# Hermann Remsperger: Financial stability issues – a view from the Bundesbank[1]

Speech by Professor Dr Hermann Remsperger, Member of the Executive Board of the Deutsche Bundesbank, at the China Society for Finance & Banking, Beijing, 7 November 2007.

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## I Introduction

Ladies and gentlemen,

First of all, I would like to thank the "China Society for Finance and Banking" for giving me the opportunity to hold a speech on "Financial Stability Issues" in Beijing today. I have to admit that I talked about a very similar subject in Brussels at the end of June.[2] Four months separate these two speeches. And, what is more, in the intervening period there has been turmoil in the financial markets that has captured our attention.

Of course, I do not want to pretend that I foresaw this turbulence. Nevertheless, I cannot resist the temptation to quote a few lines from my Brussels speech here in Beijing as an introduction to my talk today: "I believe there is a certain risk in the fact that not enough consideration is being given to the time when this period of market calm comes to an end. (…) I still see risks in the kind of things that are happening in the financial markets. These risks are not only of a cyclical nature. In some cases they are closely linked to structural changes occurring in the financial sector."

Despite all these warnings, at the time I said that the financial system was in robust shape overall. This assessment was based mainly on the resilience shown by financial institutions in the financial markets' spring turbulence in 2006 and 2007.

Now we are in the autumn of 2007. And we have every reason to look to the "hot" financial summer of this year.

Before I enlarge on this subject, let me explain briefly what I mean by financial stability. At the Bundesbank, we define it as the ability of the financial system to perform its key functions efficiently, namely the allocation of capital and risks and the settlement of payments and securities transactions. These functions must also be fulfilled smoothly in stress situations and during periods of structural adjustment.

As central bankers, we are interested in financial stability because a stable financial system is a precondition for the effective transmission of monetary policy decisions into the real economy. Disturbances in the financial system, including speculative bubbles, can delay or impair the transmission process.

Today, I will look at financial stability in the light of the recent turbulence. I would like to share my thoughts with you in three stages. First I am going to talk about some structural changes in financial markets. Second, I will look briefly at how the turbulences unfolded. Third, I will try to draw some initial lessons from this and discuss possible measures.

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[1] I would like to thank Claudia Ohly for her assistance in preparing this speech.

[2] H. Remsperger, Current Financial Stability Issues from a European Viewpoint, in BIS Review 81, 2007.

## II Structural changes in financial markets

In recent years, we have seen far-reaching structural changes in financial markets. Let me mention some of these trends: first, new, complex instruments; second, new business models; third, a growing role for relatively new players, and fourth, ever closer international financial integration.

Some of these trends have led to declining transparency and hidden liquidity risks. I shall come back to these points later.

### *1 Growing importance of new, complex financial instruments*

First of all, let me address the growing importance of innovative and complex financial instruments. Among those instruments, financial products used for credit risk transfer have played a prominent role and have significantly changed credit markets over recent years. The most popular instruments are collateralised debt obligations (CDOs), which bundle credit risk into different tranches with different ratings, credit default swaps (CDS), by which you can insure yourself against the default of a borrower, and CDS index contracts covering the default risk of all names in the index.

The structuring of CDOs can produce tranches with triple A ratings that are based on a portfolio of loans with a partly inferior rating. These tranches are riskier than traditional bonds with the same rating and generally receive a much higher coupon. The complexity of this kind of securitisation makes risk assessment very difficult.

On the one hand, credit risk transfer, in principle, leads to a more efficient allocation of risks. On the other, credit risks do not disappear in the process and are often shifted into unregulated market segments. As transactions take place over the counter, there is no publicly available information on where the risks go. Transparency suffers. In addition, new risks emerge, such as counterparty risks.

Growth in the credit risk transfer market has been enormous. For instance, the outstanding volume of credit default swaps more than doubled in both 2005 and 2006. Between 2001 and 2006, CDS notional amounts outstanding increased from USD 632 billion to over USD 34 trillion.

### *2 New business models*

The second structural change we are observing is the increasing weight of new business models. In the past, banks extended loans and mostly kept them in their books. These days, the large, internationally active banks, in particular, are switching more and more to the "originate-to-distribute" model – in other words, they pool credit risks and sell them on – often to investors outside the banking system.

By passing on credit risk, banks create additional scope for new lending. Even though it is hard to verify, it is likely that the large demand for structured products has led to an increase in primary lending.

Moreover, I would like to point to the fact that the distinction between bank- and market based financial systems has become blurred. Even in traditionally bank-based economies, refinancing through the money and capital market has become more popular.

### *3 Increasing importance of relatively new, largely unregulated players*

The third trend we are observing is the growing importance of a number of relatively new players. What is common to them is the fact that they are unregulated or regulated only to a minor extent. This reduces transparency in the financial system.

Let me talk first about hedge funds, which have come to play a major role in financial markets. Assets under their management have more than tripled over the past six years. They increased from USD 539 billion in 2001 to USD 1,810 billion at the end of the third quarter of 2007. A typical feature of hedge funds is the use of high financial leverage. This means that the actual volumes of their transactions far exceed reported assets under management.

Hedge funds' share in the turnover of the credit market is so large that they make a considerable contribution to market liquidity. In principle, this is positive. However, given their large weight and high transaction volumes, hedge funds can both cause and intensify market disruptions and thus play an important role for financial stability. Moreover, they are borrowers from and counterparties to systemically important financial institutions.

The second type of player which has seen record inflows over the past few years are private equity firms. Private equity firms' assets under management amounted to USD 700 billion worldwide in 2006; the compound annual growth rate between 2000 and 2006 was 14%. Inflows to west European private equity firms increased from EUR 20 billion in 1997 to over EUR 112 billion in 2006.

Among other things, private equity firms have benefited from lower regulatory requirements than listed companies, favourable financing conditions and tax advantages in many countries. To a considerable extent, the business model has relied on leveraged buyouts (LBOs).

Private equity creates financing opportunities for firms that might have had difficulties in obtaining a bank loan. This is particularly helpful for start-up enterprises. However, owing to their substantial weight and high leverage, private equity firms can also affect financial stability.

Until the beginning of the turmoil last summer, we had witnessed increasing leverage and an easing of credit standards for private equity firms. Apparently, they had sufficient market power to ask lenders for very favourable conditions because investor demand was so strong. At the same time, private equity firms' strategies were characterised by growing short-termism. Those developments pointed to an overheating in this market segment.

After the outbreak of the turmoil, the flow of new LBOs came to a virtual standstill. The loss of liquidity in the credit markets made it difficult for banks to distribute the leveraged loans that they had originated.

As a third group of new market players, I should mention Asset-Backed Commercial Paper Conduits (ABCP Conduits) and Structured Investment Vehicles (SIVs.) These have come play a pivotal role in financial markets in recent years. These types of Special Purpose Vehicle (SPV) are generally used by banks to keep risks off their balance sheets. In that sense, they are not really independent players like hedge funds or private equity firms.

Both conduits and SIVs usually buy tranches of structured products with longer maturities and refinance themselves by issuing short- or medium-term debt. While conduits exclusively issue Asset-Backed Commercial Paper (ABCP), SIVs also sell Medium-Term Notes (with a one to three-year maturity) and Capital Notes involving profit participation.

Sponsoring banks provide liquidity lines for the event of market disruptions. ABCP Conduits usually have liquidity facilities of about 100% of their asset portfolio, while those of SIVs amount to no more than 10% to 15%. Therefore, SIVs may have to resort to the sale of assets in the event of market disturbances.

If conduits or SIVs have to draw on liquidity lines, they transfer their liquidity problems to the sponsoring banks. At first sight, the risks for banks appears lower in connection with SIVs. However, if SIVs are forced to sell assets, banks may face additional risks as holders of the notes issued by SIVs. According to current legislation in both Germany and the EU as a

whole, liquidity lines to SPVs are not counted when calculating lending ceilings for banks and do not require additional regulatory equity capital if their maturity is less than one year.

The fourth group of financial market players that I would like to talk about today are Sovereign Wealth Funds (SWFs). While there is no generally accepted definition for SWFs, I think it is appropriate to say they are public investment funds or agencies, which invest governments' foreign assets in addition to – and separately from – the traditional foreign reserve management.

SWFs have been around for a long time. However, in recent years, more and more countries have set up such funds and their weight has reached unprecedented levels. Most of the assets are held by funds in the United Arab Emirates, Singapore, Norway, Saudi Arabia, China, Kuwait and Russia.

### *4 Ever closer international financial integration*

All the structural changes I have just mentioned have taken place against the background of ever closer international integration in financial markets. The speed of financial integration even exceeds that of globalisation in the real economy. Financial openness, measured by the share of cross-border direct and portfolio investment in GDP, is growing fast. In industrial countries, financial openness increased from 15% in 1970 to 32% in 1990, then picking up speed and reaching 150% in 2006.

Of course, overall, increasing financial integration is a very positive development, leading to higher efficiency and welfare. But it also means that disturbances spread faster from one country to the other. The recent turbulence makes that very clear: the defaults of subprime borrowers in the United States eventually turned into a widespread international crisis of confidence and liquidity. So, let us take a closer look at the recent turmoil in the financial system.

## III Recent turmoil and current situation

The US subprime mortgage market was characterised by loose credit standards, insufficient loan assessments and the involvement of unregulated mortgage brokers. As a result, default rates in this market segment increased significantly, starting in May 2007. This default surge triggered the turbulence that eventually led to a fundamental repricing and reassessment of risks across the globe.

Among the first reactions to the subprime crisis we saw the breakdown of two large hedge funds and witnessed serious problems in conduits and SIVs which had invested in subprime credit risk and could not find buyers for the commercial paper they had issued to refinance themselves. The outstanding volume of ABCP declined from more than USD 1,100 billion in the summer of 2007 to below USD 900 billion in October.

The problems then spread to the banking sector. The complex structure of some derivative instruments made it extremely difficult to assess the risk exposure of individual market participants. It became evident, however, that a smaller proportion than expected had been sold to non-banks. As there was not enough information on what risks were on counterparties' books, interbank lending pretty much dried up.

It was indeed surprising how the crisis then spread into the money market, making rates soar. Yield spreads between secured and unsecured interbank lending demonstrated the uncertainty prevailing in the markets. While the spread between USLIBOR and USREPO had mostly staid below 20 basis points before the turmoil, it exceeded 130 at the end of August 2007.

The interplay of different types of risks – counterparty, funding liquidity, credit risk – led to strong dynamics, which reinforced each other. The market liquidity of certain instruments

was affected as well. Large parts of the credit market dried up. Risk premia increased sharply and we saw substantial deleveraging. Equity markets also fell sharply, but were quick to recover.

Provision of liquidity by the ECB and other central banks have helped to reduce tensions in the financial system. However, we still face uncertainty. There might be more delinquencies of US homeowners over the coming quarters, and we do not know when the adjustment process in the US real estate markets will come to an end. Moreover, the situation in money markets has not completely returned to normal. The funding of the interbank market continues to be hampered by liquidity concerns and a lack of confidence with regard to potential counterparties.

With the increase of risk premia in the international corporate loan markets, a period of extremely favourable financing conditions has come to an end. In the credit risk transfer markets, we shall probably see a longer adjustment process, during which complex financial instruments need to be repriced.

It is striking that emerging markets seem to have been affected less than industrial countries and have emerged from the turbulence in remarkably strong shape. Their risk premia only went up for a rather short period. Emerging markets have not always been so resilient. In previous financial crises these countries were often hit particularly hard. I believe that it is still essential to enhance market forces and the efficiency of local currency bond markets in emerging economies. These have proved to be one of the main vehicles for the shift from short-term external finance to long-term domestic debt and have helped to reduce currency and maturity mismatches. Thus, they play a major role strengthening the resilience of emerging markets financial sectors.

After looking at emerging markets, you may be also interested in the effects of recent market developments on the German banking industry. I would like to make four points here.

First, German banks' direct lending to US subprime borrowers or to intermediaries who passed loans on to the intermediaries is negligible. Investments in structured products that are based on subprime credits amount to less than one percent of German banks' total assets. However, liquidity or credit lines for special purpose vehicles that invested in structured credit resulted in outflows from large, internationally active banks. There appear to be some burdens on banks due to the taking-over of assets from their special purpose vehicles into their own books.

Second, two smaller German banks got into serious difficulties as they had set up conduits that were disproportionately large given their total assets. But this did not involve systemic risks. The banks' owners as well as other German banks stepped in. Our comprehensive, privately organised system of deposit insurance also helped to keep up confidence.

Third, real estate prices have been more or less stagnating in Germany for many years, and there is definitely no risk of overheating or the development of bubbles. Moreover, standards for mortgage loans in Germany are much stricter than in the US subprime segment, and we have a long-standing tradition of fixed-interest loans for residential construction. In the past few years, interest rates have been fixed for at least five years for about two-thirds of new loans for residential construction.

Fourth, direct financing via capital markets is still not very important for the majority of German enterprises. Thus, the impact of higher spreads for corporate bonds on German growth should be limited.

## IV Initial lessons and possible therapies

Now let me turn to the question of what lessons we can draw from the turmoil. As I see it, it is still too early to make definitive judgements. Nevertheless, I would like to stress that we

should avoid rushing into overhasty regulatory responses. Above all, we need to analyse in more detail what happened and identify the reasons for the turmoil.

As the turbulence has spread across national borders, international cooperation is key. It would hardly be possible for one country alone to take any promising measures to prevent the recurrence of such developments.

At present, a whole range of international bodies are inquiring into various aspects of the turmoil. In my view, the Financial Stability Forum is a “natural choice” for discussing the recent events. The Bundesbank also contributes to the work of the Forum. Recently, the Forum set up a working group that is to examine the underlying causes of the recent financial market turmoil and make appropriate recommendations.

Of course, other bodies, such the Committee on the Global Financial System and the international committees of supervisors (for example, the Basel Committee on Banking Supervision, IOSCO) are currently working on this issue.

In my view, at least two weaknesses in the current system should be discussed in all these fora: liquidity risks and a lack of transparency. I will now first talk about liquidity and then discuss transparency issues.

## *1 Liquidity issues*

This summer, it became more than obvious that liquidity is essential for the functioning of the financial system and thus key for financial stability. In my view, we should make a distinction between three different types of liquidity: market liquidity, which is generally defined as an asset's ability to be easily bought and sold without causing a significant movement in its price, funding liquidity – in other words, the access to markets for funding – and monetary liquidity provided by central banks.

Let me start with some remarks on monetary liquidity. Many observers see a link between years of ample monetary liquidity and what is known as search for yield. David Dodge, Governor of the Bank of Canada, argues that the increase in securitisation implied an easing of credit conditions. The securitisation probably led to the creation of loans that would not otherwise have been made. Monetary policy may thus have been less restrictive than thought. But this effect, and here I also agree with David Dodge, should not be overestimated since inflation rates remained contained.

What I would like to stress, nevertheless, is that central banks need to take account of the link between monetary and market liquidity. In particular, we must be aware that a change in monetary liquidity can result in a more than proportional effect on market liquidity.

Let me add that during the turbulence central banks had a very difficult task: ensuring the functioning of the money market without creating moral hazard.

The ECB initially responded to the disruptions in the money markets by providing overnight liquidity and additional liquidity with a maturity of one week in its main refinancing operations. However, tensions persisted with regard to longer maturities. The ECB responded with longer-term refinancing operations. While tensions in the money markets have been reduced by the ECBs operations, the situation is still not “back to normal”.

Now let me turn to market liquidity. It is obvious that this type of liquidity could turn out to be elusive in times of market distress. However, the role of funding liquidity, and the interplay of different types of liquidity were underestimated. Funding liquidity has become increasingly dependent on market liquidity. This is due, not least, to the increasing importance of the originate-to-distribute business model. At the same time, market liquidity depends on financial institutions having funding liquidity at their disposal.

So how can the handling of liquidity risks be improved? Of course it is up to the banks to take a close look at their risk management techniques. In particular, the management of liquidity risks should receive due attention.

To my mind, the implementation of Basel II will help to avoid some of the problems I have just described. In the first pillar of Basel II, capital requirements will also be introduced for credit lines to off-balance-sheet special purpose vehicles for periods of less than one year. The rules on large credits will also become stricter and more risk-adequate. The second pillar of Basel II, which relates to the Supervisory Review Process, contains the requirement to include concentration risks in banks' risk management.

Having looked into liquidity issues, I would like to conclude that is a real challenge to create financial instruments which are tailored to the needs of individual investors and, at the same time, tradable in liquid markets. Maybe we can pick up this issue in our discussion.

## *2 Transparency issues*

The second weakness that has become apparent in the financial system since last summer is a lack of transparency. Transparency is necessary for the identification of risks and for the assessment of their seriousness. It is essential for making market discipline to work. Transparency is also an important means of maintaining confidence among market participants under stress. Thus, it is a precondition for safeguarding financial stability.

In my view, private sector initiatives are key for ensuring transparency and increasing the resilience of the financial system. We should first discuss the outcome of such initiatives in detail before rushing into new regulation.

Banks can make important contributions to transparency in financial markets. Originating banks should provide more information on the structure and underlyings of complex instruments.

Talking about banks, I would also like to mention the launch of a private sector initiative by the Institute of International Finance (IIF), which aims at refining best practices for market participants. It is to produce recommendations concerning issues such as the pricing of risks; conduits and the contingent liquidity risks to which firms have been exposed by using off-balance sheet instruments; valuation questions, especially where markets are thin or absent; ratings; and, transparency, disclosure and communications to define appropriate standards.

We can also expect some progress with regard to transparency when Basel II comes into force in Europe at the beginning of next year. The third pillar of this new framework addresses the issue of improving market discipline through public disclosure.

Furthermore, we need transparency and reliability with regard to valuations of financial instruments. In the recent turmoil, the valuation of credit instruments – especially those that are backed by subprime loans – in financial institutions' balance sheets has raised considerable attention and contributed to uncertainty. Pricing structured financial instruments mark-to-market is extremely difficult in times when markets have dried up. Therefore the mark-to-model method is increasingly being used. Extremely complex models are applied, but they are far from perfect.

No easy solution is at hand, but in any event market participants must do their best to make valuations as realistic as possible. In this regard, it is important that the methods use are consistent and transparent. How this goal can be achieved is, above all, up to financial institutions and auditors.

Rating agencies should also contribute to ensuring transparency. Over the past few years, we have seen lots of triple A ratings for structured credit products. These ratings may be misunderstood. The same rating for a corporate bond and a CDO tranche does not mean that the risk is the same.

In addition, the frequency of rating adjustments for structured products is lower than for traditional bonds. However, if ratings are adjusted, the change for structured products tends to be much larger. Moreover, ratings focus on credit risk, while for structured products, in particular, market and liquidity risks play an important role, too. Probably not all investors took that sufficiently into account.

Rating agencies do acknowledge the need to improve their rating methods for structured products. It may be worth considering a separate rating scale for these instruments in order to make it clear that the related risks are of a different kind than in the case of classic bonds. Publishing more information on the type and quality of claims underlying structured products would also be helpful.

At the same time, I would like to emphasise that ratings are no substitute for a broad-based risk assessment by investors, who should develop their own risk analysis, as Randall Kroszner from the US Fed recently pointed out.

Thus, investors will have to weigh the benefits of certain instruments against the cost of acquiring the data and expertise necessary to assess them properly. Sellers may respond by putting instruments on offer that are less complex and more transparent.

As regards the transparency of hedge funds, it is essential to strengthen market discipline and to enable counterparties to make a correct assessment the risks involved in dealing with hedge funds. In May 2007, the Financial Stability Forum published a list of recommendations on hedge funds to address potential systemic risk, which is clearly a step in the right direction. The recommendations include strengthening the management of counterparty exposures and the development of enhanced sound practice standards for hedge fund managers. The G7 have endorsed these recommendations.

A group of UK-based hedge funds under the leadership of Sir Andrew Large have announced plans to introduce standards based on the industry's best practices. I think this is a very promising project. In the US, the government has launched two working groups on hedge fund transparency. We expect to see their recommendations by the end of this year.

Concerning Sovereign Wealth Funds greater transparency should be in the interests of the investing countries as well, because they would also benefit from a reduction of uncertainty in the financial markets. Moreover, a commitment to best practices would reassure the target countries and could help to prevent protectionist tendencies. The dialogue between investing and receiving countries should definitely be intensified. The formulation of and adherence to best practices in that area seems to be a promising route to follow, possibly with the involvement of the IMF and the OECD. In any event, we should not call into question the principle of free capital movement and should avoid resorting to protectionism.

Last but not least, I would also like to point to the lack of aggregate statistics on credit risk transfer. Transactions are mostly carried out over-the-counter. Comprehensive and reliable data, say, on the overall volumes of transactions, exist only for some market segments. In particular, data on the CDO market are far from sufficient.

In other areas, for example, with regard to CDSs, different sources publish figures that are difficult to compare. They are often based on surveys carried out by the private sector (for instance, by business associations or rating agencies). Thus, it is hard to judge whether specific activities could have an impact on the financial system as a whole.

We need to discuss, at the international level, how statistics can be improved. Such initiatives can only be successful if all countries with significant market shares participate. They should be coordinated by international organisations like the BIS.

## V Conclusions

Let me briefly summarise the main points I wanted to make.

First, while the structural changes that have taken place over recent years have helped to increase efficiency and certainly have had positive effects, they have also led to transparency and liquidity problems.

Second, a lack of transparency and the underestimation of liquidity risks were at the centre of the recent financial turbulences.

Third, we are currently observing a number of promising private sector initiatives aimed at increasing transparency and reducing liquidity risks.

Fourth, while regulators, as well as central banks, should indeed ask themselves whether there is room for improvement in their domain, there should be no rush to new regulation across the board. In any event, we can expect the implementation of Basel II to bring about improvements.

Last but not least, we should not forget the international dimension of the disruptions in the financial system. No country can be sure that it will not catch the flu that started in other countries' financial markets. Policies focused solely on national markets will not work. International cooperation has become more important than ever.

Thank you very much for your attention.