. The merits of that first step are well-known. However, a number of important changes have since taken place in the financial and banking industry landscape. In several important respects, we are now far removed from the environment of the late eighties.

For one thing, the complexity of risks now faced by credit institutions operating in an increasingly globalized environment has increased significantly and, as a result, both risk-management and supervision have become much more difficult tasks.

For another, some recent developments have also increased the opportunities to manage risks. The impressive advances in technology that have enhanced the industry's ability to collect and process large amounts of information in real time could hardly have been suspected 20 years ago. Collecting risk data across many business lines has catalysed further efforts to aggregate those measures of risk by quantifying them in a more rigorous and more consistent fashion.

The "ultimate expression" of risk aggregation is the summation of many types of risk into a single measure based on the concept of economic capital, which estimates the amount of capital a firm requires to protect itself against these risks with a certain degree of confidence. Using the concept of economic capital, banks can develop sound policies for monitoring exposure limits, risk-adjusted pricing policies and sound provisioning practices based on the inherent

risks of the portfolios. They can also measure returns and assign capital on a risk-adjusted basis. Likewise, the progressive widening and deepening of financial markets and the continuous creation of new assets has enlarged the menu of choices available for banks to manage, share and transfer risks.

The Basel II process started, more than six years ago, against this background of increasingly sophisticated risk management practices, heightened complexity in the financial markets



and stronger interaction between the real and the financial economy. Rather than simply resetting the quantitative standards, we sought to develop a new forward-looking approach that would be more sensitive to the actual risks that banks take on.

The new framework is a significant step towards achieving a more comprehensive and risk-sensitive supervisory approach. It seeks to provide banks with stronger incentives to employ the most advanced techniques to calculate risk exposures and, hence, to push risk-management towards the best available practices.

Specifically, Basel II makes these general principles operative by building on three complementary pillars.

The first pillar is intended to achieve a more precise and sensitive mapping between banks' actual risks and the minimum regulatory capital requirements. Under the new framework, banks are allowed and, indeed, encouraged to rely on their

own measures of certain risk parameters, thus fostering a wider usage of the best available techniques and tools for that purpose. The Committee firmly believes that a better alignment between regulatory and economic capital is conducive to a more efficient allocation of credit and a less distortionary regulatory system. The framework is also extended to operational risks, which have proved to be more relevant in an increasingly complex world that demands highly sophisticated processes.



The second pillar, supervisory review, requires banks to assess their own capital needs for

their overall risk profiles, including whether any activities or exposures may incorporate more risk – and hence may require more capital – than is assumed in Pillar 1. Supervisors, in turn, must evaluate the banks’ assessments and processes, and respond if these are not appropriate. In the case of those banks that use the advanced approaches offered by Pillar 1, Pillar 2 can be a useful tool for ensuring a constant enhanced dialogue between the supervisors and banks throughout the whole sequence of procedures and estimates, reflecting the ideas that wider freedom for banks to evaluate their own risks requires closer involvement by the supervisor.

The third pillar, market discipline, imposes higher levels of transparency in banks’ financial reporting. It complements and reinforces the two previous pillars in the following sense. First, it stimulates a more efficient management of banks, since more transparency entails closer scrutiny

by market participants. Second, it provides the supervisor with a most valuable ally, namely stronger external incentives for prudent risk-management.

In sum, Basel II constitutes a forward-looking approach to capital regulation that blends some of the ideas and practices that have shown a more solid record of success in finances with the best regulatory principles we have learned over time. At the same time, I think that Basel II incorporates two of the key basic principles that are built into modern approaches to monetary policy and which have successfully resolved the debate between rules and discretion: a flexible and forward-looking approach, anticipatory rather than reactive behaviour to risk, and the need to take into account market views.

Let me underline additionally two features that are important for our monetary policy discussion.

The first is that Basel II has tried to incorporate in the framework not only micro-risks but also the macro-perspective to risks. If you like, we have tried to incorporate how micro-risks change through the cycle and in stressed economic conditions. We have therefore been very conscious about how micro-prudential regulation can influence macro-behaviour and also how different macro-scenarios can change the risks that bank face.

As Jean-Claude Trichet said in June last year, when presenting the new framework: “It will enhance banks’ safety and soundness, strengthen the stability of the financial system as a whole, and improve the financial sector’s ability to serve as a source for sustainable growth for the broader economy.”

This enhanced financial stability is a significant contribution of Basel II



to monetary policy. In general terms, a better functioning of the banking system will tend to improve the efficiency of the monetary policy transmission mechanisms. In addition, one could think of a positive effect on the expectations about better financial stability.

Second, Basel II is about much more than just setting better quantitative minimum capital requirements. It is about establishing an incentive-based approach to risk management and capital adequacy, within a framework of the three mutually-supporting pillars.

The new comprehensive framework provides at least four transmission channels for influencing financial stability and the overall economy: first, by setting more risk-sensitive minimum regulatory capital requirements, so that regulatory capital is both adequate and closer to economic capital; second, by providing incentives to encourage improvements in banks' internal risk management processes; third, the enhanced mechanisms to encourage the marketplace to exert external discipline on banks and the banking sector; and fourth, the necessary greater cooperation among supervisors across jurisdictions. The effects of each of these channels will be different in terms of time and in terms of final influence, some of them having the capacity to bring significant long-term positive changes to the financial markets. In my view, perhaps too much attention is placed on the minimum capital rules of Pillar 1 and not enough on the effects of the other three channels.

### 3 Implications of Basel II for Monetary Policy

Let me therefore turn to the issue of how the main elements of Basel II may affect the ability of the monetary authority to fulfil its objectives.

I believe that the achievement of price stability as a desirable medium to long-term target is, by now, a non-controversial objective of primary importance whose foundations are well known. On one hand, the proposition that labels inflation largely as a pure monetary phenomenon within long time-horizons can hardly be contested either conceptually or empirically. Furthermore, a wide consensus among academics and policymakers has emerged over recent decades on the damaging effects of high inflation levels and variability on economic growth and, hence, on social welfare.

Indeed, the history of monetary policy in the last 20 years or so is a very successful one. Price stability, as it is usually defined, is currently a tangible reality in most developed countries. Also, many less-developed countries previously prone to endemic high inflation have managed to reduce and stabilise it at reasonable levels, with noticeable effects on economic prosperity.

I believe that the achievements of the last few years in terms of price stability are largely permanent. In the main, they respond to non-conjunctural factors such as a more refined conceptual understanding of issues like the temporal and uncertain nature of the trade-off between output and inflation, to institutional reforms – such as central bank independence – and, probably, to greater social awareness of the benefits to be had from sustained low inflation.

Although low and stable inflation is a clear prerequisite for macroeco-

economic stability, this does not per se eliminate the potential risks of disturbances that can adversely affect economic performance. This is the case of negative demand shocks which can generate deflationary processes.

Past episodes of persistent negative price growth, such as those seen in Japan over the last decade, have shown us that in those conditions monetary policy loses much of its potential to exert a decisive influence on the price path and on the level of output. In that regard, most central banks, such as the ECB, recognise that their price stability objective should be made compatible with a low probability of deflation.

Moreover, in the current setting of low inflation and interest rates, we have witnessed episodes of rapid increases in some asset prices that have led analysts to suspect important deviations between fundamental and observed values. Some notorious recent examples include the overvaluation in the real-estate sector in several East Asian countries in the 1990s, and the surge and subsequent correction of the wave of excessive optimism in some equity markets around the turn of the millennium. Currently, the extreme increases in housing prices and households' level of indebtedness witnessed in some western countries is attracting some attention and concern in view of the potentially adverse consequences on the stability of the whole economy. Looking back, one can indeed find in unbalanced developments in asset and debt markets the seeds of some of the major financial crises that ultimately led to persistent negative output and price growth.

Therefore, conditions such as low inflation and interest rates may sometimes conceal risks capable of bring-

ing a phase of price and economic stability to its end. Those dangers are often linked to excessive risk-taking in the credit or asset markets leading to episodes of financial instability. In that situation, it may be difficult for monetary policy to meet its objectives since the relationship between certain key variables and interest rates becomes unstable. Moreover, as market volatility increases, the ability of central banks to affect the relevant interest rates becomes more uncertain. The conduct of monetary policy then becomes much like steering a boat in the middle of a dark stormy night.

Even if the likelihood of such episodes of macroeconomic distress is low, the considerable implications in the economy and in terms of welfare have led to increasing concern among central banks and much discussion and research on what the monetary policy response to this kind of underlying risk could and should be.

There is now a broad consensus among central bankers that they should not directly target asset prices, and I must include myself among those who share this view. Detecting unsustainable patterns of asset prices or indebtedness ratios in real time is a complex task in practice. But even if central banks were able to do so, there would still be a lot of uncertainty as to how those financial imbalances would react to a specific change in monetary policy. Under the most realistic case, in which the monetary authority only possesses noisy information on the presence of unsustainable patterns, the remedy could be worse than the illness, since one can never be certain that a true illness is the case.

Yet this is not to say that there is nothing left to be done by monetary policy to deal with low-probability

high-impact events, such as an asset market collapse and/or a deflationary spiral. As we have moved towards a scenario of price stability and lax credit conditions, some leading central bankers have been inclined to consider more prevention-oriented policies. To the extent that monetary decisions may be a useful tool for reducing the likelihood of a major financial disruption, or for mitigating the effects of a really adverse shock on the entire system (full deflation, for instance), it might be desirable to pursue a monetary strategy that pays due attention to these unlikely crisis scenarios if the associated impact is disproportionately high. This idea is at the root of what Chairman Greenspan refers to as the *risk-management approach to monetary policy*.

Martin Feldstein has described the essence of this approach in a very insightful and simple way: “A prudent man carries an umbrella even when the forecast says there is only a small chance of rain. If there is no rain, he suffers the small inconvenience of carrying the umbrella. But if he does not bring the umbrella and it does rain, he may suffer the much larger inconvenience of being caught by a downpour.”

While this argument for a wider pre-emptive role for monetary policy would bring self-evident benefits, we should bear in mind that it also entails some costs and can be difficult to communicate to the public. These costs can be understood as an insurance premium that must be paid for using monetary policy in a decidedly preventive fashion.

These considerations help to highlight some dimensions of the current monetary policy context that may benefit from a sound banking capital regulatory framework. In this regard,

I tend to think that certain important elements in Basel II will contribute, firstly, to restricting the build-up of financial imbalances, thus diminishing the probability of extreme adverse shocks; and secondly, to mitigating their negative consequences for the overall system.

As the disorderly granting of credit is often a defining characteristic of an extreme and unstable phase of financial euphoria, a regulatory framework that provides banks with strong incentives for sound risk assessment must clearly be conducive to a more watchful and efficient allocation of credit. In this



sense, one would naturally expect a more risk-sensitive capital framework to make banks more likely to account for the true risks of lending policies aimed at achieving short-run-focused targets, such as market share or portfolio size, at the expense of putting their medium-term financial health more at risk. Since speculative activities naturally fit into this risk-return temporal pattern, given that they usually yield substantial immediate profits at the outset at the expense of a possible once-for-all large loss at an uncertain future date, a more cautious credit strategy will tend to penalise the funding of self-fulfilling asset-revaluation processes.

Forward-looking risk management that is aware of how risk-drivers change through the cycle and in stress conditions will tend to build shock absorbers to be used when difficult times arrive. I will return later to this idea and how Basel II encourages the appropriate use of capital buffers. Let

me add now that the idea of building robustness in good times is not only a prudent policy, it is also theoretically consistent because we all have a tendency to think that risks increase in bad times. From my perspective, this is only true in part. A better description is to say that exposures and therefore risks increase in good times and that in bad times these risks materialize.

On top of that, to the extent that risk assessment and control methods become more formalised and rigorous, this will lessen the likelihood of making bad decisions and will improve risk-adjusted pricing policies. It will also contribute to the prompt detection of errors and deviations from targets, allowing banks to implement corrective measures at an early stage. Increased awareness of the risks and early reaction to problems is likely to lead to a smoother adjustment to new conditions or to the correction of mistakes, making decisions less abrupt and time-lags perhaps shorter.

This early reaction will be supported by the supervisory second pillar and again by the transparency of the third, which will also reduce the temptation of supervisory forbearance. Let me add a few words on transparency.

History has also taught us that some of the worst financial crises were ultimately unleashed by sudden bank crises, during which an upsurge of collective panic led individuals to withdraw their funding to banks. A vast amount of analysis and research on these issues has underlined the role of information asymmetries in financial intermediation. Indeed, it is no overstatement to say that the presence of asymmetric information between lenders and borrowers in financial markets can explain much of their inherent instability. Higher transparency in the information pro-

vided by banks on their balance-sheet and risk position, along the lines of that set out in Pillar 3, must undoubtedly alleviate such asymmetries, thus reducing the likelihood of an episode of profound disintermediation and, by fostering the public's confidence in the banking system, easing the recovery of the financial pulse in the event of a downturn.

Before moving to my next point, let me sum up some of the ideas expressed by quoting Alan Greenspan, who recently said: "Perhaps more critically, better risk management and the associated quantification have the real potential for reducing the wide attitudinal swings that are associated with the historical cyclical pattern in bank credit ..."

In a more general conclusion, I think that while the objectives of regulatory policies are different from those of monetary policy, the former should always be aware of the macro-implications of their micro-policies and the latter can clearly benefit from effective regulations that help ensure a safe and efficient financial system.

#### **4 Procyclicality and the Link between Basel II and Monetary Policy**

So far, I have highlighted key features of Basel II which, in my opinion, will unambiguously tend to make the current terrain in which monetary policy operates a safer place. Yet in the course of the work conducted by the Committee and, especially, after the release of several consultative documents, there has also been lively and enriching discussion about several potentially negative side-effects of the revised capital framework.

The issue of procyclicality, in particular, has attracted much attention. Although I think that most arguments

have been overstated and I have a more positive view of the macroeconomic implications of Basel II, I also think that this is a legitimate concern and I take this opportunity to gratefully acknowledge the interest and effort made by researchers and commentators to shed light on this and other issues relating to the macroeconomic implications of Basel II. To be sure, all this is also relevant for my topic here today, as monetary policy works precisely through its influence on economic activity at business cycle frequencies.

Some commentators have warned that the new framework, by tying minimum capital holdings more closely to debtors' creditworthiness, may exacerbate the cyclical pattern in credit aggregates, thus altering the bank-based monetary transmission mechanism, perhaps in an unwanted direction. In this respect, a potentially worrisome picture would be one in which the economy falls into a recession, credit ratings deteriorate, capital requirements become more demanding under Pillar 1, and monetary policy loses some of its stabilising effectiveness, as banks find it difficult or too expensive to secure funds to expand credit.

My impression, however, is that this simple story must be qualified on several grounds, as there are a number of effects working in opposite directions as well as some mitigating factors. But before going into more technical details, let me mention the important steps towards mitigating excessive swings in regulatory capital included in the framework. Banks that use the internal rating systems are required to consider longer-term horizons in assigning ratings, and to estimate risk parameters as long-run averages or to reflect downturns.

Finally, they are also required to carry out stress tests under conditions of simulated recessions.

Following on from this last point, as banks are required to perform a meaningfully conservative credit risk stress test, they will hold capital buffers that make regulatory capital requirements less of a constraint. Pillar 2 will also enhance this precautionary behaviour. At present, actual capital held by most banks is, in general, well above minimum regula-



tory requirements and there is some empirical evidence of a negative relationship between the capital buffers and the cycle, although the magnitude of this effect is more disputed.

By promoting sounder practices for risk assessment, Basel II creates incentives for more forward-looking capital management through which banks will fully recognise the benefits of a prudent strategy of capital accumulation from an intertemporal perspective. The new framework places capital and risk management at the centre of the bank's responsibility and strategy, requiring managers to be very mindful of and serious about understanding the drivers of risk through the cycle within a medium-term time horizon.

A second idea to bear in mind when considering procyclicality in bank credit is that bank behaviour is inherently procyclical. Regulatory considerations aside, a general fall in returns on investment together with a perception of increased risk are



natural ingredients during a recession, thus leading *per se* to a contraction of credit. Moreover, such a contraction and even the closure of some firms in the industry can be understood, in some cases, as efficient outcomes on purely economic grounds.

While concepts like full efficiency or maximum social welfare are “too grand” to be operative, I think we can still make some progress on this issue by posing the question in relative terms: will Basel II unduly exacerbate the tendency towards procyclicality inherent in banks’ business? In response, I find it helpful to focus on certain key determinants of bank capital supply and demand, for their interaction will ultimately determine the conditions under which banks may gain access to capital markets and withstand a general downturn.

On the demand side, under Basel II higher overall uncertainty about debtors’ solvency during a recession will admittedly tend to put upward pressure on the regulatory capital. But we shouldn’t view this effect as economically artificial, since we know from basic contract theory that lenders, i.e. depositors, will optimally require a larger amount of own resources from investors, i.e. banks, whenever the former perceive higher risk in the projects to be funded. In plain terms, while regulatory capital is rising in such a situation, economic capital goes up as well. I firmly believe that the latter is the most relevant variable for understanding banks’ decisions about the amount of credit to be extended and its price. Nowadays, well-managed banks already allocate economic capital and take decisions on the basis of incurred risks. Their economic capital is procyclical today and Basel II does not alter the calculation of economic capital; if anything it can

help to promote cycle awareness. In this regard I tend to think that the role of regulatory capital is overstated and the degree of risk sensitivity of banks’ behaviour today is underestimated.

Furthermore, the most abrupt and procyclical behaviour will probably occur in a poorly provisioned and poorly capitalised bank with inadequate risk management. In a downturn this bank will most likely encounter unpleasant surprises stemming from mismanaged risks and, lacking appropriate shock absorbers (provisions and capital), it will have little room for manoeuvre. The most likely outcome is an abrupt cut-back on lending, therefore contributing to exacerbating the cycle. I mentioned before the importance of risk awareness and early detection and reaction by banks. I will just emphasise here that these are also important elements for restraining procyclicality.

On the supply side, I have already commented on the beneficial effects of higher transparency in the information released by banks, especially after accounting for the fact that lender-investor informational asymmetries could result in a lower-than-optimal level of funds available for bank lending. Pillar 3 will thus grease the wheels of the market for bank capital, building up capital providers’ and depositors’ confidence about the efficient use of their resources and easing the conditions under which banks may gain additional funding if required. This observation is of special relevance precisely in times of crisis, when some bank managers may be more tempted to pursue “gambling for resurrection” strategies. Likewise, as market participants understand that banks will have stronger motivation to employ better technologies for risk management, one would naturally expect the industry to



move to a safer plateau, with its capital, therefore, enjoying a lower risk premium, all other things being equal.

To summarise, while I think that a reasonable degree of procyclicality of the supply of loans is a logical feature of the credit market, I sympathise with the idea that all kinds of regulations affecting banks, from accounting to prudential ones, should try to minimise or compensate for the risk of excessive sensitivity of bank lending policy to cyclical conditions. Indeed, the latter would normally appear when banks are poorly capitalised and lending decisions are based on inadequate risk assessments and driven only by current market conditions, a natural terrain for unplanned drastic swings in credit policies.

I believe that all investment in technology and human capital, enhanced transparency, and better and pre-emptive risk management based on improved control structures and corporate governance will entail significant improvements not only to the stability and soundness of the financial system, but also to its efficiency in the allocation of resources. This, in my view, should benefit the cyclical behaviour of the banking system and also, it is very likely that it will be around a superior trend.

## 5 Concluding Remarks

Let me conclude with a few reflections on the general issue of this talk, namely monetary policy and Basel II. I have tried to highlight those distinctive features of the revised capital framework which, in my opinion, are more likely to exert some influence on the terrain in which central bankers design and implement their monetary policies. Only the passage of time will reveal the consequences of the most ambitious bank-capital

regulatory framework ever envisaged at a multinational level for the conduct of monetary policy. Still, I feel we can lay hands on some basic, but valuable, equipment for performing this jump into the future by looking at the past.


So far, I have drawn on some important lessons imparted by past monetary and financial episodes and experiences. Let me now draw on one further lesson. The enormous success of monetary policy in bringing us the benefits of low and stable infla-



tion could have hardly been possible without a preliminary diagnosis of the causes of high inflation and its effects on welfare, including an assessment of what the objectives of monetary policy should be, their relative importance over different horizons, and a comprehensive analysis of the best institutional framework and the instruments required. With hindsight, the right answers to these points seem clear: in general terms, a stable value for money should be the most precious output yielded by monetary policy; and, to achieve this, a wise mixture of simplicity, transparency, commitment and sound judgment, and, overall, a good measure of forward-looking behaviour should all be included in the monetary authority's toolbox.

You will recognise in this list of tasty ingredients some of the basic elements used in building up Basel II, for it pursues a goal, namely financial stability, which at least in some of its most fundamental aspects may not be

much different from that pursued by monetary policy. Just as the economics profession concluded that over the relevant horizon price stability was essentially all about monetary conditions, we on the Committee believe that the stability of the banking industry is all about risk awareness and management and adequate shock absorbers.

Consequently, Basel II seeks to give due regard to the greater importance of managing bank risk and capital for the purpose of achieving higher levels of financial stability, but I am personally in little doubt that its benefits will also be felt in monetary policy spheres. 



FRANCO BRUNI  
KURT PRIBIL  
KARL SEVELDA



Podiumsdiskussion:  
Herausforderungen für Finanzinstitute  
auf der Mikroebene

Panel Discussion:  
Micro-Challenges for  
Financial Institutions

FRANCO BRUNI





# Micro-Challenges for Financial Institutions

## Introductory Statement

It is a pleasure to participate in this panel and I deeply thank the OeNB for the invitation. I am honoured, in particular, to have the opportunity to comment on Basel II as along with Governor Caruana.

In the international scenario of financial regulation, the most important micro-challenge is probably the one of coping with the *introduction of Basel II*. The vast majority of authorities, experts and operators think that the substance of Basel II is – more than anything else – a powerful and beneficial incentive for banks to improve their risk monitoring and risk management capabilities. One can criticize Basel II in various ways and on many grounds but this favourable judgment, in my opinion, remains true.

This assessment is equivalent to saying that Basel II is more a method to improve the way in which banks calculate their *economic capital* than a change in a binding minimum *regulatory capital* ratio. Economic capital is the expression we use to indicate the amount of capital that banks would chose in absence of capital regulations. When economic capital is larger than regulatory capital, it is also the amount of capital that compliant banks, in fact, have.

Theoretically the calculation of the economic capital of a bank requires the minimisation of a *bank's loss function* trading off the marginal extra cost of capital with the marginal extra benefits of reducing the probability that the bank loses its franchise value. Quite differently, regulatory capital should result, for every bank, from the maximisation of a *social welfare function* trading off a higher *macroeconomic* cost of credit with a lower *systemic* risk of banks' failure. It is important to stress



that, in principle, capital regulation, even if it is tailored to the different characteristics of individual banks, is aimed at avoiding *systemic* failures. As a consequence, regulatory capital should depend also on the specificities of a banking system as a whole as well as on the features of several different elements of financial regulation, of supervision and of the methods of crisis management that prevail in the system. For instance, given the difficulties to distinguish solvency from liquidity crises, optimal capital regulation should take into account also the existing rules and arrangements for central banks' lending of last resort.

The relationship between economic capital and regulatory capital has not been analyzed in depth in the literature. Basel II official papers are explicit in stating that the new regulations are aimed at reducing the

gap between economic and regulatory capital. But so far insufficient efforts have been made to understand what this shrinking of the gap exactly means; which is just one of the many possible examples of the fact that the economic theory of financial stability and of financial regulation is seriously underdeveloped. We are far from being able to check whether our regulations are the optimal ones. The impressive differences of opinion on Basel II are among the consequences of the lack of a solid, well established theory behind the regulations. Also as a university teacher of both monetary theory and policy and of prudential regulation, I feel rather uneasy when I consider how differently robust are the theoretical foundations of my lectures on optimal monetary policy strategies and institutions and the theory behind my teaching on topics of optimal financial regulation.

My knowledge of the literature is probably insufficient, but the only paper that I know which develops in a sufficiently articulated and analytical way the theory of the relationship between economic and regulatory capital is a very recent paper co-authored by Rafael Repullo.<sup>1</sup> One of the conclusions of this paper is that economic capital tends to be, within a reasonable parameter region, higher and increasing when the degree of competition between banks is higher and rising, mainly as a consequence of the fact that bank margins are a substitute for bank capital in cushioning from insolvency risks. The paper also shows an obvious inverse correlation between economic capital and the risk-premium component of the cost of capital. With a sufficiently

<sup>1</sup> Elizalde, A. and R. Repullo. 2004. *Economic and Regulatory Capital: What Is the Difference?* CEPR Discussion Paper No. 4770. December.

low cost of capital and a sufficiently high degree of bank competition, regulatory capital can turn out to be lower than economic capital. In this case regulatory capital is non-binding and banks' capital ratios are – as it often happens in reality – well above minimum required ratios.

The case of *non-binding capital ratios* is relevant. The excess of economic over regulatory capital can be used by banks also as an important signalling device for the markets. Among the consequences of the possibility that capital ratios are non-binding there is a substantial decrease in the risk of pro-cyclicality of capital regulations. More importantly, I think, to the extent that minimum capital ratios can be non-binding, there is less risk that the ratios required by Basel II will turn out to be dangerously too low, especially for large banks. This risk had already been noted some years ago by the European Shadow Financial Regulatory Committee (ESFRC)<sup>2</sup> and is now feared also by important US regulatory authorities.

Minimum regulatory capital, though, can be often *strictly binding*, which happens when economic capital is low. Economic capital can be low, for instance, when bank competition is low and bank margins are high. It can also suddenly become lower than regulatory capital (and therefore strictly binding) when, for instance, a sudden increase takes place in the bankers' risk propensities, a parameter that influences only economic capital while regulatory capital depends on

the much more stable risk aversion of the authorities. Economic capital can happen to be low, I maintain – I cannot cite any literature on this point –, also when banks are too big to fail and, more generally, when implicit or explicit bail-outs or subsidies are expected in favour of borrowers and/or in favour of lending or securities-buying banks. With non-binding regulatory capital, the risk that the complex methods with which it is calculated result in capital ratios that are too low, compared to the socially optimal values that would guarantee an adequate protection against systemic crises, is a material risk.

Looking at the current debate on Basel II, the risk of too low mandatory ratios is just one among the many issues that are discussed. An issue which is also connected to the risk of serious delays in finalising and applying the new rules. At the end of April US federal banking supervisors<sup>3</sup> decided to postpone the publication of implementation details, throwing into doubt the timetable of the new rules. They argued that their own testing had suggested that Basel II would result – because of unclear reasons – in a sharp drop in required capital. More generally, the attitude of the US and of some other countries towards the new Basel Accord suggests that there is a risk that the Accord is applied in different ways, with different timing and to a different extent in different parts of the global financial world, which would endanger the credibility of international financial regulation as

<sup>2</sup> “The ESFRC thinks these estimates are too conservative, and there will be a substantial overall reduction of the regulatory capital requirement. ... This significant reduction in the amount of capital held by banks in the EU and G10 is contrary to the stated objective of the Basel Committee, and it may have potentially adverse consequences for the stability of the banking system” – in: ESFRC. 2003. *Bank Supervisors' Business: Risk Management or Systemic Stability?* Statement No. 16. Basel and Zurich. May 2003 ([http://www.ceps.be/Article.php?article\\_id=283](http://www.ceps.be/Article.php?article_id=283)). See also (on the CEPS website) the other ESFRC Statements on Basel II, starting from Statement No. 4 in 1999 and including the recent Statement No. 19, 2004.

<sup>3</sup> See *Global Risk Regulator*. Vol. 3, Issue 5. May 2005.

well as the effectiveness and efficiency of the new Basel pillars.

Among other problems on the Basel front<sup>4</sup> let me just mention one that is very general and potentially important. I like to call this problem the *problem of double discretion*. It has to do with the role of Pillar 2, which gives supervisory authorities substantial discretionary powers in various directions, including the validation of the methods with which the ratios of Pillar 1 are applied by the banks. In



my opinion the discretion is double because, even when a bank is fully compliant with Pillar 1 ratios, the

authorities can ask that bank, in special circumstances – including the case of obviously insufficient ratios resulting from validated models – to hold additional capital. I am worried about the extent of the authorities' discretionary powers for three reasons. First because, as in other types of economic policies, when the ratio of rules to discretion diminishes and goes below a certain critical value, various inconsistencies can cause a loss of credibility and efficiency of the policy stances. Second, because when high levels of discretion are allowed the behaviour of national authorities can differ very much and, as a consequence, the integration, the efficiency and the stability of the international banking sector can suffer. Third, because discretionary decisions in prudential policies can shift the perceived responsibility of banking risks from the banks

to the authorities, whose support – even in the form of at least partial bailouts – is then expected in times of difficulty, triggering, if necessary, government interventions. Suppose that a bank fights for some time to get the authority's approval of its Pillar 1 internal rating model and then struggles again to comply with additional capital required on the basis of Pillar 2 as well as with other detailed and intrusive discretionary supervisory requirements. Now think what might happen if this bank, after complying with all the required measures, enters a period of serious difficulties and solvency problems. Isn't it true that this bank will feel like having a sort of right to be helped in a substantial way, considering that the vast amount of discretion used by the supervisor can look like a patronage of its risk management decisions? The problem becomes obviously larger with the size of the bank and can result in a socially risky amount of *moral hazard*.

Let me conclude by mentioning a few other issues that, besides Basel II, are among those that make the present situation of international financial regulation, in my opinion, a rather difficult one. Problems with International Accounting Standards are well known and deeply linked with Basel issues. Company law and corporate governance are also a connected source of concern. Transatlantic cooperation in financial regulatory matters is progressing, but certainly not very fast and it often leads to discover more problems than those that it partially solves. At the European level, difficulties with the Financial Service Directive threaten the efficiency of the Union's capital market: for vari-

<sup>4</sup> Including the major issue of coming to a better definition of the numerator of the Basel's ratio, i.e., of what banks can count as their eligible capital.

ous reasons, they have also a potential cost in terms of stability. The Financial Services Action Plan has been successful in producing 39/42 planned directives but the number of directives that have been adopted and implemented by individual member states is both low and badly known: in this respect I find the European Commission's Green Paper<sup>5</sup> a somewhat weak document and I hope that the name & shame method will be soon used much more intensively to discipline member states. The Green Paper adventures into suggesting the idea of the 26<sup>th</sup> regulatory regimes for specific financial products.<sup>6</sup> This can be an interesting perspective, but the much more natural proposal to stop playing the tricky mutual recognition game, to abandon the acrobatic idea of lead supervisors, while simply putting the 15 to 20 largest European international banks under a *single 26<sup>th</sup> regulatory and supervisory umbrella*, with strong central coordination and total

sharing of information (plus, perhaps, an opting-in clause for smaller banks that might prefer this 26<sup>th</sup> regulatory setting) seems completely unfeasible from a political point of view, during a period when cross-border mergers and acquisitions are going through such strange and unbelievable stories as the ones that are presently happening in my own country. In several countries, often triggered by the lack or by the delay of action of regulators and supervisors, magistrates are massively invading the fields of financial transparency, correctness, regulation and supervision.

The scenario does not seem encouraging. It is a discouraging paradox that in a situation where it is so difficult to produce new regulations in an appropriate way, the loudest voice coming from the markets is a protest against *over-regulation*. It is even worse that this protest is often perfectly right and well justified, and this is where I would like to conclude. 🐼

<sup>5</sup> COM (2005) 177. *Green Paper on Financial Services Policy (2005–2010)*.

[http://europa.eu.int/comm/internal\\_market/finances/docs/actionplan/index/green\\_en.pdf](http://europa.eu.int/comm/internal_market/finances/docs/actionplan/index/green_en.pdf)

<sup>6</sup> *Ibidem*, section 4.

KURT PRIBIL



# Micro-Challenges for Financial Institutions

Let me first thank you for the invitation to participate in this panel discussion of the Economics Conference.

We have heard a lot about Basel II – about the importance of economic capital and how Basel II may affect the way monetary policy influences some key financial and real variables.

Using a somewhat different starting point in my contribution, I would like to focus on three different micro-areas. As a representative of a supervisory authority I will first illustrate the new challenges for supervisors; second, present the main challenges for banks resulting from Basel II; and third, point out what we can expect from the post-FSAP period.

With regard to the new challenges for supervisors, I see more and more that regulators have to implement an integrated approach in supervision. Why is it so important to choose an “integrated view”? Let me illustrate this with a few points:

- Financial markets are becoming progressively integrated and increasingly complex;
- Cross-border systems of trade are emerging;
- There is a burgeoning supply of financial services across sectors – insurance companies offer loans or substitutes to loans; banks are a powerful distribution channel for



- insurance policies – and these are only a few examples;
- There is disintermediation on the one hand as well as an increase in cross-sectoral interlinking among companies – up to big financial conglomerates – on the other hand.

As a consequence, which conclusions have to be drawn? I believe that regulators have to take care of a level playing field – not only across national borders, also across sectoral borders.



Moreover, regulators have to build up a supervisory framework that gives flexibility to regulate a permanently changing financial market and to avoid supervisory gaps. In the end, regulators and supervisors have to cooperate internationally in order to develop and enforce common international standards which will enhance the efficiency and integration of financial markets. In that context, the general conclusion is that the concept of an integrated supervisor meets these challenges best.

Let me come to the second part of my statement and allow me to briefly stress the main challenges for banks resulting from Basel II.

First, banks must implement new core processes in order to fulfil the Basel II requirements. The implementation of new processes is not restricted to risk management departments. It affects and encompasses the whole credit approval process throughout the whole banking organisation. For

example, rating results (rating grades, PDs) as used for the calculation of IRB parameters must be used as a main input for internal risk management and the credit decision.

Second, in order to use credit risk mitigation techniques to gain reductions in capital requirements, demanding operational requirements must be met. An example is the requirement that the bank has to ascertain that real estate property is adequately insured. Therefore the new framework places risk management at the centre of the bank's strategy and requires managers to understand the drivers of risk inherent in their business.

A further main challenge for banks are the requirements arising for banks from Pillar 2, which shall not be underestimated. Pillar 2 requires banks to assess all relevant risks and relate the risks to their economic capital. This is the so-called *internal capital adequacy assessment process* (ICAAP). Unlike the regulations of Pillar 1, the rules of Pillar 2, do not prescribe how risk has to be calculated. Pillar 2 only prescribes which risks have to be considered in the assessment, if relevant (e.g. interest risk in the banking book, residual risk, concentration risk etc.). Apart from the requirements related to the ICAAP, Pillar 2 states requirements concerning internal procedures and internal control mechanisms (e.g. governance arrangements, organisational structure, lines of responsibility). These internal procedures shall be comprehensive and proportionate to the nature, scale and complexity of the credit institution's activities. It is in the first place the bank's job to define what this means for its own procedures and control mechanisms. But it will be checked by the supervisor, too.


Pillar 2 as a whole is designed to give banks and supervisory authorities room for flexibility and the opportunity to implement the rules in a proportionate way.

So far, I have highlighted the new challenges for supervisors and the key challenges for banks resulting from Basel II. Looking ahead in regulatory development, I will devote the last part of my contribution to what we can expect after the intense FSAP period with its 42 areas of re-regulatory activity.

The micro-challenges of Basel II and of other recent directives are high, to say the least – not only in their sheer quantity, but also in their qualitative dimension. While the industry is complaining about the cost of regulatory regimes, it is at the same time concerned about the still high fragmentation of financial markets in Europe. The irony of this situation that the best efforts to deliver the necessary regulatory framework for a financial internal market, accommodating state-of-the-art risk management systems and innovative product markets, now seem to have provoked regulatory fatigue. This is the reason for a thorough examination of the state of affairs, as laid down in the Green Paper of the European Commission on the ‘post-FSAP agenda’. What challenges do we have to face in the post-FSAP period? In that context many topics may be discussed, I would like to briefly underline two issues: First, I support the message of the Green Paper: let the current, just recently set

framework of integration, cooperation and coordination work out first before possible next steps are taken into consideration – both as regards the regulatory environment and as far as the current EU supervisory system is concerned. We understand the need to accommodate the demand of EU-wide or even global players to streamline their regulatory contacts and to provide a level playing field across sectors and jurisdictions. And it is this goal we have been aiming at in reform-



ing the structures of EU supervision while not giving up the strengths of the local knowledge and understanding of a decentralized structure. Second, I want to disperse the impression that regulatory intervention is a value in itself. It is the achievement of the underlying goals and values that we aim at. We therefore very much welcome valid self-regulatory proposals of the industry, which are seen as more flexible solutions to specific problems, and invite all interested parties to propose solutions along this line. These solutions must be effective, however, and it is the industry that has to live up to what it is expected to deliver in this context. 

KARL SEVELDA



# Micro-Challenges for Financial Institutions

Before going into the topic of “Micro-Challenges for Financial Institutions” I would like to briefly introduce myself as well as RZB Group where I am a Member of the Board of Managing Directors. RZB AG, the commercial and investment bank operating globally also serves as the holding company for Raiffeisen International AG, since recently a publicly traded company that owns and runs network banks in 15 countries within Central and Eastern Europe. In RZB I am heading the Corporate Customer Divisions as well as different Finance Divisions.

This short introduction is not only for the benefit of those who I have not met before, but moreover should underline that I am a banker rather than an economist. Therefore, what most of you with a background in economics would refer to as a micro-challenge, myself as a banker would very often refer to as a macro- if not a mega-challenge.

So I guess you are noticing already that I will not be talking about economic theories explaining macroeconomic measures and their effect on important issues like financial stability and the avoidance of financial crises. Besides, I suspect that I am explicitly invited today because of my reputation as an *advocatus diaboli* in the Basel II discussion between the regulatory authorities and the Austrian banks.

And in order to satisfy the honorable hosts of today’s conference and to work on my diabolic image, I have prepared a short statement mainly dealing with micro-challenges for banks like RZB Group as a consequence of new Basel II regulations. These challenges – as well as some positive points about Basel II – shall serve as an impetus for the subsequent discussion on the panel, which I am very much looking forward to.

Basel II basically is a logical thing and most of the measures prescribed, professional banks have been applying for decades already. But Basel II demands slight changes of measuring risks, goes extremely into detail and opens a wide field of activities for banking authorities – which all have one thing in common: they cost a lot of money! Therefore my first criticism is the lack of cost-benefit analysis within the entire Basel II framework.

RZB Group is currently estimating – and this estimate is quite well

informed by now – that total cost attributable to the implementation of the new regulations will EUR 100 million over the next four years – that is around EUR 25 million per year. Quite a challenge in the eyes of a banker, whose bank is No.124 in the ranking of the world’s largest banks in terms of balance sheet total.

Second, I would like to address a challenge that is obvious as well, but only to those people who have had the pleasure to study and understand the Basel II Accord. Looking at Jaime Caruana, Governor of the Banco de España, I expect you would agree that the 230 pages of regulations are everything else but lean and an easy to understand paper. When I saw the formula for the new risk weight under Basel II I felt that the people, who had figured it out, should be nominated for the Nobel price in mathematics. For those who haven’t seen the formula, – here it is!

$$Correlation(R) = \frac{0.12 * (1 - EXP(-50 * PD))}{(1 - EXP(-50))} + 0.24 * \frac{1 - (1 - EXP(-50 * PD))}{1 - EXP(-50)} - 0.04 * 1 - \frac{(S - 5)}{45}$$

$$Maturity\_factor(b) = (0.11852 - 0.05478 * \ln(PD))^2$$

$$Risk\_weight(RW) = LGD * \left( N \left( (1 - R)^{-0.5} * G(PD) + \left( \frac{R}{1 - R} \right)^{0.5} * G(0.999) \right) - PD * LGD \right) * (1 - 1.5 * b)^{-1} * (1 + (M - 2.5) * b) * 12.5 * 1.06$$

I would like to characterize it similar to the Basel II Accord in general – extremely *complex*. A good thing that computerized systems will have to do the computations.

But that is exactly, where my major concern in connection with the new regulations and procedures comes in. I am convinced that credit business simply cannot be brought down to a single formula – no matter how long and complex it might be!

Currently, key account managers are in touch with their clients on a day-to-day basis and know their customers inside out. And they are the ones who have the final responsibility whether to lend or not to lend money to a company. Clearly, their decisions are often based on facts other than mere financial ratio analysis that leads to a mathematically derived rating. Much rather, so-called “soft facts,” like the drive of top management or its net-

working skills and sociability with key clients and suppliers are the deciding factors besides pure mathematical formulas. And from my experience – and I have been in this business for a little while – this way of doing business is extremely effective. Summarizing the loss history of the loan portfolios I am responsible for, I can state that I have lost money mostly with companies, where my account managers did not follow my major principle that is “*know your customer*” and not because a certain formula showed some negative results.

My concern is that – in the future – my colleagues might rely too much on mathematical formulas, which – according to my experience – can never replace the personal judgement and assessment of a commercial banker. Or in other words: Mathematics might kill the “guts feelings.”

But what else does Basel II mean to a financial institution like RZB Group? Currently, RZB Group is successfully implementing the required standards and procedures within no less than 40 financial institutions such as fully licensed banks and leasing companies in 21 countries with individual jurisdictions. Within RZB AG only, 70 highly skilled employees are dedicating 100% of their time to the project. Another 70 to 80 people do the same within our network. Not to mention the countless meetings that I as well as top and middle management within the entire Group have had and will have with regards to the subject.

And – looking into the past – the trend of extensive regulation will be continued in the future. In Switzerland, for example, the official collection of federal legislations concerning banks had 2,440 pages in the 1970s, 3,600 pages in 2001 and by 2003 the extent had grown to 5,500 pages.

Luckily, no bad comes without any good. And in order to give you a more balanced picture of what Basel II means to a lot of banks (including RZB) I would also like to mention the benefits of Basel II that come alongside its implementation:

Once Basel II is rolled out the banks concerned will have obtained uniform risk management and risk controlling. Global risk positions will be obtainable from the systems with the proverbial “push of a button.” All client ratings and key data will be available to headquarters in Vienna at any time and the management and control of banking groups will be facilitated significantly. So quite a bit of good news also.

But I was asked to address another question during my short statement. How will all this affect the optimal level of capital that financial institutions are planning to hold in the future? Here, I can only speak for RZB Group and the short answer is: *Not much, really!*


First, the latest QIS (Quantitative of Impact Study) shows that the regulatory equity requirement for RZB Group will not change significantly as a consequence of Basel II.

Second, this decision will remain based on three factors outside of the Basel Accord: Return on Equity, Rating and Cost of Refinancing. The more core capital – or equity – the less return on equity can be achieved. Less equity on the other hand will result in a lower rating from the rating agencies and therefore in higher refinancing cost. In 2004 RZB Group managed to



generate a return on equity of 27.4% before tax. At the same time we maintained a core capital ratio of 9.2% and an equity ratio of 10.7% that is 34% above the legal requirements, which is particularly helpful for a fast growing bank like the RZB Group!

To make a long story short, for RZB Group the level of equity will remain a strategic decision to be periodically made and revised by

RZB Group's board of management. Currently, we have set at a minimum level of 7% – a level, where we feel that we get an external credit rating that allows us to refinance our operations at competitive prices and leaves us with an equity buffer that puts the Group in a position to keep growing its operations internationally, like we have done in the past. 





EVA SREJBER



# The Divorce between Macro-Financial Stability and Micro-Supervisory Responsibility: Are We Now in for a More Stable Life?

## **Introduction**

I hope I won't disappoint our kind hosts who asked me to deliver this address but I have a confession to make – in Sweden, macro financial stability and supervision are not divorced. They have never been married. Indeed, it is only quite recently that the Riksbank and the Financial Supervisory Authority (FSA) have started to acknowledge – operationally in their respective policy frameworks – the link between macro-financial stability and micro-supervisory issues.

Whether we just got divorced or are soon to get married, the relationship between financial stability and supervision is highly relevant. I will structure this address in the following way. First, I will give a brief description of how the relationship between supervision and financial stability has developed in Sweden. Then, I will move on to the financial sector developments that now challenge the ways supervisors and central banks have been working. The process of internationalisation, in general, and cross-border integration, in the EU, will force both supervisors and national

central banks to focus on their core tasks and to a certain degree invent new ways to perform those tasks. Finally, I will comment more specifically on some of these challenges, and in connection to that also discuss some of the proposed alternative ways of responding to these challenges.

### **The Swedish Case**

Before the banking crisis in the early 1990s, the cooperation between the Riksbank and the Swedish FSA (then the Banking Inspection) was limited to high-level contacts. In their day-to-day activities, however, the two authorities worked in different silos – the Riksbank with monetary and exchange rate policy and the FSA with regulating and supervising financial institutions. The crisis made it very clear to the Swedish authorities that there is a strong link between soundness of financial institutions and macro-financial stability, and hence a need for close cooperation between the FSA and the central bank.

This economic link is mirrored by a parallel link spanning at least three aspects of regulatory involvement in the financial sector – crisis prevention, crisis management and crisis resolution. In Sweden, these aspects of regulatory involvement are shared between the supervisor, the central bank and the ministry of finance.

In crisis prevention, the supervisor has the tools for regulating and supervising the institutions, while the central bank might play a supporting role through monitoring the stability of the system and the links to the real economy. In crisis management, the supervisor lacks the financial resources to back any intervention, while the central bank has the power to act as a lender of last resort. In other words, the likelihood that the central bank

will have to provide liquidity support to a financial institution is partly determined by the quality of supervision. At the same time, the central bank may very well need the supervisor's analytical or informational support to be able to decide on whether or not and how to intervene. Finally, in crisis resolution, even if the ministry of finance takes the lead, it is likely to rely extensively on the supervisor and the central bank for advice and execution.

If we agree that there is a link between the soundness of institutions and financial stability, then supervisors must be interested in crisis management and resolution and central banks must be interested in certain aspects of supervision.

In the last decade, at least in Sweden, the macro- and micro-perspective have grown gradually closer. Indeed, the Swedish FSA now has an explicit interest in the stability of the system, while the Riksbank has taken a greater interest in the stability of single institutions, if they are judged as systemically relevant. We have regular contacts to share information and assessments and coordinate policy. If before, the relationship between the two authorities might have been described as polite but uninterested, it is now a mix of curiosity, some competition and frequent flirting.

### **The Times They Are A-Changin'**

This could have been the happy end of our story but recently there have appeared challenges to this set-up. All over the globe, the financial markets are becoming more integrated and financial institutions as well as financial infrastructure companies are consolidating domestically as well as cross-border. The challenge touches

all the aspects of regulatory involvement – crisis prevention, crisis management and crisis resolution.

### **Cross-Border Integration of Financial Markets ...**

In the EU, the process of cross-border integration has been actively promoted by the creation of the euro and the ongoing harmonisation of regulation and supervision – in the last years epitomised by the Financial Services Action Plan (FSAP). Admittedly, financial markets integration in the EU has so far been a mixed picture.

Until now, integration has mostly taken place in wholesale markets, such as the money market and the bond markets. Many investment banking segments such as capital raising and mergers and acquisitions (M&A) for large corporates are also dominated by global giants. In contrast, retail financial services are still to a very large extent controlled by domestic players, at least in the old Member States.

### **... and Institutions ...**

My guess is that we still have only seen the beginning of cross-border integration. Banking integration will probably not primarily take place through direct cross-border provision of services but through cross-border bank M&A. Integration of ownership will result in integration of lending/funding, organisation, products and services.

According to a study by the ECB, 43 banks and banking groups are active in more than three EU countries.<sup>1</sup> Only some years ago, cross-border banking M&A in the EU was only taking place between small countries or vis-à-vis the new Member States – Austrian banks' expansion into

some Central European countries is a good example of this phenomenon. Now this is changing. Today French, Spanish, German and UK banks are all trying to build European platforms. For instance, as you all know, Spanish Grupo Santander now owns the fifth biggest UK bank, and Barclays of UK owns the sixth largest private sector bank in Spain. And this spring, we are all witnessing the takeover battles, started by foreign bids, for two Italian banks.



### **... Is Good News for the Economy but Raises Challenges to Supervisors and Central Banks**

At the Riksbank, we welcome this development. We believe financial market integration is strongly positive for economic efficiency and hence for growth and welfare in the EU. But we admit that integration presents some complex and multifaceted challenges to us as authorities.

At the outset, integration is obviously hindered by differences in language, business culture and national laws and regulations. But once it happens, integration tends to follow the logic of business, not the “logic” of country border or national law. For instance, for financial groups which are expanding cross-border a part of the synergies is derived from centralising functions. Hence, the group's credit risk model might be developed

<sup>1</sup> Banking Supervision Committee. 2004. *Cross-Border Banking and Its Possible Policy Implications*. December.

in the parent bank, while the group's liquidity is managed through a foreign subsidiary, and the group's derivatives trading is done in yet another subsidiary. That is why integration gives rise to a structure that often seems to be in conflict with the present regulatory structure. But the problem is not integration – the problem is that our regulatory framework is not designed for a single market for financial services.

Let me give you a concrete example of this. In the Nordic and Baltic countries – excluding Iceland – there are six banking groups with significant cross-border activities. Each one of these cross-border groups has regulatory contacts with seven supervisors and eight central banks.<sup>2</sup> It is commonplace to note that Western Europe is over-banked. It would not be outrageous to say that it is also over-crowded with regulatory authorities.

Our conclusion is that we, as national authorities in the EU, must solve the issues that integration gives rise to, rather than stopping integration. This might sound very obvious, but some of us authorities still only pay lip service to the idea of the single market. Or we love the idea of the single market as long as it means that our own banks survive as national champions and are able to expand abroad.

The question of how the relationship between financial stability and supervisory responsibility might evolve is a big and difficult one. Still, it is dwarfed by and will be determined by the question of which will be the shape of the relationship between authorities – central banks and supervisors – in different countries in the EU. It goes without saying that since laws and regulations and the division

of responsibilities between authorities are ultimately decided by the governments of the Member States, the challenge of integration inevitably also concerns finance ministries. I will now try to give some thoughts on the alternatives before us.

### **Back to Basics**

What will be the roles of national supervisors and central banks in an integrated EU financial market? If central banks and supervisors haven't done it before, cross-border integration will force them to think hard about their responsibilities, mandates and tools.

In order to do this, they will have to go back to the beginning and find their “raison d'être”. What is special about the financial system and why are we regulating, supervising and monitoring financial markets and institutions? Who or what are we protecting and which tools do we need?

Whether authorities want to defend the status quo or reform the regulatory framework, they will need to prove their case to politicians as well as to each other. By itself, this might very well improve the way supervisors and central banks work. You may call this a positive external effect of integration.

### **Regulation and Home-Host Issues**

There are many issues at the table, but in the context of this presentation I would like to divide them into two categories.

The first category includes the issues of what regulations should be imposed on institutions and markets in the EU. How can we design laws and regulations that are flexible enough to

<sup>2</sup> The Bank of Lithuania also has supervisory responsibility.

fit all countries reasonably well, while strict and “harmonised” enough to support a single market?

The second category is essentially about the relationship between supervisors and central banks in different countries – the division of labour, power and responsibilities. This category of issues has come to be broadly referred to as the home-host issues. I will just give a short comment on the regulatory issues, while devoting the rest of my time to the home-host issues.

### Regulation

Regulation on the EU-level first of all faces the same basic trade-off as on the country level. The Riksbank’s view is that since almost all regulation involves costs – in terms of lower efficiency and growth – it should be the last resort and used only when there is a clear case of market failure. Some regulation is surely needed to ensure a stable and sound financial system and necessary consumer protection. But too much or too strict regulation will give rise to new costs that are higher than the original costs that regulation initially aimed to address.

Regulation on the EU-level also faces another trade-off that is not present on the national level – that between the value of a *level playing field* and the cost of an overly detailed or inadequate regulation. A completely level playing field presupposes detailed rules that are applied in the same way in every market. But too detailed rules on the EU level risk being inadequate on the national level since national markets often differ widely. This could give rise to costly overregulation hampering financial development or driving financial institutions to settle elsewhere. Hence, it might be wise to leave some degree

of freedom to the member countries. Historically, *institutional competition* has proved to be very positive for development in the long run.

At the same time, EU directives (as most international rules) tend to leave plenty of room for *national discretions*, effectively reducing the value of the convergence/harmonisation that probably was the motivation for the directive in the first place. We risk ending up with the worst of two worlds – very detailed rules on the EU



level and loads of discretions on the national level. This makes the rules opaque and their implementation difficult to predict for the private sector. The starting point for EU rules should be the least common denominator. Today instead, it often seems like the starting point is the sum of all Member States’ national rules.

As national authorities we are all convinced that our national discretions are worth fighting for and we take pride when they are included in the final drafts. Perhaps we should ask ourselves more often whether our discretions are motivated by a fundamental need or just deep-rooted tradition or, even worse, our unconscious caving in to special interest groups. I realise this might be naïve but why not take this opportunity of change and think new instead of designing EU regulation on the basis of existing, often imperfect, national regulation.

The need for a *common rule book* for big cross-border banking groups is often



raised by the industry. In principle, we are sympathetic to this wish. If a common rule book means “just” common rules we are certainly moving in that direction. One of the main objectives of the Committee of European Banking Supervisors (CEBS) is to promote convergence of supervisory rules and practices. However, in the sense of common or centralised decision making by authorities, I think it is still far away from coming true. As long as the implementation and interpretation of direc-



tives and rules is done on a national level it will take time before we have a common rule book.

Still, the aim should be to eliminate or reduce as much as possible these differences. Remaining differences in supervisory practices between countries should be clearly disclosed in order to improve the predictability of the EU regulatory system – which is another area where the CEBS is doing important work. Another practical example on how to reduce the regulatory burden would be for countries to agree on a common and centralised reporting standard for large cross-border groups.

#### **The Home-Host Relationship ...**

The home-host relationship is the underlying theme running through a number of issues in the regulatory debate. Broadly speaking, the home-host relationship is about how we should divide tasks, powers and responsibility between different countries when it comes to supervising, monitoring and, in the worst case, sorting out financial institutions in distress.

Formally, the home-host relationship only refers to the division of responsibility between supervisors, which currently is based on the principle of home country control. The home country is the country where the bank is licensed. For a bank, this means that the home country is responsible for supervising the bank and its foreign branches. The home country's deposit insurance also covers its banks' foreign branches. In the case of a group, it means that the home country is also responsible for supervising the entire group on a consolidated basis, while the host countries are responsible for their respective subsidiary banks and deposits. At this very moment, the CEBS is drafting the so-called home-host paper giving guidance on how the home-host supervisory relationship should be arranged given existing EU legislation.

Even if there are no legally binding rules regarding the relationship between countries in crisis management or crisis resolution, these aspects of regulatory involvement have borrowed the terminology of the supervisory home-host concept. For example, when discussing lender of last resort in crisis management and burden sharing in crisis resolution we now talk about home and host central banks and finance ministries, respectively. This is natural, since legally the financial liabilities for a group are ultimately carried by the parent bank. Of course, a parent can choose to default a subsidiary, but it will then have to bear the capital loss. Subsequently, in practice, the ultimate public responsibility over a group rests with the home country.

#### **... Comes Under Strain ...**

At first glance, the home country principle seems very neat. But take a closer look and you will see signs

Table 1

The Home-Host Relationship (Both Bank and Group)		
Systemic relevance in HOME country	Systemic relevance in HOST country	
	Significant	Non-significant
Significant	Potential conflicts of interest and coordination problems	Not a big problem
Non-significant	Potential conflicts of interest and coordination problems	Not a big problem

that this set-up was not designed for a fully integrated market. Essentially, there is a gap between, on the one hand, legal powers and mandates and, on the other hand, de facto abilities and responsibilities. Home countries are given powers over branches and subsidiaries but might be unable or unwilling to use them, while host countries are losing powers that they have been willing to use. This gap becomes a problem once you have a banking group or bank that is systemically relevant in a host country (see table 1). Even if there are not so many of these cases yet, I am convinced that the number will increase. The potential conflicts of interest and coordination problems are of many kinds. Let me give you some examples:

**... When Branches and Subsidiaries Become Systemically Relevant**

Suppose there is a banking group of roughly equal systemic relevance in the home country and the host country. The home country supervisor is the consolidating supervisor and coordinates the activities vis-à-vis the group. If cooperation works well, the host supervisor will receive information from the home supervisor. But in the event of a crisis in the banking group, all authorities have a clear mandate to only protect their depositors and systems. One can easily imagine a situation where, as in my earlier example, the group has surplus capital

in one of its parts, extra liquidity in another and the cause of the problem is in a third part. The lack of coordination might very well result in a worse (more costly) outcome for all involved.

If the presence in the host country is a branch and not a subsidiary, the host supervisor has only limited means of obtaining information about – or taking actions against – the bank. In the event of a crisis it can only hope that the home country will take the host country’s situation into account when managing the crisis. The home country, on the other hand, faces a situation where it could be necessary for its central bank to provide emergency liquidity assistance (ELA) to support a bank which has a large part of its activities in other countries. Should the bank need to be reconstructed it would be the home country’s tax payers that would have to foot the bill – either by supplying the necessary capital to the bank or by supporting the deposit guarantee system with the funds needed to pay out insurance to the bank’s depositors.

The imbalance between home and host countries may be further deepened by differences in size between the two countries. One case will be that of a big home country and a smaller host country. The banking group’s exposure to the host country is then probably relatively small on a consolidated basis. This results in the

home country authorities spending relatively limited resources – in terms of staff – on the foreign subsidiary’s activities in the host country. If such a banking group runs into problems, the home country authorities will not necessarily view it as systemic, while the host country authorities certainly will do.

### **How to Deal With the Home-Host Asymmetry?**

In all these examples host authorities



have a legitimate interest in being able to influence supervision, share assessments and have a say in the event of a

crisis situation. They have been given the task of protecting the soundness and stability of their financial sector and the general public in the host country will rightly expect their authorities to be able to do this. At the same time, the home authorities should have an interest in sharing resources in crisis prevention and risks and costs in crisis management and resolution with the host countries. In the current setting, however, this is only possible to a very limited extent.

First, there is a need to share information between the home and the host. This should be the least difficult, but in practice everyone who has tried to share information between authorities knows it can be a complicated and cumbersome process, at least until there is an established routine. Even when there are no confidentiality concerns there are many practical obstacles to overcome. Information sharing is not only about sending data back and forth, but more importantly,

it is about explaining information and sharing assessments. As long as hosts are under the impression that they know a lot less than the home, it will be very tricky to cooperate.

Second, there is a need to cooperate on actions vis-à-vis the bank or the group and its components. If hosts cannot influence the process of supervision or crisis management, their trust in and use of the information from the home authority will be very limited.

Sharing information and cooperating on regulatory actions may be problematic already in normal times, but is probably much more difficult in a crisis situation when economic risks and costs are clearly visible. So far, cooperation and coordination in crisis situations is dealt with in the EU by various Memoranda of Understanding (MoUs). Even if these MoUs are not legally binding, they are valuable documents. They provide a basis from which more operational crisis cooperation agreements can be developed by the countries and authorities that see the need to do so.

But looking at this increasingly complex patchwork of supervisory colleges, central bank networks and MoUs that we are now creating, one cannot help to wonder if there are not any better alternatives for cross-border cooperation.

### **Future Alternatives to the Home-Host Model**

What are, in the long term, the alternative models to the current home-host set-up? In the EU, we are committed to creating a single market for financial services. If we take off our national central bank and supervisor hats, are we really convinced that the home-host model is the best one in the long run?

After all, several serious alternative models have been suggested. The pros and cons of the three main models are reviewed in an interesting paper by Oosterloo and Schoenmaker.<sup>3</sup> I will briefly comment on these.

### Three Alternatives for Supervision

The first alternative is to give the home supervisor the role of *lead supervisor* with full responsibility for EU operations, branches as well as subsidiaries. This is the proposal from the European Financial Services Roundtable (EFR). The lead supervisor would be the single point of contact for reporting and would validate and authorise internal models, approve capital and liquidity allocations, decide about on-site inspections. In short, the lead supervisor would have full supervisory responsibility. The role of host supervisors would be as advisers in a college of supervisors. However, host supervisors would have no formal power. Also, when it comes to financial stability and crisis management, the lead supervisor would only have a national mandate. Thus, there would still be a need for cross-border regulatory cooperation.

The second alternative, which is put forward by the two authors, is to give the home supervisor the role of *lead supervisor with an EU mandate*. The lead supervisor would work as in the EFR model, with the difference that the lead supervisor is given a “European mandate to ensure that the interests of all depositors/countries are taken into account”. In this model there is a decision-making agency of European Financial Supervisors at the centre, which is delegating the task of supervision to each respective home supervisor. Regarding financial stabil-

ity issues, the home country central bank would also be involved, acting on behalf of the European System of Central Banks (ESCB).

The third alternative is both the most obvious and the most radical and would be to create a *European Financial Supervisor* (for example put forth by Breuer). This simply means having one authority acting with full supervisory powers over branches and subsidiaries of cross-border European banks. The system could be tiered



(like in the US) in the sense that the EU supervisor would only be responsible for banks and banking groups with significant cross-border operations, while purely domestic banks could remain the responsibility of the national supervisors.

### A European Financial Supervisor

All three of these alternatives, even the first one, are considerably more far-reaching than what is currently under construction. I do not think many authorities find the first alternative with a lead supervisor very appealing. It addresses the problem only from the cross-border bank's perspective of minimising the regulatory burden. This is important but does not solve the underlying conflicts of interest between the home and the host countries. In short, it is a model which will only work in normal times when the weather is nice, if even then. The sec-

<sup>3</sup> Oosterloo, S. and D. Schoenmaker. 2004. *A Lead Supervisor Model for Europe*. In: *The Financial Regulator* 9(3). 34–42.

ond alternative – the lead supervisor with an EU mandate – seems nice in theory and aims at solving the conflicts of interest by creating a central decision-making body. In practice, however, it could easily become very bureaucratic and inefficient. If we are establishing a central decision-making body anyway, why act through 25 different authorities? Both the first and the second alternatives are half-way compromises trying to please different interests. My own view is that the third alternative, although radical, is the logical solution. There are two main arguments against the idea of a European Financial Supervisor – one relevant and one not very relevant.

The not very relevant argument is that the supervisor needs proximity to have knowledge about the markets where the institution operates. First, this is already a problem with the home-host model. Second, this is an organisational problem that can be solved. An EU supervisor would certainly employ staff from all EU countries and have local offices in the national financial centres. For instance, for a regional cross-border banking group, I imagine the supervisory team to be based in the relevant region, perhaps in the same premises as the national FSA, and to consist of staff from that region.

The relevant argument against an EU supervisor is that supervisory power ultimately needs to be backed by financial muscle. In the present set-up, the financial muscle derives from the national central bank's ability to act as a lender of last resort and the government's ability to raise taxes. The EU lacks such power.

However, this problem is hardly unsolvable. For instance, one could think of the EU building up a deposit insurance fund for cross-border banks

supervised by the EU supervisor, which would be able to handle all but the largest banking failures. In fact, such an EU fund would be better diversified than the national funds are today, which all else equal would enable it to charge lower fees or hold a bigger risk-adjusted buffer. In the event of really large banks or several large banks failing, there could be an established system of committed drawing rights, where the EU fund has the right to raise funds through national governments' ability to raise tax. Regarding liquidity support, the ECB would be given the role as lender of last resort.

To convince national governments to commit such guarantees would of course demand very strict and well thought-out rules governing what actions the EU fund should be allowed to take in the case of a bank failure. These rules could be inspired by the US Federal Deposit Insurance Corporation's very strict mandate to always choose the least cost solution. Among other things, this would in some cases mean allowing shareholders as well as uninsured depositors and debt holders to lose their money. Since to my knowledge most EU countries lack the rules on how to handle large bank failures, it would also be very positive from a contingency planning and moral hazard point of view. With a strong legal framework, the EU would be able to let investors in even the biggest banks take full financial responsibility.

### Concluding Remarks

I remember once hearing Tommaso Padoa-Schioppa, the outgoing member of the executive board of the ECB, saying that there is no need for a European supervisor if national supervisors can prove that, when

needed, they are able to act as one. Personally, I find it hard to see how, in the long run, the EU could avoid establishing an EU financial supervisor. At the moment, we are spending considerable supervisory and central bank resources on trying to construct arrangements that will enable us to work and act as one. Why not instead become one, and spend the resources on supervision and monitoring?

Coming back to the title of this address, I would like to conclude that even though financial stability and

supervision has been divorced in most EU countries there are few reasons to expect the life of central bankers and supervisors to be very stable in the coming years. It will probably not happen overnight, but the integration of European financial institutions and markets will eventually mean big changes also for the financial authorities. To ensure a good outcome for the European financial market, central banks and supervisors will have to be flexible and reinvent their roles and tools. 

ISABEL SCHNABEL





Comments on Eva Srejber,  
“The Divorce between  
Macro-Financial Stability and  
Micro-Supervisory Responsibility:  
Are We Now in for a More Stable Life?”

**1 Motivation**

Eva Srejber’s talk sets out from an interesting and important observation: Financial systems in Europe have become increasingly integrated, giving rise to an increase in systemic risk at the European level; however, the institutions for supervision and crisis management that are supposed to deal with systemic risk are typically located at the national level. Srejber places a lot of emphasis on one particular aspect of financial integration, namely the increasing significance of cross-border banking, defined as the establishment of branches or subsidiaries in countries other than the home country. This emphasis is natural, given that the Nordic countries have already experienced a significant amount of cross-border banking activity, in contrast to many other European countries. But as Srejber rightly points out, one should also expect an increase in cross-border banking in other European countries. As a policy recommendation, Srejber

argues forcefully for the creation of a European financial supervisor to solve the externality problems arising from cross-border banking.

## 2 Historical Perspective

Let me start by giving a historical perspective on the issues raised in Srejber's speech. One first important observation is that financial integration is, of course, not new. Even before World War II, financial markets were highly integrated not only across



Europe, but even globally. However, financial integration was mainly restricted to wholesale markets and it took the form of capital flows rather than cross-border banking. At the same time, financial systems were largely unregulated, and there were no international coordination mechanisms for crisis management. When the crises arrived in the form of severe recessions, stock market crashes, the drying-up of capital flows, and finally the collapse of banking systems, the national authorities proved to be unable to cooperate with each other. Barry Eichengreen (1992) has claimed that this lack of cooperation was one of the reasons for the occurrence and severity of the Great Depression. This is suggestive of the importance of the international coordination of national authorities in a financially integrated world, especially in crisis situations.

Another, completely different example stems from a time when markets were arguably less integrated than today, namely the breakdown of Bankhaus Herstatt in 1974. The bank's failure was related to losses from

the foreign exchange market, which – after the breakdown of Bretton Woods – had become much more volatile than before. In spite of the bank's relatively small size and less integrated financial markets, the crisis led to severe disturbances in the international banking system through interbank markets and payment systems.

These two examples illustrate two important points. First, they point towards one of the major stylized facts of financial crises, namely that they are related to macroeconomic shocks. Second, cross-border banking is by no means a prerequisite for international spillovers. Systemic risk at the international level can be important even in the absence of significant cross-border banking.

## 3 Systemic Risk at the International Level and Financial Integration

One usually distinguishes between two types of systemic risk: The first works through balance sheet interlinkages, such as interbank liabilities or other kinds of exposures between banks. The second is due to banks' exposure to common macroeconomic shocks. These shocks may be exogenous to the banking sector. However, they may also arise endogenously from the banks' behavior. If banks hold similar portfolios, their reaction to some shock may induce price movements, reinforcing the initial shock. One example is fire sales in times of crises, which lead to a further depression of prices.

Both types of systemic risk seem to have risen in Europe in recent years due to increasing financial integration. First, the European interbank market has grown rapidly over recent years, creating more direct linkages among European banks. Second, the synchro-

nization of business cycles in Europe implies that banks all over Europe are now exposed to similar macroeconomic shocks. Financial integration may also have led to an assimilation of strategies across European banks.

The measurement of such risks is inherently difficult. In any case, they can only be judged from a macroeconomic perspective. One important difference between the two types of systemic risk is that the one working through balance sheet interlinkages requires the build-up of contractual relationships. Such relationships can, in principle, be observed relatively easily. Common exposures to macroeconomic shocks do not require any contractual relationships across banks or across borders. Therefore, they are much harder to assess. At the same time, they are potentially much more important.

Given that there has already been an important increase in systemic risk from financial integration, how does cross-border banking contribute to systemic risk? First of all, it creates direct linkages across countries. This may induce higher diversification and hence *decrease* systemic risk because it may reduce the probability of a crisis. At the same time, it may increase the spillovers across borders if a crisis occurs. But even this is not necessarily the case: Cross-border banking may simply replace other contractual relationships, such as interbank liabilities, and it is not clear what creates higher systemic risk.

Another effect of cross-border banking is that it leads to the emergence of larger banks. This may again decrease the probability of a crisis, while increasing the damage if there is a crisis. However, this issue is not special to cross-border banking, but arises similarly, and potentially

more severely, with national bank mergers.

Finally, cross-border banking may affect financial stability through banking competition. If cross-border banking increases competition, the ensuing decrease in banks' profit margins may induce higher risk-taking, and hence lower stability. However, it is far from clear that we should expect an increase in competition. If the entering foreign banks increase the number of competitors in the market, competition



is likely to increase. If foreign banks enter through mergers or acquisitions, competition may actually remain constant at the local level (the relevant market for retail business), or even decrease in the international market (the relevant market for wholesale business).

The conclusion is that the expected increase in cross-border banking does not necessarily lead to an increase in systemic risk. In contrast, systemic risks arising from other aspects of financial integration, such as interbank exposures and common macroeconomic shocks, are already there and may pose a severe threat to systemic stability. I do not want to say that the problems arising from cross-border banking are unimportant, especially in the Nordic countries where cross-border banking is already a reality. However, there seems to be an imbalance between the intensity of the discussion of cross-border banking and the systemic risks arising from other

factors, which in my view does not do justice to the relative significance of these factors for systemic stability.

#### **4 Management of Systemic Risks**

The presence of systemic risks at the international level raises the question how such risks can be dealt with in a world where many of the involved authorities are located at the national level. I would like to distinguish between three different types of risk management: regulation, prudential supervision, and crisis management. I will focus on the potential benefits and drawbacks of centralized versus decentralized solutions. Note that my view is purely academic, in that I do not take into account political sensitivities and obstacles to political implementation.

##### **4.1 Regulation**

It is well-known that banking regulation still focuses mainly on individual institutions (the “microprudential” approach). If we take the view that banks are not worth being saved for their own sake and that the ultimate goal is the protection of systemic stability, a “macroprudential” approach seems preferable to the existing one. Under such an approach, a regulation that treats banks according to their contribution to overall systemic risk seems desirable. This implies that different banks may, in fact, be subject to different regulatory standards.

However, so far, there exist very few instruments for the assessment, and hence regulation, of systemic risks, even at the national level. Therefore, it seems to me that we are trying to take the second step before having taken the first one: How can we expect to deal with systemic risks at the international level if we do not

even know how to deal with them at the national level? Admittedly, there has been some progress in the assessment of bank risk at the system level (see, in particular, Elsinger et al., 2002). Also, the publication of financial stability reports is a step in the right direction. However, we are still far away from a situation in which regulators have a well-defined toolkit that they can use for the assessment of systemic risk. Especially, there is to my knowledge no proposal on how to deal with the endogeneity of macroeconomic risks. Given that we do not know how to measure bank risk at the system level, regulators have no choice but to follow the microprudential approach.

Another issue concerns the limited convergence of regulation in Europe. The EU directives often define no more than minimum standards, and apart from that there are substantial differences in the implementation across countries (cf. the speech by Danièle Nouy in the same volume). The academic literature suggests that, in the absence of regulatory harmonization, regulators may try to provide their domestic banks with competitive advantages, starting a race to the bottom, with potentially undesired consequences for financial stability (see Dell’Ariccia and Marquez, 2001; and Acharya, 2003). It may also distort banks’ investment decisions due to regulatory arbitrage.

Further advances in financial integration will increase competition among banks from different countries. At the same time, differences between national systems are likely to be eroded, at least partially. Therefore, with increasing integration, the trade-off between the level playing field and the costs of inadequate regulation, mentioned by Srejber, is likely to shift

in favor of the former. A level playing field requires convergence in *all* regulatory aspects, which also includes competition policy. This leads me, similarly to Srejber, to the conclusion that a further centralization of regulation seems to be desirable.

#### 4.2 Prudential Supervision

In prudential supervision, centralization again seems to be superior, as has also been argued by Srejber. First, it helps to solve the externality problem pointed out by Srejber. This would not be possible by cooperation among supervisors alone. No cooperative arrangement could induce the supervisors to act against their national interests. This is also the result of a recent paper by Holthausen and Roende (2004), who argue that national supervisors may not fully transmit “soft” supervisory information; as a result, supervisory decisions are inefficient in their model. Second, centralization could help to exploit economies of scale, which clearly exist in supervision and are likely to increase if regulation is further harmonized. Finally, it facilitates the assessment of systemic risks at the international level. If we believe that such risks also arise in the absence of cross-border banking, the centralized authority should be responsible for *all* banks, and not just for cross-border banks, as suggested by Srejber.

Realistically, the supervisory information still has to be gathered at the national level. This raises the question whether the externality problem has not simply been shifted to another level. In fact, the problem of information transmission described by Holthausen and Roende may also exist if supervision is centralized and the data collection is still carried out at the national level.

#### 4.3 Crisis Management

With regard to crisis management, it is no longer clear that centralization is the dominant solution. The major advantage of centralization still consists in its ability to take the externalities of bank failures into account. However, such a solution is again subject to incentive problems regarding the information transmission. In fact, the problems may be more severe because they exist not only in the vertical dimension (national vs. international), but also in



the horizontal dimension (supervisor vs. central bank vs. fiscal authority). Another advantage is that a central authority may be less inclined to support “national champions.” This is particularly important in the light of the importance of national champions in many European countries. Therefore, a central solution may reduce moral hazard.

However, there is also a downside to centralization in crisis management. In contrast to regulation and supervision, the costs from crisis management may be enormous, which raises difficult cost-sharing issues. A centralized provision of liquidity or bank bail-outs imposes externalities – be they in the form of higher inflation or a higher tax burden – on other countries that do not benefit from the intervention. This gives rise to moral hazard problems on the side of national regulators and supervisors.

Whatever view one takes on the relative weight of these considerations,

it seems to me that in reality there is no free choice regarding the degree of centralization in crisis management unless one wants to undertake major institutional reforms, affecting many areas outside of the realm of financial stability. In the following, I will distinguish between two types of crisis management: liquidity assistance and bank bail-outs.<sup>1</sup>

#### 4.3.1 Liquidity Assistance

The provision of liquidity assistance requires the ability to “produce” liquidity. In the Economic and Monetary Union (EMU), this ability has been shifted to the European Central Bank (ECB); the capacities of national central banks to produce liquidity are limited. Hence, the decision for a common monetary policy implicitly includes the decision for a centralized provision of liquidity in crisis situations. As long as the ECB acknowledges this responsibility, it should be able to efficiently deal with crises, even if there are spillovers across national borders. If interbank markets are working smoothly, there may not even be a need to transmit information from supervisors to the central bank. Liquidity could simply be provided to the market, and there would be no need to obtain supervisory information to distinguish between illiquidity and insolvency. If interbank markets do not work smoothly, as is typically the case in times of crisis, it may be necessary to provide liquidity to individual institutions and hence to obtain access to supervisory information.

The provision of liquidity assistance may stand in conflict with the maintenance of price stability. In a centralized solution, the costs associ-

ated with higher inflation are borne by all member countries of the EMU and not just by the countries benefiting from the liquidity provision, which may give rise to moral hazard problems. Furthermore, as Srejber also mentioned, it is unclear how costs would be shared if some of the supported banks turned out to be insolvent, and not just illiquid.

Regarding non-EMU countries, liquidity assistance has to be carried out in a decentralized fashion. The ECB does not have the mandate to serve as a lender of last resort for non-EMU countries unless there is a systemic threat for EMU countries. Also, the ECB cannot produce liquidity in other currencies.

#### 4.3.2 Bank Bail-Outs

The financing of bank bail-outs requires the ability to raise taxes, which can only be done by national governments in the EU. This naturally gives rise to a decentralized approach to bank bail-outs. If the externalities of bail-outs are not taken into account by national governments, the inclination for bail-outs is reduced relative to the centralized solution. However, it is far from clear that this is welfare-decreasing. Due to well-known problems of commitment, there may be – from an ex-ante perspective – too many bail-outs in the case of centralization. My impression is that there have been very few incidences where an efficient bail-out was not carried out, whereas the opposite case of (ex ante) inefficient bail-outs is much more frequent. Therefore, a decentralized solution may actually help to reduce moral hazard. However, the opposite may also be true: In a decentralized

<sup>1</sup> *Bail-outs are defined so as to involve the transfer of capital, whereas liquidity assistance involves no transfer of capital if it is given only to solvent, but illiquid banks at non-subsidized rates.*




system, it is easier to support national champions than in a centralized system. Therefore, the EU competition authorities must assume the role of preventing the undue subsidization of national champions.

The creation of a common pool for the funding of bank bail-outs, suggested by Srejber, may help to provide for efficient bail-outs when there are significant externalities. But it imposes the costs from such bail-outs on all contributing parties. The resulting moral hazard problem of national supervisors could be solved through the centralization of supervision. However, there may still be scope for excessive bank bail-outs if the use of common funds is subject to national political pressure. Such considerations may, in fact, make the creation of a common pool even more difficult than the financing of joint bail-outs.

## 5 Conclusion

It is true that financial integration has led to an increase in systemic risk at the EU level. This is due not so much to an increase in cross-border banking as to a stronger synchronization of business cycles and the growing importance of European interbank markets. The expected increase in cross-border banking gives rise to a number of practical problems for microprudential regulation and supervision, but not necessarily to an increase in systemic risk. Therefore, the strong focus in public discussions on the issue of cross-border banking may not be commensurate to its systemic importance. In contrast, the development of tools to assess systemic risk at the national and international level should be a high priority on the political and research agenda.

Regarding the management of systemic risk, a higher degree of central-

ization seems to be desirable to detect and deal with systemic risks. This is particularly true in regulation and supervision. Given the reluctance of national authorities to give up competences, there is however the danger of a duplication of effort, which would clearly not be desirable. If centralized institutions are developed, national institutions have to be downsized. Similarly, there should be clear divisions of responsibilities among regulators, supervisors, and crisis managers. A prerequisite for this is a smooth flow of information in both the vertical and the horizontal direction, which means that the incentive problems for information transmission have to be solved. This seems to be one of the big challenges for the future. 



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JOSEF CHRISTL



## Concluding Remarks

Over the past two days a number of highly interesting and sometimes controversial reflections on “Monetary Policy and Financial Stability” have been presented. Let me briefly summarize the main insights, inspirations and conclusions I have drawn from the conference in three areas centering around the relationship between monetary and financial stability, the role of asset prices in monetary policy and the potential effects of Basel II on bank lending behavior.

The topic of the conference indicates a close relationship between monetary stability and financial stability. They are mutually dependent: a stability-oriented monetary policy enhances the stability of the financial system and, at the same time, a stable financial system is a prerequisite for the effective conduct and implementation of monetary policy.

A stability-oriented monetary policy contributes to financial stability: Price stability reduces uncertainty with respect to the real value of future nominal returns. Sound monetary policy provides a stable medium of final settlement in financial transactions and, hence, reduces the risks associated with final settlement. An efficient framework for monetary policy implementation can reduce the volatility of money market rates and,

thus, contribute to deep and liquid money markets and bolster the liquidity provision to the banking sector.

At the same time financial stability contributes to the successful implementation of monetary policy: Stable financial institutions and markets reduce uncertainty with respect to the impact of monetary policy on the real economy, as financial institutions and markets play a major role in various transmission mechanisms, be it the credit, investment or wealth channels. Deep, liquid and integrated money markets as well as efficient, well-functioning and reliable payment systems enhance the effectiveness of monetary policy implementation. In order to ensure the smooth functioning of payment systems, central banks play an important role in one or more of the following areas: operation, regulation and oversight of payment systems. The Eurosystem and the NCBs operate efficient and reliable large-value payment systems with (collateralized) intraday credit provision to reduce banks' exposure to counterparty and liquidity risk. The ECB and the NCBs are also responsible for the oversight of cross-border and national payment systems in the euro area.

From the above considerations I draw the practical conclusion that macroprudential financial analysis is of paramount importance for central banks. It can lay the foundation for preventive measures against potential financial instability and contribute to the effective implementation and conduct of monetary policy.

My second topic, the role of asset prices in monetary policy, has received increasing attention in the popular press throughout Europe recently. Does the interdependence between monetary and financial stability imply that central banks should react to asset

price inflation in a more systematic and determined manner?

I do not think so. Let me briefly share my assessment of the major arguments on both sides of this debate with you, starting with the pros.

The approach of measuring inflation only in terms of current goods and services was questioned theoretically by Alchian and Klein (1973). They argued that current consumer welfare depends not only on current service flows but also on (expected) future service flows. Hence, if constant purchasing power is defined as keeping consumer welfare constant at constant expenditure, it must take into account both current and (expected) future service flows. As a consequence of inadequate measurement which does not explicitly take future service flows into account monetary policy can be either too contractive or too expansionary. This is attributable to the different speeds of adjustment, as current consumer prices react more slowly to monetary policy than the approximation for expected prices of future service flows (i.e. asset prices). Under the current approach to inflation measurement, asset price inflation already influences monetary policy decisions, albeit in an indirect manner. If monetary policy focuses on the stability of consumer prices, asset price inflation factors into the considerations by its impact on aggregate demand via private consumption (wealth effects) and investment demand. But under certain circumstances asset price inflation might not translate into consumer price inflation fast enough to trigger a tightening of monetary policy before a bubble builds up; consumer price inflation remains low while asset prices soar.

Therefore, the Eurosystem explicitly takes monetary conditions into

account in its monetary policy strategy, which rests on the two-pillar approach. Liquidity conditions are regarded as revealing useful information about future consumer price inflation. The Eurosystem therefore does not need to rely on asset prices as proxies for future inflation. In addition, historical evidence indicates that liquidity conditions also reveal useful information concerning potential asset price bubbles, many of which have been fueled by lax liquidity conditions in the past (ECB, 2005, p. 53). The ECB argues that high aggregate credit growth and ample liquidity in comparison to past trends in conjunction with large deviations of asset prices from past trends can provide leading indicators for financial instability caused by sharp corrections in asset prices. Asset price inflation can increase the exposure of the financial system to a variety of downside risks (i.e. market risk, credit risk). Thus the conduct of monetary policy in the euro area already indirectly factors indicators of future consumer price developments – which are also indicative for the future development of asset prices – into policy decisions via the role of the monetary analysis pillar.

The counterarguments focus primarily on the critical assumptions of the underlying theoretical models and the practical problems of implementing their results.

The theoretical arguments rest on the heuristic assumption that markets are complete and that there is a full set of state-contingent prices. This assumption is clearly untenable, as market prices for all future service flows are not available. Alchian and Klein (1973) suggested that asset prices could serve as proxy for these missing prices and that a true “cost of life” index would consist of a weighted

average of current service flow prices (e.g. HCPI) and asset prices.

Fundamental practical problems have caused central banks to refrain from including asset prices in their measures of inflation:

1. Asset price bubbles are notoriously hard to identify;
2. Theory does not provide unambiguous results as to how to determine the appropriate weight of asset prices in price indices – if lifetime utility were taken into



consideration, the weight of asset prices would have to be very high and monetary policy would end up targeting asset prices rather than consumer prices; and

3. Increases in interest rates would probably have to be quite large in order to effectively end asset price inflation; large interest increases could lead to sharp reversals of asset prices, thus, potentially contributing to a financial crisis, which could have severely negative repercussions on financial stability and the real economy.

Despite the theoretical appeal of some of the pro arguments, I have come to the conclusion that monetary policy should not explicitly target asset prices. Weighing the pros and cons, I regard the practical problems as inhibitive. We are concerned about asset price bubbles primarily in cases, in which they are caused by an increase in the expected nominal price of future service flows. Only in these cases they

are indicative of expected future inflation rather than changes in underlying preferences and, hence, according to Alchian and Klein, should also be taken into account in appropriate measures of current inflation. I fully agree. But I regard the Eurosystem's credible commitment to a long-term strategy of price stability and its two-pillar approach as the most effective contribution to contain expected future inflation and, thus, asset price bubbles fueled by inflation expectations.

Let me now turn to my third topic, namely the effects of Basel II on bank lending behavior.

Past experience demonstrates that bank lending behavior has traditionally been positively correlated with the cycle. However, given that the new capital adequacy framework is more risk sensitive, increased risk during economic downturns will obviously be measured more accurately and increase the capital costs of lending. Thus, concerns have been expressed as to whether banks may be encouraged to reduce their lending supply in an economic downturn when borrowers appear more risky.

Unexpected loan losses that have a negative impact on capital adequacy ratios represent the core concerns related to procyclicality. Therefore, the best measures against procyclicality are those that reduce unexpected loan losses. Basel II addresses this issue explicitly, as improved risk management and adequate financial supervision should reduce unexpected loan losses. These measures should decrease both the trend of loan losses and their volatility. As a result, negative shocks to regulatory capital and ensuing credit crunches become less likely and less pronounced. Furthermore, Basel II encourages banks to take account of uncertainty over the full

cycle in their rating processes. Thus, a smoother adjustment to new macroeconomic data can be expected. Currently banks tend to hold more capital than required. These capital buffers will further insulate regulatory capital requirements from negative shocks and reduce the probability that regulatory capital will be binding even in downturns.

How will Basel II affect the credit conditions for SMEs? In the course of the negotiations on Basel II a number of alleviations for SMEs were introduced into the framework, in particular the categorization of business loans of up to EUR 1 million as retail loans. The evidence of the Quantitative Impact Study 3 (QIS 3) suggests that capital requirements for loans to SMEs of up to EUR 1 million are even expected to decrease relative to current levels. Basel II does not contain explicit provisions concerning the pricing or the conditions of loans to SMEs. The latter are derived from the assessment of their perceived risk characteristics based on the banks' risk management framework. This framework will be improved in the course of the implementation of Basel II. It will take into consideration business and financial data of SMEs, so that the latter can improve their credit conditions through professional balance sheet management and transparency. Increases in the efficiency of credit allocation reduce the level and the cyclical variation of loan losses and reduce the likelihood that sound SMEs become credit constrained due to the misallocation of credit, sharp increases in provisioning requirements and ensuing reductions in the supply of credit by banks.

Let me close the conference with words of gratitude. I want to thank all the distinguished contributors, who

deepened our understanding of the interdependence between monetary and financial stability by sharing their insights and assessments with us in their function as speakers, discussants and panelists. Furthermore, I wish to express my appreciation for the efforts of my colleagues at the OeNB who helped to prepare and organize this conference. Finally, it is my pleasure to invite you to a farewell lunch which will conclude the conference. 🍷

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DIE VORTRAGENDEN  
SPEAKERS

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Die Volkswirtschaftliche Tagung der OeNB stellt eine wichtige Plattform für den internationalen Meinungs- und Informationsaustausch zu währungs-, wirtschafts- und finanzmarktpolitischen Fragen zwischen Zentralbanken, wirtschaftspolitischen Entscheidungsträgern, Finanzmarktvertretern und der universitären Forschung dar. Der Konferenzband enthält Beiträge der Tagung und ist überwiegend in Englisch verfasst.

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