

**Policy Department
Economic and Scientific Policy**

Monetary Dialogue – 24th June 2008

Background documents and Briefing notes

This series of briefing papers was requested by the European Parliament's Committee on Economic and Monetary Affairs.

Only published in English.

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Manuscript completed in June 2008.

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DG INTERNAL POLICIES OF THE UNION

- Directorate A -

ECONOMIC AND SCIENTIFIC POLICY

POLICY DEPARTMENT

MONETARY DIALOGUE JUNE 2008

Summary of Monetary Experts' Panel Briefing Papers

for the Preparatory Meeting – 24 June 2008, 13.30-15.00hrs, ASP 3E3

The following summary presents the respective topics of the briefing papers followed by brief points on the main answers of the experts to the questions asked. Only selected main points are mentioned here. For a complete argumentation, please refer to the subsequent papers.

1. How to safeguard general support and legitimacy of monetary policy during times of economic distress in a monetary union?

The economic and financial effects of global financial turbulences, commodity price increases and exchange rate developments may have grave consequences. If these external developments intensify the already existing divergences, the governance of the monetary union may be severely tested. It therefore appears opportune to ask what short term governance improvements could be implemented.

Two main flows of argument are explored in the briefing papers of the experts: Some argue that there is little for governments to co-operate upon or that coordination of macroeconomic policy is unnecessary and could be harmful. Others argue that the role of fiscal policy in the policy mix should be enhanced and set up more effectively.

Arguments for the former include the following strands: The best course of action is to focus in bringing inflation down as soon as practical. This means that the contractionary impact of the supply-side shocks must be accepted as the least bad response albeit it is not a politically appealing conclusion. Governments pressed by a variety of pressure groups may find it expedient to call for the Eurosystem to lighten the burden by adopting a counter-cyclical policy stance. Such a policy would eventually fail because the supply-side shock imposes an unavoidable cut in purchasing power. If still attempted, the policy would leave a trail of higher inflation, which would have to be eliminated in subsequent years.

With regard to the latter view of enhancing the role of fiscal policy, several possibilities are presented. These include among others a renewed role for discretion in fiscal policy involving possibly the scrapping of the objective of a balanced budget over the cycle, introducing some form of *golden rule*, or raising the 3% ceiling of the SGP. In another approach, a co-ordination process could be established via the Eurogroup: national governments should find a common euro area fiscal strategy aiming at stabilising the euro area at aggregate level. Another idea explores the restriction of national fiscal policy to focusing on asymmetric shocks. This would be possible by changing the policy goals of the ECB in such a way that the Bank would be obliged to give price stability and business cycle stabilisation the same weight in its policy deliberations.

Sylvester EIJFFINGER – The ECB should not be compromised by enforced economic policy coordination as this may jeopardize its independence

The ECB executive board members and the governors of the national central banks within EMU could make more efforts to develop and increase monetary literacy among citizens. An opportunity to do that presents itself with the 10th anniversary of the ECB and the euro and the current financial turmoil.

There seems to be a mismatch between the actual and perceived degree of ECB transparency. Despite the "moral" obligation to bring transparency perceptions in line with its practice, the ECB may feel an incentive to keep transparency perceptions misaligned in case they are higher than the actual transparency practice. To benefit from higher transparency perceptions the ECB might be tempted to stress its transparency strengths (political, economic and policy transparency) and to de-emphasize its weaknesses (procedural and operational transparency).

Jean-Paul FITOUSSI – The main problem with the institutional framework is its coherence with a theory approach confining macroeconomic policy to a marginal role.

Economic distress sheds light on an essential problem: the political nature of monetary policy decisions. When an instrument is used to reach several objectives, the policy-maker has to make trade-offs. In a democratic regime, trade-offs have to be made by the elected representatives of the population and cannot be left to a technocratic body.

In fiscal policy, while maintaining some form of peer pressure to avoid free-riding and spillovers, there should be a renewed role for discretion. Scrapping the objective of a balanced budget over the cycle, introducing some form of *golden rule*, increasing the number of exception to the 3% ceiling or raising the ceiling are all measures to allow governments to recover some room for policy in their action.

Gustav HORN - To overcome the coordination problems in a sustainable manner, only the creation of a truly European fiscal authority would help, admittedly an unrealistic alternative.

The institutional setting in the euro area is not optimal for stabilisation requirements. A sensible solution would see a change in the policy goals of the ECB. The central bank could be obliged to give price stability and business cycle stabilisation the same weight in its policy considerations. A disadvantage of such an approach: on the aggregate euro area level, fiscal policy would no longer have a stabilisation function.

A more realistic alternative is to keep institutions as they are but to establish a coordination process via the Eurogroup. National governments should find a common euro area fiscal policy strategy aimed at stabilising the euro area. This means the Eurogroup would have to decide according to aggregate euro area needs. The more unrealistic alternative would be a truly European fiscal authority with the political responsibility lying with the EP and the Commission as executive power receiving euro area wide tax revenue from corporate taxes.

Pedro SCHWARTZ - Coordination of European macroeconomic policies is unnecessary and could be harmful.

Without true fiscal rules some countries still try and counteract economic downturns with ad hoc monetary and fiscal measures. The existing SGP, far from embodying a proper rule, makes fiscal cooperation in EMU highly discretionary and unpredictable from an ex-post perspective. Non-cooperative policy games between the ECB and the national governments will be played with inefficient policy outcomes.

Fiscal policy should be a national competency and the best way towards the optimum would be a fiscal rule (zero deficit rule) to effectively limit unsound fiscal policies. Within a rules-based framework, fiscal policy would not be in conflict with monetary policy and thus there will be no uncooperative games with undesired outcomes.

Charles WYPLOSZ - Monetary policy cannot soften supply-side shocks.

As a severe symmetrical supply-side shock involving oil and food prices is hitting the euro area shortly after the onslaught of a severe financial crisis, it should be remembered that supply-side shocks act as a tax on all citizens. The reduction in purchasing power is unavoidable. Governments may redistribute the burden among their citizens but cannot eliminate the adverse effects.

Attempts to counter the contractionary effects of the shock only lead to higher inflation with no lasting beneficial growth and employment effect. The Eurosystem must therefore focus on its core task and re-establish price stability while governments must avoid seeking to alleviate the pressure they have come under by calling for an expansionary monetary policy.

2. International role of the euro

Current exchange rate developments could suggest that the euro might be on its way to surpassing the dollar as the leading international currency. This sentiment seems to have become more widely shared recently in light of the relatively rapid depreciation of the dollar against other currencies. Would the euro eventually become the leading currency?

The experts evoke the raise of the euro share in foreign currency reserves but also point to the fact that this raise (of about 7%) would be mainly due to exchange rate appreciation. Currently probably a quarter of the world's foreign exchange reserves are denominated in euro. The dollar remains the world's pre-eminent anchor currency with the euro being a regionally important anchor currency. As a vehicle currency, the euro has made little progress and the dollar remains dominant. The dollar is also unchallenged in its position as the most important currency for invoicing and unit of accounting. An important fact in these developments is that the euro area is still a very fragmented banking and capital market which makes it more difficult to exploit the economies of scale, of scope and the network externalities in full, all of which are major pre-conditions for being a leading currency.

Being a leading currency bears risks as well as benefits. Benefits are identified in increasing seignorage income and taking over the role of banker of the world: the euro area would be able to accept short-term deposits at low interest rates in return for long-term investments at higher average rates of return. That is, it would tend to achieve permanently higher returns on its foreign assets than the return paid on its liabilities as foreigners would be ready to accept lower returns on euro investments. As a consequence, the euro area would achieve the possibility of being able to finance large current account deficits for long periods as the US has done for many years.

On the other hand, increased vulnerability to sudden capital flows is the main cost of having one's currency become a major reserve currency. There is also a possibility that the eventual changeover could be abrupt and might imply a sudden leap in the value of the euro versus the dollar and possibly most other currencies. This could push the EU economy into a strong deflation.

Incidentally, Europe should not be proud of the rapid and increasing use of large denomination euro banknotes as they are mostly used for illegal activities.

With regard to commodity prices, there is no direct connection between the rising reserve function of the euro and the increase in these prices. However, the massive rise in foreign exchange reserves in recent years has led to a substantial increase in the liquidity of local currency in emerging markets irrespective of whether the reserves were invested in dollar or euro-denominated assets. This provision of local liquidity has contributed to the smooth financing of the dynamic growth in emerging markets. Thus, it is fair to say that rising foreign exchange reserves have an indirect impact on commodity prices via growth financing.

Guillermo DE LA DEHESA – ECB policy of neutrality with regard to the international role of the euro is the right one.

The ECB should try to make the euro the most stable currency by maintaining long-term price stability. The international role of the euro is the outcome of a market driven process and not the result of interference by central banks and political authorities.

The euro area economic authorities should mainly concentrate on integrating their still segmented banking and capital markets to achieve a larger and more competitive size in order to attract more issuers and investors from the rest of the world and compete on equal terms with the US financial markets.

Unless the euro area achieves a political governance system similar to a federal state, it will be very difficult for the euro to maintain a durable hegemonic status as the leading international currency despite the probable case that it is able to achieve that role in the next two decades. It is a fact that the euro is already being by far the best candidate to replace the dollar in that role.

Jean-Pierre PATAT – It is improbable that the euro will be the leading currency in the next 10 to 20 years.

Even if the role of the euro can still grow, it seems likely that a situation with a 30% international weight of the euro and a 60% weight of the dollar will appear. One can wonder whether the euro area would had great interest in a significant surge of the euro share in foreign investment positions. The euro area has no external deficit and the international financial stability could be strongly affected if, in addition of the US, a major economic area pursued a policy of benign neglect and drained an additional part of the world wide savings, which would be better used in financing poor countries.

The euro is an unfinished strategic operation as the single currency has no unique economic government and even less a political government. It is remarkable for such an atypical concept to have such a great success and to acquire such great credibility. But to become the leading world wide currency it needs probably more decisive steps.

Leon PODKAMINER – There are serious doubts about the eventuality of the euro replacing the dollar as the lead international currency (any time soon).

The existence of network externalities in international currency markets raises doubts about the euro being able to replace the dollar. Institutional inertia may be of vital importance and also the development and levels of sophistication of financial markets. In this respect, the euro area still trails far behind the US.

US macroeconomic policy-making is superior to the policy-making in the EU where fiscal policies are constrained by the SGP. The monetary policy of the FED must be judged superior to that of the ECB - if only because of its unorthodox pragmatism, flexibility, decisiveness and degree of consistency with fiscal policy.

The euro, unlike the dollar, is not a currency of a sovereign state and there is also some residual (however hypothetical) uncertainty about the fate of the euro which may prevent the euro from becoming a lead currency.

Anne SIBERT – Disappointing productivity growth and profligate fiscal policy diminish the euro's attractiveness as an international currency.

The main cost to a country of having its currency become an important reserve currency is increased vulnerability to sudden capital flows. A sudden change in preferences can lead to fluctuations in the exchange rate. For this reason, there are several examples of countries discouraging the use of their currency as an international currency. Its large size, however, lessens this effect on the euro area.

The main benefits are increased seigniorage as foreigners are willing to hold the domestic currency, increased earnings of the financial sector as it attracts more business and insulation from exchange rate changes if internationally traded goods are priced in the domestic currency.

Norbert WALTER - The dollar will remain the most important reserve currency in the longer run

The euro meets essential prerequisites for a key global currency. However, the dollar will remain the most important reserve currency in the longer run as the dollar is likely to be benefiting from a higher US growth dynamic and a lower current account deficit beyond 2010.

A bipolar international monetary system would not be unstable per se. It is likely to stimulate economic and fiscal policy discipline on both sides of the Atlantic. Large and liquid euro financial markets are likely to cope smoothly with abrupt and massive capital flows.

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HOW TO SAFEGUARD GENERAL SUPPORT AND LEGITIMACY OF MONETARY POLICY DURING TIMES OF ECONOMIC DISTRESS IN A MONETARY UNION?

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

The purpose of this briefing paper is to investigate how to safeguard general support and legitimacy of monetary policy during times of economic distress in a monetary union. The economic and financial effects of global financial turbulences, commodity price increases and exchange rate developments may increase the divergences in economic performance inside the monetary union. If these external developments intensify the already existing divergences, the governance of the monetary union may be severely tested. It therefore appears opportune to ask what short-term governance improvements could be implemented under the current institutional setting (including changes in the Lisbon Treaty). Three questions could be relevant:

(1) How should member states individually or collectively (e.g. through the Eurogroup) behave in order to maximize general trust in monetary policy and the single currency? How should short-sightedness and scapegoating be avoided? It is evident that the challenges for economic policy and communicating with the general public will be different depending on the economic situation of the member state in question. Would more coordinated public statements from the euro group be necessary, or is informal peer pressure and peer support inside the euro group sufficient? (2) How could the ECB improve its dialogue with all relevant parties? It is not evident whether the general public sees the only established channel for holding the ECB to account, the quarterly meetings with the European Parliament, as sufficient. (3) How could the ECB improve its functioning? With more and more countries joining the euro area, the size of the Governing Council is increasing. How will the new voting mechanism in the Governing Council, once it takes effect, affect the functioning and decision-making of the Governing Council? Could the transparency of the monetary policy decisions be developed e.g. by enhancing the role of public hearings of ECB Executive Board members at the EU and national level? Our own position is that the ECB should not be compromised by enforced economic policy coordination as this may jeopardize its independence. However, the ECB executive board members and the governors of the national central banks (NCBs) within EMU could make more efforts to develop and increase monetary literacy amongst the European citizens. This monetary literacy is still in its infancy. Finally, we discuss the mismatch between actual and perceived ECB transparency based on a survey among Dutch households. To benefit from higher transparency perceptions, the ECB might feel tempted to stress its transparency strengths (political, economic and policy transparency) and to de-emphasize its transparency weaknesses (procedural and operational transparency).

1. Introduction¹

The purpose of this briefing paper is to investigate how to safeguard general support and legitimacy of monetary policy during times of economic distress in a monetary union.

The economic and financial effects of global financial turbulences, commodity price increases and exchange rate developments may increase the divergences in economic performance inside the monetary union. If these external developments intensify the already existing divergences, the governance of the monetary union may be severely tested. It therefore appears opportune to ask what short-term governance improvements could be implemented under the current institutional setting (including the changes foreseen in the Lisbon Treaty). This is particular of importance as some academics argue that the "current institutional setup largely keeps the member states in a non-cooperative policy game" (Von Hagen and Mundschenk, 2003). In particular, it would be useful to discuss more concretely what should be the responsibilities of all relevant parties during economic tensions in order to increase general "ownership" of the euro. The following questions could be relevant:

(1) How should member states individually or collectively (e.g. through the Eurogroup) behave in order to maximize general trust in monetary policy and the single currency? How should short-sightedness and scapegoating be avoided? It is evident that the challenges for economic policy and communicating with the general public will be different depending on the economic situation of the member state in question. Would more coordinated public statements from the euro group be necessary, or is informal peer pressure and peer support inside the euro group sufficient?

(2) How could the ECB improve its dialogue with all relevant parties? It is not evident whether the general public sees the only established channel for holding the ECB to account, the quarterly meetings with the European Parliament, as sufficient.

(3) How could the ECB improve its functioning? With more and more countries joining the euro area, the size of the Governing Council is increasing. How will the new voting mechanism in the Governing Council, once it takes effect, affect the functioning and decision-making of the Governing Council? Could the transparency of the monetary policy decisions be developed e.g. by enhancing the role of public hearings of ECB Executive Board members at the EU and national level?

In the following sections we will investigate these three questions accordingly. Section 2 reviews the literature with respect to the first question, while section 3 discusses the literature regarding the second and third question. Section 4 gives our own opinion based on this literature and concludes. Our position is that the ECB should not be compromised by enforced economic policy coordination as this may jeopardize its independence. However, the ECB executive board members and the governors of the national central banks (NCBs) within EMU could make more efforts to develop and increase *monetary literacy* amongst the European citizen. This monetary literacy is still in its infancy. Finally, we will discuss the mismatch between *actual* and *perceived* ECB transparency.

¹ The author gratefully acknowledges the very helpful comments of Drs. Edin Mujagic, MSc and the excellent research assistance of Mr. Rob Nijskens, MSc.

2. How should individual member states behave individually or collectively?

How should member states individually or collectively (e.g. through the Euro group) behave in order to maximize general trust in monetary policy and the single currency?

In their paper, Von Hagen and Mundschenk (2003) state that “the current institutional setup largely keeps the Member States in a non-cooperative policy game”. They attribute this to the fact that the coordination in the EMU is relying on “soft” enforcement, such as dialogue, exchange of information, peer pressure and persuasion. This indicates that EU member states are unwilling to give up further sovereignty over their economic policies. They also mention that, apart from the Single Market and the EMU monetary policy, the coordination of policy operates under a narrow agenda. However, a broad agenda, which also develops an explicit framework for cooperation in policy, should be preferred. Additionally, the development of transparent rules for reactions to unexpected shocks is key in coordination between monetary and fiscal policy, also because it greatly helps guide private sector expectations about policy variables. Concerning the working of peer pressure, they stress that large countries are not very responsive to peer pressure in a monetary union, as follows from experience. This has also been demonstrated in the past by, among others, France, Germany and Italy. Other EU level mechanisms, like recommendations and negotiations, have also proven to be ineffective due to procedural impediments. The processes for economic policy coordination do not suffice for EMU. For instance, the Broad Economic Policy Guidelines (BEPGs, now Integrated Guidelines) do not distinguish enough between EU and EMU. The eurozone needs broader policy coordination because of the short-run conflict between national (fiscal) policies and EMU-wide monetary policy. A strategic equilibrium between countries and the central bank is then obtained, which leads to sub-optimal output, as the authors demonstrate in their theoretical model of policy coordination. Therefore, the potential to use the BEPGs for policy coordination remains limited. Also, the measures to assure fiscal discipline for monetary policy, such as the Excessive Deficit Procedure (EPD) and the Stability and Growth Pact (SGP), are unsatisfactory because of two reasons. First, the procedures focus on individual member countries, without looking at the aggregate fiscal policy stance for the euro area. Second, there is a narrow focus on deficits and debt. Also, there is no proper mechanism to address short-run fiscal policy conflicts within EMU. There is insufficient focus on EMU macroeconomic variables and lack of a framework to enter into and enforce binding commitments among governments, and between them and the ECB. This leads the ECB to not engage in cooperative policy making with the national governments as long as such commitments cannot be made. Therefore, Von Hagen and Mundschenk (2003) conclude that mechanisms should be designed that facilitate agreement among member states on joint fiscal policy stance at the aggregate level, reconciling this with EMU monetary policy, and expressing country preferences on the output-inflation trade-off at the EMU aggregate level. Experience shows that the latter has been a problem mainly with the larger member states within the eurozone.

EU commissioner Almunia (2008) already reviewed the challenges for EMU in the next ten years. He states that the eurozone’s governance and policy coordination must be improved, especially to address growth, inflation and competitiveness divergences. He believes that the euro has been used as a scapegoat for these developments, to mask unsuitable policies at the national level leading to bad economic results. Changes in economic governance should make the public aware of this and should enforce member states to pursue more sound economic policies. This should mainly been brought about by making strong and binding political commitments. He starts by mentioning reinforcement of the budget surveillance at the national and the multilateral level.

Also, national policies in the eurozone should be discussed before implementation. Almunia (2008) believes that Ecofin will remain the suitable decision-making forum for economic policy, and the Commission intends to play an important role. In the light of the revised Lisbon Agenda, the Commission wants to promote a joint structural reforms agenda for the Eurogroup, among others by improving the dialogue between the ECB, the EP and social partners and promoting the eurozone's interests on the international stage. This has come forward as the EC saying that the eurozone should have a single permanent seat in forums such as the IMF, which should also help developing common positions among the member states. Also, the EMU member states should consult more closely about economic policy at their monthly council meetings, before making major changes to fiscal policy or structural reforms. Additionally, the existing peer monitoring and pressure system should be extended beyond fiscal policy, to take into account current and future economic imbalances and divergences in the eurozone. The Lisbon Treaty already gives the EC the capacity to send direct warnings to member states with worrying economic trends or failing reforms. This should help mitigate spillover effects across the EMU as it would help countries affected by divergences to take measures early.

Bini Smaghi (2008) discusses the implications of the new Lisbon Treaty for economic governance of the European Union. He stresses that there continues to be a contrast between a fully-integrated monetary system and only a partly integrated financial market, as supervision and regulation is still executed at national level. The Lisbon Treaty established some changes, mainly to strengthen the ECB's and national central banks' independence. However, the treaty does not provide for a higher level of harmonization or coordination of economic policies. He emphasizes the importance of coordinating financial market and banking supervision within the eurozone and aligning this with monetary policy, i.e. with the provision of (emergency) liquidity to financial institutions. The recent financial developments require significant improvements in several aspects of the financial regulation set-up, such as the vulnerability of banking and financial systems to external shocks, the aspect that the monetary market within the integrated eurozone transmits external shocks, liquidity provisions that may interfere with monetary policy, if supervisors do not have enough information and politics that stands in the way of efficient regulation. Therefore, Bini Smaghi (2008) sees two main problems: (1) market integration reveals increasing inefficiencies due to different laws in different countries, and (2) the possibility of applying laws in various ways impedes proper coordination of (crisis) policies. The ECB has already suggested two improvements, by strengthening the role of the Committee of European Banking Supervisors to improve coordination and by stressing a greater convergence of laws, mainly to decrease the discretion that national authorities have. In the end, changes should lead to a single regulatory approach. The current crisis also makes clear that this is most necessary in the fields of deposit insurance and management of liquidity risk. He concludes that the asymmetry between a single monetary policy and decentralized financial supervision should be reduced by coordination and reinforcing the common bases of European legislation. It should then be possible to work with the current decentralized system, as long as there is a common, European set of rules as a clear reference point for financial institutions in their cross-border activities, which should be applied consistently by national financial supervisors. This has already been set in motion by the Ecofin, as this body has introduced a European mandate for financial supervisors and strengthened the functioning of the committees of supervisors in the case of cross-border banking groups. Also, a Memorandum of Understanding on cross-border cooperation in crisis situations has been signed.

Begg et al. (2003) examine the coordination within the EU and the adequacy of the system under EMU, mainly the Stability and Growth Pact. They note that monetary integration has increased interdependence between eurozone countries. This leads, under the current institutional setup, to national fiscal policies incompatible with each other, an aggregate fiscal policy stance inconsistent with ECB objectives and unhealthy competition in national supply-side policies. Just like Von Hagen and Mundschenk (2003), they stress the problems of a lack in coordination to agree on an overall set of policy objectives and the possibility of free-riding by some member states, because of the imbalances of power within the EU and its policy actors. Coordination should be built up by creating a common understanding and political commitment, as using coordination as a disciplining device (like the SGP) will meet resistance. Rather, coordination should improve the quality of policy. This should happen by correcting three weaknesses. First, there should be paid more attention to the aggregate fiscal stance of EMU, instead of the budgetary health of separate member states. Second, there should be a stronger enforcement role for an independent institution, like the European Commission. Finally, the whole process of coordination should be made more strategic and less specific to national economies, together with a strong political commitment to coordination.

Begg (2008) adds to this that there will be even new challenges when the EMU is enlarged. He suggests several other changes to economic governance. First, politicization of EMU decision-making should take place by increasing political dialogue and maybe even by having an “overall body at the euro area level”, for instance starting with the Eurogroup. Also, the power of peer pressure could be increased by adding the possibility of enforcement due to public pressure. Finally, increasing the ECB’s transparency can increase the ownership of the euro, which may boost the acceptability of fiscal consolidation at the European level.

Pisani-Ferry (2005) first highlights the problems with the policy coordination in the eurozone, after which he proposes several solutions to make the coordination more efficient and transparent. He defines four problems starting with the definition of fiscal discipline. This focuses on actual rather than cyclically adjusted deficits, which does not take into account economic conditions. Moreover, the focus lies too much on the fiscal deficit rather than on government debt, resulting in an emphasis on short-term constraints as opposed to long-term sustainability. Then, there is still no clear view on the role and coordination of macroeconomic policy instruments in the eurozone, especially concerning the responsibilities of the ECB versus those of the member states. Furthermore, interaction between EU and national procedures remains weak, as the impact of the Integrated Guidelines is often small and the Eurogroup still lacks visibility and power; though, this has been improved in the new Lisbon Treaty. Finally, while structural reforms are a priority for the EU, interaction between these reforms and general macroeconomic policy is insufficient. Pisani-Ferry (2005) proposes several solutions for these problems. First, a common methodology should be used to measure structural deficits and output gaps, which have to be assessed by an independent panel of experts. Also, the focus of fiscal discipline should be redirected from the short-term to a more medium-term approach, aimed at long-run sustainability of public finance. This can, for instance, be achieved by drawing up a Debt Sustainability Pact (DSP). Furthermore, the interaction between the national budget decisions and those at the EMU level (aggregate fiscal stance) should be enhanced by making national policies more consistent with those of the EU. Second, the Eurogroup should adopt a code of conduct, an economic policy charter for the eurozone. This should then serve as a non-binding guideline, based on common understanding of collective economic policy principles.

Third, the coordination among members of EMU should be strengthened, by creating, for instance, a reciprocal binding agreement to consult other member states before taking significant policy decisions, designating a Eurogroup president for a fixed period, and maybe even transforming the Eurogroup into a collective executive body making decisions by qualified majority voting. The latter has been highly politically controversial lately, especially with France and Italy stressing the need for an economic government of the eurozone. Fourth and finally, he suggests that “a constructive dialogue should be developed between the ECB and the Eurogroup”, especially concerning the interaction between structural reforms and macroeconomic policy decisions. This leads us towards the next question: how could the ECB improve its dialogue with all relevant parties?

3. How could the ECB improve its dialogue with all parties and its functioning?

How could the ECB improve its dialogue with all relevant parties and how could the ECB improve its functioning? These questions have also been dealt with in the literature. First, we focus on the issue whether the general public sees the only established channel for holding the ECB to account, the quarterly meetings with the European Parliament, as sufficient. Could the transparency and communication of the ECB’s decisions be improved? Then, the functioning of the ECB Governing Council will be discussed. With more and more countries joining the eurozone, the size of the Governing Council is increasing. How will the new voting mechanism in the Governing Council, once it takes effect, affect the functioning and decision-making of the Governing Council?

Globalization has according to ECB president Trichet (2008) important macroeconomic consequences for the eurozone as well as other regions of the world. It has strong direct effects on price movements, and therefore challenges price stability. This is especially visible in the rise of commodity prices like oil. Additionally, competitive forces alter firm profit mark-up behavior and developments in costs, which underlie price dynamics. Furthermore, financial globalization has effects on monetary policy through global liquidity and changes in long-term interest rates. These are all challenges for guaranteeing price stability, which is as important as ever. For this, clear communication is essential. Central banks can for instance engage in dialogues among each other, and together contribute to a solid international financial architecture. He states that this has already happened in the eurozone. Information-sharing and transparency is imperative to strengthen the resilience of the global financial system, as it gives the private sector information to facilitate investment decisions, risk management and market discipline. This translates to establishing market-based policy frameworks.

Blinder et al. (2008) make an overview of the existing literature on central bank communication and transparency, both theoretical and empirical. Besides concluding that this is a very recent area of research, they do find coherent evidence that central bank communication is important and powerful in conducting monetary policy. Inflation targeting can move financial markets, improve the predictability of monetary policy and help monetary authorities achieve low and stable inflation. Their survey suggests, however, that communication practices are different across central banks, but are evolving. On the other hand, predictability of monetary policy has improved substantially in many countries. This can be degraded somewhat when there are conflicting statements, as has happened before at the Fed. The ECB, however, makes clear, consistent statements. They also distinguish between short-run and long-run central bank communication. Short-run information, such as official statements, reports and minutes seem to have the clearest effects on financial markets. Also, it has been found that markets move in the “right” direction, i.e. the effects of short-run information help the central bank rather than hindering it.

Long-run information, such as announcement of an inflation target, does anchor inflationary expectations. However, it has not been shown that inflation targeting leads to lower or less variable inflation. Finally, Blinder et al. (2008) mention practices such as the publication of the interest rate path, the nature of the central bank's decision making process and the structure of its monetary policy committee and its accountability.

Geraats, Giavazzi and Wyplosz (2008) suggest several reforms for improving ECB's transparency. They conclude that the ECB could do better in transparency, as credibility is decreasing. This is especially due to the clouded decision-making process of the Governing Council, which has led to incorrect anticipation of monetary policy by the market. With the policy rate being now close to neutral, the markets are very uncertain about the next decision by the ECB. Therefore it is utterly important for the markets and the public to understand the ECB's reasoning. To build credibility, the ECB should enhance its transparency by publishing the voting records of its meetings. Although the ECB claims its votes are consensual, this does not mean unanimous and it would be informative to see the voting pattern within the Governing Council. However, they also warn against publishing individual votes, as this may lead to political pressures on the central bank governors. Besides that, the ECB should publish its anticipated interest rate path to shape market expectations. The current system of code words is much too opaque, since they may be misinterpreted and are imprecise, which reduces monetary policy effectiveness. Finally, the ECB should be internally reorganized to rid the Executive Board members from their managerial responsibilities of running the bank. Limited managerial responsibilities should be given to the president and the vice-president, such that the Executive Board can concentrate on its main task: setting monetary policy and explaining it to the public.

Svensson (2006), who has recently been appointed as a deputy-governor of the Sveriges Riksbank, outlines good practices for optimal inflation targeting. He defines the characteristics for good inflation targeting as: (1) having an explicit monetary objective in the form of a numerical inflation target, (2) an internal decision process (forecast targeting) and (3) a very high degree of transparency and accountability. He suggests several changes to central bank behavior to enhance inflation targeting. First, central banks should be explicit about the loss function that they use. Since the central bank uses flexible inflation targeting, the inflation rate is not the only target variable it encounters. Introducing an explicit loss function will reduce the ambiguity and lack of transparency caused by uncertainty about the weight of the several target variables and their inter-temporal substitution pattern. It also removes the ambiguity about the degree of flexibility in inflation targeting. Moreover, it avoids inconsistent and ad hoc ways of making policy choices and, most importantly, provides an operational interpretation of the central bank mandate, which is usually too vague. This will, according to Svensson (2006), greatly increase the transparency of the ECB, will clarify to the public what the ECB's inflation target (objective) actually means, and thereby increase its accountability. Second, the central bank should be more specific, systematic and transparent about the way it arrives at a specific interest rate path and plan by using forecasts since expectations in the market depend on these forecasts. This acknowledges the fact that the decision of setting an interest rate is essentially a decision about the path of this interest rate. Finally, the central banks should report afterwards about the correctness of these internal forecasts and decision process. Publicly announcing the optimal projection and the analysis behind it would have the greatest impact on private sector expectations. It also allows for a sophisticated and precise external evaluation (i.e. by the Eurogroup or Ecofin) of the monetary policy framework and decisions.

Genberg (2004) states that the enlargement of the eurozone will not have large economic effects since the Central and Eastern European accession countries are in this respect small.

Thus, the monetary policy implications for the ECB will be limited to its decision-making structure. To align interests of all countries, including the entrants, Genberg proposes two (second best) changes to the ECB's governance. His first best solution would be delegating monetary policy decisions to a small monetary policy committee made up of independent experts. First, monetary policy decisions should be explicitly focused on eurozone inflation forecasts, to diminish the problems with the relatively large number of country representatives on the ECB's Governing Council. This will effectively mean abandoning the two-pillar strategy. Evidence from Switzerland led to the conclusion that this can have positive effects on the predictability of monetary policy. Second, country representatives should be deterred to vote merely from their country's perspective, but should focus on eurozone-wide conditions. This can be achieved by making the ECB publish the minutes of monetary policy discussions, as well as the voting records of the decision-making process.

For the enlargement of the eurozone, the ECB has proposed a new voting mechanism, which has been accepted by the European Council. This will abolish the "one country-one vote" principle and introduce a rotational system when the EMU reaches fifteen member states. The German Institute of Economic Research (DIW) has proposed to enhance this by making only smaller countries rotate their voting rights, and giving larger countries a permanent vote. Also, the four biggest economies will have the right to propose Executive Board governors. Fahrholz and Mohl (2004) have analyzed these proposals by a voting power analysis (using so-called Banzhaf indices). These show interesting results. First, current EMU members will lose influence on eurozone monetary policy, as expected. However, this differs among the voting mechanism proposals. Second, partisan voting behavior will make current EMU members (mainly smaller ones) to be worse off than when they vote in a non-partisan way, thus strengthening actual ECB independence. Thirdly, when assessing the impact of the various proposals on price stability, the proposal by the ECB is worse than the status quo, i.e. without reforms. The proposal by Fahrholz and Mohl (2004) mitigates the effect of EMU enlargement on price stability. For a critical assessment of the ECB old and new voting mechanism we refer to De Haan, Eijffinger and Waller (2005), which also gives some alternative proposals.

The enlargement of the EMU will have, according to Hefeker (2006), an impact on monetary policy effects, but also on the way monetary policy is set in the eurozone as the Governing Council will be enlarged. He starts with noting that country representatives in the Council will increasingly vote from a regional perspective, something that may be enhanced by enlargement, since the new member states will have different economic situations. Then, the whole monetary stance of the ECB could change due to these new preferences. The rotating voting system of the ECB leads to a higher centralization of monetary policy, since the Executive Board receives more power and the under-representation of larger countries is corrected slightly. Moreover, the new Executive Board will face increasing divergence of economic structures. This will alter the transmission of monetary policy to become more different across member states than before enlargement, which will lead to a less active monetary policy because of increased uncertainty. National governments will take this into account and engage more in reforms to improve the private sector in dealing with economic shocks. Therefore, in the new setup, not having full transparency can have beneficial effects on wage setting and government reform policy.

4. Our own position and conclusion

Our own position is that the ECB should not be compromised by enforced economic policy coordination as this may jeopardize its independence. We will not elaborate this position further as we have extensively dealt with this question in our earlier briefing papers for the Committee on Economic and Monetary Affairs.² However, the ECB executive board members and the governors of the national central banks (NCBs) within EMU could make more efforts to develop and increase monetary literacy amongst the European citizens. The monetary literacy is according to our opinion still in its infancy. An opportunity to do that presents itself now with the 10th anniversary of the ECB and the euro and the current turmoil on the financial markets and the spillovers to the real economy. Members of the Executive Board of the ECB and the governors of the national central banks could draw attention to counterfactual, asking the question: how would different eurozone countries fare, if there would be no monetary union. We think that they would have been much worse off. The exchange rates of the now eurozone countries would be all over the place, with a high probability that the hypothetical exchange rate crisis would have been much bigger than the crisis within the European Monetary System (EMS) in 1992, when the British pound was forced to leave the EMS and, among others, the French franc came under severe pressure by speculative attacks. Nominal and real interest rates would have been much higher than now in a large number of eurozone countries, in particular in France, Italy and Spain. Perhaps (but this is hard to prove) even the present eurozone economies would not have grown as fast as they have done since 1999, if there would have been no EMU and ECB. The combination of the 10th anniversary and the financial crisis is an excellent opportunity for European central bankers, but also for other stakeholders (European Commission, Ecofin, Eurogroup and European Parliament) to develop and increase monetary literacy among the European citizens. This opportunity should be used well by the national governors for giving regular testimonies for national parliaments and for explaining to the public at large.

Moreover, there seems to be also a mismatch between the actual and perceived degree of ECB transparency, which we will discuss further briefly in this concluding section.

Van der Crujssen and Eijffinger (2007) argue that a mismatch between the actual degree of transparency of a central bank and its degree of transparency as perceived by the public is likely to exist and that it matters. Transparency perceptions are based on two factors: (1) actual knowledge of transparency, and (2) psychological factors. Regarding determinant (1), based on a survey among Dutch households on the ECB's transparency we show that actual knowledge is lacking or even incorrect, which is a first evidence for a mismatch between actual and perceived transparency. We find strong indications that this lack of depth and correctness of transparency knowledge is not only present for the public at large, but also for those agents whom the central bank is more keen on influencing: financial experts. Both expert definitions we use (having an economic job and having a very high self-assessed economic knowledge) confirm this viewpoint. Depending on which aspect of transparency it is looked at 46 to 72% of the respondents report that they have no idea about the current transparency practice of the ECB. A majority of the respondents that do report to have knowledge possess the correct knowledge, whereas the rest has incorrect transparency knowledge. About some aspects of transparency knowledge is higher than on others.

² See our earlier briefing papers of 30 November 2004, 23 May 2005, 21 June 2006, 11 June 2007 and 9 October 2007 for the Committee on Economic and Monetary Affairs during the 6th Parliamentary Term.

Dutch households know more about for example the goals of the central bank and the economic information it provides (aspects on which the ECB is relatively transparent) than about whether minutes are published and forecast errors are made public (aspects on which the ECB is relatively intransparent). Regarding determinant (2), psychological factors seem to matter in the formation of transparency perceptions. For example, optimistic people are more inclined to judge ECB's transparency to be high. The share of people reporting transparency perceptions is larger than the share of people reporting to have knowledge about transparency. So, even without having exact knowledge people form perceptions about the ECB's transparency. The finding that transparency perceptions do not only depend on actual transparency knowledge complicates it for central banks to align transparency perceptions with their actual transparency practice. Transparency perceptions matter as they are significantly positively related to the amount of trust in the ECB. This result highlights the importance of transparency perceptions as central banks are interested in keeping up people's trust. It eases their policymaking and increases their effectiveness. We find that when households' trust in the ECB is higher, inflation perceptions are more in line with actual inflation and inflation expectations are better anchored around the inflation target of the ECB, which eases policy-making. The indirect transmission channel analyzed in this paper (from transparency perceptions to the economic outcomes) though seems to be relevant. It is however absent for the majority of the population, but less so for people with relatively high economic "expertise" in whom the ECB is interested the most. The central bank has an accountability obligation to the public and fulfills it by being transparent. In order to do this as best as possible, a closer match between the actual and perceived degree of transparency is welcomed. Despite this "moral" obligation to bring transparency perceptions in line with the ECB's practice, the central bank might feel a perverse incentive to keep transparency perceptions misaligned in case they are higher than its actual transparency practice. To benefit from higher transparency perceptions the ECB might feel tempted to stress its transparency strengths (political, economic and policy transparency), but to de-emphasize its transparency weaknesses (procedural and operational transparency). However, it might not be so easy to develop one communication strategy that works because the manner in which perceptions are being formed is likely to differ between agents and perceptions and not only depends on transparency knowledge, but on psychological factors as well.

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HOW TO SAFEGUARD GENERAL SUPPORT AND LEGITIMACY OF MONETARY POLICY DURING TIMES OF ECONOMIC DISTRESS IN A MONETARY UNION?

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

JEAN PAUL FITOUSSI

Executive Summary

The two recent macroeconomic shocks that hit the world economy - the surge of oil and food prices and the subprime crisis – have revived the attention of policy makers and economists on the consequences of shocks, symmetric and asymmetric, and on the appropriateness of the EMU institutional framework to respond to these shocks. The briefing paper outlines the doctrine that underlies the ECB response to the shock, i.e. an exclusive focus on inflation, and argues that this policy is likely to be ineffective, while it will certainly have deep distributional consequences, having the same analytical effect as of a regressive tax on low income wage earners. The paper then discusses in more general terms how the European institutions face difficulties in the classical instrument/objective assignment problem, which stems from an excess of confidence in market adjustment mechanisms. This contrasts with the case of the US, where market forces and policy interventions complement each other in a virtuous way. The paper then concludes with a number of proposed changes in the economic governance of Europe, which would make the policy reaction to shocks easier and more effective.

In the past months two major sources of uncertainty loomed on the world economy. First, the recent turbulences on the financial markets, triggered by the subprime crisis, whose effects seem not to be over, and are beginning to spill to the real sector through increased credit constraints and deteriorating private agents' confidence. The second element of uncertainty, even more dramatic, is the steep increase of food and raw materials prices³ that depends on both structural and contingent factors, and whose social consequences are causing increasing concern.

The combined macroeconomic effect of these two crises is quite visible. Growth forecasts for the years 2008-2009 are being revised downwards for most countries and economic zones, and the debate is still heated as of how lasting the effects of this twin crisis will be.

An important effect of this period of turbulence is the revived attention on the consequences of shocks on the economy, and on the appropriate policy responses. This is particularly important in the European Monetary Union, where the treaties have left a good deal of ambiguity in the objectives/instruments assignment. How to safeguard the general support in macroeconomic policies in general and in particular monetary policy during times of economic distress in a monetary union is hence a very relevant question. Monetary policy being the main federal policy of the EU, general support in it is crucial for its legitimacy.

This moment of crisis becomes then an occasion to assess whether the current institutional framework of the EMU is appropriate to respond to the different types of shocks that hit the European economies, and to assess its effectiveness and credibility.

³ The ECB forecasts international food prices to increase by 44% in 2008. See *ECB Monthly Bulletin*, June 12th 2008, p 81.

This paper will at first outline the doctrine that lies behind the current European institutional framework, and then argue that while coherent, such framework may be inappropriate to respond to a number of shocks; in particular, in the current situation the policies followed by the European governments and by the ECB are likely to exacerbate the problems faced by the European economies, and by low income wage earners in particular. I will conclude that a more pragmatic approach is desirable, and that the example of the United States may prove helpful.

1. The Design of the Institutions for European Economic Governance

In my briefing paper of March 2007⁴ I described at length the theoretical framework that influenced the creation of the Maastricht institutions. That discussion may be briefly summarized as follows:

1. Once public intervention has coped with externalities, clearing and complete markets that are populated by rational agents usually yield the best possible outcome in terms of resource allocation and growth.
2. When that is not the case, the responsibilities lie with frictions and market failures.
3. The role of economic policy is then simply to remove or minimize these frictions on the supply side (through structural reforms and a reduction of government's size).
4. Any active intervention on the demand side is useless, if not harmful. Once conditions on the supply side are established, the economy will attain the most efficient position unless distorted by public intervention.
5. This has important consequences in terms of policy: if tradeoffs do not exist, the policy maker is not confronted by choices, and there is no role for activist macroeconomic policies. Fixed rules are the preferred tool for conducting policy because they prevent biases in policy makers' actions and constitute an anchor for private expectations. Hence the search for price stability and the obedience to a fiscal rule (the SGP) is more than enough to take care of demand.

Coherently with this conclusion, the European institutional setup, de facto, gives up discretionary economic policy. Monetary policy is delegated to an independent monetary authority, the European Central Bank, which is not accountable to any political body. Fiscal policy is strongly constrained by the Stability and Growth Pact, which barely leaves space for automatic stabilizers to work.

Within this framework, whenever a shock hits the economy the bulk of the adjustment relies on market forces (wage and price flexibility, factor mobility, etc etc), while fiscal and especially monetary policy have a limited role. In particular, barring very particular cases monetary policy has to focus on its primary objective, inflation.

The almost exclusive focus on inflation explains the choice to focus on a headline inflation objective, that is to react to price increases even when they do not directly depend on domestic conditions. In the June 2008 ECB Monthly Bulletin, the ECB explains its strategy as follows:

“The Governing Council emphasises that maintaining price stability in the medium term is the ECB’s primary objective in accordance with its mandate. The Governing Council is monitoring very closely all developments. It is in a state of heightened alertness. By acting in a firm and timely manner, the Governing Council will prevent second-round effects and ensure that risks to price stability over the medium term do not materialise. It is its strong determination to secure a firm anchoring of medium and long-term inflation expectations in line with price stability. [...] Against this background [of increased oil and non energy commodity prices hikes], it is imperative to secure that medium to longer-term inflation expectations remain firmly anchored in line with price stability.”

⁴ Jean-Paul Fitoussi, *Wage Setting and Price Stability*, Briefing paper prepared for the Committee For Economic and Monetary Affairs, no 2007-1, March 2007. The interested reader may also look at Fitoussi and Saraceno (forthcoming).

All parties concerned, in both the private and the public sector, must meet their responsibilities. Wage-setting needs to take into account productivity developments, the still high level of unemployment in many economies, and price competitiveness positions. Moderate labour cost increases are particularly necessary in countries which have lost price competitiveness in recent years. Broadly based second-round effects stemming from the impact of higher energy and food prices on price and wage-setting behaviour must be avoided. In this context, the Governing Council is concerned about the existence of schemes in which nominal wages are indexed to consumer prices. Such schemes involve the risk of upward shocks in inflation leading to a wage-price spiral, which would be detrimental to employment and competitiveness in the countries concerned. The Governing Council therefore calls for such schemes to be avoided.”⁵

To summarize, the ECB argues that it has to tighten its stance (or not to ease it, which during times of economic distress amounts to the same) in reaction to domestic and imported inflation pressures alike, because the latter risks triggering wage-price spirals (second-round effects). The possible deflationary effects of such a stance are not a major concern of the ECB, whose primary objective is price stability. This is in stark contrast with the US Fed, which has to balance the objective of price stability with the support to economic activity, and thus focuses on core inflation (excluding oil and food prices). The result of these two different views in the past months has been a significant drop of US interest rates (from 5.25% to 2%), while the ECB rate remained rock-steady at 4%.

2. The Dilemmas of Economic Policy in the Eurozone

The ECB theoretical framework, and the strategy that it follows coherently with this framework, are today running into two related dilemmas. The first is the one I already mentioned above, and that has been the subject of other briefing papers, between the inflation and growth objective. Only three months ago⁶, writing about the subprime crisis, I challenged the ECB explicit assumption, that inflation is always a monetary phenomenon, and that the interest rate instrument should be devoted exclusively to dealing with inflation pressures.

The second dilemma, that is much less debated but at least as important as the first, is related to the redistributive effects of shocks and monetary policy's reaction. The impact of the current shocks on prices is more important for low and fixed income categories, who spend a much larger share of their income in the goods that have seen their price explode (oil, primary goods, etc), and who are unable to transfer these increases on other categories.

As a consequence, the burden of these price increases falls disproportionately on the shoulders of low income categories, and these shocks are analytically equivalent to regressive tax increases. This explains why according to many surveys purchasing power is the main concern of households in many countries across Europe.

If we keep in mind this fact, the ECB argument that restrictive monetary policy should also be used against imported inflation in order to fight second round effects, acquires a new meaning. Acting as the watchdog of wages (the very last sentence of the citation above is revealing in this respect) the ECB controls inflation, but in doing so it exacerbates the redistributive effects of imported inflation that disproportionately affects low income categories. In other words, to avoid a price inflation spiral, the “external tax” due to the increase in oil prices in particular should be paid only by the wage earners.

⁵ ECB Monthly Bulletin, 12 June 2008, pp. 4-5.

⁶ Jean-Paul Fitoussi, *ECB Objectives and Tasks: Price Stability vs. Lender of Last Resort*, Briefing paper prepared for the Committee For Economic and Monetary Affairs, no 2008-1, March 2008.

Then the decrease in purchasing power of the median worker would calm inflationary pressure helping the ECB to reach its inflation target. To that mechanism will cooperate also the decrease in purchasing power due to the increase in food prices. Thus, inflation controls come at the price of an increasing income inequality, and depressed domestic aggregate demand, thus linking the two dilemmas in a vicious circle.

Furthermore, even abstracting from considerations about inequality and growth, we can raise doubts on the effectiveness of this strategy. Both the subprime crisis and the oil and food price increases are shocks that hit the entire Euro zone, but whose effects are different in the different countries depending on a number of factors like the productive structure, the energy mix, the response of the labour market, the distribution of income, etc. While purely asymmetric shocks (e.g. a natural disaster, a social conflict) are much easier to identify and tackle, the real difficulty lies in the diagnosis of asymmetric effects of common shocks. Once again we can rely on simple textbook analysis to show that using the common monetary instrument to address country specific inflation problems is useless, so that it risks hampering the credibility of the institution.

The standard argument that the ECB opposes to these criticisms is that market forces would be able to take care of these asymmetric shocks through relative price and wage changes, migration etc. The International Policy Group that I coordinated at OFCE⁷ had already warned in the early 1990s, that even in the US, where cultural and economic obstacles are much lower than in the Euro zone, persistent differences across states would show that market mechanisms alone were not able to absorb shocks. Thus, we suggested that asymmetric shocks would result, in absence of policy reactions, in increased unemployment and labour market tensions, an argument that was further validated by the works of Blanchard and Katz (1992), and Decressin and Fatas (1995).

We can add a few further considerations on the inadequacy of market flexibility and structural reforms as the *sole* answers to asymmetric shocks. First they may result in competition among member states (for example tax competition), triggering a race to the bottom that risks hampering the solidarity among countries that was the basis of the European construction. Second, reforms are not implemented in one day. Measures aimed at increasing flexibility, especially in the labour markets, will most likely result in long transitions during which reforms may have countercyclical effect, exacerbating the effects of shocks.

Our Policy Group also suggested that, following a standard textbook analysis, the loss of monetary sovereignty linked to the EMU should be compensated by a reinforced fiscal autonomy, and that the European institutions in the making (that later resulted in the Stability and Growth Pact) were actually going in the opposite direction and did not adequately respond to the standard objective/instrument assignment. Thus, I could only observe with preoccupation the slow but inexorable drift of the European institutions toward a restrictive interpretation of the SGP that we observed in the past few months, with increased focus on the medium term objective of a balanced budget rather than on the ceiling of 3%. What is puzzling is the autonomous dynamic of the stability pact which despite reforms to allegedly increase its flexibility seems to become more and more rigid. The focus of the Commission is by now much less on the level of the deficit than on its medium term evolution towards zero! Many European economists are now advocating the introduction in national constitutions of a fiscal rule whose effect will be to constrain countries to obey the stability pact. Notice that outside Europe almost no economists, or politicians are pleading for such a move, and that inside Europe but *mezzo voce* many politicians are criticizing the stability pact.

⁷ Fitoussi *et al.* (1993).

It is nevertheless reassuring that today, after a decade of policy inertia that was among the causes of disappointing macroeconomic performances for the Euro zone, we are asked to reconsider the issue of appropriate responses to macroeconomic shocks. I see this as an implicit acknowledgement that policy should be given a more active role.

3. What Institutions for a More Effective Economic Policy?

I see the main problem of the current institutional framework in its global coherence with a theoretical approach that confines macroeconomic policy to a marginal role in the management of the economy. In this respect, the US may serve as a model in that their institutions rely on the complementarities between market based adjustments and discretionary fiscal and monetary policy. Thus I would strongly argue in favour of a global reappraisal of policy intervention.

For what concerns *monetary policy*, the present times of economic distress shed light on an essential problem, which is more or less hidden in normal circumstances: the political nature of monetary policy decision. We have seen that monetary policy affects four variables which usually are considered as primary objectives of any government: inflation, growth (and thus employment), the degree of inequalities, and through exchange rate variations the external balances. (And I skip wealth which is obviously affected by the rate of interest). A robust result in economics is that when an instrument is used to reach several objectives, the policy maker has to make trade-offs. In a democratic regime, trade-offs have to be made by the elected representatives of the population: they imply political choices and thus political responsibility. They can't be left to a technocratic body. It may well be that a government proceeds exactly to the same choices than those of the ECB, but it will then bear full responsibility for this choice.

In saying that, I am not criticizing the ECB. It has indeed no other choice than fulfilling its mandate which has been politically designed. But one has not to be an expert to understand that in making it such a way that a "technocratic body" has to bear responsibility for a political choice, it may lose its legitimacy. These remarks belabour the obvious which is that full responsibility can only be born by the political structure, and that "independent body" have to be accountable.

As for *fiscal policy*, while maintaining some form of peer pressure to avoid free riding and spillovers within the EMU, I strongly argue for a renewed role of discretion for governments that already lost the monetary instrument with the Euro. Scrapping the objective of a balanced budget over the cycle, introducing some form of *golden rule* of the type implemented in the UK, increasing the number of exceptions to the 3% ceiling, or raising the ceiling altogether, are all measures that would allow European governments to recover some room for policy in their action.

To better deal with asymmetric shocks a solidarity fund could be envisioned, to which countries would contribute in good times.

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Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

GUSTAV A. HORN

Executive Summary

The institutional setting for economic policy in the Euro area is still unique. While there is an aggregate monetary policy that is clearly directed towards aggregate Euro area developments, there is no aggregate fiscal policy so far. There are only rules that limit the leeway of member countries to expand their household deficits beyond limits. But there is no fiscal policy reference to the aggregate Euro area economic situation. In order to overcome co-ordination problems in a sustainable manner, only the creation of a truly European fiscal policy authority would help. This implies a perception of the Euro area market as a purely domestic market for any member country. Several proposals are outlined.

The ECB with its monetary policy could act as a substitute for a European fiscal policy, but then their targets have to be changed. An alternative to this setting is to keep institutions as they are, but establish a co-ordination process via the Euro group. However, this could create a very ineffective co-ordination process. A more unrealistic alternative is to set up a truly European fiscal authority. The ideal setting would give the European Parliament the political responsibility. The EU Commission should have executive power for fiscal policy actions. Beyond doubt this proposal is the most unrealistic one of all those presented here. It requires national governments to share power with the EU Commission that acts no longer as an agency of the member states' governments, but rather as a European government. It is highly doubtful whether European politics is ready to enter a road to stronger links on a European level.

In the end only marginal improvements seem realistic, but it is highly doubtful whether the co-ordination problem can be properly solved this way.

1. Introduction

The institutional setting for economic policy in the Euro area is still unique. While there is an aggregate monetary policy that is clearly directed towards aggregate Euro area developments, there is no aggregate fiscal policy so far. There are only rules that limit the leeway of member countries to expand their household deficits beyond limits. But there is no fiscal policy reference to the aggregate Euro area economic situation. Every government of the EMU is free to choose its fiscal stance according to its perceived national interests.

This setting has been criticised already for quite some time (v. Hagen, Mundschenk 2003). The basic reason for the critique consists in rejecting the politically predominant view of national economic independence. Governments tend to think that if every government does the right thing from a national perspective it would be the right thing from an EMU aggregate perspective. This is only true, if national economies within the Euro area would be completely independent from each other. In fact they are highly interdependent with varying degrees. The most important channels of interdependence are trade and capital market links. Therefore national fiscal policy of one country will in general affect the economy of other member countries. In this case the assumption that a beneficiary national policy will always lead to of a beneficiary European policy does no longer hold and there is a case for co-ordination. As von Hagen and Mundschenk have shown even if governments refrain from discretionary fiscal policy and mechanically rely on automatic stabilisers there is no solution as the effect of automatic stabilisers may differ from country to country. Then again there is a case for co-ordination.

However there are also strong theoretical and in particular practical arguments against co-ordination as Akerholm (2003) has pointed out in his comment on von Hagen and Mundschenk. It is difficult for a national government to distinguish properly between symmetric (common) and asymmetric (national) shocks. All this takes time, too much time to react in time. The same applies to the present co-ordination process for fiscal policy within the Euro group and the Broad Economic Policy Guidelines (BEPG) of the EU Commission. Akerholm's conclusion is that the institutional settings should more or less stay as they are and governments should seek for marginal improvements.

In the following different approaches will be outlined. Firstly as a combination of realism and some effectiveness change of ECB targets is suggested. Then a more realistic approach with at least marginal improvements is outlined. Finally a setting is described. Finally the first best and highly utopian proposal of a European fiscal policy authority is described.

2. A sensible approach

The present governance system EMU has created a huge domestic market on a European level. But the political institutions still reflect this in an incomplete way. While the ECB is by construction a truly European institution there is no such counterpart on the fiscal policy side. Any institutional setting that assumes a final responsibility for national governments will ultimately run into the difficulties outlined above. In order to overcome the co-ordination problems in a sustainable manner, only the creation of a truly European fiscal policy authority would help. This implies a perception of the Euro area market as a purely domestic market for any member country. A notion that contradicts a competitive policy approach many governments tend to follow. They think if each government follows a fiscal policy stance it considers as optimal, the potentially differing macroeconomic performances of the respective member countries will tell parliaments and voters what is best. Consequently a less successful approach will be changed to a better one. Yet, again the external effects prevent an optimal outcome since the performances mutually influence each other.

Then it is not possible to select an optimal strategy on the basis of single country approaches. In sum all considerations lead to a unified European approach.

It is anyway contradictory that on the one hand institutions have been changed between member countries to ensure free flows of goods, capital and on top of this a joint currency has been created. All these are essential elements of a single market. On the other hand fiscal policy approaches do not recognise this except for the rules laid down in the Stability and Growth Pact (SGP). But these refer only to public deficit and public debt and are silent on appropriate fiscal policy stance according to business cycle movements. Consequently up to now, there is no European fiscal policy approach providing optimal reactions to business cycle shocks.

There seems to be an obvious solution. The ECB with its monetary policy could act as a substitute for a European fiscal policy. Then no major institutional change would be required. That would leave the total responsibility for the stabilisation of the Euro area to the ECB. However, the ECB presently has the predominant task to ensure price stability. That is not necessarily a contradiction to stabilisation goals, as long as price pressures have mainly domestic roots. If an economy is booming and employment may grow very strongly, wages will also rise steeply. In this case a cooling down of the economy by a restrictive monetary policy is sensible to stabilise the economy as well for ensuring price stability. The same applies for the symmetrical situation when the economy is slack. A more expansionary monetary policy then helps to stimulate the economy and also to keep prices from a deflationary track. Insofar a European monetary policy could be a substitute for a European fiscal policy. However, this conformity of policy goals is by no means guaranteed. First of all there may be a conflict of timing. Reactions to price movements should be much more forward looking than those for movements of quantities on the goods and labour market. The latter tend to move faster and are more volatile, so one has to decide much closer to the event. Secondly there may be a conflict of extent. The dangers for price stability and business cycle stability may differ. Then it is not clear what stance monetary policy should take. Finally there could even be a fundamental conflict. The present situation is an example. If the origin for inflationary developments, as in the case of oil and energy price hikes, predominantly lies abroad, they tend to be a burden for economic expansion. On the other hand inflation rates may be above target, as presently is the case and adversely affect inflation expectations. The former problem could require lower interest rates, the latter higher.

Presently the ECB would have to solve all these potential conflicts with respect to the price stability target, because of its predominance as ECB policy goal. But then the ECB cannot be a substitute for a European fiscal policy institution at least not under the present institutional setting. If above problems should be addressed properly, a solution could be, to change the policy goals for the ECB. The central bank then could be obliged to give price stability and business cycle stabilisation basically the same weight in its policy considerations. Then, given the potential conflicts, the ECB would have to seek compromises between its then two targets. That increases communication necessities at times of conflict between the policy goals. The ECB has to explain to the general public what target is addressed first and why it does so. It should be an obligation of the ECB to do so. The way how it is done should be at the discretion of ECB, but one should expect success. Inflation expectations should stay anchored around the inflation target and an economic overshooting in both directions should be avoided.

An increase of the number of meetings at the European Parliament does not seem necessary. Since quarterly information on the monetary situation in the Euro area seems sufficient. But the character of the meeting should be changed.

It should not be any longer a meeting where the ECB and the Monetary Affairs Committee meet on an equal level to exchange information and views. Instead, there should be a hearing, where the ECB has to report to the Parliament as the European sovereign. In such a hearing the ECB President has to explain and justify his policy measures. At the same time he should use this opportunity to communicate his signals to the markets. Signals should even become clearer when he is questioned properly by Members of the Committee. Questions could clarify unclear points and in the end lead to more information for the broader public.

In such a setting the ECB takes charge of a Euro area wide economic stabilisation. A disadvantage of this approach is that on the aggregate Euro level, fiscal policy no longer has any stabilisation function. Stabilisation policy is completely overtaken by monetary policy. Hence one renounces on instruments that have proven helpful in the past.

National fiscal policy should focus on asymmetric shocks that affect single countries only. A reliable identification of asymmetric shocks is not easy. The EU Commission and national government institutions should provide a standardised set of diagnostic instrument to achieve it as reliable as possible.

This framework constitutes a coordinated fiscal and monetary policy approach for the Euro area without the need to establish a complicated and slowly working coordination process. In fact, the ECB would internalise coordination by its double target structure and national governments are restrained in their action since only limited shock can justify any action. Politically this coordination is based on a stronger position of the European Parliament at the expense of the Euro group and national governments. It remains to be seen whether these institutions are ready to renounce some of their powers. Given the present political situation with a lot of distrust with respect to European institutions it does not seem highly likely. But it may be an option for the future.

3. A more realistic alternative

An alternative is to keep institutions as they are, but establish a co-ordination process via the Euro group. In this case national governments should find a common Euro area fiscal policy strategy that is aimed at stabilising the Euro area. It means the Euro group has to discuss and decide according to aggregate Euro needs. They have to consider the interdependencies between the economies and decide upon the stance of their respective fiscal policy. The ECB should be part of the coordination process. Since any conflict between monetary and fiscal policies has to be avoided. The decision should be taken on the basis of a standardised diagnostic framework provided by the EU Commission. In addition to that each government will have its own analysis. However, for a decision only arguments referring to the state of the Euro area economy as an aggregate are valid. Fiscal policy should in this respect follow the same rules as the ECB.

Such a setting requires national governments to restrain from national arguments when deciding upon European fiscal policy. Given the fact that they are depending on their domestic voters only, the task becomes very demanding. By no means an appropriate outcome is guaranteed. Political bargaining is highly likely. In the end nobody can be held responsible for mistakes, since the Euro group is not depending on any democratic vote. However, if working properly the outcome would be a coordinated fiscal policy approach that satisfies the needs of the Euro area without any unlikely and probably only in the longer run feasible institutional changes.

4. A more unrealistic alternative

A more unrealistic alternative is to set up a truly European fiscal authority. The ideal setting would give the European Parliament the political responsibility and ECOFIN may be acting as a kind of a second chamber with minor rights than the Parliament. The EU Commission should have executive power for fiscal policy actions. To be able to do so the EU Commission should receive Euro area wide tax revenues based on corporate taxes. Corporate taxes are very well suited since they often give incentives to shift revenues of firms between countries just searching for tax breaks. If there is a Euro area wide corporate tax this incentive would be considerably diminished. Furthermore revenues from corporate taxes are highly cyclical and make it hence possible to save them during good times and spend them during bad times. Good and bad times are defined on an aggregate Euro area level. Given all this the Commission could develop contingent plans under approval of the Parliament what should be done when an area wide fiscal stimulus is needed. The financial means can even be used to overcome external effects of un-coordinated national fiscal policies. With such a setting the Euro area would have an aggregate fiscal policy as it has an aggregate monetary policy. In this setting a non-cooperative fiscal policy is largely avoided, since there is a central authority. As in the first proposal, national fiscal policy should focus on asymmetric shocks.

Beyond doubt this proposal is the most unrealistic one of all those presented here. It requires national governments to share power with the EU Commission that acts no longer as an agency of the member states' governments, but rather as a European government. It is highly doubtful whether European politics is ready to enter the road to stronger links on a European level. Nevertheless, an appropriate institutional setting for a truly domestic European market requires just that. Only then external effects of un-coordinated fiscal policy can be avoided and fiscal policy can be used properly to stabilise the economy.

5. Conclusion

The present institutional setting of the Euro area is not optimal as far as stabilisation requirements are concerned. There are considerable external effects of non-co-operative national fiscal policies. Therefore, a change in the setting is required. There has to be an institution that takes responsibility for a European stabilisation policy beyond monetary stabilisation. This can – the most realistic but least effective approach – be the Euro group. More realistically one could change the target for the ECB. By extending its responsibility to the business cycle stabilisation, problems would be tackled in a better way. The most appropriate but highly unrealistic approach is to create a fiscal policy authority on a European level. But there is good reason to assume the political circumstances presently will not allow this.

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HOW TO SAFEGUARD GENERAL SUPPORT AND LEGITIMACY OF MONETARY POLICY DURING TIMES OF ECONOMIC DISTRESS IN A MONETARY UNION?

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Be the economic weather fair or foul, monetary policy coordination is ensured in the euro area with no derogation of central bank independence by the participation of the heads of national central banks in the governing body of the European Central Bank (ECB). As regards fiscal policy the mechanism of the Stability and Growth Pact (SGP) gives sufficient leeway to automatic stabilisers at the national level in times of recession. The possibility that a sensible monetary policy be endangered by irresponsible fiscal policies at Community or national level is on the whole prevented by the strict limits imposed on the credit operations of the ECB and by the (less than) strict obligation of Member States (MS) to aim at zero budget deficits one year with another. For the authors of this opinion, the only open question in the matter of macroeconomic policy coordination in Europe is whether we should return to the stricter budget deficit limits of the original SGP, since the ECB needs as much help as it can get in its remit to fight inflation and keep the payments system in working order – a tall requirement in itself.

Now, economists of a different persuasion from ours tend to be suspicious of rule-bound monetary policies and central bank independence because they think that the ECB should do more than simply keep the financial system running as smoothly and predictably as possible. They believe that the Bank should use discretion in its monetary policy to counter cyclical downturns, and that fiscal authorities, both Communal and national, ought to apply a policy of variable deficit spending to keep the European economy on its long term growth path. If these economists were right, there might be a case for increasing the coordination of European macroeconomic policies on three points: (a) to concur on monetary decisions that would reduce cycle variance in the Euro area; (b) to consent to budget deficits at Community or national level when they might be needed to maximise real growth; (c) to keep monetary and fiscal policies in harmony with each other in pursuit of the goal of real growth.

It is our belief that such coordination is unnecessary and could be harmful. Firstly these interventionist proposals overlook the fact that the public is largely free of monetary illusion: hence it quickly develops inflationary expectations when central bankers try to cheapen money to fight unemployment and foster growth. Secondly, they forget that, over a longer period than with money, the public discounts and saves opportunistic tax bounties as it understands that government debt is delayed taxation. Finally, they ignore that politicians and civil servants, having their own agenda of office preservation and bureau expansion, tend to use any discretionary power to ratchet-up government size.*

* These neo-Keynesian proposals are based on faulty theory. In technical terms, they unaccountably set aside rational expectations theory (see Box 1), long term Ricardian equivalence (Ricardo 1817, ch. 29), and the public

Monetary and fiscal policies under currency union

Economic and Monetary Union (EMU) has caused a major change in the institutional economic policy setting of the member states (MS). A single currency area with thirteen (and soon more than twenty) different countries needs effective and operational rules to define the roles and responsibilities of the several policy actors. A clear definition is needed of the competencies obtaining at the national and the supranational level, as well as the respective institutions in charge of them. This new institutional policy setting, given its different levels of operation and responsibility, must also define the separation between the several powers in charge of economic policies so as to avoid destructive policy conflict and ineffectiveness.**

On the one hand, the ECB is the institution that singly conducts monetary policy in the Euro area since 1999. MS have delegated their monetary sovereignty to the ECB, a supranational and independent institution. In principle, there should be no conflict or controversy as to the institution responsible for the design and conduct of monetary policy in the Euro area. Moreover, granted its autonomy and independence by its own constitution, the ECB (with the rest of the National Central Banks of the Euro area) defines and implements a single monetary policy according to the tasks given in its statutes. Regarding monetary policy, the ECB has chosen a two pillar monetary strategy intended to achieve price stability in the mean term, a stability that it has defined as a year on year increase of the Harmonised Index of Consumer Prices (HICP) less, but close to, 2%. Clearly set in its statutes and confirmed by its recent policy-making, that is certainly its primary policy goal. This shows that the monetary Authority is aware of the ineffectiveness of monetary expansions as a consistent instrument to foster economic growth or job creation. The ECB has thus adopted a monetary target (that is, low inflation) as the best contribution of monetary policy for a sustainable and consistent growth in the Euro area.

On the other hand, fiscal policy is still a national competency in the EU, and therefore in EMU countries. The political traditions and the economic policy history and options of the MS are quite diverse, as can be seen in the varied fiscal paths they follow. However, all EU countries must abide by the SGP and must therefore aim at achieving medium and long term sound public finances. This obligation is backed by warnings and even penalties for the members of the Euro area.

In the absence of an effective fiscal rule that EU countries must balance their budgets one year with another, MS in the Euro area may have an incentive to spend themselves out of a temporary downturn or even to run permanent public deficits in longer periods of lacklustre growth. Policies that used to develop into currency crises before they adopted the euro would not harm them directly but impinge on the worth of the euro as a whole, especially if the errant country were a large one. Such free-riding could be remedied in one of two ways: the first is to let it be known that deficit countries would be allowed to go bankrupt, as the city of New York was forced to do in the 'seventies'; the other is to monitor it and eventually penalise it. The bankruptcy way is not very credible. The second is a little more credible, despite the leniency with which infractions by France and Germany were treated in the past and the subsequent watering down of the SGP.

service agency problem (Niskanen, 1971). Neither do they take into account the theory of the second best proposed by Lipsey and Lancaster (1956-57).

** The Montesquieu doctrine of the separation of powers should be called the doctrine of concordant powers, since its essence is that no collective decision can be taken by one single power without the collaboration, backing, confirmation or revision of another. See Gordon Tullock (1993, pg.84).

Since most prices tend to be temporarily sticky and do not adjust immediately to changed economic conditions, those MS incurring in more deficit may find it useful as a policy tool to expand aggregate demand in the short run, and so their national income. All this is on the assumption that fiscal expansion affords short run relief in an economic downturn. What is clear, however, is that such policies do not help long run growth, since the public is not finally taken in by discretionary monetary policies. As is well established in economic theory (see Box 1) and supported by extensive empirical evidence, this is a time inconsistent policy (Kydland and Prescott, 1977), as well as an artificially created demand expansion, with no real effects in the medium and long term. In the last ten years data clearly show that recurrent deficit countries such as France, Italy or Portugal do not attain higher economic growth (see tables 1-4).

In the face of inflationary pressures and expectations coming from the need to finance growing fiscal deficits in the Euro area, the ECB would have to tighten monetary policy for the whole of the Euro area. There will be net winners and losers, as both prudent and errant countries will “pay the bill” in the form of higher interest rates; while the former have not obtained any short run policy “relief” nor output gain. The resulting higher interest rates for all will cause a worsening of MS public finances and more output volatility. In sum, running active fiscal policies in a monetary policy framework committed to maintain price stability could result in a consistent but inefficient equilibrium, incompatible with a sound and credible Eurosystem in the medium and long term.

Current fiscal restrictions in the European Union and EMU: neither rules, nor effective policy constraints

To avoid free-riding among MS and promote a policy of sound balanced budgets in Europe, the running of national fiscal policies was restricted by the *Stability and Growth Pact*, originally adopted in 1997. According to this original SGP, European countries had to achieve fiscal balance, or even a surplus in the long run, by avoiding fiscal deficits equivalent to more than 3% of GDP in the short run. The adoption of that fiscal restriction (not properly a rule) was the extension of the fulfilment of the so called “EMU accession criteria”, intended to achieve fiscal discipline for candidate countries. These fiscal criteria, among others such as price and long run interest rates stability, set not only a maximum ratio of public deficit to GDP (also 3%), but also a measure of long run fiscal sustainability, by requiring a ratio of public debt to GDP below 60%.

Both the SGP and the EMU accession fiscal criteria are in essence compatible with the primary policy task of the ECB’s monetary policy; and so, in principle, there is no institutional or policy conflict between the several national and supranational economic policy makers under EMU in the long run (see Von Hagen and Mundschenk, 2003). However, this policy restriction designed to avoid excessive and unsustainable fiscal expansion in the shorter run has not been as effective as desired.

During the last ten years, some (significant) MS have run fiscal deficits, even above the limits clearly imposed by the original SGP (see tables 2 and 3). Moreover, even though most European economies did not suffer any recession during these years (see table 1), some MS have not fulfilled the limits imposed as to the growth of public deficit in the short term; and, even more, many MS as well as the Euro area as a whole has not converged to fiscal balance or surplus in the medium and long term (see tables 2 and 3). Accordingly, MS have not even achieved its limits for debt and deficit growth, nor its long run targets; and thus, *de facto*, fiscal and monetary policy makers in EMU have adopted different and non compatible long run policy targets.

Unfortunately in 2005 European governments reformed the SGP and relaxed its fiscal restrictions. By construction, neither the original nor especially the reformed SGP are true *fiscal rules*. To be so, the *Pact* should not only have specified the zero budget deficit target but also set a clear time horizon to achieve it. Moreover, in order to be properly evaluated, the fiscal target should have been linked to a variable easy to interpret and monitor. Finally, in order to be effective, timely and specific policy actions, and sanctions in case of a deviation from the target value, should have been known in advance. A fiscal rule thus defined provides *ex ante* both a strong and clear commitment to achieve the specific fiscal target, and the actions needed to correct unsound fiscal policy in case the target is not achieved and sanction errant countries.

As regards the *preventive arm* of the *Pact*, the reformed SGP currently assigns country-specific fiscal targets. These include the evaluation of the public deficit, as well as other indicators of the long run sustainability of public finances (such as public debt). However, a crucial restriction is that these targets are evaluated “over the cycle”. There is no way unambiguously to define the duration and the intensity of business cycles; hence the new *Pact* creates an unavoidable lack of definition of the operational target, which makes it virtually impossible to monitor and evaluate whether the MS have effectively achieved it.

As concerns the *corrective arm* the new *Pact* allows considerably more fiscal flexibility in the actions to be undertaken by errant MS. The reformed SGP established a new and longer period for fiscal corrections, as well as several escape clauses, which makes corrective actions even more unlikely than before. As the corrective arm has virtually vanished, countries will be increasingly inclined to run fiscal deficits in difficult times. In the present current crisis affecting financial and real markets, the weakness of the reformed SGP will become evident and the outcome of that lack of an effective sound fiscal commitment, easy to foresee. Countries will try to exploit fiscal policy as a means to increase temporary income and output growth, with unwanted destabilising effects for the MS, as well as the Euro area as a whole.

In sum, as regards an automatic fiscal policy coordination framework for Europe, no rule-based fiscal scheme has been put in place and current formal and informal channels may prove ineffective. The fiscal restrictions of the SGP have been violated in recent years. Informal coordination via peer pressure or economic policy committee’s recommendations at EU level have been insufficient to prevent unsound policies and correct errant countries. Thus, without true fiscal rules, some countries still tend to try and counteract economic downturns with *ad hoc* monetary and fiscal measures. The existing SGP, far from embodying a proper rule, makes fiscal cooperation in EMU highly discretionary and unpredictable *ex post*. Within this uncertain institutional scenario, non-cooperative policy games between the national governments and the ECB will be played, with the expected inefficient policy outcomes: more output and inflation volatility, higher interest rates and less credibility of both policy actors and the institutional policy setting.

Box 1: Rational expectations and discretionary macro policies*

If we assume that people make use of all the information in the market relevant to their personal decisions and that they will learn from their mistakes, then it is safe to conclude that monetary policy can no longer be conceived as a game of the authorities playing with inert agents as pawns for their ends.

The discretionary measures of monetary authorities cannot be conceived as once and for all decisions, as giving rise to no future unwanted counteracting individual reactions. Central bank measures will affect the future decisions of other agents because these agents form expectations about the future behaviour of the authorities: they study the current decision of the authorities and discount future behaviour. Private agents will react differently if the current monetary measure was anticipated or was not, and whether they believed it to be transitory or permanent in character.

Rational expectations is an equilibrium concept used to model dynamic economies where there is self-reference. Models of such economies must take account of the fact that expectations shape the future values of variables used by agents. They must also take account of the fact that those agents will have a better knowledge of the structure of the economy in their sector than any outside observer. Hence, as Muth posited, forecasts made by the economist who has the model will be no better than forecasts made by agents within the model.** Another way of putting this is to say that no outside authority can know better than the market.

Models taking as given that equilibrium will be reached because people act rationally (in the sense that they form expectations about the future that turn out to be true) are counter-intuitive. However this theory can be interpreted heuristically in the following way. Agents acting outside the rational expectations compass will, in the words of A.V. Savin, eventually notice that they are making systematic mistakes and will try to revise their forecasts. "Agents are not in equilibrium until they have learned to form rational expectations."***

Rational expectations theory carries fatal consequences for active monetary policy. These dynamic self-reference models generate recurrent but a-periodic business cycles that are not due to erroneous, readily improvable perceptions by agents. Governments cannot smooth cycles. Rational expectations theory also explains the incurable error of Phillips curves, by the implication that active inflationary policies will not permanently deflect the labour market from its 'natural' unemployment equilibrium.****

Only fully anticipated and permanent policy rules can create a framework for rational behaviour by individuals. Making monetary authorities understand these policy limitations is crucial in the discussion of European macro-demands for discretionary intervention by policy makers are therefore out of bounds.

* Febrero (1998) is used to write this summary.

** Muth (1960, 1961), as quoted by Sargent (1987), IV, p. 76c.

*** Savin (1987), IV, p. 79d.

****This is the Lucas critique of econometric policy evaluation procedures. Lucas (1976).

Is achieving *optimal* policy outcomes possible via more fiscal and monetary policy coordination?

It is lately the fashion in political circles (see UK Treasury, 2003) and in parts of the academic world, to support proactive macroeconomic policies (Clarida et. al. , 1999) and to demand a more coordinated fiscal and monetary policies (Begg, 2008) in EMU. In particular, Von Hagen and Mundschenk (2003, p. 293) have proposed that MS governments should come to reliable fiscal agreements and “*aggregate preferences over the output-inflation trade-off at the EMU level and to make choices consistent with these preferences*”. According to these two authors and many others, the lack of credibility of the current fiscal coordination procedures at the EMU level impedes any efficient cooperation of the ECB with the national governments of MS. In plain words, they are demanding continuous consultation and binding agreements between the ECB and the MS on the desired trade-off between inflation and economic growth, reinforced by a freezing of wages – as if any such trade-off cum incomes policy could stick once the public begin to guess the game played by the Authorities.

What these authors are proposing is a discretionary solution to the impossibility of applying an ideal automatic macro policy in the real world, a policy consisting in the mere application of simple monetary and fiscal rules.*** Seeing that rule-bound ECB and MS Treasuries do not deliver the wished for inflation-free growth, because of various political constraints, these authors demand that the first best be given up for a consensus second best attained through continuous consultation.

However, we all know that in the end discretionary monetary policy does not foster real growth and public debt is simply another form of future taxation. Short term policies that try to exploit short lived price rigidities are nugatory and should be avoided if inflation free growth is to be attained. The time-inconsistency shown by these myopic proposals should be guarded against with the help of rules, precisely those rules enjoining monetary stability and balanced budgets.

In any case, it is the coordination solution that is impossible because it heaps constriction upon constriction.

- Firstly, the fiscal policy objective function of individual MS is not evident, nor revealed. Moreover, MS usually have time changing policy targets which highly depend on the political bias of the government in power and on the economic policy stance affecting the economy.
- Even if fully known and clearly revealed, it is far from realistic to believe that the several national preference sets can be meaningfully aggregated. An agreement of fifteen highly heterogeneous MS on the desired policy trade-off between inflation and output growth is not very likely in the conceivable future.
- Finally, even if the previous conditions were fulfilled, an agreement between the ECB and the MS on a common monetary cum fiscal policy also looks difficult, if not impossible, to achieve.

*** This is a misapplication of the Lipsey and Lancaster (1956-57) theory of second best. These two authors discovered that “*it is not true that a situation in which more, but not all, of the optimum conditions are fulfilled is necessarily, or is even likely to be, superior to a situation in which fewer are fulfilled*” (p. 12). When many optimum conditions are not fulfilled, Lipsey and Lancaster (1956-57, p. 12) assert that “*a second best situation is achieved only by departing from all other optimum conditions*”. However, the Lipsey and Lancaster impossibility theorem does not apply when it can be shown that the relevant policy spaces are separable from each other by their very nature or with the help of rules. See Schwartz (1982).

By contrast, the ECB has a clear mandate that avoids any conflict or uncertainty regarding its main policy target. Contrary to other central banks, such as the Federal Reserve, the ECB is primarily committed to achieving a low and stable inflation rate in the medium and long term and can do so independently of the situation of the real economy. True, the ECB takes not only monetary but also real indicators into account to conduct monetary policy: the monetary analysis (the first pillar) serves to evaluate what rate of inflation can be expected in medium and long term; and the economic analysis (the second pillar) is a useful indicator of short run inflation pressures. However, quite explicitly, the ECB, as enjoined by its statutes reinforced by its Bundesbank tradition, does not target output growth or output gap, nor balance inflation and output as if they were two policy targets. It is not by stoking up inflation that a paralysed economy can be made to grow in a sustained way but by institutional and structural reforms.

What type of monetary and fiscal policy coordination

Several ways to increase fiscal and monetary policy coordination have been proposed. First would be adopting all sorts of “soft” enforcement coordination via MS dialogue in regular meetings, peer pressure and exchange of information. Second would be, creating a centralised supranational institution to run a single fiscal policy for all MS (see Von Hagen and Mundschenk (2003, p. 288). However the only way is, in our opinion, to keep fiscal policy at the national level, but subject to a zero deficit rule for MS Treasuries and a monetary stability rule for the ECB.

In the context of EMU and, especially of the whole EU, effective fiscal delegation to a supranational single institution is clearly out of the political agenda and, thus, not a realistic proposal. Similarly, peer pressure and the exchange of information at multilateral meetings of the Ecofin and the European Council (mainly through the adoption of the Broad Economic Policy Guidelines) have proved to be ineffective, especially when large MS economies are involved, as even Von Hagen and Mundschenk (2003) remark.

In our view, fiscal policy should still be a national competency and the best way towards the optimum would be with the help of a fiscal rule to restrict and effectively limit unsound MS fiscal policies. As set above, a fiscal rule committed to sound fiscal balances in the medium and long term should contain, *ex ante*, (1) a clear and operational definition of the target, (2) well established policy actions in case the target is not fulfilled by a MS and (3) the regular communication of the policy stance of each MS in relation to the target. Within this rule-based framework, fiscal policy would not be in conflict with monetary policy in EMU, and thus there will be no non-cooperative games resulting in unwanted outcomes. And vice versa, a price-stability oriented ECB**** would not clash with the balanced budget policy of rule-bound MS Treasuries. Both sets of rules would work in harmony for sustainable economic growth.

**** A “flexible inflation targeting” strategy (Svensson, 1999 a, b) could be accepted within well defined limits with the aim to correct price deviations from target, while minimising real costs by avoiding abrupt output adjustments. But now it is years since the ECB has achieved its monetary target. A clearer definition of the time horizon would be needed to guarantee the institutional independence of the ECB in the face of regular political pressures coming from the MS. So far, the ECB has never defined what “medium term” means.

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Annex

Table 1: Real GDP growth rate (% change on previous year)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU (27 countries)	2.9	3.0	3.9	2.0	1.2	1.3	2.5	1.9	3.1	2.9	2.0^(f)	1.8^(f)
EU (15 countries)	2.9	3.0	3.9	1.9	1.1	1.2	2.3	1.7	2.9	2.7	1.7 ^(f)	1.5 ^(f)
Euro area	2.8	2.9	3.8	1.9	0.9	0.8	2.1	1.6	2.8	2.6	1.7^(f)	1.5^(f)
Belgium	1.7	3.4	3.7	0.8	1.5	1.0	3.0	1.7	2.8	2.8	1.7 ^(f)	1.5 ^(f)
Bulgaria	4.0	2.3	5.4	4.1	4.5	5.0	6.6	6.2	6.3	6.2	5.8 ^(f)	5.6 ^(f)
Czech Republic	-0.8	1.3	3.6	2.5	1.9	3.6	4.5	6.4	6.4	6.5 ^(f)	4.7 ^(f)	5.0 ^(f)
Denmark	2.2	2.6	3.5	0.7	0.5	0.4	2.3	2.5	3.9	1.8	1.3 ^(f)	1.1 ^(f)
Germany	2.0	2.0	3.2	1.2	0.0	-0.2	1.1	0.8	2.9	2.5	1.8^(f)	1.5^(f)
Estonia	5.4	-0.1	9.6	7.7	8.0	7.2	8.3	10.2	11.2	7.1	2.7 ^(f)	4.3 ^(f)
Ireland	8.0	10.4	9.4	6.1	6.6	4.5	4.4	6.0	5.7	5.3 ^(f)	2.3 ^(f)	3.2 ^(f)
Greece	3.4	3.4	4.5	4.5	3.9	5.0	4.6	3.8	4.2	4.0	3.4 ^(f)	3.3 ^(f)
Spain	4.5	4.7	5.0	3.6	2.7	3.1	3.3	3.6	3.9	3.8	2.2 ^(f)	1.8 ^(f)
France	3.5	3.3	3.9	1.9	1.0	1.1	2.5	1.9	2.2	2.2	1.6^(f)	1.4^(f)
Italy	1.4	1.5	3.7	1.8	0.5	-0.0	1.5	0.6	1.8	1.5	0.5^(f)	0.8^(f)
Cyprus	5.0	4.8	5.0	4.0	2.1	1.9	4.2	3.9	4.0	4.4	3.7 ^(f)	3.7 ^(f)
Latvia	4.7	3.3	6.9	8.0	6.5	7.2	8.7	10.6	12.2	10.3	3.8 ^(f)	2.5 ^(f)
Lithuania	7.5	-1.5	4.1	6.6	6.9	10.3	7.3	7.9	7.7	8.8	6.1 ^(f)	3.7 ^(f)
Luxembourg	6.5	8.4	8.4	2.5	4.1	2.1	4.9	5.0	6.1	4.5	3.6 ^(f)	3.5 ^(f)
Hungary	4.8	4.2	5.2	4.1	4.4	4.2	4.8	4.1	3.9	1.3	1.9 ^(f)	3.2 ^(f)
Malta	:	:	:	-1.6	2.6	-0.3	0.2	3.4	3.4	3.8	2.6 ^(f)	2.5 ^(f)
Netherlands	3.9	4.7	3.9	1.9	0.1	0.3	2.2	1.5	3.0	3.5	2.6 ^(f)	1.8 ^(f)
Austria	3.6	3.3	3.4	0.8	0.9	1.2	2.3	2.0	3.3	3.4	2.2 ^(f)	1.8 ^(f)
Poland	5.0	4.5	4.3	1.2	1.4	3.9	5.3	3.6	6.2	6.5	5.3 ^(f)	5.0 ^(f)
Portugal	4.9	3.8	3.9	2.0	0.8	-0.8	1.5	0.9	1.3	1.9	1.7^(f)	1.6^(f)
Romania	:	-1.2	2.1	5.7	5.1	5.2	8.5	4.2	7.9	6.0 ^(f)	6.2 ^(f)	5.1 ^(f)
Slovenia	3.6	5.3	4.1	3.1	3.7	2.8	4.4	4.1	5.7	6.1	4.2 ^(f)	3.8 ^(f)
Slovakia	4.4	0.0	1.4	3.4	4.8	4.8	5.2	6.6	8.5	10.4	7.0 ^(f)	6.2 ^(f)
Finland	5.2	3.9	5.0	2.6	1.6	1.8	3.7	2.8	4.9	4.4	2.8 ^(f)	2.6 ^(f)
Sweden	3.8	4.6	4.4	1.1	2.4	1.9	4.1	3.3	4.1	2.7	2.2 ^(f)	1.8 ^(f)
United Kingdom	3.4	3.0	3.8	2.4	2.1	2.8	3.3	1.8	2.9	3.0	1.7 ^(f)	1.6 ^(f)
United States	4.2	4.4	3.7	0.8	1.6	2.5	3.6	3.1	2.9	2.2	0.9^(f)	0.7^(f)
Japan	-2.0	-0.1	2.9	0.2	0.3	1.4	2.7	1.9	2.4	2.1	1.2^(f)	1.1^(f)

Source: Eurostat
(f) forecast

Table 2: Public balance; Net borrowing/lending of the consolidated general government sector (% of GDP)

EU definition: net borrowing (+)/net lending (-) of general government is the difference between the revenue and the expenditure of the general government sector. The general government sector comprises the following subsectors: central government, state government, local government, and social security funds. GDP used as a denominator is the gross domestic product at current market prices.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU (27 countries)	:	-2.6	-1.9	-1.0	0.6	-1.4	-2.5	-3.1	-2.8	-2.5	-1.4	-0.9
EU (15 countries)	-4.2	-2.6	-1.8	-0.8	0.8	-1.2	-2.3	-3.0	-2.8	-2.4	-1.3	-0.8
Euro area	-4.2	-2.6	-2.2	-1.3	0.1	-1.8	-2.5	-3.0	-2.9	-2.5	-1.3	-0.6
Belgium	-3.8	-2.0	-0.8	-0.5	0.1	0.6	0.0	0.0	0.0	-2.3	0.3	-0.2
Bulgaria	:	:	:	:	:	0.4	-1.0	-0.5	1.4	1.8	3.0	3.4
Czech Republic	-3.3	-3.8	-5.0	-3.7	-3.7	-5.7	-6.8	-6.6	-3.0	-3.6	-2.7	-1.6
Denmark	-2.0	-0.6	-0.1	1.3	2.2	1.3	0.2	-0.1	1.9	5.0	4.8	4.4
Germany	-3.3	-2.6	-2.2	-1.5	1.3	-2.8	-3.7	-4.0	-3.8	-3.4	-1.6	0.0
Estonia	-0.4	2.2	-0.7	-3.5	-0.2	-0.1	0.4	1.8	1.6	1.8	3.4	2.8
Ireland	-0.1	1.1	2.4	2.7	4.7	0.9	-0.4	0.4	1.4	1.6	3.0	0.3
Greece	:	:	:	:	:	:	-4.7	-5.6	-7.4	-5.1	-2.6	-2.8
Spain	-4.8	-3.4	-3.2	-1.4	-1.0	-0.6	-0.5	-0.2	-0.3	1.0	1.8	2.2
France	-4.0	-3.3	-2.6	-1.8	-1.5	-1.5	-3.1	-4.1	-3.6	-2.9	-2.4	-2.7
Italy	-7.0	-2.7	-2.8	-1.7	-0.8	-3.1	-2.9	-3.5	-3.5	-4.2	-3.4	-1.9
Cyprus	-3.2	-5.0	-4.1	-4.3	-2.3	-2.2	-4.4	-6.5	-4.1	-2.4	-1.2	3.3
Latvia	-0.5	1.4	0.0	-3.9	-2.8	-2.1	-2.3	-1.6	-1.0	-0.4	-0.2	0.0
Lithuania	-3.3	-11.9	-3.1	-2.8	-3.2	-3.6	-1.9	-1.3	-1.5	-0.5	-0.5	-1.2
Luxembourg	1.2	3.7	3.4	3.4	6.0	6.1	2.1	0.5	-1.2	-0.1	1.3	2.9
Hungary	-4.7	-6.2	-8.2	-5.5	-2.9	-4.0	-8.9	-7.2	-6.5	-7.8	-9.2	-5.5
Malta	-8.0	-7.7	-9.9	-7.7	-6.2	-6.4	-5.5	-9.9	-4.6	-3.0	-2.6	-1.8
Netherlands	-1.9	-1.2	-0.9	0.4	2.0	-0.2	-2.1	-3.1	-1.7	-0.3	0.5	0.4
Austria	-3.9	-1.8	-2.3	-2.2	-1.7	0.0	-0.6	-1.4	-3.7	-1.5	-1.5	-0.5
Poland	-4.9	-4.6	-4.3	-2.3	-3.0	-5.1	-5.0	-6.3	-5.7	-4.3	-3.8	-2.0
Portugal	-4.5	-3.5	-3.4	-2.8	-2.9	-4.3	-2.9	-2.9	-3.4	-6.1	-3.9	-2.6
Romania	-3.7	-4.5	-3.2	-4.5	-4.4	-3.5	-2.0	-1.5	-1.2	-1.2	-2.2	-2.5
Slovenia	-1.2	-2.4	-2.4	-3.1	-3.8	-4.0	-2.5	-2.7	-2.3	-1.5	-1.2	-0.1
Slovakia	-9.9	-6.3	-5.3	-7.1	-12.2	-6.5	-8.2	-2.7	-2.4	-2.8	-3.6	-2.2
Finland	-3.5	-1.2	1.7	1.6	6.9	5.0	4.1	2.6	2.4	2.9	4.1	5.3
Sweden	-3.3	-1.6	1.1	1.4	3.8	1.6	-1.2	-0.9	0.8	2.2	2.3	3.5
United Kingdom	-4.2	-2.2	-0.1	0.9	3.6	0.5	-2.0	-3.3	-3.4	-3.4	-2.6	-2.9
United States	-2.2	-0.8	0.4	0.9	1.6	-0.4	-3.8	-4.6	-4.4	:	:	:
Japan	-5.1	-3.8	-5.5	-7.2	-7.5	-6.1	-7.9	-7.7	-6.5	:	:	:

Source: Eurostat website

Table 3: General government consolidated gross debt (% of GDP)

EU definition: the general government sector comprises the subsectors of central government, state government, local government and social security funds. GDP used as a denominator is the gross domestic product at current market prices. Debt is valued at nominal (face) value, and foreign currency debt is converted into national currency using end-year market exchange rates (though special rules apply to contracts). The national data for the general government sector are consolidated between the sub-sectors. Basic data are expressed in national currency, converted into euro using end-year exchange rates for the euro provided by the European Central Bank.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU (27 countries):	68.5	66.6	65.9	61.9	61.0	60.3	61.8	62.1	62.6	61.3	58.7	
EU (15 countries)	71.7	69.9	68.1	67.2	63.2	62.2	61.6	63.0	63.2	64.1	62.8	60.4
Euro area	73.6	73.1	72.8	71.5	68.7	68.4	68.2	69.3	69.7	70.3	68.6	66.6
Belgium	127.0	122.3	117.1	113.6	107.8	106.5	103.4	98.6	94.2	92.1	88.2	84.9
Bulgaria	:	105.1	79.6	79.3	74.3	67.3	53.6	45.9	37.9	29.2	22.7	18.2
Czech Republic	12.5	13.1	15.0	16.4	18.5	25.1	28.5	30.1	30.4	29.7	29.4	28.7
Denmark	69.2	65.2	60.8	57.4	51.5	48.7	48.3	45.8	43.8	36.4	30.4	26.0
Germany	58.4	59.7	60.3	60.9	59.7	58.8	60.3	63.8	65.6	67.8	67.6	65.0
Estonia	7.4	6.2	5.5	6.0	5.2	4.8	5.6	5.5	5.1	4.5	4.2	3.4
Ireland	73.4	64.2	53.5	48.4	37.9	35.6	32.2	31.1	29.5	27.4	25.1	25.4
Greece	111.3	108.2	105.8	105.2	103.2	103.6	100.6	97.9	98.6	98.0	95.3	94.5
Spain	67.4	66.1	64.1	62.3	59.3	55.5	52.5	48.7	46.2	43.0	39.7	36.2
France	58.0	59.2	59.4	58.9	57.3	56.9	58.8	62.9	64.9	66.4	63.6	64.2
Italy	120.9	118.1	114.9	113.7	109.2	108.8	105.7	104.4	103.8	105.8	106.5	104.0
Cyprus	52.2	56.6	58.6	58.9	58.8	60.7	64.7	68.9	70.2	69.1	64.8	59.8
Latvia	13.9	11.1	9.6	12.5	12.3	14.0	13.5	14.6	14.9	12.4	10.7	9.7
Lithuania	14.3	15.6	16.6	22.8	23.7	23.1	22.4	21.2	19.4	18.6	18.2	17.3
Luxembourg	7.4	7.4	7.1	6.4	6.2	6.3	6.3	6.1	6.3	6.1	6.6	6.8
Hungary	73.7	64.0	62.0	61.1	54.3	52.1	55.7	58.0	59.4	61.6	65.6	66.0
Malta	40.1	48.4	53.4	57.1	55.9	62.1	60.1	69.3	72.6	70.4	64.2	62.6
Netherlands	74.1	68.2	65.7	61.1	53.8	50.7	50.5	52.0	52.4	52.3	47.9	45.4
Austria	67.6	63.8	64.3	66.5	65.6	66.1	65.9	64.7	63.8	63.5	61.8	59.1
Poland	43.4	42.9	38.9	39.6	36.8	37.6	42.2	47.1	45.7	47.1	47.6	45.2
Portugal	59.9	56.1	52.1	51.4	50.5	52.9	55.6	56.9	58.3	63.6	64.7	63.6
Romania	14.1	16.5	18.8	22.1	24.7	26.0	25.0	21.5	18.8	15.8	12.4	13.0
Slovenia	:	:	:	:	:	27.2	28.4	27.9	27.6	27.5	27.2	24.1
Slovakia	31.2	33.8	34.5	47.9	50.4	49.0	43.4	42.4	41.4	34.2	30.4	29.4
Finland	56.9	53.8	48.2	45.5	43.8	42.3	41.3	44.3	44.1	41.3	39.2	35.4
Sweden	73.9	71.8	70.0	65.6	54.4	55.3	53.7	53.5	51.2	50.9	45.9	40.6
United Kingdom	51.3	49.8	46.7	43.7	41.0	37.7	37.5	38.7	40.4	42.1	43.1	43.8
United States	73.4	70.9	67.7	64.1	58.2	57.9	60.2	62.5	63.4	:	:	:
Japan	93.9	100.3	112.2	125.7	134.1	142.3	149.5	157.6	164.0	:	:	:

Source: Eurostat website.

Table 4: HICP (% annual average rate)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
European Union	1.7	1.3	1.2	1.9	2.2	2.1	2.0	2.0	2.2	2.2	2.3
Euro area	1.6	1.1	1.1	2.1	2.3	2.2	2.1	2.1	2.2	2.2	2.1
Belgium	1.5	0.9	1.1	2.7	2.4	1.6	1.5	1.9	2.5	2.3	1.8
Bulgaria	:	18.7	2.6	10.3	7.4	5.8	2.3	6.1	6.0	7.4	7.6
Czech Republic	8.0	9.7	1.8	3.9	4.5	1.4	-0.1	2.6	1.6	2.1	3.0
Denmark	2.0	1.3	2.1	2.7	2.3	2.4	2.0	0.9	1.7	1.9	1.7
Germany	1.5	0.6	0.6	1.4	1.9	1.4	1.0	1.8	1.9	1.8	2.3
Estonia	9.3	8.8	3.1	3.9	5.6	3.6	1.4	3.0	4.1	4.4	6.7
Ireland	1.3	2.1	2.5	5.3	4.0	4.7	4.0	2.3	2.2	2.7	2.9
Greece	5.4	4.5	2.1	2.9	3.7	3.9	3.4	3.0	3.5	3.3	3.0
Spain	1.9	1.8	2.2	3.5	2.8	3.6	3.1	3.1	3.4	3.6	2.8
France	1.3	0.7	0.6	1.8	1.8	1.9	2.2	2.3	1.9	1.9	1.6
Italy	1.9	2.0	1.7	2.6	2.3	2.6	2.8	2.3	2.2	2.2	2.0
Cyprus	3.3	2.3	1.1	4.9	2.0	2.8	4.0	1.9	2.0	2.2	2.2
Latvia	8.1	4.3	2.1	2.6	2.5	2.0	2.9	6.2	6.9	6.6	10.1
Lithuania	10.3	5.4	1.5	1.1	1.6	0.3	-1.1	1.2	2.7	3.8	5.8
Luxembourg	1.4	1.0	1.0	3.8	2.4	2.1	2.5	3.2	3.8	3.0	2.7
Hungary	18.5	14.2	10.0	10.0	9.1	5.2	4.7	6.8	3.5	4.0	7.9
Malta	3.9	3.7	2.3	3.0	2.5	2.6	1.9	2.7	2.5	2.6	0.7
Netherlands	1.9	1.8	2.0	2.3	5.1	3.9	2.2	1.4	1.5	1.7	1.6
Austria	1.2	0.8	0.5	2.0	2.3	1.7	1.3	2.0	2.1	1.7	2.2
Poland	15.0	11.8	7.2	10.1	5.3	1.9	0.7	3.6	2.2	1.3	2.6
Portugal	1.9	2.2	2.2	2.8	4.4	3.7	3.3	2.5	2.1	3.0	2.4
Romania	154.8	59.1	45.8	45.7	34.5	22.5	15.3	11.9	9.1	6.6	4.9
Slovenia	8.3	7.9	6.1	8.9	8.6	7.5	5.7	3.7	2.5	2.5	3.8
Slovakia	6.0	6.7	10.4	12.2	7.2	3.5	8.4	7.5	2.8	4.3	1.9
Finland	1.2	1.3	1.3	2.9	2.7	2.0	1.3	0.1	0.8	1.3	1.6
Sweden	1.8	1.0	0.5	1.3	2.7	1.9	2.3	1.0	0.8	1.5	1.7
United Kingdom	1.8	1.6	1.3	0.8	1.2	1.3	1.4	1.3	2.1	2.3	2.3
United States	2.3	1.6	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2	2.9
Japan	1.8	0.6	-0.3	-0.7	-0.7	-0.9	-0.3	0.0	-0.3	0.3	0.1

Source: Eurostat website.

MONETARY POLICY UNDER STRESS

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

The Euro area, and much of the world, has long been blessed with very mild conditions. The Great Moderation of the last decade has come to an end. A severe supply-side shock, involving both oil and food price increases, is hitting the Euro area shortly after the onslaught of a severe financial crisis. Both occurrences are known to be particularly challenging, if only because any policy response is, at best, a mixed blessing.

Not everything is dark, however. The single currency has already delivered its expected beneficial effect: there has not been any currency pressure. In addition, the shocks are largely symmetric, i.e. they affect all countries in a similar way. Indeed, inflation rates have risen throughout the Euro area, even though pre-existing differences have mostly been exacerbated. This means that monetary policy must be qualitatively the same.

Governments, too, are under pressure, which creates the risk of miscalculations. This creates the need for some coordination among governments and between the Eurosystem and member governments. Fortunately, the required coordination is relatively straightforward to envisage and to implement.

The supply-side shocks act as a tax on all citizens. The implied reduction in purchasing power is unavoidable. Governments may redistribute the burden among their citizens but they cannot eliminate the adverse effect. The most desirable action is to protect the poorer citizens. Unfortunately, everywhere governments have come under pressure from organized groups, which do not usually represent the interests of the most deserving citizens. Resisting such pressure is politically difficult. The risk is that ill-designed measures create a contagion effect throughout the European Union. This situation calls for coordination among governments.

Previous experience with supply-side shocks tells us that monetary policy cannot either soften the blow. Attempts to counter the contractionary effect of the shock only lead to higher inflation, with no lasting beneficial growth and employment effect. The Eurosystem must therefore focus on its core task of re-establishing price stability. This implies accepting to implement a policy that will, if anything, be contractionary. Governments must carefully avoid seeking to alleviate the pressure that they have come under by calling for an expansionary policy.

Hard times and no good policies

After a decade of Great Moderation, the economic situation has started to deteriorate over the last year. Oil and gas prices, already rising for a few years, have picked up speed, just as food prices jumped up, following a long period of stability or even decline. Finally, the long-awaited bursting of the housing price bubble in the US and some other countries has predictably ushered in a serious banking crisis. This represents the first serious test of the Euro area economic policy making institutions.

Supply-side shocks – rapid increases in the price of production inputs – are feared by policymakers, for good reason. Demand-side shocks can be alleviated by demand-management policies but there are no equivalent supply-management policies. Supply-side policies, which attempt to increase employment and/or production through structural reforms, take a very long time to produce their effects, unlike demand-side policies which deliver, when they do, within a few quarters. In the short run, the choice is between absorbing the supply shock in the form of higher inflation, slower growth and rising unemployment, or a combination of both. Experience with previous supply-side shocks has taught us that it is a very bad idea to try to inflate away the risk of slower growth. Having already been surprised – like everybody else – by an abrupt price acceleration, the Eurosystem is now trying to contain further inflationary pressure, implicitly accepting a further growth slowdown.

A similar reasoning applies to the increase in the price of foodstuff with the crucial difference that most European countries produce locally a large portion of their food consumption needs. This implies that, partly at least, the contractionary effect is offset as income is transferred from consumers to producers.

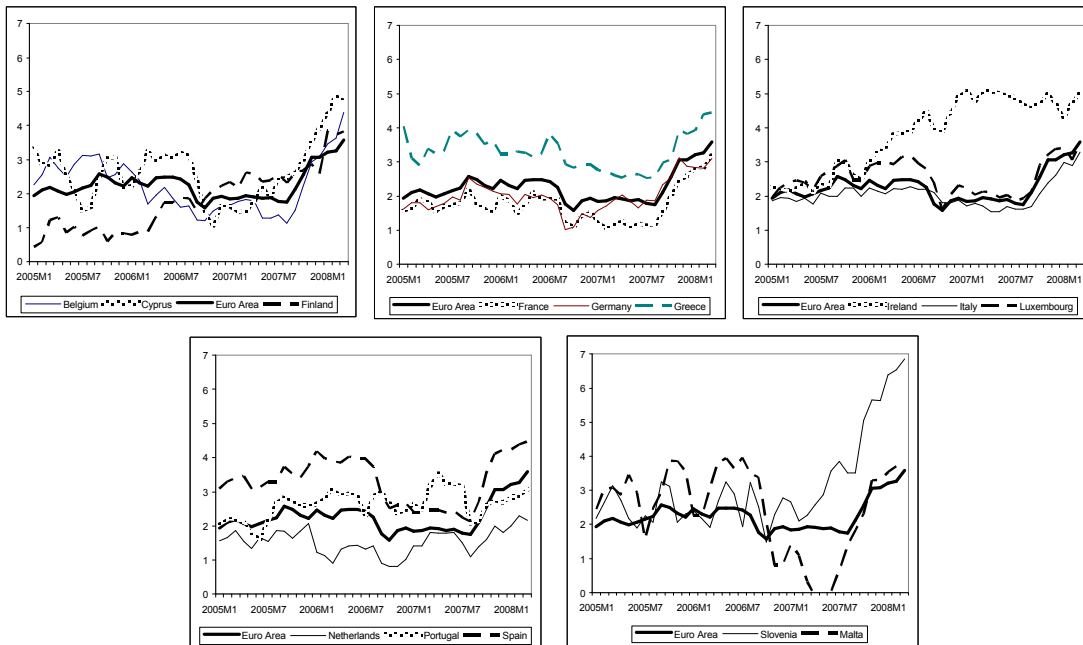
The financial crisis raises two macroeconomic policy issues.⁹ Since the central banks are involved in large scale interventions to keep the interbank functioning, they must be concerned about the monetary policy implications. A surprising feature of the crisis is that the commercial banks have been accumulating large amount of liquidities that they fail to recycle. Thus the Eurosystem has to be careful about the use made of these liquidities. Premature tightening could rekindle interbank market instability.

Symmetric shocks

These major shocks are common to all Euro area members, although intensity may vary from one country to the other. In particular not all countries have experienced sharp housing price increases and not all banks have been directly hurt by the financial crisis. As a result, inflation has risen throughout the Euro area, without changing much to the general pattern of relative rates, see Figure 1. The supply and financial crisis shocks are “good” in the sense that they are not asymmetric. The Eurosystem’s policy response is likely to be well adapted, at least qualitatively, to each and every member country. Yet, the fact that, as a demand management tool, monetary policy is not ideal and that the most likely priority of the Eurosystem is to seek to contain inflation, there is a serious possibility of disappointment, or worse, in some parts of the public opinion. In addition, the Eurosystem may find it difficult to explain that it does not make more liquidity available to counteract contractionary forces after having injected massive amounts of cash when dealing with the financial crisis.

⁹ It does raise a host of microeconomic and prudential issues, which are not part of the present report’s brief.

Figure 1 Inflation Rates in the Euro Area



Source: International Financial Statistics.

Cooperation among governments

The Eurosystem is not alone in facing a very uncomfortable situation. Governments too are facing the same generic problem as the ECB, the fact that demand-side policies are ill-adapted to a supply shock.

An oil shock is contractionary because it acts as a tax on oil consumers. An oil-importing country cannot escape this “tax”: collectively, its citizens must bear the burden. The government can shift the burden from one group to another. Is there any economic principle that can be used in dealing with this question?

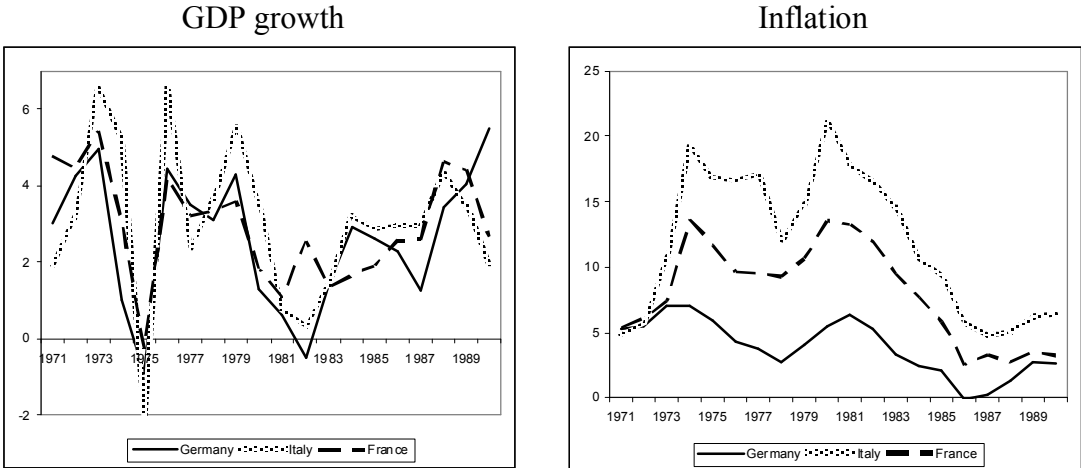
Governments across the world are asked to provide support to all groups that feel especially hurt by the shock. Unsurprisingly, the most vocal groups are those that have political clout and means to pressure their governments. Whether governments respond to these calls is a matter of income redistribution, a potentially explosive political issue. A cold-blooded economic prescription is that governments should not attempt to soften the blows, except for the poorest segments of society. Thus support should be directed to individuals based on clear criteria, chiefly income, and not to organized groups. The risk is that concessions to particular groups – e.g. fishermen or truck-drivers – create a precedent that other organized groups will use to ask for the same favour. Eventually, the burden will get shifted to the less organized individuals, among which the poorer figure prominently.

There is little, therefore, for governments to cooperate upon. Each one must deal with burden sharing in the most even-handed way possible. Yet, there is a contagion issue. If, say, fishermen in Country A obtain some relief, their competitors in Country B will have an argument to ask for the same relief. In that case, it is in the interest of every country that others do not get involved in selective relief.

Cooperation between the Eurosystem and governments

As noted previously, the Eurosystem’s best course of action is to focus in bringing inflation down as soon as practical. This means that the contractionary impact of the supply-side shocks must be accepted as the least bad response. This is not a politically appealing conclusion. Governments pressed by a variety of pressure groups may find it expedient to call for the Eurosystem to lighten the burden by adopting a counter-cyclical policy stance. As explained, such a policy will eventually fail because the supply-side shock imposes an unavoidable cut in importing countries’ purchasing power. If still attempted, the policy will leave a trail of higher inflation, which will have to be eliminated in subsequent years. This is illustrated by the comparison between France, Germany and Italy shown in Figure 2. The Bundesbank decided not to accommodate the oil shocks of 1973-4 and 1980-81 while the Banca d’Italia tried to expand its way out, while the Banque de France adopted an intermediate stance. The right-hand chart shows that inflation exploded in Italy, rose to double-digit levels in France and was fully kept under control in Germany. The left-hand chart indicates that growth rates were very similar in all three countries: the “oil tax” took its toll in 1975 and 1982 and Germany eventually outgrew France and Italy.

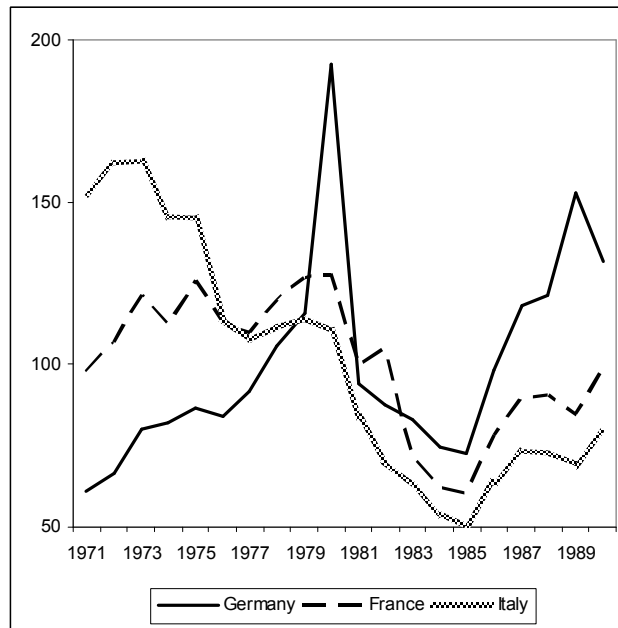
Figure 2 Dealing with oil shocks – 1971-1990



Source: Economic Outlook, OECD.

The implication is that governments should, tacitly at least, allow the Eurosystem to perform its thankless task. Not only would an accommodative monetary policy stance fail to achieve much, as previous experience has taught us, but very high inflation rates would destroy the Eurosystem’s credibility and reduce support for the single currency. The monetary union already has proven its usefulness in hard times: the conjunction of three large shocks has not been accompanied by the kind of intra-European instability that Europe went through in the 1970s and 1980s, see Figure 3. Harming the single currency is the worst possible option under the current circumstances.

Figure 3 Exchange rates vis-à-vis the US dollar – 1971-1990



Source: *Economic Outlook*, OECD.

Note: Exchange rate indices: 100 = average over 1971-1990.

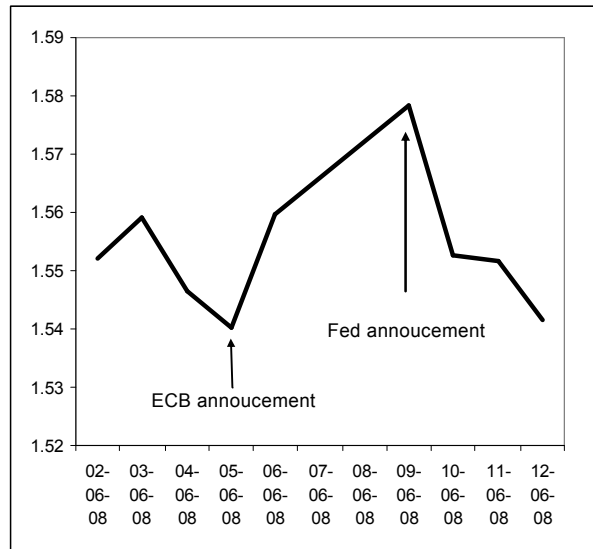
Cooperation among central banks

All oil importing countries face the same challenge so it is to be expected that their reactions will be qualitatively similar. Since August 2007, most developed countries' central banks have been battling the financial crisis. This had become a priority once the interbank markets started to freeze up. This has meant large liquidity injections. In a number of countries where credit conditions tightened up, often as the result of lasting interbank interest spreads over policy rates, central banks have either reduced their interest rates or, as in the Euro area, interrupted the then ongoing process of interest rate hikes. This was a matter of high priority in a highly unstable financial environment.

If financial conditions stabilize, the central banks will refocus their attention on the supply-side shocks. The Eurosystem's June 5 signal that it could raise its policy rate in July is the first signal that this is indeed happening. It was quickly followed by similar, if less definitive statements from the Federal Reserve's President. An interesting aspect is how exchange rates reacted. Figure 4 shows that the euro appreciated vis-à-vis the dollar following the June 5 announcement. It depreciated back once it emerged that the Fed could adopt a similar policy stance.

Beyond the usual disruptive effects of exchange rate gyrations, these movements also matter because the oil price, which is set in dollars, seems to offset changes in the value of the dollar. Lasting deviations between central bank policy stances would lead to compensating oil price effects. These effects mean that, when the dollar depreciates and the euro appreciates, oil becomes more expensive in dollars and less expensive in euros. Of course, this provides the US with a more competitive currency but the experience seems to indicate that this effect is partly at least offset by price adjustments. Euro area producers reduce their profit margins to protect their market shares in the US while US producers raise their profit margins in the Euro area. Thus exchange rate fluctuations have limited effects on the direction of trade.

Figure 4 Euro-dollar exchange rate – June 2-15, 2008



Source: ECB

It is thus in the interest rate of the Euro area that the dollar depreciates, with an opposite incentive for the US. This may explain why the traditional US “benign neglect” of the dollar value seems to be shifting to “measured concern”. It would be disastrous that the next step be competitive appreciation, with each central bank trying to outdo the other in raising interest rates. Traditionally, in such instances, European central banks would take into account their dollar exchange rates when deciding on monetary policy. The June moves represent an early indication that the relationship is becoming more balanced. The absence of a “natural leader” may make the situation more volatile. It calls for some coordination.

WILL THE EURO OVERTAKE THE DOLLAR AS DOMINANT CURRENCY?

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Summary

Very few currencies have been able to become leading or dominant international currencies in world's history.

Those currencies which have been able to become leading international currencies tend to become monopolist due to the centripetal forces derived from the existence of economies of scale, economies of scope and network externalities in their use.

But these centripetal forces tend to be counterbalanced by the opposing centrifugal forces derived from the need by investors to diversify their holdings of assets through negative correlation of major currencies, so that the leading currency is always followed by a second competitive currency.

The share of the euro in the international markets is, on average, still much smaller than that of the dollar, with minor exceptions. But the rate of growth of its share is high enough to may be able to displace the dollar in a few decades.

The euro share in world financial markets could receive a major boost if the UK would adopt the euro as its currency, given that London is a leading financial market in the world both in euros and in dollars. In any case, the Euro Area is expanding every year with new members and potential candidates that will join in the future which is not the case with the dollar.

In the medium term, the high risks of inflation in the US can accelerate the diversification away from the dollar and into the euro by central banks and sovereign wealth funds.

Nevertheless, the Euro Area is still a very fragmented banking and capital market which makes it more difficult to exploit the economies of scale, of scope and the network externalities in full

Finally, the fact that the EU and the Euro Area are only a union of national states and not a federal state will make it much more difficult to overtake the dollar and maintain a dominant international role.

Lessons to be learned from historical evidence

Historical empirical evidence has shown that very few currencies have been able to become dominant in world's history. The Dutch guilder was the dominant currency during the XVII and XVIII centuries even when Spain and France were the dominant political and military powers and only after the First Industrial Revolution the English pound was able to displace the guilder as the dominant currency. The pound was able to keep this hegemonic position during the "gold standard" until the Second World War, although the US had overtaken Great Britain in terms of total GDP at the end of the XIX century, had achieved a higher volume of trade after the First World War and the dollar was the only currency convertible into gold at a fixed price in the twenties. The US dollar took the leading position just after the Second World War until today. There are a few important lessons to be learned from this historical experience:

The first lesson is that the displacement of the dominant currency by the challenging one takes a long time to materialize. Usually, the incumbent currency tends to coexist with the challenging currency for many decades before it is displaced to second place. The guilder and the pound did so for almost a century before the second overtook the first and the pound and the dollar coexisted as the two major currencies for more than five decades before the dollar took the lead. The Deutsche mark and the yen have been coexisting with the dollar as secondary currencies for some decades as well until the creation of the euro ten years ago which has become the new challenger.

The second lesson is that only those countries that are more open and more active in the international trade of goods, services and capital and which have developed large trade and financial centres are able to get its own currency to a dominant position, independently of which country was the political and military power at that moment. Spain became the biggest military power in the world for more than a century, invading parts of France, Italy and the Low Countries and conquering large parts of America. But, at the same time, Holland was the largest trade and financial power, Amsterdam was the world's financial centre and the guilder was the dominant currency. The US was the dominant military power many years before its currency became hegemonic, because England was still the dominant economic and financial power and London the world's trade and financial centre.

The third lesson is that, although in every country the currency is used because it has the full guaranty of the State that issues it, in the international markets this guaranty is not a sufficient condition to make it of preferred use. Private economic agents are the ones that, in the last instance, decide which currency to use for their international transactions. There are a number of requisites that these agents demand for deciding which currency to use. The first one is that it is issued by a strong, open and competitive economy that takes itself a large share of the world's trade and financial transactions. The second one is that the country that issues that currency has a very large and efficient financial system well developed and regulated, very deep and liquid that allows economic agents to finance their transactions at very competitive costs and at high speed. Large volumes and low transaction costs are the two key drivers for private economic agents to prefer a foreign currency to their own national one and a different financial market than their own national one to transact.

The fourth lesson is that the same dominance of a currency in the world markets tends to create the necessary conditions for other currency or currencies to emerge as its competitors. In a world of multiple currencies and free multilateral trade, those agents that engage in international transactions between countries have the problem of coordinating the purchases and sales of the currencies they need.

As the purchase of a currency by an agent is not easily compensated by the simultaneous sale of another currency by another agent, the financial intermediaries must make their clients wait or need to hold large inventories of different currencies. Nevertheless, when the volume of transactions in one currency is very large, the waiting time or the inventory volumes are very low, reducing the costs of the transaction. The larger the use of a currency the larger is its liquidity, the lower are its bid and ask spreads and the more attractive it becomes until it ends up in achieving a kind of natural monopoly.

That is, the currencies, which are able to reach a high level of international use, tend to become monopolists through the work of the centripetal forces derived from the work of economies of scale and agglomeration effects due to economies of scope and network externalities in currency markets. International currencies derived their value from their use by citizens and companies of other countries. Thus, there is a strong bias in favour of using increasingly the currency that it is being mostly used until now. Therefore, the value of a dominant currency depends more on its past performance than on its intrinsic value given that its value is based on its relative level of use. It works in a similar way to international languages which also show large network externalities. Today, the dominant language in the world is English, not because it is intrinsically superior to others, but because it is the most used as a second language and the more it is used, the more tends to be used by others. One person that speaks English as a second language tends to interact with a larger number of other people and to have access to more information and knowledge than others that do not. In the end, he or she improves their potential more than with other languages.

However, fortunately for other leading currencies, it becomes increasingly difficult for the dominant currency to maintain such a monopoly position since these centripetal forces are increasingly counterbalanced by the opposing centrifugal forces that emerge as a consequence of the portfolio diversification of financial assets, which tend to reduce the risk of the concentration by investors on one single currency by diversifying their allocations into other currencies. These centrifugal forces are very powerful given that currencies offer much larger diversification opportunities than any other financial instrument such as fixed income or equities. The average price of all currencies, by definition, does not show any trend and therefore diversifying tends to reduce the covariance and the risk of a portfolio.

This diversification outcome is even stronger between the two leading currencies today, given that when the euro goes up the dollar goes down and vice-versa. The more global are the financial markets the more fixed income securities and equities prices tend to evolve in the same direction given the increasing interconnection and contagion of the different financial markets, as it has happened in the recent credit crisis. Therefore, currency diversification becomes increasingly necessary to reduce portfolio risk. This is a main reason why the euro is becoming a growing challenger to the dollar in a very short period of time, mainly in terms of the asset allocation by portfolio managers and the yen keeps being still a third choice, in spite of the dollar dominance.

Finally, for a currency to achieve a leading or dominant position it needs not only to be strong but also to have a very well proven record of stability. This is a very important distinction. Naturally, the optimum for a dominant currency is to achieve both features, but in reality this is not always the case, sometimes one currency can be very stable but losing value versus another currency that is more volatile. However, in the long run, investors tend to prime stability versus temporary strength, because by definition they are, on average, risk averse.

Importers and exporters of goods and services and long term savers and financial investors tend to give much more importance to the currency stability because the large majority of them are not short term speculators and do not want any exchange risk. Only the more opportunistic investors prime short-term value versus long-term stability.

The real proof for a dominant currency is when there is a large financial crisis and risk aversion is at its highest. Then, not always the true dominant currency is able to reach the status of “safe heaven”. In times of financial stress, volatility and risk aversion, investors tend, on the one hand, to unwind trades and return home and, on the other hand, to look for a safe heaven. If the country of issuance of the dominant currency is very large, then the homeward-bound effect makes its currency to appreciate versus other currencies in riskier times, but it does not mean that it has achieved the status of safe heaven, which results when a currency strengthens by attracting investors which had not a prior national attachment with that currency. This has been traditionally the case of the Swiss franc and, in some cases, gold or commodities have become safe heavens.

Relative weight of the euro as an international currency

The best way to measure the role of the euro as an international currency is through its relative presence in three international different markets: the international liability management market, the international asset management market and the foreign exchange market. The underlying concept, based on a portfolio balance framework, is that the international weight of a currency is determined by the balance between the demand for assets and the supply of liabilities, denominated in that currency.

1) In the international liability market, the supply of euro-denominated securities in the international markets shows a very large surge in its issuance since the introduction of the euro.

However, its relative weight in the fixed income markets is still far more important than in the equity markets. The reason for this asymmetry is the persistence of national, structural and institutional impediments to achieve a pan-European equity-trading framework. It is true that European equity markets are increasingly pricing company stocks on the basis of pan-European economic factors, taking into account the industrial sector effects more than the pure national ones, but still the “home exchange bias” remains the rule for most European shares. As a consequence of this very slow process of integration of the European equity markets, the Euro Area equity markets remain smaller than the US and the UK counterparts, even taking into consideration the relative size of their economies. At the same time, trading activity is thinner and transaction costs are higher both in trading and post-trade settlement.

Therefore, it is taking more time than the expected to reach a relative size big enough to compete with the US market. At the end of 2006, the market capitalization of the US equity market was \$13.9 trillion (39.2% of the world’s total and 112% of the US GDP) and that of the Euro Area (EA) one was only \$5.3 trillion (18% of the world total and 53% of the EA GDP), while the UK alone reached \$2.7 trillion (7.7% of the world total and 116% of the UK GDP). If the UK would join the Euro the Euro Area volume would jump up much closer to the US. Although the gap between the two has increased in absolute terms it has narrowed in relative terms, given that the rate of growth of the Euro Area equity market has been much faster, although coming from a much lower figure.

On the contrary, fixed income or debt securities markets have been much faster in realizing the greater potential gains of introducing a single currency. The elimination of the exchange rate risk and the convergence of the yield curves within the Euro Area have reduced the importance of economic factors that had previously led to the segmentation of the European bond markets. Therefore, borrowers can now tap on a very large and expanded investor base with a single issue making the euro an attractive alternative to the dollar as a currency of denomination for debt, and as a consequence, the bond issuance has soared. Euro Area borrowers, both public and private have accounted for most of the increase in issuance volumes, but the biggest shift has been the increasing share of the private sector borrowers.

The total stock of international debt securities outstanding can be measured in three different ways: First, measured in a “narrow” sense (that is, excluding home currency issuance) the euro denominated debt securities share of the total has been growing from 20% at the start of EMU in 1998 to 33.8% in mid 2005, but since then, it has decline to 31.4% at the end of 2006, out of a total of \$7.9 trillion. By contrast, the dollar share of the total has been steadily decreasing from 49% at the start of EMU in 1998 to 41% in 2005, but it has increased again up to 44.1% at the end of 2006, out of a total of \$18.4 trillion. Second, measured in “broad” terms (that is, including home country issuance) the relative percentages at the end of 2006 were 47% in euros and 36.3% in dollars. Third, measured in “global” terms (that is, including domestic issuance) the percentages are 27.8% in euros and 42.2% in dollars out of a total of \$68 trillion.

Finally, in terms of annual flows, the net issue of global debt securities by currency, in 2006, was 55.0% in dollars and 22.0% in euros, out of a total of \$1.75 trillion. In terms of short-term international debt securities, the net issuance was, in 2006, 36% in euros and 38% in dollars both declining 1 percentage point over 2005, given the rise of net issuance by emerging country currencies. In terms of long-term debt securities, the net issuance in 2006 was 28% in euros, losing 7 percentage points, and 48% in dollars, gaining 8 percentage points over 2005. The stock of outstanding bonds and notes by currency has shown, at the end of 2006, a total of \$2.27 trillion in euros and \$3.2 trillion in dollars. Financial institutions represented 67% of the total in euros and 50% of the total in dollars. By contrast, the sovereign and public share was 12% in the case of the euros and 29% in the case of the dollars.

Another interesting finding is that, by breaking the shares by region, the non Euro Area EU countries (UK, DK and Sweden) represent 42%, North America represents 22% and the offshore centers 11% of the total bond and notes outstanding denominated in euros, while the shares of the Euro Area, Non Euro Area EU countries and offshore centers in the total outstanding in dollars are, respectively, 24%, 18% and 20%.

The euro bond market is still far from reaching its full potential. There are several reasons for it: the legacy of its national origins still presents some obstacles for full integration and for further deepening; there is no central debt agency for government bonds and, hence, no co-ordination of the new issuance schedule; the lack of single benchmark yield curve in the euro bond market is symptomatic of these factors because no single borrower can provide the necessary volume and liquidity across the maturity spectrum in order to fulfill this role. While swaps have provided some proxy reference for a yield curve, it remains an imperfect one because of the less than perfect link between the swaps market, which is based on corporate issues and the futures market, which is based on government issues.

2) In the international asset management market, the currency diversification has notably increased. Investors inside the Euro Area have been keen buyers of foreign securities denominated in euros, especially bonds, but euro denominated assets have been less successful with non Euro Area based investors until 2005 but the trend has changed dramatically since then. Japanese asset managers have been much more attracted initially by euro denominated assets, but later, the fall of the relative value of the euro discouraged them. On the contrary, investors in the Euro Area have been large buyers of dollar denominated US securities. Although bonds have been the major instruments of non-European attraction, the surge in euro equities purchases by foreigners has been increasing.

The breakdown by currency of the funds under management in the US, Canada and in the non Euro Area European countries (UK, DK, Sweden, Switzerland, Norway, Monaco and Liechtenstein) has shown, at the end of 2006, a euro share of 0.7% in the first two countries and of 27.8% in the rest of Europe, while the US dollar share was of 97.1% in the first two and of 14.4% in the rest of Europe. It is very interesting to see that at the end of 1999, the euro share was only 0.2% in the first two countries and that the dollar share was 26.8% in the European non Euro Area, thus the euro has had an increase in both areas although in total it is still much lower than the dollar.

In other regions, the euro is dominant in non Euro Area EU countries where the average euro shares of total portfolios are around 50% with the exception of Poland (only 22%) and Romania (100%) and in Switzerland (39%). By contrast, the dollar is dominant in non Japan Asia, where its average share is more than 80%, with the exception of India (17%), in Japan, with 44% (versus only 20% in euros) in Latin America, where it has an average share of 95%, and finally, in Russia, where its share is 92% (versus only 4% the euro one)

As for the share of the euro in the stock of outstanding international loan markets, at the end of 2006, the euro share of loans was 19.8%, down 1.5 percentage points from 2005, but the share of the euro in the loans made by Euro Area banks to non-bank borrowers outside the Euro Area was 36% of the total, mainly to non Euro Area Europe. By contrast the share of the euro in the loans made to Euro Area borrowers stood at 54% while that of the dollar was 28%. The share of the euro in the international deposit markets was, at the end of 2006, 21.6% of the total, down 3 percentage points from 2005. The largest share of deposits was held by residents in the UK (47% of the total), followed by residents in offshore financial centers (17%) and by US residents (9%). The dollar share of international deposits was more than 60%. The euro share of deposits held by OPEC countries is 18% versus a dollar share of 77%. In Russia, by contrast, the euro share is 40% and the dollar share 51%.

In the foreign exchange markets, at the end of 2006 and using the continuous linked settlement system, CSL, the euro share was just below 40% while the dollars share was just above 90%, being the sum of currency percentage shares 200% as both currencies involved in a settlement of foreign exchange trade are counted individually. According to the BIS, in 2007, the share of the euro in the total foreign exchange turnover, based on daily averages in April, has gone down from 37.2% in 2004 to 37.0% in 2007. The same has happened to the dollar, which has come down from 88.7 in 2004 to 86.3% in 2007, while other European, Asian and Latin American currencies have gone up in share.

The euro is also widely used in the invoicing and settlement of international trade in goods and services. Regarding extra-EU exports of goods by EU member states, the share of the euro, at the end of 2005, was 49.7% being the dollar share 44.0%, but in imports of goods, the dollar share was 55.7% and the euro share only 35.2%, given the larger weight of energy in the imports content.

In the case of exports and imports of good and services by EU member countries not belonging to the Euro Area and candidate countries, the euro share is also remarkably high. Its average was, in 2005, above 62.5% in exports and 63% in imports.

3) The share of the euro in the total foreign currency reserves is not easy to know, given that around 46% of foreign exchange reserves held by developing and emerging countries cannot be allocated according to its currency composition and another 46% of the global reserve accumulation in the last three years is not known. The IMF Official Foreign Exchange Reserves (COFER) data remain the only official source. The latest data published by the IMF are those of 2007 and show that the euro share in developed countries has increased, since 2005, because of its appreciation versus the dollar during that two year period but it has not grow in the developing countries. In all, the euro share of foreign currency reserves was, at the end of 2007, 19% in the developed countries and 28% in the developing countries, while the US dollar share was 67% in developed countries and 60% in the developing countries.

Given that the latter have shown an increasingly larger share of total foreign currency reserves and today they account for 72% of the total, the euro share has not improved much in the last few years. The 2005 shares were almost the same as in 2007 for developing countries and higher for the dollar in the case of developed countries with 73% of the total, so that it can be said that there has been a small change in the composition of international reserves of developed countries in favour of the euro. Globally and at current exchange rates and taking into account only the disclosed reserves, the euro share is close to 26% and the dollar share is around 65%. Just as a reminder, in 1998, the share of the present Euro Area currencies was the following: DM 12.2%, French Franc 1.4% Netherlands guilder 0.4% and ECU 5%, that is, 19% in total, so that means that the euro has gained 7 percentage points of share since then, mainly due to its exchange rate appreciation.

Nevertheless, by not knowing the currency composition of very large foreign currency reserve holdings, these shares are only partial and not as relevant as they were only five years ago. Of the total reserves, 50% are disclosed, 24% are not disclosed and another 26% are held by sovereign wealth funds (SWF) which are only estimated because they are not exactly known. It is also important to look at the euro share in central bank deposits held at BIS reporting banks, show that the euro is increasing its share getting close to 30% coming from only 22% in 2004, while the dollar has come down from 65% five years ago to only 57% at the end of 2006.

Finally, it is also important to show the euro share in the large banknotes holdings circulating outside the Euro Area and its comparison with that of the dollar, that is, the use of the euro as a “parallel currency” in third countries. According to the FED and the ECB calculations, the euro has overtaken the dollar after 2004 as a percentage of domestic GDP by going up from 5.6% in 2003 to more than 7% in 2006, while the dollar fell from 6% in 2003 to only 5.7% in 2006. The ratio of US dollar banknotes in circulation to euro banknotes in circulation has come down from 1.3 in 2003 to 1.0 in 2006 at PPP exchange rates and to 0.9, at current exchange rates. The main reason is that the denomination of the euro banknotes (200 and 500 euros) is much larger than that of the dollar ones (100 dollars). In any case, I think that, as Europeans, we should not be proud of the rapid and increasing use of large euro banknotes because they are mostly used for irregular or illegal activities, both in the Euro Area and abroad.

The Future of the Euro as an International Currency

In the last few months, a few papers and articles have tried to prove that the euro will overtake the dollar rather soon. They look at the historical evidence of how the dollar slowly overtook the pound, between 1897 and 1945, find that the same may happen again between the euro and the dollar now, concluding that the first may overtake the second within the next two decades. According to them, the decline of the pound was part of a larger pattern whereby the UK lost its economic pre-eminence: colonies, military power and other trappings of international economy. And now they see the same happening to the US, which might now have embarked as well on a path of imperial over-reach, following the one experienced by the UK. On the one side, they see the euro as a more serious challenger to the dollar than any other previous currency. On the other side, they see that, as it happened to the UK before, the US dollar is suffering now a 25 year history of trend depreciation of its currency.

Most papers take, as a measure of the international role of the euro, its increasing share in the total foreign exchange reserves held by central banks. Because they believe that similar considerations may apply to the other criteria of international currency status, such as trade invoicing, debt and equity, cash and deposits and foreign exchange transactions denomination. They have chosen foreign currency reserves because of their huge growth increase in recent years in emerging countries and of their need to diversify their large holdings by different currencies. Global foreign exchange reserves have gone up 160% since 2000, due mainly to global imbalances. Today, China has 3 times and Japan 2 times more reserves than those of the Euro Area, whose volume has already been matched by Russia.

Their argument is based, on the one side, on the expected fact that these foreign central banks cannot keep supporting the dollar indefinitely so that they will eventually diversify part of their huge dollar holdings into other alternative currencies. The recent monetary policy followed by the FED, in order to avoid a financial stability crisis is going to cause an increase in inflation that will make it difficult for all the foreign currencies pegged to the dollar to be able to maintain it. One way to keep it would be to peg to a basket of euros and dollars, another way would be to drop the peg altogether. On the other side, on the fact that these countries have now in the euro, for the first time in many years, a real and credible alternative to the dollar, given that it also complies with most of the exclusive characteristics of an international currency: stability, reliability and increasing network externalities. Moreover, the Euro Area total GDP is now similar to that of the US but growing faster due to new and future EU members finally adopting the euro and the UK adoption of the euro will give a huge bust to the Euro Area, given that it will bring London as the largest euro financial centre in the world.

There are two question marks in this argument. The first is that by diversifying away from the dollar they may provoke an appreciation of their own currencies which are pegged to it, but they think that the end result may not affect their currency on a trade-weighted basis but only on nominal terms. The second is that if they diversify by selling dollars and buying euros they may provoke a large fall in the dollar and a loss in value of their dollar denominated stock of reserves. Nevertheless, they see this issue inevitable since their decisions to sell tend to be individual and not collective and coordinated, so that it may be less negative for those central banks to follow the herd than to be the last one. The main reason is that the network externalities which have helped the dollar to become increasingly used by economic agents may turn now to favour the euro. Therefore, network externalities can turn from developing centripetal forces in favour of the dollar to developing centrifugal forces in favour to the euro.

To become the issuer of the leading and hegemonic international currency brings large benefits but also large responsibilities. The benefits tend to be exorbitant according to these two papers. First, the Euro Area will be able to increase its seignorage in a major way, because it can issue even more billions of large banknotes of 200 and 500 euros than it is issuing at present, which equal an un-nominated perpetual debt which does not pay any interest. Second, the Euro Area will take over from the dollar its role of a banker of the world in the sense that it will be able to accept short-term deposits at low interest rates in return for long-term investments at high average rates of return. That is, it will tend to achieve permanently higher returns on its foreign assets than the return paid for its liabilities, because foreigners are ready to accept lower returns on their euro investments. Third, as a consequence of all that, it will also achieve the privilege of being able to finance large current account deficits for long periods of time as the US has done for so many years.

The attached responsibilities of a dominant international currency are also important. The euro will have to keep being very stable for a long time. It will have to avoid inflation expectations, sometimes at the expense of the Euro Area rate of growth, in order to keep intact its hegemonic status as an international currency. As the recent US experience has shown, the consequences of higher inflation in the Euro Area could tend to be twice negative, since not only it will tend to depreciate the euro, making it difficult for other pegged countries to maintain their pegs, but because a depreciation of the euro will result in even higher inflation in the Euro Area. But symmetrically, if the ECB, in order to keep inflation expectations under control goes too far, it may produce financial crises in other countries or even provoke a deflation in the Euro Area and the rest of the world. Moreover, the Euro Area could not abuse its privileges of issuing the leading international currency or indulge in maintaining long term current account deficits, as the US has done, because it may result in the beginning of the end of the hegemonic status of the euro. Today the US is absorbing three quarters of all net international capital movements, what is an oxymoron for a leading international currency.

Another important responsibility of being a hegemonic international currency is that the Euro Area will need eventually to take as well from the US the role of the world's political leader and the world's military gendarme. Unfortunately this is going to be extremely difficult and uncertain because its political governance, based on 27 national governments achieving majority decisions, is totally at odds with a single federal government as that of the US.

I think that the present ECB policy of neutrality with regards to the international role of the euro is the right one. The ECB should try to make the euro the most stable currency by maintaining long-term price stability. That is a task hard enough for the ECB to make the euro attractive as an international currency. The reason is that the international role of the euro is the outcome of a market driven process and not the result of interference by central banks and political authorities. To try to impose to importers and/or exporters of major commodities, such as oil and gas to invoice in euros is going to be perceived by the markets as an intolerable interference by politicians. The private companies engaged in these activities know better than anybody which is the optimal (and workable) currency of use decision for them. So that and they would change the present situation only if they think that it is convenient for their efficiency, competitiveness and for their shareholders returns.

In the meantime, if the Euro Area economic authorities aim at achieving a hegemonic international status for the euro, they should mainly try concentrate on integrating their still segmented banking and capital markets to achieve a larger and more competitive size in order to be able to attract more issuers and investors from the rest of the world and compete on equal terms with the US financial markets as it has been achieved in its money markets.

Unfortunately, until now, the dominant political view in the Euro Area is still shortsighted and short-terminist derived from an old fashioned and nationalistic view and understanding of the markets, completely incongruent with an increasingly globalized economy and it is retarding the surge of the euro as an international currency comparable to the weight of the GDP and the trade share of the Euro Area in the world.

In conclusion, I think that unless the Euro Area achieves a political governance system similar to a federal state, it will be very difficult for the euro to maintain a durable hegemonic status as the leading international currency, in the probable case that it is able to achieve that role in the next two decades, given that it is already being by far the best candidate to replace the dollar in that role and given that its rate of catching up with the dollar share in the major international markets is faster and faster every decade.

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INTERNATIONAL ROLE OF THE EURO

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

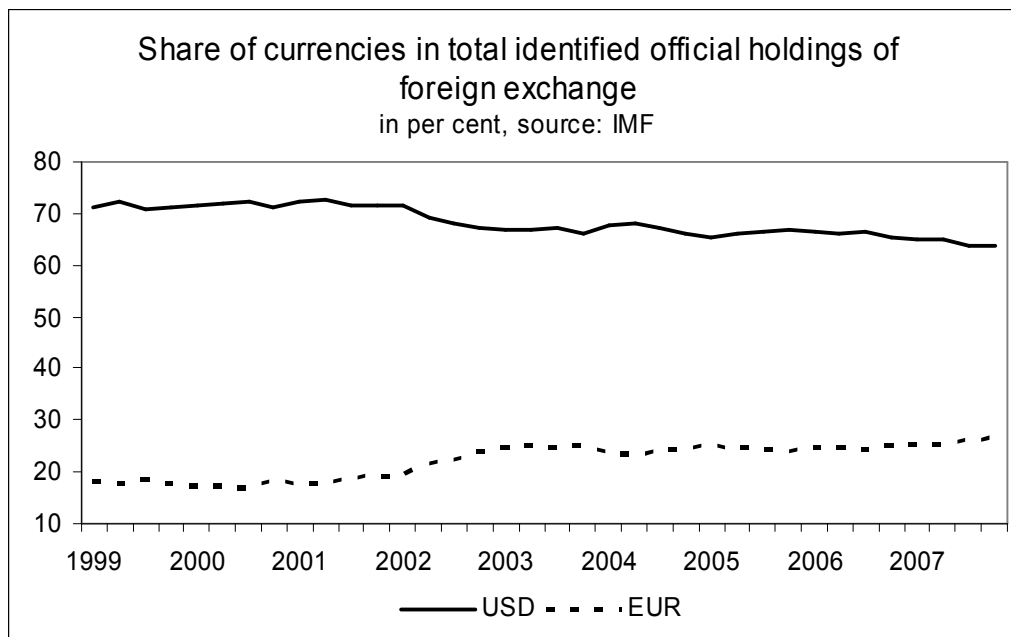
- In the years ahead, the dollar will probably be the leading international currency, whereas the euro is likely to stay in a stable second place.
- Recent dollar weakness is partly caused by a cyclical weakness of the US economy, i.e. the currency should recover once US economic conditions start to improve. Hence, one obstacle for the dollar's role as leading international currency will start to disappear.
- Larger euro shares in official holdings of foreign exchange are likely in the medium to long term, but diversification should prove a smooth process.
- The benefits and responsibilities arising from being an internationally used currency like the dollar and the euro are basically the same and do not depend on changes in the share of the currencies in official holdings.

I. Will the euro become the leading currency?

a. Does the euro already make up a far larger share of global currency reserves?

The CFA institute, a global association of investment professionals, has recently asked its members if the US dollar will be able to keep its role as the world's leading reserve currency. There was only a small backing for the dollar: A thin majority of the 1800 respondents – 51% – answered „yes“, 42% reckoned on an end of the dollar's dominance, 7% even within the next two years.

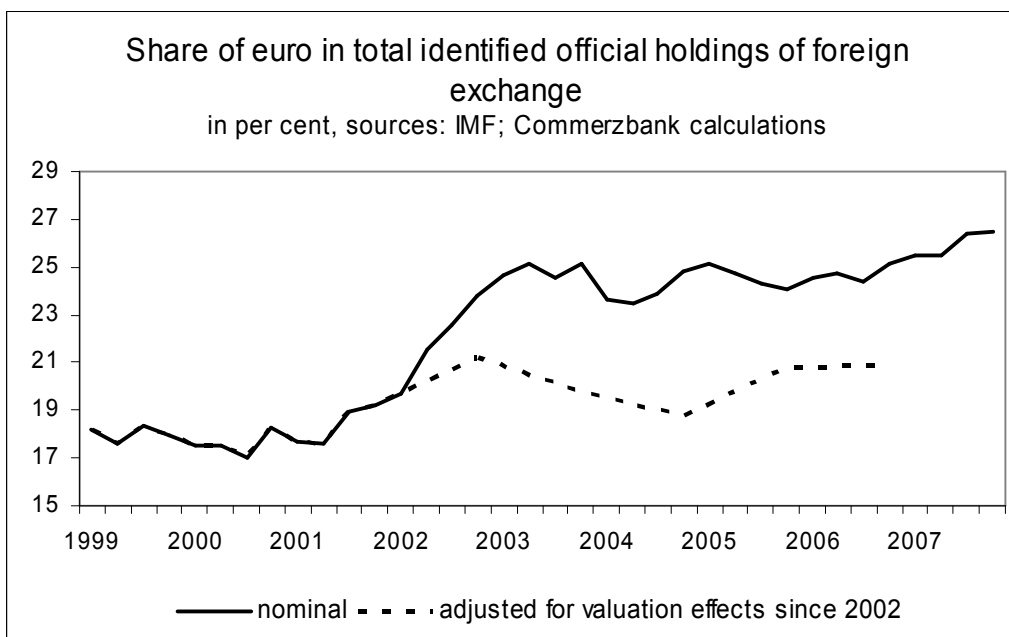
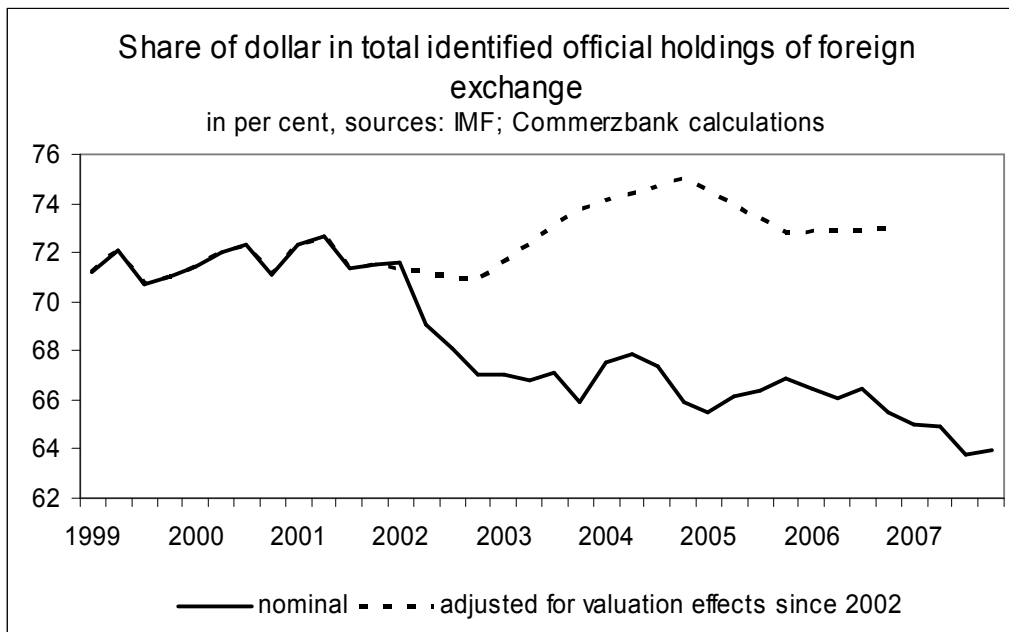
Is the US dollar really about to lose its role as the leading international reserve currency, as the poll suggests? Not at all, since the empirical facts draw a completely different picture (see chart).



The dollar's share in total identified official holdings of foreign exchange was 64% at end-2007, declining gradually from 71% at the beginning of 1999. During the same period, the euro's share increased from 18% to 26.5%. Given the wide gap of still more than 38 percentage points between the dollar's and the euro's share, the euro is obviously far away from endangering the dollar's role as leading reserve currency. Assuming that the development of shares observable since 1999 continues at the same pace, it will take more than two decades, not years, before the euro may take over a leading role.

What is more, the above graph is somewhat misleading, as it suggests – at first glance – that the decline of the dollar's share is a consequence of active portfolio reshifting away from the US currency into the euro. This is not the case. The declining share of the dollar is simply a result of the US currency losing ground versus the euro in recent years, i.e. a valuation effect. This is apparent from the next two charts which show the dollar's and the euro's share of total currency reserves, adjusted to exclude exchange-rate movements¹⁰.

¹⁰ Data for 2007 are not available so far.



The euro appreciated substantially versus the dollar from \$0.88 in early 2002 to \$1.46 at end-2007. Adjusted for the resulting valuation effects, the dollar's share did not decline, nor did the euro's share rise in recent years. The decline of the dollar's nominal share is thus not the result of active diversification, i.e. central banks appear to be far away from abandoning the US currency as their preferred reserve currency.

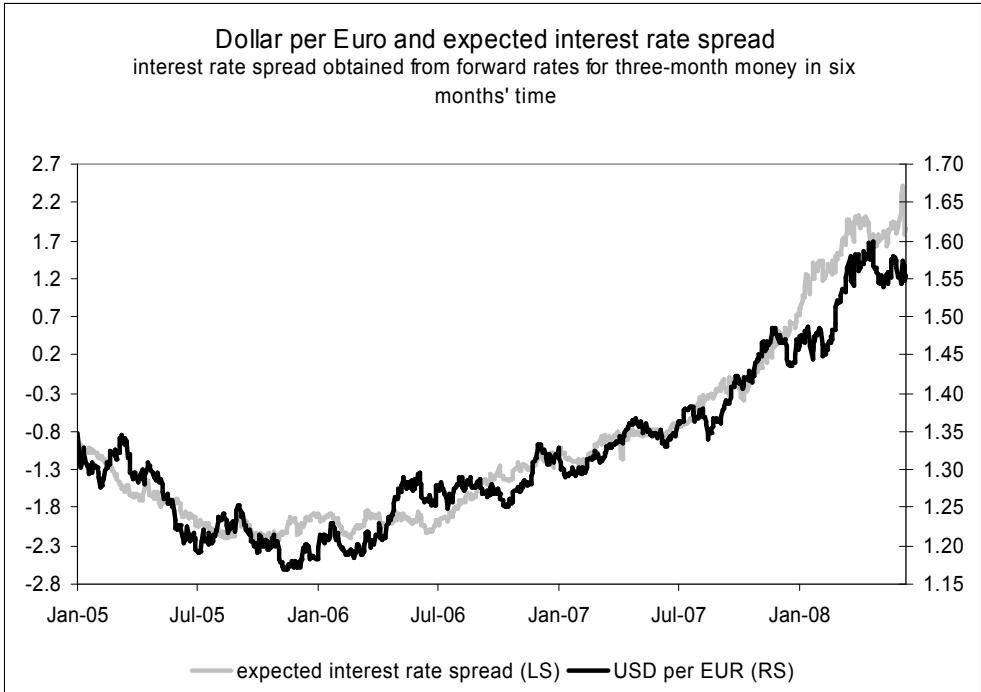
b. Could a continued dollar weakness trigger a break-through for the euro's international role?

It may be argued that distinguishing between quantity and valuation changes in currency reserves is besides the point. Ultimately, it makes no difference whether the dollar's share declines because the US currency becomes worth less and less or because central banks actively diversify away from the dollar.

What is more, a continued dollar depreciation over a protracted period will no doubt trigger an active flight from the US currency, i.e. the two reasons for a possible decline of the dollar's share in reserve holdings are interrelated in the longer run.

Therefore, the claim of some observers that the days of the dollar as leading international currency are numbered is presumably due to the marked depreciation of the dollar in recent years. There can be no question that in the event of a continued dollar depreciation, the currency's fate as international currency is dire. However, we doubt whether a continued depreciation is a likely scenario. Let us therefore have a closer look at the reasons for the depreciation of the US currency in recent years.

The euro's rapid advance on the dollar in recent quarters has occurred largely because the market was expecting generous Fed rate cuts, whereas the ECB is still basically more inclined to raise rates. For several years now, the euro has moved versus the dollar in line with the money-market interest-rate spread expected between the eurozone and the US (see chart).

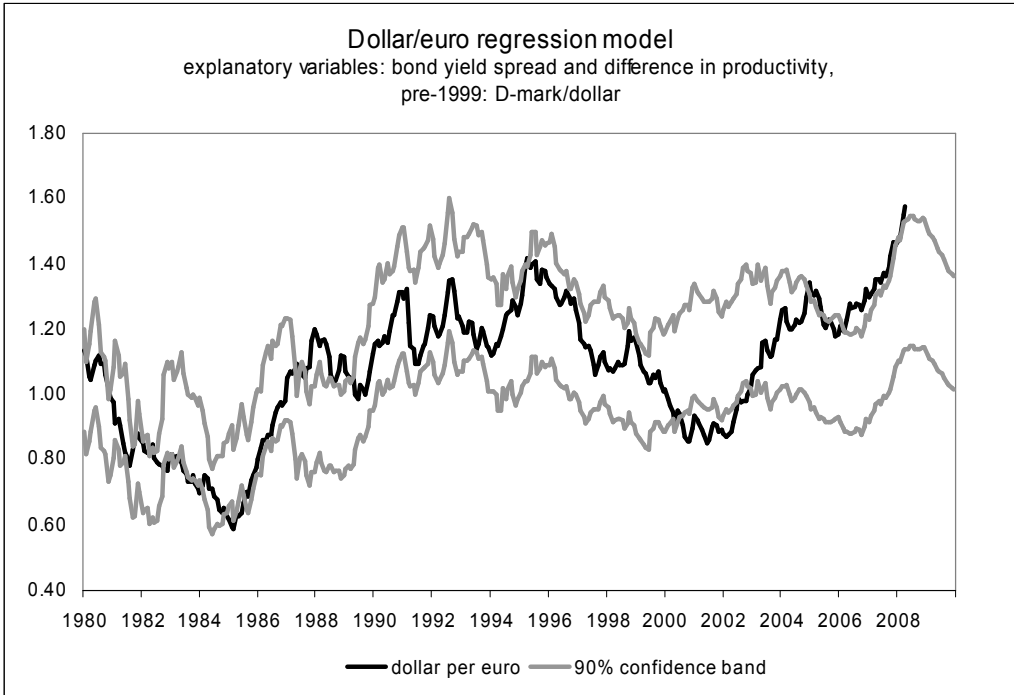


The chart suggests that the US currency is under pressure for cyclical, not structural reasons. By implication this means that the dollar will start to appreciate when the cyclical reasons change. It is of course difficult to predict when the Fed will start to raise rates, but it is in no way a bold move to forecast that key interest rates in the US will not stay at the current low level of 2% forever. In our view, the equilibrium rate for three-month money is around 4.7%, and 3.4% for the euro area.¹¹ This yields a spread of -1.3 percentage points, which corresponds to a euro exchange rate of roughly \$1.30.

As for the longer-term fate of the exchange rate, it is important to keep an eye on the US current-account balance. The size of the country's foreign-trade deficit has often been cited in recent years as a major reason for the dollar's pronounced weakness. In the absence of any concern about the deficit being sustainable in the long run, a much stronger dollar would basically be justified.

¹¹ The 'equilibrium' or 'neutral' interest rate is defined as the interest rate which is consistent in the long run with output at its potential level and a stable rate of inflation.

A longer-term model based on the eurozone-US yield spread and productivity gap currently suggests a fair value of \$1.42, some 15 US cents below the actual exchange rate (see chart). Over-valuation on this scale has only occurred once since the start of the 1980s, when the US current-account deficit was undergoing adjustment in the second half of the decade. Then, as now, the size of the foreign-trade deficit was probably a main reason for the serious deviation from the model value. However, comparison between then and now also shows that the discrepancy is meanwhile so great that it bears no relation any longer to what has been happening to the US current account. The deficit has actually been shrinking for several quarters, and while in the third quarter of 2006 it amounted to 6.6% of GDP, the figure had fallen to 4.9% by the fourth quarter of last year. With the US economy passing through a weak phase, we expect the deficit to shrink further to below 4% of GDP, allaying fears of it being no longer sustainable. In itself, a smaller risk premium should have a stabilising effect on the dollar.



To sum up, in my view it would be wrong to bet on the dollar losing its role as leading international currency on account of an ever-depreciating currency.

It is therefore sensible to have a look at other important factors determining a currency's international role.

c. What are the real factors which determine a currency's international role?

1. *Large economic size*

International currencies usually belong to large, competitive economies, particularly those with far-reaching trade and financial ties. Such an economy will usually generate a large market in foreign-exchange transactions with at least one leg in its own currency. In addition, large market size means lower transaction costs: International trade requires investment in software, hardware, trading, and clearing systems. However, once installed, these systems can be used for many or few transactions, generating not much different costs. In other words, average costs fall with the scale involved.

2. Well-Developed Financial System

International currencies are usually associated with open and liquid financial systems. What are the advantages of a well-developed financial system?

To begin with, a well-developed financial system is more likely to attract business from abroad, where financial markets may be less developed or barriers to efficiency exist.

Moreover, international market participants need a short-term risk-free instrument to hold their temporary positions. A liquid secondary market allows them to sell or buy large positions in the currency quickly without fear of capital loss.

Last but not least, international market participants not only hold temporary positions, but want to borrow or invest in the international currency, or hedge their foreign currency positions, etc., i.e. a wide range of ancillary services is required.

3. Price stability

Price stability and confidence in a currency are important criteria for selecting a reserve currency.

Empirical study supports theoretical considerations

An empirical study carried out by Chinn and Frankel¹² shows that the above-mentioned factors explain most of the shifts in the shares various currencies have had of overall foreign-currency reserves (see box). Interestingly, according to the study, a country's net international investment position has on average had no significant impact on the shares individual currencies have had in total reserves, i.e. empirical evidence at least suggests that a mounting US current-account deficit and the resulting deterioration in the US net international investment position would not result in a flight from the dollar as a reserve currency.

Factors determining selection of a reserve currency – an empirical study carried out by Chinn and Frankel

The study establishes in a combined time series and cross-section analysis what determines a currency's share of total currency reserves. The period prior to monetary union from 1973 to 1998 is examined.

The following equation is an example of the various regressions used:

$$\text{share} = 0.023 + 0.086 * \text{gdpratio} - 0.097 * \text{inflationdiff} - 0.02 * \text{exratevar} + 0.922 * \text{share}(-1),$$

whereby

share = currency's share of total reserves

gdpratio = a country's GDP as percentage of global GDP

inflationdiff = average inflation rate of a country in relation to the average for all industrial countries

exratevar = standard deviation of the rate of change of a country's currency versus special drawing rights

share(-1) = currency's share of total reserves in prior period

¹² Chinn, M., J. Frankel: Will the Euro eventually surpass the dollar as leading international reserve currency?, NBER Working Paper Nr. 11510, 2005.

The percentage of total foreign-currency reserves thus increases when aggregate economic output rises in relation to global output, whereas a high inflation rate compared with the average and strong exchange-rate volatility are detrimental. An additional significant factor for the present figure is the percentage for the prior period, i.e. a gradual transition in every case.

Other equations showed positive correlation between the respective share and size of a country's financial market.

No link to a country's net international investment position was established, though.

The model is reliable in that it provides a good explanation of the euro's share of total currency reserves from 1999 to 2004.

Larger euro shares likely in medium term,...

Developments on the euro-area financial markets suggest that the euro will become more popular as a reserve currency in the medium to long term. A study compiled by Galati and Wooldridge¹³ in 2006 considers in detail whether changes in conditions on the financial markets favour the euro playing a greater role as an international currency. The authors come to the conclusion that the euro-area financial market is rapidly catching up with the US financial market in terms of liquidity and breadth. In other words, their conclusion is that some of the advantages which have made the dollar the dominant world currency have been eroded. Factors favouring the dollar at present, they say, are the very large US Treasury bill market and the homogeneous nature and financial strength of the US bond market.

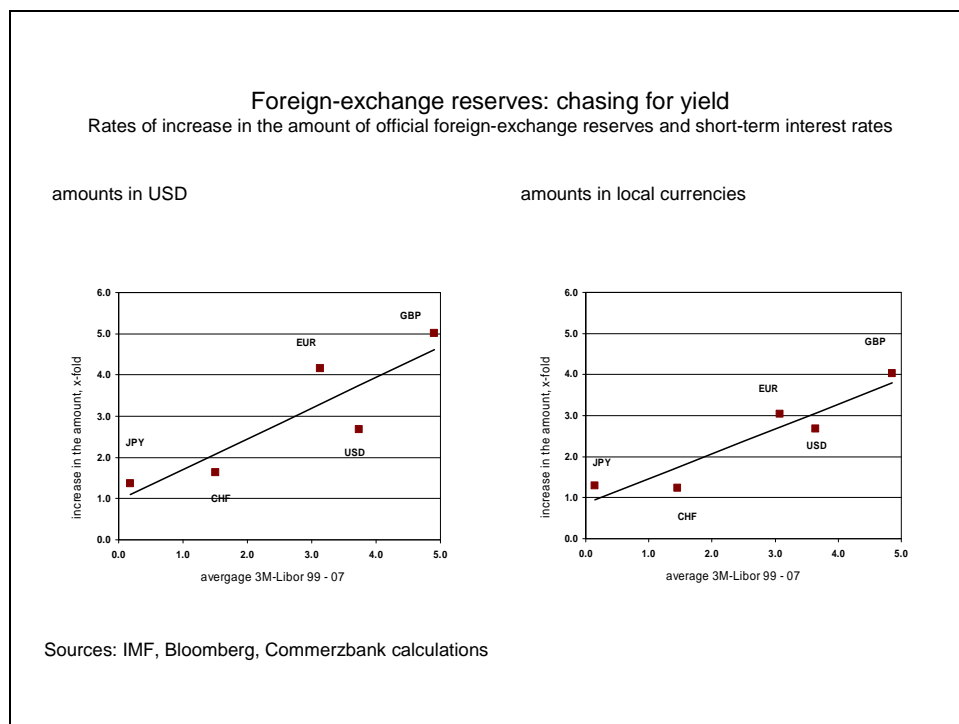
... but diversification should prove a smooth process

It is not so much a question of whether a larger percentage of currency reserves will consist of euros in the future, therefore, but how this will happen. Is there any justification for the fears of some market players that restructuring would mean a sudden, sharp fall on the part of the dollar? We think this unlikely, as there are a number of pointers to the cautious approach to restructuring taken in the past being adopted in the future as well:

1. Central banks' focus on maximising earnings

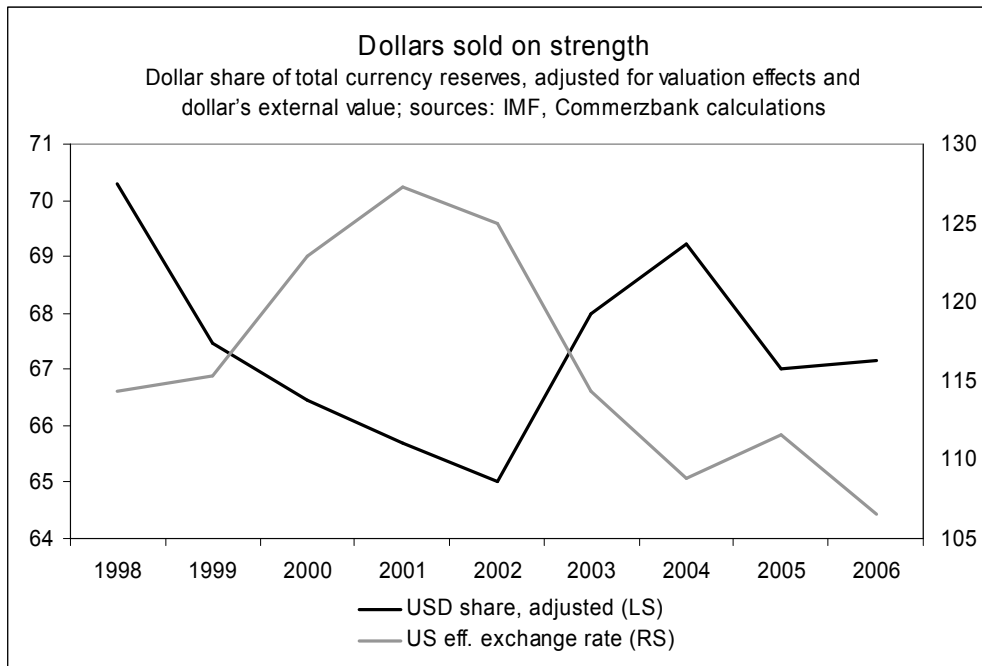
The main reason for central banks keeping foreign-currency reserves in the past was to be able to intervene on the foreign-exchange markets. This motive can no longer explain the size of the reserves held in some countries. Nowadays, a currency's external value is kept low to promote export-based growth. As a result, the volume of foreign-currency reserves held has risen sharply, so that the banks' attention has been drawn automatically to maximising returns on the reserves. The view that central banks try to increase the return on reserves is supported by the fact that in the longer term the rate of increase in the amount of reserves is significantly correlated to the average level of short-term rates:

¹³ Galati, G., Ph. Wooldridge: The euro as a reserve currency: a challenge to the pre-eminence of the US-dollar?, BIS working papers, Nr. 218, 2006.



If the central banks really are focussing to an increasing extent on maximising income from their reserves, it is hardly likely that restructuring of the reserves would reinforce an existing tendency for the dollar to depreciate. From the standpoint of the central banks, diversification during a time when the dollar was comparatively weak would after all not be particularly successful. While higher earnings might be achieved if securities from other countries were substituted for US bonds, if the dollar were already weak in any case there would be a danger of confidence in the currency then suffering an additional setback. There would thus be a considerable risk of the inevitable valuation loss on remaining dollar reserves resulting from the sale of some dollars outweighing additional income from the shift to another currency.

All of this means that the central banks can be expected to stick to the successful strategy pursued in recent years. International Monetary Fund figures on foreign-currency reserves adjusted to allow for valuation effects show that the percentage of dollar reserves has been large at times when the dollar has tended to be comparatively weak, and vice versa (see chart). Central banks have evidently bought dollars when it was weaker, i.e. cheaper to buy, and sold when it was stronger. Diversification away from the dollar is thus more likely to occur when the dollar is relatively strong, not when it is weak. In other words, the approach taken by the central banks has a stabilising effect on the dollar's external value, not the reverse.



2. Network externalities

Another key factor for the selection of a reserve currency is “network externalities”, whereby a good or service becomes more valuable as more people use it. The classic example is the telephone: A telephone connection becomes more useful to a user as the number of people with telephones increases.

The same can be said of currencies. The dollar’s strong position as a global currency means that it also makes sense for every individual to use it. The more the dollar is used as a recognised means of payment, the lower the transaction costs involved, and the higher the liquidity involved, so it becomes more attractive for all concerned to use this currency. Accordingly, diversification of foreign-currency reserves away from the dollar occurs at only a very slow pace.

The view that network externalities play a key role in determining a currency’s share of total currency reserves is supported by Chinn’s empirical finding that a significant factor for the present share is the share for the prior period.

II. Is there an unstable reserve currency situation?

As I have shown above, it is unlikely that the euro will surpass the dollar as the leading international currency *in the years ahead*. The dollar will continue to be the leading reserve currency, whereas the euro is likely to stay in a stable second place.

III. Does a leading reserve currency lead to special responsibilities?

What in my view is still a marked gap between the dollar’s leading role as an international currency and the euro in second place does not imply that the US and the euro area are faced with completely different risks and benefits resulting from their respective roles as international currencies. For example, one obvious cost for the US on account of the dollar’s role as leading international currency is the possibility of large fluctuations in the demand for dollar and hence its movements vis-à-vis other currencies. However, these other international currencies cannot escape this cost: The euro as the natural alternative investment opportunity suffers or benefits from the same fluctuations of the EUR-USD exchange rate – but in the opposite way.

Having an internationally used currency requires continued monitoring and analysis by the central bank and other organisations, but the methods used do not of course change when the share of the currency in official holdings of foreign exchange has changed.

One reason for closely monitoring the international role is that the use of the currency outside the home country may have an impact on monetary policy transmission and on the information content of economic indicators. To give only one example, money supply may rise on account of a stronger cash demand from abroad, i.e. money growth in this case does not signal upside risks to price stability in the home country.

A second reason for closely monitoring the international role of a currency is that it could affect the transmission of global financial and exchange-rate shocks to the home country.

The ECB has published the main findings regarding the international role of the euro in its annual review, and in quite a few other publications such as the bank's financial stability review. It will continue to do so in the future.

INTERNATIONAL ROLE OF THE EURO

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

JEAN PIERRE PATAT

Executive summary

A currency has an international role when it is used on a large scale by non residents in exchange market transactions, investment tool, borrowings on international markets, anchor for foreign currencies, invoicing and settlement reference on international transactions.

If we consider some of these aspects, the euro is indisputably as from now a major worldwide money, but its situation remains far from that of the dollar, while it largely outdistances the other currencies. The use of the euro has significantly increased in foreign exchange reserves. The euro is also an important international debt instrument, and is an anchor for more than 40 currencies. But its role remains, even if it is important, far from that of the dollar on exchange market transactions. Finally, it still has a very little role as an invoicing/settlement vehicle for many strategic commodities.

A lot of economists and analysts consider the euro to be possibly a leading currency in the next 10/20 years, with a possible conceivable situation of quasi equilibrium between the two great worldwide moneys. In our sense, such an evolution is improbable. Concerning the GDP, which is a necessary but not sufficient condition for a major international role of a currency, the forecasts for the future are unfortunately less favourable for Europe with a weak demography, a too low working population and insufficient efforts in education, research and innovation. In the financial field, the size of the aggregate euro area bond market is not negligible, but investors consider mainly the Bund and the OAT. And there is no comparison with the US bill and bonds market which offers to the investors a wide diversity of fungible securities and the guarantee of an optimum liquidity.

In addition, and perhaps mainly, long term choices of international currency commitments by investors are also driven by political, diplomatic and strategic considerations. As the euro area is not a unified state, it is suffering from a heavy handicap in this field.

So, even if the role of the euro can still widen, our assessment is that a situation with a 30% international weight of the euro and a 60% weight of the dollar is likely to appear.

Moreover, one can seriously wonder if the coexistence, with broadly the same importance, of two major international currencies is thinkable: if it could theoretically incite US authorities to pay more attention to their external position, it could also cause much more instability. Moreover, historical evolution showed that the international monetary system needs only one dominant reference, even if this reference is not necessarily the best one. (unless deep reforms leads to total shifts in the system).

In fact, if a wider international utilisation of the euro would provide advantages in the statement of international transactions, especially in great commodities markets, one can wonder if the single currency area would have great interest in a significant surge of the euro share in investment foreign positions. The area has no external deficit and the international financial stability could be strongly affected if, in addition of the US, a major economic area pursued a policy of benign neglect and drained an additional part of the world wide saving,

which would be better used in financing poor countries. Outstanding public debts already represent 65.5 % and 64.3% of the German and French GDP. So, it is obvious that such an orientation would foster market interest rates surges, as the euro area has not the political, diplomatic and strategic position allowing them to increase significantly its indebtedness without damaging its credibility.

1) The introduction of a single monetary policy together with a single currency in Europe has been the logical issue of the European Monetary System evolution, as it had become difficult and even counterproductive to try to deal with fixed exchange rates, free capital flows, and national autonomous monetary policies. In addition, the euro was susceptible to optimise the advantages of the single market, the price stability, and the dynamism of wealth production and exchanges in reducing the transactions costs and enhancing the level of market interest rates provided that the new currency was credible.

These considerations were obviously predominant and the ambition of creating a worldwide currency playing a major international role was not the first priority. At this time, one could not find out among numerous declarations and papers of European political, financial and monetary leaders, when they developed the advantages expected from the single currency, any explicit allusion to the creation of a worldwide currency and even less to the promotion of a challenger for the US dollar, while this argument was widely developed by journalists.

Yet, in first analysis, it could seem evident that the currency of more than 300 millions of inhabitants, accounting for 17% of the worldwide wealth, would have an important international statute.

But such a statute is not only depending of the size of an economy, which can be considered as a necessary but not sufficient condition, as has shown the example of the Japan: before the creation of the euro, this country was the second world economy, but the Yen has played a minor international role.

Indeed, having an international role for a currency requests a great use of it on a large scale by non residents in four areas:

- This currency is a vehicle for exchange market transactions, not only directly, against foreign currencies, but also indirectly, as an intermediate for purchases and sales of other currencies. This role is played on spot, forward, and derivative markets.
- This currency is an investment vehicle which means that the issuer country offers a large and permanent amount of diversified safe and liquid financial investments.
- This currency is an important international debt instrument as it can be used by borrowers on international markets such as firms or states of which the own currency market is less deep and less liquid.
- Finally, this currency is used as a reference, mainly in two different stances: political as it is an anchor, with diverse methods, for foreign currencies; economic as it is used for invoicing and settlement of international transactions, especially on commodities.

At the end of the twentieth century, when the euro has been introduced on the markets, the US dollar was the only currency able to play these diverse roles. Other major currencies, namely Yen, Pound, French Franc, and even DM, had fewer diversified international functions or were used on an insufficient scale for being considered as having an international role.

In the following development we will firstly give a broad description of the present role of the euro in the various aspects of an international currency statute and assess its recent evolutions.

We will then evaluate the possible future evolution, which could be either a broad continuance of the present respective positions of the two major currencies, or an important and continuous growing international role of the euro, which could lead to a situation of twin worldwide currencies or even of a leading role of the euro, while the dollar would be dethroned. We will try to assess the likelihood and the consequences for the international financial system of these issues.

Finally we will discuss the consequences for a country and its economic and monetary policy to have its currency playing an important and rising international role. We will especially assess the possibility, and the opportunity of a policy aiming at strengthening strongly the international role of the euro.

2) If we consider the several aspects of the international use of a currency, it appears that the Euro is indisputably as from now a major worldwide money. But its situation remains far from that of the dollar, while it largely outdistances the other international currencies. An abstract globalisation of all the different positions could give a 65% weight of the dollar, a 25% share of the euro, a 10% share of the other moneys (of which Yen whose use has significantly decreased, Pound which remained stable and some shelter or regional currencies such as Swiss franc, Australian dollar...).

Without being exhaustive, one can list some main issues.¹⁴

Concerning the role of the euro as a vehicle for transactions on the exchange market, its share in daily settlements accounts for 39%, in slight diminution during the recent years (but the number of currencies traded within the Continuous Linked Settlement system – CLS – which is the statistical reference, has increased to 15 whereas it originally included 7 currencies). This share of almost 40%, superior to the aggregate shares of the former European currencies, can be considered as relatively important, especially if we compare this figure with the stake of the Japanese Yen (18%) and of the British Pound (14%), but remains far behind the dollar which represents 92.5% of the transactions and remains the dominant currency in global foreign exchange markets.

The share of the euro on the international bond market (therefore excluding residents' issuances) remains important but, after having been in a leading position until 2005, the use of the European currency in debt instruments issuances declined from 43% to 20% at the end of 2006. The amount of these operations has continued to grow, from USD 70 billions to 94 billions, but during the same period, the US dollar denominated borrowing by non US residents boomed from USD 60 billions to 284. As a result, the euro share in the stock of international debt securities, assessed at constant exchange rates, which had soared from 20% in 1999 to 34% in 2005, declined to 31.4% at the end of 2006, while the US dollar share rose from 41.5% to 44%. Investments banks in North America and financial institutions in the UK and Eastern and Nordic countries are the main issuers of euro denominated bonds. Non residents investments in euro bonds are mostly performed by non euro area Europe funds, as the euro share of debt securities portfolio managed by North America funds is still negligible.

Concerning the role of the Euro as an investment tool, the share of the European currency is broadly steady on the international deposits market, and growing in the reserve portfolio of foreign central banks.

Deposits from depositors located outside the euro area towards banks located outside the euro area represent between 20 and 18% of the international deposit market, while the share of similar deposits in US dollars is up to 50%. No real trend can be observed since the beginning of the century. From 18% in 2002 the euro market has increased to 21.3% in 2005, and decreased to 18% at the end of 2006.

¹⁴ Statistics come from the ECB "Review of the International Role of the Euro" of which the most recent publication is June 2007; these figures can be completed by more recent information provided by the IMF and the BIS.

The use of the euro in foreign exchange reserves by third countries has increased from 18% of the total reserves in 2000 to almost 25.8% at the end of 2006, while, during the same period the share of the dollar declined from 71% to 65%. A more recent estimation gives 27% for the euro and 61% for the dollar. But the progression of the euro, at constant exchange rate, is estimated by the ECB at 24% in 2007 against 19% in 2000, while the dollar share declined from 70% to 67% during the same period. Even if the US currency is “inch by inch” moving back, the progression of the euro is remarkable as, since 2000 the total amount of worldwide foreign exchange reserves has surged from two trillions of dollars to 5 trillions.

The role of the euro as an invoicing/settlement currency remains relatively weak. Of course, euro area countries use euro for a significant part of their importations – between 34% and 56% against 41% to 61% in 2004 – but the dollar remains by far the predominant invoicing currency for a lot of strategic commodities.

One can mention a very particular area of international use, which concerns banknotes holdings by non residents. It is difficult to have precise information, but it seems that the amount of euro banknotes in circulation in third countries is presently equivalent to the amount of dollar denominated banknotes, while in 2002 the dollar circulation outside the US was three times above the outstanding amount of euro banknotes used outside the euro area.

Finally, let's remind that 40 currencies or territories have an exchange rate regime linked to the euro, with diverse modalities.

3) We have now to assess what could be the more probable evolution for the next ten or twenty years.

A decade ago, according to a lot of sceptical advices, at the very worst the European monetary union would not even be launched, and at the very best it would be a clone of the DM and of the Bundesbank, with a very limited number of members. The sceptics were wrong and everybody can now agree on the fact that the European Central Bank and the euro have played a definitely more worldwide role than the DM and the Bundesbank did (moreover the Bundesbank has no specific and no predominant influence on the institution).

Considering the evident growing role of the euro as an international currency during the last years, a lot of economists and analysts consider this trend is going to continue and the euro will be possibly a leading currency in the next 10/20 years. In addition to this recent evolution, they argue that the euro area has the first world GDP, that its financial market is well developed and, last but not the least, that the evidence of a constant commitment to low inflation ECB policy is very attractive for investors.

Few of these analysts forecast the dollar could be really dethroned and the euro become the leading worldwide money, but a lot of them consider as likely a situation of quasi equilibrium between the two great currencies. The dollar and the euro would cohabit during a rather long period before perhaps being challenged by other currencies, especially the Yuan.

In our sense, such an evolution is improbable for a lot of reasons.

First of all, it is obvious that the questionable US economic and monetary policies, the slightly decreasing but remaining huge current account deficit, the financial sector crisis, the weak growth forecasts (where not recession forecasts), and as a result the dollar weakness, can give the feeling that there is a context of durable and pronounced distrust movement vis-à-vis the American currency.

But one has to go beyond transitory situations and consider structural issues. And yet, these issues remain in favour of a predominant role of the dollar, at least during the next ten or even twenty years.

As mentioned previously, the economic size and dynamism of a country is an important factor for its currency to play a major international role. If the GDP of the euro area and of the United States are today broadly of the same size, the forecasts for the future are unfortunately less favourable for Europe, with a weaker demography and a lot of structural deficiencies, the most important being a too low working population and insufficient efforts in high education, research and innovation, all factors which are determinant for the potential growth of a country.

But economic size is not the only favourable factor: the size, the depth, the liquidity, the dynamism of the financial market is perhaps more determinant. In this field, the US market still has not serious challenger. Of course, the size of the aggregated euro area bond markets is not negligible, but in fact, the Bunds and the OAT markets are the most attractive for investors. There is no comparison with the US bill and bond markets, which “benefit” from almost eighty years of budget deficit and offers to investor a wide diversity of fungible securities and maturities, and the guarantee of an optimum liquidity, which is a determinant factor for most holders.

In addition, and perhaps mainly, one has to consider that long term choices of international currency commitment, by private as well by public decision makers, are not solely driven by economic and financial factors but also by political, diplomatic and strategic ones. As the euro area is not a unified state, it is suffering from a heavy handicap in these fields, whatever the individual strengths and assets of some European countries could be.

4) For all these reasons we don't think the dollar could be seriously challenged by the euro in the next ten/twenty years and our assessment is that the international role of the European currency could reach and remain at broadly half that of the US dollar. If reserve assets could be in the future less concentrated in dollars than currently, it is unlikely that the euro will supplant the dollar as a vehicle currency, that is to say the role in trading on the foreign exchange market and as the currency for global commodity trade. Concerning the role of the euro on international bond markets, we have seen that even if the European currency can be attractive and used on a large scale, US dollar denominated issuances continue to benefit from the exceptional liquidity of the American currency markets.

Accordingly, our assessment is that a situation with a 30% weight of the euro and a 60% weight of the dollar on the international markets is likely to appear.

Of course, one can imagine and hope that the Euro area will correct some of its major structural handicaps, with growth acceleration and consequently a more attractive euro. But, if such an evolution could increase the weight of the European currency, let's suppose to 35%, we don't believe, for the reasons we previously suggested, especially the fact that the euro is not the currency of a unified state, that one could arrive to a situation of 50/50 that some analyst are envisaging.

Moreover, one can seriously wonder if such a situation of 50/50, that is to say the coexistence of two major international currencies, is thinkable, even if that could theoretically incite the US to pay more attention to its external position. Indeed, if it can make sense to have more diversified portfolio holdings (but a situation of equivalent share of the two moneys can create more instability on the exchange markets), owing to economies of scale and scope, it is difficult to imagine two currencies as vehicles in exchanges, commodities, derivatives markets.

Briefly, and even if the statement is severe for European sensibilities, the international monetary system needs only one dominant reference, as historical evolutions showed (which does not mean such a situation and the sole reference to be necessarily ideal), unless deep reforms lead to total shifts in the system, with for example the abandoning of leading currencies as reference values and the adoption of new concepts like a commodities basket.

5) We have now to discuss about the advantages and the constraints for a country and its economic and monetary policy to issue a currency playing a major international role.

Considering the US example, everybody is conscious that the statute of the dollar provides the country the “exorbitant” privilege to pay for its current account deficit with its own currency. One cannot state that this situation is the main reason of the “benign neglect” attitude of the US government toward its huge deficit, but it is sure that for a country in which householders are deeply in debt and in which domestic demand is steadily exceeding production power, such an advantage does not create incentive for a more orthodox policy.

There is another benefit from this position. The unbalance between domestic demand and output should normally be source of inflationary tensions. The “valve” of the current account deficit contributes to moderate these tensions.

Another privilege, which is perhaps not automatic but is particularly evident in the case of the USA, is the existence of a positive difference between return on investments abroad and on foreign investments inside the country. Some analysts explain this situation by the fact that private decisions of investment in the US are supported by the desire to gain insider access to a key decision centre, which can motive the acceptance of a lesser return. Instead, our interpretation is that the possibility to finance an important external deficit which balances an insufficient domestic saving is a factor of pulling down interest rates.

Coming back to the constraints, and always considering the US example, one can have the feeling that they don’t exist. In fact there is a constraint for maintaining the attractiveness of the financial market with a sound economic and financial policy. The US economic and financial authorities can escape from this constraint thanks to their political, diplomatic, strategic and financial worldwide leadership. But the example of the United Kingdom during the twenties and the thirties shows that such a constraint can be decisive: the UK had no (or had no more) leadership position and the role of international currency played by the Pound had been strongly and decisively affected by the weakness of the British economy and of the economic policy.

6) Finally, one has to assess if a substantial strengthening of the international role of the euro would be useful and profitable for the euro area.

An unquestionable field in which a wider international use of the European currency would provide advantages is the statement of international transactions. Such an evolution would give a better visibility and less erratic fluctuations in prices of imported commodities and in the financial situation of great exporters which presently buy raw material charged in dollar and sell euro invoiced output.

A greater use of the euro on the exchange market could also, perhaps, contribute to increase the role of some euro area financial centres.

But except these specific points (whose evolutions depend on strategic and political factors and on private firms’ commercial negotiations), one can wonder if the single currency area would have a great interest in a significant surge of the euro share in private and public investment positions.

The area has no external deficit and domestic European agents are net savers. Therefore, there is no need for attracting massive foreign savings. International financial stability would be strongly affected if, in addition to the US, a major economic area pursued a “benign neglect” policy and drained an additional part of the worldwide saving, which would be better used in financing poor countries.

However, some economists, without explicitly calling for a policy aiming to a more important international role for the euro, think that the euro area governments should take advantage of the present dynamic in favour of the European currency in increasing supply of bonds, in other words, in raising euro area external debt. Such a policy would reduce the supposed gap between demand and supply of euro financial instruments, contribute to soften the euro exchange rate, and provide resources for useful investments in crucial fields like, education, research or communications.

But which countries would be the issuers of these bonds? As there is no euro area common entity, except the European Investment Bank which has definitely not the size for such wide scale borrowings, one must admit that new bonds would be issued by national governments, mainly the German and French Treasuries, whose debt instruments are the most demanded by foreign investors. If we remind that these outstanding public debts already represent 65.5% of the German GDP and 64.3% of the French GDP, it is obvious that these operations would foster long term interest rates surge, and would actually weaken the credibility of the area. Once again, if the particular political, diplomatic and strategic position of the US allows them to increase their indebtedness without structurally damaging the credibility of the international role of the dollar, it is sure that the euro area is not in the same position.

As Jeffrey Frankel said: “Rankings of international currencies change only very slowly.” So although the US surpassed the UK for GDP in 1872, in 1915 for exports and in 1917 as a financial centre; the dollar did not surpass the pound until 1945.

The euro is an unfinished strategic operation as the single currency has no unique economic government and still less a political government. It is remarkable for a so atypical concept to have such a great success and to acquire such great credibility. But to become the leading world wide currency it needs probably more decisive steps.

THE INTERNATIONAL ROLE OF THE EURO: PROSPECTS OF DETHRONING THE DOLLAR AS THE LEADING INTERNATIONAL CURRENCY STILL FAIRLY REMOTE

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

LEON PODKAMINER

Summary

The idea that a central bank eager to maximize its wealth should *now* be considering moving out of depreciating dollars into appreciating euros sounds reasonable and seems to be supported by the statistics showing a rising share of official reserves denominated in euro. However, the rise of the share of euro-reserves represents a passive valuation effect of the ongoing appreciation of the euro and not any active currency rebalancing. In actual fact the central banks' demand for dollar-denominated reserves has been rising much faster than that for euro-denominated reserves. The widely shared sentiment that the rapid depreciation of the dollar vs. the euro might augur the replacement of the dollar by the euro as the lead international currency does not seem to be really shared at the central banks worldwide. This makes sense if it is widely expected that the dollar will eventually regain its strength.

In other (than being international reserve currency) aspects the euro trails far behind the dollar as well. In particular, the euro plays a subordinate role in mediating foreign exchange transactions worldwide. Apart from that, there are fairly good economic and institutional reasons for doubts about the eventuality of the euro replacing the dollar as the lead international currency.

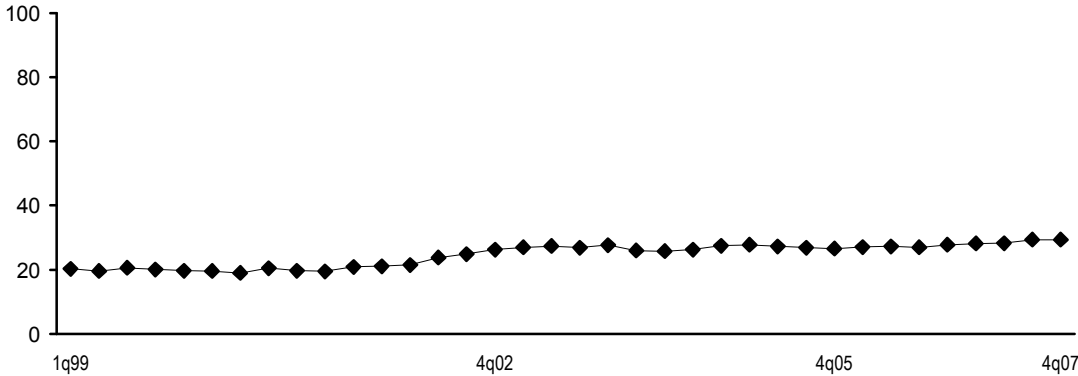
Given the present EU institutional and economic-policy frameworks, an eventual (unlikely) replacement of the dollar by the euro would bring the EU more disadvantages than benefits.

Do current exchange rate developments really augur a change in the dollar’s position as the lead international official reserve currency?

‘Current exchange rate developments could suggest that the euro might be on its way to surpassing the dollar as the leading international currency. This sentiment seems to have become more widely shared recently in light of the relatively rapid depreciation of the dollar against other currencies.’

The current exchange rate developments (i.e. the relatively rapid depreciation of the dollar against other currencies, especially in 2007-8) have some rather obvious implications for the owners of assets denominated in dollars. In terms of other currencies (i.e. the ones appreciating against the dollar) the owners of dollar-assets have suffered wealth losses (independently of eventual income losses due to the differences in the interest rates, which might have been higher on assets denominated in appreciating currencies). Conversely, the holders of assets denominated in appreciating currencies (especially in euro) have recorded gains (in terms of dollars). Quite possibly these considerations are on the minds of the largest *foreign* holders of the dollar-assets – i.e. at the central banks around the world. Surely, the theory that a central bank eager to maximize its wealth or income should *now* be considering moving out of depreciating dollars into appreciating euros sounds reasonable – and may indeed suggest that the euro might be on its way to surpassing the dollar (at least as an official reserve currency). This theory finds some support in data on the currency composition of official worldwide foreign exchange reserves. It turns out that the share of claims in euro in the combined euro-cum-dollar official (allocated) foreign exchange reserves has risen from about 20% (1999-2000) to close to 30% most recently (at the end of 2007).¹⁵ This is illustrated by Figure 1.

Figure 1. Share (%) of claims in euro in the combined euro-cum-dollar official (allocated) foreign exchange reserves, 4q1999-4q2007



A qualification must be added now: the allocated reserves (i.e. the ones whose currency denomination can be identified) are only a part of total reserves. The unallocated reserves (the difference between total and allocated reserves) are huge and rising fast (from 22% of the total in 1999 to 36% most recently). Practically all of the unallocated reserves are held by central banks of the developing countries.¹⁶

¹⁵ Data on official reserves come from the IMF (COFER data base). The combined euro-cum-dollar claims have accounted for about 90% of total allocated reserves all along.

¹⁶ The share of unallocated reserves in total reserves of developing countries has risen from 38% in 1999 to 47% recently. Moreover, the share of developing countries in total reserves has risen from about 50% to over 60%.

There are good reasons to assume that the unallocated reserves of major groups of the developing countries (China, Southeast Asia, Latin America, possibly also the Middle East) are in dollars rather than in euros. The implication is that the data for *allocated* foreign exchange reserves are likely to exaggerate the significance of euro-denominated claims in the *total* reserves. Most likely the true share of euro-claims (in total reserves) is lower than suggested by Figure 1. Moreover that true share need not be rising at all.

Now, let us take the data on allocated reserves at face value and assume that they reflect the actual relationships between *total* euro and dollar reserves accurately. The share of claims in euro began to rise (around the second quarter of 2002) – more or less at the time when the period of the initial depreciation of the euro came to an end. Since about that time the euro has been generally appreciating vs. the dollar. The relevant question to ask now is whether (or to what extent) the rising share of claims in euro represents a passive effect of a stronger euro/dollar exchange rate – as opposed to an active ‘real rebalancing’ of central banks’ currency portfolios. Figure 2 provides some tentative clues.

Figure 2. Quantities of euros and dollars held in allocated official foreign exchange reserves: indices for periods 1q1999-2q2002 and 2q2002-4q2007, and the euro/dollar exchange rate

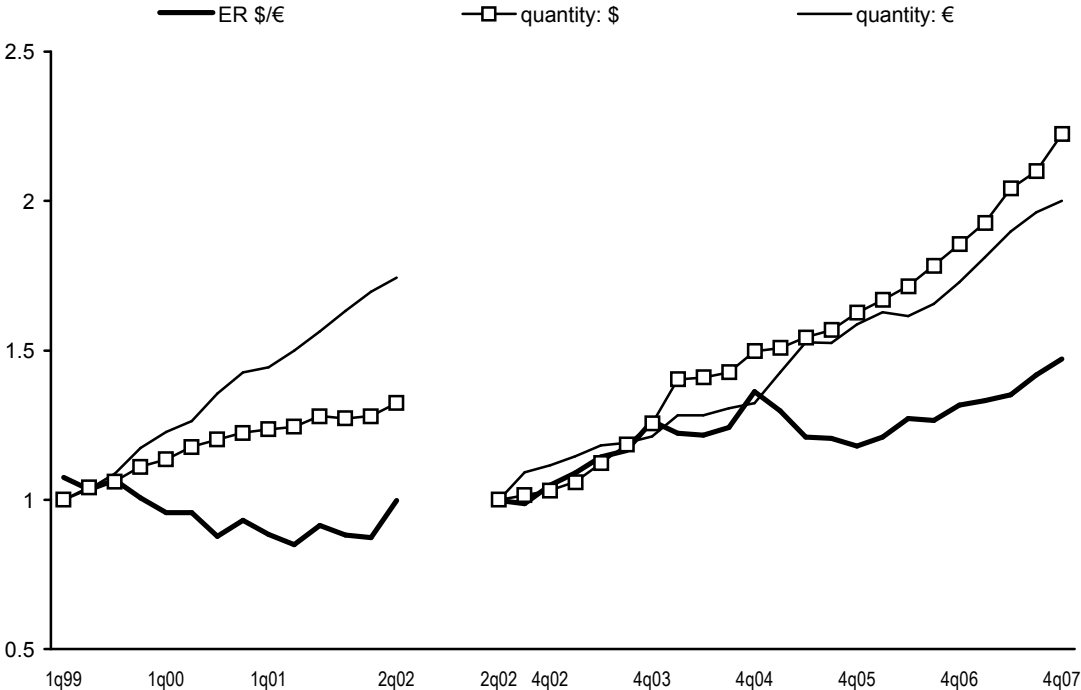


Figure 2 suggests the following:

1. The period of depreciation/weakness of the euro (ending around the 2q2002) was accompanied by a fast *rise* in the central banks’ demand for ‘physical’ euros and a relatively anaemic rise in the demand for ‘physical’ dollars. This, of course, would seem strange. Why were the central banks investing in a weakening (or weak) currency?¹⁷

¹⁷ It may be important to remember that the US Federal Reserve System keeps – despite its name – only symbolic quantities of *foreign exchange* reserves. Strong demand for the euro in that period could not reflect FED interventions aiming at preventing appreciation of the dollar. It may be added that the central banks of the developing countries had a particularly strong appetite for euro reserves in just that period. During the period of a weak euro the quantity of ‘physical’ euros held in reserves by these banks rose by 81%. (The respective growth rate for the industrial countries was 68%.)

2. Conversely, the period of a ‘strong’ euro (since about 2q2002) happens to be associated with the demand for ‘physical’ euros rising, generally, at a much *lower* pace than the demand for ‘physical’ dollars. This tendency appears to have been particularly strong during the most recent wave of euro appreciation (since about 4q2005). Moreover, while one could perhaps interpret the strength of the demand for dollar reserves as an effect of some hidden interventions of the industrial countries’ central banks (including – implausibly – the ECB) aiming at preventing an appreciation of the euro, it would seem utterly improbable that the central banks of the developing countries had any motive to act that way. In actual fact the developing countries’ central banks have been expanding their holdings of dollar reserves much faster than of euro reserves – and much faster than the industrial countries.¹⁸
3. The visual shape of the trajectory of the share of euro (or dollar) claims in total allocated reserves is likely to suggest incorrect conclusions concerning the changing roles of the euro (vs. the dollar) as the official reserve currency. The relatively rapid depreciation of the dollar (against the euro) – especially since 4q2005 – happens to be associated with a strong rise in the demand for *dollar* reserves (see the Table in Footnote 4). On the same principle, the relatively rapid appreciation of the dollar (1999-2001) was associated with a strong rise in the demand for euro reserves (rather than dollar reserves). The *widely shared sentiment* that the rapid depreciation of the dollar vs. the euro might augur the demise of the dollar as the lead international currency and the advent of the euro-era is – apparently – *not shared* at the central banks worldwide.

Are then the central banks worldwide, accumulating huge reserves of depreciating rather than appreciating currencies, collectively irrational in their decisions on the currency composition of their foreign exchange reserves? I don’t think so. Even leaving aside possible ‘strategic’ motives (e.g. for China’s accumulating dollar rather than euro reserves) it may be actually quite rational to ‘buy’ dollars (or euros) when these are cheap rather than expensive. Of course, for this interpretation to be right it has to be widely believed (at least at the central banks worldwide) that the current dollar depreciation trend will be reversed, sooner or later. I assume that this is the case: there must be a general expectation of the dollar eventually regaining strength – at least vs. the euro.¹⁹

¹⁸ Euro and dollar allocated reserves, by country groups, \$/€ exchange rate, end-4q2005 and end-4q2007

	All Billion \$	countries Billion €	industrial Billion \$	countries Billion €	developing Billion \$	countries Billion €	Exchange rate \$/€
4q2005	1900	579	947	216	953	364	1.1797
4q2007	2599	731	1039	235	1560	496	1.4721
Index	1.368	1.261	1.097	1.087	1.637	1.364	1.248

¹⁹ At this stage it may be worth commenting on the opinion that the current global instability (with the dollar being challenged by the euro as the chief reserve currency) may be partly responsible for increasing commodity prices (e.g. of gold). The problem with this opinion is that the dollar is not really challenged by the euro – either as the official reserve currency or in any other use. Increasing commodity prices need not have much to do with the presumed euro-dollar contest. In part these prices may reflect upset supply-demand balances and in part speculative motives (as seems to be also the case with, e.g., prices of art objects).

In other (than being an international reserve currency) aspects the euro still trails far behind the dollar

Sticking to the dollar as the chief reserve currency may also be connected with that currency's lead position as a foreign exchange market currency – hence with its being more liquid than any other currency. And that liquidity may be essential for the central banks of countries which occasionally may need to consider a quick currency intervention.

The most recent available data (from the *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007*, published by BIS in December 2007) demonstrate the dollar's continued worldwide superiority. 43.2% of all foreign exchange market turnover involved the dollar – against 18.5% for the euro. The share of the euro is still lower than the combined shares of Swiss franc, pound sterling and yen. Moreover, while the dollar is of crucial importance for foreign exchange transactions involving the euro (74% of the euro forex market turnover is against the dollar), the euro is not all that important for the dollar (the share of the euro in dollar forex transactions is about 32%). The disparity between the roles of the two currencies is lower in some market segments, for instance in invoicing deliveries in international trade in goods or in the debt securities markets. This is understandable – e.g. given the very high levels of the euro area's trade in goods relative to its GDP. On the other hand, it must be remembered that the daily turnover in international goods' trade accounts for a tiny fraction (2-3%) of the total forex turnover. All in all, the distances between the roles (other than those of serving as official reserve currencies) played by the two currencies are still rather enormous – and unlikely to be reduced substantially anytime soon.

Other reasons for doubts about the eventuality of the euro replacing (anytime soon) the dollar as the lead international currency

First, there are network (externality) effects. The individual usages of the lead international currency are mutually reinforcing. For example, being the main international reserve currency enhances other uses of that currency – and these strengthen the case for keeping the reserves in the currency itself. The uses create entrenched institutions and skills which further reinforce the status of the lead currency.²⁰ Breaking the existing networks/institutions is of course imaginable – but the likely short-term costs may be prohibitively high to many (all?) parties involved. Maybe one needs a major cataclysm to see a currency losing its lead position. It is perhaps not a coincidence that it took two devastating world wars which reduced the UK to a US client to terminate the unparalleled supremacy of the pound sterling.

Second, it is sometimes assumed that economic supremacy (the size of GDP) may eventually (e.g. upon further enlargement of the euro area, possibly also with the UK acceding) lead to the advance of the euro. I am not convinced. The US overtook – in terms of both total output and output per capita – the UK already by 1900. But the pound sterling was not challenged by the dollar long after the UK economy had been dwarfed by the US. Again, institutional inertia may be of vital importance; and also the development levels/sophistication of the existing financial markets. In this respect the euro area still trails far behind the US. Actually, it is even difficult to speak of any truly unified euro area financial market. The national financial markets within the euro area itself are still far from being fully integrated.

²⁰ Institutions and skills inherited from the past are responsible for the continuing over-proportionate international roles still played by the Swiss and UK currencies.

Third, even if the GDP size does matter, it is doubtful whether the euro area will be in a position to overtake the US anytime soon. Rather, I would expect the US to remain much more dynamic than the EU not only on account of, e.g., its more advantageous demography, higher innovativeness etc. First of all, the US macroeconomic policy making is superior to the policy making in the EU – and is likely to remain such. The fiscal policies in the EU are constrained by the provisions of the Growth and Stability Pact. The US fiscal policy faces no such arbitrary constraints and makes full use of the good old Keynesian prescriptions for ensuring fast growth and low unemployment. Also, the monetary policy conducted by the FED must be judged as superior to that of the ECB – if only because of its unorthodox pragmatism, flexibility, decisiveness and the degree of consistency with the fiscal policy.

Last, but not least, the euro – unlike the dollar – is not a currency of any sovereign state. It is not fiscally supported by any *single* tax authority ready to prop it when necessary. While claims expressed in dollars (and the dollars themselves) automatically represent definite liabilities of the US *government*, the claims expressed in euros (and the euros themselves) do not seem to represent – even ultimately – the liabilities of any specific EU government. Moreover, there is a possibility (however hypothetical) of the euro area breaking up (e.g. with some countries reintroducing their own national currencies). After all one encounters, quite often, public deliberations on the ‘sustainability of the euro’ – but not on the ‘sustainability of the dollar’. This makes a difference: there is some residual uncertainty about the fate of the euro. Of course the implications of an eventual demise of the euro (admittedly a highly unlikely, but not impossible, event) are hard to foresee. But it may be that uncertainty – however tiny – over these eventual implications which may prevent the euro from becoming the lead currency (even provided other criteria for becoming such a currency were to be met).

Disadvantages of the euro becoming the lead currency probably greater than eventual benefits

It transpires, from what has been written above, that I do not see any signs of imminent replacement of the dollar by the euro as the truly international lead currency. Nor do I believe that such a replacement can be realistically expected in any foreseeable future. Should we deplore this? Not really. First of all, an eventual changeover – which would probably have to be abrupt – would possibly imply a sudden, quantum leap in the value of the euro not just vs. the dollar, but possibly against all, or most other currencies. Unless countered by expansionary *domestic* policies in the EU, this might push the EU economy into a strong deflation combined with a possibly deep recession. Given the irrational, atavistic beliefs prevailing among the EU economic policy makers (Growth and Stability Pact) this would probably be the *real* short-term outcome of the euro becoming a global currency.

That much about the costs. There would, of course, be some *potential* longer-term benefits, e.g. in the form of the ability to obtain – at a low cost – real assets and resources abroad. Like the US during the recent decades, the EU would be in a position to live ‘beyond its means’, i.e. with its current consumption and investment being in part cheaply financed by rising foreign debt. The problem is that the euro area as a whole has itself been a net creditor to the rest of the world. Becoming a net debtor may not be all that easy. For over a decade now the Japanese have been trying hard to stop being net creditors – i.e. net exporters of both goods and capital; without much success. Now, if Europe also failed to invest in excess of its savings, it would not be really in a position to benefit from the privileged status of its own currency. All in all, the real disadvantages of the euro becoming the lead currency are likely to be greater than the eventual benefits. But, as stated before, the risk of the euro assuming the roles nowadays played by the dollar is rather low.

In any case, the ECB is quite clearly unenthusiastic about the idea. The attempts to slow down the enlargement of the euro area (and the opposition to any unilateral euroization in third parties) seem to reflect the same sentiment. Most probably the ECB – with its current governance framework – is fully aware of the additional difficulties it could face on having to manage a global currency. Given the fact that the ECB is not really prepared (also institutionally) to safeguard financial stability even in the euro area, one cannot expect the ECB to cherish the vision of being co-responsible (even if only ‘morally’) for the global financial stability. Of course, things may change if the EU policy framework is reformed so that the ECB and the fiscal authorities of the EU countries can learn to run jointly – first – the *internal* EU policy more efficiently. But even this need not occur anytime soon.

THE INTERNATIONAL ROLE OF THE EURO

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

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Executive Summary

- Probably about a quarter of the world's foreign exchange reserves are denominated in euros and the euro appears to have gained importance as a reserve currency in recent years.
- The dollar is the world's pre-eminent anchor currency; the euro is a regionally important anchor currency.
- The euro has made limited progress as a vehicle currency; the dollar remains dominant.
- The dollar is the most important currency for invoicing, but the euro is now used in some transactions in some new EU member countries.
- The euro is likely to remain important as a reserve currency, but is unlikely to usurp the dollar's role as an anchor currency, a vehicle currency or as a unit of account in the foreseeable future.

In this briefing report, I consider the current importance of the euro as an international currency. I consider the likelihood that it will displace the dollar as the most important international currency in the foreseeable future. I briefly discuss the costs and benefits to the euro area of an increase in the euro's importance.

Current Evidence on the International Roles of the Euro and the Dollar

Is it possible that in the next few decades the euro will usurp the dollar's role as the pre-eminent currency? Or is it more likely that the euro will be nothing more than a regionally important currency for the foreseeable future? The economics profession is divided on this issue. Chinn and Frankel (2008), for example, see the first scenario as possible; Posen (2008), for example, favours the latter.

An international currency is one which is used and held outside the country of its issuance. In particular, international currencies are used as reserve currencies by central banks, as anchor currencies in foreign exchange arrangements, unit of account currencies in the prices of internationally traded goods and as vehicle currencies in foreign exchange transactions. In this section, I review the current status of the euro as an international currency. I conclude that the euro is an important reserve currency and that it is regionally important as an anchor currency. However, it plays less of a role as a unit of account or a vehicle currency.

The Euro as a Reserve Currency

The euro is the second most important international reserve currency, probably accounting for about a fourth of the world's reserves. While it is not possible to be certain, in recent years it appears to have gained importance as the prominence of the dollar has declined slightly.

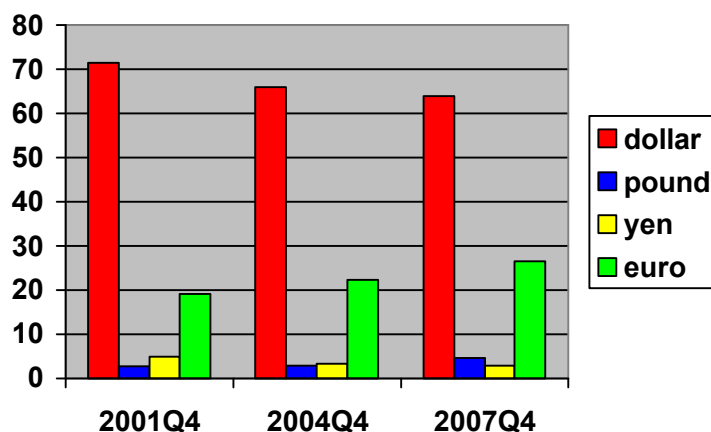
It is not possible to establish the exact currency composition of the world's foreign exchange reserves. Truman and Wong (2006) report that only 23 countries (holding just 13 percent of the world's foreign-currency reserves) disclose the currency composition of their reserve holdings. China and Taiwan, holding 20 percent and six percent, respectively, of the world's reserves, are not among these countries. Small European countries and candidate members of the European Union are over-represented in this sample; hence, this data is of limited usefulness in assessing changes in importance of the dollar and the euro as international reserve currencies.

The IMF does a survey that does not identify the participants and has much wider coverage, including all of the industrial countries. Currently, however, the survey gives the composition of only about two-thirds of the world's reserves.²¹ The shares of the world's important reserve currencies, as measured by this survey, are shown in Figure 1, below. As can be seen, the dollar's share has declined somewhat in recent years to about 64 percent; the share of the euro has risen to over 26 percent.²²

²¹ In 2007Q4, the survey provides the allocation of \$4,064,806 million, which is 63.6 percent of the \$6,390,611 reported in the International Monetary Fund's *International Financial Statistics*.

²² The chart also shows the decline of the yen and the recent rise of the pound.

Figure 1. Currency Composition of Foreign Exchange Reserves (COFER) (as a percentage)



Source: International Monetary Fund

The IMF data is in line with a recent BIS (2007) estimate that about two-thirds of the world's official reserves appear to be in dollars and a quarter in euros. In their interpretation of the available data, however, Galati and Wooldridge (2006) argue that there has been little diversification away from the US dollar in the past decade.²³

The Importance of the Euro as an Anchor Currency

Another measure of the importance of a currency is its use as an anchor currency in foreign exchange arrangements. Using the available evidence to assess a currency's importance in this role, however, is not straightforward. The International Monetary Fund's Annual Report on Exchange Rate Arrangements and Exchange Restrictions asks member countries to report their exchange rate arrangement. Unfortunately, however, the behaviour of a member country's exchange rate may not be consistent with its official classification: supposed pegs may not be maintained and supposedly floating exchange rates may be managed to the point where they are better described as pegs. Countries may also report that they peg their currency to a basket of currencies, but then fail to disclose the currencies in the basket.

As a result of the problems with the official data, I use the data in Ilzetzki et al's (2007) statistical update of Reinhart and Rogoff's (2004) seminal study on classifying exchange rates regimes to determine the relative importance of the dollar and the euro as anchor currencies. Ilzetzki et al test each country's exchange rate to verify whether or not it behaves consistently with the officially reported exchange rate regime. If it does not, they then examine its behaviour against several different potential anchor currencies to make their own determination of its classification.

²³ See these authors for a discussion of the available data.

As a caveat, it should be noted that Reinhart and Rogoff's (2004) classification system is not perfect. It appears to confuse a correlation of an exchange rate with a particular anchor currency (which might be the result of, say, correlated fundamentals) with a deliberate attempt by policy makers of the country that issued that currency to peg their bilateral exchange rate with the anchor currency. An example is the pound: policy makers in the United Kingdom might be surprised to learn that their exchange rate regime is classified as a de facto moving band around the euro.

Table 1, below, lists countries that appear to use the dollar as an anchor currency on the left-hand side and countries that appear to use the euro as an anchor currency on the right-hand side. It is seen from Table 1, that the euro is far less important in exchange rate arrangements than the dollar. Countries as diverse and important as Canada, China, India, Saudi Arabia and Russia, unofficially at least, appear to peg their currency to the dollar or maintain their currency in a band around the dollar.²⁴ As a legacy of French imperialism, some African countries that once pegged their currency to the French franc now use the euro in their exchange rate arrangements. Otherwise, while the euro is the most prominent anchor currency in Europe, it has little importance as an anchor currency elsewhere.

²⁴ Officially, Russia targets a basket made up of both the dollar and the euro.

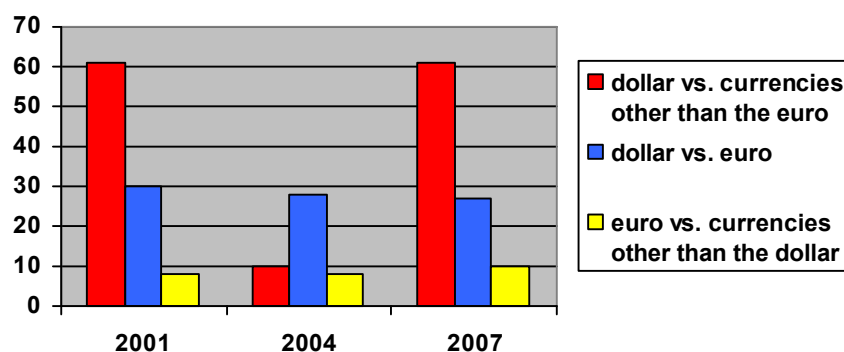
Table 1. The Use of the Dollar and the Euro in Exchange Rate Arrangements

	Arrangements Involving the Dollar		Arrangements Involving the Euro
Dollar as legal tender:	De facto crawling or moving peg:	De facto crawling or moving band:	Euro as legal tender:
Ecuador	Angola	Argentina	Monaco
El Salvador	Azerbaijan	Armenia	Montenegro
Marshall Islands	Bangladesh	Belarus	San Marino
Micronesia	Bolivia	Burundi	Peg:
Palau	Burundi	Canada	Bosnia-Herzegovina
Panama	Cambodia	Fiji	Bulgaria
Peg:	Costa Rica	Gambia	CFA franc nations
East Caribbean Central Bank nations	Egypt	Georgia	Comoros
Aruba	Ethiopia	Ghana	Equatorial Guinea
Bahamas	Guatemala	Guinea	ERM II:
Bahrain	Guyana	India	Denmark
Barbados	Honduras	Israel	Estonia
Belize	Iran	Kazakhstan	Latvia
Eritrea	Jamaica	Kenya	Lithuania
Hong Kong	Malawi	Korea	Slovak Republic
Lebanon	Mauritania	Kyrgyz Republic	Crawling band:
Maldives	Mongolia	Mauritius	Hungary
Oman	Pakistan	Moldova	De facto peg:
Surinam	Papua	Mozambique	Macedonia
United Arab Emirates	Rwanda	Nepal	De facto crawling peg:
Venezuela	Seychelles	Peru	Cape Verde
Crawling peg:	Sierra Leone	Philippines	Morocco
Nicaragua	Sri Lanka	Russian Federation	Tunisia
Crawling band:	Sudan	Samoa	De facto band:
Haiti	Tajikistan	Saõ Tomé and Príncipe	Croatia
De facto peg:	Trinidad and Tobago	Singapore	Czech Republic
China	Vietnam	Syrian Arab Rep.	De facto crawling or moving band:
Jordan	De facto band:	Thailand	Albania
Kuwait	Chile	Tonga	Algeria
Qatar	Colombia	Uganda	Sweden
Saudi Arabia	Malaysia	Uruguay	Switzerland
Ukraine		Managed float/other de facto arrangement	United Kingdom
		Indonesia	Managed float/other arrangement
		Paraguay	Norway
		Poland	Romania
		Tanzania	

The Euro as a Vehicle Currency

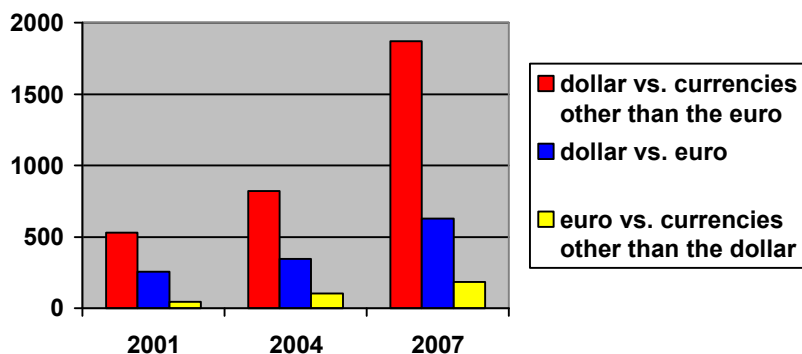
Another measure of the importance of an international currency is its use as a vehicle currency. Here, in both the traditional foreign exchange market and the over-the-counter (OTC) derivatives market, the dollar is unquestionably dominant and its prominence is little changed since the introduction of the euro. As shown in Figure 2, below, almost 90 percent of all transactions in the traditional interbank market for foreign exchange involve the use of the dollar. The euro is used in 37 percent of all transactions, but most of these are against the dollar; only ten percent of all transactions are the euro against a currency other than the dollar. The situation is similar in the OTC derivatives market, shown in Figure 3.

Figure 2. Currency Distribution of Traditional Foreign Exchange Market Turnover
(Percentage of Transactions)



Source: BIS (2007)

Figure 3. Currency Distribution in the OTC Foreign Exchange Derivatives Market
(Daily Turnover in Billions of US Dollars)



Source: BIS (2007)

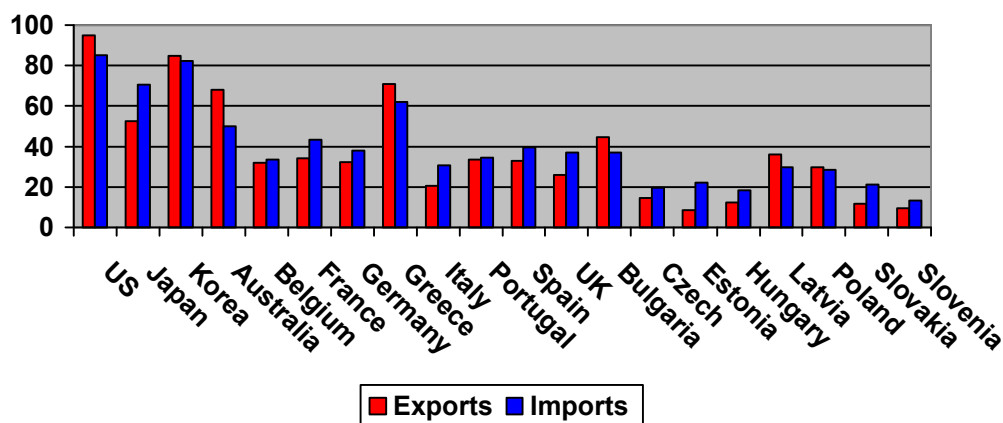
Use of the Euro as a Unit of Account

To make cross-country comparisons, it is typical to convert nominal amounts in different currencies into a nominal amount in a particular currency, say the dollar or the euro. If a currency is persistently used in this way, then it plays the role of an international unit of account.

One way that currencies are used as units of account is in invoicing. The producer of a good can quote the good's price in his own country's currency, the currency of the country of his purchaser or a third country's currency.²⁵ Invoicing data is difficult to assemble. The best known recent study is probably the one by Goldberg and Tille (2004), who collected data from 24 countries, some of which are shown in Figure 4, below. Their findings indicate that the dollar remains the dominant currency for invoicing. About 95 percent of US exports, 85 percent of US imports, a third of euro-area exports and 40 percent of euro-area imports are invoiced in dollars.

²⁵ In addition to facilitating comparisons, in markets where goods are close substitutes, it may be optimal for a firm to price in the same currency as its competitors. This lowers sales volatility due to relative price movements brought about by price fluctuations. See Goldberg and Tille (2004).

Figure 4. The Percentage Share of the Dollar in Export and Import Invoicing
(in value-weighted terms)



Source: Goldberg and Tille (2004). Observations for Japan and Korea are for 2001; the observation for Australia is for 2002; the observation for Estonia is for 2003; other European observations are for 2002. Observations for Belgium, France, Germany, Greece, Italy, Portugal and Spain are for extra euro-area trade.

The euro has, however, displaced the dollar in some transactions in recent EU accession countries. Kamp (2006) provides more recent evidence of the importance of the euro as an invoicing currency in Eastern Europe. For example, in 2004, the share of exports denominated in euros was 85 percent for Hungary, 70 percent for Poland and 62 percent for Bulgaria. The share of imports denominated in euros was 71 percent for Hungary, 62 percent for Poland and 64 percent for Bulgaria.

Prospects for the Dollar and the Euro as International Currencies

In the last section I discussed the current importance of the euro as an international currency. In this section I discuss what may happen in the future.

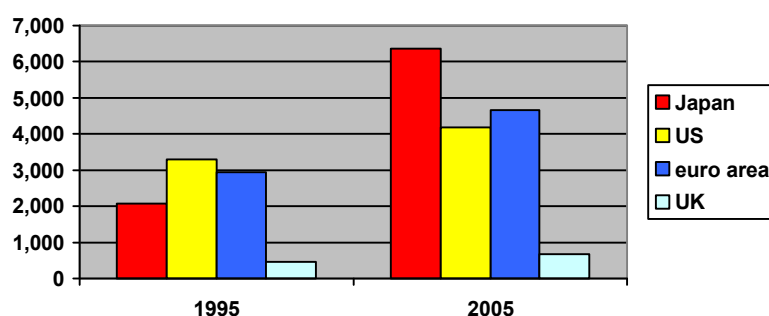
Prospects for the Euro as a Reserve Currency and as an Anchor Currency

As seen in the previous section, along with the dollar, the euro is an important international reserve currency and a regionally important anchor currency. It is desirable that the world have multiple international reserve currencies so that central banks can hold a diversified foreign exchange portfolio. If a country chooses to have an anchor currency, instead of having a freely floating currency, then optimal currency area type considerations ought to be important in its choice of an anchor currency. As geographical proximity is important for determining trade between countries, it also appears that the world ought to have multiple anchor currencies.

In deciding how much of a particular international currency to hold as a store of value and whether to use that currency as an anchor currency, central banks and their governments care about three things. First, how costly is it to transact with the currency and what opportunities are there for investing it. Second, is it economically sensible to use the currency? That is, what is the expected return to holding the currency and how does holding it affect the riskiness of the central bank's portfolio? Will it maintain a stable value and does it satisfy optimal currency area criteria? Third, are there political considerations that make the currency more or less attractive?

The euro scores well, but not as well as the dollar, on the first consideration. Euro area financial markets are large: at the end of 2005, the outstanding stock of euro-area government securities, seen in Figure 5 below, was \$4.7 trillion; this compares with an outstanding stock of US Treasury securities of \$4.2 trillion. However, US government securities are all of high quality (rated AAA by Fitch), while the same cannot be said of euro-area securities. Fitch's ratings for Belgian, Greek and Italian sovereign debt are AA+, A and AA-, respectively. Moreover, Galati and Wooldridge (2006) argue that the markets for US government securities are more liquid and have greater depth than the markets for euro-area sovereign securities: these authors point to the much higher turnover and the reportedly tighter bid-ask spreads.

Figure 5. Outstanding Stock of Government Securities
(in millions of dollars)

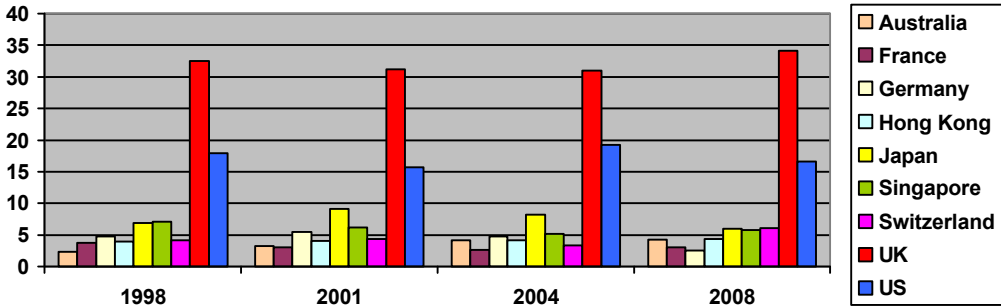


Source: Galati and Wooldridge (2006)

Continental European foreign exchange markets are much smaller than the US foreign exchange market. Turnover in French and German foreign exchange markets, shown in Figure 6 below, is surprisingly low: lower than in foreign exchange markets in Australia, Hong Kong, Singapore and Japan and much lower than turnover in New York. Moreover, the importance of Frankfurt as a foreign exchange market relative to the importance of New York appears to be declining.

Turnover in Frankfurt was 35 percent as large as turnover in New York in 2001; it was about 15 percent in 2007. The foreign exchange capital of the world, however, is London. This suggests the United Kingdom’s membership in the euro area would make a significant difference to the attractiveness of the euro as an international currency.

Figure 6. Geographical Distribution of Foreign Exchange Turnover (Percentage Share)



Source: BIS (2007)

On the second consideration, the economic factors, the dollar’s and euro’s long-run relative attractiveness as investments depends in large part on macroeconomic developments in the United States and the euro area and these are uncertain. After decades of current account deficits, the United States is a large debtor nation and its debt is denominated in its own currency. Were it to appear likely that the United States would succumb to the temptation of inflating away some of its liabilities to the rest of the world, this would diminish the appeal of the dollar as a reserve currency and probably as an anchor currency. On the other hand, if productivity growth in large parts of the euro area is a disappointment, or if continued profligate fiscal policy in some euro area countries raises the prospect of default risk, the euro’s attractiveness as an international currency might decline.

While economic considerations must have some influence on how central banks diversify their foreign reserve portfolio, economists have been frustrated in their attempts to explain actual foreign reserve composition as the result of an optimal investment strategy. (See, for example, Portes et al (2006).) Lim (2006) reports that most central banks, instead, appear to maintain fixed shares for different currencies.

Clearly, in deciding what reserve currencies to hold it is important to a central bank which currency or currencies it uses in its exchange rate arrangements. But, economists also find it difficult to explain the continued importance of the dollar as an anchor currency in terms of economic considerations. This suggests that the third factor – political considerations – matter. Posner (2006) argues that foreign policy and national security considerations play an important role in a country’s choice of its anchor currency. Should what Chinn and Frankel (2006) refer to as the United States’ ‘imperial overstretch’ threaten American political hegemony, the dollar would lose its appeal as an anchor currency. However, as Posner (2006), points out, the unlikely inability and unwillingness of the euro area to provide global security in the foreseeable future suggests that the euro is unlikely to take the dollar’s place. This, he gloomily suggests, is more likely to lead to a fragmentation of the international monetary system, with a consequent loss of easy currency convertibility between currency zones, diminished international capital flows and the return of gold and other commodities as reserves.

Prospects for the Euro as a Unit of Account and as a Vehicle Currency

A currency that serves as a unit of account allows for an easy interpretation of nominal amounts in different currencies. Suppose that an international agency publishes the nominal value of each country's current account. If all values are in the local currency, then one must convert them into a common currency to compare them. If instead, all values are in dollars, it reduces the amount of information and effort that is needed. Similarly, suppose that there are, say, 180 currencies in the world. If there were separate markets for each pair of currencies, there would be $\binom{180}{2} = 16,110$ separate currency markets. Having a vehicle currency that serves as one side of each transaction, allows for only 179 separate currency markets. While it is desirable to have multiple reserve and anchor currencies, it appears to be inefficient to have multiple units of account and vehicle currencies. The desirability of a particular currency as both a unit of account and as a vehicle currency depends on its maintaining a stable value.

Once a currency is established as a unit of account or vehicle currency, it is difficult to dislodge. That currency is valued solely because of its existing position. A popular analogy is language. It may be that Welsh is a nicer language than English; perhaps it is more mellifluous or easier to spell, but as long as the number of English speakers vastly exceed the number Welsh speakers it is difficult to persuade people to learn Welsh rather than English, no matter how much nicer Welsh is.

Thus, even if a currency does not maintain a stable value, its importance as a unit of account or a vehicle currency is highly inertial. The dollar maintained its position after the breakup of the Bretton Woods system and during the US inflation of the 1970s. If differences in inflation between the United States and euro land continue to remain fairly small, as they have since the inception of the euro, there is no reason to think that the euro will threaten the dollar as a unit of account or vehicle currency any time soon.

What are the Costs and Benefits of the Euro becoming more Important?

The main cost to a country of having its currency become an important reserve currency is increased vulnerability to sudden capital flows. A sudden change in preferences can lead to fluctuations in the exchange rate. For this reason, there are several examples of countries discouraging the use of their currency as an international currency. Its large size, however, lessens this effect on the euro area. The main benefits are increased seigniorage as foreigners are willing to hold the domestic currency, increased earnings of the financial sector as it attracts more business and insulation from exchange rate changes if internationally traded goods are priced in the domestic currency.

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INTERNATIONAL ROLE OF THE EURO

Briefing Paper for the Monetary Dialogue of June 2008 by the Committee on Economic and Monetary Affairs of the European Parliament with the President of the European Central Bank

NORBERT WALTER

The euro has strongly gained in importance as an international trade, investment and reserve currency. For instance, the euro's share as an international reserve currency rose from 18% in early 1999 to 26.5% at the end of 2007. The dollar remains, however, the dominant reserve currency (share: 64%).

The euro meets essential prerequisites for a key global currency. There are four driving market forces for the euro to catch up as international reserve currency by 2010: the dollar exchange rate, changes in exchange rate policy worldwide, rising investment requirements of central banks and the increasing focus on yield.

Beyond 2010 the dollar is likely to benefit from a higher US growth dynamic and a lower current account deficit. In contrast, Europe will see a dampening impact of the demographic development on growth. Thus, the dollar will remain the most important reserve currency in the longer run whereas the euro will be the undisputed No. 2.

A bipolar international monetary system per se is not unstable. It is likely to stimulate economic and fiscal policy discipline on both sides of the Atlantic. Large and liquid euro financial markets are likely to cope smoothly with abrupt and massive capital flows.

The rising holdings of euro reserves do not explain the price hike in commodities, including gold. On the contrary, central banks have sold one-tenth of their gold stock since 2001 dampening the gold price rally. Commodity prices have been pushed by dynamic global growth, particularly in emerging Asia.

Being an international reserve currency has benefits such as a higher degree of freedom for economic policy and lower bond yields. But the risks should not be overlooked, e.g. the greater exchange rate volatility in day-to-day business and a substantial overshooting of the EUR/USD exchange rate.

The ECB is pursuing a neutral stance towards the euro's internationalisation. Yet, the ECB has fulfilled its international tasks concerning price stability and the role of lender of last liquidity both tacitly and professionally.

The Eurogroup should resolve the problem of speaking with one voice in order to strengthen the euro area's international clout.

1. Introduction

The dollar has been the undisputed key international trade, investment and reserve currency for decades. Neither the D-mark nor the yen which gained some weight as international currencies in the 1970s and 1980s, called the dominance of the dollar into question. But the advent of the euro in 1999 has triggered a vigorous debate on whether the euro will have the potential to challenge and even to surpass the dollar as key international currency in the foreseeable future. This issue was discussed well before the start of EMU.²⁶ This debate intensified in 2005 in light of the huge US current account deficit and the massive accumulation of foreign exchange reserves, and has so again since August 2007 in the wake of the sub-prime crisis, the US slowdown and the decline in dollar interest and exchange rates.

This paper analyses recent trends and driving market forces for the euro's international use. Looking ahead the main focus will be on the determinants of its future role as a reserve currency next to the dollar. A key issue is the stability of a bipolar international reserve system. Furthermore, the question is raised whether the rising reserve function of the euro explains the surge in the price for commodities, in particular gold. The analysis also deals with the benefits and risks of the euro's internationalisation. Finally, the paper reviews the impact of the internationalisation of the euro on the ECB and economic governance of EMU.

2. Main trends in international use

The international use of the euro can be illustrated on the basis of the standard summary of the international functions of a currency²⁷ (Table 1, see end of paper for tables). The results are summarised in Box 1. The main message is that the euro has caught up in relation to the dollar in nearly all markets or areas with the exception of the euro's share in the foreign exchange market. In the latter field, the dollar has benefited from the rapid integration of the dynamic Asian emerging markets into the world economy. This also reflects the fact that the dollar is still profoundly anchoring economic thinking in Asia. Nevertheless, the rising international use of the euro has been particularly impressive regarding its role as an international investment and anchor currency. The euro has even surpassed the dollar in the field of currency in circulations (Table 2).

The euro is now firmly established as the second largest international currency next to the dollar. The euro has even topped the international role of the 11 legacy currencies including the D-mark. One feature is the regional concentration in Europe and nearby. While the international monetary system was characterised by the three poles dollar, D-mark and yen until 1998, the launch of the euro has led to a bipolar system with the dollar as key international currency - in particular with regard to the role as reserve currency - and the euro as the undisputed currency No. 2, whereas the yen has lost considerable weight and the pound sterling remained of minor importance.

²⁶ Fred Bergsten argued in 1997 that the dollar would have its first real competitor since it took over the pound sterling's international role. C. Fred Bergsten (1997), *The Dollar and the Euro*, Foreign Affairs, July/August.

²⁷ Peter Kenen (1983), *The Role of the Dollar as an International Currency*, Occasional Paper 13, Group of Thirty, New York.

International role of the euro has gained momentum

Private international use comprises:

1. The role as a *medium of exchange in payment and foreign exchange transactions*. The (worldwide) volume of euro banknotes and coins in circulation surpassed that of dollar notes in 2006 for the first time. However, only about 10-20% of euro banknotes are used extraterritorially compared with 50-70% of dollar notes. In contrast, the role of the dollar/euro segment as the most frequently traded currency pair sank from 30% of global foreign exchange turnover in April 2001 to 27% in April 2007, while there has been a rise in dollar trading against many other currencies except the yen and pound sterling.
2. *Use as a unit of account in invoicing international trade*. Unfortunately, the data situation is unsatisfactory on this count. According to earlier analyses nearly 50% of world trade is invoiced in dollars. Oil and other commodities are billed in dollars (only Iran invoices oil exports in euros). Exports of the euro area have been increasingly invoiced in euros (on average: 60%, Germany: 80%). This also applies to non-EMU EU members.
3. *The store of value function*. This role is closely linked with the creation of large euro financial markets which are now comparable with dollar markets in terms of liquidity and availability of instruments. For *initial offerings of international bonds* in 2007, 49% were issued in euros and just 35% in dollars, whereas in the preceding years the euro had to settle for second place (with shares between 34% and 47%) behind the dollar (39%-49%). *In the circulation of international bonds* the euro achieved a share of 32% in 2007 compared with 19% in early 1999, while the dollar share fell from 50% to 44% and that of the yen halved to 5%.

Public international use comprises:

1. *The role as an intervention currency* in foreign exchange markets. Central banks have made only very limited use of euros for this purpose. This applies to the EUR/USD market, where a few coordinated interventions were carried out in 2000 in order to bolster the then weak euro, the European exchange rate mechanism II (ERM II) as well as those other currencies with a euro peg or a euro orientation. By contrast, several central banks in Asia and elsewhere have heavily intervened to support the dollar and accumulated huge foreign exchange reserves.
2. *Anchor role for other currencies*. About 40 countries in Europe, Africa and the Mediterranean align their exchange rate policy with the euro. The regimes range from a currency board (e.g. Bulgaria) and membership of ERM II to managed floating (e.g. Poland). In contrast, there are about 60 countries with a dollar peg. Furthermore, currency baskets are increasingly used as yardstick for exchange rate policy with the dollar and the euro as key components (e.g. China, Russia).
3. *The holdings of foreign exchange reserves*. The share of the euro has risen from about 18 % in early 1999 to 26.5% at the end of 2007, whereas the dollar share has declined from a peak of 71.5% in 2001 to about 64% (Table 3). The main reason for holding reserves are backing exchange rate policy via interventions, ensuring smooth development of international trade and capital transactions, and securing a face-saving way out of a currency crisis without having to comply with the conditionality of an IMF credit.

International comparison of key indicators 2007

	Unit	USA	Euroland	Japan	China
Population	m	299,8	318,5	127,7	1.321
GDP	EUR trillion	10,1	8,9	3,2	2,2
GDP per capita	EUR thousand	33,7	27,9	25,1	1,7
Share of world GDP	%	21,4	14,7	6,6	10,9
Exports (goods and services)	% of GDP	11,9	21,6	17,7	41,9
Imports (goods and services)	% of GDP	17	20,9	15,9	33,8
General government debt	% of GDP	63,4	66,6	162,5	45
General government deficit	% of GDP	-1,2	-0,6	-0,8	-1,3
Current account balance	% of GDP	-4,9	0,1	5	9,2

* Euro area incl. Malta and Cyprus

Sources: ECB, IMF, Global Insight

3. What factors determine the euro's international role?

The international role of a currency is not allocated by a political decision of governments but is the outcome of numerous decisions made not only by market participants but also by official authorities like the worldwide central banks. In history a currency's international role used to exist over long periods and changes occurred only gradually. The dominant international role of the pound sterling lasted some centuries until the period between the two world wars when it was successively replaced by the dollar. There are mainly four factors that determine the international role of a currency²⁸: (a) price stability, (b) economic size, growth dynamic and international openness, (c) large financial markets, (d) political stability and military power.

a. Monetary policy and price stability

A high degree of price stability and monetary policy credibility are essential. The ECB has a clear mandate to attach priority to price stability. Only if this objective is achieved is the ECB permitted to pursue other EU policy goals. The ECB's track record since 1999 has been even better than that of the US Federal Reserve System (Fed). The inflation rates in the euro area averaged at 2.1% from 1999 to 2007 compared with 2.7% in the US. The fact that the Fed has a "dual mandate" of fostering both price stability and growth increases the risk of stagflation, i.e. relatively high inflation rates associated with weak growth. Stagflation was a widespread problem in the 1970s that should be avoided. An inflationary bias is deemed to be detrimental to the international use of a currency over time. In this field the euro seems to have an advantage vis-à-vis the dollar.

b. Economic size, growth dynamic and international openness

Euroland or the euro area is the world's second largest economy after the US, well ahead of Japan. Although Euroland has a larger population than the US it only produces the equivalent of 88% of US GDP at current exchange rates. The euro area is the most important global exporter, accounting for 20% of the world's exports of goods²⁹ in 2007 compared with a US share of only 12%. But it absorbs only about 19% of world imports, i.e. less than the US with a share of 21%, reflecting the role of US consumer demand as a global growth engine. Euroland produces about 15% of world GDP, compared with 21% in the US. With a ratio of goods and services exports (extra-EMU) to GDP of about 22%, Euroland's degree of openness is higher than that of the US (12%) or Japan (18%). This implies that the euro area meets the prerequisites of economic size and openness. In contrast, the US growth rate has been higher than that of Euroland (3% on average from 1999-2007 compared with 2%).

c. Size and liquidity of financial markets

The euro has been the catalyst for pushing financial market integration in the EU and EMU with the Financial Services Action Plan (FSAP) of 1999 being a milestone. Substantial integration progress has been made in the money and (government) bond markets, which have provided the most important investment instruments for central banks. The high liquidity of government bonds – German and French bonds have benchmark status alongside the yield curve – is a means to overcome the disadvantage that there is not a central government borrower in the euro area like the US Treasury.

²⁸ Chinn, Menzie David and Frankel, Jeffrey A. (2005), "Will the Euro Eventually Surpass the Dollar as Leading International Reserve Currency?", G7 CURRENT ACCOUNT IMBALANCES: SUSTAINABILITY AND ADJUSTMENT, Richard Clarida, ed., University of Chicago Press,

²⁹ World exports = total world exports minus intra-EU-trade

Issuing activities have also flourished in the corporate and mortgage bond markets. A survey among central banks³⁰ concluded that euro money and debt markets have reached the same quality as dollar markets as far as the liquidity and the availability of instruments are concerned. The euro's share in the stock of international debt securities (narrow definition of the ECB) amounted to 32% at the end of 2007 while the share of the dollar came to 44%.³¹ Thus, the size and the quality of euro financial markets are valid arguments for international investors to choose euro assets.

d. High degree of political stability and military power

While the US and Euroland have a similar high degree of political stability there are major differences in political structures and international clout. The US is a federal state and a military superpower while the euro area (and the EU) is an entity sui generis. The euro area is an economic powerhouse but a political dwarf in the global arena. Above all, the US has a more flexible monetary and fiscal policy enabling it to react faster to economic shocks. Given the dual mandate the US central bank has more room for manoeuvre in lowering interest rates than the ECB. The US has also a large central budget (27% of GDP) which allows substantial fiscal scope both in terms of automatic stabilisers and discretionary measures over the business cycle. In contrast, the EU has only a small central budget of 1% of GDP, but big budgets on the national level. Automatic stabilisers can only work smoothly via fiscal policy coordination and consistent consolidation policies in good times.

4. What role will the euro play as a reserve currency?

Given these structural advantages of the US there are strong reasons to assume that the dollar will remain the international reserve currency No. 1 in the decades to come. Nevertheless, the euro has the potential to play a bigger role as a reserve currency, well beyond its last reported share of 26.5% at the end of 2007. Looking ahead I would like to differentiate between the period until 2010 and beyond 2010. There are several conceivable scenarios for the phase by 2010.³²

In a first extreme-case scenario the process of shifting into the euro could occur relatively quickly within a few months, assuming central banks utilised the current phase of dollar weakness to reduce their cluster risk by diversifying out of the dollar. Although a swift reserve shift in favour of the euro cannot be ruled out, the probability seems small because many Asian central banks are still dollar-oriented and will proceed cautiously to minimise the risk of their currencies depreciating against the dollar and avoid a decline in reserve value.

In a second extreme-case scenario it is assumed that no diversification is carried out for the time being, as the existing currency situation between the US and Asia suits all the countries concerned.³³

³⁰ The survey was carried out between September and December 2004 among 65 asset managers of central banks, see Robert Pringle and Nick Carver (2005), Trends in reserve management – survey results, London, Central Banking Publications.

³¹ The narrow definition of the ECB includes only issuance in a currency other than the currency in which the borrower resides. In the broad definition which also includes home-currency issuance the share of euro-denominated international debt securities even amounted to 48% surpassing the dollar share of 36%. See also European Commission EMU@10, Successes and challenges after 10 years of Economic and Monetary Union, European Economy 2/2008, p 117 f.

³² Werner Becker (2007), Euro riding high as an international reserve currency, Deutsche Bank Research, Reports on European integration, EU Monitor 46.

³³ In this scenario a de facto Bretton Woods II is assumed, in which the US benefits from Asian investments in the dollar while Asia can export to the large US market at a relatively low exchange rate.

A third scenario combines both the wish for diversification and the desire for value retention, namely a gradual increase in the euro share to 30-40% by 2010. Still, we consider this our baseline scenario.³⁴

As things stand, there are probably four main drivers that will be essential in shaping the diversification of foreign exchange reserves into euros over the medium term: (1.) the EUR/USD exchange rate (2.) changes in exchange rate policies, (3.) central banks' rising investment requirement and (4.) the growing appetite for returns.

The euro may benefit from the dollar weakness

The dollar exchange rate has been an important determinant for the dollar's role as reserve currency. A period of a low dollar rate vis-à-vis the euro (or before 1999 vis-à-vis the D-mark and the yen) resulted – with a time lag of a few years – in a decline in the dollar's share in global foreign exchange reserves and vice versa³⁵. Even in weak periods the dollar share remained dominant (i.e. over 50%).

In contrast, there is no clear-cut relationship between the euro exchange rate and the international role as reserve currency. In the period 1999 to 2002 the euro exchange rate vis-à-vis the dollar tended to be weak while the euro's share in global foreign exchange reserves rose from 18% to 25%. The euro share had stabilised at that level by 2006 even though the euro exchange rate rose considerably. Only in 2007 was the strong euro exchange rate associated with an increase in the euro's share to 26.5%. Looking ahead a further rise in the exchange rate – starting at a value of about USD 1.55 – cannot be ruled out given the uncertainty about the US economy in the wake of the sub-prime crisis. However, it should not be overlooked that the euro has already reached a very high level against the dollar. Thus, the risk of a dollar rebound against the euro is growing, making the euro less attractive to central banks wanting to diversify. The fact that the correction of the global current account imbalances is under way and the Chinese yuan has witnessed a tangible up-valuation against the dollar may be regarded as a signal that there is no need for a further major devaluation of the dollar against the euro. Thus, the exchange rate argument is likely to lose in importance in favour of the euro.

Changes in exchange rate policy may support euro use

The fact that countries use the euro as an orientation yardstick for their exchange rate policy implies that they have to hold reserves in euros in order to be able to intervene in the euro foreign exchange market of their currency. At present, about 40 countries align their exchange rate policy with the euro. Furthermore, currency baskets are increasingly being used as a yardstick for exchange rate policy, with the dollar and the euro as key components. Such changes in exchange rate policy demand that the respective central bank hold euro reserves. Recent examples have been China³⁶ and Russia³⁷.

³⁴ In 2000 Deutsche Bank Research published a forecast that the euro share in global foreign exchange reserves would climb to 30-40% by 2010. Walter, Norbert (2000). The Euro Second to (N)one. The American Institute for Contemporary Studies, German Issues No. 23.

³⁵ Werner Becker (2005), The euro: Well established as a reserve currency, Deutsche Bank Research, Reports on European integration, EU Monitor 28.

³⁶ In July 2005 China switched over to managing its exchange rate policy via a currency basket that apart from the dollar also contains the euro, the yen, the pound sterling, the Korean won, the Thai baht and the Russian rouble. But there have been no announcement of the details of the currency weights in the basket.

³⁷ Russia completed the changeover from pegging its currency to the dollar to an exchange rate regime based on a currency basket made up of just the dollar and the euro in 2005. Interventions in the euro/rouble foreign exchange made it necessary to hold a corresponding quantity of foreign reserves in euros.

At present, exchange rate policies are under review in many countries around the globe. Obviously, the trend towards the two corner regimes³⁸ of either flexible exchange rates or a fixed exchange rate seems to be over as the number of middle-ground exchange rate models of pegged but adjustable exchange rates has recently risen. To my mind, the exchange rate policy of many countries around the globe is currently challenged by two closely related problems.

The first problem concerns rising inflation rates around the globe mainly due to increasing oil, other (energy) commodity and agricultural prices. The inflation rate has climbed to 8.3% in China (May 2008), to 7.4% in India, to 8.1% in the Asean countries and to even 11.6% in the six countries of the Gulf Cooperation Council. This provokes the question of how these countries can maintain economic growth in an inflationary environment, and which role the exchange rate should play with regard to fighting inflation.

The second problem regards the Fed's policy of easy money. Therefore, those roughly 60 countries that use the dollar as anchor currency face the problem of whether a dollar peg is still compatible with the aim of combating inflation or whether a change in the exchange rate regime is necessary. Alternatives to a dollar peg are, for instance, a basket solution with the euro as a key component or even a pure euro orientation. Both cases would generate a need to hold euro reserves. It is, however, open whether a country that changes its exchange rate policy will provide detailed information about the role of the euro, e.g. its weight in a currency basket.

Central banks' rising investment requirement

Global foreign exchange reserves held by central banks more than tripled to around USD 6,400 bn between the end of 2001 and the end of 2007 – compared with cumulative increases in world trade of two-thirds and in global nominal GDP by two-fifths. The lion's share of the increase in foreign exchange reserves was accounted for by China, other emerging markets in Asia, and Japan. The main source for reserve accumulation has been the buying of dollars in foreign exchange markets against local currency. Of all the international foreign exchange reserves at the end of 2007 about two thirds were held in Asia (excluding Middle Eastern oil nations), with China and Japan combined accounting for nearly 50%. The accumulation of such huge reserves went far beyond the level necessary for exchange rate management. Thus, Asia's central banks are under increasing pressure to reduce their dollar-denominated cluster risk³⁹ and diversify into other currencies. China is a special case as it has the largest stock of reserves. According to unofficial sources⁴⁰ some 80% of its foreign exchange reserves are invested in dollars, i.e. more than the global average share of 64%. China is also a major player with regard to sovereign wealth funds (SWF).⁴¹ This special type of institutional investors has gained major importance in holding, managing and/or administering public funds mainly stemming from official reserves at central banks. This is also a vehicle giving the euro a major opportunity to grab a bigger share of global foreign exchange reserves.

³⁸ Corner solutions were the mainstream in the exchange rate landscape of globalisation since 2000. Summers, Lawrence H. (2000), "International Financial Crises: Causes, Prevention, and Cures", American Economic Review, Papers and Proceedings, 90, 2 (May), 1-16.

³⁹ About 64% of global foreign exchange reserves were invested in dollar at the end of 2007 according the COFER statistic of the IMF. The currency breakdown of global reserves is, however, incomplete as it exists for only USD 4064 bn out of a total of USD 6400 bn. In particular, China does not officially report its currency breakdown.

⁴⁰ Hui Feng (2007), China's new reserve strategy, Central Banking, Vol. XVII. 3.

⁴¹ Steffen Kern (2007), Sovereign Wealth Funds – state investments on the rise, Deutsche Bank Research, International topics, Current Issues.

Focus on yield of foreign exchange reserve investments

Given the huge volume of foreign exchange reserves eligible for investment purposes there is a growing pressure on central banks to sharpen their focus on yields. This is not only true for central banks in Asia but also in the industrial and oil-exporting countries. The watchword is diversification and from a yield standpoint in both senses: firstly, by instrument within the dollar segment and, secondly, by currency. Diversification moves within dollar segment – from US treasury paper into other securities – before July 2007 are likely to have been negatively affected by the sub-prime crisis. At present, diversification within the dollar segment might still be difficult due to a lack of liquidity in many securities markets except US treasuries. This also offers opportunities for diversification out of the dollar into the euro.

However, the desire for currency diversification and a higher yield on the one hand and the desire to maintain the value of foreign exchange reserves on the other can be conflicting objectives. A central bank must thus take into *consideration* what impact diversification out of the dollar into the euro could have on its country's exchange rate against the dollar. A strategy of massive currency diversification could prompt an appreciation of this central bank's currency against the dollar and this would in turn lead to write-downs of the dollar reserves in national currency. There are two alternatives: either it decides against currency diversification or it pursues a clandestine strategy of currency diversification, for instance by transferring part of its reserves into a separate unit (e.g. a SWF) or to a professional asset manager. However, it is doubtful whether a central bank's investment strategy can prevent a fundamentally driven appreciation of its own currency against the dollar in the medium run.

5. What will happen to the euro's role as a reserve currency after 2010?

Whether the euro will still be on the rise as reserve currency or even outstrip the dollar after 2010 is closely linked with structural changes that can be expected in Europe, in the US and the rest of the world. One factor that will remain key for the euro/dollar exchange rate is longer-term US development particularly with regard to growth and interest rates. US growth is expected to pick up as of 2010 once the structural problems of the sub-prime crisis are overcome and the huge US current account deficit has been convincingly reduced to a manageable level. Then, US growth is likely to be more dynamic than in the euro area.

A longer-term problem of relevance to the euro area is the reduction of growth potential linked with the demographic developments. Trend growth in the euro area at nearly 2% is around one percentage point lower than in the US. The contribution of the factor labour will play a key role in this regard, as determined by the development of working hours per employee, participation rates and the population. Although working hours and the participation rates in the euro area have risen in recent years, they are well behind US levels. The euro area is, however, clearly at a disadvantage in terms of population growth. As the birth rate has been much lower than in the US in recent decades, population growth will continue to slow in the EMU states. Despite immigration the population in EMU countries will actually decline in the next ten years. Reduced future growth potential should, however, dampen the appeal of the euro especially among central banks focusing heavily on returns and constitute a risk factor for the euro as a reserve currency. Therefore, I think that the dollar will also remain the most important reserve currency in the longer run.

6. Is a bipolar reserve system per se unstable?

There is no simple answer to this question. So far the answer has been that market participants and monetary authorities have established a bipolar international monetary system, which is working smoothly. The coexistence of two globally important currencies is based on the fact that both fulfil the prerequisites for an international role.

The dollar has remained the Nr. 1 currency while the euro has the capacity to catch up further. Nevertheless, there are concerns that such a bipolar system may not be stable⁴² in the medium term. One argument stresses the risk that there will be large and abrupt capital flows in and out of the currency. In particular, it is argued that the US economy is much more flexible and dynamic than Euroland and that there is ample latitude for sudden massive capital movements from euro to the dollar, for instance once the US economy returns on a strong growth path with rising interest and dollar exchange rates. Moreover, it is argued that, in history, there have never been two major international currencies in parallel over a longer period of time.

However, I do not share the view that a bipolar system is per se unstable. The risk of abrupt capital movements will exist in open and global markets anyway, irrespective of the euro being a reserve currency or not. More importantly, I think that euro financial markets are liquid enough to cope with large capital flows. History also provides evidence that changes in the international role of a currency occur gradually. The new reserve currency used to crowd out the old one. In the past, we had the pound sterling then the dollar. Furthermore, I would like to stress that competition between the dollar and the euro regarding the international role is basically a good thing. Such a permanent beauty parade is expected to provide a big incentive for policy makers on both sides of the Atlantic to pursue sound economic and fiscal policies. Last but not least, there is a close network of international policy cooperation, e.g. within the G7 and the IMF in order to deal with global monetary and economic problems such as exchange rate distortions or current account disequilibria.

7. Could the rising reserve function of the euro explain the surge in the price for commodities, in particular gold?

The surge in commodities (including oil and gold) has mainly been caused by the dynamic growth of the world economy between 2003 and 2007, in particular by continuously buoyant demand in Asian emerging markets. Obviously, there is no direct connection between the rising reserve function of the euro and the increase in commodity prices. However, the massive rise in foreign exchange reserves in recent years has led to a substantial increase in the liquidity of local currency in emerging markets irrespective of whether the reserves were invested in dollar or euro-denominated assets. This provision of local liquidity has contributed to the smooth financing of the dynamic growth in emerging markets such as China, India or Russia. Thus, it is fair to say that rising foreign exchange reserves have an indirect impact on commodity prices via growth financing.⁴³

The gold price, which peaked at USD 1,011 per fine troy ounce in March 2008 and which has recently fallen to about USD 862. There has been a strong gold demand on the part of emerging Asia. The dynamic growth process in these countries has produced a burgeoning group of wealthy private individuals being in the position and willing to buy gold jewellery – in no inconsiderable quantities – and invest in gold instruments such as bullion or coins. Moreover, rising inflation rates around the globe have reinforced the demand for gold, which is obviously still deemed to provide effective protection against inflation. This is, however, a widespread misunderstanding as gold instruments involve costs (e.g. for storage and insurance) but do not bring a yield unless the gold price rises and gold instruments are sold with a profit.⁴⁴

⁴² For instance, George Soros argues along these lines.

⁴³ An interesting question is whether the provision of local liquidity through dollar interventions has been excessive and fuelled inflation. But there is no simple answer.

⁴⁴ According to IMF statistics the gold stock has decreased from 944 fine troy ounce at the end of 2001 to 853 ounces at the end of 2007.

The central banks worldwide still hold a substantial stock of gold in their coffers. The gold holders have seen rising book values in recent years. However, a number of OECD central banks (including the Bank of England and the Swiss national bank) have sold part of their gold stock.⁴⁵ In total, central banks have sold about one tenth of their gold stock since 2001 and thus enhanced global gold supply which has dampened – all other things being equal – the gold price. The receipts from gold sales were mainly distributed to the shareholders, i.e. mostly governments. My conclusion is that the increase in the gold price is driven by private-sector demand and cannot be explained by central banks' actions to rise their foreign exchange reserves in euro.

8. Cost and benefits of running an international currency

There is no single model to assess the costs and benefits for the country that issues an international currency, but several factors must be taken into account.⁴⁶

On the cost or risk side it is argued that there is an impact on monetary policy as the international role of the euro may alter the statistical measurement and behaviour of monetary aggregates⁴⁷, which are essential for the monetary pillar of the ECB strategy. However, the ECB can take international factors into account when analysing monetary aggregates and explain them to the markets. There may also be the risk of greater day-to-day volatility in the euro foreign exchange markets. While hedging instruments are available, they trigger costs for the firms involved. Eventually, the internationalisation of the euro may trigger substantial changes in the exchange rate level. I would like to differentiate between two extreme cases. Firstly, the “strong euro case” featuring large capital inflows, when the international role as a reserve and investment currency has been established, that leads to an overshooting of the EUR/USD rate. The high exchange rate has a restrictive effect on the economy which may provide scope for the ECB to lower its key rates. Secondly, the “weak euro case”, in which a strong capital outflow causes an undershooting of the EUR/USD rate and the ECB is confronted with the problem of imported inflation. In this case the ECB might increase key rates if necessary. So far it is good to see that the ECB has followed a medium-term monetary strategy that anchors inflationary expectations and minimises the risk of destabilising capital flows.

The benefits also concern a variety of aspects. The international role provides a high degree of freedom in economic policy compared with constraints of small or medium-sized economies with “national” currencies. Thanks to the international role of the dollar the US has, for instance, the ability to avoid a policy-driven adjustment of a large current account deficit by financing in its own currency. The Federal Reserve has ample scope for the conduct of monetary policy as it can focus on domestic issues and leave the exchange rate as a “residual”. By the same token, the ECB has been in the position to pursue a monetary policy that is largely independent of the development of US policies and also able to focus on domestic stability requirements. This is illustrated by how differently the Fed and the ECB are dealing with the consequences of the US sub-prime crisis. The ECB is sticking to its mandate of price stability whereas the Fed has substantially lowered the key interest rate, taking into account its “dual mandate” of fostering price stability and growth.

⁴⁵ Most sales were based on two central bank agreements on gold concluded in 1999 and 2004 between several OECD countries. The Deutsche Bundesbank also participated in the 2004 but did so far not use the option to sell parts of their gold stock.

⁴⁶ Elias Papaioannou and Richard Portes (2007), *The euro as an international currency vis-à-vis the dollar*, paper presented to euro 50 Group Roundtable: July 2-3, 50 Years After the Rome Treaty, “Strengthening the Economic Leg of EMU”, Rome.

⁴⁷ Hartmann, P. and O. Issing (2002), ‘The International Role of the Euro’, *Journal of Policy Modeling* 24, North-Holland, pp. 315-345.

To my mind, the internationalisation of the euro will even increase the scope for an independent ECB policy but this will also require responsible action not only by the ECB but also by other policy makers in EMU.

A second aspect is that the international use of notes and coins produces net income from seigniorage⁴⁸. One major difficulty is, however, to estimate the share of currency in circulation held outside the euro area. There is one rough estimate suggesting that the seigniorage income in Euroland is unlikely to exceed 0.1% of GDP⁴⁹. Estimates for the US differ widely, one estimate being close to the Euroland figure. This indicates that the advantage of seigniorage income should not be overestimated.

Greater effects than from seigniorage are very likely to be realised in form of lower transaction costs in financial markets. Moreover, government, corporate and bank bond issuers are expected to benefit from the “liquidity premium effect” in the bond markets. For the US, estimates point to a sizeable downward effect in bond yields of between 65 to 150 basis points.⁵⁰ A rising role of the euro as reserve currency also implies rising investments in euro bond markets on the part of worldwide central banks. This promises a rising liquidity premium effect for Euroland provided international private-sector investors and central banks will continue to increase their euro bond portfolios.

9. Is the economic governance of the euro area appropriate to shoulder international responsibility?

As regards the policy stance of the ECB I would like to begin with a comment on its position towards internationalisation of the euro. For its part, the ECB does not actively promote the international role of the euro. Rather, the ECB has explicitly declared that it pursues a neutral policy, i.e. it refrains from hindering or promoting the international use of the euro. Yet, the ECB regularly monitors the international role of the euro and provides valuable information about its global use⁵¹. It should, however, not be overlooked that the ECB has indirectly contributed to the international attractiveness of the euro by doing a good job on price stabilisation and – more recently – by temporarily assuming the role of “lender of last liquidity”. In the latter function the ECB has acted decisively, professionally and rapidly. Thus, the ECB has implicitly taken responsibility for the euro’s international role. Fulfilling this function tacitly and smoothly gets a warm welcome from market participants.

A second issue concerns the policy mix between monetary and fiscal policy. The ECB’s mandate of attaching priority to price stability and the principle of independence limit the room for manoeuvre for an ex ante coordination between the ECB and the Eurogroup of EMU finance ministers. It is positive that the Eurogroup has been led by President Jean-Claude Juncker since 2005. He has given the euro area more continuity in leadership, greater visibility in the general public and better representation in international fora. I think three important issues should be on top of the agenda of the Euro group in order to strengthen the international responsibility of the euro area.

⁴⁸ Seigniorage in case of coins arises from the difference between the face value of a coin and the cost of production and distribution. Seigniorage resulting from notes is the difference between the interest earned on government securities acquired in exchange for bank notes and the costs of producing and distributing those notes. In Euroland income from seigniorage is earned by the central bank (in case of notes) and by the finance minister (in the event coins).

⁴⁹ Elias Papaioannou and Richard Portes (2007).

⁵⁰ F. Warnock and V. Warnock (2006). [International capital flows and U.S. interest rates](#). NBER Working Paper No. 12560.

⁵¹ European Central Bank (2007), Review of the international role of the euro.

First, it is vital to make full use of the room for action in the reformed stability and growth pact. This implies in particular to push through consistent fiscal consolidation policies in good times in order to be able to let the automatic fiscal stabilisers work in recession without a violation of the 3% limit.

Second, globalisation has increased inequality and has led to an intense debate about the distribution of benefits, income and wealth. This threatens to deflect from the pressing problem of structural reforms which are badly needed to stimulate expansion in Europe in a global environment of slowing growth. Coordinating and pushing through structural reforms will be a major challenge for the Eurogroup.

Third, the euro area must be able to speak with one voice in order to increase its clout on the international stage in line with the rising international use of the euro. The current threefold international representation of the euro area by the ECB, the Eurogroup and the European Commission (as demonstrated by the visit in China last autumn) is neither transparent nor efficient. But there is some hope that the pending Lisbon Treaty will give the Eurogroup a somewhat greater say and contribute to strengthening the global voice. I am, however, concerned that excessively high expectations might be pinned on designing and presenting a common voice. The designing requires the ability of the Eurogroup to agree on one voice, which is rather complicated given the different political and monetary views within the euro area. Moreover, an open debate about the complex representation structures in international fora (e.g. G7 and IMF)⁵² is necessary. It is argued that a common voice is better than a common seat. I presume that consistent changes in international representation are very complicated as they are associated with a reduction in the euro area's current number of seats in the IMF and in the G7. I think a consistent international representation with one seat in the IMF and one seat in the G7 (or better G3 with the US, the euro area and China) is only likely in the longer run.

10. Summary

Since 1999 the euro has gained in importance as an international trade, investment and reserve currency. The internationalisation has been a market-driven process. The euro meets essential pre-requisites for an internationally key currency in terms of price stability, economic potential and international openness, size and liquidity of financial markets as well as political stability. There are four factors relevant for a rise in the international use of the euro as reserve currency by 2010: the dollar exchange rate, changes in exchange rate policy, rising investment requirements of central banks and increasing focus on yield. Beyond 2010 the dollar is likely to benefit from a higher US growth dynamic on the basis of a sustainable low current account deficit while Europe sees the restrictive impact of demographic developments on its growth potential. Therefore, the dollar will remain the most important reserve currency in the longer run whereas the euro will be the undisputed No. 2.

A bipolar international reserve system per se is not unstable as it is likely to stimulate economic and fiscal policy discipline on both sides of the Atlantic. The rising reserve function of the euro does not explain the surge in the price of commodities, in particular gold. There are benefits of being a reserve currency such as lower bond yields and income from seigniorage, but also risks e.g. in terms of greater volatility of the EUR/USD exchange rate. The ECB is pursuing a neutral stance towards the international role of the euro. The ECB is, however, fulfilling its international tasks tacitly and professionally both concerning price stability and the role of lender of last liquidity. Last but not least the euro area must solve the issue of speaking with one voice in order to increase its clout in the international arena.

⁵² In the G7 the ECB President participates, alongside the president of the Eurogroup, in the Ministers and Governors meetings. At the IMF which is a country-based institution, the ECB has observer status.

Tables

Table 1: Functions of an international currency

Function	Private sector	Public sector
Medium of exchange	Payments and vehicle currency in forex markets	Interventions
Unit of account	Trade invoicing	Anchor currency
Share of value	Financial assets	Foreign exchange reserves

Table 2: Euro surpasses the dollar

Banknotes and coins in circulation, EUR bn

	euro	dollar
December 2004	517	564
December 2005	583	668
December 2006	647	619
December 2007	697	525
April 2008	690	521

Sources: ECB, FED

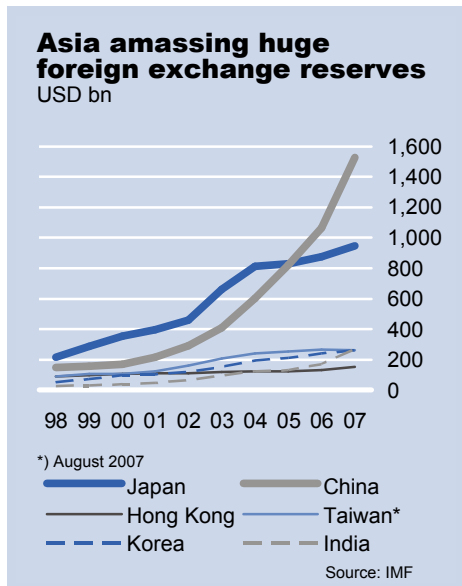
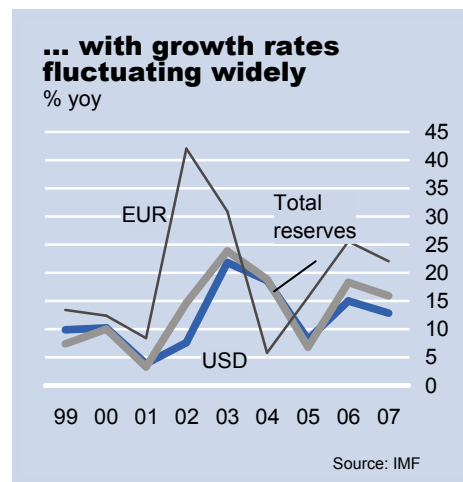
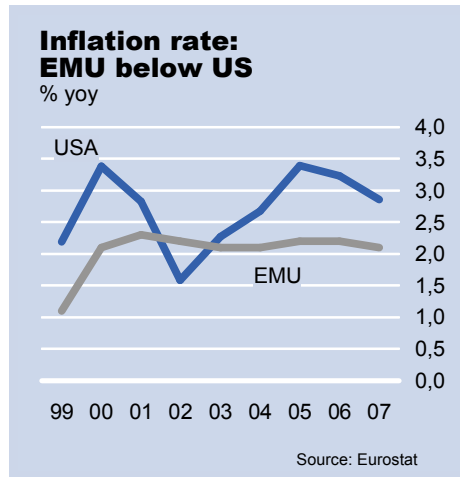
Table 3: Euro share rising again

	99*	01	03	05	06	07
USD	71,2	71,5	66,0	66,9	65,5	63,9
JPY	6,0	5,0	3,9	3,6	3,1	2,9
EUR	18,2	19,2	25,2	24,1	25,1	26,5
GBP	2,7	2,7	2,8	3,7	4,4	4,7

*) Q 1

Source: IMF

Charts



continued overleaf

