Deutsche Bundesbank Spring Conference 2010 – International risk sharing and global imbalances

This year's Bundesbank Spring Conference on the topic of international risk sharing and global current account imbalances was clearly shaped by the current financial crisis. The aim of the Spring Conference was to acquire a better understanding of the extent to which the continuous growth in international financial market integration as well as global imbalances have played a role in the current dislocations. Among other things, the papers presented at the conference illustrated how the relationship between growing international financial integration and an imperfect understanding of financial system innovations contributed to the financial crisis. Against this backdrop, the participants also discussed ways to improve the regulation of the financial systems that would harness the benefits of international financial market integration and the associated international sharing of risks while avoiding the danger of intensifying the financial crisis.

Uncertainty is a characteristic feature of financial markets. A key component of this is the need to make decisions in an uncertain context about future economic developments. New information regarding the economic situation can lead to a revision of previous decisions and also trigger share price fluctuations and wealth adjustments which, in turn, may affect the evolution of current accounts and might foster turbulence and turmoil on the financial markets.

Other contributors showed that the significance of international financial integration in the current crisis can be better understood by more profoundly analysing not only economic cycles but also their interaction with financial market fluctuations. It became clear that central banks should play a major role in the ongoing development and application of a regulatory framework for the international financial system. However, it was also emphasised that central banks' primary objective remains to ensure monetary stability and that this should not be jeopardised by other aims. In addition, the conference sought to promote a deeper understanding of the role of monetary and fiscal policy in overcoming the crisis.

Introduction

Integrated financial markets allow households to diversify their income risk

Globalisation and the growing integration of international financial markets, as well as associated developments in the national current accounts, offer significant economic benefits. An increased level of cross-border financial market integration allows residents, for example, to hold foreign financial assets and to protect themselves against possible income risks resulting from country-specific cyclical fluctuations. Furthermore, residents can accumulate savings in foreign securities if this appears warranted, say, by demographic developments in their home country. Hence greater international financial market integration fosters the diversification of households' income risk.

Integrated financial markets also enable wider dispersion of corporate risk ...

International diversification also allows enterprises to spread their profit risk more widely. It therefore enables firms to concentrate on specific projects, despite heightened uncertainty regarding their demand, costs and profits.

... and more efficient investment

Advantages at the corporate level additionally result from the ability, especially in less developed countries, to generate certain types of capital flows (such as foreign direct investment) and thus productivity gains. Furthermore, international capital flows can help the domestic financial sector, particularly in emerging market economies, to develop more quickly. Numerous studies have provided evidence that this fosters more efficient investment. The current-account developments that result from the above scenarios therefore improve the allocation of scarce capital goods, long-term income prospects and consequently the repayment capability of countries receiving capital and thus boost global welfare.[1]

Integrated financial markets help to discipline economic policy

Finally, greater integration of international financial markets is also generally coupled with the hope of greater discipline and stability of a country's economic policy as large budget deficits or high inflation rates, for example, can be "punished" by international capital outflows.

However, the financial and economic crisis has also highlighted the risks and potential economic costs resulting from globalised and integrated financial markets as well as from diverging current account developments. This has happened before in the aftermath of monetary and financial crises. For example, the drawbacks of liberalised capital markets attracted critical attention following the Asian crisis at the end of the 1990s. One new feature of the latest crisis, however, is that it hit the capital markets and economies of the industrial countries with full force. The transatlantic contagion effects, which emanated primarily from the US real estate market, have had a profound impact worldwide.

Against this backdrop, it is not surprising that these questions are currently playing a central role in the academic debate as well. The Bundesbank therefore dedicated its Spring

1 The welfare gains are, however, difficult to quantify; the calculated results are dependent on the model's theoretical assumptions (see, for example, K K Lewis (1999), Trying to Explain Home Bias in Equities and Consumption, Journal of Economic Literature, 37, pp 571-608).

Conference this year to the subject of financial market integration and current account imbalances.[2]

This article summarises the individual papers that were presented at the conference grouped around the following central issues.

- How significant were the international financial system and financial integration for the current financial crisis?

- What role did global imbalances play in the current financial crisis?

- What monetary and fiscal policy lessons can be learned from the international dimension of the financial crisis?

- How can the international financial system be better regulated without sacrificing the benefits of international financial integration?

The role of financial market integration in the financial crisis

The presentations of Boz and Mendoza[3] as well as Bacchetta, Tille and van Wincoop[4] provided new insights into the first issue regarding the significance of international financial integration and the financial system for the current financial crisis.

Both contributions use general equilibrium models in which investors' decisions depend largely on expectations regarding an uncertain future and the world of today is likewise imperfectly understood. Investors must therefore try to learn from new experiences and information. New information may result in significant revisions of past decisions which, in turn, could have far-reaching implications for the financial markets and also the real sector of the economy. Decision-making in the context of uncertainty and incomplete information coupled with learning opportunities also featured prominently in other papers presented at the conference. This new generation of theoretical models can explain crises better than older equilibrium models which assumed that complete information was available.

Imperfect understanding of innovations in the financial system

In their paper, Boz and Mendoza analyse the significance of the new financial products for the US financial crisis. The authors demonstrate that insufficient knowledge of the actual probabilities of default of the new financial derivatives led to the risk of such derivatives being underrated. Boz and Mendoza illustrate how this can lead to overoptimism on financial markets. This results in a partly unconscious tendency among market players to ignore the economic fundamentals in their assessments and in excessive borrowing. The subsequent learning process and corresponding adjustment led to a credit crunch, a surge in savings and a slump in consumption.

2 A complete conference programme and the individual papers presented can be downloaded from the Bundesbank's website at http://bundesbank.de/vfz/vfz_konferenzen_2010.en.php.
3 E Boz and E Mendoza (2010): Financial Innovation, the Discovery of Risk, and the US Credit Crisis.
4 P Bacchetta, C Tille and E van Wincoop (2010): Rational Risk Panics.

Capital ratio and financial market fluctuations

Bacchetta, Tille and van Wincoop highlight the impact of poorly capitalised financial institutions on financial stability by demonstrating that such institutions can decisively influence investors' risk perception of the state of the financial system. An eroding capital base of these institutions decreases liquidity and increases volatility on financial markets. Furthermore, market participants assess the likelihood of a financial crisis occurring under these circumstances as being higher, which then leads to panic reactions on the financial markets. It is interesting to note in this context that a crisis can be explained as an undesired equilibrium of the modelled economy rather than, for example, an exogenous event.

Both of these conference papers suggest that international financial integration, interacting with financial system innovations as seen in recent years, contributed to the current financial crisis. In particular, an imperfect understanding of the nature and features of new financial instruments and the undercapitalisation of banks were key factors in this. An increase in financial institutions' capital ratio and a rise in liquidity requirements, as are currently being discussed, are possible consequences which can be derived from these two research papers.

The ability to better assess the role of international financial integration in the current crisis additionally necessitates a deeper understanding of the interaction between economic cycles and financial market fluctuations. The research work of Claessens, Kose and Terrones[5] as well as Kumar, Pavlova and Rigobon[6] has made an important contribution to this.

Interaction between economic cycles and financial market fluctuations

Claessens, Kose and Terrones examine the empirical relationship between cyclical and financial market developments. The authors draw on empirical data from a large number of countries to illustrate in detail how sharp upswings and downswings in the economic cycle are accompanied by considerable financial market fluctuations and share price swings. Among other things, they confirm the finding of other studies that cyclical downturns are often particularly deep and long whenever problems in the real and financial sectors coincide.

Systemic risk in the international financial market

Kumar, Pavlova and Rigobon focus on the role of systemic risk in the form of increased contagion risks in the highly integrated international financial markets. The authors develop a structural measure to determine the size of systemic risk in the global financial markets. They demonstrate that contagion risks make a significant contribution towards explaining the extent of the crisis on the US housing market. To this end, a deeper understanding of how contagion risks originate in integrated financial markets can help us to better anticipate the risks of future crises and to contain them more quickly and effectively.

5 S Claessens, A Kose and M Terrones (2010): How do Business and Financial Cycles Interact?
6 P Kumar, A Pavlova and R Rigobon (2010): Structural Estimation of Systemic Risk.

The role of current account imbalances in the financial crisis

The research papers of Fratzscher and Straub,[7] Ghironi and Stebunovs[8] as well as Hoffmann, Krause and Laubach[9] provided new insights into the role of external imbalances in the current financial crisis.

Revision of growth expectations and its implications

Hoffmann, Krause and Laubach stress the importance of growth expectations for the development of global imbalances and show how revisions to these expectations contributed to the current financial crisis. They argue that the less favourable growth expectations in the USA after 2005 led to substantial adjustments in the present value of wealth, a decline in consumption, investment and the level of output as well as an improvement in the current account balance. This abruptly reversed the pre-crisis process in which favourable growth expectations had pushed up the current account deficit. Seen from this perspective, the current crisis was due in part to a revision of the present value of wealth, and the high current account imbalances were a leading indicator of this development. This, however, by no means negates the major role which the international financial markets played in causing the crisis as *inter alia* they failed to promptly signal doubts regarding overoptimistic growth expectations.

Deregulation of the banking system

A complementary result is shown in the research work of Ghironis and Stebunovs. Their findings suggest that financial system innovations can lead to efficiency gains and productivity increases and thus promote international capital inflows. The authors show, in particular, that a more efficient banking system facilitates increased business start-ups. The market entry of new enterprises leads to a greater demand for labour, higher labour costs as well as real appreciation and a current account deficit. According to this interpretation, the rise in the US current account deficit in the 1990s was attributable in part to the deregulation of the banking system in the United States. The extent to which the efficiency gains actually translated into sustainable increases in productivity is, however, to be viewed more critically in retrospect than at the time when deregulation began.

Share price developments and anticipated productivity changes

Fratzscher and Straub likewise emphasise the importance of expected future productivity developments for the evolution of the current account. Variations in the prices of shares and other financial assets reflect anticipated changes in a country's future productivity and are therefore a good fit for partially explaining the development of the current account. Thus, here too, there is an explicit correspondence between financial markets and current account dynamics. The closeness of this correspondence depends to a large extent on the degree of international trade and financial market integration as well as on the country's monetary and fiscal policy stances. Above all in the USA, the current account corresponds closely with share price developments.

7 M Fratzscher and R Straub (2010): Asset Prices, News Shocks and the Current Account.
8 F Ghironi and V Stebunovs (2010): The Domestic and International Effects of Interstate US Banking.
9 M Hoffmann, M Krause and T Laubach (2010): Real Causes of the Global Economic Crisis.

Lessons for monetary and fiscal policy, and the regulation of the international financial system

Fiscal policy in the liquidity trap

The third issue that was discussed at the Spring Conference relates to the monetary and fiscal policy lessons that can be learned from the financial crisis. Expansionary monetary and fiscal policies were adopted worldwide with a view to stabilising the slumps in the real economy. In the major currency areas, the short-term interest rate level fell to historic lows and discretionary fiscal stabilisation policies experienced a renaissance. Associated issues which are also relevant for political decision-makers did not feature prominently on the main agendas of academic discussion in the past decades. For this reason, a range of recent studies are devoted to issues relating to classical stabilisation policy. Cook and Devereux,[10] for example, set out to gauge the size of the fiscal multipliers as well as the international knock-on effects which are associated with an expansionary fiscal policy in a crisis. They show that, compared with "normal" times, fiscal policy can have strong demand effects in a country in which interest rates are close to zero and which is in a liquidity trap. This is because the interest and exchange-rate effects that would otherwise be expected – and which at least partly counteract the fiscal demand effects – are only very marginal in this case. Conversely, other countries, unlike the "normal" case, benefit little from this expansionary fiscal policy. One of the main conclusions that can be drawn from this is that an internationally co-ordinated monetary and fiscal policy does not yield any significant welfare gains. Despite the generally strong domestic effects, however, it would not be advisable from a welfare perspective for a government to seek to fully offset a cyclical output gap.

The research papers from this year's Spring Conference reviewed above provided a good basis for the final question raised at the conference, which moved away from the academic aspects and more into the policy sphere of the issue: how can the international financial system be better regulated without sacrificing the benefits of international financial integration, and what role should central banks play in this? The panel discussion, the presentation by IMF director José Viñals and the concluding keynote address from Bundesbank President Axel Weber outlined a number of possible ways forward.

Introduction of new liquidity rules and incentive structures

It was stressed that the regulation of the international financial system needs to focus on two main aspects. Microprudential regulation at the individual bank level should apply to the same extent as macroprudential regulation at the level of the financial system as a whole. In the context of reforming microprudential regulation, it is important that the current Basel II framework is extended to incorporate a number of different aspects. First, greater attention should be given to stricter capital ratios for financial institutions and, second, incentives to incur greater risks should be critically questioned at firm level. A further aspect of an improved microprudential regulatory framework includes introducing new liquidity requirements in order to

10 C Cook and M B Devereux (2010): International Monetary and Fiscal Coordination in a Liquidity Trap.

improve banks' capital quality. This also involves reassessing the degree of leverage appropriate for banks.

Against the background of these measures, however, it is also necessary to ensure that the activities of individual banks on the international capital markets are not too severely restricted as to prevent financial institutions from sufficiently benefiting from international financial market integration, such as being able to diversify the risk of their customers' portfolios. To this end, it is important to find the optimal level of financial market regulation in order to internalise the above-mentioned benefits offered by competitive markets and international financial market integration.

Capital requirements for systemically relevant financial institutions

The global structure of the international financial system makes it necessary not just to consider the regulation of individual banks but also to strengthen the resilience of the global financial system. This implies a need to subject systemically relevant financial institutions to additional capital requirements. Furthermore, a better financial market infrastructure is required under which systemically relevant banks which run into distress can be caught by a better safety net within the financial system, without this jeopardising the entire financial system.

When implementing these measures, however, it is crucial to keep in mind their potential consequences. If the positive welfare effects of international risk sharing and current account dynamics in a globalised world are to be retained, the external impact of individual bank regulation on the global financial system has to be taken into account, and *vice versa*.

The role of central banks

Central banks have an important role to play in the ongoing development and application of the regulatory framework and in safeguarding the stability of financial systems. In doing so, however, they must not neglect their paramount task of ensuring long-term monetary stability. The orientation of central banks towards maintaining price stability is the central monetary policy achievement of the past few decades. Any attempt to subjugate monetary policy to the aim of financial stability would have an adverse impact on the credibility of monetary policy in the long term. Therefore, it is important that a central bank, as an independent institution, clearly communicates and pursues its monetary policy objectives in order to continue to firmly anchor inflation expectations.