Axel A Weber: Financial market stability

Speech by Professor Axel A Weber, President of the Deutsche Bundesbank, at the London School of Economics, London, 6 June 2008.

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1 Introduction

Financial markets perform an indispensable task for economic well-being. They provide the services and products by which the intertemporal allocation of savings and investments is accomplished. As such, financial market stability is a precondition for macroeconomic stability and economic growth.

An efficient allocation of funds presupposes that the necessary flow of information between borrowers and lenders is sufficiently stable to overcome the inherent information asymmetries between both parties. Risks to financial stability, on the other hand, imply also risks to the real economy and to overall economic stability.

It should come as no surprise then, that central banks in their strive for macroeconomic stability always had a keen eye on developments in financial markets and an interest in preserving financial stability. And the abundance of published financial stability reports over the recent past is indicating that the respective resources invested by central banks have been increased visibly over the past couple of years. It would have not needed the most recent financial market turbulences that started last summer to drive home that point. However, the events since last August have made clear for even distant observers that central banks have a natural interest and responsibility to safeguard developments on financial markets.

AAA, ABCP, ABS, CDO, CDS, SPV, SIV – until just under a year ago, these abbreviations could only be found in the financial press, if at all. This has radically changed in the past ten months or so. What was previously only of little interest to outsiders has thus moved into the limelight of public attention, within a very short time period. Much the same can be said of the regular weekly recurring refinancing operations of the Eurosystem central banks, through which the commercial banking sector is supplied with central bank money. While interest rate decisions often receive public attention, such money market operations have so far been regarded largely as a purely technical matter and have very rarely been covered by the financial press. In the meantime, however, the public interest in our operational framework has made clear that monetary policy involves more than just tweaking the interest rate.

In my following remarks I would like to touch upon some issues in the context of financial markets and monetary policy. At first, I would like to explain the meaning and importance of financial stability for central banks. Then I will briefly describe the causes of the recent turmoil on financial markets and some of the lessons learnt. Thirdly, I would like to say something in more detail about the liquidity operations we have been engaged in.

Finally, I would like to take up a more general aspect in discussing the potential role of financial market trends for changes in the monetary transmission process.

2 The term "financial stability" and the role of the central bank

The term "financial stability" describes a financial system's ability to efficiently allocate financial resources, reliably assess and tackle risks, and securely settle payments and securities transactions. A stable financial system generally fulfils these functions also in stress situations. Financial stability therefore also means resilience to shocks.

The term "financial stability" describes the functioning of the financial system as a whole, not the skills of individual market participants. Or to put it bluntly: From a financial stability point

of view, the fates of individual institutions are of interest only if they could negatively affect the system as a whole. Stable financial systems reduce uncertainty and thus develop positive external effects on the real economy, thereby contributing to greater economic prosperity. However, the reverse is also true: Instability in the financial system or even financial crises can have negative external effects and thus cause high economic costs. Contributing to financial stability is therefore part of a central bank's core area of responsibility, in order to ensure price stability and avert negative repercussions of the financial system on the real economy.

However, an emphasis on central banks' (joint) responsibility for financial stability must not lead to false conclusions: Government measures should generally function only as a subordinate security net when trying to ensure financial stability. The primary and essential task is to underline and strengthen the responsibility of market participants not only for themselves but also indirectly for the system as a whole.

After these more general thoughts, I will now come to some brief remarks on the dominating topic of the past few months: the subprime crisis and its effect.

3 Subprime crisis: cocktail of causes and lessons learnt

What are the causes of the most recent tensions on financial markets? Here, I am extremely sceptical about monocausal explanations. Instead, I believe that a cocktail of various ingredients triggered the shock waves for the financial system.

A cocktail – whose individual ingredients would have been some cause for concern, however, digested more or less smoothly by financial markets, but whose dynamic interaction when mixed proved to be a severe and ongoing stress test for the international financial system. The three main ingredients of this recipe are lending standards which have become more lax and less risk-oriented, especially in the real estate sector in the United States, weaknesses in credit risk transfer, especially in the originate-and-distribute model, and overly optimistic assessments of structured securities.

Lax lending standards

The notion of obtaining a real estate loan with almost no capital and with only a poor or no credit rating at all, is quite strange. In some countries, such mortgage loans, however, became a major feature of the real estate market in the two to three years preceding its peak.

Weaknesses in credit risk transfer

The almost oblivious-to-risk approach of lending to debtors with a low credit rating was fuelled by two factors, previous house price increases and innovative financial instruments which permitted the credit risk to be passed on from the bank to yield-seeking non-bank investors. By securitising and tranching, it appeared for a while to be possible to convert unstable individual loans to almost fail-safe securities. Some observers called this “financial chemistry”. In the corresponding passage in its last Annual Report, the German Council of Economic Experts wrote of transforming “vin de pays into a cru”, a bit like trying to make silk purses out of sows’ ears.

Not to be misunderstood: In principle, the possibility of transferring credit risks increases the flexibility of financial market players and is an element of modern risk management.

However, the disruptions of the previous few months have highlighted major weaknesses in this process. It has become clear that the tradability and fairly broad dispersion of credit risks, in particular, can actually improve the resilience of the financial system only if a high quality standard is maintained at all levels of the transfer process and no new concentrations

of risk arise. When transferring credit risks, one must always bear in mind that the transferred risks themselves do not vanish into thin air – they are merely elsewhere and the danger remains that they could resurface, possibly even in concentrated form. It was precisely such new concentrations of risk that led to the distress in the past few months threatening the existence of a number of financial institutions which were not themselves active players in the area of real estate lending.

Overly optimistic assessment of structured securities

The previous ten months have shown dramatically the limited value of even professional ratings. The assumption held by many around 12 months ago that structured securities backed by mortgages provided a premium over government bonds at a similar (low) level of risk has since proven to be a gross misperception.

The effects of the US subprime crisis meant, that for a period, a general crisis of confidence spread among financial market participants. This crisis of confidence also restricted the distribution of liquidity on the interbank money market, and still continues to do so.

In a nutshell: New and complex instruments to transfer credit risks in combination with large banks engaging in an "originate and distribute" business model have amplified the consequences of the undeniable credit excesses in the US mortgage market. These new instruments exhibited several weaknesses that seriously hampered the efficient flow of information between originators and investors. In the end, the new instruments of credit risk transfer "distributed fear instead of risks" (Borio 2008). Already stated by Walter Bagehot in his classical treatment "Lombard Street" in 1873, "credit means that a certain confidence is given, and a certain trust reposed". Thus, it was not surprising that, in the end, the turbulences on a special segment of the US mortgage market had the power to develop into a general turmoil on credit markets and into a crisis of confidence between the still most important intermediaries on current financial markets, i.e. banks.

A lot of effort by national and international institutions is currently put into the identification of lessons learnt and necessary reforms. In an international context, most notably, the analysis and reform proposals by the Financial Stability Forum deserve close attention. They are an important step forward to make the international financial system more resilient. Most of the reform proposals focuses on supervisory, accounting, and risk management issues. This focus is certainly justified, but as it is somewhat separated form the core business of central banks, I do not want to elaborate on them in greater detail.

In my following remarks I will try to sketch out in somewhat more detail issues that are more central to monetary policy. In doing so, I will try not only to focus on the recent developments, but also stress some more general aspects of the issues involved. To be more concrete, I will discuss Eurosystem liquidity operations in the face of tensions on interbank markets. Here I will for comparative reasons also refer to the latest steps by the Bank of England. Finally, I would like to elaborate somewhat on the more general implications of financial market developments on the monetary transmission mechanism to make clear that it is not only in times of stress when financial markets are of interest or the core business of monetary policy.

4 Current money market distortions and measures against it

4.1 The need of a well-functioning money market

Since August 2007 financial market turbulences have had a strong impact on the money market – not only in the euro area but in nearly all important currency areas in the world. Due to a rapid loss in confidence among banks the distribution of central bank money on the interbank money market was distorted massively. Two cumulative effects were at work: On

the one side, banks' willingness to lend decreased sharply due to increased counterparty risks. On the other side, banks' demand for short-term financing went up significantly due to involuntary re-intermediation of former off-balance-sheet activities (SPVs, conduits) and a higher liquidity preference due to the mounted uncertainty about future liquidity needs. The resulting increase in the spread between money market rates and central bank interest rates complicates monetary policy: The determination of the appropriate level of the central bank rates is aggravated and the signalling function of these rates becomes more limited.

To counteract distortions in the money market, central banks all over the world took a wide range of different measures. Some central banks reacted earlier, some central banks later, some central banks had to change their operational framework more strongly, others less so. While the Eurosystem reacted promptly but left its toolbox of monetary policy instruments nearly unchanged, the Bank of England (BoE) stayed calm in the first turbulent phase, but implemented some more extensive changes in its conduct of monetary policy after having recognised that money market tensions were more enduring and more severe than previously expected.

4.2 The operational framework of the Eurosystem (and the Bank of England)

Since the outbreak of the financial market turbulences the conduct of Eurosystem's refinancing operations has changed only slightly – but not dramatically. All modifications happened within the existing operational framework and without any change in Eurosystem's key interest rates. Promptly after the financial market turmoil in August 2007 the Eurosystem sharply increased its temporary liquidity provision to the banking sector. It announced liquidity providing fine-tuning operations with favourable conditions and the banks took the additional money readily. This quickly increased confidence of market participants and brought the overnight rate roughly back to the minimum bid rate for main refinancing operations. Since then, liquidity providing fine-tuning operations became largely unnecessary.

However, despite a fostered liquidity provision at the beginning of the maintenance period, no additional liquidity has been provided on average because the Eurosystem withdraw the additional liquidity again at the end of the maintenance period with liquidity absorbing fine-tuning operations. The resulting "front-loading" of the reserve requirements helped the banks in their liquidity management. The same objective was achieved by the conduct of a two-week main refinancing operation for the last two weeks of December. This measure was also designed to increase banks' planning reliability especially around the turn of the year.

Furthermore, the Eurosystem participated in a co-ordinated action of five important central banks, together with the Bank of Canada, the BoE, the Federal Reserve, and the Swiss National Bank in mid-December. Namely the Eurosystem took part in the newly implemented Term Auction Facility of the Fed.

Already at the end of August 2007 the ECB Governing Council decided to introduce supplementary long-term refinancing operations. The maturity of these operations was three months (as for the regular longer-term refinancing operations). At the beginning of April 2008, for the first time, a supplementary longer-term tender with six-month maturity was conducted. The announced six-months tender being allotted on 9 July will for the first time provide liquidity beyond the turn of the year.

Despite these measures, however, especially unsecured longer-term money market rates continued to entail significant default-risk and liquidity-risk premiums.

As I said, money market tensions emerged in all industrial countries and created a challenge for the respective central banks. Whilst the Eurosystem kept its operational framework largely unchanged, let me just for comparative purposes describe the decisions taken by the Bank of England in adjusting its operational framework.

During the financial turmoil, the BoE announced that it allows banks to hold more remunerated reserves and that it will provide the additional funds to do so. Normally the BoE tolerates an on-average under- or overshooting of banks' remunerated reserve holdings of ±1% around banks' own reserve targets. For the maintenance period starting in September 2007 it widened the range to ±37.5%, and shortly later to ±60%, to increase the flexibility of the banks. Meanwhile, since last October, the range has been reduced again to ±30%.[1]

Within the above mentioned co-ordinated action of five central banks the BoE gave notice in mid-December 2007 that it has expanded the amount of reserves offered at the 3-month maturity longer-term repo open market operations (OMO) on 18 December and 15 January and, more importantly, that it has widened the range of collateral accepted for these additional funds.

Again within another co-ordinated action of the five central banks, the BoE announced on 11 March 2008 a continuation of its expanded 3-month OMO against the wider range of collateral.

On 21 April 2008 the BoE introduced a special liquidity scheme to swap high quality mortgage-backed and other securities for UK Treasury Bills – which are provided to the bank by the UK treasury for this purpose – for a given period of time. The purpose was to temporarily exchange illiquid assets of high quality against very liquid securities thereby stimulating the secured inter-bank money market. It is worth to note that the asset swaps exist for a period of one year with the opportunity of a renewal of up to three years.

The developments in the operational frameworks of the Eurosystem and the Bank of England indicate a certain convergence in responding to the liquidity tensions. The same is true if one takes the actions of other important central banks into account. Most notably, all relevant central banks have responded by undertaking exceptional fine-tuning operations and by lengthening the average maturity of their refinancing operations. Central banks with a more restrictive pool of eligible collateral and/or counterparties before the current turmoil have broadened the range of accepted securities and counterparties. This is especially true for the Bank of England and the Federal Reserve.

4.3 (Financial stability) implications of the operational measures

Although it is always difficult to draw conclusions from a cross-border comparison – even more as we are right in the middle of a broad refurbishment of the causes and consequence of the current financial market turmoil – I try to derive some conclusions:

From today's perspective it was the right decision of the Eurosystem to act promptly and to inject additional funds temporarily into the money market. Confidence was re-established quite fast and at the end of the reserve maintenance period there was no on-average increase in central bank money.

In this respect, the communication policy of the central bank is very important. Policy makers have to stress the separation between liquidity operations and general changes of the monetary policy stance. To avoid "ex-post insurance of risky behaviour" – and to avoid negative implications for price stability, too – it is predominantly important to make clear that changes in the monetary policy stance are justified only when there is a risk to the primary mandate of the central bank, i.e. price stability. I will come back to the current stance of monetary policy in the Eurosystem, but let me first devote some further remarks on the refinancing framework.

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[1] The liquidity support for Northern Rock plc in mid-September is not included in this list of market-wide measures.

Central bank's flexibility is important in order to suffocate upcoming money market tensions. A quick response to money market distortions will be supported by having a broad toolbox of monetary policy instruments. In times of distorted money markets, a broad access to central bank money undoubtedly helps banks to control their central bank liquidity. Both from an implementation perspective as well as from a monetary policy perspective it is generally desirable that all banks have access to central bank money. This broad access to central bank money is even more important in the current environment. In normal times, however, usually only a subset of banks will actually use the direct access to central bank money on a regular basis.

One of the main differences between the Eurosystem and the BoE frameworks concerns the range of accepted collateral. The Eurosystem did not and does not only accept government bonds as eligible collateral but also highly rated private issuances and even bank loans to the private sector with a good credit quality (according to Eurosystem Credit Assessment Framework; ECAF). It is exactly this feature of our framework, that provided us with a high degree of flexibility and allowed us to conduct our operations without changing the toolbox.

In general, it is quite difficult to assess whether a narrow or a broad range of collateral is preferable. All in all, however, at least for me the advantages of a broader range of collateral outbalance the potential disadvantages. In turbulent times a broad range of collateral helps to grant additional funds to the banks without being restricted by their available high liquidity range of securities. In this respect, a broad range may help to safeguard financial stability.

However, it is occasionally pointed out that the acceptance of private assets could create adverse incentive problems aggravating counterparty risks of the central bank. Counterparties have recently brought forward more than before less liquid collateral to the Eurosystem, in particular asset-backed securities (ABS), for which primary and secondary markets have basically dried up. The annual average share of ABS pledged as collateral increased to 16 percent in 2007, up from 12 percent in 2006 and 6 percent in 2004. This development may be promoted by the fact that, in terms of volume, nearly 60 percent of the European securitisation market is eligible for Eurosystem collateral purposes. As a measure of risk control the Eurosystem generally refers to market prices and deducts a haircut from that value. If a market price is stale or not available, the Eurosystem calculates a theoretical price itself. Therefore, the submitted collateral is at any time valuated with up-to-date prices. If the (daily) valuated collateral falls below a certain level, the Eurosystem makes a so-called margin call, requiring additional collateral from the counterparty. From a risk management perspective, time-varying haircuts may also mitigate, among other adequate measures, counterparty risks of the central bank. This instrument is also in use by the BoE for evaluating collateral. It requires central banks' ability to assess the recoverability of the collateral appropriately. For this purpose the Eurosystem continuously monitors the quality of its collateral very carefully.

We should keep in mind, however, that in light of the financial tensions central bank repo transactions as such can only mitigate some funding tensions for banks. They do not address the fundamental cause of the problems, that is an overhang of illiquid assets on banks balance sheets due to former credit excesses.

5 The current monetary policy stance in the Eurosystem

For setting the Eurosystem monetary policy stance, however, the outlook on price stability is the magnetic needle of the Governing Council. It is only the possible repercussions of stress in financial markets on real economic developments and on the outlook for inflation that is of interest for monetary policy in that regard. Against this background the fallout of the financial market tensions – but also the effects of higher commodity prices – will be a more moderate, but still resilient, global growth.

The euro area remains on solid fundamentals with regard to real economic growth. This view is underlined by the Eurosystem staff projections published yesterday. And also the outlook on Germany as laid out in the Bundesbank forecast published today supports this assessment. While we will see a moderation in growth rates over the coming quarters, both in the euro area and also in Germany, already at the turn of the year we will have reached the through. Moreover, the moderation in growth rates in the quarters ahead have to be seen against the positive developments in Q1. Looking through the volatile quarterly figures, it is evident that the current cycle is resilient and robust.

At the same time, current inflation rates as well as the medium-term outlook on consumer prices leaves us in a state of heightened alertness. Even under the optimistic assumption that recent dynamics in commodity prices diminishes over the projection horizon and that there will be no broad-based second-round effects, monthly HICP inflation rates will stay above our definition of price stability far into 2009. And the risks to this outlook are clearly on the upside.

Given our focus on price stability, the Governing Council has sent a clear signal to markets and to the broader public yesterday, which seems to have been well-understood, that such an outlook on inflation is not acceptable for a stability-oriented monetary policy. The message of yesterday's Governing Council meeting also strongly underlines the already mentioned principle to keep distinct liquidity operations and interest rate setting in the conduct of Eurosystem monetary policy.

6 MTM and financial developments

The relationship between monetary policy and financial markets, however, is by no means one that is only of interest for policy makers in the face of a crisis. Developments on financial markets have the potential to modify core economic relationships and, thus, are of utmost interest for monetary policy. Let me therefore move away somewhat from the recent stress episode to discuss another more structural issue.

The recent decade has seen remarkable financial development, leading to many new financial products, more competition, a tremendous increase of securitization activities, disintermediation, and a consolidation process in the banking sector. This alters the range of activities of financial market participants and it possibly also changes their reaction to monetary policy. In the following, I will briefly discuss how financial innovations could have modified the interest rate channel and the bank lending channel of monetary policy transmission

6.1 Interest rate channel

Increased competition in banking together with an enhanced availability of alternative capital market-based instruments for financial investment has likely amplified and/or sped-up the effects of monetary policy changes on bank interest rates (and, ceteris paribus, on output and inflation): Increased competition between banks, but also between banks and different other financial market segments led to a closer relationship between market and bank interest rates. Consolidation in the banking system has also potentially accelerated the transmission of monetary policy shocks to bank lending rates as well as to other financial variables if (fewer and) larger banks use improved arbitrage opportunities between different market segments. The deepening of financial markets has likely fostered the role of expectations and thereby increased the speed at which changes in short-term interest rates are transmitted to other financial variables and to the real economy.

In sum, the existing literature points to a faster interest rate pass-through caused by deeper, more complete and more competitive financial markets. This is also confirmed by the respective empirical literature.[2]

6.2 Impacts on credit channel

The credit channel consists of several sub-channels, with the bank lending and the balance sheet channel being the most prominent ones. The bank lending channel concentrates on the effects of monetary policy on bank loan supply via changes in the banks' funding possibilities. The balance sheet channel looks at the effects on the overall supply of funds via changes in the borrowers' balance sheets (esp. value of collateral). The bank lending channel is generally expected to have lost importance due to the financial development of the recent years: Banks' flexibility to react to an interest rate hike has increased, and the dependency on bank loan supply has declined. With a higher flexibility on the banks' side, caused, e.g., by increased securitization or an improved risk management, banks have become able to better isolate their loan customers from monetary policy impulses. In consequence, European banks can nowadays react more flexibly to changes in market conditions than before.

Empirical studies (e.g. Altunbas, Gambacorta and Marques (2007) point in this direction and suggest that asset securitization may have reduced the importance of the bank lending channel for monetary policy transmission. Further, it allows banks to transfer parts of their credit risk to other market participants such as institutional investors. Thus, those banks that use securitization more intensively are better sheltered against monetary policy.

In a similar vein, with the increasing use of derivative instruments lending policies of banks might also have become less vulnerable to macroeconomic shocks – such as an unexpected monetary policy tightening. In addition, derivative instruments potentially facilitate banks to raise non-reservable sources of funds, for instance, by improving a bank's liquidity. Drawing on US data, the empirical results of Purnanandam (2007) show that the lending volumes of those banks that use derivatives are not sensitive to a Federal funds rate shock. On the other hand, those banks that do not use derivatives (even the very large one) significantly cut their lending volume when the Fed tightens the monetary policy. This suggests that derivatives help banks to shield themselves (at least partially) from a monetary policy shock. However, credit protection through credit derivatives may also be associated with an increase in bank credit supply, as has been found for other innovations like securitizations as well. Drawing on US micro data Hirtle (2007) finds that greater use of credit derivatives is associated with greater supply of bank credit for large term loans.

Further, huge amounts of loan-backed instruments have been acquired by entities known as conduits/SIVs which, while not appearing in banks' balance sheets, benefit from large contingent credit lines granted by banks that set them up. The turbulences starting in the second half of 2007 have just illustrated that, as structural investment vehicles draw on their credit lines, bank balance sheets may greatly inflate in times of stress (ECB, November 2007).

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[2] Bondt, G. de (2005), "Interest Rate Pass-through: Empirical Results for the Euro Area", German Economic Review, Vol. 6, No. 1, pp. 37-78.

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Moreover, financial development has not just broadened banks' possibilities to react to monetary policy and thereby reduce the effect of loan supply – it has also broadened borrowers' financing opportunities, reducing their dependency on bank loans. The additional funding opportunities entail a larger share of market-based (instead of bank-based) products; due to the fact that these are more standardized and less idiosyncratic, collateral may play a more important role now. Therefore, the importance of the balance sheet channel which relies on the effects of monetary policy on the supply of funds via wealth and collateral effects may gain importance due to financial development.

Whether the credit channel as a whole loses or gains importance due to financial development is an open issue, both theoretically and empirically.

Since a good knowledge of the monetary transmission process, that is of the key variables and the lags involved, is key for monetary policy, it is necessary for central banks to closely monitor the developments in the financial markets because they have the potential to seriously affect the monetary transmission process. Factoring-in the influence of financial market developments underlines the fact that monetary policy has to be based on a broad range of different indicators in order not to run the risk of missing important information.

7 Conclusion

I have tried to illustrate some aspects of the relationship between monetary policy and financial markets. Developments on financial markets have repercussions on our operational and refinancing framework. In addition, they have the potential to alter the impact of interest rate measures on the rest of the economy. It goes without saying that without financial stability the task of monetary policy becomes more complicated.

In that regard we should remember that in safeguarding price stability monetary policy supports financial stability. Thus, considering the influence of financial market developments on monetary policy does not lead to a change of the well-respected fundamental goals of a stability-oriented monetary policy.

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