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Table of Contents

Summary of Monetary Experts' Panel Briefing Papers.....	2
1. Financial Stability and the Role of the Central Bank.....	2
2. Exchange rate policy – Potential Global Imbalances with regard to developments in Asia (China, Japan)	5
Jean-Paul Fitoussi	8
Gustav A. Horn	15
Anne Sibert	23
Charles Wyplosz.....	29
Guillermo de la Dehesa.....	36
Prof. Dr. Sylvester C. W. Eijffinger	41
Jean-Pierre Patat	56
Leon Podkaminer.....	63
Pedro Schwartz	70
Prof. Dr. Norbert Walter.....	77



DG INTERNAL POLICIES OF THE UNION

- Directorate A -

ECONOMIC AND SCIENTIFIC POLICY

POLICY DEPARTMENT

MONETARY DIALOGUE JUNE 2007

Summary of Monetary Experts' Panel Briefing Papers

The following summary presents the respective topics of the briefing papers followed by brief bullet points on the main messages and answers of the experts to the questions asked:

1. Financial Stability and the Role of the Central Bank

Against the backdrop of an increasing integration of EU and indeed world financial markets, the issue of financial stability constantly gains in importance. The emergence of an ever greater number and rising importance of financial institutions active in more than one Member State requires a continuous evolution of the structure of financial supervision in the EU. This concerns effective structures for crisis prevention as well as crisis management. Both of these, and especially the latter, require an effective interplay of the various players involved, including national central banks and the ECB. It is not obvious, though, that the right processes and structures have yet been established in order to exercise financial supervision efficiently, to effectively safeguard financial stability and to deal with a pan-European financial crisis in a timely way that limits the overall costs to the EU economy.

Looking towards the ECB, stability of the financial sector is important for monetary authorities, as monetary and financial sector stability are closely connected. History provides many examples where problems in the financial sector led to monetary instability.¹

Currently, the ECB (or any other EU body) does not play any concrete role in the financial sector supervision at the EU level or even for the euro area. Organisation and management of supervision is left to Member States. The role of national central banks – natural partners of the ECB – is not dominant as far as the supervision at the national level is concerned.

The structure of the financial supervision must correspond to the realities and hence must evolve with the structure of the financial system. A number of alternative concepts are presently discussed:

- preserving the status quo;
- giving greater powers to the Level 3 Lamfalussy Committees;
- establishing a lead supervisor system;
- establishing a separate, mandatory regime for multi-jurisdictional institutions only;
- establishing a European Financial Services Authority/European System of Financial Supervision.

¹ The Great Depression in the US is probably the best-known example where bank failures combined with an inadequate response by the monetary authorities resulted in a prolonged economic crisis. More recently, the beginning of the 90s saw numerous financial crises in Europe, especially in Nordic countries and in the UK.

Central banks should be involved in the supervisory processes in a suitable manner. After all, it is impossible to achieve lasting monetary stability without a stable financial system.

Guillermo DE LA DEHESA – The issues concerning the financial supervisory structure in the EU can be addressed in a sequential way

- First: Rules should be based on shared principles (and not specific regulations), these principles should be the same for all Member States. They should be consistent with market conditions.
- Second: a progressive reduction of the large number of national supervisors and also a convergence towards a single supervisory model should be achieved.
- Third: Issues related to the “burden sharing” among member states in the event of cross-border crises need to be resolved.
- Fourth: The questions surrounding the convenience or even necessity of a pan-European supervisor need to be resolved.

Sylvester EIJJFINGER – In the long run, the best system for European financial supervision will be a European Financial Services Authority

- Cross-border externalities between EU financial institutions and markets will become increasingly important. This means that there will be, in the long run, a federally organized financial supervision structure with a European Financial Services Authority (EFSA) at the centre in which national supervisors (NCBs and national FSAs) still have supervision tasks.
- The case for an EFSA is based on the underlying tendency towards the integration of intermediary and market operations and the relief arising from the existence of an independent agency with a well-defined mission with no conflict of interest between monetary policy and banking supervision.
- It would be good news if the EU political authorities would open a serious debate on whether and how European financial supervision should be concentrated and what the future role of the ECB should be in this respect.

Jean-Pierre PATAT– The best solution could be to strengthen the role of the ECB in supervision

- Contagion risks are still weak across the euro area, but things will change with the creation of pan-European banking groups with high contagion risks. Then, the real problem will not be the implementation of lender of last resort operations but ensuring an adequate flow of information between all involved.
- The argument that central banks should not be involved in banking supervision in order to avoid conflict of interest in conducting monetary policy is out of date. Allocating the both functions to central banks has led to a decline in bank failures. The availability of information collected during supervision processes enables the central banks to improve the efficiency of monetary policy.

Leon PODKAMINER – Centralised financial supervision at the European level? No, thanks.

- There is no empirical evidence on superiority of any specific model of supervision. Practice seems to favour separation of supervision from central banking, but the differences between these two basic models should not be exaggerated.
- Preserving diversity of national systems is important for financial stability: Responses of agents are likely to be less uniform whereas in an integrated system the herding behaviour/contagion could reach devastating dimensions more easily. Developing a centralised supervisory authority would thus enhance the risks to overall European financial stability.
- The potential weakness of the present arrangement cannot be neutralised without *some* centralisation of the EU crisis management (with crisis management being a matter entirely different from supervision/regulation!). An EU agency directly involved in crisis management (the ECB, why not?) could jump in if national central banks shirk effort. The EU institution involved in the actual crisis management would have to be in a position to act as lender of last resort.

Pedro SCHWARTZ – Centralisation of the supervisory and regulatory roles is not needed in the euro area for some years to come

- There could be an argument in favour of more direct regulation and overseeing powers for the ECB, flanked by some euro zone Financial Services Authority if there existed a single financial market in Europe. But such unity is still far away and a case could be made for keeping a federalised structure of supervision.
- The current distribution of competencies in the euro area is an efficient option to timely detect signs of financial instability and to quickly assist affected institutions. As long as consistency of the different regulations and co-operation between NCBs, the ECB and other regulators is assured, this system benefits from better knowledge of the national agency of the national market participants.

Norbert WALTER – Financial supervision and central banking should be kept separate

- There is a general trade-off between the options for a European financial supervision structure (*see above*): While the more supranational alternatives are more difficult to realise given political and legal prerequisites, they have the advantage of providing a clear-cut, consistent framework, with clear accountability and responsibilities and where costs would be lowest for all parties concerned.
- The way forward could be sketched as follows: 1) Empowering Level 3 Committees; 2) Establishing the lead supervisor regime; 3) Development of the lead supervisor regime into a genuine, supra-national European system of financial supervisors.
- Financial supervision and central banking should be kept separate. However, central banks should be involved in the supervisory processes in a suitable manner. In addition, central banks occupy a pivotal role in crisis management.
- If deliberation and action is further delayed, there will be – following an acute crisis situation – the danger of strong political pressure to “do something”. Then there would be a great likelihood that a political decision will be taken enact to the default option of art. 105,6 TEU, transferring the powers of banking supervision to the ECB. This is not the most desirable outcome.

2. Exchange rate policy – Potential Global Imbalances with regard to developments in Asia (China, Japan)

In the wake of the continuing build-up of global imbalances, exchange rate policy is returning into the limelight of debate. Looking at different global regions, there are some with high current account surpluses or deficits while others are not affected with the euro area belonging to the latter group. Imbalances are particularly pronounced in the US and China, and these developments could well be non-sustainable.

They carry the risk of abrupt exchange rate movements leading to an unwinding of the current situation. For the ECB "*excess volatility and disorderly movements in exchange rates are undesirable.*"

In the first place, it would be the task of the US and China to overcome the current potentially harmful situation. One scenario suggests that the imbalances can wind themselves out through more saving in the US (e.g. by taking a more restrictive fiscal policy stance) and less saving in Asia (e.g. by fostering domestic demand and reforming pension systems), with no need for significant exchange rate adjustments. Another scenario predicts a direct sharp fall in the US dollar. In that case, if the Asian countries limit the appreciation of their currencies vis-à-vis the dollar, the euro would sharply appreciate. The resulting relative loss of competitiveness on tradable goods would provoke a current account deficit in the euro zone. In that event, European attempts to resist the euro appreciation would require a monetary policy relaxation. The consequence would be higher inflation.

As regards recent developments of exchange rates, conclusions can be differentiated with regard to nominal and effective nominal exchange rates. Looking at USD, JPY, GBP and CNY in comparison to the euro in terms of nominal bilateral rates, the following conclusions emerge:

- Fluctuations are wide and exhibit long cycles that span more than 5 years.
- The Asian currencies have tended to follow the dollar.
- The pound has kept an intermediate position between the dollar and the euro.
- The euro initially weakened and, since 2001, has strengthened vis-à-vis the other currencies.

A different picture emerges when looking at effective exchange rates² capturing the impact of exchange rate fluctuations on external trade:

- Effective rates are significantly less volatile than bilateral rates.
- Since its creation to end-2000, the euro declined by about 20%, then rose and is now about 2.5% above its starting value.
- Since January 1999 the dollar and the yen have lost about 10%.
- Sterling and the renminbi have fluctuated significantly less than USD, EUR and JPY and are not far from where they started.

² Average value of each currency vis-à-vis a basket of other currencies using weights that reflect the intensity of trade links.

Three statements can be looked at in more detail³:

"Exchange rates move too much."	Figures for fluctuations are well in line with historical movements since the end of the era of fixed exchange rates. A reasonable conclusion is that the pattern since 1999 is not unusual.
"There are serious misalignments"	<p>The period since 1999 has exhibited considerably smaller fluctuations than earlier. Competitiveness has been less disturbed by exchange rate movements.</p> <p>Under certain assumptions⁴ it could be concluded that USD is undervalued by 16%, JPY is undervalued by 20%, EUR is overvalued by 3% and GBP is overvalued by 24%. However, one has to take into account that only the euro zone has not undergone massive shocks in recent years and its current exchange rate reflects almost perfectly its long-run average.</p>
"Exchange rates are manipulated."	<p>Central banks are clearly focused on domestic objectives, it would make little sense to shape monetary policy according to exchange rate fluctuations. Furthermore, the link between the interest and the exchange rates is known to be unstable.</p> <p>China is different in this respect. Until 2005 it operated an exchange rate target vis-à-vis the dollar. Since then, China has adopted a less transparent policy aiming at limiting fluctuations of its currency vis-à-vis a basket of currencies whose composition is not disclosed.</p>

Jean-Paul FITOUSSI – The only possibility to avoid a brutal exchange rate readjustment or a deep recession in the US is stronger growth in Europe and Japan

- The main source of the deterioration in the US position is domestic. In today’s debate, too much emphasis is placed on China and the East Asian countries. Indeed, it could be argued that East Asian countries are playing a stabilizing role by preventing interest rate increases and possible deflationary effects on the world economy.
- Financial markets have been exploiting the macroeconomic situation to develop profitable business (helping in turn to sustain world growth) and to finance the imbalances. There is now a risk that in case of a macroeconomic correction, financial markets will play a destabilizing role.
- The only way to assure a smooth absorption of the current imbalances, at least in the short run, is sustained growth in Europe and in Japan. If these two economies were able to take the role of locomotive, the trade deficit of the US could gradually be reabsorped without a deep recession.
- Monetary and fiscal policy in Europe should accommodate this trend and abandon the deflationary stance of the past. This change of perspective is the only hope for avoiding a potentially devastating crisis.

³ See Briefing Paper of Charles Wyplosz: Exchange Rate Policy and Global Imbalances.

⁴ These are: The level of competitiveness is evaluated correctly and has not changed during the period under consideration and it is approximated by the average level over the period of observation.

Gustav HORN– The ECB should have an action plan for the worst case

- All appropriate strategies to deal with global imbalances have one major drawback from a European perspective: neither the ECB nor any other European institution has the power to enforce them. Therefore, the ECB should have an action plan for the worst case. The advantage of the ECB consists of being the central bank of the appreciating currency. Therefore, all action is credible.

- As a first step, the ECB should make a commitment that it would not tolerate any euro appreciation beyond 30 or 40% within the next two years. If markets accept this, no further action is required. If the commitment is tested, the ECB should start with open market operations which can be sterilized domestically. If open market operations do not produce the desired results, interest rates would have to be lowered. Inflationary dangers are low since the impact of lowering interest rates should offset the adverse effects of an overvalued currency.

Anne SIBERT – The ECB does not need an exchange rate policy, but if it has one, it should be transparent

- If inflation is to be contained, it is impossible to reduce interest rates to lower a currency's value. A central bank cannot use monetary policy to target both inflation and the exchange rate and expect to achieve either objective.

- As long as the ECB has control of monetary policy, all ECB foreign exchange intervention can be sterilised and would therefore not pose a danger in terms of inflation. However, there is little evidence that foreign exchange intervention is effective through a portfolio-balance channel or that such intervention would have any forecasting or signalling value.

- Obviously, the ECB analyzes exchange rate and current account movements. This information is useful for predicting inflation and for picking the correct monetary policy. However, the ECB should not be in the business of influencing exchange rates independently of their effect on the price level.

Charles WYPLOSZ – Imposing on the ECB an exchange rate policy is tantamount to restricting its ability to carry out an independent monetary policy

- Articles 111 and 108 ECT are not mutually consistent. Any monetary policy decision affects the exchange rate albeit mostly in unpredictable ways. Imposing on the ECB an exchange rate policy is tantamount to restricting its ability to carry out an independent monetary policy. Article 111 could possibly be used to clip the wings of the ECB. Undoubtedly, this is exactly what opponents of central bank independence intend to do.

- As long as the euro is a floating currency, the ECB cannot have an exchange rate policy. This does not mean that the ECB should not monitor the exchange rate. The major currencies float, with one huge advantage: the exchange rate is not a political variable.

- In case of a euro appreciation in the wake of an adjustment of global imbalances, the choice would be between a nominal and a real exchange rate appreciation at constant inflation at the one hand and nominal exchange rate stability along with real appreciation created by accelerating inflation on the other hand. Clearly, resisting the appreciation is not a desirable option.

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Exchange Rate Policy - Potential Global Imbalances especially with regard to developments in Asia

Jean-Paul Fitoussi
Executive summary

Today's global imbalances turn around the increasing current account deficit of the United States. Consumption and investment have been growing at excessive pace, while savings (private and public alike) were excessively reduced. This has a mirror image in the excessive savings of East Asian emerging countries and in Europe and Japan. While the former is justified by the absence of a functioning welfare state, and by the need to build up international reserves, in Europe and Japan excess savings reflect slow growth and aggregate demand insufficiencies.

Overall, these imbalances compensate each other, and the system is in a fragile equilibrium. The excessive expansion of credit in the US, and speculation in the currency markets, add to the risk of a global financial crisis

The request of a substantial appreciation of the yuan and of other East Asian currencies does not seem to be well grounded. It is unlikely to solve the American trade deficit problem, but on the other hand it would probably trigger an increase in interest rates and a financial crisis. Likewise, structural reforms and cost reduction in Europe, even if necessary for other reasons, would probably exacerbate the competition with the US, without really reducing the EU deficit with low cost emerging countries. Tightening monetary policy would also have little effect on trade flows, while increasing the risk of interest rate hikes and financial turmoil

The only way to assure a smooth absorption of the current global imbalances, at least in the short run, is sustained growth in Europe and in Japan, together with a more cautious fiscal policy in the US. If these two economies were able to take the role of locomotive formerly held by the US, the trade deficit of the latter could gradually be reabsorbed without going through a deep recession. The general macroeconomic trend goes in this direction; monetary and fiscal policy in Europe should accommodate this trend (as the Bank of Japan is doing), and abandon the deflationary stance that characterized them in the past. This ambitious change of perspective is the only hope for avoiding a potentially devastating crisis.

1. Introduction

The bright performance of the world economy, in 2006, hides a number of interrelated imbalances that compensate each other; the result is a global equilibrium whose foundations are extremely fragile. An increasing number of developments in financial markets, while extremely profitable so far, adds to the potential instability of the system. The sources of imbalances are well known (the US current account deficit, the excess savings in East Asian countries), as well as their effects on financial, housing and exchange rates markets. It is obvious, furthermore, that these imbalances will have to be corrected in the foreseeable future. The question is thus how can such an adjustment happen without a general turmoil. The thesis of this briefing paper is that this will take a coordinated effort among the main actors today on the scene.

2. The US current account imbalances: why is it worrisome today?

Among macroeconomists we can observe a widespread belief that the main source of global imbalances is the trade deficit of the United States. Figure 1 shows that the trade balance has been almost continuously in deficit since the early 1980s, and that it has seriously deteriorated since 1996, to reach today's record value of 6.6% of GDP.

The main source of this deterioration is domestic. In fact, since the mid 1990s we can observe both an increase of domestic investment, and a decrease of domestic savings.

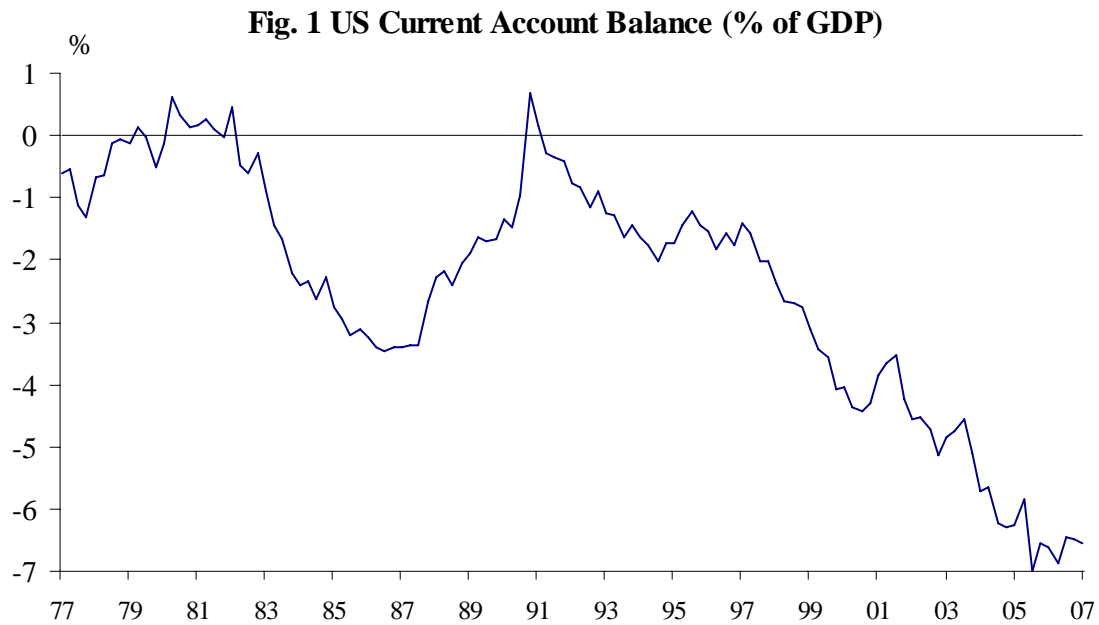
Investment has increased sharply over the 1990s, partly because of robust growth (the investment share usually tends to grow larger during periods of boom), but especially because of the stock market boom of the second half of the 1990s, that led to an overstatement of the potential growth rate of the economy, and hence to an overinvestment cycle in the ICT sector.

The stock market boom has also had the effect of increasing the perceived wealth of households, thus contributing to the strong reduction in the savings rate that we observed over the period. An important development of consumer credit (in particular, the increased importance of mortgage lending), and the important increase of liquidity of the year 2001-2002, has allowed to sustain consumption even when the stock market bubble deflated, and the confidence of households was shook by the terror attacks of September 11. This allowed to absorb in size and in length the recession of 2001 (that lasted only two quarters), but it contributed to keep the households savings rate to historically low levels.

The sharp decrease in savings is also due to the expansionary fiscal policy of the Bush administration (both because of the tax breaks and of the war in Iraq); the budget deficit went from a surplus of 1.6% of GDP in 2000, to a deficit of 3.7% in 2005. The negative savings of the government, and the low savings of households, caused the comeback, in 2002 of the twin deficits.

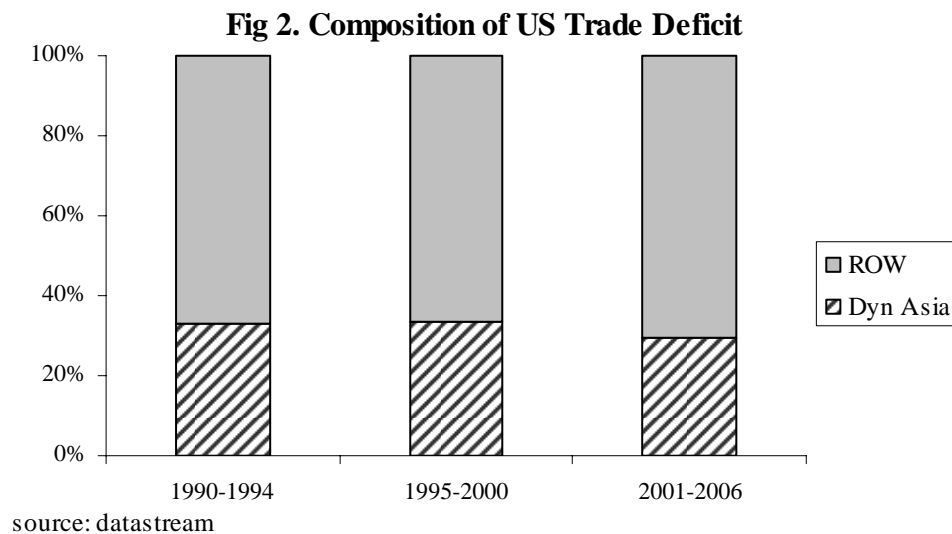
A straightforward conclusion is that the current account deficit, being from an accounting point of view the difference between national investment and national savings, had necessarily to increase. By simply looking at these macroeconomic figures, it is hard to believe that the source of the deficit lies abroad. If this explanation is correct, then, the necessary adjustment will mainly have to be internal to the United States and the other zones of the world will simply have to accommodate this adjustment

An alternative explanation can of course be offered: The excess investment of the United States is nothing but the mirror image of an excess of savings in the rest of the world, notably in the “Dynamic Asia” region⁵.



The strategy of East Asian countries

After the East-Asian crisis of 1997-98, most developing countries reoriented their strategies (from a standard deficit financed catching up process), with the objective of



⁵ This region is composed of China, the four dragons (Hong Kong, Singapore, South Korea, Taiwan), and the IP/A/ECON/RT/2007-05 Page 10 of 88 PE 385.643

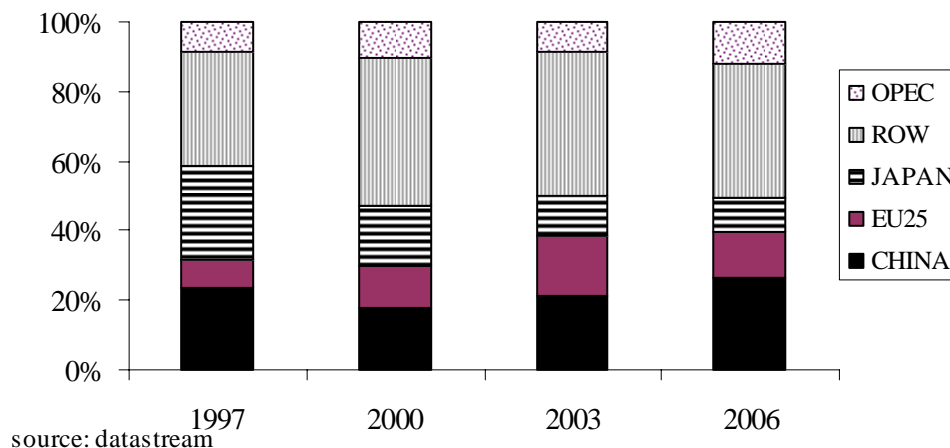
accumulating enough reserves to allow them facing sudden crises. Most countries, notably in East Asia, have limited the appreciation of their currency, in order to obtain trade surpluses and foreign reserves.

This is where the two imbalances have compensated each other: The increasing internal imbalance of the United States would have been financed by countries in surplus, willing to accumulate reserves in form of US treasury bills, thus financing the budget deficit of the US government and contributing to maintain global interest rates down.

While the story is coherent as a whole, it is not East Asian countries that have to be blamed for the “savings glut” evoked by Ben Bernanke in 2005. In fact, if we look at figure 3, we can observe that the part of South and East Asian economies in the trade deficit of the US did not change appreciably, and in fact it has even been slightly lower in the first half of this decade, than in the 1990s. By looking at figure 3, we can observe that the US saw their position significantly worsen with respect to OPEC countries, and that on the other hand, the weight of the European Union has decreased of about the same amount.

This fact is interesting for two reasons. The first is that, if this interpretation is correct, too much emphasis is placed, in today’s debate, on China and the East Asian countries. The

Fig. 3. Composition of US Trade Deficit



second reason is that the OPEC surplus is linked to the oil price, which fluctuates according to its own patterns (geo-political, and linked to global demand). Thus, while it can partly explain the recent worsening of the trade balance, it has nothing to say about the long run, structural reasons behind the imbalances of the US commercial sheet.

Thus, by looking more in depth at the trade balance of the United States, it seems that the internal factors are playing a much more important role than external ones. In this sense the periodic pleas for an appreciation of the yuan and of other East Asian currency seem misplaced, unless it were proven that a weaker dollar has an important impact on savings and investment, the true sources of the disequilibrium.

It may even be possible that a depreciation of the dollar, by increasing competitiveness increased investment even further, thus making the internal imbalance even deeper.

In fact, we could push the argument further, by arguing that East Asian countries (and in particular China) are playing a stabilizing role. As I already mentioned, by absorbing massive amounts of US government debt, they prevented interest rate increases and possible deflationary effects on the world economy.

Now, it is likely that a revaluation of the yuan would not decrease global imports of the US, but rather reallocate them to other, smaller countries, like Bangladesh, Cambodia and Viet Nam. Nothing guarantees, as of today, that these countries would keep “lending” back this surplus to the US. Thus a possible scenario, were the US to succeed in forcing a revaluation of the yuan (and of the yen) is that the US deficit would not be significantly affected, but international financial markets would be disrupted by an excess supply of dollars. The effects would be negative for all, but especially devastating for developing and emerging countries.

While an “easy” solution, like the appreciation of the yuan does not seem to be effective (or desirable), a number of other factors, mostly related to financial markets and speculation contribute to weaken the system. The first is the already mentioned exceptional development of household credit in the United States, which while sustaining consumption through the shocks of the early 2000s, has on one side increased the marginal risk profile of the borrowers, and on the other contributed to the housing market bubble. The increasing number of exotic contracts, extending lending to risky agents, also applied to firms, which after a short correction following the boom of the late 1990s, started investing robustly.

The other factor of instability is the speculation that exploits the low interest rates and will of East Asian central banks to keep the value of their currencies low. This happened in particular with the yen, due to the extremely low interest rates. The *yen carry trade* (borrowing in yen, to invest in foreign markets, profiting from the interest rate differential and from the probable loss of value of the yen) has grown in size to a point that it is today the main source of the depreciation of the yen. While extremely profitable and relatively risk free in the short run, these operations are typically speculative, and likely to trigger a run when the sentiment will change. We had an anticipation of what would happen in February 2007, when following the correction of the Shanghai stock market (mainly based on Chinese internal factors) the yen appreciated of 5% in a week.

To conclude, financial markets have been exploiting the macroeconomic situation to develop profitable business that in turn helped sustain the robust world growth of the past few years, and to finance the imbalances built into the system. Nevertheless, these developments are characterized by increasing fragility, and there is the risk that in case of a macroeconomic correction (namely a depreciation of the dollar, a generalized increase of interest rates, or a recession in the United States), financial markets may play a destabilizing role.

3. The role of Europe and of the Euro

Europe has contributed to absorb the commercial deficit of the United States. Figure 3 shows that while slightly reduced in the recent past, the share of the EU 25 on US deficit is still very significant.

Nevertheless, there are differences between the European (and Japanese) surplus and the Chinese one. In the latter case, the high saving rates, and the corresponding trade surplus may be explained by the need of insurance of Chinese households, who have a very weak pension and health system. The high savings rate is then nothing but the outcome of a rational intertemporal allocation of revenues.

The excess savings of Europe and Japan instead has different reasons. It is the result of sluggish growth (it is in fact a typical textbook Keynesian aggregate demand deficiency) that has been consistently lower than in the US since 1992. The trade surpluses of these areas with the US can be largely explained by the increase in exports due to the growth differential.

The common wisdom calls for a concerted action: The US should reduce their budget deficit, China and the other emerging countries should let their currencies free to appreciate, and Europe should make its economy more flexible and competitive, through structural reforms and a strict control of inflation. This is the periodic engagement of the G8, for example.

Luckily, though, until now actions only partially followed these recommendations. I already argued that it is far from certain that an appreciation of East Asian currencies would solve the US current account problem, while it is possible that it would have disruptive effects on financial markets, on interest rates, and on global growth.

As for the recommendation for European countries, regardless of what one may think about the necessity of structural reforms and strict inflation targeting, it is quite clear that they would exacerbate, rather than absorb, the global imbalances. Reducing costs and prices would yield a real depreciation of the Euro, that would maybe increase the surplus with the United States, but that would certainly not be enough to compete in costs with emerging economies. Ideally, the absorption of global imbalances would pass through a depreciation of the euro towards the yuan and the other East Asian currencies, and through an appreciation towards the dollar. This ideal adjustment nevertheless is impossible, because most East Asian currencies have formal or *de facto* pegs with the dollar.

A recent meeting (February 2007) of the shadow G8⁶ (of which I am member), presided by Joseph Stiglitz, pointed out that Economic policy (fiscal and monetary alike) in Europe has been deflationary, and called in particular for a less restrictive monetary policy. Further increases of the ECB interest rates would cause an appreciation of the Euro, increasing the difficulties of European countries, as well as the risk of a worldwide increase of interest rates that could break the fragile equilibrium on which rest financial markets.

On the contrary, reflating the economy, and sustaining economic growth in the Euro zone would be beneficial in two respects. First, it would allow reducing the excess savings in Europe that, as I pointed out above, is due to a long period of growth below potential. Second, sustained growth in Europe would play an important role in reducing the trade deficit of the US against Europe without forcing the former to go through an excessive recession. These effects would be enhanced by a similar pattern in Japan, that after more than a decade of slow growth and deflation is finally coming back to growth also thanks to an aggressive monetary policy.

On the longer term, it would also be important that, through the construction of a well functioning welfare system, China were able to reduce the excessively high savings rates, and to boost consumption. But such a process would necessarily take time. As of today, the only possibility to avoid a brutal exchange rate readjustment or a deep recession in the US, both potentially very harmful for global growth, is a stronger growth in Europe and Japan

⁶ The chairman summary can be found at:

<http://www.globalpolicy.org/soecon/bwi-wto/g7-8/2007/0209stiglitzshadow.pdf>

To conclude, the hope of a smooth readjustment of today's global imbalances rests on a readjustment of growth, with Europe and Japan taking the leading role that until now has been of the United States, through growth based on investment and consumption rather than exports. There is no reason why this should not happen, provided that economic policy is sufficiently ambitious. The question is urgent because we have today a window of opportunity. The current trend goes in the good direction, with a moderate slowdown in the US growth, China and the other emerging economies that keep growing at important rates, and Europe and Japan that are picking up. This opportunity has not to be missed by economic policy, in particular monetary policy.

Exchange Rate Policy - Potential Global Imbalances especially with regard to developments in Asia (China, Japan)

Gustav A. Horn

Executive Summary

Exchange rate policy is returning to the limelight of the economic policy debate. The reason is the continuing build-up of global imbalances. Looking at different global regions one can indeed detect several that show high surpluses or deficits, but others are not affected at all. The only imbalances in the sense of a non-sustainable situation occur in the US and China. So in the first place it would be the task of the US and China to overcome this potentially harmful situation. From a European perspective, appropriate strategies all have one major drawback, whether they are put into practice or not, neither the ECB nor any other European institution has the power to enforce them. It is for precautionary reasons that the ECB should have an action plan for the worst case. The tremendous advantage of the ECB consists in being the central bank of the appreciating currency. Therefore all actions are credible. Since markets know about this strong position, the ECB should as a first step make a commitment. This could have the form that the ECB would not tolerate any appreciation of the Euro beyond 30 % or 40% within next two years. If markets accept that, no more action is required. In case the markets test that commitment, the ECB should preferably start with open market operations. These can be sterilized domestically so that the supply of money will not rise. In this case there is no reason to assume any inflationary impact.

If open market operations do not produce the desired result, interest rates have to be lowered. Even then the inflationary dangers are low, since the expansionary impact of lower interest rate should offset the adverse effects of an overvalued currency.

Introduction

Exchange rate policy is returning to the limelight of the economic policy debate. The reason is the continuing build-up of global imbalances that according to many observers will sooner or later trigger fundamental exchange rate adjustments. These may occur at the wrong time and in the wrong place given the present global institutional settings and strategies. These may endanger the global upturn especially for those regions that have started to recover after a lengthy period of virtual stagnation like the Euro area and Japan. Therefore it is worth analysing the present situation and considering pre-emptive action in order to avoid such a dismal scenario. Furthermore it should be considered whether fundamental changes are necessary to avoid the emergence of these huge imbalances right from the beginning.

In the following section the imbalances are outlined. After that the role of exchange rates is described and in the final section policy recommendations for monetary policy are derived. The conclusion is that a more active stance of the ECB is required for precautionary reasons.

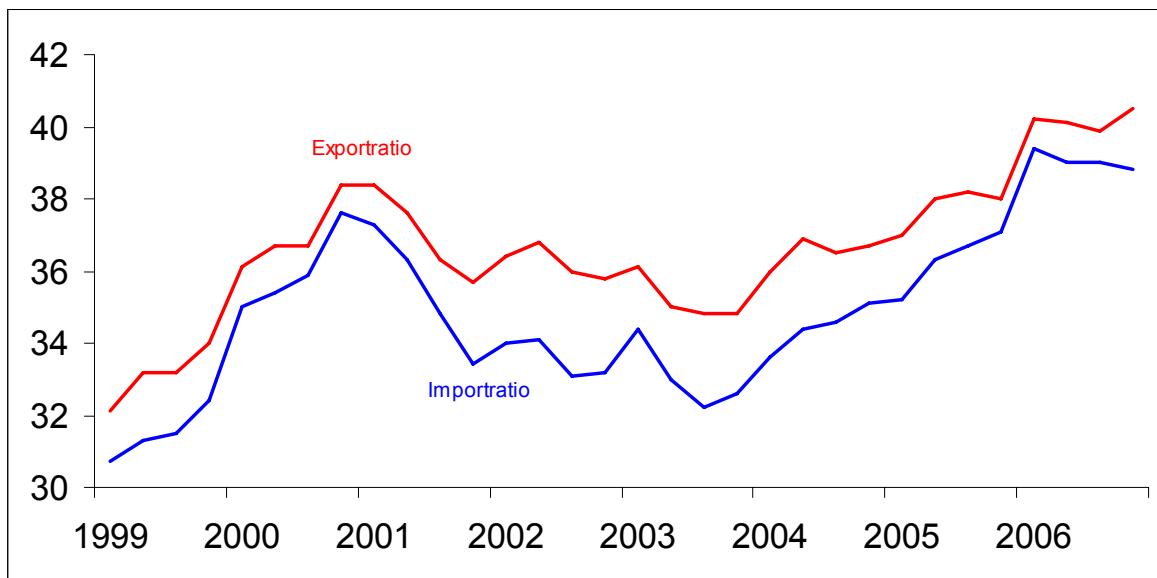
Global Imbalances

Global imbalances are mainly seen as deficits or surpluses either in net-exports or the current account. So it is trade that determines the imbalance. But one has to keep in mind that neither any surplus nor any deficit necessarily signifies an imbalance. There are good reasons why foreign trade flows are not always balanced. One consists in differing phases of the business cycle. If an economy grows at a relative high pace and domestic demand is the driving force it is likely to import more than another economy that is growing slowly, especially because domestic demand may be weak in the latter. As soon as the situation changes the trade balance will adjust automatically, too. Hence it is problematic to qualify current trade figures as imbalance. But, if there is a clear tendency towards a permanently widening gap, one may conclude that this situation is not sustainable, because for the economy showing a deficit foreign debt would rise indefinitely and for the surplus economy foreign assets would pile up. It can reasonably be expected that global capital markets will not accept this to continue forever. Instead, the adjustment process outlined below will occur.

Looking at different global regions one can indeed detect several that show high surpluses or deficits, but others are not affected at all. Among the latter is the Euro area. Looking at net exports as a percentage of GDP (i.e. the difference between the export and the import ratio, c.f. Figure 1), one realizes that although the export ratio has always exceeded the import ratio since the beginning of the currency union, the difference is rather small and has even been narrowing since 1999. Maximum trade surpluses were seen in 2002 and 2003 when the Euro area showed a very low growth record, especially compared to the United States.

It is difficult to interpret these findings as a trade imbalance. The high numerical values of the respective ratios should not be misleading. These trade figures include the internal Euro area trade. Hence only the difference can be attributed to external trade. The internal imbalances of the Euro area where high surpluses in Germany are matched by huge deficits in e.g. Spain and Italy are not discussed in this paper. The obvious reason is there is no exchange rate mechanism that could adjust in this case.

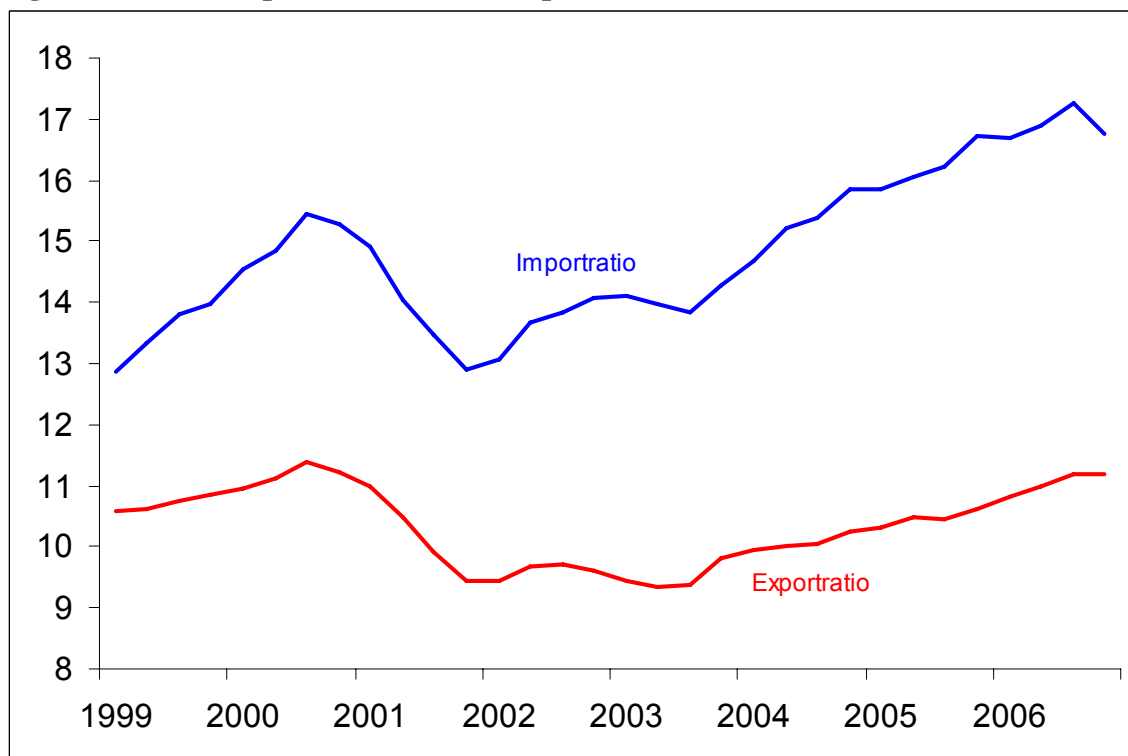
Fig. 1 Export and Import-ratio in % of GDP: Euro-area



Source: IMF, IFS

Looking at the same figures in the US, the result is quite different (Figure 2). Here we see a huge deficit of about 6 % of GDP. Until recently the gap was widening by each quarter. But against the backdrop of a moderate slow down in the US imports move more slowly too. The deficits are extreme however by historical standards.

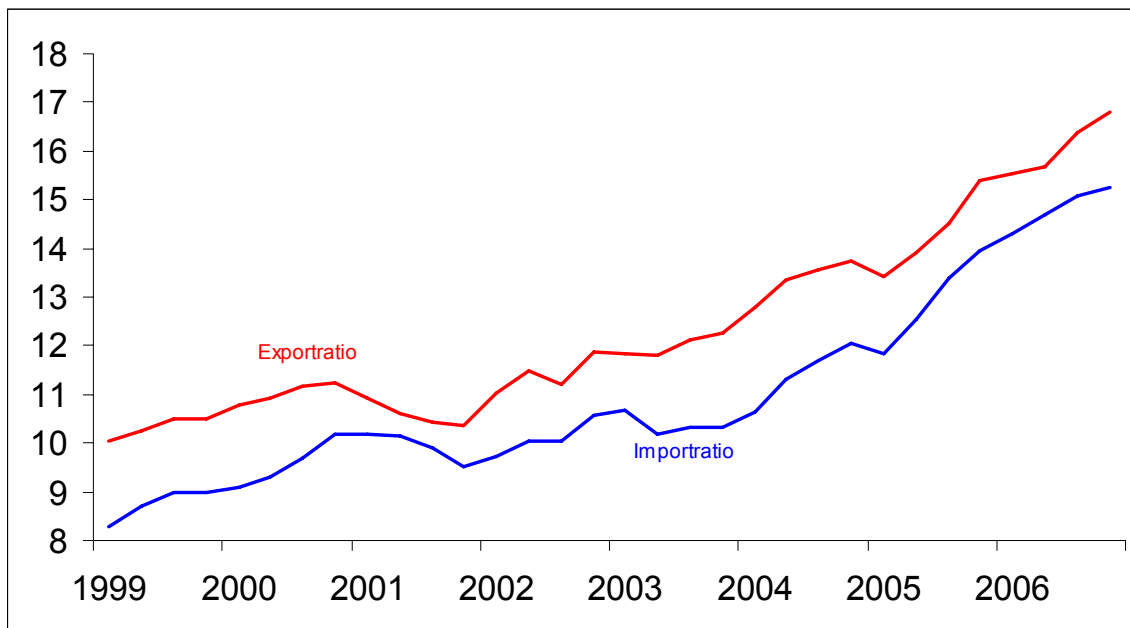
Figure 2 Export- and Import-ratio in % of GDP: USA



Source: IMF, IFS

The contrary applies to Japan (Figure 3).

Fig.3 Export- and Import- ratio in % of GDP: Japan

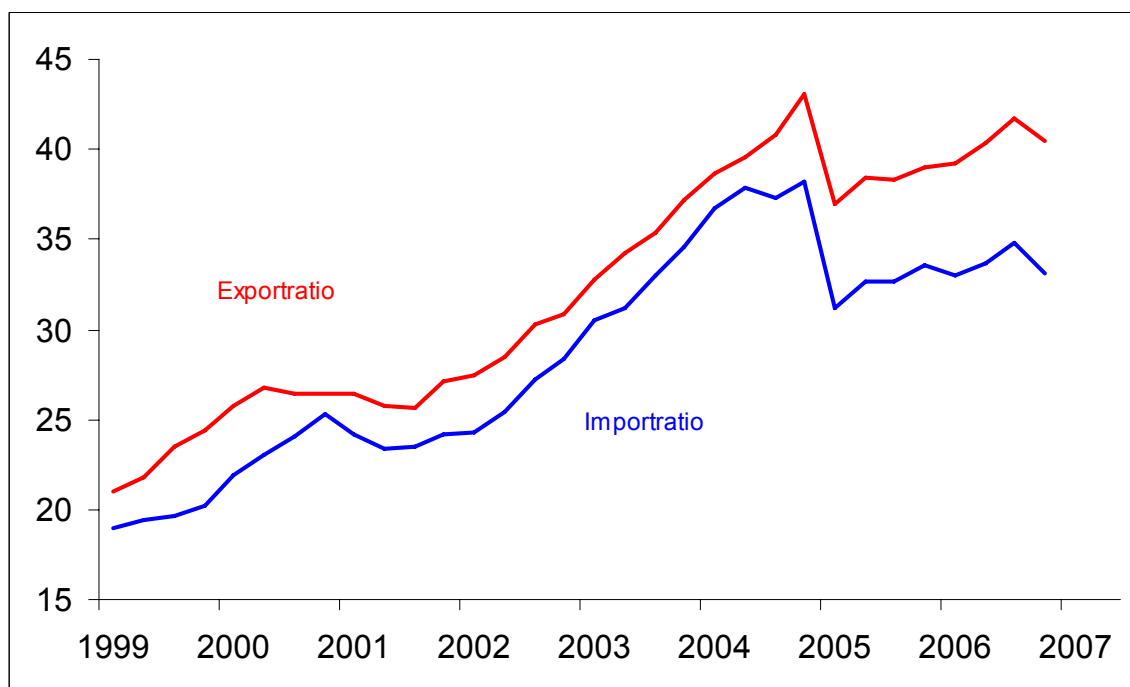


Source: IMF, IFS

In Japan there is an almost constant trade surplus of around 2 % of GDP. It remains largely unaffected by cyclical fluctuations.

A much more pronounced surplus can be found in China's trade balance (Figure 4).

Fig. 4 Export an Import –ratio in % of GDP: China

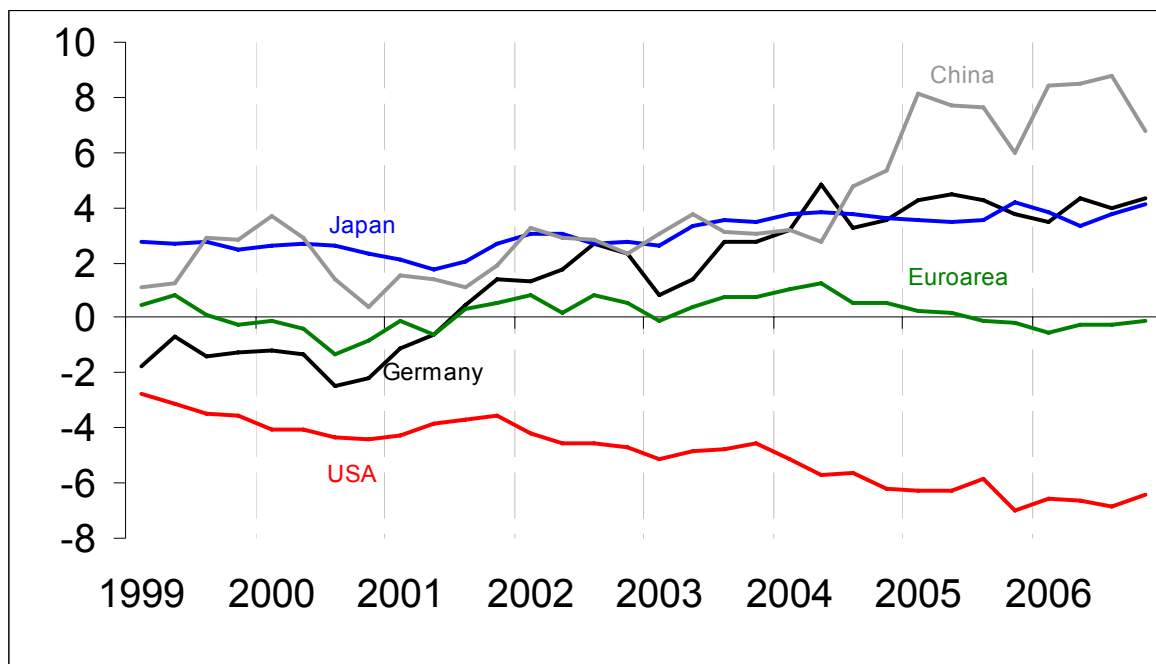


Source: IMF, IFS

Especially during recent years, it has grown significantly amounting to 6 % of GDP at the end of last year. One has to keep in mind that China's growth performance was far better than that of any other big industrial country. Nevertheless, if one wants to find a counterpart of the growing US deficit, it can be detected predominantly in China.

This impression is confirmed by the figures in the current account (Figure 5). Besides foreign trade of goods these include trade in services, income flows (such as the repatriation of profits) and transfers (e.g. workers' remittances, contributions to international organisations or aid to other countries). Hence it is a more general measure than the trade balance. Nevertheless, the results are quite similar. Where as the US shows huge deficits, China and to a much lesser extent Japan run high surpluses⁷. The Euro area again shows are more or less balanced current account.

Figure 5 Current Account as % of GDP (USA)



Source : IMF, IFS

In the light of these figures global imbalances with respect to trade are not a general phenomenon. The Euro area definitely shows no sign of an imbalance. Even Japan with its hardly changing surplus is difficult to interpret as an unsustainable situation. The only potential imbalances in the sense of an unsustainable situation occur in the US and in China. Thus, in the first place it would be the task of the US and China to overcome this potentially harmful situation. Unfortunately matters are much more complicated. Trade is a multilateral rather than a bilateral affair.

Trade Deficits and Exchange Rate Adjustments

The concerns related to potential imbalances are mainly caused by the hypothesis that high deficits or surpluses in the trade balance will lead to potentially dramatic exchange rate adjustments. This hypothesis is based on the assumption that the currency of a country that accumulates foreign debt will devalue sooner or later since the debt situation will be considered unsustainable at a certain point of time.

⁷ Within the Euro area Germany shows the very same surplus.
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Creditors will then refuse to provide additional credits and shift their money to other currencies reducing the demand for the currency in question and increasing the demand for other currencies. Thereby an exchange rate adjustment process is triggered. For the present situation that would mean the US-Dollar would depreciate and the Chinese Renminbi would appreciate. In this case only China and the US would be affected.

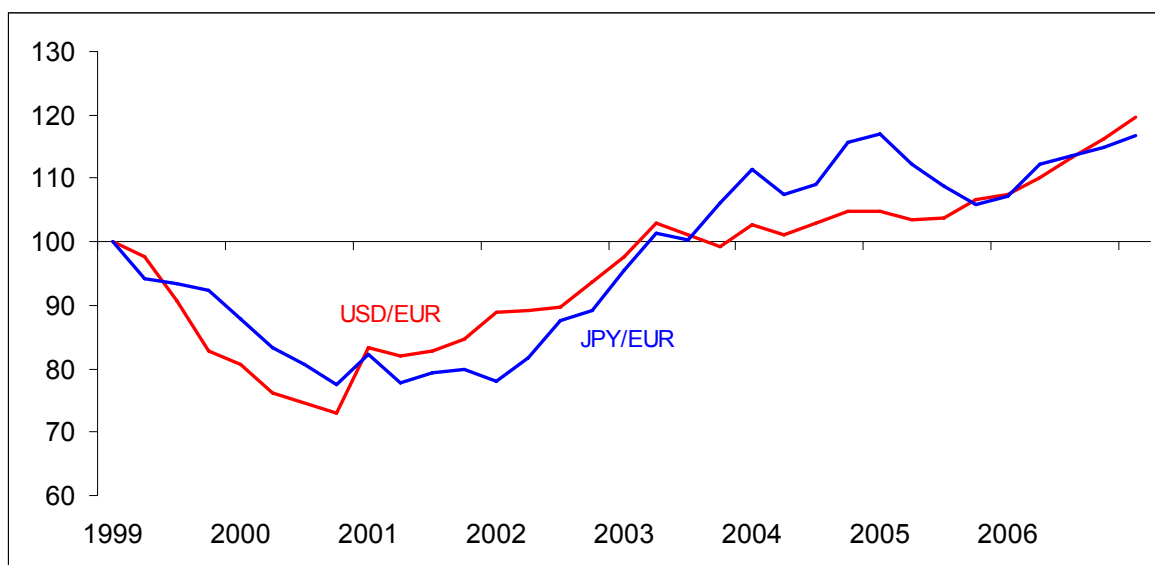
The exchange rate movements would then lead to a lower US-Dollar in relation to the Chinese currency. As a consequence US exports, especially to China, would grow faster and imports (also especially from China) more slowly. China would be affected symmetrically. Therefore such an adjustment would be very benign since it affects only those countries that caused the imbalances. Moreover, they would be affected in the right direction, since the imbalances would gradually be overcome.

But so far China has refused to let the Renminbi float freely and the Chinese capital markets are still highly restricted. There are some good reasons for that, but the effect on the imbalances is nevertheless detrimental. Investors may shift their assets to another currency, but then the appreciation will occur in the wrong place. One primary candidate for this replacement of China is the Euro area. After all, the Euro is the second most important currency after the US-Dollar. Furthermore, it has acquired a reputation for stability. Hence it seems highly likely that investors choose the Euro as a safe haven, when the US-Dollar starts to come under pressure. As figure 6 shows there are signs that this is already the case.

Since 2001, when the euro showed its lowest value vis-à-vis the US dollar in recent years, the European currency has appreciated significantly vis-à-vis the US dollar and the Japanese Yen. Compared to its initial value in 1999, the euro has gained about 20 % in value. Compared to the lowest point in 2001, the value of the euro increased by more than 60 %. This is already a significant burden for the euro area, a region that shows no sign of an imbalance. Hence it is the wrong place. But it is also the wrong time, because the euro area has just recovered from a lengthy economic slump. If the export industries have to carry that burden, may be even aggravated by additional appreciation, the upturn will be unnecessarily weaker. Computations by the Brussels-based think tank Bruegel show that if the EU carried the whole burden of adjustment, the process would lead to a 2 % lower GDP in the EU. If one applies these computations to the Euro area the costs would rise to 2.5 % of GDP. In the end, this kind of adjustment would amount to a premature end of the still necessary employment – build-up. In sum the Euro area is an obvious candidate, but the most inappropriate, too.

Fig.6 Exchange rates

Index: 1999=100



Source: IMF, IFS

An appropriate exchange rate policy

Given the facts mentioned above it seems sensible that - for precautionary reasons - the ECB should show a more active approach to exchange rate policy. This is so, because the ECB has to act, if growth and employment are endangered as long as price stability prevails. An exchange rate shock as outlined above will show very detrimental effects on growth and may even trigger deflationary price developments. Therefore the ECB is perfectly legitimated to act.

There are still some ways out of this situation that do not require any intervention by the ECB. If e.g. the US gradually succeeded in getting the balance right without a recession, no serious problems should occur. This could only happen if savings in the US is gradually increased. This could be achieved by slowly raising interest rates and taking a more restrictive stance in fiscal policy. But doing so sliding into a recession has to be avoided, as the global economy would be adversely affected and among other central banks the ECB also would have to react by lowering interest rates. Symmetrically China could foster domestic demand to raise imports strongly. If this were done by raising wages, China would at least appreciate in real terms and record an increasing demand for imports. Both effects will put pressure on the Chinese foreign trade surpluses.

These or similar recommendations have already been made by several international institutions including the IMF. From a European perspective, they all have one major drawback, whether they are put into practice or not, neither the ECB nor any other European institution has the power enforce them. Therefore, it would be gambling with growth and employment to assume that the benign scenarios come true and not the worst case outlined above.

It is for precautionary reasons that the ECB should have an action plan for the worst case. The tremendous advantage of the ECB consists in being the central bank of the appreciating currency. Therefore all actions are credible. If the ECB decided to intervene in the market by buying dollars their actions are not limited by a lack of foreign currencies. If interest rates are lowered, no recession threat can be an obstacle.

Since markets know about this strong position, the ECB should as first step make a commitment. This could have the form that the ECB would not tolerate any appreciation of the Euro beyond 30 % or 40% within next two years. If markets accept that, no more action is required. In case the markets test that commitment the measures described above should be taken. Preferably the ECB should start with open market operations. These can be sterilized domestically so that the supply of money will not rise. In this case there is no reason to assume any inflationary impact.

If open market operations do not produce the desired result, interest rates have to be lowered. Even then the inflationary dangers are low, since the expansionary impact of a lower interest rate should offset the adverse effects of an overvalued currency. Nevertheless, a coordinated approach with fiscal policy being more restrictive, and wages that keep on track during this phase, would make business much easier for the ECB. But this is not the reality in the present Euro area.

The Exchange Rate Policy of the ECB⁸

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Executive Summary

- Misaligned or volatile exchange rates may be costly.
- Using monetary policy to target the exchange rate conflicts with attaining price stability.
- The central bank could be given multiple objectives, but this would cost it its credibility.
- It is suggested that sterilised foreign exchange intervention may be a second monetary policy tool.
- But, does sterilised foreign exchange intervention work?
- There is little evidence that sterilised intervention is effective through a portfolio-balance channel.
- There is little reason to believe that sterilised intervention has a signalling role.
- It is not obvious that foreign exchange intervention or central bank speeches can prevent coordination failures; it may even cause them.
- The ECB does not need an exchange rate policy. But, if it has one it should be transparent.

The most important role of a central bank in a modern society is to provide a stable means of payment; hence, price stability is the ECB's mandated primary goal. The ECB and other central banks, however, may also be interested in maintaining a stable exchange rate.

Misaligned or volatile exchange rates may be costly

Swings in exchange rates can do real damage to an economy. A stronger domestic currency increases the foreign-currency prices of exported domestic goods, making them less attractive to foreign purchasers. For any home-currency price, it also increases the foreign-currency price of imported goods. This allows foreign producers to lower their home-currency prices and foreign goods become more attractive relative to domestic goods. The strong currency lowers competitiveness and workers and firms are hurt. A weaker currency increases the prices consumers and firms pay for foreign goods. This causes damage by increasing consumer price inflation and the prices that domestic firms pay for imported imports.

In addition to a too high or too low exchange rate causing harm, volatility of exchange rates may be injurious. The empirical evidence is inconclusive, but it seems reasonable that exchange rate uncertainty should reduce international trade and investment.

⁸ Briefing paper for the Committee on Economic and Monetary Affairs (ECON) of the European Parliament for the quarterly dialogue with the President of the European Central Bank.

Using monetary policy to affect the exchange rate conflicts with attaining price stability.

Unfortunately, using monetary policy to influence an asset price – such as an exchange rate – may conflict with providing low and stable inflation. Suppose, for example, that a central bank is confronted with a rising external value of its domestic currency that it perceives as undesirable. If inflation is to be contained, it is not possible to reduce interest rates to lower the currency's value. A central bank cannot use monetary policy to target both inflation and the exchange rate and expect to achieve either objective.

The central bank could be given multiple objectives, but this would cost it its credibility

A possible solution is to adopt a more flexible attitude about the primary role of a central bank and to give the central bank multiple objectives, to allow it discretion in trading off the costs of inflation against the costs of a fluctuating currency. Unfortunately, this increased flexibility comes at the cost of a loss of credibility. If inflation is low and the home currency is appreciating, the central bank could lower the interest rate for opportunistic reasons unrelated under the guise of trying to contain the exchange rate.

It is suggested that sterilised foreign exchange intervention may be a second monetary policy tool.

Another solution is to realise that the monetary authorities potentially have more than one instrument. In addition to controlling the short-term interest rate, they can engage in sterilised foreign exchange intervention. In theory, sterilised intervention works as follows. Suppose that a government wants to lower the value of its domestic currency against the dollar. It would buy dollar-denominated debt from the private sector, selling its domestic currency in return. This, however, increases the supply of the domestic currency which is not compatible with the central bank maintaining its chosen short-term interest rate. Thus, to keep from having to change its monetary policy, the central bank sterilises or undoes the effect on its domestic money supply by performing an offsetting open-market operation: selling domestic-currency-denominated debt for domestic currency. Thus, the outcome is an unchanged domestic money supply and an increase in the supply of home-currency denominated securities relative to dollar-denominated securities.⁹

It should be noted that as long as the Governing Council has control of monetary policy, no matter who in the Euro zone has control of exchange rate policy, all ECB foreign exchange intervention can be sterilised.¹⁰

The idea of sterilised intervention is not new and its appeal to policy makers has varied over time. European countries and Japan bought dollars in an attempt to slow the dollar's decline in the late 1970s and they sold them to stem its rise in the early 1980s. In September 1985, the United States government – scared of rising domestic calls for protectionism – joined the other G-5 countries in signing the Plaza Accord and took part in the resulting concerted intervention to further the dollar's fall. In February 1987, G-6 finance ministers agreed at the Louvre on cooperative intervention to stabilise exchange rates.

⁹ In practice, central banks may not go through this whole two-part procedure. Instead, they may effect a more rapid transformation of the fraction of outstanding debt denominated in domestic currency with the use of derivatives, especially forward contracts and swaps. Thus, sterilised intervention is achieved synthetically.

¹⁰ Central banks do not always choose a country's intervention policy. In the United States the Treasury is senior to the Federal Reserve in deciding foreign exchange intervention. In Japan, intervention is decided by the Ministry of Finance.

Most of this intervention, as well as the Bank of England's disastrous 1992 attempt to stave off the collapse of the pound – which reportedly resulted in a \$5 billion capital loss in only a few hours – was sterilised.

In recent years, many central banks of industrialised nations – perhaps convinced of its ineffectiveness – have done little intervention. The United States, which intervened in foreign exchange markets on average one out of four business days between February 1987 and July 1990, has intervened only twice since mid-August 1995 – in June 1998, when it sold dollars for yen in a cooperative action with the Bank of Japan, and in September 2000 when it sold dollars for euros in coordination with the ECB and the monetary authorities of Japan, Canada and the United Kingdom.

Policy makers' current attitudes toward intervention vary greatly. In 2004 the Reserve Bank of New Zealand Governor, Alan Bollard, asked for the capacity to intervene in disorderly conditions. But, the Bank of Israel Governor, Stanley Fischer says that it is not healthy, "It would change the nature of the market completely. If we intervene, instead of the market focusing on the fundamentals, it will be wondering how we were feeling that morning."¹¹

But, does sterilised foreign exchange intervention work?

Does sterilised intervention work? Clearly *unsterilised* intervention works. All sensible theories of exchange rates predict that a – if not the – most important determinant of the exchange rate is the relative size of the relevant countries' money supplies. If the supply of domestic currency goes up relative to the supply of dollars, then *ceteris paribus*, the domestic currency can be expected to depreciate against the dollar. The effect of an increase in the supply of home-currency-denominated debt relative to the supply of dollar-denominated debt on the value of the home currency is less clear, however. But, in theory it might cause the home currency to depreciate.

The reason is as follows. If financial assets denominated in different currencies have different risk characteristics, then members of the private sector will want to diversify their portfolios between securities denominated in different currencies. If the supply of euro-denominated debt rises relative to the supply of dollar-denominated debt then – at unchanged exchange rates – investors will find themselves holding a greater portion of their portfolios in euro-denominated securities than they want. Equilibrium can be restored if the euro depreciates, lowering the real value of euro bonds relative to dollar bonds.

There are, however, two potential reasons why this portfolio balance effect may be small. One reason that is sometimes given is that investors do not regard bonds denominated in different currencies as having sufficiently different risk characteristics: they are good substitutes for investors. Thus, equilibrium in international bond markets is achieved when debt denominated in different currencies has similar returns on average. Given the similar returns, the investors do not care much how their portfolios are allocated. Thus investors are willing to accommodate a change in the relative supplies of securities denominated in different currencies; little change in the exchange rate is necessary.

This story is at odds, however, with a vast empirical literature demonstrating that assets denominated in different currencies are poor substitutes. Risk premia in foreign exchange markets are not small, but puzzlingly large and unpredictable; investors do care about how their portfolios are allocated.

¹¹ Reported in the *Jerusalem Post* 12, April 2007.

An alternative explanation is that investors are *Ricardian*. Suppose that the tax liabilities of the current members of the home private sector depend on the government's net issuance of home-currency and foreign-currency debt.

If the government conducts sterilised intervention, then the government's tax liabilities will change. If the private sector had chosen its investment portfolio optimally before the intervention, then the change in its tax liabilities means that its portfolio is no longer optimal. It can achieve the same net-of-tax income stream as before the intervention by conducting trades that are the opposite of the government's.

Thus, for the country as a whole, the net issuance of home-currency debt relative to foreign-currency debt is not changed by sterilised intervention and there is no need for exchange rates to adjust.

There is little evidence that foreign exchange intervention is effective through a portfolio-balance channel

Does foreign exchange intervention affect the fundamental value of the exchange rate in this manner in practice? Participants at the 1982 G7 Economic Summits of the Heads of Government at Versailles agreed to coordinate a vast international study of the effectiveness of sterilised intervention. The study, along with a sizable body of later research, concluded that the effects of sterilised intervention are at most small and ephemeral.¹² Rare exceptions are Ghosh (1992) who finds weak evidence in favour of a portfolio-balance effect and Dominguez and Frenkel (1993) who find that intervention affects risk premia, supporting the hypothesis of a portfolio-balance effect.

There is little reason to believe that sterilised intervention has a signalling role.

If the portfolio-balance effect of sterilised intervention is small, it has often been suggested that sterilised intervention may still be effective because of its information-signalling role. A central bank that is better informed than the public can signal its knowledge that its currency is, say, overvalued by selling the currency. A problem is that the central tenet of this story – that the central bank is a better forecaster of future exchange rates than the private sector – is questionable. It is not clear – some studies find one thing and some another – that central banks make a profit on their intervention. There is also little evidence that foreign exchange intervention has forecasting value. Using US data for 1990 – 1997, Humpage (1997) casts doubt on central banks' ability to convey economic information through intervention by suggesting that official intervention does not improve on the informational efficiency of the foreign exchange market.

Indeed, as much central bank intervention is secretive, it does not appear that central banks view their intervention as a signal.

It has been suggested that monetary authorities might use sterilised foreign exchange intervention to signal their own private information about their future plans. The idea is that if a central bank purchases foreign currency then this signals an easing of monetary policy; if it sells foreign currency then this signals a tightening. Credibility arises because intervention creates an open position for the monetary authorities. If the central bank purchases foreign exchange then it makes a profit only if its currency weakens; hence, the story goes, it pays to ease monetary policy. Likewise, if the central bank sells foreign currency it gains by following a tight monetary policy so as to cause an appreciation of the home currency.

For the above story to be sensible, private sector beliefs must be rational; hence, on average they must be validated.

¹² See Edison (1993) for a survey of the early literature. Humpage (2003) is a more recent survey.

Thus, it must be that the monetary authorities' incentive to make a profit is so strong that a purchase, or sale, of foreign exchange is indeed followed by the expected loosening or tightening of monetary policy.

But, the weight that policy makers attach to foreign exchange gains and losses in their objective functions and the relatively small profits and losses involved in any reasonable amount of foreign exchange intervention suggest that it is unlikely that the other goals of monetary policy are likely to be subordinated to this purpose.

Not surprisingly, there is little empirical evidence that foreign exchange intervention helps market participants predict monetary policy in this way. One paper did find some predictive power but found that it went the wrong way: a purchase (sale) of foreign exchange was followed by a tightening (loosening) of monetary policy.¹³

It is not obvious that foreign exchange intervention or central bank speeches can prevent coordination failures

Recent research has suggested that intervention might be used to correct coordination failures in the foreign exchange market. It is suggested that the foreign exchange market may be subject to irrational speculative bubbles, perhaps brought about by chartist or technical analysis. Once a bubble has started, publicly announced intervention may help market participants coordinate on moving back toward a fundamental equilibrium. The classic example is the 1985 Plaza Accord that led to concerted intervention which may have helped puncture a dollar bubble. The coordination channel is proposed by Sarno and Taylor (2001); Taylor (2005) finds evidence supporting the effectiveness of intervention through this channel. Obstfeld (1990) as well as several other studies, however, suggest that foreign exchange intervention played only a small role in the realignment of exchange rates after the Plaza Accord.

There are a number of difficulties with this argument. First, the authorities must be able to identify a bubble. Second, it is not clear why intervention is necessary for coordination. Why would it be any more effective than, say, a speech or other official announcement. Second, recent research suggests that providing public information in this manner may be harmful. Morris and Shin (2002) suggest that if the government provides credible and useful information, then members of the private sector – eager to coordinate – will focus on the government's information at the expense of their own. The government's information crowds out the private information.

The ECB does not need an exchange rate policy

Obviously the ECB analyses exchange rate and current account movements: this information is useful for predicting inflation and, hence, for picking the correct monetary policy. However, the previous arguments suggest that the ECB should not be in the business of influencing exchange rates independently of their effect on the price level. Thus, the ECB does not need an exchange rate policy that is separate from its monetary policy.

However, should the ECB – or any other Euro zone body -- have an exchange rate policy it should be transparent and any sterilised intervention should be promptly reported: secrecy does not promote accountability or credibility.

¹³ Kaminsky and Lewis (1996).
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Exchange rate policy and global imbalances

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Executive Summary

Careful analyses of recent exchange rate fluctuations reveal that there is limited evidence of dollar undervaluation and euro overvaluation, with some signs that the renminbi is somewhat undervalued. The recent exchange rate fluctuations are rather more moderate than what has been observed in the past.

The European Treaty is self-contradicting in granting the ECB full operational independence and in giving some role for exchange rate policy to the Council. Exchange rate policy is not another instrument; any monetary policy action carries exchange rate effects and controlling the exchange rate requires making it the anchor of monetary policy. Thus, were the Council to articulate an exchange rate policy, it would effectively seek to deprive the ECB from its independence. Likewise, an international agreement to limit exchange rate flexibility would clash with sound monetary policies and eventual fail, as happened with the Bretton Woods system of fixed exchange rates. In addition, control of the exchange rate unavoidably leads to politicization and to serious international frictions.

Very different views exist about the current global imbalances. One scenario suggests that the imbalances can wind themselves out through more saving in the US and less saving in Asia, with no need for significant exchange rate adjustments. Another scenario predicts a sharp fall in the US dollar. In that case, if the Asian countries limit the appreciation of their currencies vis-à-vis the dollar, the euro would sharply appreciate. The resulting loss of competitiveness would provoke a current deficit in the Eurozone. In that event, European attempts to resist the euro appreciation would require a monetary policy relaxation. The consequence would be higher inflation and, anyway, a loss of competitiveness.

Introduction: What really happened?

Considerable public attention to exchange rates fluctuations is understandable but their interpretation is more difficult than meets the eye. Raw numbers need to be carefully considered and the time horizon must be long enough to distinguish the trees from the forest. The following figures are meant to adequately frame the discussion.

Figure 1 shows the evolution of four much-discussed currencies – the US dollar, the sterling pound, the yen and the renminbi. For comparison purposes, the actual rates are transformed into an index that is 100 on average during the period under scrutiny. These are bilateral rates vis-à-vis the euro; when they go up, it means that the euro is getting stronger. A few conclusions emerge:

- fluctuations are wide and exhibit long cycles that span more than 5 years
- the Asian currencies have tended to follow the dollar
- the pound has kept an intermediate position between the dollar and the euro
- the euro initially weakened and, since 2001, has strengthened vis-à-vis all the other currencies displayed.

Figure 1

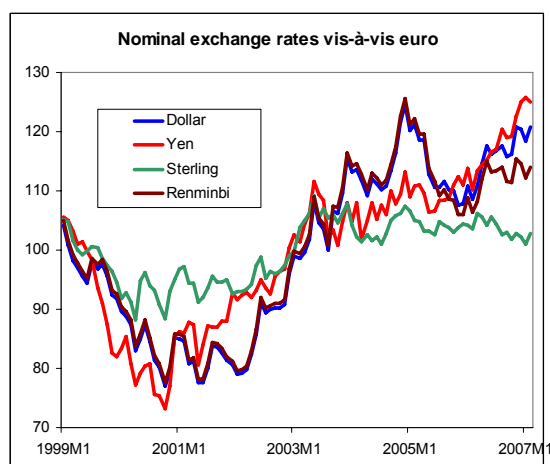
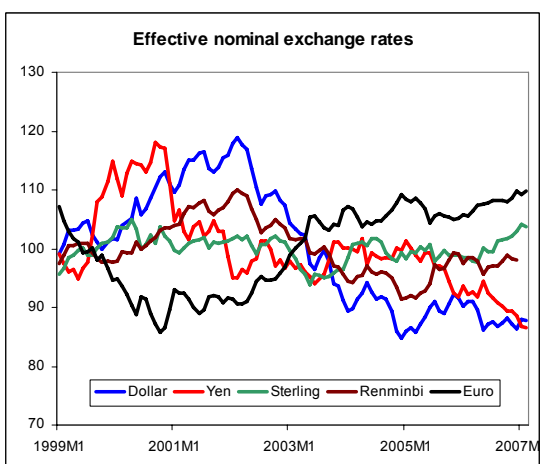


Figure 2



Source: *International Financial Statistics*, IMF

Figure 2 looks at effective exchange rates, the average value of each currency vis-à-vis a basket of other currencies using weights that reflect the intensity of trade links. The indexing and the scale are the same as in Figure 1. This is a more useful measure since it better captures the impact of exchange fluctuations on external competitiveness. The conclusions that can be drawn from this figure are:

- Effective rates are significantly less volatile than bilateral rates. In other words, focusing on specific bilateral rates always exaggerates the importance of fluctuations.
- Since its creation to end-2000, the euro indeed declined by about 20%, then rose and is now about 2.5% above its starting value. It is therefore quite doubtful that it is seriously overvalued.
- Since January 1999 the dollar and the yen have lost about 10%.
- Sterling and the renminbi have fluctuated significantly less than the three major currencies and are not far from where they started.

Is the current situation unsatisfactory?

This question implies a value judgement. To pass judgement, however, we need to have an explicit criterion. The various criteria, which are implicit in the policy debate, are the following.

Exchange rates move too much.

The amplitude of fluctuations (from peak to trough) has been of about 34% for the dollar, 31% for the yen, 24% for the euro, 18% for the renminbi and 11% for the pound. These numbers are well in line with historical movements since the end of the era of fixed exchange rates. With the exception of the renminbi, these currencies are freely floating. We have a poor understanding of what drives exchange rate fluctuations over the short to medium run, so it is impossible to assess what “too much” means. A reasonable conclusion is that the pattern since 1999 is not unusual, some will say that it is simply normal.

There are serious misalignments.

Misalignments occur when the exchange rate does not reflect its fundamentals. This criterion requires defining what are the fundamentals and what value is implied by the fundamentals. The fact that we poorly understand short to medium run fluctuations means that we have no way to assert what the fundamentals are over these horizons. Over the long term – say beyond at least 5 years – there are two main fundamentals: relative production costs and external indebtedness.

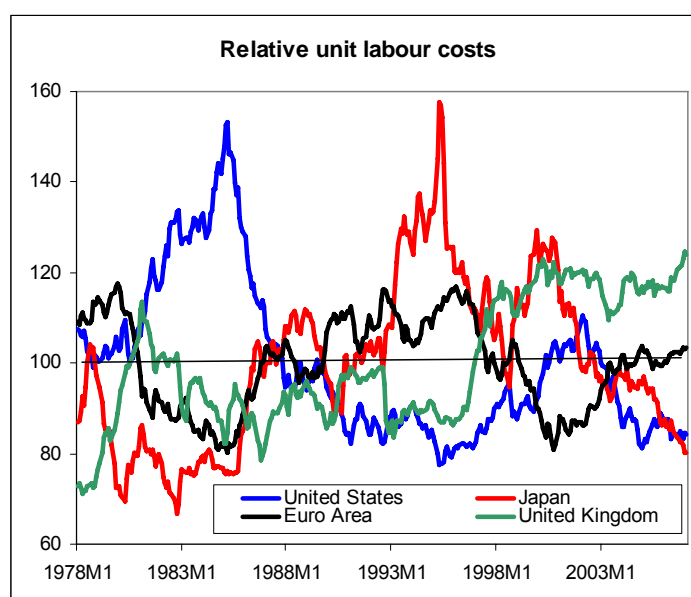
Relative production costs further decompose into two parameters: the costs of production factors, chiefly wages, and productivity. They are often captured by relative unit costs – the cost of producing one unit of average output – which are displayed in Figure 3 (they are indexed to be 100 over the whole period). Note also that the period of observation is much longer than in the previous figures: since we focus here on long-term fundamentals, we need to take as long a view as possible. Unfortunately, comparable data do not exist for China.

One first observation is that the period since 1999 has exhibited considerably smaller fluctuations than earlier. If anything, competitiveness has been less disturbed by exchange rate movements. The figure also confirms the presence of long irregular cycles, another way of saying that cost fundamentals do not explain exchange rate fluctuations in the short to medium run.

Next, the figure displays the average over the whole period, set at 100 by construction. Under two assumptions, that the “correct” level of competitiveness has not changed during the period and that it is approximated by the average level over the nearly thirty years of observation, we could conclude that the dollar is now undervalued by 16%, that the yen is undervalued by 20%, that the euro is overvalued by 3% and the pound is overvalued by 24%.

But these assumptions are not fully warranted. During that period, the UK has become self-sufficient in oil, the US has moved from being a net creditor to a net debtor (the second fundamental) and Japan has undergone a lost decade of no growth at all. The only “country” that has not undergone a massive shock is the Eurozone; indeed its current exchange rate almost perfectly reflects its long-run average.

Figure 3



Source: *International Financial Statistics*, IMF

Exchange rates are manipulated

The four exchange rates in Figure 3 are freely floating, so there can be no direct manipulation. It is sometimes asserted that, indirectly, central banks “orient” the exchange rate by moving the interest rate accordingly. This view is untenable for two main reasons.

First, at least in the four countries exhibited in Figure 3, the central banks are very clearly focused on domestic objectives, price stabilization and, to some variable extent, growth. There is now substantial evidence to that effect. Exchange rate fluctuations affect both inflation and growth, of course, but along with many other variables that play as important a role; it would make little sense for the central banks to shape monetary policy according to exchange rate fluctuations. Second the linkage between the interest and exchange rates – referred to as interest rate parity – is known to be highly unstable. Even if they wanted to use the interest rate to orient the exchange rate, central banks would not succeed. Short of an explicit and priority exchange rate target, backed by substantial foreign exchange market interventions, central banks cannot do much about their exchange rates. I return to this last issue below.

The case of China is very different. Since the unification of its multiple exchange rates in 1994 and until 2005, China has adopted an exchange rate target vis-à-vis the US dollar (RMB 8.28). Since July 2005, China has adopted a much less transparent policy. In brief, it now undertakes to limit fluctuations of its currency value vis-à-vis a basket of currencies, which it not disclosed. It is widely believed that China allows a slow appreciation. Indeed, relative to the dollar, the renminbi has appreciated by 6%, which barely compensates the competitiveness gains reaped through productivity increases. By and large, the Chinese authorities seem to maintain their relative labour costs constant.

A number of economists have argued that the renminbi is vastly undervalued. Indeed, there is now strong political pressure in the US to declare China a “currency manipulator” in violation of the IMF articles of agreement.

Overvaluation is often put at 30% to 40%. Other economists are highly sceptical. This is not the place to review this heated and complex controversy. Suffice it to note that serious researchers have observed that estimates of currency overvaluation are highly sensitive to data and assumptions, see the recent evaluation by Dunaway et al. (2006).

Evaluation

Based on three criteria, there is just no ground to consider that the current exchange rate situation of the euro and the other major currencies is unsatisfactory. In a world of freely floating exchange rates, fluctuations are only to be expected. If anything, exchange rates have been less volatile since the advent of the euro.

Who should care for the euro, and how?

There is an ambiguity in the European Treaty regarding responsibility for the euro. Article 111 attributes to the Council the responsibility to decide to fix the euro and, when no such arrangement exists as is currently the case, to “formulate general orientations for exchange-rate policy”. Article 108 gives the ECB full independence to carry out monetary policy.

These two articles are not mutually consistent. Any monetary policy decision affects the exchange rate, albeit mostly in unpredictable ways (because exchange rates are driven by market expectations of future policy moves and other events, whether related or not to monetary policy). Imposing on the ECB an exchange rate policy is tantamount to restricting its ability to carry out an independent monetary policy. Article 111 is couched in fairly general terms, yet it could possibly be used to clip the wings of the ECB. Undoubtedly, this is exactly what opponents of central bank independence intend to do.

As long as the euro is a floating exchange rate currency, given its mandate – to deliver price stability and, “without prejudice to the objective of price stability”, to support economic growth – the ECB cannot have an exchange rate policy. None of the large central banks has any exchange rate policy. This does not mean that the ECB should not monitor the exchange rate. It could even be that the ECB occasionally finds its evolution so out of line that it seeks to actively reorient it, even though its ability to do so is very much in doubt, as previously noted.¹⁴

There remains the question of whether the Eurozone should be part of an international agreement that would limit exchange rate movements, as envisioned in Article 111. In countries part to such an agreement, the central banks would lose much of their monetary policy independence. In addition, such an agreement would require a tight coordination among these central banks on how to collectively set the world interest rate. During the Bretton Woods era, the task of setting the world interest rate was attributed to the US Federal Reserve. Dissatisfaction with the Fed’s policies directly leads to the collapse of the arrangement. One can confidently predict that any new attempt to restore fixed exchange rates would equally collapse.

This leaves the possibility of establishing large margins of fluctuations, as is the case in the European Monetary System. This may look like a good idea, but it is not. What would happen when the margins are reached?

¹⁴ Exchange market interventions were carried out in September-October 2000. It seems that these interventions, which were coordinated with other central banks, merely reinforced a trend that was under way. The current conventional wisdom is that single-sided interventions are ineffective and that coordinated interventions have, at best, a short-run effect.

The system would then operate as a fixed exchange rate system, for the relevant margins would become the *de facto* fixed rates, with the same consequence as above.

For better and for worse, the major currencies float, sometimes too much for comfort, but with a huge advantage: the exchange rate is not a political variable. The case of China, where the exchange rate is controlled, well illustrates the problems that arise with politicization.

Should the US Congress win its way, declare China a currency manipulator and impose trade sanctions, we would be served with a dramatic illustration of the perils of exchange rate politicization.

Sharing responsibility for the euro in the event of international turmoil?

Many believe that the current global imbalances can result in a major upheaval that would sharply move exchange rates around, including a sharp depreciation of the dollar. This is one scenario, among many. Other equally plausible scenarios predict a smooth unwinding of the global balances; a rosy scenario assumes that savings spontaneously rise in the US and decline in Asia and, especially, in China, with no need for major exchange rate movements. In that case, the euro exchange rate would not change much and the Eurozone's current account would remain approximately balanced.

Assuming that a sharp fall in the dollar occurs, the question is what would be China's response. If China and the other Asian countries – which consider China as their strategic competitor and partner – let the dollar drop alone, the US current deficit reduction would be accompanied by a lower surplus in Asia.¹⁵

If, instead, the current policy of very slow renminbi appreciation vis-à-vis the dollar is maintained, it is likely that the other Asian countries will also attempt to limit the dollar appreciation of their own currencies. The result would be a continuation of large surpluses in Asia. The closing of the US current deficit would then have to be matched by a Eurozone deficit commensurate with the continuing Asian surplus. The Eurozone would replace the US in matching Asia's imbalance. For this deficit to occur, the euro would have to appreciate to make European exporters "adequately" uncompetitive. The question, then, is whether the euro appreciation should be resisted.

To thwart an appreciation, the ECB would be called upon – possibly by the Council – to relax its policy stance. This relaxation would have to continue until the Eurozone's current account deficit has moved into a surplus, not because of competitiveness has been regained and exports boosted, but because the monetary relaxation will have generated a spending boom, which will have fuelled imports. With the Eurozone close to normal capacity, such a boom would result in higher inflation – the natural implication of a monetary policy relaxation. But higher inflation leads to a loss of competitiveness: this is another way through which a real appreciation can occur. In the end, therefore, the choice is between a nominal and real exchange rate appreciation at constant inflation on one hand, and nominal exchange rate stability along with a real appreciation created by accelerating inflation on the other hand. Clearly, resisting the appreciation is not a desirable option.

Regrettably, if the dollar goes through a hard landing and the Asian countries prevent their currencies from appreciating vis-à-vis the dollar, there is no good option for Europe. Calling upon Asian countries to let their currencies appreciate vis-à-vis the dollar will become Europe's problem, with a limited chance of success.

¹⁵ Like many others, I do not believe that a dollar depreciation alone will rebalance the current disequilibria. Saving rate adjustments are necessary to achieve this result.

Reference

Dunaway, Steven , Lamin Leigh, and Xiangming Li (2006) “How Robust are Estimates of Equilibrium Real Exchange Rates: The Case of China”, IMF Working Paper WP/06/220.

Financial stability and optimal supervision in the EU 15

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Financial Stability, regulation and supervision are intertwined. Supervision exists because there is regulation and regulation exists because its main objective is to preserve financial stability to avoid a long historical and costly experience of national, regional and systemic crises of financial institutions.

Financial Stability and supervision in the world in general and in the European Union in particular is becoming increasingly complex and difficult to achieve for several reasons:

First, financial institutions are becoming increasingly international, having affiliates in many different countries under different regulators and supervisors. Second, financial institutions are increasingly becoming financial conglomerates and covering all financial services: commercial and investment banking, insurance and pensions, securities trading, asset management and merchant banking, so they have to be supervised by different institutions in each country. Third, the consolidation of financial institutions is progressively increasing both within borders and across borders. Fourth, financial products have become increasingly complex and sophisticated, because they are based on mathematical models of great complexity, and need very skilful regulators and supervisors to properly understand them and to guess their level of risk. Fifth, short term “return on equity” and “shareholder value” have increasingly become the main objectives for managers of financial institutions, thus, giving them an incentive to take up more risk. These five trends make financial institutions stronger, more diversified and resilient, but, at the same time, their pro-cyclicality and correlation are becoming larger, increasing the probability of systemic crises.

In this rapidly changing environment, the present structure and systems of supervision in the EU have an increasing difficulty to cope with these new challenges, even more in the case of an unexpected systemic crisis. At the moment, in most member states of the EU 15, regulation is done generally by governments and sometimes by the EU institutions and supervision is done by a different array of structures. Banking supervision has been done traditionally by the national central banks, but today, in more than half of its member states the central bank is involved in the supervision, but in some cases not directly, not exclusively, or not at all: Austria, Belgium, Denmark, Germany, Finland, Ireland, Luxembourg, Sweden and the UK are in one of these three categories. Moreover, securities and insurance supervision are mostly done by other agencies, which run from 1 agency in the case of Belgium, Finland, Luxembourg and the Netherlands; to 2 agencies, in the case of Greece, Italy, Portugal and Spain and to 3 agencies, plus the Ministry of Finance, in the case of France. Finally, there are a six member states where all supervision is centralized in one institution, as is the case of Austria, Denmark, Germany, Ireland and Sweden and the UK.

In all, there are around 40 financial supervisory authorities in EU 15 member states. As a consequence, EU supervision is mainly based on the principles of subsidiarity, minimum harmonization, home country control and mutual recognition.

The obligation to cooperate and coordinate based on these principles is legally binding to EU member states. Internal cooperation between these national supervisory authorities is based on a network of bilateral memoranda of understanding (MOU).

The latter are supplemented by a growing number of multilateral committees, either by sector (the Committee of European Banking Supervisors (CEBS) and the Banking Supervision Committee of the European System of Central Banks (ESCB) for banks, the Committee of European Securities Regulators (CESR) for securities, and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) for insurers, or across sectors, among these three committees.

The first rational reaction to this too complex and diverse supervisory structure should be of worry. How are these large and diverse numbers of supervisors, going to act together and in a quick and urgent manner in the case of a liquidity crisis, similar to the one in 1998, in order to avoid a systemic risk?

Nevertheless, two European reports published in the last few years do not show much worry and are confident that cooperation is still the main solution to the present structure:

First, the two reports commissioned by the ECOFIN Council on the issues of financial stability and crisis management (Brouwer I and II) concluded that the financial supervisory structure in Europe needed only minor adjustments and called for more cooperation between supervisory authorities, especially on cross-sector basis, for a better exchange of information, for harmonization of supervisory practices and for the participation of central banks.

Second, more recently, the Inter-Institutional Monitoring Group (IIMG) which members are six independent experts of different institutions, mandated by the European Parliament, the Council and the European Commission has published its first interim report about “the Lamfalussy Process implementation progress and any possible emerging bottlenecks”. The report calls for greater efforts in making further progress in its implementation, within CEBS, allowing supervisors to stepping up progress in this field and governments to give them necessary political support.

Nevertheless, there are increasing demands to improve and change the present supervisory structure of the EU:

First, large banks and even individual supervisors, as FSA’s Callum McCarthy, are calling for moving European supervisory structures into the direction of “lead supervisor”, by which the home-country supervisor responsible for the parent of a financial group would take on the function of a lead supervisor responsible for all of the group’s subsidiaries and branches as well as in all sub-sectors of on going supervision, throughout Europe.

Second, the European Commission White Paper on Financial Services Policy 2005-2010 expressed the need for clarify and optimize home-host responsibilities to be able to deal with potential spillover effects for the European Union; the need to explore delegation of tasks and full responsibilities for the supervision of a subsidiary to the parent company’s supervisor; the need for a truly common data, reporting requirements and supervisory databases and the need to deliver a pan-European supervisory culture. Moreover, the Green Paper which was the basis for the White Paper stated that “more consolidated supervision is a legitimate demand by industry; however it should be a long term objective”.

Third, even more recently, Edgar Meister, the Chairman of the Banking Supervision Committee of the European System of Central Banks (ESCB), in a speech at a group of debate at the European Parliament mentions with great worry: “On 27 march 2007, ECON will probably adopt a report on the Commission White Paper on Financial Services Policy 2005-2010, which advocates, in surprisingly clear language, a centralized supervisor for Europe.

In paragraph 34, ECON notes that for a real oversight of the systemic and prudential risks of the top players in the market, the present system of cooperation is too weak. Therefore, it promotes a well-equipped executive European prudential supervisory authority inside that system and endowed with the appropriate competences for supervision of large cross-border and cross-sector financial conglomerates”.

It is absolutely clear that the present financial supervisory structure of the EU shows a number of issues that need to be tackled in order to avoid major problems and risks in the future and that they can be addressed in a sequential way:

First, issues related to the large number of rules applied by different supervisors, which become excessively cumbersome for the financial institutions that are trying to consolidate the financial European system, through the necessary cross-border integration. Thus, rules should be based on shared principles and not on specific regulations, these principles should be the same for all member states and for all their individual supervisors, they should not place too much burden on financial institutions and they should be consistent with markets conditions.

Second, issues related to the large number of different national supervisory structures, which may impose, at the beginning, to achieve an agreement by all member states supervisors on the idea of having “lead supervisor” for financial institutions which have subsidiaries and branches in different member states. Later on, a progressive reduction of the large number of national supervisors and also a convergence towards a single supervisory model should be achieved in each member state. The most obvious way is to try to progressively concentrate all financial supervision in the supervisor of each member state which has clearly shown to be the most efficient.

Third, issues related to the “burden sharing” among affected member states in the event of cross-border financial crises. There is a clear need for reaching agreements among member states’ fiscal authorities as to the way and conditions they will share the costs of the crisis and how they will cooperate with their financial supervisors to face such a crisis in order to minimize that burden.

Fourth, issues related to the convenience or even necessity to have a pan-European supervisor as there is already a single European Central Bank and eventually and hopefully a single European financial system.

There is not yet a theoretical or political consensus about these four issues in the EU, except for the first:

The idea of the “lead supervisor” has the advantage that each one of the member states’ supervisors knows in advance that it has the full responsibility to act quickly and efficiently when there is crisis in a bank which parent company is a resident in its own member state. Its main disadvantage is that the hosts of cross-border financial groups from other member states will not have much of a say and may think that they are losing sovereignty, but, on the other hand, it is clear that they benefit for not having to deal with the crisis themselves. There is also the issue of supervising differently large cross-border banks from national in-border banks.

The idea of converging into similar national supervision models and, more specifically, into a single supervisory agency, as those of Austria, Belgium, Denmark, Germany, Finland, Ireland, Luxembourg, Sweden and UK, is also still quite controversial.

On the one side, the view of the ECB and of many members of the ESCB is that the national central banks have a natural advantage to be supervisors because of their knowledge of the overall economy and the financial system, and their information from payment and settlement systems and monetary policy operations are very valuable for any supervisory task. Moreover, conversely, if these national central banks have supervisory duties and information, these can play an important role in the oversight of payment and settlement systems and of market infrastructures, as well as helping to manage liquidity crisis.

This view is also supported by economic theory that shows that central banks have informational economies of scope between monetary policy, lender of last resort (LOLR) facility and supervision. It is also supported by the facts since this is what happens in many EU member states in which the central bank either does also supervision or in the case it is done by other agency, the central bank is also involved in the supervision, given its informational advantages. Further evidence comes from the New York FED which plays a key role in supervision, helping the other supervisors and playing a major role in the management of financial crises.

On the other side, there is another point of view showing that central banks can incur into conflicts of interest if they manage, at the same time, monetary policy and financial supervision. They may be looser in their monetary policy stance if they see that some domestic banks may be close to a liquidity or solvency crisis, given that a crisis will affect to its reputation as a supervisor and even affect the credibility of its monetary policy. There is empirical evidence showing higher inflation in countries in which the central bank is also the supervisor. In that case, the single supervisor should be a non central bank institution.

In any case, there are two strong cases for an integrated national supervisor: one is that financial institutions are increasingly becoming financial conglomerates which engage in banking, insurance and capital markets acting on a multinational or even global scale. A sector by sector supervision may rend difficult a correct valuation of all the risks incurred by these conglomerates. Another one is that fragmented and complex national supervision is becoming an obstacle to the necessary financial consolidation and integration of the EU financial markets. The empirical evidence available shows that it affects not only to banking, but also to insurance and stock markets.

The idea of achieving eventually a single supervisor for the whole EU shows the same or even a greater disagreement because of the same arguments of above plus the fact that will cover the whole financial system of the EU and it will entail far reaching political implications. On the one side, it may need (although it is disputed by different constitutional experts) an amendment of the EU Treaties, followed by the necessary ratifying process by every member state, which is losing sovereignty; second may need creating a single supervisory procedural law for all member states; third, may need a uniform insolvency legislation for all member states.

There are three dominant views among academics and policy makers about the structure of a potential European Single Supervisor:

The first one is that the ESCB and the ECB should be the main and sole guarantors of the stability of the EU financial system. Ad hoc cooperation and coordination in crisis situations will not be sufficient and may endanger the stability of the system. The necessity of a quick intervention in a crisis enhances the value of a centralized authority. The ESCB should assume the function of guarantor of the system but the ECB will need to play a key role in determining the policy as regards the ways in which to intervene and take the initiative, while the one or several members of the ESCB will apply it.

Given the lack of a central fiscal European authority, the ECB should sign an MOU with the national central banks and other supervisors to clarify responsibilities, achieve access to supervisory records, establish information sharing protocols and elucidate who would pay for the failed institutions that have been helped.

The second one is a European Financial Services Authority (EFSA) as it is the case in the UK. The main arguments for this second alternative are, on the one side, to avoid conflicts that may arise between the monetary policy and the supervision policy of the financial system, which may affect the credibility and reputation of the ECB and, on the other side, to cover not only banks but also insurance companies and capital markets, reducing the fragmented supervision which is an obstacle to European financial integration and helping to a better assessment of the total risks of financial conglomerates.

The third one is a combination of the previous two, the EFSA and the ECB. This option will allow for exploiting the economies of scope of the ECB as the lender of last resort and its knowledge and experience on the payment systems and its knowledge of the liquidity situation of financial institutions. It will also avoid the ECB's conflict of interest between monetary policy and supervision; it would resist better the local pressures to assist particular institutions; it would facilitate and improve accountability and it will not increase the power of the ECB that it is view sometimes as too powerful and too little accountable. The main problem with this alternative is that it will take even more time to be implemented than the other two.

Within this third alternative there are two ways to allocate the supervision between the ECB and the EFSA, following the recent experience by the UK and the Netherlands in their new supervising structures. In the case of the UK, the Bank of England is in charge of the macro prudential stability of financial institutions while the FSA is in charge of the micro prudential stability of financial institutions and of the capital markets supervision. In the case of the Netherlands, the Nederlandsche Bank is in charge of both macro and micro prudential stability of financial institutions and the Financial Markets Authority is in charge of the supervision of capital markets. Any of the two could fit into the potential European Supervisory System

Finally, the issue of "moral hazard" in the management of crises can be avoided if the lender of last resort follows strictly the rules established by Bagehot in 1873: "Only solvent banks with liquidity problems should be assisted and this should be done with loans at a penalty rate and against good collateral, evaluated in normal times"

Financial Stability and the Role of the Central Bank

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Executive Summary

The purpose of this Briefing Paper is to discuss the issue of financial stability and the role of the European Central Bank (ECB) in the Euro area and the European Union (EU). In the long run the best system for European financial supervision will be a European Financial Services Authority (EFSA). There will be a tendency to more integrated supervision because of the long-run trend to financial conglomerates in Europe. Next to that there will also be a development towards more cross-border supervision depending on the pace of cross-border mergers and acquisitions. The cross-border externalities between EU financial institutions and markets will become increasingly important. This means that there will be in the long run a federally organized financial supervision structure with the EFSA at the centre in which national supervisors (NCB's and national FSA's) still have supervision tasks. Like the ECB, it will have all the characteristics of a 'hub and spokes' system. Of course, quite crucial will be the decision about the degree of centralization of financial supervision. When the degree of centralization is high, we could speak of a "strong" EFSA. Instead, when the degree of centralization is low, the EFSA is said to be "weak". In both systems the ECB has an important role to play because of its responsibility for financial stability in general and its function of lender of last resort in particular. The difference between the "weak" and "strong" EFSA will also determine the relative influence of the ECB, which will be higher in case of a "strong" EFSA (high degree of centralization). Financial supervisors and academics see these tendencies very well, but it is up to the political authorities to take timely steps in this direction. It would be good news if the EU political authorities (Ecofin, EC and EP) would open a serious debate on whether and how European financial supervision should be concentrated with a newly established EFSA and what the future role of the ECB should be in this respect. However, we may need a major European financial crisis (e.g. a serious bank failure, merger or take-over in France, Germany or Italy) before the political authorities will become aware of this jump to a European level of financial supervision.

Introduction¹⁶

The purpose of this Briefing Paper is to discuss the issue of financial stability and the role of the European Central Bank (ECB) in the Euro area and the European Union (EU). In the case of a liquidity crisis in the financial sector, central banks have a role to play as lender of last resort. But as the lender of last resort function can lead to moral hazard and issues of adverse selection in the context of deposit insurance, regulation and supervision are needed. In your view, is there any optimal way in which central banks should be involved in the supervision of the financial sector? What is the case for separate supervisory agencies, and how should their institutional relationship with central banks be designed? Is there a clear case for any specific model? The ECB currently has no mandate for supervision but acts as an "umbrella" in financial stability matters for the national central banks that keep supervision tasks within a national framework. For the euro area, there exists a crisis management scenario that coordinates between the different players that would potentially be involved in case a liquidity crisis occurs. Do you judge the current set-up based on cooperation in crisis management and with home state supervision of financial institutions to be able to cope with the financial integration processes in Europe in the future? Looking at the challenges in keeping financial stability, is there a case for the centralization of supervision at the European level? If so, how could this pan-European supervision be structured? Should the ECB play a role in this structure? In the following I will try to answer these questions.

Financial Stability and the Role of the Central Bank

Stability of the financial sector is important for monetary authorities, as monetary and financial sector stability are closely connected. History provides many examples where problems in the financial sector led to monetary instability. The Great Depression in the US is probably the best-known example where bank failures combined with an inadequate response by the monetary authorities resulted in a prolonged economic crisis. What causes instability of the financial sector? The balance sheet of banks makes them vulnerable. Banks provide long-term loans, which are at least partly funded through deposits, which are generally withdrawable on demand. Lack of trust may cause depositors to withdraw their money. Apart from this traditional run on a bank, a liquidity crisis can also occur due to illiquidity in money or capital markets. Doubt about the solvency of a bank may lead to a shift in portfolios away from bank liabilities in favor of government securities or corporate assets. A massive withdrawal of deposits or a shift in portfolios could force a bank to liquidate its loan portfolio on unfavorable terms. So, a process that starts as a liquidity crisis could lead to a solvency crisis. Furthermore, problems at one bank could easily spread towards the rest of the financial system. If various banks would go bankrupt, the resulting decline in the money supply could lead to a serious recession. Deposit insurance and liquidity support by the central bank may prevent such a scenario from happening.

¹⁶ This paper is based on : S.C.W. Eijffinger, The European Central Bank and Financial Supervision, in: D. Masciandaro (ed.), *Handbook of Central Banking and Financial Authorities in Europe*, Edward Elgar Publishing, Cheltenham, 2005. The author would like to thank Martin Knaup, MPhil for his comments on an earlier version of this Briefing Paper.
IP/A/ECON/RT/2007-05 Page 42 of 88 PE 385.643

However, the lender of last resort function of the central bank comes at the price of increased *moral hazard*. A bank may provide more risky loans in the knowledge that deposit holders are insured and the central bank may come to the rescue. A further problem of deposit insurance arises due to *adverse selection*.

The people who are most likely to produce the adverse outcome insured against (bank failure) are those who most want to take advantage of the insurance. Therefore, regulation and supervision are needed. Banking regulation generally consists of restrictions on bank assets holdings and capital requirements. In some countries banking supervision is carried out by the central bank. In other countries this task is performed by another institution(s), sometimes in close co-operation with the central bank (see Table 1).

Table 1. The Role of Central Banks in the European Union in Promoting Financial Stability

Country	CB responsible for financial stability?	Supervisor
Austria	Yes	Ministry of Finance
Belgium	Yes	Banking and Finance Commission
Denmark	Yes	Financial Inspectorate
Finland	Yes	Bank Inspectorate/Bank of Finland
France	Yes	Banque de France/Commission Bancaire
Germany	Yes	Federal Banking Supervisory Office and Deutsche Bundesbank
Greece	Yes	Bank of Greece
Ireland	Yes	Central Bank of Ireland
Italy	Yes	Banca d'Italia
Luxembourg	Yes	Commission de Surveillance du Secteur Finance (CSSF)
Netherlands	Yes	De Nederlandsche Bank
Portugal	Yes	Banco de Portugal
Spain	Yes	Banco de España
Sweden	Yes	Swedish Financial Supervisory Authority
UK	Yes	Financial Services Authority
EMU	No	National supervisors

Source: Update by Eijffinger and De Haan (2000) of Goodhart and Schoenmaker (1995)

Following the recent adoption by the UK¹⁷ and Luxembourg of the separation approach, only six EU member countries have the central bank as the only authority responsible for banking supervision. According to Lannoo (1999) the development that central banks retreat from supervisory functions can be explained as follows. First, banking is becoming an increasingly complex business and less clearly defined. Leading banks are active in several jurisdictions as providers of a whole series of financial services. Linked to this are new developments in financial supervision, which increasingly emphasize the role of self-regulation and internal risk management in financial institutions. Finally, there is increasing acceptance that the government, not the central bank, should take responsibility for ultimate financial support. This was demonstrated earlier this decade in Norway and Sweden, but also more recently in France. In those cases there was no alternative but to rely on taxpayer funding, leading to more demand for political control of supervisory functions.

The ECB is not entrusted with any direct responsibility related to prudential supervision of credit institutions and the stability of the financial system.¹⁸ These functions are in the realm of the competent national authorities. In most EU countries the central bank plays a role here, albeit that the supervision is often entrusted to another agency (see Table 1). Limiting the ECB functions to monetary policy is part of a general trend of withdrawal from supervisory functions in central banking and fits with the home country control principles of the single market. Specific expertise in and knowledge of prudential control is situated at the local level, where the bulk of the operations of financial institutions are still located (Lannoo, 1999). There is no agreement on the role of the central banks in supervision (see Padoa-Schioppa, 2003). The ECB (2001) has argued in favor of the role of National Central Banks (NCB's) in supervision. In this way systemic threats to stability within the euro area can be better met. Another possibility is to have a network of single supervisory agencies that undertake supervision. As can be seen in the Table 2, all central banks, except the ECB, are involved in financial stability and the majority of NCB's is involved in financial supervision.

¹⁷ In the UK all financial supervisory tasks are now concentrated in the *Financial Services Authority* (FSA), including banking supervision (formerly belonging to the Bank of England). The FSA has rule-making powers and co-operates with exchanges and clearing houses. It is accountable to the government and parliament. The Bank of England remains responsible for ensuring the overall stability of the financial system, which involves monitoring and, when necessary, intervening in the market. A mega-supervisor has certain advantages. There are economies of scale in supervision, as well as some practical advantages. There is a one-stop-shopping for conglomerate financial groups. Expertise is pooled and co-operation between the different functional supervisors is guaranteed. Still, the differences in risk profiles and in the nature of the businesses remain an important argument against a mega-supervisor, most importantly for banking as compared to the insurance business (Lannoo, 1999).

¹⁸ The Maastricht Treaty establishes however a simplified procedure that makes it possible without amending the Treaty, to entrust specific supervisory tasks to the ECB.

Table 2. Central Bank Involvement in Financial Supervision

Countries	Central bank	Involved in financial stability	Involved in financial supervision
<i>EU</i>			
Austria	National Bank of Austria	Yes	Partly, banking supervision
Belgium	National Bank of Belgium	Yes	No
Denmark	Danmarks Nationalbank	Yes	No
Finland	Bank of Finland	Yes	Partly, banking and securities
France	Banque de France	Yes	Partly, prudential supervision (B, S)
Germany	Deutsche Bundesbank	Yes	Partly, banking supervision
Greece	Bank of Greece	Yes	Yes, banking supervision
Ireland	Central Bank of Ireland	Yes	Yes, financial supervision
Italy	Banca d'Italia	Yes	Yes, prudential supervision (B, S)
Luxembourg	Banque Centrale de Luxembourg	Yes	No
Netherlands	The Netherlands Bank	Yes	Yes, prudential supervision (B, S, I)
Portugal	Banco de Portugal	Yes	Yes, prudential supervision (B,S)
Spain	Banco de Espana	Yes	Yes, banking supervision
Sweden	Sveriges Riksbank	Yes	No
UK	Bank of England	No	No
Euro area	European Central Bank		No
<i>Outside EU</i>			
Australia	Reserve Bank of Australia	Yes	No
Canada	Bank of Canada	Yes	No
Japan	Bank of Japan	Yes	No
US	Federal Reserve Board	Yes	Yes, banking supervision and financial holding companies

Note: B = Banking, S = Securities, I = Insurances.

Source: Schoenmaker (2004), who adapted it from Goodhart and Schoenmaker (1995), Eijffinger and De Haan (2000) and ECB (2002).

Financial Markets integration and Financial Supervision in Europe

Schoenmaker (2004) takes a look at the amount of integration of the European financial markets. Integration of financial markets is pursued because it is expected to lead to economic growth and employment creation because of increased efficiency. An indicator for financial integration that is often used, are cross border mergers and acquisitions of financial institutions. Walter (2001) gives an overview of the value of mergers and acquisitions in the financial sector between 1986 and 2000. It is clear from his study that most of the financial restructuring in Europe was on an in-sector and domestic basis, namely 76 per cent. Only 29 per cent of the total amount of mergers and acquisitions in Europe were cross-border intra-European. Relatively most cross-border intra-European mergers were within the insurance sector and the banking sector had relatively the least cross-border intra-European mergers. The question is whether a European supervisor is needed before there are a lot of pan-European mergers occurring. Schoenmaker (2004) argues that although there are some differences between markets, the wholesale markets within the European financial system are integrated. In contrast, retail markets are not integrated at all. The convergence of consumer lending rates is small and this result suggests limited integration in retail markets. Reasons are both differences in language, cultural, consumer protection rules and taxation. The introduction of the Euro and the planned removal of legal and regulatory obstacles (*Financial Services Action Plan* of the European Commission) will probably increase the integration in the retail markets. Schoenmaker argues that when cross-border financial activity increases, it will become more difficult to supervise the financial system at a national level.

In the EU prudential supervision is based on home country control, which means that a financial institution is authorized and supervised in its home country. Home country control is combined with minimum standards and mutual recognition. When a financial institution becomes pan-European no additional supervision is needed. It is argued by proponents of home country control that the effectiveness of supervision is higher when the home country makes a group wide-assessment of the risk profile and the capital adequacy of a financial institution. In addition, efficiency of supervision is increased because financial institutions do not have different supervisors. This prevents duplication of effects and regulatory costs. Home country supervision authorities are only responsible for financial stability in the home country and not in the host countries. In case of a failure, home country taxpayers do not want to pay for the cross-border spillover effects that this failure has. Cross-border spillover effects or externalities will increase with the increased integration within the EU. As noted by Schoenmaker (2004) it is questionable whether home country control for supervision and host country responsibility for financial stability can be maintained. Cooperation in the field of crises-management, between home and host countries might be needed to deal effectively with cross-border externalities. Another possibility is centralization of supervision at the European level. A disadvantage is the loss of flexibility. This loss of flexibility is worse if countries are more asymmetric. A question that should be solved is who has to bear the fiscal costs of a possible bailout. Prati and Schinasi (1999) state that the ECB should get a larger role in crisis management.

According to them national supervisors are less capable of assessing bank soundness and systemic risk adequately when there are more and more pan-European banking groups. Prati and Schinasi argue based on recent experience of the Group of Ten Countries that cooperation between the home and host supervisors is not in all cases successful. Vives (2001) highlights the questions of conflict of interest between home and host financial supervisors in case of a financial crisis and is in favor of supervision at a centralized level such that external effects between countries can be internalized properly.

At the moment at which the ECB decides whether to solve a general liquidity crisis the ECB does not need detailed information of each institution in order to make this decision. National central banks decide whether to give institutions liquidity support and need detailed information in order to decide on this. They need only to take care of financial stability within their region. This could make them reluctant to take into account externalities caused by financial institutions within their supervisory region. Schoenmaker (2004) argues that whether a centralized system is needed depends on the amount of cross-border externalities. These are at the moment limited, because (retail) financial institutions are mainly national. He argues that therefore the vision to remain supervision at a national level will remain popular. Although the amount of cross-border penetration of financial institutions is slowly increasing, it is limited. Some pan-European financial institutions have emerged and they could lead to cross-border externalities. If integration is almost completed and there are more pan-European (retail) financial institutions, it may be needed to have financial supervision at a European level. According to Schoenmaker it is important to cautiously select the rules and procedures for how to share the costs of potential bailouts and how to design the political control mechanism for supervision at a European level.

Kremers, Schoenmaker and Wiertz (2001) made an overview of the possible organizational structures of financial supervision. In Table 3 an overview is given of the main models.

Table 3. The Organizational Structure of Financial Supervision: Basic Models for Europe

European models (cross-border)	Basic models		
	1. Sectoral	2. Cross-sector: functional	3. Cross-sector: integrated
A. Decentralized & Co-operation	Co-operation in sectoral committees	Co-operation in functional committees	Co-operation between national FSA's
B. Co-ordination	Co-ordination between national sectoral supervisors: -Harmonisation in sectoral regulation -Convergence in supervisory practices in banking, insurance and securities respectively	Co-ordination between national functional supervisors: -Functional EU-wide legislation -Convergence in supervisory practices in prudential supervision and conduct of business supervision	Co-ordination between national FSA's: -Single financial services market act within the EU -Convergence in supervisory practices between national FSA's
C. Centralized	Separate systems of European banking, securities and insurance supervisors	European system of prudential supervisors European system of conduct of business supervisors (broad SEC)	European system of FSA's (EFSA)

Source: Kremers, Schoenmaker and Wierts (2001)

Separate supervisors exist for banking, insurance and securities in the *sectoral* model. In the *functional* cross-sector model, 'twin peak', separate supervisors are present for prudential supervision and the conduct of business (two objectives of supervision). In the *integrated* cross-sector model there is one supervisor that combines supervision of banking, insurance, securities and prudential and conduct of business supervision. *Decentralized* and with co-operation means that there is decision-making by consensus. Instead, if there is *co-ordination*, decisions are made by autonomous national decision-makers based on a rule (e.g. majority voting). In case of *centralization*, decision making on supervisory regulation and policy is done at a European level.

European countries differ in the way they have organized financial supervision. All basic organizational structure models can be observed somewhere. The supervision structure has changed in a lot of countries.

As can be seen in Table 4 the trend is towards cross-sector supervision. The underlying reason for this is the increased amount of financial conglomerates, which makes the division between financial sectors more vague. Both the cross-sector functional and integrated model have become increasingly popular.

Table 4. The Structure of Financial Supervision: National Models in OECD Countries

Countries	Basic models		
	1. Sectoral	2. Cross-sector: functional	3. Cross-sector: integrated
European Union	Belgium Finland Greece Luxembourg Portugal Spain	France (2003) Italy (1999) Netherlands (2002)	Austria (2002) Denmark (1988) Germany (2002) Ireland (2001) Sweden (1991) United Kingdom (1997)
Outside EU		Australia (1998) United States (1999)	Canada (1987) Japan (2000)

Note: Between brackets the year of establishment of the new cross-sector supervisor(s).

Source: Courtis (2002) and ECB (2002), both in Schoenmaker (2004), who made his own classification.

There are other arguments both for and against a separation of the responsibilities for monetary policy and supervision (see Eijffinger and De Haan, 1996). The first argument in favor is the possibility of a conflict of interests between both activities. A central bank, responsible for supervision of the financial system and, thus, also for failures of financial institutions, could be tempted to admit lower (money market) interest rates or higher money growth than would be desirable from the perspective of price stability, in order to avoid such failures. An example of this argument could be the Federal Reserve System in the late 1990's. The Fed was in this period very cautious with raising the Federal Funds Rate because of its consequences for the interest rate margins and reserves of the US Savings and Loan associations of which the balance sheets have deteriorated seriously after the S&L crisis. A second argument to separate the authority on financial stability from that on monetary stability is the bad publicity usually associated with failures or rescue operations. This bad publicity could harm the reputation of the central bank in its function as a supervisory agency. A loss of reputation may also affect the credibility of monetary policy. However, formally having separated responsibilities implies the risks of inter-agency conflict, long deliberations and insufficient information exchange. This will become problematic when rapid decision-making about e.g. liquidity support is needed. An example of this argument is the failure of the BCCI bank, at the beginning of the 1990's, which was the only pan-Arabian bank with its headquarters in London and then, thereby, formally under the supervision of the Bank of England. The BCCI affair was quite harmful for the reputation of the Bank of England and triggered the creation of the *Financial Services Authority* (FSA) in the UK. There are further arguments against a separation of financial supervision and the conduct of monetary policy.

First, the central bank plays a crucial role in the smooth operation of the payments system and the associated financial risks. To limit these risks, the central bank wishes to supervise and regulate the participants of the payments system. Furthermore, the central bank has a function as *lender of last resort* for the financial system and has in that capacity the task to supply instantly enough liquidity in the case of liquidity problems or rescue operations. Because of its function of lender of last resort, the central bank must always be informed by the financial supervisor(s) about (potential) crises in the banking system.

Various critics have argued that the situation where the ECB puts its resources at stake while national supervisors remain responsible for supervision, creates a huge potential for inter-agency conflicts (Folkerts-Landau and Garber, 1992). National supervisors may have interests of their own, like keeping national banks in business. Lacking expertise and the time to acquire any, the ECB is likely to follow the advice of the national supervisor if a crisis occurs. Led astray by possibly biased advice and information, the ECB may then create excess liquidity, thereby perhaps even compromising on its primary objective of price stability (Arnold, 1999).

This reasoning assumes that the ECB will act as lender of last resort. Surprisingly enough, no explicit reference is made in the Maastricht Treaty to the role of the ECB as a lender of last resort. However, the ECB has a responsibility for promoting the smooth operation of payment systems, including the provision of financing facilities to credit institutions. In this respect there is a potential for the ECB to act in the capacity as a lender of last resort as far as the provision of short-term liquidity is concerned. Furthermore, the trend towards greater financial integration will make it increasingly difficult to establish national dividing lines. Even when a bank problem can be identified as a national one, it may quickly become European in scope, warranting action by the central bank. Indeed, Goodhart and Schoenmaker (1995) find that in most banking problems in the history of industrial countries central banks have been involved.

However, in crisis management the creation of central bank money is just one category of emergency action. The central bank may not be the provider of liquidity assistance. Funds may also come from the private sector (i.e. other financial institutions) or from the government (i.e. the taxpayers). In the latter case the European Commission will be involved in scrutinizing and authorizing such actions, since state aid must be compatible with the EU's competition legislation. According to Padoa-Schioppa (1999) the textbook case for emergency liquidity assistance to individual institutions has been a rare event over the past decades. Furthermore, the emergence of the single euro money market lowers bank's liquidity risk, because the number of possible sources of funds is now considerably larger than in the past. If a liquidity crisis would occur, the Eurosystem has – at least according to Padoa-Schioppa – the necessary capacity to act.

The lender of last resort function of the ECB requires that it will have some monitoring powers as well. This is possible without amending the Maastricht Treaty. The case for an *European Financial Services Authority* (EFSA) is based on the underlying tendency toward the integration of intermediary and market operations and the relief arising from the existence of an independent agency with a well-defined mission with no conflict between monetary policy and banking supervision (see Vives, 2001). Such an EFSA would increase the democratic accountability and transparency of banking supervision in Europe. Nevertheless, it would imply a change in the Maastricht Treaty. Experiences with the Financial Services Authority in the UK and other countries (e.g. Sweden) may serve as a laboratory in supervision.

The European Central Bank and Financial Supervision

As a consequence of integration of payment systems and the inter-bank market within the EMU, systemic risk increased. A close link between the European system of financial supervision and the ECB is needed in order to ensure financial stability. The ECB has an operational and regulatory role in the payment system. Payments systems should be safe and efficient in order to get an effective and stable functioning financial system. Schoenmaker (2004) states that the Eurosystem considers that there should be close co-operation between the supervisors of banks and the supervisors of the payment system. It would lead to less financial system risk and therefore increased stability. In the Maastricht Treaty there is a separation between the task of monetary policy and the task of financial supervision and stability, although there is a relationship between oversight on the payment system and some broader functions why financial supervision and stability are necessary. According to Schoenmaker one could give the ECB a financial supervision task, if it is thought to be desirable. A treaty basis is needed if one wants to create a *European System of Financial Supervisors* (ESFS). Provisions that are linked to the ECB could be amended. The independence of the monetary function should be kept and a cross-sector supervisor function with political accountability could be defined.

The Lamfalussy approach stimulates the convergence of supervisory practices. Differences in supervision that remain will occur because of differences in financial structures between countries. After convergence has taken place there will be more similar policy (supervisory standards based on best practices) and this gives the EU a more level playing field (EFC, 2002). The system of financial supervision will become more efficient. In addition, centralization will be more desirable because the costs in terms of lost flexibility will be lower. Centralization at a European level may be desirable if the number of cross-border externalities increases. Schoenmaker mentions the ESFS, which could co-operate with the national supervisors. This does not mean that all supervision has to be done at a centralized level. Home countries can still have the task of small and medium-sized financial institutions supervision. In many cases field inspections are performed and this is best done at the local level. Instead the supervision of large pan-European financial institutions could be centralized. The policy framework (the reporting requirements, the rule book, the reporting format and computer systems) could be made uniform as well. In order to make local supervisors adhere to this framework one could design the appropriate decision-making and incentive mechanism. In addition, pooling of information could be helpful in decreasing systemic risk. Schoenmaker argues that the fiscal costs of possible bail-outs should still be at a national level, because there is no European budget available. He concludes that supervision of financial institutions will become a combination of national and European characteristics.

Di Noia and Di Giorgio (1999) argue that banking supervision should be done by an agency that is separated from the central bank. They state that functional separation is desirable. OECD countries are divided in countries where the central bank is a monopolist in banking supervision and countries in which this is not the case. The latter countries have lower inflation rates and less volatile inflation rates. Banks supervised by the central bank are more profitable but face larger staff costs and issue less bonds. This could indicate lower efficiency. Although the data that was used by them was not definitively in favor of a separation of the supervision agency and the central bank some reasons are mentioned why separation should occur. The reasons mentioned are: the evolution of financial intermediaries, moral hazard problems, cost accountability. Separation could make it more transparent who is paying for monetary policy and who is for banking supervision. Di Noia and Di Giorgio favour also an independent ESFS structure.

This supervision structure should be similar to the structure of the ESCB. This means that national agencies in EU member countries should participate actively. They want two European financial regulation agencies, which are formally separated from the ECB. The first agency would be responsible for the stability of all intermediaries and the second agency is responsible for transparency and disclosure requirements. They believe that comprehensive coordination of legislation and execution of regulation in financial markets could be achieved in this way. They propose to place both agencies at the center of the ESFS.

Vives (2001) analyzes the restructuring of financial regulation in the EMU. He states that a financial supervision system in which NCB's are responsible for financial stability could lead to some problems. First of all, there will be a conflict in interest when a transnational crisis occurs. National supervisors will only take into account the effects of a crisis on the financial stability in their own country and neglect the adverse effects the crisis could have on other countries. Secondly, national authorities could execute too much intervention because they will listen more to domestic interest groups that see some institutions as too big to fail. Too much intervention will take place as well if the costs of intervention are distributed over the whole EU. This happens in case of concern of general financial stability within the EU. Thirdly, there are some regulatory jurisdiction problems. The question is who wants to bail out financial institutions that are located in more than one European country because not all the benefits of a bailout go to one country. The fourth problem mentioned by him is the fact that a national supervisor is not able to provide sufficient help in case of a crisis, because of contagion to other countries that can take place. The last problem is a fiscal issue. It is not clear how high the rescue amount has to be and how the payment and losses have to be divided across countries. Some arguments can be put forward to give the central bank supervision tasks. The central bank can distinguish whether a problem is a problem of liquidity or of solvency and this minimizes the losses that occur with loans granted. The central bank could be a crises manager and determine what the best kind of intervention is. In addition it can have economies of scope in information gathering by combining the tasks of providing liquidity and supervision. More banking supervisory information within the ECB could improve the accuracy of the macroeconomic forecasts. Vives argues that the only institution that can guarantee stability is the ECB. Coordination in case of crisis situations is not enough. Instead quick centralized interventions should be taken. In addition he suggests that the ECB should publish the formal framework of crisis resolution. It should be made transparent in which cases the NCB's need to intervene and in which cases this task is for the ECB. He points out that the ECB should perform some monitoring tasks as well. It should get the power to access and gather supervisory information. As a consequence costs in communication and negotiation will decrease and the exchange of information could be facilitated. Amendment of the Maastricht Treaty is not needed to achieve this. It is important to have a procedure that describes how losses in case of lender of last resort activities are divided between countries. The Ecofin could be consulted when such operations are needed. The costs of bargaining ex post are reduced when the crisis procedures are clear and in case of a crisis situation fast intervention is possible. Vives states that cooperation is not enough in case of an integrated European market. A centralized supervisor is needed and could lead to even further integration of European markets. The establishment of an independent EFSA that has authority over banking, insurance and securities would have some advantages. Firstly, it might better resist the local pressure to assist particular institutions. Furthermore, accountability would be facilitated because the ECB and the ESFA have clear missions. This prevents the conflict between monetary policy and supervision. In addition, it would prevent an increase in the power of the ECB and would let the ECB remain its credibility in monetary policy.

Vives argued in 2001 that an ESFA was not desirable yet because there was not enough political integration within Europe. The ESFA would therefore face the same accountability problems that the ECB faces because a well-defined political principle is missing.

Conclusions

In the long run the best system for European financial supervision will be a European Financial Services Authority (EFSA). There will be a tendency to more integrated supervision because of the long-run trend to financial conglomerates in Europe. Next to that there will also be a development towards more cross-border supervision depending on the pace of cross-border mergers and acquisitions. The cross-border externalities between EU financial institutions and markets will become increasingly important. This means that there will be in the long run a federally organized financial supervision structure with the EFSA at the centre in which national supervisors (NCB's and national FSA's) still have supervision tasks. Like the ECB, it will have all the characteristics of a 'hub and spokes' system. Of course, quite crucial will be the decision about the degree of centralization of financial supervision. When the degree of centralization is high, we could speak of a "strong" EFSA. Instead, when the degree of centralization is low, the EFSA is said to be "weak". In both systems the ECB has an important role to play because of its responsibility for financial stability in general and its function of lender of last resort in particular. The difference between the "weak" and "strong" EFSA will also determine the relative influence of the ECB, which will be higher in case of a "strong" EFSA (high degree of centralization). Financial supervisors and academics see these tendencies very well, but it is up to the political authorities to take timely steps in this direction. It would be good news if the EU political authorities (Ecofin, EC and EP) would open a serious debate on whether and how European financial supervision should be concentrated with a newly established EFSA and what the future role of the ECB should be in this respect. However, we may need a major European financial crisis (e.g. a serious bank failure, merger or take-over in France, Germany or Italy) before the political authorities will become aware of this jump to a European level of financial supervision.

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Financial stability and the role of the central bank

Jean-Pierre Patat

Executive summary

Financial stability can be defined as a situation of sound activity and interrelations of financial system partners, banks, other financial institutions, and markets. There is a consensus supposing that central banks have a particular responsibility in the preservation of financial stability, mainly because these institutions are directly or indirectly involved in the supervision of banks whose sound activity is the corner stone of financial stability.

Concerning financial stability, two main questions arise:

Firstly, what must be the degree of involvement of central banks in banking supervision? According to the “Chinese wall” theory, the central bank - in order to stay independent for monetary policy purposes - cannot also be in charge of banking supervision so as to avoid a conflict of interest. Such a debate seems out of date considering the new dimension of the financial stability issue. According to empirical studies, allocating the dual function to central banks has led to a decline in bank failure. Moreover the availability of information collected during bank supervision processes enables central banks to improve the efficiency of monetary policy.

Secondly, if financial globalization does not need a specific and unique structure for supervision of banks, of other financial institutions, and of markets, such as the British FSA which takes the supervision function away from the central bank. However, one can argue that these different types of supervision cannot be merged since they have different finalities and methods, and that there is some contradiction in assigning the financial stability mission to central banks and giving them a minor role in banking supervision.

Another important issue for the financial stability mission framework, which specifically concerns the euro area, is connected to the opportunity, or even the necessity, to have a unified banking regulation and supervision body instead of the present organisation in which supervision remains allocated at a national level.

Those who support this idea underline two major issues which should motivate another organisation: the supervision of transnational groups and financial conglomerates, and the lender of last resort intervention. Bilateral memoranda of understanding between national supervision bodies and multilateral groups in the European and euro area frameworks are responses to the first point. Concerning the lender of last resort mission, the performance of this function has not been changed by the introduction of the euro and remains within national central banks’ competence, with rapid information transmission mechanisms between the ECB and the NCBs to manage the impact on liquidity of lender of last resort operations.

However it can be recognised that contagion risks are still weak across euro area, as cross-border moves and mergers have been relatively few in number. But things will change and EMU could result in a vast and unified capital market and the creation of pan-European banking groups, with greatest contagion risks. In such a situation, the real problem would not be the implantation of lender of last resort operations, but the information, especially advanced information, between ECB, NCBs, and specific Committees and Groups.

Financial stability does not only depend on a legal organisation but depends also and more probably on the ability of central banks to cope with specific situations and to be pragmatic enough to escape from doctrinal a priori and to take the right decisions.

1) Financial stability is not easy to define. Unlike price stability, it cannot be rated with a figure or a single index. At first analysis, it can be defined as a situation of sound activity and interrelations of financial system partners - banks, other financial institutions, capital and money markets. Financial stability can also be defined more simply as a situation where there is no financial crisis risk.

With financial globalisation, without any global regulation, and even without any self regulation, financial stability has become a worldwide public good.

There is a general consensus to consider central banks to have a particular responsibility in the preservation of this worldwide public good, even if this mission is not directly mentioned in the statutes of “old” central banks (but it is written down in the statute of the ECB – art. 33, 25.1, 25.2, in accordance with art.105 of the Treaty).

Legitimacy of central banks in financial stability matters results from several points that evidence this:

- Central banks are in charge of price stability which is a prerequisite (but not a guarantee) of financial stability.
- In the case of serious financial crisis (systemic) central banks are single lenders of last resort as they are the single issuers of central bank money.
- Central banks are strongly involved in the conception, regulation and monitoring of payment systems whose sound functioning is essential for inter-bank transactions.
- Central banks are closely monitoring the financial market evolutions and liquidity conditions, even if they are not in charge of the regulation in all market areas (they have such direct responsibility only for the inter-bank market and in some cases for the money market).
- Lastly, and mainly, all central banks are, directly or indirectly, involved in the regulation and the supervision of the banking system whose sound activity is the corner stone of financial stability.

But, even if everybody agrees on the crucial importance of an effective banking supervision for preserving financial stability, there is some debate on concrete implementing methods of that function.

Two main questions arise and are in the crux of the financial stability legal framework issue:

The first can be considered as rather paradoxical as it asks whether central banks must have direct responsibilities in banking supervision;

The second, which concerns specifically the euro area, relates to the opportunity, or even the necessity to have a unified banking regulation and supervision body in a single currency multinational area.

2) Several types of organisation exist for banking supervision in various countries. However three specific cases have been roughly observed:

- Direct implication of the central bank in supervision. Italy, the Netherlands, the United States are in this situation. (There are several banking supervision bodies in the USA but the Federal Reserve System has such a responsibility for the most important American banks).
- A strong implication via a separate agency: in France, the “Commission bancaire” is in charge of banking supervision. It is an independent body with a collegial directorate but the Governor is its President according to the statute of the Banque de France, and the Bank provides the Commission with all necessary technical supports.

Such an organisation has been adopted in African countries which are members of the “Zone Franc”.

- Technical cooperation with an independent body which is in charge of banking supervision, as in Japan, the United Kingdom, Germany and some Eastern European countries: in such an organisation, the central bank has no direct or even indirect responsibility in supervision. It provides its sui generis technical knowledge of the banking system to another institution with which it is of course in close contact, and gets from this institution all information about the process and the result of supervision.

In the euro area, most organisations are close to the two first cases, the German structure being closest to the third.

These different frameworks result mostly from historical circumstances; but they can also reflect, in some cases, the influence of conceptual issues about the areas of competences of an independent central bank and the consequences of financial globalization.

3) The first and rather traditional source of concern regarding the role of central banks in banking supervision refers to the “Chinese wall” theory, according to which the same body cannot be in charge of monetary policy and banking supervision. Such a double function is acceptable if the central bank is not independent. But if the central bank has the ability of fixing interest rates, there are risks of conflicts of interests: so a central bank in charge of banking supervision could be inclined to lower interest rates in consideration of the critical situation of a creditworthy institution, even if inflationary expectations would justify the opposite behaviour.

The “Chinese wall” argument has not remained a theoretical concept: it was invoked by the British government when it took the banking supervision function away from the Bank of England as it gave it the independence for monetary policy, in 1996.

On the other hand, the “Chinese wall” argument could be used in the euro area for supporting a strong implication of national central banks (NCBs) in the supervision since they are no more directly in charge of the monetary policy definition.

However, one can reasonably ask if such a debate is not out of date considering the new dimension of the financial stability issue and the complexity of its approach.

Some empirical studies show now that allocating the dual function of monetary policy and banking supervision to central banks has led to a decline in bank failures. Indeed, it can be easy to admit that information collected by central banks in the course of their oversight of payment systems and money markets helps them to detect bank liquidity problems. In addition, it has been shown that the availability of confidential information collected during banking supervision processes enables the central bank to improve the efficiency of monetary policy. The FED’s action in autumn 1998 is a good example of this synergy: the American central bank reduced its interest rates twice to prevent recessionary risk, but this risk was in fact more linked to the serious liquidity problem of some creditworthy institutions than to macroeconomic factors.

4) Financial globalization has been another source of questions about the best framework for the monitoring of the financial system. Stronger relationships between the major financial actors - banks, mutual funds, insurance companies, investment funds, financial and money markets... - need a coordinated approach of regulation and supervision processes. Furthermore, it has been argued that such an observation would logically lead to entrust a unified structure with the supervision of all these financial bodies. Of course such an organism could not be the central bank which has full authority only on banks, inter-bank and money markets.

So, giving to a unique authority the mission of supervising the financial system has led to taking supervision functions away from central banks and creating a new institution, public or not, in charge of supervising all the financial system actors activities. The British government has been a pioneer in this process in creating the Financial Services Authority (FSA) when it deprived the Bank of England of its mission of banking supervision.

The FSA concept looked a priori a very attractive and seemed particularly adapted to the context of financial globalization. So, it was proposed to have a similar body in the euro area with a unified supervision of all the financial system, which implied to take banking supervision functions away from the national authorities (central banks or others).

Such an idea would have called for an enormous administrative transfer of staff and skills. As regards the conceptual aspect, the ECB issued a discussion paper in which it raised objections and critic to this proposition.

There was perhaps some “corporatist” reaction in this approach, but also basic arguments:

Firstly, the ECB argued that the FSA concept was not a real response to the financial globalization, as the supervision of market, banking, and other financial institutions could not be merged because their finalities and methods were different. Banking supervision is responsible for preserving banks’ solvability and liquidity but not responsible for their transparency as is the case for markets supervision. Banking supervision applies to assets as well, while insurance supervision is more concerned about the liabilities of the institution. A lot of other examples of differences could be shown. According to the ECB, the solution die not lie in a merge but in strong coordination and exchange of information between the different supervision bodies, as has been the case, for example, in the monitoring of the great financial conglomerates activity. The solution also relies on a best regard on market activity of banks by the supervisors as it is planned in the Basel II system.

In fact, the British FSA is located in a unique building in London, but banking, market, insurance companies’ supervisions are on separate floors.

Secondly, there was some contradiction in assigning the financial stability preservation mission to central banks and in weakening their proximity to the situation of the banking system. As already mentioned, appreciations on bank liquidity problems are essential for detecting the risks of crisis and contagion, and for finally deciding to intervene as lender of last resort. In fact, this ultimate central bank function is closely related to three basic prerogatives: issuing central bank money, monitoring payment systems, overseeing - if not supervising – banks’ activities. Reducing one of these three channels of skill and interventions can be counterproductive.

Without referring to the ECB’s arguments, the question is whether a supervision system in which the central bank is not directly or indirectly implicated, but only has the function of a statistics collector, in the framework or not of an FSA, is or is not an optimal situation. Would the Japanese banking crisis have been so long and so difficult to cure with a Bank of Japan more directly involved in supervision?

5) Concerning the question of a unique banking supervision body in the euro area, which is another important issue for the financial stability framework, the first question is whether there is a specific systemic risk in the euro area, or more precisely whether the single currency was likely to increase systemic risk.

As mentioned in a previous paper, it could be careless or presumptuous to affirm that Europe is protected against crisis risks: such risks exist, especially with speculative funds activities or in the case of enlargement of the euro area to countries where banks don’t respect the Copenhagen criteria. In addition, we have known since the beginning of this century that “everything is now possible”.

Nevertheless, if we consider the three main channels of contagion of crisis - banks, payment systems, markets - it seems the introduction of the single currency could have beneficial effects.

Concerning the banks, one must remain cautious as it appears that the single currency did not yet bring about all its effects. It is obvious that the banks' situation has significantly improved since 1999. They have taken advantage of the strong economic growth from 1998 to 2000 to consolidate their financial soundness. Adverse development in 2001 did not endanger their robustness, solvency ratios remain high, European banks seem to have comfortably provisioned against new types of risk. The technical methods of risk evaluation use more and more "stress tests" and not only the traditional but limited "value at risks". Moreover, the level of cross-border lending and bank cash management operations in the area remains relatively small. As a logical consequence of the single currency, these operations, and also cross-border mergers in the sector, would develop and reinforce the interdependence between euro area institutions, which could therefore heighten the risk of contagion.

Specific factors linked to the introduction of the euro have contributed to strengthen financial market stability: a single monetary policy, the disappearance of exchange-rate crisis, improved fiscal discipline. Other factors, more technical such as the increased liquidity and the replacement of unsecured loans by repos, have led to the same result.

Payment systems are probably the area in which the reduction of crisis risk was more profound. The national central banks set up real time gross settlement systems (RTGS) and systems to facilitate cross-border payments. As a result, Target (Trans European Automated Real time Gross settlement Express Transfer) was launched in early 1999. It comprises the RTGS of national central banks and the ECB's payment mechanism. The ESCB grants intra-day liquidity to Target participants by fully collateralised credits to ensure settlement finality during the day. This system allows the difference in overnight interest rates across markets to be reduced to 2 or 3 basis points, and eliminates almost all systemic risks except the risk of technical default, which by nature cannot be completely removed, and the risk of an insufficient level of collateral for a participant.

6) Economists and analysts who support the idea of a unified banking supervision body in the euro area acknowledge that the performance of banking supervision at the national level, which in most countries is undertaken by central banks themselves or in close cooperation with them, is well suited to the current situation. But they point out two major issues which, according to their opinion, should be the motive to form another organisation: the supervision of trans-national groups and financial conglomerates, and the lender of last resort intervention.

For trans-national groups, cooperation between supervisory authorities exists at two levels.

Bilaterally, there are the "memoranda of understanding", signed between European organisms with a view to carry out the supervision of branches by the home country, and the double supervision by the host country and the home country for subsidiaries established in countries other than their home country.

Multilaterally, European supervisors have been cooperating for a long time in the "Contact group" created in the framework of the European Commission instances. In the euro area, a Banking Supervision Committee of the European System of Central Banks was created.

It is difficult to describe an "organisation" of lender of last resort, as such a function is not defined in advance and can be considered as the "désert des Tatars" of the central banks which are generally discrete about this subject to avoid a negative "moral hazard" effect.

In any case, it is clear that the performance of this function has not been changed by the introduction of the euro and remains within national central banks' competence. As they manage the Target payment system, NBCs grant intra-day credits and are in a situation to eventually extend an intra-day credit to an overnight credit, by access to the marginal lending facility. NCB are in charge of the market liquidity conditions and are implicitly guarantors of a situation in which no creditworthy institution could suffer from an unfavourable technical market situation. If an institution were to become illiquid and generate a systemic risk, NCBs have the provisions and instruments for emergency assistance, with clearly identified associated costs to be covered by national authorities. Rapid information transmission mechanisms are in place between the ECB and the NCBs in order to manage the impact on liquidity of lender of last resort operations and to assess their possible implications in terms of monetary policy, for example by deciding and performing "sterilisation" action, i.e. the destruction by the central bank of liquidity created (rise in minimum reserve or specific absorbing actions).

7) As previously mentioned, contagion risks are still relatively weak across the euro area countries and markets, partly because of the few number of cross-border moves and mergers by banks. But that can and in fact must change, and EMU could ultimately result in a major transformation in the structure of the European financial sector, with a vast and unified capital market and the creation of pan-European banking groups (cross-border mergers already occur and could affect major groups). Would such a context require a significant reorganisation of the institutional arrangements governing the prudential policy in the euro area?

Centralisation would not be necessarily the panacea and it is difficult to imagine how it could improve the efficiency of the present framework, especially in the case of a systemic crisis. Indeed, it could be better to maintain the present proximity of the supervision and rescue instances with local markets and credit institutions (to take a trivial comparison, local fire stations are surely more efficient than a centralised organism). One must be conscious that most of the national supervision bodies in the euro area are considered as the best performing in the world. They especially respect the totality of the 25 "core principles" for an efficient prudential control resulting from an international recommendation.

Some reports on the issue of the development of cross-border operations concluded that the current European regulatory and supervision framework provided a constant and flexible basis for maintaining financial stability. In fact, there is no reason to consider that a decentralized implementation of the lender of last resort mission would be less efficient than the monetary policy decentralized scheme.

The real problem does probably not lie in implementation but in information, especially advanced information. Moreover, the reports recommended a strengthening of cross-border cooperation. In this sense, advanced procedures for exchanges of information have been decided between national supervision authorities, national central banks, the ECB and specific Committees and Groups. If it appears these procedures fail in the case of a major contagion risk, the question of a new framework in the euro area supervision function would of course be posed. Instead of a tremendous upheaval of the existing structures, the best solution could be, in our sense, to strengthen the role of the ECB in supervision, for example by associating it in real time to this task which could continue to be implemented by national organisms.

8) These developments can be felt as a rather conservative approach. In fact, if we consider such questions to be legitimate, it also appears that the financial stability issue does not only depend on a legal organisation, (except perhaps for the lender at last resort function which fortunately is not a current problem) but depend also - and more probably - on the ability of central banks to cope with specific situations and take the right decision.

If it can be agreed that prevention is the main issue in the preservation of financial stability, some questions can be asked. Two of them seem crucial.

Does the ongoing expansion and volatility of financial markets justify that a central bank's objective includes financial assets prices? Central banks generally answer "no" to this question. They argue the difficulty to measure an aggregate index of asset prices, the uncertainty in determining a reference level for eventual intervention (according to which criteria can stocks prices be judged excessively high or excessively low?), the risk of interventions which could create moral hazard and encourage excessive risks taken by investors or which could totally destabilize the market.

Nevertheless, all central banks include asset prices (stocks, bonds and real estate prices) in the monitored panel of data they use to take their monetary policy decision. Academic studies show that central banks could reduce the volatility of inflation and output by reacting to inflation forecasts and to asset prices misalignments.

Concrete examples show that this question remains open. Would the Bank of Japan have saved the Japanese economy and markets from a long deflationary process if it had intervened earlier to moderate the terrific surge of stocks and real estate prices? More recently, a central bank, the Hong Kong Monetary Authority, directly intervened on the stocks market by buying shares in order to fight the speculative action of big hedge funds. And yet, such an intervention is theoretically considered in the "doctrine" of central banks as totally out of sense. But a central bank (little to tell the truth) did so, and succeeded not only in stopping the fall in market prices but also in selling, after some time and without any losses, the shares it bought so audaciously.

Another important question on which concrete actions can contradict theoretical assertions concerns the ability of central banks to rescue financial institutions out of their regulation and supervision. This question is particularly important as these institutions play an increasing role in the market; some of them, such as mutual funds or pensions funds, have links with banks and are submitted to a specific regulation. But others, such as investment companies or hedge funds are not very or even not at all regulated and most of them are totally opaque.

The answer to the question is of course "no". How could a lender of last resort action in favour of a free-lance institution be justified? Nevertheless experience shows that these free-lance funds can not only destabilize their own situation but also create major difficulties for other market interveners and be the source of a systemic crisis risk. Thus, nine years ago, the Fed of New York rescued a big hedge fund in a situation of near bankruptcy. Of course, this action was subtle and the central bank did not provide central bank money, but organised a bank creditors' consortium. But this was another concrete example of the gap between the doctrine and a necessary pragmatism.

The preservation of financial stability is a permanent adaptation to changing and sometimes to totally new situations.

Supervision of the Financial Sector. The Role of the Central Bank and Some Related Issues.

Leon Podkaminer

Summary

Abstract speculations cannot produce conclusive recommendations about the ‘optimal design’ of supervision. There is no empirical evidence on superiority of any specific ‘model’. But practice seems to favour separation of supervision from central banking. Because even separate supervision requires close collaboration with the central bank, the differences between the two basic modes of supervision must not be exaggerated.

The ECB does not play any concrete role in the financial sector supervision at the EU (or euro area) level. Organisation and management of supervision is left to individual member states. This is unlikely to change. The ECB could contribute to the maintenance of stability by conducting effective and moderate monetary policy.

Despite the rising weight of cross-border banks and other financial firms, the supervision remains firmly national. The diversity of national supervision systems is considered an obstacle to a fuller pan-European integration. ‘Brussels’ is busy ‘promoting progress’ in this area. Hopefully, that progress will NOT be very spectacular.

Preserving diversity of national regulation/supervision systems is important for the financial stability. In an integrated or harmonised system all agents respond stereotypically, while in a fragmented system the responses are less likely to be uniform. Under an integrated system the herding behaviour/contagion (often observed in the financial markets) could reach devastating dimensions more easily than under a less integrated one. The idea of developing a centralised supervisory authority is not only impractical on political or purely pragmatic grounds. First of all, it would enhance the risks to the overall pan-European financial stability.

The management of crises – once they occur – is a matter entirely different from supervision/regulation. That management requires prompt and decisive measures (so as to prevent ‘falling domino effects’). The measures may have to be ‘drastic’. In the euro area the crisis management arrangements boil down to voluntary cross-border cooperation between the central banks, payment systems, finance ministries, deposit-guarantee schemes, EU committees etc. One does not really know how the crisis management would work under real-life stress. In a real crisis the first fiddle will most probably be played by the national central banks (in tandem with their finance ministers) of the countries likely to suffer most. The cross-country crisis management cooperation need not be smooth, as views and interests may differ.

The potential weakness of the present arrangement cannot be neutralised without *some* centralisation of the EU crisis management (not to be confused with the centralisation of supervision/regulation). An EU agency directly involved in the EU crisis management (a part of the ECB, why not?) could jump in should this or that national central bank shirk effort. As the emergency lending (or the at least the potentiality of providing such lending) is an essential element of the crisis management, the EU institution involved in the actual crisis management would have to be in a position to act as the Lender-of-Last-Resort. For that, it would have to have sufficiently deep pockets, or have the right to ‘print money’ itself. Or, eventually, to charge the national central banks for the services rendered. In any case, that institution would acquire attributes of an authentic central bank which the current ECB lacks.

Financial sector supervision agencies in the EU countries: a trend towards separation from the Central Banks

It is a sovereign responsibility of the national authorities of individual EU countries to make decisions on the institutional ‘architecture’ of the supervision of the financial sector(s). Given this fact it is unsurprising that there is a wild diversity of systems of supervision institutions across the EU. In 13 (out of 25, as of 31 Dec. 2006) EU countries, the national central banks do not have supervisory functions¹⁹. These include Bank of England, Banque de France and Sweden’s Riksbank. Central banks of Ireland, Hungary and Latvia belong to the same category – though they can carry out *some* supervisory tasks (e.g. on-site inspections).

Out of 12 countries where the central banks have some supervisory responsibilities two (Germany and Austria) have separate financial sector agencies *sharing* responsibility for the supervision of the banking system (only) with their central banks. In the Czech Republic and Slovakia the central banks are solely responsible for the supervision of the entire financial sector. In the remaining 10 countries (including Spain, Italy, Portugal, Greece – but also the Netherlands) there are two independent supervision agencies - each ‘in charge of’ a specific financial sub-sector. The national central bank in each of these 10 countries is only one of the supervisors²⁰.

The predominance of systems with the financial sector supervision being separated from the central seems to be associated with the tendency to create a single *unified* national supervision agency. Such agencies function now in 14 countries (out of which only in the Czech Republic and Slovakia that agency happens to be the central bank itself). As recently as in 2003, the prevailing supervisory structure was radically different (with only two single-supervisor countries).

The tendency for separation from the central bank most probably not a coincidence

The trend for unification of supervisory agencies - and for their separation from the central banks – does not seem to be a matter of fashion, or a mere coincidence. It seems to have some rational grounds. The financial systems are becoming increasingly complex nowadays. This is a consequence of progressing financial deregulation/liberalisation, followed by a tendency towards *conglomeration* in the financial sector. Thereby the boundaries between the traditional areas of activities of commercial banking, insurance institutions, pension and investment funds, investment firms etc are becoming increasingly blurred. Arguably, the regulation/supervision of the system populated by hybrid (and fast mutating) entities which can simultaneously run diverse activities (i.e. in the traditional banking, insurance, management of financial assets, mergers and acquisitions, more or less unhedged speculation etc) seems to require a single regulating/supervising agency, rather than many narrowly specialised sectoral ones. The sectoral agencies may be unable to assess the overall risks exposures in complex financial conglomerates.

In principle the task of ‘policing’ the whole financial sector might be entrusted to the central banks. But there may be quite good reasons for placing that single agency outside the central bank.

¹⁹ In Bulgaria and Romania the national central banks have supervisory tasks/responsibilities. But they are not the sole financial sector supervisory agencies. (In Romania there are as many as four separate supervisory agencies – the same number as in Italy or Cyprus).

²⁰ See the ECB document: *Recent Developments in Supervisory Structures in EU and Acceding Countries*, ECB, Oct. 2006.

First, traditionally the central banks have been competent supervisors of the banking sector proper – but not of other segments of the financial industry. Of course, the central banks might develop new skills – and then become competent supervisors also of activities that have virtually nothing to do with banking proper (e.g. the operation of the stock exchanges). But this would be distracting them from their main responsibility which nowadays tends to be understood as the control of inflation plus – eventually - contributing to a possibly smooth (and preferably high) real growth²¹.

Besides, a central bank's involvement in the supervision of more exotic segments of the financial sector may create a specific – and probably risky – implicit responsibility. Under the universal demand for 'level playing ground' also the non-bank institutions could – in emergency – expect/request exceptional financing from the central banks. Or, the central banks may somehow feel responsible for the consequences of their own supervisory actions – should these fail to prevent a crisis in the non-bank segments of the financial sector. Either way there may be a pressure to extend the scope of the central bank's Lender-of-Last-Resort responsibilities²².

Last but not least, under the currently prevailing fashion for the central banks' independence in the monetary policy matters, entrusting any central bank with the powers to supervise increasingly large and important segment of the whole economy would only strengthen the popular opinion that vital economic decisions are in fact made by some unelected, unaccountable, bureaucratic clubs pursuing their own secret agendas.

Separation does not exclude cooperation

Having supervisory agencies (or a single such agency) formally separated from 'its' central bank does not rule out close – or even intimate – cooperation between the two. On the contrary, in Europe one observes close ties having been knitted between formally separate supervisors and the central banks. But there is a large diversity of the cooperation arrangements between the 13 non-supervisory national central banks and supervisory authorities currently observed in the EU countries.

Cooperation starts with the personnel matters. In six countries (including France, Sweden and the UK) the central bank is involved *ex officio* in the management of the banking supervisor (the single FSA in the UK); in three (including Belgium and Finland) the central bank appoints its representatives to the banking supervisors' managing boards.

²¹ It may be argued though that the national banks in the euro area are now largely relieved of the traditional monetary policy responsibilities. The same applies to the countries that are on the currency-board exchange rate regimes (at present the three Baltic countries as well as Bulgaria). Having a bit less to do, the central banks of the euro area countries (and of the currency-board ones) could – so the argument may go - dedicate their spare energies to other worthy tasks such as conducting economic research or supervising the entire financial sector. Of course one could not object to such a transformation of the central banks' functions/responsibilities – though it is not clear to me why an institution specialising in financial sector supervision or economic research etc – and NOT running any independent monetary policy - should be called a *central bank*.

²² This is not to say that the central bank must never help out a troubled non-banking financial institution. The issue is that non-banking institutions must not be under the impression that in an emergency they have a legitimate right to demand help from the central bank. Such an impression – which could well enhance the levels of moral hazard - is probably more likely to emerge if the supervisory agency is a part of the central bank.

There are staff-sharing arrangements between the supervisor and central bank in five countries (including France and Poland); financial budget sharing in four countries; sharing of other resources (databases etc) in seven countries. Finally, in all (apart from Luxembourg and Lithuania) countries there are formal mechanisms for cooperation and information sharing (either in the form of Memoranda of Understanding, and/or joint committees²³).

Practice seems to speak in favour of separation. No clear case for any specific model of cooperation

Arguments in favour of separation of the supervision agencies from the central banks (and for their unification) may appeal to some (including the present writer) – but not necessarily to everybody. Given the fact that abstract speculations are unlikely to produce any conclusive recommendations concerning the ‘optimal institutional design’, and because there is no empirical evidence (so far) on the superiority of any specific ‘model’, one may be inclined to accept the verdict of practice. And practice seems to favour separation. Of course, given the fact that separation appears to be requiring a great deal of (often intimate) collaboration with the central bank, the differences between the two basic modes of supervision ‘architecture’ must not be exaggerated.

There is no (formal) supervision of the financial sector at the EU level

Currently, the ECB does not play any concrete role in the financial sector supervision at the EU level - or even for the euro area. Nor does any other supranational EU body. Organisation and management of supervision is left to individual member states. And, as discussed above, the role of national central banks – which are the natural partners of the ECB – is not dominant as far as the supervision at the national level is concerned. In the matters of supervision the ECB could, at best, try to find a ‘common language’ with a rather limited number of the individual national supervisors (i.e. with those directly integrated with their central banks). Moreover, the current position of the ECB is unlikely to change. I am not aware of any legislative (or even purely political) initiatives to endow the ECB with some formal supervisory responsibilities. Of course, this does not mean that the ECB does not play an essential role in the maintenance of the financial stability in the euro area (and beyond). Important research on the stability matters is conducted at the ECB and its periodical Financial Stability Reviews are very informative. First of all however, the ECB could contribute to the stability by conducting effective monetary policy – in particular avoiding unnecessary excesses in its interest rate decisions²⁴.

Cross-border financial integration and the convergence of national supervision systems

The process of cross-border financial integration has been accelerating throughout Europe (and of course on the global scale as well). Financial sector firms active across borders proliferate. Within the EU the process has been actively supported by the EU Commission, building on the original ‘Lamfalussy framework’.

²³ See ECB 2006, op.cit.

²⁴ Unlike the national central banks (also of the euro area countries), the ECB does not ‘print money’. Moreover, it is not backed by any fiscal authority. Thus the ECB does not have the Lender-of-Last-Resort capability which may be essential for the *management* (if not for prevention) of systemic financial crises.

There are many initiatives seeking to repel some of the remaining formal obstacles to integration, harmonise standards, support the development of financial infrastructure (e.g. payment systems), deepen collaboration etc across the EU. A large number of more or less formal institutions ('committees') are active in the field²⁵, busying themselves with meetings, consultations, exchange of information, proposing 'solutions' etc. Interestingly, the actual convergence of some national prudential standards in the EU banking has been a product of another informal (*non* - EU) institution (namely of the Basle Committee on Banking Supervision whose recommendations appear to be binding globally).

The rising weight of cross-border banks and other financial sector firms has not yet visibly reduced the prerogatives of the national financial supervisors. In effect, the trans-border firms may fall into the jurisdictions of supervision authorities of more than one country (with the lead role played by the 'home' country hosting the firms' headquarters). Such firms may be required to comply with possibly different national regulations. This situation is not conducive to faster/deeper cross-country financial integration. Unsurprisingly, the diversity of national supervision systems is often considered an obstacle to a fuller pan-European integration. And, as can be expected, 'Brussels' is busy 'promoting progress'²⁶ in this area. Hopefully, that progress will NOT be very spectacular.

Preserving econ-diversity is important for the financial stability

A situation when the cross-country financial firms (often quite large and influential conglomerates) are subject to the supervision agencies from various countries is surely better – from the financial stability viewpoint – than when only one national (or international) agency is in charge. In the former situation the amount of supervision may be excessive - but the risk of imprudent behaviour going undetected should be correspondingly lower. Moreover, the 'multiple supervision' must be considered particularly advantageous when the national supervising agencies follow *different* rules. Thus, contrary to the ideas implicit in much of the EU (or Basle Committee's) efforts, harmonisation, convergence etc need not be unequivocally good things. (At least not for the financial stability).

Preserving diversity of national supervision institutions/rules etc is even more important for the overall financial stability for quite a different – and fundamental - reason. That reason is that the financial stability itself requires that the financial markets are not only large – but also sufficiently *heterogeneous*. As put by Lord Eatwell: '*Markets become illiquid when objectives become homogeneous. When everyone believes that everyone will sell, liquidity vanishes. Markets fall over the cliff when average opinion believes that average opinion has lost confidence in financial assets*'²⁷.' Whatever increases the levels of market heterogeneity decreases the risks to financial stability. Whatever reduces the levels of market heterogeneity automatically enhances the risks of instability. Convergence/harmonisation of national regulation/supervision agencies (or of their operating modes) appears to be just one of such homogenising forces. In an integrated or harmonised system all agents tend to respond stereotypically – in a fragmented system the responses are less likely to be uniform.

²⁵ These include The Financial Services Committee, Inter-Institutional Monitoring Group for Financial Services and the Committee of European Banking Supervisors (CEBS).

²⁶ For example the CEBS is '*mandated to develop common standards, guidelines and interpretative recommendations for the practical performance of supervisory tasks on a day-to-day basis with a view to identifying and gradually converging towards the best practices... the enhanced prudential framework is expected to provide an adequate institutional setting to foster closer information-sharing and coordination among supervisors and promote progress in convergence of supervisory practices and approaches.. etc, etc.*' See 'Financial Integration in Europe'. ECB, March 2007, p.40.

²⁷ See J. Eatwell (2004): *International Regulation, Risk Management and the Creation of Instability*. Centre for Financial Analysis and Policy, Cambridge University.

Under an integrated system the herding behaviour/contagion (often observed in the financial markets) could reach devastating dimensions more easily than under a less integrated one

Centralised financial supervision at the European level? No, thanks.

Putting too much effort into harmonisation/integration/convergence of the financial sector regulation/supervision is not warranted by the eventual outcomes. In particular, the idea of developing a sort of centralised supervisory authority is not only impractical on political or purely pragmatic (organisational) grounds. First of all, having such a pan-European supervisory body could – as argued above – enhance the risks to the overall pan-European financial stability. Of course, having such a body could advance financial integration, and therefore might be advantageous to some segments of the financial sector *most of the time*. The problem is that in *bad* times the non-financial sector (including ordinary citizens' households) might be asked to pay dearly for these advantages.

Crisis management for the euro area: no supranational Lender-of-Last-Resort

So far I have been reflecting on the 'architecture' of the financial supervision in the EU. Supervision (and regulation) are there to help maintain financial stability – i.e. to minimise the risks of financial crises²⁸. Perhaps it may be worth remembering that the complete elimination of risks to financial stability is practically impossible. No quantity of supervision/regulation (even of a paramount quality) could do the trick²⁹.

The management of crises – once they occur – is a matter entirely different from supervision/regulation. As a rule that management requires prompt and decisive measures (so as to prevent 'falling domino effects'). The measures in question may have to be 'drastic': i.e. they may stipulate for allocation of 'taxpayers money' to the failing private financial companies, or the introduction of intrusive administrative controls etc. In the euro area the crisis management arrangements boil down to the provisions stipulating for voluntary cross-border cooperation between the central banks, payment systems, finance ministries, deposit-guarantee schemes, EU committees etc. As no serious crisis has so far happened in the euro area, one does not really know how the crisis management would work under real-life stress. Possibly, it won't work at all. Should a real crisis develop, the first fiddle in its management will most probably be played by the national central banks (in tandem with their finance ministers) of the countries likely to suffer most. Active support from/cooperation with the central banks/treasuries of other *major* countries will surely be actively sought (also from the US FED, if need be). Imaginably, the cross-country cooperation need not be frictionless, as differences of views on the forms of eventual intervention (and the distribution of its costs) may come to the fore. But time will probably be too short to engage in elaborate negotiations. Also, there may be little time for consultations with many formal/informal EU/international bodies (or with *all* national partners in the EU).

²⁸ And to achieve other goals, such as investor/consumer protection.

²⁹ The financial business is inherently risky. A risk-free financial business is not a financial business. (E.g. a completely safe banking would require 100 percent reserves – i.e. would not be banking anymore). It is also worth remembering that the very existence of financial crises defies the notion that the market always regulates itself optimally (if only sheltered from the governmental interference). This lesson is sometimes ignored – e.g. by legislators trying to achieve financial stability through enhanced 'market discipline' (as if the instability/indiscipline were not outcomes of the market process itself).

All in all, a financial crisis surfacing somewhere in the euro area (or in the EU more generally) will most likely be managed without a very meaningful contribution from the ECB itself, or any other separate, supranational EU body. This may be suboptimal – if only because individual countries' central banks/finance ministers involved in the management of specific crises may be tempted to behave opportunistically – i.e. to free ride on efforts of other nations.

The potential weakness of the present arrangement may be hard to neutralise without *some* centralisation of the EU crisis management (not to be confused with the centralisation of supervision/regulation³⁰). An EU agency directly involved in the EU crisis management (possibly affiliated with the ECB, why not) could jump in should this or that national authority shirk effort. As the emergency lending (or the potentiality of extending such lending) is essential to the crisis management, the EU institution involved in the actual crisis management would have to be in a position to act – within some limits at least - as the Lender-of-Last-Resort. For that, it would have to have sufficiently deep pockets, or have the right to 'print money' itself. Or, eventually, to charge the national central banks for the services rendered. In any case, that institution would acquire attributes of an authentic central bank which the current ECB lacks.

³⁰ Q: Can the financial crisis management be divorced from the financial supervision? A: Yes. Most (if not all) international 'financial rescue operations' (e.g. led by the IMF) were not linked, in any way, to the authorities that had supervised the failing financial systems.

Financial Stability and the Role of the Central Bank

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Our monetary system is based on fiat money multiplied by commercial banks. Such a system, for all its advantages, is unstable. It calls for Central Bank intervention to circumscribe the contagion of financial crises that can trigger a run for liquidity and a flight from bank money. In a globalised world such as ours, these local difficulties easily spread to other economies; also, the global economy itself may suffer systemic shocks of monetary origin.

Possible liquidity crises in the Eurozone

The role of the ECB in maintaining financial stability in the Eurozone must be defined in terms of the possible crises that may occur. There are a number of sources of instability in fiat money systems that may lead to a run for liquidity:

- (a) Local repercussions from the failure of a large financial institution, when banks with a sound balance sheet may suffer sudden cash flow problems (as could have happened in the US with the LTCM failure of 1998 or the Amaranth \$6bn losses on natural gas bets in 2006).
- (b) Asset price crashes, in stocks or real estate, after loose monetary policies have fuelled imprudent speculation or unsustainable credit (as happened on Black Monday 1987, or with the dot-com crash of 2001, or perhaps soon in our economies).
- (c) Capital flight and forced devaluations due to unsustainable macroeconomic imbalances (as the Argentine crisis of 2001).
- (d) International contagion from kindred economies (as happened during the East Asia currency crisis after the Thailand failure of 1997).
- (e) Panic reactions following what Taleb (2006) has called “black swans” or Knight called uncertainty as different from risk: low-probability events of a large magnitude (e.g. the 9/11, 2001 attack on the World Trade Center and the Pentagon).
- (f) A sudden correction of monetary and trade imbalances in the World at large (with a precipitous devaluation of the dollar and the massive unloading of dollar denominated reserves on the currency markets).

Crises of the (c) and (d) type need not worry the ECB, as they were triggered by excessive and growing foreign debt beating against a pegged currency: the Growth and Stability Pact and a floating euro are guarantees against their occurrence in the Eurozone; although such crises could happen in countries aspiring to enter the euro, as is shown by the Hungarian jitters of the last three years.

The other four can indeed happen within the purview of the ECB. Crises of the (e) and (f) types are difficult to foresee and prevent and call for nimble reaction times on the part of central bankers to provide the system with sufficient short term liquidity: enough to stop a run on the banks but not so much that the necessary adjustments are delayed or indefinitely put back. Crises of the (a) and (b) types demand capital sufficiency rules, coherent regulation, and inspection and chastisement. Our brief is to examine the institutions, capacities and instruments of the European System of Central Banks to prevent and counteract these four kinds of crises.

The advantages and dangers of a fiat money financial system

There is almost no need to remind one of the reasons why these crises can badly harm the real economy: they interrupt the services supplied by the financial system.

- The banking system is supposed to supply ‘real’ money to a fluctuating economy, i.e. a stable purchasing power means of exchange.

Financial intermediaries (banks, stock markets, OTC markets, private capital and insurance companies) bring together savers and borrowers by transformingshort term funds into long term investment.

Financial markets help spreading of risk through insurance, securitisation, derivatives, commodity futures, hedge funds.

The dangers appended to these services are:

- Inflation of the currency, which it is in the power of the Central Bank to avoid;
- Unreliability of the institutions, to be corrected by regulation and control;
- Systemic risk, which properly designed new instruments can help reduce.

The Central Bank as the head of a club of banking institutions

If we assume that each central bank acts as if its objective was the maximisation of seignorage income, the central bank will be interested in the maximum use of its monetary standard on a long run and sustainable basis (Castañeda 2006). Depositors have great difficulty in identifying imprudent risky banks. Although there are market sources of information on the running of the banks, there always is a high information for outsiders in monitoring the banking sector, processing the information, and properly assessing the risks associated with each bank.

Because of the costs and other difficulties of obtaining and disseminating information, the reputation and trust attaining to any one bank (financial intermediary) is closely intertwined (with causality running in both directions) with the reputation, etc., of the group of banks as a whole. (...) A solution to the free rider problem is to form a club, which will keep out “undesirables” and will also have club regulations that will induce members to behave in a way that will benefit the membership as a whole.” (Goodhart, 1988, pp. 69)

After a single institution adopted the crucial role of the provision of the money to the economy, it came to look after the soundness and stability of the monetary and financial system. In exchange for its currency becoming the standard means of payment of the institutions it oversees, the central bank had to perform the following services for the benefit of the financial institutions (traditionally banks) in its club:

- *The provision of the monetary standard* of the economy where its currency is used. This standard will be the reference value for transactions in the purlieu of the zone where the currency is legal or customary tender.
- *The supply of high-powered money* on which the banking sector creates so-called bank money. In a fractional reserve system the liquidity of the economy comprises two main components: the money issued by the central bank (legal money or outside money), and the money issued by the financial institutions in their regular operation as financial intermediaries (traditionally, deposits).

- *The pooling of the liquidity reserves of the banking sector.* In our monetary system, the commercial banks operate within a fractional reserve framework that lets them expand bank money, while keeping just a small fraction of the customers' deposits as a reserve with the central bank (a 2% legal reserve ratio in the euro area).
- *The setting up of an inter-bank clearing market.* This facility permits the commercial banks to clear everyday operations smooth and efficiently by electronic transfers of their reserves deposited at the central bank and even lending and borrowing overnight; hence the ability to run financial operations with a small reserve ratio.
- *Affording regular deposit and credit facilities to the banking sector.* Since the central bank is currently the only bank issuer of the customary or legal tender of the economy, it regularly acts as the supplier of liquidity to the banking sector. As a bank, it provides liquidity by standard intermediary operations with the rest of banks; which includes the lending of money, as well as the deposit of the excess of liquidity of the banks. As we will see later, this regular lending facility may be extended in extraordinary times of liquidity crisis.
- *Becoming the lender of last resort.* Since the central bank can create outside money at will it can come to the rescue of subordinate banks in a liquidity crisis. This ability may clash with its objective of supplying a stable monetary standard.
- *Watching over the external credit-worthiness of its monetary zone.* When foreign reserves were the main outside money (as under the gold standard) or when exchange controls were in operation, the cost of holding outside reserves was minimised by pooling them with the central bank. Under the flexible exchange rate regimes in operation today the central bank must still look after the good reputation of its currency with foreign holders.

How to behave in a liquidity crisis

If we look at these functions from the point of view of financial stability, the central bank must be, and known to be, ready quickly to supply high-powered money to the banking system so as to prevent general liquidity crises; support well run banks with loans at premium rates; and, in a situation of general bank failures, take ailing banks into a 'life boat' and liquidating them while keeping the total amount of bank deposit effectively stable. All this must be done without undermining the monetary standard, or fostering morally hazardous behaviour in the financial community, or lulling depositors into adverse selection of their bankers. Hence this exceptional assistance to the banking sector must operate by strict and clear rules; the supply of credit and new products by institution must be submitted to inspection and correction; and a cap must be set on deposit insurance.

- Firstly, the central bank must lend to an illiquid bank with a sound balance sheet when the rest of the commercial banks are not able to do it (or are also suffering from a massive liquidity run). Such extraordinary lending must be at a significantly higher rate than normally; so that it imposes a penalty on the imprudent assisted bank. This will reduce the likelihood of any bank asking for extraordinary help and contain moral hazard.

Secondly, as Bagehot said in the language of 1873 (pg. 197), the extraordinary loan "should be made on all good banking securities, and as largely as the public ask for them". So, even in these exceptional times, the central bank should only assist those illiquid banks that still have good collateral to back the loan; defining "good" as the one used in financial operations in normal times. The adoption of this rule highlights the nature of the central bank as a bank, and thus the need to preserve its reserves and assets even in an extraordinary lending financial operation.

Today we would put it thus: the extraordinary loan must be returned at the earliest occasion so that the creation of outside money by the central bank does not later lead to an asset or price inflation.

Thirdly, traditional role of the central bank as the lender of last resort “has been used to mean more than one thing” (see Allen and Wood, 2006, pp. 164); which includes not only liquidity support but also solvency support. In a solvency crisis affecting a single bank, unless financial stability is clearly affected, the central bank should not assist that institution. If the bankruptcy of the bank may destabilise the financial sector as a whole, the central bank may act. But in this case, as Allen and Wood (2006) argue, regulators always try the private sector solution as the best solution; so the best practice of the central banks is “to persuade shareholders and creditors of the distressed company (and perhaps others) that there are terms on which it would be in their interest to provide additional funds to the distressed company” (Pp. 168). In the last resort, the central bank can act as a liquidator by hauling the bankrupt institutions onto a ‘lifeboat’ and then acting as a liquidator.

Prudential supervision in the Eurozone

In the Eurozone the banking club is double-tiered. The ECB is the head of the ESCB and the constituent national central banks in turn are the sub-heads in their jurisdictions.

The ESCB competencies on prudential supervision and the achievement of the financial stability in the euro area are defined in its Statutes, Article 3.3: “the ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system”. The actual exercise of these competencies is delegated to national institutions, usually the National Central Banks (NCBs). However, the supervision of national financial markets is often shared by the NCB with other institutions, such as the Stock Exchange Authority and an Assurance regulator.

In this legal setting, the ECB only has advisory functions (Statutes, Art. 4), and therefore shall be consulted on the national legislation that may “influence the stability of financial institutions and markets.” (98/415/EC). On the ground, the ECB has also promoted financial stability in the euro area by co-ordinating the different agencies that keep this competency at the national level. In this regard, apart from the advisory function given in its Statutes, the ECB plays an explicit role on financial stability in a federal system distribution of competencies: by which the regulatory power is driven by the national agency (the NCB or other), and the ECB acts as an “umbrella” of these national authorities in order to co-ordinate the national legislation on financial stability and monitor and provide information that may affect financial stability at a multi-country or supranational level.

This co-operation has been developed at the EU level by adopting specific common regulations and other informal supranational agreements between the different regulators involved in both preserving financial stability and managing instability crises (see ECB, 2007):

On the one hand, the *Capital Requirement Directive* has adapted the implications of the “Basel II Accord” to the EU legislation. This directive “assigns a coordinating role to the authority responsible for the supervision of the banking group on a consolidated basis- the consolidated supervisor” (ECB, 2007, pp. 75).

Accordingly, it sets a clear mandate to the consolidated supervisor to provide information to the rest of authorities involved in the supervision of a banking group; and also imposes to the consolidated supervisor the need to set a clear procedure in the face of financial crises. This includes the transmission of information to the rest of national regulators (such as the NCBs). Additionally, the *Financial Conglomerates Directive* extends this principle of coordination and transmission of information between different regulators to the field of supervising financial conglomerates operating in the EU.

On the other hand, the *ESCB Banking Supervision Committee* permits the dialogue between the supervisory agencies and the NCBs and the ECB in order to promote the consistency of the country level legislation on financial regulation. As a result of this dialogue, they have agreed common procedures in case of a financial crisis arises (*Memoranda of Understanding*). The ECB also plays this co-ordinating role in several others similar committees: such as *the Economic and Financial Committee*, the *Financial Services Committee* and the *Committee of European Banking Supervisors*.

Central banks or separate agencies?

Three questions must be asked at this point: Should supervision of all financial markets be put in the hands of a single authority different from the Central Bank? Should the supervision of the Eurozone financial markets be centralised in the hands of the ECB? Or should that supervision be vested in a special European agency different from the ECB?

The central bank, we have seen, has a natural role to play in the supervision and regulation of the banking sector, as well as a crucial role in case a crisis arises in the wider financial market. However, in the last years there is a trend to entrust financial regulation and supervision to a number of parallel bodies and even assign that competency to an agency separate from the central bank.

The reasons for assigning these competencies to a separate agency rest on the higher complexity of the financial markets, which exceeds the traditional boundaries of the banking sector. From a political perspective, there is also the threat to keep too much power in a non-elected body, such as current central banks (see Goodhart, 2000). As a result of the financial innovation, it is said that a single regulatory body for the overall financial market participants and extremely diverse financial products is needed in order properly to supervise extended and complex financial markets.

However, there are also reasons to keep supervision and regulation of financial markets in the hands of the central bank: it will permit the central bank to catch essential information to improve the conduct of monetary policy and assess financial stability (see Goodhart 2000, Blinder 2007). Also, since the central bank has the financial instruments (reserves and monetary policy) to solve a financial panic, it is therefore better to maintain the supervision and regulation functions in its hands, so there can be a timely detection of signs of financial stability and the requested solution to the panic.

Arrangements differ in Europe. In the UK the Financial Services Authority (FSA) supervises all financial markets, but it does so in close collaboration with the Bank of England and the Treasury. The German arrangement is of a similar kind. The Bundesbank is assigned most of the operational tasks in banking supervision.

But a new institution was created in 2002, the Federal Financial Supervisory Authority, which is not limited to licensing, monitoring or, if needed, closing individual institutions. It can also issue general instructions, solve problems affecting the assets in the care of financial institutions or possible cause harm to the conduct of financial services or the economy as a whole. But even in these two cases supervision of the financial markets if not wholesale regulation is shared among different collaborating agencies.

The ESCB has delegated this supervisory and regulatory role to the national “branches”. Within this setting, the ECB, at the federal level, is the institution responsible for fostering the consistency of the different national regulations, for the adoption of common procedures to share information on financial stability by all member countries and for co-operation in case a financial crisis arises. In order to make this federal distribution of competencies operational, each NCB keeps a fraction of the ESCB overall liquidity reserve; used not only to implement the monetary policy made at the federal level but also, in case needed, to counteract financial instability episodes and prevent the contagion to the rest of the financial institutions.

In sum, in the euro area, most of the member countries have kept the competencies regarding the banking sector in their NCBs. However they have developed a regular communication and co-operation with the rest of national regulators and the ECB in to monitor financial stability and also to set clear procedures for the prevention of financial crises and panics. Thus, even when some centralisation is imposed locally on the regulation of financial services, the resulting arrangement is one of cooperation between agencies, Government and the central bank. There could be an argument in favour of more direct regulation and overseeing powers vested on the ECB, flanked by some Eurozone Financial Services Authority if there existed a single financial market in Europe. But such unity is still far away and a case could be made for keeping a federalised structure of supervision.

The current distribution of competencies in the euro area is an efficient option to timely detect signs of financial instability and, in case needed, to quickly assist the affected institution. As long as consistency of the different regulations and co-operation between NCBs, the ECB and other regulators is assured, this federal system benefits from the better knowledge of the national agency of the national market participants. Accordingly, centralisation of the supervisory and regulatory roles is not needed in the euro area for some years to come.

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Financial Stability and the role of the Central Bank³¹

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1. Against the backdrop of an increasing integration of EU financial markets, the emergence of an ever greater number and rising importance of financial institutions active in more than one member state, and the continuous evolution of the structure of the institutional set-up of financial supervision in the EU, the issue of financial stability constantly gains in importance.
2. This concerns effective structures for crisis prevention as well as crisis management. Both of these, and especially the latter, require an effective interplay of the various players involved, including national central banks and the ECB. It is not obvious, though, that the right processes and structures have yet been established in order to exercise financial supervision efficiently, to effectively safeguard financial stability and to deal with a pan-European financial crisis in a timely way that limits the overall costs to the EU economy.

1) Principles for an efficient and effective supervisory system

3. In order to be considered optimal and conducive towards reaching its goals, any supervisory structure must meet – and must be assessed against – objective criteria. In our view, these would be the following:
 - It must create financial stability, while at the same time set a framework for a dynamic and competitive financial sector;
 - The supervisory structure must be cost efficient;
 - It must be competitively neutral, i.e. ensure a level-playing field;
 - It must be transparent, thereby increasing the general public's and industry's confidence in the stability of the financial system;
 - It must provide for an effective and transparent framework for crisis management;
 - It must foster market integration and efficiency and be responsive to the evolution of market structures;
 - It must provide for clear conditions of political accountability.
4. There are two trends that must be taken into account when devising the structure of financial supervision
 - a) internationalisation and especially EU financial market integration

There are a growing number of truly multi-country organisations that operate as integrated cross-border institutions with single product and function platforms. According to ECB figures³², the 46 largest EU banking groups hold 68% of all EU banking assets – and their share is rising. 16 out of these 46 groups hold at least 25% of their EU assets outside their home country and are present in at least six other EU member states. Responding to market-led developments, to the above-mentioned political commitment and to the nature of regulation in FSAP, financial institutions have reconfigured their business strategies and have reorganised their internal organisational set-up. Importantly, the latter has involved the centralisation of business functions. Specifically, in pan-European institutions risk, liquidity and capital management are central functions that are executed centrally for all organisational

³¹ This essay draws to some extent on the work of the European Financial Services Roundtable (EFR), in which we are actively involved. In particular, the EFR's 2005 report: "On the lead supervisor model and the future of financial supervision in the EU", Brussels, was used.

³² Trichet (2007), "Towards the review of the Lamfalussy approach: Market developments, supervisory challenges and institutional arrangements", address delivered at the First CEBS Conference, London, May 9, p.2.

units irrespective of their legal status (such as branch or subsidiary). As a consequence, looking at individual business units in isolation is becoming less and less meaningful for purposes of prudential supervision; indeed, it may actually be misleading. Instead, pan-European financial institutions must be examined and assessed on a group-wide basis as far as prudential supervision is concerned.

b) convergence of market segments

It is becoming common knowledge that borders between different segments of the financial market have become blurred. If so, the principle “same business, same risk, same rules” must apply, i.e. all institutions should, fundamentally, operate under the same set of rules. The division of supervision by type of institution does introduce distortions if institutions perform essentially the same services but are not subject to the same regulatory framework and the same supervisor. It should be underlined that the need to integrate the different sectoral supervisors does not depend on the emergence of financial conglomerates engaging in “allfinanz” or “bancassurance”. Of course, if a national market is dominated by that type of institution the issue is particularly pertinent. However, the crucial factor arguing for an integrated authority is that the sub-segments of the financial sector are converging more and more in terms of content, i.e. what counts is not the institutional, but the substantive convergence of the different segments of the financial market. The transfer of credit risk between the banking and the insurance sector by means of credit derivatives, structured products and securitisations are cases in point. It is therefore to be welcomed that the institutional consequences of this, i.e. the need for a single, cross-sectoral regulator, have been acted upon in some countries, most notably in the UK and in Germany.

2) Deficiencies of the status quo

5. Market-driven integration and the organisational restructuring of large financial institutions that are active across borders on a pan-European basis represent a combination that stands in increasing contrast to the still largely nation-based organisation of financial supervision in the EU. In spite of market integration and in contrast to the political commitment to build an integrated financial market, financial supervision in the EU remains a responsibility of individual member states with the European dimension only being taken into account in the form of intensified cooperation.
6. This historically grown institutional set-up and the inconsistencies that it causes were tolerable in the past, when financial firms had a parent company with a clearly defined nationality, and when foreign operations – whether in the form of subsidiaries or branches – were small both in relation to the business of the parent firm and overall banking volume in host countries. In addition, the internal structure of banks was organised in such a way that there essentially were full banking operations – including all corporate centre functions – in all countries.
7. Today, however, the reality is different, which is why the current structure of EU financial supervision does not satisfy any of the above-mentioned conditions. In particular, it is deficient on the following scores:
 - a) First, as regards the **effectiveness** of financial supervision: A fragmented structure of financial supervision enhances the risk that disruptions in one market spill-over into other markets. At the same time, a fragmented supervisory structure carries the danger that information needed to assess the risk situation of a financial group is not effectively shared between the supervisors involved. More importantly, within the current institutional structure it is highly unlikely that an effective crisis management would take place, should such a pan-European group get into difficulties. Rather, there is a risk that valuable time will be lost, that the necessary, intricate interplay between the different elements of crisis management – collective action by solvent banks, central bank liquidity, deposit insurance and fiscal funds – won’t work or that national authorities may even try to transfer assets into their respective jurisdiction, in order to limit the fall-out in their own market. (see below)

- b) Secondly, as regards the **efficiency** of financial supervision: The fragmented structure of financial supervision creates duplicated reporting duties and causes inconsistent requirements for internationally active financial institutions. In other words, rather than being rewarded for advancing the single market, pan-European banks are given additional burdens – which is all the more deplorable as this hampers the competitiveness of Europe’s large financial services companies as well as Europe’s financial markets at large in global competition. At the same time, inconsistent regulatory behaviour across member states distorts competition between financial firms from different countries. And not to forget: uncoordinated action by supervisors entails the danger of simultaneous, yet uncoordinated regulatory action, which is one reason for the increasing incidence of overregulation, which is becoming a major concern for the financial industry. At the same time, duplicated and inconsistent supervisory activities are an inefficient use of scarce supervisory resources.
- c) Thirdly, the issue of **accountability**: the necessity to find pragmatic answers to the objective challenge of supervising trans-national financial actors and markets in a system of nation-based financial supervisory authorities leads these authorities to seeking pragmatic solutions. This is a rational response and better than inaction; but it carries the danger that these pragmatic solutions lead to an unequal treatment of the same issue by different regulators – and, hence, competitive distortions. More seriously, these solutions may lead into a legal grey area, where accountability structures are unclear. Specifically, the close cooperation of financial supervisors in the so-called level 3 committees (CEBS, CESR and CEIOPS) – raises questions about their legal status, if and when their cooperation by means of soft law is so intensive and successful that they become de-facto rule-setters.

The more successful and powerful the level 3 committees become, the more they will be in danger of exceeding their mandates. Informal arrangements between supervisors and the use of soft law are welcome – in a bilateral as well as a multilateral setting – but ultimately there must be legal clarity for supervisors, for parliaments, for financial services providers and for depositors and investors.

3) Options for developing the systems

8. As stated above, the structure of financial supervision must correspond and, hence, must evolve with the structure of the financial systems. As EU financial markets and the structure of EU financial institutions will continue to evolve, it would be inappropriate to apodictically truncate a discussion on the structure of financial supervision for political reasons or for fear of having to change established structures. An open discussion on the relative merits of alternative concepts is warranted. Consequently, a continuous monitoring must be established to ascertain whether the structure of financial supervision continues to meet the above-mentioned objective criteria and – if satisfactory improvements cannot be achieved within existing structures – whether other concepts (some of which are discussed below) will ultimately be warranted. A report on this should be published annually by an expert group based on consultations with all stakeholders.
9. A number of alternative concepts are being discussed at present. These include proposals, such as,
- essentially conserving the status quo;
 - giving greater powers to the Level 3 committees, e.g. by giving them power to mediate disputes between L3-committee members (as was suggested, e.g. in CESR’s Himalaya report)
 - establishing a lead supervisor system (as, e.g., proposed by the European financial Services Roundtable, EFR)
 - establishing a separate, mandatory regime for multi-jurisdictional institutions only
 - establishing a European System of Financial Supervision (ESFS) with an ESCB-type structure.
10. Conserving the status quo and complementing it with mechanisms for improved cooperation and coordination would appear to have an advantage in that it is politically feasible and can be implemented without major (legal and operational) pre-requisites. Nonetheless, conserving the

status quo is a practical stop-gap measure, but not a long-term option. The present arrangements create a supervisory structure that is neither efficient nor effective in terms of ongoing supervision and crisis management. Likewise, as has frequently been evidenced, present supervisory arrangements are a severe obstacle to further market integration. The present arrangements also endanger the principle of competitive neutrality of supervision – and stand in the way of a more effective EU voice in international financial diplomacy.

11. While the work of the Level 3 committees can be improved, there are limits to what is possible under the legal nature of the Level 3 committees: as they are inter-governmental by nature, the committees depend on the voluntary compliance of national supervisors with the rules agreed upon. In general, as long as there are national supervisors, these (a) will have an interest in tilting the playing-field in favour of their institutions and (b) will use their powers to supervise operations within their jurisdictions.
12. Giving greater powers to the level 3 committees could, in principle, increase the effectiveness of supervision and lead to a more consistent and hence competitively neutral supervision in the EU. They could also be empowered to appoint a lead supervisor for cross-border groups in the EU, by means of which the lead supervisor would be based on a European mandate.³³ However, increasing the powers of the level 3 committees will inevitably lead to conflicts with their legal status³⁴: presently, the level 3 committees are purely intergovernmental and have no legal personality. They are therefore legally not allowed to take binding decisions which have legal power in and vis-à-vis member states. Put differently: expanding the use of "soft law" techniques at Level 3 risks a situation in which political accountability is unclear and market participants are faced with legal uncertainty.
13. The lead supervisor concept as suggested by the EFR would build on the model of the consolidated supervisors as established in art. 129 CRD. In contrast to the consolidated supervisor, the lead supervisors, as suggested by the EFR, would have more encompassing power. Specifically:
 - The lead supervisor would chair a college of supervisors that would comprise at a minimum all supervisory agencies in whose jurisdictions the financial institution has sizeable operations.
 - The college of supervisors is the forum in which all supervisors involved share relevant group-wide and local information regarding the financial group in question.
 - The lead supervisor would be the single point of contact for the financial institution in question and would be the sole authority for all matters of prudential supervision at group level, including, but not limited to, model validations and authorisations, pillar 2 issues and capital allocation.
 - The lead supervisor would coordinate reporting requirements and coordinate all on-site examinations
 - The lead supervisor would make intelligent use of the expertise and knowledge of local supervisors / other members of the college and entrust tasks to them by means of the delegation of tasks and, where appropriate, responsibilities.
 - A mediation mechanism would be available if disagreements were to arise between the lead supervisor and other members of the college.
 - In order to avoid competitive distortions, the lead supervisor concept must be applied by all member states. To ensure this, a legislative basis – most probably an EU regulation (directly applicable in all member states) – will have to be created. This should not prevent supervisors, in the interim, from continuing current efforts to improve supervisory practices, inter alia by means of supervisory colleges and the delegation of tasks and responsibilities.

³³ Cf. Sander Oosterloo and Dirk Schoenmaker (2004): A lead supervisor model for Europe; in: The Financial Regulator, Vol.9, No. 3, December.

³⁴ This was also noted by the IIMG in their latest report, cf. IIMG (2004): Third report monitoring the Lamfalussy Process; p.29.

14. The lead supervisors would be a positive step towards a more effective and efficient structure for financial supervision in the EU, which would be conducive to fostering cross-border integration of EU financial markets. As it builds on existing legal provisions such as Art. 129 CRD, the lead supervisor model could be a near-term arrangement for financial supervision in Europe, which simultaneously (a) would bring about a substantial improvement for the effectiveness and efficiency of financial supervision in the EU, (b) seemed politically acceptable and (c) could be realised with comparatively little change in the legislative framework.
15. However, the lead supervisor regime, too, has its deficiencies. First, it might be problematic for member states with smaller financial systems in both a political and a financial stability perspective: As smaller states, on average, tend to be host rather than home to multinational financial institutions, these states would, by and large, lose direct supervisory powers over the financial institutions operating in their jurisdictions. While they would be fully involved by means of the supervisory college, this may still cause political uneasiness. Second, the lead supervisor system would in all likelihood necessitate changes to the mechanisms for crisis management, the reason being that the lead supervisor would create externalities: While the concept would give the lead supervisor the power to take supervisory action – including, ultimately, the power to close institutions – the consequences of these decisions would, under existing structures, be born by other jurisdictions, too.
16. Establishing a separate, mandatory regime for multi-jurisdictional institutions only would offer the opportunity to establish an efficient and effective regime for these institutions, while keeping existing structures for the vast majority of EU financial institutions (i.e. those that are only active in one member state) as they are. Erecting such a regime would require EU-level legislation (possibly a Treaty change) and willingness of member states to cede sovereign rights to an EU-level institution. As is the case in the lead supervisor concept, the repercussions for crisis management would have to be clarified.

One obvious disadvantage of this kind of bifurcated-regime model would be the danger that it might violate the principle of competitive neutrality by introducing different supervisory regimes for multi-jurisdictional and single-jurisdictional financial institutions – which, after all, compete directly with each other in local markets. It may also lead to disputes about competences between the national supervisory authorities and the EU-level one, which might be particularly damaging in a crisis situation, where smooth cooperation would be needed, because problems at a large EU financial institution would inevitably have repercussions on smaller players.

17. An ESCB-type European System of Financial Supervision (ESFS) would comprise a new EU-level institution (a European FSA, or EFSA) which would supervise the systemically relevant financial institutions that operate on a pan-European basis and would be the final authority on interpretation and implementation of EU financial market rules in cases of conflicts between national regulators. Small and domestically-oriented institutions would continue to be supervised by national authorities, acting on the basis of common rules and subject to the final say of EFSA. Such a structure would overcome the potential problem of competitive distortions by giving, in cases of conflicts between regulators, the final authority on interpretation and implementation of EU financial market rules to the central institution, EFSA. Unlike in other concepts, it would be legally impossible for national authorities to impose additional requests / burden on banks. The model would also offer the advantage of being organisationally efficient, by leaving national supervisory structures as they are and limiting the direct influence of EFSA to multi-jurisdictional firms.³⁵

In a crisis situation, there would be no uncertainty in both official and private sector on which authority takes the lead; there would also be no danger that information on financial health of banks is withheld by national supervisors. The problem of how to deal satisfactorily with “systemically important branches” would be resolved, as host countries would have shared responsibility via the EFSA.

³⁵ Note that EFSA is not a „single“ nor „centralised“ EU supervisor that would oversee all EU financial institutions directly.
IP/A/ECON/RT/2007-05

18. Building an ESFS-type model, too, would require EU-level legislation, possibly a Treaty change – making it a medium-term option only. In addition, satisfying arrangements for the political accountability of an EFSF would need to be found. A possible downside of the ESFS-model would be that it would reduce the scope for regulatory competition – though it could be argued that an ESFS would, of course, find itself in regulatory competition with other regulators around the globe. Such a concept also implies a greater degree of harmonised Law in areas relating to enforcement. Additional specific issues also arise in non-prudential areas of regulation such as conduct of business and market supervision. A further risk is that the ESFS model could lead to overregulation if it merely added all existing national practices instead of establishing a new, streamlined and efficient system. Difficulties with aligning it to the lender of last resort and deposit protection / insurance guarantee schemes would also remain, if these were kept in their current form.
19. Looking at the various options, there obviously is a general trade-off: Essentially, while the more supranational alternatives would be more difficult to realise given the political and legal prerequisites, they would have the advantage of providing a clear-cut, consistent framework, where accountability and responsibilities were clear and where costs would be lowest for all parties concerned.

4) The way forward

20. The options discussed above would seem to argue for a three-step approach:

- **Step 1: Empowering the Level-3 committees**
 - Current efforts to increase co-operation between financial supervisors in the EU are most welcome. Committees established in the context of the Lamfalussy process (CESR, CEBS, CEIOPS) certainly help to improve consistency of implementation by means of common guidelines, peer review and scorecards.
 - More importantly, interaction in the level 3 committees may, over time, also increase the level of trust between supervisors – which, ultimately, may be their most important contribution.
 - The 3L3 need to be able to take decision on the basis of qualified majority voting.
 - Level 3 guidelines need to be legally binding.
 - Extensive use should be made of supervisory disclosure which might put pressure on national supervisors to bring their practices in line.
 - Level 3 members should make extensive use of the delegation of tasks and responsibilities (and EU member states should provide a robust basis in their respective national laws for these forms of delegation to take place).
 - All Level 3 members should have identical powers within their respective jurisdictions.
 - All Level 3 committees should have at their disposal an effective mediation mechanism.
 - Currently, individual member institutions of the level 3 committees suffer from competing mandates: While, as members of the 3L3, they are supposed to form a common supervisory culture and achieve supervisory convergence, at the same time, as national authorities, they are mandated to act in the national interest. In order to align the incentive structure, level 3 committee members should have a European, not a national, mandate in order to give them the legal footing and incentive structure to develop a truly European supervisory culture.
- **Step 2: establishing the lead supervisor regime**
 - In the medium-term, a lead supervisory regime along the lines of the suggestions made by the EFR should be established that would give multi-jurisdictional firms a single point of contact for essentially all supervisory issues they have within Europe.

The lead supervisor would have responsibility for all operations of a financial institution within the EEA, for both branches and subsidiaries.

- **Step 3:** Over time, such a lead supervisory regime could evolve into a genuine, supra-national European system of financial supervisors along the lines of the ESFSA structure sketched above.
 - The new EFSA should be an integrated (cross-sectoral) supervisor à la BaFin / UK FSA for two reasons: (a) Many of the largest EU financial institutions which would be under the direct supervision of EFSA are financial conglomerates; (b) against the background of the emergence of a pan-European capital markets infrastructure (exchanges consolidation; pan-European C&S systems; concentration of capital-markets activities in London with ensuing cross-border business) the responsibility for conduct of business supervision ought to be on the EU-level. Institutional arrangements on the national level can remain or, where need be, develop according to national preferences as long as these arrangements are effective and follow the common rules as defined by the ESFSA.

21. It should be noted that, from a political point of view, an ESFSA system, while difficult to agree upon in the first place, would have one significant advantage over the lead supervisor regime: Smaller countries that would essentially lose direct supervisory authority under a lead supervisor system (and indeed even a consolidated supervisor regime), would regain an influence via a pan-European structure. In a way, the ESFSA would thus bear some noticeable resemblance to monetary policy, with small countries that had passively followed German monetary policy prior to EMU regaining a voice in setting monetary policy by means of pooling sovereignty.

5) The role of central banks in financial supervision

22. The academic literature does not give unequivocal evidence on an optimal structure for financial supervision. This is perhaps not surprising given that the supervisory regime ought to be, in order to be optimal, attuned to the respective financial system it is designed to protect. As the development, structure and maturity of financial systems vary considerably, it follows that no single model will fit in all circumstances. Nevertheless, there are good arguments that speak against entrusting financial supervision to the central bank, especially in a mature, diversified financial system, such as the EU's.

23. In the EU, financial supervision should be kept separate from the central bank for a number of reasons.

- a) The traditional argument is that a conflict of interest can arise between the tasks and aims of a central bank and those of a financial supervisor. Central banks responsible for financial sector (especially: banking) supervision might be tempted to maintain a loose monetary policy in order to support financial institutions. This is not an entirely academic notion: for instance, the steep US yield curve in the early 1990s has been interpreted as a rescue operation for the US banking system reeling from the 1980s debt crisis.

It is occasionally claimed that this is no longer an issue in the Eurosystem, as in this system national central banks do no longer control monetary policy. This argument is not entirely convincing: First, national central banks have an active part in determining the role of monetary policy in the euro area – as they are usually only too keen to point out. So, while the potential for a conflict of interest may have diminished because a national central bank only has one vote, it is clearly still there. In fact, it will be even greater, once a greater number of financial institutions emerge, which operate on a European scale and which will therefore be of interest to a number of Council members. Second, if the supervisory function were given to the ECB, the argument of a potential conflict of interest would hold all the more, given the weight of the ECB directorate in the Council and the pivotal role of the ECB in analysing monetary conditions in the euro area.

- b) In addition, central banks that are also banking supervisors have a reputational risk: if they fail in their role as supervisor, this will undermine their credibility for monetary policy, too.

- c) It is a fundamental rule that institutions should have clearly defined mandates in order that parliaments and the public can hold them accountable for their actions. This is all the more important for institutions which – rightly – have as much independence as central banks. Given the ECB’s two mandates – one for fighting inflation and one for safeguarding financial stability – would make it more difficult to define clear accountability structures. This argument carries particular importance in the EU, where accountability of EU-level institutions is often questioned anyway. Moreover, the more diverse and the more political the tasks of a central bank is, the greater the risk of political interference.
 - d) It would be incompatible with basic democratic principles to entrust too much power to a single institution. This holds particularly true in the case of institutions that dispose of a great level of autonomy and independence, as the ECB – rightly – does.³⁶
 - e) It is often claimed that central banks must be close to the market in order to perform their job and that they gain insights into the health of financial institutions through monetary policy operations and through running the payments system. Both claims, no doubt, are valid, but it does not follow logically that central banks must supervise those institutions, only that there should be a very close exchange of information between central banks and supervisors and the industry. Put differently: Central banks’ responsibility for securing systemic stability is not cast in doubt if the central bank does not have direct responsibility for banking supervision. The information that central banks need in order to fulfil their primary function is available even without their direct integration in banking supervision. The proposition that central banks would have to be assigned the supervisory function because of their greater market proximity is not a logically compelling argument. As a participant in the money market and foreign exchange dealings, central banks are party to market developments; no supervisory function is needed in this regard. The use of knowledge which a central bank acquires as a result of its involvement in payment transactions, refinancing operations and other activities in the financial markets can flow into the supervisory process without the central bank being responsible de jure for prudential supervision
 - f) In addition, as mentioned above, a strong case can be made for an integrated form of supervision comprising banking, insurance and securities markets supervision under one roof. Again this would speak against entrusting supervision to a central bank not only on the basis of the arguments against a concentration of powers, but also because it is not evident why central banks should have a comparative advantage in supervising conduct of business in securities markets (or insurance markets, for that matter).
24. Even central bank intervention in a crisis is not predicated on a supervisory function. Rescue operations do not require monetary-policy measures, but rather a coordination (which can also be carried out by other institutions) of private creditor action or the deployment of public funds. Monetary measures play only a short-term flanking role (see below for more detail). Placing the supervisory function with the central bank on grounds that it has to guard against systemic risks is much more likely to create an environment for moral hazard, instead.
25. Summing up, financial supervision and central banking **should be kept separate**. Arguing against establishing the role of financial supervision at the central bank does of course not mean that there should not be an involvement of the central bank in financial supervision. Central banks should be involved in the supervisory process in a suitable manner: on the one hand, it is impossible to achieve lasting monetary stability in an instable financial system. On the other hand, the macroprudential supervision of central banks (examining financial vulnerabilities of the financial system at large, not that of individual banks) is a useful complement of the microprudential work of financial supervisors. In addition, central banks obviously occupy a pivotal role in crisis management. Hence, there should be close dialogue between financial supervisory authorities and central banks.

³⁶ Though it needs pointing out that central banks that have a supervisory function enjoy autonomy and independence only as regards monetary policy, not as regards their role as banking supervisors.

6) Crisis management

26. It is important to be aware that the issue of financial crisis management is a **pressing concern for the EU quite irrespective of any potential changes to the institutional structure of financial supervision in the EU**. Already today, there are a number of pan-European financial institutions whose impact on the systemic stability in the EU is such that their failure would have repercussions beyond their home jurisdictions.
27. Having said this, it is, of course, also true that any change in the institutional structure of financial supervision in the EU which would entail more supra-national features would require changes to the process for crisis management, too.
28. Given the integration of EU financial markets and the existence of pan-European groups, potential disturbances would no longer be confined to any national jurisdiction. Instead the failure of a large institution would have negative consequences in more than one member state. There are a number of transmission channels: Directly via interbank markets, counterparty risk and investment in financial assets issued by the institution in question; indirectly via abrupt changes in asset prices, liquidity crunch, and the impact on GDP or the Euro exchange rate.
29. The current structure, inefficient as it may be, provides sound legal and regulatory basis for crisis prevention and stipulates clear legal responsibilities for the supervision of multi-jurisdictional banks. However, it is not clear whether this simultaneously leads to efficient structures when it comes to crisis management: It may well be that current structures lead to inefficient outcomes precisely because the incentives resulting from the current set-up neither provide a framework for quick reaction nor encourage cooperative behaviour in times of crisis.³⁷
30. Thus, it is not clear whether the current system sets sufficient incentives for an effective exchange of information between supervisors in times of tension. Given their national mandates and their obligation to safeguard, primarily, the interest of their own country, there might, in times of crisis, be an incentive to disclose information about asset quality, capital, and liquidity selectively or delayed only. There also is a lack of a common methodology for assessing the risk stemming from a financial crisis – such a methodology obviously being the precondition for a common assessment of the risk situation and for the design of a strategy for effective crisis management. Finally, there is a lack of agreement on common principles for crisis resolution, without which the inclination of individual member states to intervene might differ significantly and without which the signals given to the markets would be unclear.
31. Current discussions on crisis management lack a sufficient delineation of different situations, i.e. taxonomy of different types of crises. In particular, it must be distinguished between (a) a crisis involving a bank that sees an idiosyncratic deterioration of the asset quality of its asset base (e.g. the mortgage portfolio in reaction to a sharp fall in real estate prices) and (b) a crisis that has its origins in capital markets (e.g. a sharp movements in the prices for structured financial). The latter is likely to leave less time for a solution than the former and will require a different mix of rescue instruments.
32. A differentiation will also need to be taken according to relative importance of the institution in its home country on the one hand and in host countries on the other hand, as this will affect authorities' behaviour.
33. The essential objective must be to achieve an incentive structure that ensures that all parties involved have an incentive to act in a way that ensures that the *overall* cost of the crisis to the European economy is minimized. Currently, there is an incentive to minimize the perceived cost to the national economy – which potentially may lead to uncooperative behaviour and a ring-fencing of assets that happens to be within the jurisdiction.
34. In thinking about crisis management it must be kept in mind that the resolution of financial crises is more of an art than a mechanistic application of pre-determined rules. This holds true both in

³⁷ This also seems to be suggested by the results of the various crisis management exercises. While the experiences gained in these exercises have not been disclosed publicly, it has been indicated that they point to deficiencies in reaching cooperative solutions.

case of difficulties of an individual institution and, *a fortiori*, in case of a system-wide crisis. Hence, the arrangements for crisis management must be adaptable to the specific features of a crisis. Therefore, it would be inappropriate to frame the discussion on pan-European crisis management in terms of setting strict *ex ante* rules on who gives how much: The lesson from past financial crises is that authorities and the private sector have to and do come up with case by case solutions depending on the nature of the crisis. This is not to say that it is not useful and necessary to define basic principles for crisis management, such as the basic principle that the objective of crisis management is not to save individual banks but to maintain systemic stability at the lowest costs. There should also be no doubt, that shareholders suffer losses and management be held accountable.

35. Crisis management involves the interplay of various actors and will usually involve different mechanisms. The crisis of a pan-European institution will require changes to all of these mechanisms in order to ensure that they can effectively contribute to limiting the fall-out from a crisis.
36. *Private sector contribution:* Private sector involvement has always been an important element in crisis resolution for three reasons. First, it enlarges the pool of available resources. Second, it is often indispensable for the orderly wind-down of a failed institution in order to provide for the continuity of outstanding contracts in financial markets, so that chaos is prevented. Third, it is assumed that private sector involvement has a positive impact in terms of market discipline and limits the costs of crisis resolution to the general taxpayer. However, the limits of private sector involvement must also be acknowledged, especially when drawing on private institutions threatens to endanger the viability of the hitherto healthy part of a financial system. In addition, private sector involvement requires that the institutions feel a sufficient degree of self-interest in maintaining the stability of the market in question. As a consequence of the latter, private sector solutions are, at present, only realistic in a national context or in markets marked by a high degree of concentration (as was the case with LTCM). In contrast, it is an open question whether EU banking markets are already interlinked to a degree that would provide sufficient incentive for a private sector solution in the case of the crisis of a systemically relevant institution. Moreover, up until now no effective processes have been defined to coordinate action amongst private sector players as well as their interaction with authorities. Hence, while the private sector can be drawn upon in order to deal with the crisis of a smaller institution, it is unlikely to be the answer in the case of a systemically relevant institution, let alone in case of a large-scale banking crisis. Consequently, in these cases some combination of official money (fiscal funds and central bank money), private funds and deposit insurance / insurance guarantee funds will be necessary.
37. *The fiscal dimension:* As past experience (e.g. in Sweden, France, Italy, Spain, the US) shows the use of fiscal resources will have to be considered by governments in cases of large-scale financial crises. The potential contribution of individual member states to such a stabilisation of the EU financial system following the failure of one or several pan-European financial institutions obviously has marked repercussions on the incentive structure of governments. Need to strike a balance between different objectives: Uncertainty about the distribution of fiscal burdens in case of a financial crisis might cause a severe delay in dealing with the crisis and may, thus, ultimately increase the final bill. At the same time, it is not advisable to create too tight a corset for organising fiscal support, as this would stand in the way of the flexibility needed to create tailor-made, innovative solutions to any given crisis. Against this background it is, on balance, not advisable to define *ex ante* formulas for the sharing of fiscal burdens between member states – not the least because the formula may not prove appropriate once the crisis strikes. (To illustrate: Assume that the formula would be based on the share of total assets of the financial institution question held in individual member states. Then obviously the formula would need to be adjusted regularly in response to changes in the geographic distribution of business; it would also set a – presumably unwanted – incentive to shift assets in times of tension.) By the same token, it is probably not advisable to establish institution-specific MoUs that would specify concrete operational arrangements for crisis management, not least because this also creates the danger of divergent regimes for individual institutions which might be problematic in terms of level-playing field issues.

38. Not defining rules ex ante on burden sharing does obviously carry the risk, though, that valuable time will be lost in times of a crisis while member states (and possible third countries affected) bicker over sharing the bill. It might therefore be useful to examine whether it would be appropriate to have available a pool of funds fed by all member states which would initially step in in case of a crisis, but would be replenished subsequently by the member states affected, with contributions being apportioned ex post (and thus in calmer times). Obviously, such a pool of funds would affect the incentive structure and therefore the behaviour of governments in times of crisis. In particular, the availability of funds may induce authorities to intervene more willingly, rather than to let institutions fail and let market participants bear the consequences. Especially the rules on the replenishment would therefore need to be strict enough to avert such behaviour. In addition, the administration of such a fund would need to be in the hands of a neutral institution.
39. *Central banks / emergency liquidity assistance*: There is significant confusion about lender of last resort operations. Much of the debate is still couched in terms of the classical lender of last resort to a solvent, but temporarily illiquid bank. This is not a relevant issue: While these things may occasionally happen in the context of an operational failure (e.g. a terrorist attack on an IT centre), these are not the kind of events that one usually associated with financial crises sensu stricto. The other thing to notice about the lender of last resort issue is that this is the area where it will be least difficult to solve on a pan-European basis. Based on the agreements within the Eurosystem as regards lender of last resort operations by national central banks, the ESCB is de facto already the pan-European player, even though legally the right to operate lender of last resort operations rests with national central banks.
40. The concerns of central banks about moral hazard are understandable and so is, based on this notion, their desire to maintain a structural ambiguity about under which conditions liquidity would be provided. However: First, moral hazard is grossly overrated as a problem and can be addressed appropriately by means of various mechanisms that guarantee that banks' managers do not succumb to moral hazard (especially the removal of management). Second, as stated above it is an illusion to believe that the lender of last resort function operates in a text book fashion in the cases of a large financial institution. In all likelihood, a central bank would not provide liquidity to the individual bank in question, but rather would provide liquidity to the system.
41. There is a need for EU central banks to state publicly that a workable agreement on liquidity provision in (individual and systemic) crisis situations exists between Euro zone members as well as with non-EMU members. While one can accept the virtues of constructive ambiguity, there must be certainty and confidence about the existence of a workable framework for multi-jurisdictional crisis management – which are currently absent or, at least, far from transparent.
42. *Deposit guarantee schemes (DGS)*: DGS are under review by the Commission anyway in the context of the regular review of the DGS directive. There may be some good reasons why it might be worthwhile to look into the issue with a view towards the question of whether the current set-up is an impediment to the cross-border expansion of banks in the EU or may have an adverse effect on the level playing field. Deposit guarantee schemes currently differ widely between EU member states as regards almost all of their parameters; against this background, previous efforts to come to a more harmonised model brought little progress. But while some action may be desirable for the above-mentioned reasons, there is no need to tackle the complicated issue in the context of finding more efficient structures for EU crisis management: For the kind of crises that are relevant in the context at hand, DGS will not play a major role in solving the crisis. Hence, trying to incorporate DGS into the search for a more efficient structure of crisis management will only complicate things unnecessarily.
43. One important aspect often neglected is the communication to the market in a crisis situation. Processes need to be defined that ensure that there is a coherent communication strategy. It needs to be avoided that different messages are being sent out to the market which would only increase uncertainty and deepen the crisis.
44. Finally, talking about improvements in the intra-EU processes for crisis management must not distract from the fact that, in many cases, third countries would need to be involved to, as the key

European players have a large part of their assets in non-EU countries.³⁸ In particular, the US authorities would presumably be part of any solution to a major financial crisis.

7) Conclusions

45. It would be strongly advisable to think about and to decide on the desired structure of financial supervision in the EU in the current period of high stability in the financial markets, keeping in mind that it will take considerable time to change the institutional structure anyway given the necessary legal changes on both the EU and member state levels.
46. Building on the work of the Francq report on the forthcoming report of the Ad Hoc Working Group on EU Financial Stability Arrangements, a group of experts should be established to monitor the efficiency and effectiveness of the EU's supervisory system, to evaluate different options and to discuss the implications of changing the structure of financial supervision for crisis management mechanisms.
47. If deliberation and action is further delayed, there will be a danger that, following an acute crisis situation, there will be strong political pressure to "do something". In this case, there is a great likelihood that a political decision will be taken to take refuge to the default option offered by art. 105,6 of the Treaty on European Union, according to which the Council can, by unanimous vote, transfer the powers of banking supervision to the ECB. Based on the arguments listed above, this is not the most desirable outcome.

³⁸ According to Trichet (2007), ca 30% of the foreign assets of the key EU players are accounted for by non-EU countries.