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Editorial

One Size Fits All?

The AIFM EU directive and its impact on private equity and venture capital

AIFM has passed the EU parliament

After a lengthy process which started in 2006 and culminated in the highly-debated Rasmussen report, the EU parliament finally approved new regulatory rules for Alternative Investment Fund Managers (AIFM), making a wide range of alternative investment funds subject to EU-wide supervision and regulation for the first time. The new rules are applicable to hedge funds, private equity and venture capital funds, commodity funds, real estate funds and infrastructure funds, and also closed-end funds, which do not form part of the UCITS directive. Assets worth considerably more than 1 trillion euros are affected. Hence, it can be considered as one of the broadest financial regulative initiatives in EU history that needs to be transformed into national laws in the coming two years. As compared to the initial proposals the final regulatory framework has definitively been weakened.

The main objective of the AIFM directive is to manage and reduce risks that are caused by AIFM activities and have the potential to "spread or amplify throughout ⇛

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the financial system". The new regulative initiative also pursues certain investor protection aims, such as increasing transparency and avoiding fraud. In order to achieve these objectives, AIFMs must disclose information defined in the directive and comply with capital requirement rules, limitations on remuneration and on financing practices (especially with regard to leverage), tighter rules on "asset stripping" as well as depository requirements. In return, AIFMs can apply for registration in the entire European Union rather than on a country-by-country basis. Registration for such an "EU passport" implies the acceptance of the entire set of rules of the AIFM directive (this applies to EU based AIFMs as well as to non-EU based AIFMs aiming to operate in the EU).

One Framework – Many Targets

While there is very little argument against the stated objective to address and limit systemic risks that are potentially initiated by AIFMs, there are significant concerns about the broad scope of the directive. The "one size fits all" approach comes at a high cost, likely even amplified by the translation of the directive into national law. This becomes obvious when considering the deterrent effects of the directive on the private equity segment and in particular on the venture capital industry.

This concern comes not least against the background of a large body of academic research (including research at CFS) that shows that leveraged buyouts and venture capital are vital components of the European industrial and financial landscape for securing future innovation, growth and competitiveness.

There are at least four points worth stressing. First, neither in the particular event of the recent financial crisis nor in general considerations, private equity (PE) funds or venture capitalists (VCs) are considered to cause systemic risk. Even if there were concerns that excessive leverage in portfolio companies might cause spill-over effects to the banking system (for which we have no empirical evidence at all), capital ratios rather than limits on leverage are the right policy instrument. In this sense, the application of the new rules to the PE and VC industry is not in line with the main objective of the directive. Even the objective of investor protection seems to be questionable in this context, given the fact that investors in PE and VC funds are institutional investors and thus sophisticated market players, who do not need government protection via regulation.

While there are possibilities for small venture capital funds to "opt out" of the regulation, this is only feasible at a 0-1 basis. Opting-out implies to forego access to the EU passport, a significant disadvantage in the fund-raising process. In addition, since opting-out might be considered as a negative signal by investors, this might force venture capitalists to obey the rules of the AIFM directive.

Second, the regulation is highly distortive. While it imposes significant costs on AIFMs when financing small and medium enterprises (SMEs), the same is not true for strategic investors. This distortion on the basis of ownership is questionable and, given the lack of managerial expertise and improvements in corporate governance, inefficient (many academic papers clearly stress the value-added function of VCs and PEs in this respect). In addition, it puts EU based AIFMs at a disadvantage when they compete for business outside the EU, not least due to the fact that U.S. regulation is far less restrictive. This has long-term effects hindering the establishment of EU based cross-border investments. Furthermore, since it makes investments in European small and medium enterprises less attractive for non-EU AIFMs, it reduces the supply of urgently needed risk capital to SMEs in Europe.

Third, the AIFM directive contradicts in its implications with other important policy initiatives. A substantial number of policy initiatives, either at the EU level or at a national level, aim to strengthen SME financing in general and VC and PE financing in particular (e.g. the ERP co-venturing program of KfW in Germany). In this sense, we consider the AIFM directive with its significant (administrative and capital) costs on PE/VC investors as being inconsistent with such policy initiatives.

Fourth, many concepts stated in the directive are rather vague and subject to interpretation across EU member states, thus opening up potential for regulatory arbitrage. This is true, for example, for the specific constraints on remuneration of AIFMs as well as for the disclosure rules, such as the precise rules for the valuation of assets and the calculation of the net asset value. It is even more eminent for the specific treatment of leverage at the fund level or the portfolio firm level.

Translation into national law ...

What are the implications at this stage? Obviously still quite a lot depends on the way the EU directive is transposed into national law, not least due to the fact that some of the vague concepts from the directive leave significant leeway for interpretation. Given the costs associated with the directive and the obvious conflicts with other policies, especially with respect to SMEs, national policy makers should be very careful in designing too strict national laws or even taking the chance to introduce even tougher rules. The underlying principle should be to limit systemic risks rooted in the actions of AIFMs in financial markets while aiming to keep the indirect costs as low as possible.

Uwe Walz, CFS Director

CFS Publications

CFS White Papers

CFS White Paper No. V

Stellungnahme zum Restrukturierungsgesetz
Comment on the "Bank Restructuring Act"

This White Paper is a discussion paper written by Jan Pieter Krahnen (CFS) and Helmut Siekmann (Goethe University) on the government draft of the recently adopted Bank Restructuring Act.

In short, one of the most common insights gained from the financial crisis is that systemic risk (i.e. risk that endangers system-relevant banks and thus in turn endangers the stability of the financial system) is an externality, which is not properly considered in the decision making of bankers. Systemic risk could be induced by different factors: portfolio correlation (influenced by similar portfolio structures), interbank connections (bilateral relations) and indirect interbank connections (influenced by market illiquidity, price decrease). Each financial institute contributes with its investment policy to the potential systemic risk of the whole financial system.

The newly proposed Bank Restructuring Act includes a Bank Reorganisation Act (Gesetz zur Reorganisation von Kreditinstituten – "KredReorgG"), which has as primary goal the proper internalization of systemic risk and a "bail-in" (as opposed to a bail-out) for bank equity and debt holders. It also introduces a Restructuring Fund (Restrukturierungsfonds).

The Bank Reorganisation Act foresees in voluntary and unvoluntary measures: a (voluntary) restructuring proceeding (Sanierungsverfahren) with the appointment of an advisor (Sanierungsberater) to implement a restructuring plan, and a (partially involuntary) measure consisting of a reorganization proceeding (Reorganisationsverfahren) and a transfer of parts of a bank's liabilities to a bridge bank if the existence of the bank and the stability of the financial system are endangered.

According to the authors, the main contribution of the Bank Reorganisation Act lies in the involuntary part of the proceedings. The effectiveness depends on the ability to restructure a bank by separating the systemically relevant parts. If a financial institution is unable or unwilling to restructure, authorities have the power to transfer the systemically relevant parts of a troubled financial institution to a bridge bank – Good Bank. The creditors and owners of the remaining "old bank" will carry responsibility for the remaining parts. The aim of this proceeding is twofold, namely to protect the systemically relevant parts of a bank so that other institutions are not affected, and to have a credible method to leave the remaining parts of a troubled bank unprotected in order to minimize the burden for the tax payer and to reduce moral hazard. The authors see a need for international harmonization of such regulation, certainly when "large and complex financial institutions (LCFI)" are involved.

The authors' main point of critique is that the intention of the Act can be undermined, when, prior to a crisis, bank liabilities are acquired by other banks in order to make them systemically relevant. A solution could be to keep a certain minimum of bank liabilities permanently held outside the core financial sector. To achieve this, investment rules for institutional investors (pension funds and insurance companies) and banks need to be adjusted.

Finally, the authors criticize the method used to fix the levy that credit institutions are obliged to pay into the restructuring fund. Three criteria are currently used: business volume, size and interbank connectivity. However, the charge should be oriented towards factors that narrow down the systemic risk contribution of an institution. The overall limit of € 100 billion for the fund is also considered not justifiable.

▶ CFS White Papers are available for download on the CFS website **www.ifk-cfs.de/index.php?id=1563**

CFS White Paper No. VI

Recommendations by the Issing Commission
Memo for the G-20 November 2010 summit in Seoul
By Otmar Issing (Chairman), Jan Pieter Krahnen, Klaus Regling, and William White

This is the fifth G-20 preparatory report written by the Issing Commission. In this paper, the Commission outlines four key policy measures necessary to achieve a more resilient and stable financial system:

1) de-risking individual financial institutions (by increasing capital requirements under Basel III);
2) imposing bail-in (as opposed to bail-out) for debt and equity holders;
3) de-risking the financial system by limiting the extent of systemic risk (creating a systemic risk charge together with an oversight body);
4) de-risking the trading of securities and derivatives, by requiring financial institutions to use central counterparties (CCP) in these markets.

While progress on all four accounts has been impressive, the authors see a need for further actions:
1) Concerning the de-risking of individual financial institutions, the authors emphasize the need to implement Basel III synchronously in all major jurisdictions.
2) As to bail-in procedures, legislation efforts are now underway in many countries. The authors propose two activities in order to have cross-border coordination of such bail-in activities. The first coordination issue relates to an international, legal overlay preparing the ground for cross-border financial failures; the second issue concerns the necessity of a regulation on "defaultable" bank debt. A certain fraction of each bank's debt needs to remain truly defaultable, that is, some bank debt (bonds in particular) has to be permanently held outside the core financial sector, by holders not subject to any deposit insurance scheme.
3) In order to de-risk the financial system, the authors advocate an effective policy towards systemic risk containment: a comprehensive data sharing arrangement needs to be agreed between jurisdictions, and a formal mandate has to be given to some agency in order to progress towards data consolidation and systemic risk assessment.
4) Further recommendations of the Commission concern the trading of securities and derivatives. Regulatory efforts should be made to require all derivatives to be cleared (or at least reported) via central clearing institutions, of which there should exist but a very few.
The report also responds to the proposal for a Global Financial Safety Net (GFSN), which addresses the important issue of liquidity reserves and self-insurance against external shocks. Some aspects of the proposal need to be critically assessed. The accumulation of currency reserves is seen to a large extent as a by-product of the exchange rate policy, not as the result of self-insurance. An institutionalized scheme for additional liquidity provisioning may enhance moral hazard and has other shortcomings. The authors argue that alternative sources of liquidity, like the provision of trade finance, would appear more favorable.

CFS Working Papers

The following CFS Working Papers appeared in the second half of 2010 and can be downloaded from our website www.ifk-cfs.de:

2010/12 **Analysis of Binary Trading Patterns in Xetra**
Kai-Oliver Maurer, Carsten Schäfer

2010/13 **Does Inter-Market Competition Lead to Less Regulation?**
Sarah Draus

2010/14 **Price Pressures**
Terrence Hendershott, Albert J. Menkveld

2010/15 **Trade-throughs in European Cross-traded Equities After Transaction Costs**
Bartholomäus Ende, Marco Lutat

2010/16 **Economic Literacy: An International Comparison**
Tullio Jappelli

2010/17 **Pre-Averaging Based Estimation of Quadratic Variation in the Presence of Noise and Jumps: Theory, Implementation, and Empirical Evidence**
Nikolaus Hautsch, Mark Podolskij

2010/18 **Measuring Confidence and Uncertainty during the Financial Crisis: Evidence from the CFS Survey**
Horst Entorf, Christian Knoll, Liliya Sattarova

2010/19 **Capturing the Zero: A New Class of Zero-Augmented Distributions and Multiplicative Error Processes**
Nikolaus Hautsch, Peter Malec, and Melanie Schienle

2010/20 **Cash Flow and Discount Rate Risk in Up and Down Markets: What Is Actually Priced?**
Mahmoud Botshekan, Roman Kraeussl, and Andre Lucas

2010/21 **Optimal Life Cycle Portfolio Choice with Housing Market Cycles**
Marcel Marekwica and Michael Stamos

2010/22 **Vertical Integration, Compe-tition, and Financial Exchanges: Is there Grain in the Silo?**
Steffen Juranek and Uwe Walz

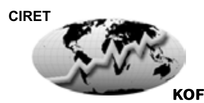
2010/23 **Why do investors sell losers? How adaptation to losses affects future capitulation decisions**
Carmen Lee, Roman Kraeussl, André Lucas, Leo Paas

2010/24 **Risk Aversion under Preference Uncertainty**
Roman Kraeussl, André Lucas, Arjen Siegmann

2010/25 **Exit Strategies**
Ignazio Angeloni, Ester Faia, and Roland Winkler

2010/26 **Credit Risk Transfers and the Macroeconomy** Ester Faia

CFS Financial Center Index Survey Paper presented in New York



WP 2010/18: "Measuring Confidence and Uncertainty during the Financial Crisis: Evidence from the CFS Survey"

Horst Entorf, Liliya Sattarova (both Goethe University) and Christian Knoll (CFS)

Based on CFS' quarterly survey, the paper "Measuring Confidence and Uncertainty during the Financial Crisis: Evidence from the CFS Survey" by Horst Entorf, Liliya Sattarova and Christian Knoll was accepted for presentation at the 30th CIRET Conference organized by the Centre for International Research on Economic Tendency Surveys. The conference that took place in New York on 15 October had as special topic: "Economic Tendency Surveys and Financial Markets".

CIRET attracts economic research focused on tendency surveys and has an international reputation for its specialization in cyclical indicator analysis. With approximately 175 participants from 35 countries and 115 presented papers, the conference evolved to a marketplace for discussion of new methodological developments and their results in the field. Horst Entorf chaired the session, Liliya Sattarova discussed financial literacy in Russia, and Christian Knoll presented the paper, making this the first appearance of CFS academic research on the CIRET platform.
Furthermore, CIRET distributed the Isaac Kerstenetzky Award[1] and CFS is proud to announce that the paper received the 2010 Award with an Honorable Mention for introducing new measures of uncertainty in financial markets.

Introducing new concepts for measuring uncertainty

A high degree of uncertainty about the current and future situation of the banking system and its inherent systemic risk is considered to be one of the main reasons for the recent financial crisis. The paper addresses this crucial topic and attempts to measure uncertainty in order to better understand the reasons driving the recent turmoil and improve the forecasting of future recessions. More precisely, the paper's main contribution lies in covering individual business situations and measuring the uncertainty of banks and other companies and institutions of the financial sector during the crisis.

Compared to the well-established Ifo (Munich) and ZEW (Mannheim) surveys of Germany's economic prospects, the CFS Survey has an innovative feature with its focus on the individual situation of firms within the financial sector and not on the economy as a whole. This provides a unique possibility to analyze valuations, expectations and forecast errors of the core sector of the crisis.

Using standard methods of aggregating individual survey data, the paper first presents the CFS survey by comparing CFS indicators of confidence and predicted confidence to Ifo and ZEW indicators.[2] The major methodological contribution of the paper is the analysis of several indicators of uncertainty. In addition to well established concepts (e. g. volatility of confidence or forecast errors), the authors introduce new measures based on i) the skewness of forecast errors and ii) the share of 'no response' replies. The first one allows to draw some additional conclusions about the asymmetry of positive and negative surprises that the financial sector has to face. The second measure could be directly interpreted as a level of uncertainty about the current and prospective situation of a company.

The results shown in the paper confirm that the proposed uncertainty indicators fit well with the patterns of real and financial time series of the time period 2007 to 2010. Moreover the paper proves that the CFS survey data, so far only available for a relatively short time period, show a promising performance for its measures of confidence and uncertainty. Thus the future waves of the CFS survey may provide researchers, professional financial analysts and economic forecasters with some excellent information on the current and future situation of the financial sector.

[1] Award in honor of Isaac Kerstenetzky, who started the first Business Tendency Survey in Latin America and donated by the FGV (Fundação Getulio Vargas) of Brazil.
[2] These measures are commonly computed as the difference between the shares of positive and negative answers in the samples, and serve as the basis for evaluating the uncertainty in the economy.

CFS Financial Center Index further on the rise

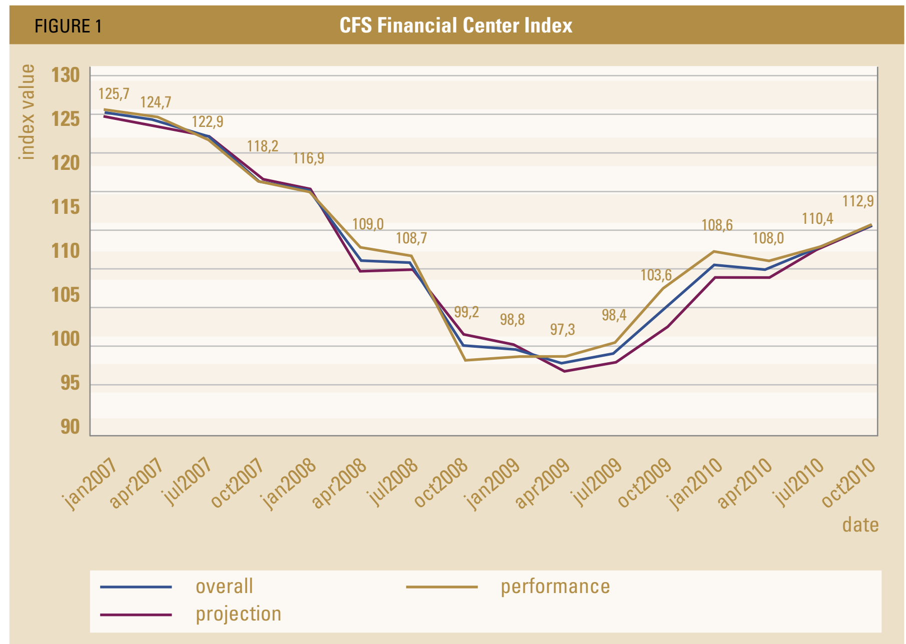
Service providers create jobs

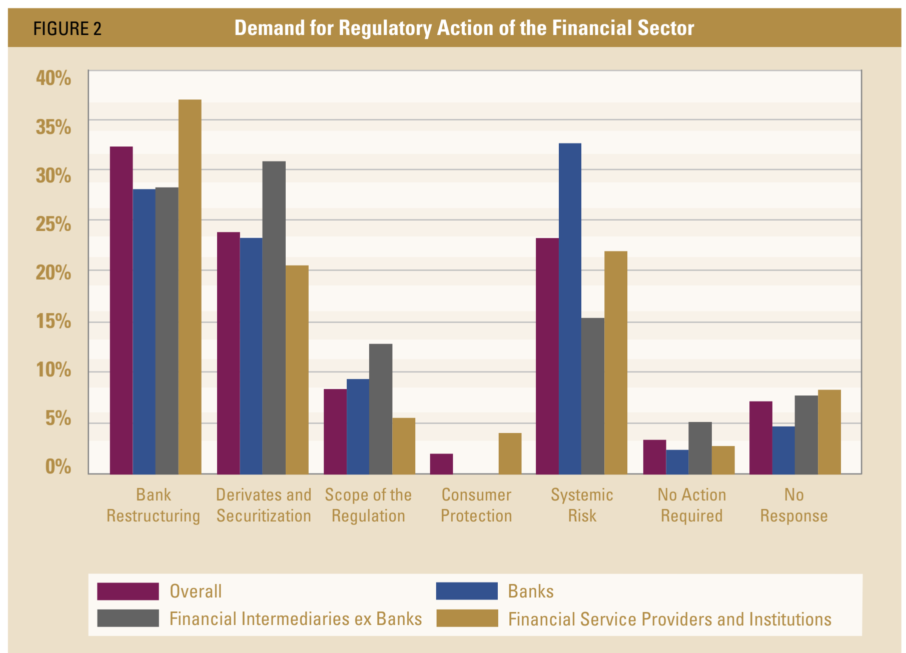
The CFS Financial Center Index has moved up again and has reached a level of 112.9 points. Continuing its upward trend since April 2009, the index is now 13 points below its record high of 125.7 points that was registered in January 2007. The rise is reflected in both subindices "performance" and "projection", which have moved up in equal measure.

The positive trend is recorded among all branch-specific groups of the survey (financial institutions/brokerage firms, financial sector service providers, supervisory and academic institutions, connected enterprises) and across all areas of value creation (transaction volume, profits, employment, investments). A closer look at two groups of the survey reveals some branch specific differences.

Most striking is the overall strong performance of the financial sector service providers, such as accountancy firms and consultancies, with an above-average growth in transaction volume and profits. The group of financial institutions and brokerage firms comparatively underperformed with an increase of 2.8 points in transaction volume and a decline of 2.4 points in profits. Looking at the third index component, employment, both financial institutions and service providers showed an improvement. The actual employment figures of the service providers profit from their strong overall performance in the third quarter. The financial institutions remain cautiously optimistic, which is reflected in a reluctance to start hiring new staff.

"The results show that, in light of a strengthening economy, financial sector service providers have invested in new capacities. In contrast to this, banks have shown declining returns and employment figures, which seem to coincide with the regulatory reforms of Basel III", explains CFS Director Jan Pieter Krahnen.





The assessment of the importance of Germany as a financial center was more positive than in the previous quarter, with an increase of 6.0 points. However, this figure has fluctuated considerably in the recent past and its trend points downwards since the beginning of 2009.

Basel III earns approval

The special survey held this time analyzed the expectations concerning the impact

of the new Basel III capital standards, and the transition periods that will apply for the Basel III rules (see also page 14). In sum, the financial sector as a whole very much agrees on the consequences: the majority of the panelists expect higher levels of financial stability, credit-tightening effects and lower returns, and a lower risk appetite by banks. One year ago, the same questions were asked to the panel and the answers today prove to be very similar. In fact, the results are, today, more supportive of Basel III with a clearly positive opinion about the stabilizing effects that are expected to arise from Basel III (77% of today's panelists expect stabilizing effects compared to 67% last year).

Most participants think that the transition period of Basel III is appropriate. The survey showed no major discrepancies between the various branch-specific groups, although the share of those who consider the transition period to be appropriate is comparatively higher among banks. 10% argue that the period is too short, while 10% say that it is too long. The former consider the credit supply being at peril, while the latter still see an imminent danger arising from systemic risk.

The survey reveals that an additional demand for regulatory action exists in 3 areas (Figure 2): bank restructuring (32%), securitization and regulation of derivatives trading (24%) and systemic risk containment (23%). The surveyed groups, however, differ in the way they prioritize those areas. Banks regard systemic risk as the most eminent issue to be dealt with (33%), non-banks such as asset managers and insurance companies rather see the highest demand for regulatory action within the area of derivatives/securitization (31%), while service providers focus on bank restructuring (37%) as the area in greatest need of action.

Calender for the 2011 CFS Colloquium Series

„Staat und Finanzwirtschaft: Auf der Suche nach neuen Strukturen
Relationship Between State and Financial Markets“

Date	Speaker
9 February 2011	Dr. Joachim Faber (Allianz Global Investors AG)
2 March 2011	Alexander Graf Lambsdorff, MdEP
8 April 2011	Charles Dallara (Institute of International Finance)
31 May 2011	Prof. Dr. Michael Heise (Allianz Se)
31 August 2011	Wolfgang Kirsch (DZ Bank AG)
20 September 2011	Dr. Clemens Börsig (Deutsche Bank AG)
9 November 2011	Klaus Regling (EFSF)
23 November 2011	Gerd Häusler (Bayerische Landesbank)
5 December 2011	Prof. Dr. Otmar Issing (CFS)

CFS Colloquium

Fault Lines:
How Hidden Fractures Still Threaten the World Economy

30 June 2010

Prof. Raghuram G. Rajan, The University of Chicago, Booth School of Business

On 30 June 2010, Professor Raghuram Rajan, Booth School of Business at the University of Chicago, gave a presentation based on his book "Fault Lines – How Hidden Fractures Still Threaten the World Economy" in the CFS Colloquium series on "Rebuilding Financial Markets".

After being introduced by Professor Krahnen, Rajan began his lecture by explaining the importance of understanding why the financial crisis of the last three years has happened. Finding the underlying reasons matters because solutions

Raghuram G. Rajan

based on different explanations will yield different results. In particular, just blaming “greedy bankers” and “pliant regulators” is shortsighted, said Rajan, since the fundamental reasons are more deeply rooted. “Bankers were neither innocent nor victims but responded to implicit and explicit incentives”, he said. According to Rajan, the financial sector in the U.S. and world economy rests on serious “fault lines”. Continuing this analogy to fault lines – normally a geological concept referring to large rifts in the earth’s crust resulting from tectonic forces – Rajan stated that if these economic and financial fault lines are not dealt with properly then the next crisis might not be far around the corner. He then went on to analyze these economic fault lines.

The first fault line he considered to be the growing inequality of earnings in the U.S. and the political pressure “to do something” about it. Rajan explained that since the 1980s the wages of workers at the 90th percentile of the wage distribution in the U.S. have grown much faster than the wage of the median worker and he attributed this development to the stagnant supply of well-educated people. As a consequence of higher demand for - and at the same time stagnating supply of - highly skilled workers, the wages of these workers have spiraled upwards. To limit the growing frustration about rising inequalities in earnings, according to Rajan, the last two U.S. governments have used “easy credit policies” as a palliative in particular to allow greater access to consumer goods and housing to the lower income sector.

Rajan identified the second fault line in the export dependency of some countries with savings surpluses that have to be absorbed elsewhere, in particular when their economy is in recession. In countries like Germany, Japan and China, he suggested that government and bank intervention have created strong export firms while discriminating against domestic households. In Rajan’s opinion this reliance on the export sector, whilst functioning to some extent as an overall growth strategy, left the domestic market underdeveloped and prone to feeble growth in normal times to the extent that these countries would not be able to pull themselves out of a recession. Instead they would have to rely on stimuli from other countries. Over the years, as Japan and Germany have become the world’s second and third largest economies, with China rapidly catching up, this has led to ever increasing global imbalances.

The third fault line identified by Rajan involved jobless recoveries and an inadequate safety net in the U.S., making it a “reliable stimulator of first sort”. Pointing out that in the past in the U.S. it has taken on average two quarters for growth and eight months for employment to recover after a recession, Rajan said that the existing safety net had nonetheless sufficed to bridge the time of unemployment while giving at the same time strong incentives to search for jobs. However, with the recessions of 1991 and 2001, whilst it had taken between one and three quarters for growth to recover, employment needed between 23 and 38 months to revive. Effectively, sluggish job recoveries rendered the safety net inadequate, necessitating substantial support programs from the government as well as from the Federal Reserve. This fault line, on the one hand, drove the huge fiscal deficits in the U.S. and extended the period of extremely low interest rates and, on the other hand, it encouraged the exporting countries mentioned above to rely on stimuli from the U.S. in recessions.

Rajan then went on to analyze the relation between the outlined fault lines and the fact that low-quality mortgage-backed securities were created, with banks keeping a substantial portion of these assets on their balance sheets. According to Rajan, there were three major driving forces underlying this process, namely a) a huge amount of money that was – with political support – channeled into sub prime lending, b)

Otmar Issing, Raghuram G. Rajan, Jan Pieter Krahnen

money entering the U.S. from foreign investors looking for high-yielding "safe" securities, and c) financially innovative products that were made possible through securitization responding to the demand of investors. The combination of these factors eliminated the checks on quality.

Rajan asked why there was no moral backstop that prevented bankers from collecting ever-increasing gains from selling flawed products. Following his line of argument, in a sophisticated arms-length financial system the consequences of behavior are not felt directly. The only feedback available on the quality of work is the money obtained in financial transactions: "Making money is both a signal of personal worth as well as social value". However, such a system relies strongly on price signals being right, whereas during the build-up of the crisis, a "wall of price-insensitive money" searching for higher returns knocked price signals enormously off-track. According to his analysis, however, neither bankers nor governments are solely to blame because all agents rationally followed incentives given by the public and the markets. "The combination of incentives for high-powered performance and the unwillingness of governments to let failure in the financial system drag down ordinary citizens generates the potential for tail-risk taking and periodic meltdowns."

Rajan then turned to the measures that would be required for dealing with the fault lines. He said that with respect to financial sector reform, the focus needs to be set on getting market signals and incentives right, in particular with regard to the roles of the central banks and governments, the incentives for bankers and the way bondholders price risk. Focusing on the U.S., Rajan suggested improving the access to education, and he wondered a) whether it would make sense to sacrifice some flexibility and innovation for a stronger safety net and b) whether the U.S. should not be more circumspect about boosting domestic consumption with public stimuli again. On the issue of global trade imbalances, he suggested that the U.S. should develop a more competitive export sector and that countries running a surplus should aim to increase productivity and competition in their domestic markets. However, said Rajan, most of the necessary reforms are of a structural nature and hence will take a long time to be implemented.

After the speech, Professor Krahnen thanked Professor Rajan for having presented his work and concluded that Rajan's reform proposals sound as if the U.S. should perhaps become a bit more European.

Marcel Bluhm (CFS)

Overview of Securities Trading: Opportunities for Exchanges and their Customers

8 September 2010

Dr. Reto Francioni, CEO of Deutsche Börse AG

The next speaker at this year's colloquium series on "Rebuilding Financial Markets" was Reto Francioni, who presented an overview of today's securities trading business and the chances it entails for the stock exchanges and their customers.

Jan Krahnen gave a short welcoming address to Franconi mentioning the enormous pressure on the exchanges resulting from the current movements in financial markets. He said the exchange sector was "juggling" in an attempt to find stability. The changes taking place in this sector originating from the financial crisis could be attributed to three specific trends.

Reto Francioni, Jan Pieter Krahnen

The first trend concerned the significant change in traditional loyalties among financial market participants, particularly regarding the cooperation between banks and exchanges. What had once been a solid business model had now been abandoned. Today's competition was largely a consequence of technological developments, on the one hand, and the transformation of stock exchanges into independent profit-seeking companies on the other. In many countries, exchanges no longer served solely as a utility for consumers. The second trend concerned the regulatory changes in, for example, capital requirements and the subsequent need for access to capital markets, whilst the third trend related to supervisory changes. Krahnen asked what these trends meant for the exchange industry, its regulation and its business models before giving the floor to Reto Francioni.

Francioni began by recounting the changing landscape, of the financial industry following the crisis. He said a huge "tectonic shift" had occurred in the market, with some participants disappearing and others barely surviving. A "new landscape" had emerged and Francioni asked what it meant for Deutsche Börse. The crisis during the years 2008 and 2009 has undoubtedly had a negative effect on the business of Deutsche Börse. Nevertheless, its economic basis has proven to be rock solid. In 2009, for example, the consolidated profit for the year amounted to 500 million euros.

The financial crisis evoked structural changes that confronted Deutsche Börse as well as its customers, the banks, with new challenges. These new challenges, however, have also meant new opportunities for growth initiatives, said Francioni. Deutsche Börse aims to achieve its goals along the lines of an integrated strategy by gradually expanding to cover new products and new markets.

Strategic strengths, such as Deutsche Börse's ability to ensure market safety and integrity and its neutrality, have gained in importance in the wake of the crisis. In Franconi's view Deutsche Börse has proven to be the guardian of the interests of issuers and investors as well as a reliable counterparty with a low risk profile. This last point was illustrated well during the Lehman Brothers crisis two years ago, when all open positions of Eurex participants could be settled without losses to the counterparties. Furthermore, the company has been able to maintain its competitive position in terms of technology and efficiency and has the highest liquidity and the necessary critical mass to extend its market share. In addition, an integrated business model covering the entire value chain enables the use of synergy effects. In Francioni's opinion, all these strengths are crucial in the face of new challenges and growth opportunities.

The growth strategy of Deutsche Börse has four dimensions. The first one is the expansion of existing business lines. The second one relates to the development of new product segments like raw materials, energy, and OTC derivatives clearing. The exploration of new growth regions, with markets in Eastern Europe, Asia, and the Middle East, is the third strategic dimension. The fourth and final dimension concerns a horizontal and vertical expansion of activities, for example, through services in the area of risk management.

In comparison to its major competitors, Deutsche Börse has an efficient business model, and in 2009 again attained the highest sales revenues worldwide. Francioni stressed that his company, with its scalability, precision and speed-based business model, is well equipped to contend with the growing range of activities in the capital markets. Several performance figures demonstrate the success of Deutsche Börse: revenues including interest income, for example, have increased from 2004 to 2009 on average by 7% per annum, while costs (adjusted for the International Securities Exchange ISE) have remained unchanged. The trading volume on Xetra, the cash market of Deutsche Börse, is influenced in the short to medium term by economic developments and stock

exchange volatility. Electronic and algorithmic trading strategies also exhibit a positive structural impact. Cyclical factors such as inflation and interest rates expectations, trading volumes and the degree of stock market volatility play a role for trading activities on Eurex. From a structural perspective, elements such as the increasing demand for European derivatives from traditional investment funds, the migration of OTC products to an organized exchange, and the substantial growth in OTC clearing have long-term positive effects. The business segment Clearstream is the least affected by fluctuations. However, here too certain structural factors exert a positive influence: the preference for Eurobond emissions, the trend towards the international custody of securities and the increasing usage of secured money and securities. Francioni concluded that this integrated business model allows Deutsche Börse to profit from structural trends and even to have a decisive say in them.

Francioni also spoke about the strategic priorities of Deutsche Börse. Concentrating on growth initiatives, operational efficiency and the preservation of a strong financial position are of prime importance to the company. This is evidenced by investments in growth projects worth approximately 100 million euros in 2010. Furthermore, the operational efficiency has improved following the relocation to Eschborn, since this has allowed huge tax savings to be made. Furthermore, the strong financial position is obvious from Deutsche Börse's rating and credit profile.

Finally, Francioni revealed the strategic roadmap of Deutsche Börse for the next three years. The first target is the expansion on the Asian markets. Clearstream is already present in the region and Eurex is also active with a focus on product distribution and the long-term development of business relations. The next strategic target is the creation of new products and services,

often jointly developed by different business segments. Next to its traditional business areas of trading, clearing, settlement and custody, Deutsche Börse also attempts to increase its services for risk management in and across all areas. This new core function has gained importance during the financial crisis and will be extended further, which will be to the customer's advantage. Another strategic building block is the development of a new single trading platform. Such technical progress will contribute to higher speed, capacity and stability. It is intended that the new platform will be first implemented at ISE in New York.

Francioni concluded his speech by summarizing some of his statements. Since the onset of the financial crisis the financial industry has been obliged to find its way in a new landscape with increased regulation. The objective of this regulation is to enhance the safety and the integrity of the markets and Deutsche Börse is in an excellent position to contribute to that. Ultimately, the company aims to create not only value but also added value to customers.

Simeona Staneva and Lut De Moor (CFS)

New Architecture for Financial Regulation

22 September 2010

Prof. Charles Goodhart, London School of Economics and Political Science

Charles Goodhart was invited by CFS to hold a lecture at this year's colloquium series "Rebuilding Financial Markets". He spoke about the newly emerging architecture of financial regulation.

After being introduced by Uwe Walz, Goodhart began by stating that there is currently a lot of momentum in the field of financial regulation. Although some would argue that two years after the Lehman collapse, there has still been too little change made to the financial architecture the evidence suggests that there is in fact currently a great deal happening in the field of financial regulation. Nowadays, more than at any other time, financial regulation is assuming a major role

worldwide. In the U.S. under the Obama administration, financial regulatory activities have received the second highest priority after health care and Congress is making rapid progress. The Dodd-Frank Act, in spite of its domestic focus, still leaves sufficient room for further discussions on many specific issues within the G20 Group. Moreover, The Basel Committee on Banking Supervision has reached an agreement on new capital requirement rules, in time for the G20 meeting in Seoul this year.

In the background paper for this lecture, Goodhart covers 3 areas of concern for a new financial architecture: crisis prevention, improved mechanisms for crisis resolution with fewer economic externalities and less devastating effects on the tax payers, and the structural implications involved. In the area of crisis prevention, many new instruments are being devised, such as enhanced ratio controls and bank taxation. Also direct constraints on allowable financial practices are being considered. Some proposals, such as those under the Volcker rule, aim to prevent bank interaction with hedge funds or private equity funds by banning proprietary trading; others, such as the one put forward by the Governor of the Bank of England Mervyn King, want to separate "utility" banking from the more risky "casino" activities. A whole set of proposals is also dedicated to the very high remunerations that bankers have been earning over recent years. However, if a bank would try to introduce a single-handed adjustment of its remunerations scheme, it would be likely to lose its traders very quickly. The same holds true for individual countries: go-it-alone policies would result in banks departing or moving their headquarters from the country. A last field of reform in the area of crisis prevention, pointed out by Goodhart in his speech, is the reform of market structures. He said that the lack of information and potential contagion that arises from over-the counter (OTC) derivatives should be eliminated through standardized forms of OTC trading and central counterparties.

Goodhart also briefly talked about the enormous structural implications resulting from certain new crisis prevention tools. The macro-prudential tools currently under discussion are instruments that will be implemented by central banks. Since these macroprudential tools have microprudential implications, the question arises how far central bankers should go in implementing these tools. The spectrum is very wide – ranging from macroprudential supervision on the one side to consumer protection on the other. And somewhere a dividing line should be drawn up for central banks, otherwise the concentration of responsibilities within the central banks

Charles Goodhart

would give them tremendous power and would take their attention away from their main area of expertise.

In the remainder of his speech, Goodhart focused on one aspect of crisis prevention, namely ratio controls. He started with a historical overview. Prior to the 1970s, the ratios that mattered were not based on capital but were liquidity control ratios. Banks went bust when they did not have enough cash; therefore the early requirements were cash-requirements. However, these cash-ratios were easy to manipulate. When needed, banks could easily get access to cash, for example by holding readily sellable government debt or, as was the case in the U.K., by holding funds with (the no longer existing) discount houses, which took on a buffering role in order to get cash from the Bank of England. There were many sorts of liquid assets that a bank could hold and, beyond the cash-ratios, there were liquid assets-ratios. The view was that central banks controlled the overall size of the banking sector by controlling the liquidity and the interest rate. Capital requirements, which basically come into play when a bank fails, played only a secondary role.

In the beginning of 1970s the development of the wholesale funding market represented a way for banks to meet the growing demand for bank lending from the private sector. As a result, banks could massively expand their books and the central banks could no longer control bank size. According to common belief, as long as banks were adequately capitalized, the wholesale markets would always be sufficiently large to meet liquidity needs. Attention thus shifted to capital requirements during the 1980s, since it was clear that liquidity had ceased to constitute any form of constraint on the size and/or operations of a bank.

The banks, however, did not want to hold that much capital, using the argument that increasing financial leverage would

lead to a higher return on equity. Goodhart asked how this might square with the Modigliani-Miller theorem or capital structure irrelevance principle? In practice, he said, the theorem does not work for banks. One of the reasons is the implicit and explicit government guarantee on all deposits and virtually all bank debt, leading to a situation where expensive equity is not counterbalanced by a reduction in the cost of debt. Another reason is that wholesale markets do not accurately respond to differences in risk by changing relative prices.

The first attempt for an international regulatory framework came after 1982, when several American banks could have been bankrupt after the Latin-American debt crisis. As a consequence, the U.S. Congress saw the need to impose higher capital ratios on banks, but also realized that only a concerted international effort would make sense. The result, known as Basel I, made it clear for the first time that banks' risky assets should be backed by equity. However, the categories defined to weight the risk were too broad. All private sector lending, for example, regardless of its riskiness, was put into one category. As a result, banks sold off good loans to non-banks and kept bad loans on their books, thus, according to Goodhart, turning the banks into bad banks.

The successor to this first set of international banking regulations, Basel II, was much more risk-sensitive, but did not look at the risks from a time perspective. This made capital requirements very procyclical moving in step with boom and bust. Moreover, bankers found a way to circumvent Tier I capital requirements, by designing new hybrid instruments. The result was a very procyclical regulatory system where relatively small changes in asset values had large adverse effects on the banking system and the economy as a whole.

The Basel Committee on Banking Supervision recently released the Basel III proposals (see box on page 14), as an improved version of Basel II. The new Tier I capital requirements are substantially higher and will reach an absolutely satisfactory level, according to Goodhart. A capital conservation and a countercyclical buffer will also be phased in at a later stage and could lead in boom periods to capital requirements for banks as large as 12%. Most nations wanted to raise the ratios even further but were confronted with concerns from Germany. The Basel Committee has also paved the way for sanctions, previously considered to be highly sensitive and a country's own decision. Sanctions, such as limiting the ability to pay dividends (and possibly suspend bonuses), could have a strong impact on the reputation of a non-complying institution. Goodhart, however, would have preferred to see a "ladder structure" for the sanctions.

Replying to criticism about a continuation of the procyclical mark-to-market accounting principle in Basel III, Goodhart rhetorically asked, "What do you mark to instead?" Countercyclical alternatives are mostly ineffective, because of the difficulties in determining exactly the current position in a cycle. Goodhart's expectation is that the Basel Committee would then leave this to the discretion of the central banks, which would mean that they would have to take very unpopular measures at the height of a boom. Finally, Goodhart spoke about the non-risk-based leverage ratio, introduced in Basel III. As we cannot measure risk properly, a risk weighted asset approach will always be fallible und subject to gaming, said Goodhart. The proposed leverage of 33:1 seems a lot in Goodhart's opinion. He would prefer to see some discretion by the central banks when applying this ratio.

To conclude, Goodhart said that the current Basel III proposals focus too strongly on banks. The problems that need to be addressed do not only concern banks but also apply to other financial institutions. Therefore, these tight restrictions should be introduced for all. Basel III is in many respects a move in the right direction but, in his opinion, does not go far enough in certain respects. "It is better than I feared but not quite as good as I would have hoped", he concluded.

Lut De Moor (CFS)

OTHER LECTURES IN 2010

10 November 2010
"Supervision of International Financial Markets"
José Viñals (International Monetary Fund)

23 November 2010
"Bewältigung der Finanzkrise: Beobachtungen und erste Schlussfolgerungen"
Axel Wieandt (Deutsche Bank AG)

8 December 2010
"Rebuilding the financial system"
Nout Wellink (President of De Nederlandsche Bank)

Basel III

The Basel Committee on Banking Supervision[3] reached an agreement on a new set of capital adequacy standards, known as Basel III, which were presented to the Seoul G20 Leaders summit in November. The objective of the reform is to achieve a safer global financial system and to stabilize the world economy. The Basel Committee argued that there should be a transition period for implementing the new standards. In this way, it will be ensured that the banking sector has a reasonable adjustment period to the higher capital requirements.

Under the agreement reached, the minimum requirement for common equity is raised from 2% to 4.5%. This will be phased in by 1 January 2015. Furthermore, the banks will be required to hold a capital conservation buffer above the regulatory minimum requirement of 2.5% to be met with common equity, in order to ensure a buffer that can absorb losses during periods of financial distress. In sum, the total common equity requirements will add up to 7%. In addition, a countercyclical buffer within a range of 0% - 2.5% of common equity or other fully loss absorbing capital will be introduced according to national circumstances. The purpose of this buffer is to protect the banking sector from periods of excess credit growth resulting from a system wide build up of risk.

These requirements are supplemented by a non-risk-based leverage ratios. The minimum Tier I leverage ratio is currently set at 3% till the beginning of 2017. The Committee has also agreed to introduce new liquidity requirements, something that has been largely ignored in the past. The liquidity coverage ratio (LCR) and a Net Stable Funding Ratio (NSFR) will be phased in over the next years.

An overview of the requirements and the transitional arrangements can be found in the table below.

Phase-in arrangements (shading indicates transition periods), (all dates are as of 1 January)

	2011	2012	2013	2014	2015	2016	2017	2018	As of January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 - 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3,5 %	4,0 %	4,5 %	4,5 %	4,5 %	4,5 %	4,5 %
Capital Conservation Buffer						0,625 %	1,25 %	1,875 %	2,50 %
Minimum common equity plus capital conservation buffer			3,5 %	4,0 %	4,5 %	5,125 %	5,75 %	6,375 %	7,0 %
Phase-in of deductions from CET 1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20 %	40 %	60 %	80 %	100 %	100 %
Minimum Tier 1 Capital			4,5 %	5,5 %	6,0 %	6,0 %	6,0 %	6,0 %	6,0 %
Minimum Total Capital			8,0 %	8,0 %	8,0 %	8,0 %	8,0%	8,0 %	8,0 %
Minimum Total Capital plus conservation buffer			8,0 %	8,0 %	8,0 %	8,625 %	9,25 %	9,875 %	10,5 %
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						
Liquidity coverage ratio	Observation period begins				Introduce minimum standard				
Net stable funding ratio		Observation period begins						Introduce minimum standard	

Source: www.bis.org

[3] The Basel Committee is a forum for cooperation on banking supervisory matters that is composed of representatives from a number of industrialized countries. Its oversight body is comprised of central bank governors and heads of supervision from the member countries. The so-called Basel Accords are not formal treaties and the members are requested to translate the rules into national law.

CFS Presidential Lectures

It is with pride that CFS President Otmar Issing can look back at two very successful highlights in the Presidential Lectures Series this year. The two lectures in 2010, both held by former judges at the German Federal Constitutional Court, were fully booked. This proves that the lectures series has gained a strong foothold in Frankfurt and that the topic of European Integration is still a matter of great public importance.

Zentralisierung – wie man Europa den Bürgern entfremdet
Centralization – alienating Europe from its citizens

23 June 2010

Prof. Dr. Roman Herzog, Bundespräsident a.D

In the lecture series on European Integration, the Center for Financial Studies welcomed former Federal President Roman Herzog. Herzog spoke about the distance that has grown between the EU authorities and Europe's citizens with a view to analyzing the underlying causes of this alienation.

Roman Herzog, Otmar Issing

Herzog began by putting this issue in its historical context. After the end of World War II, it became obvious that the future world order would be determined by states with a certain critical mass and political weight. To the extent that many nations were becoming politically organized and gaining influence, it would seem that the world had become a bigger place; in another sense, however, the possibilities arising from new means of transport and information exchange meant that the world became a smaller place. In Europe the perceived need for a common approach to dealing with the challenges ahead led in 1958 to the creation of the European Economic Community. The start of this integration process derived not only from an "internal" European desire to develop a system for solving conflicts without resorting to past practices based primarily on warfare. Rather it also allowed Germany to reenter the international arena after the war, whilst providing the other EEC countries with the means to counter too strong a German position in Europe. At the same time it also suggested a way for Europe to raise its profile vis-à-vis the new big entities in a global world.

However, the consequences of European integration for the day-to-day life of its citizens cannot be ignored. The decisions taken by the new organizational bodies – from the EEC and EC to the EU – have covered an ever-increasing territory and, at the same time, these authorities seem to have lost touch with the citizens they purport to represent. Uniform policies applied to a very large territory have inevitably led to a rule of law that entails vague legal terms, thus making compliance in a heterogeneous Europe difficult. Herzog gave some examples where the implementation of a uniform law has been hard to achieve or even envision. The remoteness of the decision-makers and the highly differentiated, complex circumstances in Europe have tended to leave a vacuum where there could be a meaningful alternative at the municipal or private sector level. Herzog is very much in favor of allowing competition and private initiative and also regional self-government to fill this vacuum. The advantages to this approach are to be found in the proximity to the people it affects and the potential flexibility it allows; an argument against it is that it leads potentially to an inequality in living conditions.

The perception that the EU authorities are far removed from everyday problems has not improved their standing with EU citizens. According to Herzog, this remoteness has led to an

abundance of legislation, with the consequence that all practical issues and problems are fed into a legal system. Many of these matters could, however, be solved with plain common sense. Herzog emphasizes that the EU should use directives rather than regulation, so that the adaption of the national laws is left to the discretion of Member States. Each Member State has its own national and local characteristics and is in a better position to decide how to implement and enforce a directive.

This is one of the issues that Europe is currently facing in the upcoming debate concerning budget deficits following the financial crisis. Herzog recognizes that the EU must set guidelines to reduce the deficits, but this sensitive issue has to be handled carefully since it concerns the budget sovereignty of single countries and parliaments.

The German Federal Constitutional Court in its judgment on the Lisbon Treaty has handed down a very strong statement, namely that, if need be, certain norms coming from Brussels can be declared non-applicable[4]. According to Herzog, the Constitutional Court hereby gave a brilliant justification, in that it referred to a decision of the European Court of Justice to substantiate its own decision. There are, however, few cases where such constitutional conflicts between both courts are conceivable, as the EU law is mainly binding for EU institutions. Herzog sees further potential conflict with respect to the media and freedom of speech. Whilst media activities are regarded as services from the EU point of view, the German Constitutional Court also considers them a warrant for freedom of speech and thus democracy. In the discussion of EU law versus national law, Herzog emphasizes that it is not a matter of superiority, but rather a matter of who will follow whom according to the issues involved. He is convinced that sensible solutions can always be found, at least when both opponents remain reasonable.

In order to avoid a conflict on parliamentary rights in the challenge to align the national budgetary policies of Member States, the EU has until now used directives stipulating that a specific result must be obtained without dictating the means to achieving that result. Clearly this approach has not worked in the past and Herzog, therefore, emphasizes that Europe needs directives that can be effectively implemented by way of an ex ante decision. For this, a veto right and the certainty of knowing that it can be used when needed are essential tools.

Herzog went on to talk about the impact of European legislation on EU citizens. The European Union depends to a great extent on the loyalty of the people vis-à-vis such new regulations. The truth is that most EU citizens do not identify with Europe and that decisions are not conveyed effectively to those concerned. There is a lack of European "publicness", owing to a number of facts: well-known faces are missing in Brussels, the legal system is inscrutable to most citizens, and the media does not play along. In reality, Herzog said, Europe is largely dependent on visible competence. This can only be reached by years of strong performance but too little has been done in this respect. In his conclusion, Herzog expressed his vision for a future Europe that makes more cautious use of EU regulations, offers more freedom for economic and regional self-regulation, and makes greater efforts towards achieving a better understanding of, and easier access to, EU law for its citizens.

Simeona Staneva and Lut De Moor (CFS)

CFS-LEMF Summer School 2010

Law and Economics of Contracts

16-20 August 2010

Frankfurt

The Summer School on "Law and Economics of Contracts" was the first event to be jointly organized by CFS and the Doctorate/Ph.D. Program in Law and Economics of Money and Finance (LEMF). The program adopted an interdisciplinary approach, analyzing legal and economic issues concerning contracts, under the supervision of an outstanding international faculty. Scott Baker is Professor of Law at the Washington University whose research focuses on the intersection point of law, economics, and game theory. Douglas Cumming is Associate Professor in Finance and Entrepreneurship at the Schulich School of Business and carries out research on topics such as entrepreneurial finance, venture capital, and exchange regulation and surveillance.
The program evolved around three topics: legal topics, economic theory and financial contracting.

The first part was presented by Baker. He explained contract reasoning from a legal viewpoint. He demonstrated how economic methods should be incorporated when dealing with contracts. The sessions were very interactive and we students gained some highly valuable insights from the perspective of an American lawyer.
The second part of the program was taught by Baker and Cumming together. The students were introduced to the theory of the firm, the Coase theorem, and the existence of transaction costs. The third and final part was taught by Cumming and focused on financial contracting.

[4] http://www.bundesverfassungsgericht.de/entscheidungen/es20090630_2bve000208.html

Bürgerliche Freiheit im Prozess der europäischen Integration und eines weltoffenen Marktes

Civil liberty in the process of European integration and global markets

13. Oktober 2010

Professor Dr. Dres. h.c. Paul Kirchhof (University of Heidelberg)

The next guest in the Presidential Lectures Series was Professor Paul Kirchhof. In his presentation, Kirchhof looked at the changes in freedom that we are experiencing as part of the process of Europeanization and globalization as well as the consequences it has for our basic concept of freedom.

Paul Kirchhof

In his opening words, Kirchhof stated that "political will and economic laws are not isolated worlds". Indeed, the economy depends on the political will of those involved. Political will has the ability to commit to and achieve objectives if this will is anchored in the law. The law seeks to give a binding answer to challenges that are currently of interest to society. Thus, much depends on the requirements we lay down for our constitution.

Kirchhof went on to address six specific points concerning the process of Europeanization, all of which relate to central concepts of Germany's constitutional order: 1) the appeal of and problems encountered in the processes of Europeanization and globalization, 2) inferences in terms of changes in freedom, 3) influences on society's freedom, 4) loss of confidence, 5) market failure, 6) sustainability.

The appeal of and problems encountered in the process of Europeanization

The notion of a Europe with open borders and free trade and exchange holds a strong appeal. However, the openness of borders dismantles the boundaries that secure each state, said Kirchhof. This leads to an increasing number of safeguards within each state and a weakening of the force of law within the 27 EU Member States. Kirchhof used as example a scenario where, had the Maastricht rules for public debt been made legally binding at the time of their implementation, many problems in the wake of the financial crisis would have been avoided. Instead the erosion of the authority of law has given rise to many transition problems. In Germany, for example, capital income is subject to a flat tax rate of 25%, in line with international levels, whereas labor income is taxed at much higher progressive rates. This indicates that national legislators are no longer able to transmit international economic demands to their domestic counterparts without disruptions occurring.

A second problem in this process is the lack of public comprehension with respect to recent events. In Germany, the financial crisis seems to date to have been managed quite successfully. However, in the view of the public many legitimate questions and uncertainties remain regarding the costs and long-term impact of the crisis, how it could happen in the first place and whether it will repeat itself.

Kirchhof sees a third problem in the trend towards "anonymization". Today's investors focus only on returns and often use investment funds where anonymity is a general condition. Many existing financial products are fully understood by neither the buyer nor the seller, and society finds itself in a situation involving fictitious rights, based merely on probabilities and (potentially incorrect) assumptions. The question thus arises concerning what relationship there should be between the freedom of opportunities on the one hand and responsibilities to society on the other. According to Kirchhof, the principle of freedom is only sustainable when it rests on a high moral standard and the principle of the "reputable merchant". Kirchhof

also put into perspective the value of quantifying reality. Using a number of witty examples, he showed that a significant portion of reality escapes the rationale of numbers.

What does this openness to the world mean for the principle of freedom?

Freedom is always an offer, Kirchhof said. It is the exploration of the unknown based on experience and knowledge, and led by morality and decency. In commercial law, freedom of enterprise means that an entrepreneur has the freedom to operate his business. This freedom still exists for medium-sized companies, but has frequently been "dissolved" in the case of large companies into different rights, i.e. those of shareholders vis-à-vis those of managers. According to Kirchhof, we currently find ourselves in a situation of existential need, as the European Court of Justice interprets freedom rights as equality rights, implying that those entitled to freedom have the right to take part in a legal order that has been decided by others. In addition, the European Court sees the fundamental rights charter not as a limit but rather as an expansion (justification) to the framework of its competences. This change in law is dramatic, said Kirchhof. He demonstrated his point with examples where the European Court interferes in issues that are basically outside its legal competence. The European Court of Justice is now working its way towards acquiring authority over direct taxes via such fundamental rights for taxpayers. Kirchhof pointed out that such dramatic changes are often partly the result of implementing legislation from the European Commission, without any involvement on the part of the respective legislative institutions, namely the European Council and Parliament.

Are we in danger of losing sight of the basics of democracy in the process of Europeanization?

Democracy cannot exist without citizens. For a democracy to function, its citizens need to have a sense of unity, leading to a set of common rules and institutions. Currently the notion of European citizenship does not invoke the same response as that of the individual citizenship of a specific country. The EU is a union of closely connected states, where power is ultimately held in the hands of the authorities in the individual states. In Kirchhof's view fundamental mistakes are now being made against the states. Since the 1960s, the general public expects not only "good law" but also "good money" from the state, and this has led to the creation of national debt and a dependence on financial markets. As a result, the democratic unit as decision-making entity has been weakened. A fundamental rethinking is needed according to Kirchhof, with potentially far-reaching consequences for both states and financial markets. There is competition among states and among legal systems. If we understand competition as a legitimate rationale in this context, we have to consider whether and how it can be used in the legal framework of a democratic unit.

Loss of confidence

The next issue raised by Kirchhof is the loss of confidence in the state. People have lost confidence in the law because of an inflation of legislation - according to its own figures, the number of new pieces of legislation issued by the EU amount to 8 per day. This has led to a situation where "the legislator doesn't know what he is doing and the law's addressee doesn't know what he is supposed to do". The legislator bears only a fictional responsibility. Our economic system, however, is built fundamentally on the idea of trust. We strongly rely, for example, on money as a generally accepted means of exchange for the economic functioning of our state. It is, therefore, essential that the economic system be consolidated in its legitimacy.

Market failure

Many see in the current financial disruptions the proof of market failure. According to Kirchhof, however, there is no serious alternative to our capitalist market system. Thus we constantly need to realign this system with the force of law. Common market rules must be upheld and responsibilities should be enhanced in view of the financial markets.

Sustainability

As his final point, Kirchhof presented his arguments against using public debt as a political and economic tool. In his view, the very idea of using government debt for future investments, or as means to stimulating the economy is fundamentally wrong. We need to reconsider the idea of using public debt as a way of financing the state budget, thus Kirchhof.

To conclude, Kirchhof said that the aim should be not only to make good law, but also to win people's confidence and improve their understanding. This is likely to be the main challenge in shaping the political will and economic rules. *Lut De Moor (CFS)*

Joint Lunchtime Seminars

The Joint Lunchtime Seminars are weekly lectures jointly organized by three institutions (CFS, Deutsche Bundesbank and ECB). The speakers present their current research findings to a selected circle of central bankers and macroeconomists. An overview of the seminars that took place in 2010 and a preview on upcoming events can be found on the CFS website.

For further information please contact Celia Wieland: cwieland@ifk-cfs.de or jls@ifk-cfs.de

2nd Bundesbank-CFS-ECB Workshop on Macro and Finance

8 October 2010

House of Finance

The 2nd Bundesbank-CFS-ECB Workshop on Macro and Finance took place in October 2010. As in the previous year, the aim of the workshop was to provide a platform for researchers from the three institutions to present and discuss their current research on topics related to macroeconomics and finance. The workshop program included six papers, each paper with at least one discussant from one of the other institutions and sufficient time for a general discussion. The organizers included Mathias Hoffmann (Deutsche Bundesbank), Bartosz Maćkowiak (ECB) and Thomas Laubach (Goethe University Frankfurt), who also manage the weekly Joint Lunchtime Seminar series. Ca. 90 participants from the three institutions discussed the following research contributions:

Involuntary Unemployment and the Business Cycle

by Christiano (Northwestern University), Trabandt (ECB) and Walentin (Sveriges Riksbank)

Mathias Trabandt explained how to introduce the possibility of involuntary unemployment in a modern New Keynesian macroeconomic model, a so-called dynamic stochastic general equilibrium (DSGE) model of the economy. Unemployed are modeled in a manner that complies with the official U.S. definition of unemployment: they are people without jobs who are (i) currently making concrete efforts to find work and (ii) willing and able to work. In this model, people searching for jobs are better off if they find a job than if they do not. Thus, their unemployment is 'involuntary'. Using this model, the authors can account quite well for the dynamic response of the labor force, unemployment, GDP and other key macroeconomic variables to monetary policy surprises and unexpected technological innovations. The paper was discussed by Ester Faia (Goethe University) and Frank Smets (ECB).

Macro-Economic Imbalances and Financial Fragility

by Boissay (ECB)

The global financial crisis exposed the potential macroeconomic impact of a fragile financial system most dramatically. In his presentation, Boissay developed an equilibrium model to analyze the link between liquidity and financial fragility. Financial fragility is defined as the co-existence of two self-fulfilling expectations equilibria in the wholesale financial market. The "good time" equilibrium is characterized by high leverage, large balance sheets, and high credit risk taking in the banking sector. The "crisis time" equilibrium is associated with deleveraging, the collapse in trade, and liquidity hoarding.

Boissay finds that the wholesale financial market only becomes fragile when the available liquidity exceeds a certain threshold. This threshold depends on the productivity of the real sector of the economy. Thus, the economy is shown to have a limited liquidity absorption capacity. Boissay also investigates the consequences of regulatory capital requirements. He finds that they can reduce risk taking (at the bank level) in good times but cannot completely rule out the financial fragility on the macro-economic level. Boissay's paper was discussed by Frank Heid (Deutsche Bundesbank) and Vladimir Vladimirov (Goethe University).

Asset Prices and Business Cycles with Financial Frictions

by Nezafat (University of Minnesota) and Slavík (Goethe University)

Ctirad Slavik reminded the audience that existing dynamic general equilibrium models have not been fully successful at explaining the high volatility of asset prices observed in the data. He presented a general equilibrium model that performs better in this dimension. It includes firms that differ from each other, in particular in each period only a fraction of firms can start new projects. Furthermore, these projects cannot be fully financed externally due to a financial constraint. The impact of this constraint varies over time and induces fluctuations in equity supply and equity prices. The model can match a number of key characteristics of the U.S. economy, including the aggregate volatility in the stock market. The paper was discussed by Almira Buzaushina (Deutsche Bundesbank) and Juha Kilponen (ECB).

The Changing International Transmission of Financial Shocks: Evidence from a Classical Time-Varying FAVAR

by Eickmeier and Lemke (both Deutsche Bundesbank) and Marcellino (EUI Florence)

As the global financial crisis started in the financial sector in the United States, Eickmeier showed how to use up-to-date econometric time series methods to investigate the changing international transmission of U.S. financial shocks. These methods termed time-varying factor-augmented vector-autoregression models (TV-FAVAR) are employed by the authors of this study to compute a financial conditions index (FCI) for the United States. Unexpected changes in this index are then considered financial shocks. Expectations are computed using a large set of macro-economic, financial and trade variables for nine major advanced countries. The authors found that U.S. financial shocks have a considerable impact on growth in these nine countries. The transmission to GDP growth in the euro-area countries and in Japan has increased gradually since the 1980s, consistent with financial globalization. A more marked increase is detected in the early 1980s in the U.S. itself and the U.K., consistent with structural changes in financial markets or changes in the conduct of monetary policy. The paper was discussed by Pooyan Amir Ahmadi (Goethe University) and Marcel Fratzscher (ECB).

Trusting the Bankers: A New Look at the Credit Channel of Monetary Policy

by Ciccarelli, Maddaloni and Alcalde (all ECB)

Matteo Ciccarelli pointed out the difficulty faced by central banks in assessing the impact of their policy actions on credit market conditions. Credit supply and demand are mostly unobserved, thus identifying completely the so-called credit channel of monetary policy is not feasible. Bank lending surveys by central banks, however, contain reliable quarterly information that is relevant to the quantity and quality of credit supply and demand. Using surveys from the United States and the euro area, the authors are able to obtain new empirical evidence regarding the likely role of this credit channel. In particular, they find that the credit channel amplifies a monetary policy shock on GDP and inflation, through the balance-sheets of households, firms and banks. With regard to the financial crisis, they provide evidence of a credit crunch for firms and tighter standards for mortgages as a source of the reduction in GDP. Florian Kajuth (Deutsche Bundesbank) and Marcel Bluhm (Goethe University) served as discussants.

Public Debt and Inflation Incentives

by Krause and Moyen (both Deutsche Bundesbank)

In the last session of the conference, Krause presented a macroeconomic (DSGE) model that includes a maturity structure for government debt. With this model he analyzed the incentives of a government to reduce its real debt burden by increasing inflation temporarily – a fitting topic in light of recent fears expressed by some investors in government bond markets. The authors find that the success of such a policy depends on the maturity structure of public debt and on the extent to which a central bank can use the credibility of its inflation target to exploit expectations of low inflation. In particular, he showed that the maturity of U.S. debt is not high enough so that a short-term increase in inflation that would be in line with a credible inflation target has much impact on the government's real debt burden. To reduce the real debt burden it would have to raise the inflation target. Discussants were Mu-Chun Wang from Goethe University and Leo von Thadden from the ECB.

Celia Wieland (CFS & wieland EconConsult)

CFS Conferences

2nd International Conference: The Industrial Organization of Securities Markets: Competition, Liquidity and Network Externalities

28-29 June 2010

Frankfurt

Two years ago, in 2008, the first conference on the Industrial Organization of Securities Markets took place (see CFS Newsletter 2/08 for details). Since then significant changes in the market environment have occurred. We have experienced the financial crisis, important regulatory changes and increased competition among different trading venues. The aim of the second conference was to reassess all aspects of the industrial organization of securities markets against the background of these recent developments. The conference was co-organized by Deutsche Börse AG, the E-Finance Lab and the Center for Financial Studies and held on the premises of Deutsche Börse. The audience was a stimulating mix of academics and practitioners.

After a short welcome address delivered by Martin Reck, Managing Director and Head of Group Strategy at Deutsche Börse, the first presentation was given by **Uwe Walz** (Goethe University). He presented a theoretical model that analyzes both horizontal integration and vertical integration along the value chain of securities trading (trading, clearing, settlement). The main results are that, first, international integration of exchanges may reduce the incentives for vertical integration and that, second, larger security providers have more incentives to integrate vertically.

Several exchanges and multilateral trading facilities have recently introduced a fee structure which charges a fee to traders submitting immediately executable orders ("take liquidity fee") but pays a subsidy to traders submitting orders which supply liquidity to the market (negative "make liquidity fee"). In his presentation, **Thierry Foucault** (Groupe HEC) provided a theoretical analysis of the economics underlying these maker/taker fee structures. The results indicate that the fee structure has important implications for traders' order submission strategies. These effects can be counterintuitive (e.g., a higher fee has an ambiguous effect on welfare). Further, the total size of the fee (i.e., the sum of the "make" and the "take" fee) matters more than the split between the two components.

During the financial crisis we have experienced that markets can break down because of severe informational asymmetries. The third presentation, delivered by **Thorsten Koeppl** (Queens University) analyzes the important question how a large player (e.g. a central bank) can intervene to restore trading after a breakdown. The results indicate that, if the market is sufficiently important (relative to the costs of the intervention), it is best to intervene immediately. A credible announcement of such a policy may assure market continuity, i.e., it may prevent markets from breaking down in the first place.

In recent years competition between market places for order flow has intensified and the MiFID has certainly contributed to this trend. **Rian Riordan** (Karlsruhe Institute of Technology) presented an empirical analysis of the competition between the London Stock Exchange and several Multilateral Trading Facilities (MTFs). The results indicate that many investors are monitoring

several markets and choose to trade on the market which offers the lowest transaction costs. In general, the LSE is the most liquid market, and trades on the LSE carry the most information. The overall finding is that the market is in general quite efficient, despite of the fragmentation of order flow brought about by the co-existence of several trading venues. In his presentation **Bartholomäus Ende** (Goethe University) covered a closely related topic. He analyzed whether trade-throughs happen in the market for Eurostoxx 50 stocks. A trade-through is a trade that occurred in one market at a point in time at which the same trade could have been executed at a different market at a lower total cost. The problem in identifying trade-throughs is the proper inclusion of trading fees into the cost estimates. The authors of the paper go a long way in integrating the differing fee structures of the market places under investigation into their estimates. They conclude that the fraction of trade-throughs is economically significant.

The next session contained two papers which analyze the relation between competition and regulation. **Cecilia Caglio** (U.S. Securities and Exchange Commission) models the co-existence between two self-regulatory organizations (SROs). These compete for order flow by a) setting trading fees and b) supervising the trading activity in their market. It turns out that competition reduces trading fees but, at the same time, reduces the quality of market supervision. **Sarah Draus** (Université Paris-Dauphine) addressed a different aspect of the competition between market places. In her model she analyzed the competition between a regulated market and an alternative trading platform and its impact on the regulatory standards. The basic idea is that certain standards (e.g. listing standards) are set by the regulated market, and that the competitive situation may affect the strictness of the standards. The difference to the model presented by Caglio is that in her model both competing trading venues act as standard setters while in the model of Sarah Draus only the regulated market sets standards. The conventional wisdom is that competition leads to reduced standards. It turns out, however, that this is not necessarily true. A further result of the model is the observation that there may be cross-subsidization between the trading fee and the listing fee an exchange charges.
The academic program of the first conference day ended with a special session by **Wolfgang Hafner** and **Heinz Zimmermann** (both University of Basel) on Vinzenz Bronzin‘s option pricing model. Vinzenz Bronzin was an Italian mathematician who taught at the Nautical Academy in Trieste. In 1908 he published a long forgotten book that developed an option pricing model and anticipated much of the Black Scholes model published 65 years later. In the joint presentation Heinz Zimmermann first explained Bronzin‘s approach to option pricing before Wolfgang Hafner put Bronzin‘s achievements into perspective by describing the political, economic and scientific background.

The second day started with a paper on high frequency trading. High frequency traders, or algorithmic traders, recently have been accused of increasing volatility and destabilizing markets. These criticisms have, for example, been raised after the „flash crash“ in the U.S. equity markets on May 6, 2010. **Albert Menkveld** (VU University of Amsterdam) presented a paper which takes a fresh look at the issue. The main argument here is that high-frequency traders are fast at processing information. They can thus update their quotes more quickly which makes them less vulnerable to adverse selection. Consequently, they are natural suppliers of liquidity. On the other hand, however, precisely because they are better informed they may also create adverse selection problems. Whether their total effect is positive or negative is thus an empirical question. Professor Menkveld therefore went on to present empirical evidence from the Dutch and Belgian stock market. The results support the conclusion that high frequency traders acting as middlemen may actually improve liquidity, a finding which contrasts with the conventional wisdom that high frequency trading is detrimental to market quality.

Central counterparties (CCPs) are a type of institution which received a lot of attention recently. They are commonly used on organized derivatives exchanges, but much less frequently in OTC markets. However, there is a recent movement towards also using CCP clearing for OTC derivatives trading. **Cyril Monnet** (Federal Reserve Bank of Philadelphia) presented a theoretical model of CCPs. The model shows that CCPs can actually improve welfare. It also shows, however, that the CCPs in OTC markets (on which non-standardized contracts are traded) have a different function than those in futures markets (on which standardized contracts are traded).

As already noted, the competition between trading platforms has increased significantly in recent years, and the traditional exchanges have lost market shares to multilateral trading facilities (MTFs), partly because the latter charge lower fees. **Peter Hoffmann** (Universitat Pompeu Fabra) presented a theoretical and empirical contribution to this topic. In his model he analyzed trading in two markets in the presence of asymmetric information. One market is accessible to everyone while the other is only accessible to a subset of traders. The trader population in both markets is assumed to be different, with traders in the alternative market being, on average, better informed. The model shows that traders in this environment face a trade-off. If they trade in the alternative market they economize on fees but, at the same time,

face higher adverse selection risk. This yields the prediction that the market share of the alternative trading system is inversely related to measures of adverse selection risk. The empirical evidence, obtained from analyzing the trading of German and French stocks on their home markets and on Chi-X, is consistent with the model predictions.

The theoretical market microstructure literature knows the concept of inventory management for at least 30 years. The idea is that market intermediaries such as the NYSE specialists don't like to hold positions in risky assets which deviate from their desired inventory level. They therefore adjust their quoted prices in a way which helps them to restore their desired inventory position. The empirical literature, however, was unable to find consistent evidence of inventory management, partly because reliable data on inventories was unavailable. **Albert Menkveld** presented an empirical analysis which relies on a new and very detailed data set. He was able to identify strong inventory effects. A 100,000 $ inventory shock causes a price pressure of 0.28%. This price pressure causes prices to deviate from fundamental value, and it increases volatility. This, in turn, is associated with a social cost which is quantified at 0.35 basis points.

The paper presented by **Harald Hau** (INSEAD) deals with a dual market structure in the bond market. The market has a dealer segment and a customer segment. The primary question addressed in the paper is the quality of the customer segment of the market. The empirical results show that the quality of the customer segment is surprisingly high (which is in contrast to results obtained for the U.S.) but also shows high dispersion. The relative quality of the customer segment improves in times of high volatility and adverse selection risk. The paper develops a model that is consistent with these stylized facts. The model assumes that dealers face inventory constraints and therefore may have to lay off inventory in the dealer segment of the market. Dealers' inventory considerations are also an important determinant of spreads in the customer segment of the market.

Bidisha Chakrabarty (St. Louis University) presented a paper which deals with the behavioral foundations of market making. Attention is a scarce resource. A specialist who trades several stocks cannot devote full attention to all of them. Thus, when one stock deserves particular attention (for example because of an earnings announcement) the dealer has to neglect other stocks. Consistent with this idea it is found that the liquidity of other stocks declines when one of the stocks in the dealer's portfolio has an earnings announcement. The paper then discusses the role of market design in alleviating the attention constraints. The basic idea is that a relaxation of attention constraints may ultimately increase liquidity and market quality.

Most papers in the microstructure literature either focus on trading or on post-trading (clearing and settlement). The paper presented by **Hans Degryse** (Tilburg University) combines these two issues and thus considers the whole value chain. Specifically, the paper theoretically analyzes how the pricing structure of the clearing and settlement agent affects market liquidity. The basic idea of the model is that internalized settlement (both buyer and seller are customers of the same broker) is associated with lower costs. In this setting it becomes important whether settlement fees are the same for all trades, are broker-specific (i.e., customers of large brokers are charged less than customers of small brokers) or trade-specific (i.e. trades settled internally are charged less than those settled externally). In the last case, liquidity suppliers have a competitive advantage in supplying liquidity to other traders who are customers of the same brokerage firm. Depending on model parameters, these liquidity suppliers set spreads such as to target only customers of their own brokers or all customers. Obviously, customers of the large broker have a larger chance of meeting a customer of the same broker. Thus, the strategies of the customers and small and large brokers may differ. The interplay of these two mechanisms results in a relation between the structure of settlement fees and market liquidity.

Last but not least, **Olga Lewandowska** (Goethe University) and **Bernd Mack** (Deutsche Börse) presented a paper on clearing arrangements in over-the-counter markets. The starting point of their analysis was the current regulatory pressure in favor of establishing a central counterparty in OTC markets. An obvious question to ask in this context is whether a central counterparty would really work better than the risk sharing mechanisms currently in place. They developed an analytical framework that allows to analyze the netting efficiency of alternative risk sharing mechanisms. This framework can be used in simulation studies aimed at comparing the efficiency of the various mechanisms.

The stimulating discussions during the conference as well as the positive feedback received after the conference provide reliable evidence of a successful event. We therefore plan to organize the third conference on the Industrial Organization of Securities Markets in 2012.

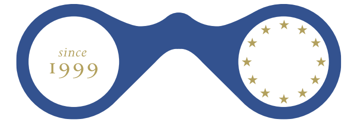
Erik Theissen (University of Mannheim and CFS)

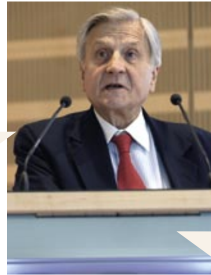
Please note: All papers presented at the conference are available for download on the CFS web site under www.ifk-cfs.de/index.php?id=1722

The ECB and Its Watchers XII

9 July 2010

Frankfurt am Main





At the 2009 ECB watchers conference many commentators said the ECB had had a "good financial crisis". It had performed quite well relative to other central banks in terms of managing money market and bank liquidity, helping Euro area governments to organize bank rescues, and fighting the great recession with interest rate cuts and a range of unconventional measures, in particular its long-term repo operations and some direct asset purchases. Together with President Trichet in September 2009, ECB watchers felt that the timing was right to present an appropriate exit strategy from these extraordinary monetary measures.

The euro area sovereign debt crisis of 2010 proved this assessment too optimistic. Of course, the question of government bailouts and fiscal sustainability had already featured very prominently on the 2009 conference agenda, for example, when ECB Board Member Gonzalez-Paramo declared "if confidence in future stability is to be ensured, now is the time to set out an effective fiscal exit strategy."

Unfortunately, this warning came too late. By the date of the 2010 conference some of the worst fears of fiscal stability pessimists had been realized. Within a short period of time, euro area policy makers decided that the "no bailout" regime would have to be replaced with mutual guarantees. The IMF was called in for support, and the ECB surprised many of its watchers by starting direct purchases of euro area government bonds. Contrary to earlier policy responses to the financial crisis, these measures proved to be highly controversial. Some supporters have judged them indispensable for the continued survival of the euro zone as a monetary union, while some opponents have considered the policies themselves to sow the seeds of continued euro area crises.

In his 2010 address to the ECB watchers, President **Jean-Claude Trichet** (ECB) emphasized that governments must send a clear message to markets – a message of determination and commitment to sound macroeconomic policies. Just like consumers, governments cannot live beyond their means forever. He reviewed Europe's governments' commitment to pursue fiscal consolidation and defended the role of the ECB's government securities purchases. Looking forward, he outlined three areas for reform: (i) national fiscal reforms that should aim at creating an anchor and a collective guarantee in stronger institutions for budget surveillance, (ii) a more stringent implementation of euro area rules and procedures to check and correct excessive deficits and debts with greater automaticity, and (iii) a crisis management framework that respects strict conditionality and minimizes moral hazard.

In the first debating session of the conference, **Lorenzo Bini-Smaghi** from the ECB exchanged views with **Charles Wyplosz** (Graduate Institute Geneva) and Manfred Neumann (University of Bonn) on the appropriate strategies for dealing with macroeconomic imbalances in the euro area. The need for strategies to increase competitiveness in deficit countries was apparent. To this end, wages in those countries with current account deficits would need to increase by less than productivity in the future. Surplus countries such as Germany, of course, should not act to lose trade competitiveness. They could, however, further liberalize the service sector to help boost domestic growth.

ECB Board Member **Jürgen Stark** presented the ECB's enhanced monetary analysis and reviewed lessons learnt in the financial crisis regarding the appropriate role of money and credit in monetary policy. He concluded that growth excesses in money and credit such as those observed before the financial crisis, should be headed off by monetary policy rather than left alone. His debating

partner, **Charles Goodhart** (London School of Economics) then asked for a symmetric policy response to the drastic slowdown in M3 growth more recently.

The afternoon program started off with a more informal, talk-show style conversation with experienced policy makers from major emerging economies, **Rakesh Mohan** (former Deputy Governor of the Reserve Bank of India) and **Eduardo Loyo** (former Deputy Governor of the Central Bank of Brazil), moderated by **Volker Wieland**. They shared their view of their countries' experience during the financial crisis as well as policy challenges and successes.

It was followed by a debate between **John Lipsky** (First Deputy Managing Director, International Monetary Fund) and Anil Kashyap from the University of Chicago, on the question whether the new supervisory and regulatory architecture would provide adequate protection from systemic risk. Lipsky presented a novel resolution framework developed at the IMF that could help to deal with cross-border failures. Kashyap reviewed the new institutions and regulations developed in Europe and the United States and expressed his skepticism whether these structures were sufficiently well-designed to deal with the threat of moral hazard and systemic risk in a satisfactory manner.

In conclusion of the conference, Vítor Constâncio, who had been appointed as Vice-President of the European Central Bank on July 1st, presented his assessment of the future of euro area governance and the strategy for maintaining financial stability to ECB watchers.

Volker Wieland (Goethe University and CFS)

European Finance Association · 37th Annual Meeting

25-28 August 2010

Frankfurt am Main

This year's annual meeting of the European Finance Association was held in Frankfurt at Campus Westend.

A special highlight of the conference was the keynote lecture given by Douglas Diamond from the University of Chicago. His speech focused on short-term debt as the main reason for financial crises observed in history. He concluded that regulation should limit excessive use of short-term debt for refinancing purposes, and that it should apply to all financial institutions, rather than just to banks.

Part of the program contributed to contemporary policy debates. Three Policy Panels were devoted to an open discussion on highly relevant policy issues. The panel on Bank Resolution discussed alternative ways to address the problem of moral hazard in banking, and how to re-introduce restructuring as a viable option for systemically important banks. The panel on the Future of Financial Regulation covered the challenges that regulatory authorities face in their efforts to redesign rules for financial institutions and markets. Finally, the panel on Transaction Taxes and Short-Selling Restrictions focused on scientific evidence regarding the consequences of such measures for market efficiency, and discussed their repercussions for financial stability in general.

This event has come to be the leading academic conference on finance-related topics in Europe with attendants from all over the world. Conference participants agreed that the 2010 EFA meeting in Frankfurt was an outstanding success marked by an excellent, high-level academic turnout.

During the event Jan Krahnen was elected as the next President of the European Finance Association. He is currently Vice-President of the association and will replace Kristian Miltersen (Copenhagen Business School) as of January 1st, 2011.

CFS Conference on Household Finance

23-24 September 2010

Athens, Greece

The academic program of the conference was opened by **Christian Gollier** (University of Toulouse) with a presentation on the implications of flexibility for agents' optimal decision making under risk. The general finding in theoretical literature is that flexibility, defined as the ability of decision makers to adapt ex post to the state of nature, raises expected utility and enhances risk tolerance. However, Gollier showed that these conclusions only hold in specific classes of models. In addition, he presented a set of sufficient conditions (additional restrictions on preferences and characteristics of the available ex post adjustments) which imply that the optimal risk exposure is larger in a flexible context.

The second talk was given by **Olympia Bover** (Bank of Spain). She presented results from an empirical study of the determinants of house purchases and housing wealth for the case of Spanish households, using a panel sample from the first two waves of the Spanish Survey of Household Finances. Her approach consists of estimating discrete hazard models, multinominal models of competing risks that distinguish investment from consumption use, and models using transactions data. The results indicate a positive and significant effect of the return of housing on the demand for housing (both for the case of consumption and investment).

Also pertaining to the issue of the factors affecting household housing demand across the life cycle, **João F. Cocco** (London Business School) presented a paper on the trade-offs of Alternative Mortgage Products (AMPs). He used two decades of U.K. panel data on labor income, housing and mortgage information in order to assess whether the mortgage type and the amounts borrowed help to predict future labor income, as the permanent income hypothesis would imply. The results tend to confirm the life-cycle consumption smoothing hypothesis.

The first talk of the afternoon session was held by **Annette Vissing-Jorgenssen** (Northwestern University). She presented an empirical paper aimed at understanding default on consumer credit. The data comprises more than a million purchases on credit, made at different retail stores across Mexico, with a significant portion of the loans not being repaid. From analyzing default behavior across product groups, Vissing-Jorgenssen concludes that people's product choices are a strong predictor of their credit repayment rates, but also that borrowers with less self-control or a strong preference for indulgence seem to have an abnormally high fraction of luxuries within their consumption.

The first day of the program ended with a presentation by **Sumit Agarwal** (Federal Reserve Bank of Chicago). He presented empirical results about the influence of cognitive abilities on household financial decision making. The authors of the paper find that higher cognitive skills, as measured by test scores from the U.S. military, generate a significant increase in optimal use of a credit card after a balance transfer and a significant reduction in house price estimation mistakes by home equity borrowers.

The next day started with a presentation by **Raimond Maurer** (Goethe University) on a project about the implications of flexibility, endogenous retirement and lifetime payouts on optimal portfolio choice over the life-cycle. The results show that making labor supply endogenous increases the implied work effort of the young and raises the older persons' equity share. In order to match empirically observed facts in terms of hours worked and equity holdings, it is essential to properly account for retirement behavior in a life cycle context.

Barry Scholnick (University of Alberta) presented an empirical analysis of a new data set of monthly credit card transactions. He showed that,

contrary to what standard consumption smoothing theories would predict, both the absolute size of income changes and its size relative to total income matter for consumption and debt holdings at the individual level.

Kasper Meisner Nielsen (Hong Kong University of Science and Technology) presented a paper examining the causal effects of entry and participation costs on stockholding. The authors' data set contained unexpected inheritances due to sudden deaths. The results tend to be consistent with the presence of fixed participation costs, while it is also apparent that stock market exit is an active choice with the majority of individuals who inherit large positions of stocks selling out the entire position immediately.

In the afternoon, **Kim Peijnenburg** (Tilburg University) presented a theoretical analysis of optimal consumption and investment decisions during retirement, when individuals face health cost risks. The authors' results substantiate the fact that the most important determinants of optimal annuity demand are medical expenses, wealth at retirement and the minimum desired consumption level.

The academic program ended with a talk by **Alexander Michaelides** (LSE) on the annuity market participation puzzle. The paper shows that if the model is calibrated with the empirical wealth distribution, annuitization is compulsory, and a bequest motive exists under Epstein-Zin preferences, then the theoretical implications come close to the actual data in terms of the voluntary annuity market participation and the share of wealth invested in stocks.

The conference ended with a panel discussion on the Greek financial crisis, moderated by **Michael Haliassos**, that was attended by the Minister of Finance, George Papaconstantinou, and the former Prime Minister, Constantinos Simitis and received considerable attention in the Greek and international media. The first talk was held by **Lucas Papademos** (former Vice President of the ECB), who stressed that the deterioration of the fiscal situation in most advanced economies is a legacy of the financial crisis, with a series of other factors like the increase in government expenditures, the loss of international competitiveness and the low credibility of fiscal statistics and government fiscal foresight being particular sources of vulnerability for the Greek economy. Papademos remarked, though, that he sees the measures that have been implemented so far as significant, courageous and necessary in order to halt the negative evolution of unsustainable debt dynamics and to prevent further losses in competitiveness. He concluded by saying that success is the only envisaged outcome of the economic adjustment programs, not only in Greece but in all of the euro area.

Athanasios Orphanides (Central Bank of Cyprus) focused on the lessons that can be drawn from the Greek situation for the economic governance of the euro area. He said that the euro area governments missed the proper incentives to gear domestic policies towards compatibility with a common currency area. He also mentioned that during the (rather stable) last decade market forces did not exert sufficient discipline on budgetary excesses. In terms of policy measures, he mentioned the advantages of transparency, fiscal credibility and consistency through a multi-year fiscal planning horizon and a better coordination among EU governments.

Gikas Hardouvelis (University of Piraeus) focused on the implications of the crisis on financial markets and especially on the question of risk containment, for example by drastic structural reforms, which insure that once consumer sentiment stabilizes and private investment stops declining, domestic output can recover forcefully.

Christos Gortsos (Panteion University of Athens) noted that the Greek banking system had been negatively affected by the Greek financial crisis but had proven to be rather resilient in the face of international shocks, thanks to a strong capital base and steadily increasing provisions. He insisted that under the current conditions, the challenges for the Greek banking system are to maintain adequate liquidity levels, assist enterprises and households in dealing with the economic downturn, and insure a smooth transition to the new capital and liquidity requirements.

Finally, **Costas Meghir** (Yale University) and **Dimitris Vayanos** (LSE) analyzed the implications of the financial and economic crisis in Greece by looking at the challenges in terms of competitiveness and growth, market governance, performance incentives in the public sector, liberalization of labor markets, social security and pension systems, public healthcare and education. They also introduced the Blog of Greek Economists for Reform (www.greekeconomistsforreform.org), a new independent platform for policy analysis, discussions and proposals by academic economists. The blog editors are Michael Haliassos, Dimitris Vayanos and Yannis Ioannides.

The conference ended with a speech by **George Papaconstantinou**, the Greek Minister of Finance. He said that, in the wake of the financial crisis, Greece had to cope with deep structural problems and a complete loss of confidence on international markets, such that the government faced a race against time. Tough measures had to be taken to stave off the crisis. The problem, however, is more structural and institutional and has to be addressed by deep reforms of the budget and

tax systems. He mentioned that one can cut pensions and wages, as the Greek government has done, by 15% and 10% respectively, but until and unless are changed the rules so as to stop the kind of excesses seen in the past, the results are not getting the country very far. And after a few years the same problems will probably arise again. Finally, the Minister highlighted the Greek government's commitment to continue the reform of the public sector, to insure transparency and social equity.

Cristian Badarinza (Goethe University)

ECB-CFS Research Network "Macro-prudential Regulation as an Approach to Contain Systemic Risk: Economic Foundations, Diagnostic Tools and Policy Instruments"

27-28 September 2010

Frankfurt

The 13th conference of the ECB-CFS Research Network to promote research on „Capital Markets and Financial Integration in Europe" took place in Frankfurt and was hosted by the European Central Bank. The complete conference article is available on the CFS website. Here you will find a summary of some of the speeches and sessions.

OPENING REMARKS

***Jean-Claude Trichet** (President of the European Central Bank)*

In his opening remarks, President Trichet focused on the relationship between the European Systemic Risk Board (ESRB) and the ECB. The ESRB will be operational from January 2011 on, with a mandate to identify and prioritize systemic risks at the macro-prudential level. It will issue early warnings when systemic risks arise and give policy recommendations in response to the risks it identifies. Although the ECB will provide support – analytically, statistically, administratively and logistically – the ESRB will be an independent body. It will be hosted by the ECB via the ESRB Secretariat, having close ties to some of the ECB's business areas. The ECB and the ESRB will cooperate intensively on developing the conceptual and analytical underpinnings for macro-prudential policies. "Research can support us significantly and will help to meet the challenges of macro-prudential policy", Trichet said and he pointed to the intellectual challenges that lie ahead. He concluded by positioning the current conference within the scope of a major joint research effort by the ECB and other central banks.

KEYNOTE SPEECH*

***John Geneakoplos** (Yale University)*

The Leverage Cycle

Geneakoplos explained the "anatomy" of the leverage cycle and its relevance for policymakers. He noted that the interest rate, as the most important variable in an economy, has received far more attention from economists and policy makers than collateral. However, in crisis times, the value of collateral is more important than the interest rate. The volatility of collateral values affects leverage and thus asset prices, contributing to economic booms and busts. The policy implication of this theory on leverage is that central banks should control system wide leverage, limiting leverage growth in good times and mitigating the sharp fall in leverage in bad times. In this framework, leverage is defined as the ratio of collateral values to the down-payment that must be made to buy them. Geneakoplos presented some anecdotal evidence about booms and busts in the mortgage markets from his own private sector experiences, which later became milestones in his own research on the leverage cycle. Departing from standard economic theory, where the equilibrium interest rate is derived from supply-demand equations, leverage is jointly determined with the interest rate in Geneakoplos' theory. The intuition behind the leverage cycle is that in good times margin requirements are low, leverage goes up and so do asset prices. The crash is generated by "scary bad news", news that increases uncertainty and disagreement about the future

***OTHER KEYNOTE SPEECHES BY:**
***Gertrude Tumpel-Gugerell** (European Central Bank), **Robert Engle** (NYU Stern Business School) and **Anil Kashyap** (University of Chicago)*

value of the collateral. This leads to a drop in asset prices, deleveraging through assets sales to meet margin requirements, further losses in asset value and tighter margin requirements. Geneakoplos proposed the regulation of leverage through a loan-to-value ratio as an attempt to limit the negative externalities of excessive leverage on the real economy.

SESSION 2: APPLIED RESEARCH INTO THE SOURCES, TRANSMISSION CHANNELS AND REAL EFFECTS OF FINANCIAL CRISES

Erlend Nier *(IMF): What Caused the Global Financial Crisis?*
Pierre Monnin *(Swiss National Bank): The Impact of Banking Sector Stability on the Real Economy*
Sujit Kapadia *(Bank of England): Overview of RAMSI (Risk Assessment Model for Systemic Institutions)*

Trying to explore the roots of the current financial crisis, **Nier** explained how abundant liquidity had contributed to the crisis by fuelling high leverage growth and strong reliance on the wholesale markets. More specifically, the main channels were lenient monetary policy, global imbalances and differences in the supervisory regime. Capital flows rather than low policy rates were the key drivers of increases in leverage financed in wholesale markets. This effect is less strong when financial supervision is strong. Concerning the first channel, Nier argued that although it seems plausible that low short-term rates may have provided incentives to accumulate leverage through low wholesale funding costs for intermediaries and low mortgage rates for households, the study finds that in some countries the higher policy rate did not slow-down the building of financial imbalances in the financial sector. Nier concluded that the results do not support the case for a reform of monetary policy objectives away from price stability to financial stability. Instead he made it clear that a larger emphasis on liquidity regulation is needed.

Monnin presented a study on the impact of banking sector stability on real output growth and inflation. A panel VAR is estimated in which the output variance is allowed to depend on banking sector stability, avoiding the restriction on the causal direction. As a measure of banking sector stability, Monin uses a continuous index based on Merton's model for credit spreads instead of a binary indicator often used in the literature. The results show that banking sector stability is indeed a driver of output growth and that this effect is asymmetric across stable and unstable periods. In contrast, there seems to be no relation between inflation and banking sector stability. Monin also stresses another important result concerning the high correlation between the Fed GDP forecast errors and the proposed stability measure. He concludes that this supports the argument that central banks should incorporate the financial sector in their forecast models.

Sujit Kapadia introduced the risk assessment model for systemic institutions (RAMSI) applied on U.K. banks. The model integrates different sources of risk to the U.K. banking system, accounting for non-linear systemic feedbacks, amplifiers and network dynamics. Thus, macroeconomic and financial shocks modeled within a Bayesian VAR affect the balance sheet of banks resulting in a specific loss distribution at system level. The simulated system level distribution exhibits fat tails despite Gaussian shocks to the various macroeconomic factors. The implied effects on bank lending translate into macroeconomic shocks completing the feedback loop. Another interesting feature of the model is the "danger zone approach", a score based on various balance sheet items: as information on a particular bank deteriorates, the funding markets close to that institution. The model can be used for forecasting and scenario analysis.

SESSION 5: INCORPORATING FINANCIAL INSTABILITY IN AGGREGATE MODELS

Yuliy Sannikov *(Princeton University): A Macroeconomic Model with a Financial Sector*
Frederic Boissay *(ECB): Liquidity and Financial Fragility*

Sannikov introduced a macroeconomic model with financial frictions in which financial experts borrow from less productive agents. Persistent wealth shocks are amplified though leverage and asset pricing feedback effects. The combination of the two gives rises to endogenous risk: wealth shocks results in a lower demand for assets and a drop in asset prices, which depletes the net worth of leveraged financial experts even further leading to fire sales and lower assets prices. Sannikov explained the destabilizing potential of these liquidity spirals and their negative externalities through fire sales and spill-over effects to the real economy. He also stressed another important implication of the model relating to securitization. Although risk sharing reduces the costs of idiosyncratic shocks and thus

interest rate spreads, the agents become less financially constrained and increase their leverage, increasing systemic risk.

Boissay presented a model linking liquidity and financial fragility. In this framework financial fragility arises when aggregate liquidity exceeds the absorption capacity of the real economy, as the result of the higher growth of the market-based banking sector relative to the real economy. Two other features of the model capturing important aspects of the past financial turmoil relate to the loosening of lending standards and the sudden liquidity freeze on financial markets. When the available liquidity exceeds a certain threshold, the economy moves from the "good equilibrium" with high leverage, large balance sheets and high credit risk taking in the "crisis time equilibrium" in which liquidity hoarding banks de-leverage and trade collapses. Boissay also considered the effects of capital requirements on financial fragility and concluded that they do reduce risk taking behavior of the individual bank but are not effective as a macro-prudential tool. *Oana Maria Georgescu*

Center for Financial Studies has kicked off the nomination process for the "Deutsche Bank Prize in Financial Economics 2011"

In 2011, the Center for Financial Studies and Goethe University will award for the fourth time the Deutsche Bank Prize in Financial Economics. The prize will be presented to an renowned researcher, in recognition of an outstanding achievement in the field of financial economic research.

- International Jury of experts in financial economics
- Some 3,800 academics from around the world were invited to propose nominees
- Jury has received outstanding academic submissions with practical application
- The prize is being awarded for the fourth time and carries an endowment of € 50,000

From September till November 2010, more than 3,800 academics from 60 countries had the opportunity to take part in the nomination process. Academics from top universities in the U.S., Europe and Latin America as well as the from the Asia-Pacific region were invited to submit entries and propose nominees for the prize. In addition, staff members of central banks, and many other institutions such as the OECD, the BIS and the IMF had the opportunity to suggest a candidate as potential prize winner.

"In a short period of time, the Deutsche Bank Prize in Financial Economics has achieved an outstanding reputation. The number of participating professors and academics eligible to nominate a potential prize winner has risen from roughly 1,400 in 2005 to more than 3,800 today. This growing attention proves that our academic prize for financial economics enjoys wide recognition" said CFS Director Uwe Walz, who is the Chairman of the Jury.

Members of the international Jury, alongside Uwe Walz, include Luigi Guiso (European University Institute), Michael Haliassos (CFS Director) and Charles Yuji Horioka (Osaka University), Otmar Issing (CFS President), Jan Pieter Krahnen (CFS Director) and Raimond Maurer (Goethe University). Also serving as Jury member are Thomas Mayer (Managing Director of Deutsche Bank Research and Chief Economist of Deutsche Bank), Carmen M. Reinhart (Maryland University) and the winner of the Deutsche Bank Prize in 2009, Robert J. Shiller (Yale University). At this occasion, the Jury would like to thank the nominators for their input.

The winner of the award, which carries an endowment of € 50,000, will be announced in February 2011. The award itself will be presented by Josef Ackermann, Chairman of the Management Board of Deutsche Bank, at a ceremony in Frankfurt on 22 September 2011. The award ceremony will take place during the course of a scientific CFS Symposium at Campus Westend that will focus on the research subject of the prize winner.

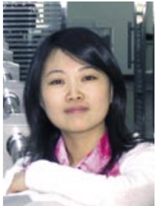
The prize was awarded for the first time in 2005 to Eugene F. Fama (University of Chicago) for developing and researching the concept of market efficiency. In 2007 Michael Woodford (Columbia University) received the prize for his research on the theory of monetary macroeconomics. In 2009 Robert J. Shiller was honored for his fundamental contributions to research in the field of financial economics and, amongst other things, his key contribution to the understanding of price fluctuations on markets and to the development of financial instruments to hedge against macroeconomic risks.

Sabine Kimmel (CFS)

▶ **Email: db-prize@ifk-cfs.de**
www.db-prize-financialeconomics.org

New staff members

Laura Moretti is a PostDoc Researcher with the task of establishing and managing the new CFS Data Center. She joined the Center for Financial Studies in October 2010. Laura earned a Ph.D. in Economics from Boston University, her M.Sc. from Pompeu Fabra and her Bachelor Degree from Bocconi University. Her research interests are Macroeconomics and International Finance, in particular she focuses on the role of transparency in international financial markets.



Lulu Wang joined the Center for Financial Studies as a researcher in November 2010. She is coordinating the CFS Visitors Program. This newly established academic exchange program seeks to stimulate research collaborations and dissemination of cutting-edge research techniques and findings in the five focal areas of research at CFS. Lulu graduated with a Master in Finance from the Albert-Ludwigs-University Freiburg and became a doctoral student within the Graduate Program "Finance and Monetary Economics" at Goethe University in October 2007.

Senior Fellow

Lucas Papademos has accepted to become a Senior Fellow at CFS. As Senior Fellow he will be involved in policy oriented research issues, mainly in the areas of monetary policy and financial stability. Professor Papademos was the Vice-President of the European Central Bank from 2002 to 2010. Before joining the ECB, he was Governor of the Bank of Greece from 1994 to 2002. He completed his doctoral degree at the Massachusetts Institute of Technology under Nobel laureate Franco Modigliani, and started his academic career at Columbia University (USA). Papademos has published, in addition to numerous policy papers, articles in a wide range of academic journals, such as *Economic Theory*, *European Economic Review* and *Brookings Papers on Economic Activity*. He has also edited several books. Recently, he co-edited with Jürgen Stark a book entitled "Enhancing Monetary Analysis". Papademos is a member of the Academy of Athens, Professor at the University of Athens, and currently Economic Adviser to the Greek Prime Minister. In the spring semester of 2011, he is scheduled to visit the Kennedy School of Government at Harvard University and teach courses on international economics and the financial crisis.

Papademos has been an active participant in many CFS events, such as the ECB and Its Watchers conferences and the International Research Forum on Monetary Policy. CFS is very grateful for the opportunity to work with Lucas Papademos on policy-inspired research issues and on policy analysis at the highest level.

The CFS team wishes you a Happy New Year 2011

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