

# **Hermann Remsperger: Emerging markets, the US dollar and the euro – reflections on the global monetary system**

Speech by Professor Dr Hermann Remsperger, Member of the Executive Board of the Deutsche Bundesbank, at an Economist Seminar hosted by the Bank of Finland, Helsinki, 18 April 2008.

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I would like to start by thanking the Bank of Finland for hosting this seminar and providing me with the opportunity to share with you some thoughts on developments in the global monetary system.<sup>1</sup>

My focus today will be on emerging markets. This may be at odds with most recent events in financial markets which suggest that the spotlight should be turned on the group of advanced economies. But as many speeches and papers have already been devoted to the financial market turmoil, I think it is useful to redirect attention to emerging market economies, not least given their growing importance for developments in the global economy.

My remarks will attempt to address three questions.

1. How has emerging markets' participation in the global monetary system evolved in recent years?<sup>2</sup>
2. Can emerging markets sustain the current form of their participation in the global monetary system?
3. What do potential developments in emerging markets imply for the future role of the main international currencies, the US dollar and the euro, in the global monetary system?

## **I. The international monetary system since the early 2000s**

Let me first turn to the question on how emerging markets have been participating in the global monetary system in the past few years. I shall answer it by looking at the three main building blocks of the “impossible trinity” hypothesis – exchange rate regimes, financial integration and monetary policy.

### ***Exchange rate regimes***

About ten years ago, in the wake of the financial crises of the mid- and late 1990s, the “impossible trinity” became the main pillar of what has been called the “bipolar view” of exchange rate regimes (Fischer 2001). With an increasingly open capital account, emerging

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<sup>1</sup> I wish to thank Adalbert Winkler for his input in the preparation of these remarks, and Karlheinz Bischofberger, Ulrich Grosch and Sabine Herrmann for their valuable comments and suggestions.

<sup>2</sup> In the literature, this question has been at the core of the debate on the “Bretton Woods II” system with a core being the United States, and a periphery consisting mainly of the emerging Asian economies (Dooley, Folkerts-Landau and Garber, 2003). According to this view, core and periphery are linked through pegged or managed exchange rates, reserve accumulation and current account imbalances. Despite very different current account patterns (Abiad, Leigh and Mody 2007, Herrmann and Winkler 2008), similar developments have been identified in Europe, where the “Euro standard” (McKinnon 2002) connects the euro area with an “EMU periphery” (Schnabl 2007). However, other observers (e.g. Rose, 2006) have been pointing to the increasing number of emerging market countries that have opted for a domestic nominal anchor and independently floating or, at least, managed exchange rates. Relying on stability-oriented domestic monetary policies pursued by each country, the system is exactly the opposite of Bretton Woods, as there is no need for anchor currencies or international policy coordination.

market economies were expected to adopt either a managed or independent float<sup>3</sup> or to choose a hard peg, that is a currency board or an arrangement with no separate legal tender, thereby credibly committing themselves to adopting the monetary policy of the anchor country.

In contrast to these “corner solutions”, intermediate regimes, in other words, soft pegs in the form of conventional fixed pegs, crawling pegs or pegs with horizontal or crawling bands, were considered non-viable. Capital markets would successfully test the exchange rate commitment in cases where authorities adopted a monetary policy stance in defence of the soft peg that is inappropriate from a domestic point of view.

In the late 1990s and early 2000s, that is in the years following the crises, the bipolar view was supported by empirical evidence (Fischer 2001, IMF 2003, IMF 2005). A number of countries, like Brazil, Indonesia, Thailand or Russia, moved from a soft peg to a managed or independent float.<sup>4</sup> However, expectations that this trend would continue did not materialise. Focusing on a group of 24 selected emerging economies<sup>5</sup> the distribution of exchange rate regimes has been basically stable between 2002 and 2007 (Chart 1).<sup>6</sup>

Consistency with the “impossible trinity” theorem requires that countries sustaining a high degree of exchange rate stability have to be either relatively closed to international capital flows or have little need for a domestic oriented monetary policy that diverges strongly from the stance taken in advanced economies. Let me quickly review the evidence on both dimensions.

### ***Financial integration***

At first glance, the process of emerging market economies’ financial integration seems to have continued unabated. After a temporary slowdown following the crises of the late 1990s, gross private capital inflows have picked up significantly in recent years. In 2007, they reached unprecedented levels, both in absolute US dollar terms and expressed as a share of GDP (Cardarelli et al 2007). Other things being equal, this would signal a need for more exchange rate flexibility.

However, other indicators of financial integration suggest that the progress made by emerging markets has been more limited. A prominent example is the sum of the outstanding stocks of foreign assets and foreign liabilities, expressed as a share of GDP. This indicator of *de facto* financial integration has advanced only slightly in recent years (Chart 2). Moreover,

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<sup>3</sup> Both floating arrangements are characterised by the fact that there is no predetermined path for the exchange rate as is the case in the hard and soft peg regimes. Under a managed float, the monetary authority influences the market-determined exchange rate, while, under an independent float, interventions by the authorities are limited.

<sup>4</sup> Most countries adopting and sustaining hard pegs since the early 1990s are very small (El Salvador, Montenegro, Bosnia and Herzegovina, Estonia and Latvia). Bulgaria and Ecuador, with about 7.3 million and 13.7 million inhabitants respectively, are by far the largest countries.

<sup>5</sup> The emerging market countries are Argentina, Brazil, Chile, Columbia, Mexico, Peru, China, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Thailand, Czech Republic, Egypt, Hungary, Israel, Jordan, Morocco, Poland, Russia, South Africa, and Turkey. The selection closely follows the group of countries compiled in the Morgan Stanley Capital International (MSCI) Emerging Market Index.

<sup>6</sup> For the complete sample of IMF member states (186 in 2001, 188 in 2007), results have been even less favourable for the bipolar view. While the number of hard pegs has been basically stable since 2001, the overall number of floaters has dropped, with the share of managed floats rising at the expense of independent floats. The number of countries with a soft peg rose from 70 to 83. The classification is based on IMF staff’s assessment of the observed (*de facto*) exchange rate arrangement rather than on the exchange arrangement a member notifies to the Fund in accordance with Article IV, Section 2(b) of the Fund’s Articles of Agreement (*de jure* arrangement). On the classification of exchange rate regimes, see also Reinhart and Rogoff (2004).

the gap between advanced economies and emerging markets has widened substantially (Lane and Milesi-Feretti 2008).

The pattern of financial integration has been very different as well. For advanced economies, financial integration has mainly taken the form of an intensive two-way trade of debt and equity instruments, reflecting portfolio optimisation strategies by private agents (Fecht et al. 2007).

By contrast, emerging market economies strengthened their international investment position by a substantially larger and increasing share of FDI in total foreign liabilities, and a build-up of foreign exchange reserves.

Overall, the evidence suggests that – with the exception of the new EU member states, where financial opening has been a key prerequisite for EU membership – emerging markets have been pursuing a gradual approach towards financial integration. Indeed, several features indicate that countries have aimed at reducing vulnerabilities to sudden stops and reversals of capital flows (Edwards 2007, Kose, Prasad, Terrones 2007).

This may have lessened the need for further movements towards the “corners”, hard pegs and managed or independent floats, in the past few years.

### ***Monetary policy***

Let me now turn to monetary policy. Chart 3 shows that, since 2002, inflation rates have been converging in emerging markets to moderate levels, irrespective of the exchange rate regime chosen (White 2008). How have countries achieved this outcome? Distinguishing between countries with a soft peg and countries operating a managed or independent float prompts the following observations.

1. Several countries with a soft peg reverted to outright administrative measures, sterilised interventions and rising minimum reserve requirements to limit the inflationary impact of rising capital inflows, in some cases supported by fiscal policy (Mohanty and Scatigna, 2005; Cardarelli, Elekdag and Kose, 2007).
2. Countries with a domestic nominal anchor made use of the flexibility with regard to interest and exchange rates to reduce inflation and achieve price stability. At the same time, the substantial accumulation of foreign exchange reserves suggests that the exchange rate has remained an important policy objective for many countries with a managed and independent float (IMF 2005, Rose 2006, Edwards 2006, Mishkin and Schmidt-Hebbel 2007).
3. More recently, emerging market floaters with inflation rates reaching levels close to those in advanced economies have been able to maintain price stability without major exchange rate fluctuations by following the pattern of interest rates in advanced economies.

Overall, the evidence on monetary policy may be summarised as follows: With the great moderation – or to put it in the terminology of the optimum currency area theory, in the absence of country-specific shocks – the need for a monetary policy stance that is substantially different from the one in advanced economies has declined significantly in recent years.

As a result, emerging markets – with different exchange rate regimes and pursuing a gradual approach towards financial integration – have been able to combine low inflation with a comparatively high degree of exchange rate stability.

## II. How sustainable is the current configuration of the global monetary system?

After having reviewed the past, I would now like to turn to future developments and the question of whether the current form of emerging markets' participation in the global monetary system is sustainable. And if it is not sustainable, to where will the system be heading?

Concerns about the sustainability of the current configuration of the global monetary system have been raised for many years, most prominently in the context of the "global imbalances" debate. Today, I would like to draw attention to a different challenge, namely an increasing divergence of inflation between advanced economies and some emerging economies. This divergence may make it increasingly difficult for emerging markets to smoothly combine low inflation and a high degree of exchange rate stability.

There are at least three factors that may explain why prices have recently been rising in emerging markets at a more rapid pace than in advanced economies:

1. The global rise in energy and food prices, as both items have a much larger share in the consumer price indices of emerging economies than in those of advanced economies.
2. Strong expansion in monetary and credit aggregates,<sup>7</sup> which may finally feed into a more pronounced rise in emerging market inflation.
3. Increasing supply constraints, as the "vast supply of underemployed workers" (Dooley et al 2003) in some countries may finally be exhausted, at least for certain segments of the labour market.

Of course, there have been rising inflationary pressures in advanced economies as well. And until July last year, the Federal Reserve and the ECB responded to these pressures by raising interest rates. The recent financial turbulence put an end to the tightening cycle in the US, with the Federal Funds rate dropping by three percentage points since August 2007. In Europe, ECB monetary policy rates have remained stable. The policy response in the US reflects the high level of uncertainty resulting from the turmoil in financial markets.

From a global monetary system perspective, the key question is whether the monetary policy stance in advanced economies will remain appropriate for emerging market economies. If this were not the case, emerging market economies with a soft peg would be facing increasing inflationary pressures as interest rates in advanced economies could become too low to be consistent with maintaining price stability.<sup>8</sup> And, in emerging markets with a domestic nominal anchor, there could be an end to the period of a smooth co-existence between meeting the inflation targets and maintaining a high degree of exchange rate stability.

I know that the question I raised is not a new one. It has been with us for some time, but under a different name, namely the "decoupling hypothesis".<sup>9</sup> From a growth perspective, the hypothesis suggests that the global expansion of the past few years could continue even in the face of a US slowdown. At the same time, the decoupling scenario might imply a growing need for divergent monetary policy stances in advanced economies and emerging markets in order to maintain price stability. If scope for an autonomous interest rate policy cannot be

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<sup>7</sup> Credit growth has exceeded 20% per annum in every major region in the developing world in recent years (White 2008).

<sup>8</sup> Of course, this may also apply to emerging economies other than the 24 countries reviewed here. See, for example, Setser (2007) with regard to oil-producing countries in the Middle East.

<sup>9</sup> Detailed analyses of the decoupling hypothesis can be found in Akin and Kose (2007) as well as Helbling et al (2007).

provided by increasing restrictions on the movement of capital, this could involve a transition to more flexible exchange rates (Eichengreen and Razo-Garcia, 2006).

The jury is still out on whether, and to what extent, decoupling will take place. My reading of latest developments is that there is divergence, while the degree of decoupling is likely to be limited. Thus, authorities in emerging markets might continue relying on fiscal policy, minimum reserve requirements and other administrative measures to contain inflationary pressures. But irrespective of the more cyclical challenges the system is currently facing, there are some arguments suggesting that tensions between price and exchange rate stability might become more fundamental.

Accordingly, the medium-term perspectives of the global monetary system are likely to be determined by two opposing forces (Bordo and James 2006). On the one hand, reflecting the ideas of the more traditional optimum currency area theory, some observers argue that, with emerging markets' rapid integration, the global economy will face a growing need for a common monetary standard. This would mean that the emerging markets would continue paying close attention to the exchange rate and exchange rate developments, in particular, towards the US dollar and the euro.

On the other hand, there are good reasons to believe that, in an increasingly integrating world, the global economy needs more exchange rate flexibility in dealing with large shifts in relative prices that affect advanced and emerging countries differently. Such large shifts in relative prices are almost certainly to occur under the assumption that the convergence of real income levels witnessed in many emerging markets in recent years continues. The recent rise in food and energy prices provides a prominent example of substantial movements in relative prices and their non-proportional impact on advanced and emerging economies.

In such an environment, differing interest rate levels are needed to maintain price stability in the global economy. Given their higher rates of inflation, higher interest rate levels would be required in emerging markets. Assuming that authorities will face increasing difficulties in limiting capital inflows by administrative measures and changes in minimum reserve requirements, interest rate differentials can be achieved only with emerging markets adopting more flexible exchange rates.

To a European observer the two opposing forces I have just described are quite familiar. They had been at the heart of the discussion on European monetary and exchange rate policies since the collapse of the Bretton Woods system.<sup>10</sup> And, in the 26 years that followed before the creation of the euro, the European countries tried almost any possible exchange rate regime to cope with the challenge of conducting independent monetary policies on an increasingly integrated continent. In the end, both "corners" prevailed: a hard peg among European countries and the euro area itself operating an independent float (Padoa-Schioppa, 1995).

In light of this, it is not surprising either to observe that there are still differing exchange rate regimes among the New EU Member States which have not yet adopted the euro. At the same time, real and financial integration in the EU is already strong and is set to increase even further. Thus, given the unique institutional environment of European integration, countries are expected to adopt the euro once they are deemed to have fulfilled the conditions set by the Treaty.

Globally, however, and having reviewed all arguments, I expect that the global monetary system of the future will probably consist of more emerging markets adopting a domestic nominal anchor and a more flexible exchange rate regime.

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<sup>10</sup> From an emerging market perspective, Dooley and Garber (2005) explicitly compare the current configuration of the global monetary system with the later years of the Bretton Woods period.

The main advantage of adopting a domestic nominal anchor instead of committing to an external one is that it provides for more flexibility *in times of need* (Barajas et al 2007). This flexibility helps to adjust to the different forces that impinge on emerging market economies' monetary policy in their process of convergence and integration. At the current juncture, such a need might arise as countries are facing increasing inflationary pressures.

### **III. Implications for the international role of the US dollar and the euro**

The scenario of increasing exchange rate flexibility in emerging markets has also featured more prominently in recent discussions on the international role of the US dollar and – albeit to a lesser and more indirect extent – the international role of the euro. In particular, it has been argued that, given rising exchange rate flexibility in emerging markets, the international role of the US dollar may suffer from falling demand as an anchor currency.

Moreover, concerns have been raised that growing exchange rate flexibility in emerging markets might have implications with regard to the demand for US dollar reserve assets, as anchor and reserve currency are closely aligned. In particular, there might be less willingness on the part of major reserve accumulators to continue purchasing US dollar assets.

Indeed, some observers argue that authorities in emerging markets, when free from the constraints of a soft peg or tightly managed float, might aim at restructuring their reserve portfolios in favour of euro assets, which – in their view – might lead to appreciation pressures on the euro against the US dollar. Some commentators have even expressed the expectation that, in the end, such a process might challenge the dominant role of the US dollar as an international currency.

However, there are three reasons why I think that changes in the use of the US dollar and the euro as international currencies will continue to be gradual (Remsperger and Winkler 2008).

First, in the past, fluctuations in the euro-US dollar exchange rate have had little impact on the international role of either currency or on their reserve currency function. Research shows that, in general, central bank interventions have a stabilising rather than destabilising pattern (Lim 2007); in other words, central banks increasingly buy the reserve currency that is depreciating. Latest IMF data on the currency composition of foreign exchange reserves is consistent with this pattern of interventions (Chart 4).

Second, it is important to distinguish between two different causes of a decline in demand for an anchor currency. And one should not confuse the two cases.

Countries may abolish an anchor currency because the import of the anchor currency's monetary policy is leading to rising domestic macroeconomic imbalances. In the history of the global monetary system, this has been quite a usual event (Frankel 1999). It merely indicates that one monetary policy does not fit the size of all countries pegging to the anchor currency.

By contrast, a decline in demand motivated by rising distrust in the stability of the respective anchor currency *per se*, in particular, its domestic stability, is a very different scenario. Such a scenario could have profound implications for the international role of the respective anchor currency. However, I do not expect this scenario to materialise. Indeed, changes in the dominant international currency have been very rare.

The third and final reason why implications for the international role of the US dollar and the euro are likely to be limited is that, as in the past, a move towards more exchange rate flexibility is unlikely to signal that emerging markets will implement the textbook rules of a domestic nominal anchor and an independent float, as is the case in the United States and the euro area.

Emerging markets can be expected to move towards greater exchange rate flexibility if and when the monetary policy stance of advanced economies – for reasons that are either cyclical or structural in nature – becomes increasingly inconsistent with higher inflation rates in emerging countries. But, at the same time, emerging markets are likely to continue paying close attention to exchange rate fluctuations. This will hold, in particular, for fluctuations against the US dollar and the euro. Against this backdrop, I would expect that, even if emerging markets adopt a more flexible exchange rate regime, changes in the use of the euro and the US dollar as international currencies will continue to be gradual.

Thank you very much.

## References

Abiad, A., Leigh, D. and Mody, A., (2007), International Finance and Income Convergence: Europe is Different, IMF Working Paper, No. 64, International Monetary Fund, Washington.

Akin, C. and M.A. Kose (2007), Changing Nature of North-South Linkages: Stylized Facts and Explanations, IMF Working Paper 07/280, Washington DC.

Barajas, A., L. Erickson and R. Steiner (2007), Fear of Declaring: Do Markets Care What Countries Say About Their Exchange Rate Policies?, Paper presented at the 8th Jacques Polak Annual Research Conference, 15-16 November.

Bordo, M. and H. James (2006), One World Money, Then and Now, NBER Working Paper 12189, Cambridge MA.

Cardarelli, R., S. Elekdag and A.A. Kose (2007), Managing Large Capital Inflows, World Economic Outlook (October, Washington: IMF), 105-134

Dooley, M., Folkerts-Landau, D. and Garber, P.M. (2003), An Essay on the Revived Bretton Woods System, NBER Working Paper No. 9971, Cambridge, MA.

Dooley, M. and P. Garber (2005), Is It 1958 or 1968? Three Notes on the Longevity of the Revived Bretton Woods System, Brookings Papers on Economic Activity, 1, 147-187.

Edwards, S. (2006), The relationship between exchange rates and inflation targeting revisited, NBER Working Paper 12163, Cambridge MA.

Edwards, S. (2007), Capital controls, capital flow contractions, and macroeconomic vulnerability, Journal of international money and finance, 26(5), 814-840.

Eichengreen, B. and R. Razo-Garcia (2006), The international monetary system in the last and next 20 years, Economic Policy 21 (47) , 393-442

Fecht, F., H-P. Grüner, P. Hartmann and M. Lo Duca (2007), Financial Globalization and Stability, Frankfurt a.M., mimeo.

Fischer, S. (2001), Exchange Rate Regimes: Is the Bipolar View Correct? Distinguished Lecture on Economics in Government, American Economic Association and the Society of Government Economists, Delivered at the Meetings of the American Economic Association, New Orleans, January 6, 2001; <http://www.imf.org/external/np/speeches/2001/010601a.htm>

Frankel, J.A. (1999), No Single Currency Regime is Right for All Countries or At All Times, NBER Working Paper 7338, Cambridge M.A.

Helbling, T., P. Berezin, M.A. Kose, M. Kumhof, D. Laxton and N. Spatafora (2007), Decoupling the Train? Spillovers and Cycles in the Global Economy, World Economic Outlook (April, Washington: IMF), 121-160.

Herrmann, S. and A. Winkler (2008), Financial markets and the current account – emerging Europe versus emerging Asia, Deutsche Bundesbank Discussion Paper Series 1: Economic Studies, 05/2008, Frankfurt a.M.

IMF (2003), Exchange Arrangements and Foreign Exchange Markets, Developments and Issues, International Monetary Fund, Washington D.C.

IMF (2005), Does Inflation Targeting Work in Emerging Markets?, World Economic Outlook (September, Washington: IMF), 161-186.

IMF (2007), Review of Exchange Arrangements, Restrictions, and Controls, Washington D.C.

Kose, M.A., E.S. Prasad and M.E. Terrones (2007), How Does Financial Globalization Affect Risk Sharing? Patterns and Channels, IMF Working Paper 07/238, Washington D.C.

Lane, P. and G.M. Milesi-Feretti (2008), The Drivers of Financial Globalization, IIIS Discussion Paper 238, Dublin.

Lim, E.-G. (2007), Do Reserve Portfolios Respond to Exchange Rate Changes Using a Portfolio Rebalancing Strategy? An Econometric Study using COFER Data, IMF Working Paper 07/293, Washington D.C.

McKinnon, R. (2002), The Euro versus the Dollar, Resolving a Historical Puzzle, *Journal of Policy Modeling*, 24 (4), 355-359.

Mishkin, F.S. and K. Schmidt-Hebbel (2007), Does Inflation Targeting Make a Difference? NBER Working Paper 12876, Cambridge, MA.

Mohanty, M. S. and M. Scatigna (2005), Has globalization reduced monetary policy independence? in: Globalisation and monetary policy in emerging markets, BIS Paper No. 23, Basle, 17-58.

Padoa-Schioppa, T. (1995), The Genesis of EMU: A Retrospective View, Robert Schuman Lecture given at the Sixth Session of the Academy of European Law on 29 June 1995 at the European University Institute, [http://www.eui.eu/RSCAS/WP-Texts/JM96\\_40.html](http://www.eui.eu/RSCAS/WP-Texts/JM96_40.html).

Reinhart, C.M. and K.S. Rogoff (2004), The Modern History of Exchange Rate Arrangements: A Reinterpretation, *Quarterly Journal of Economics*, 119 (1), 1-48.

Remsperger, H. und A. Winkler (2008), Welchen Einfluss hat der Wechselkurs auf die internationale Rolle von US-Dollar und Euro?, Frankfurt a.M., mimeo.

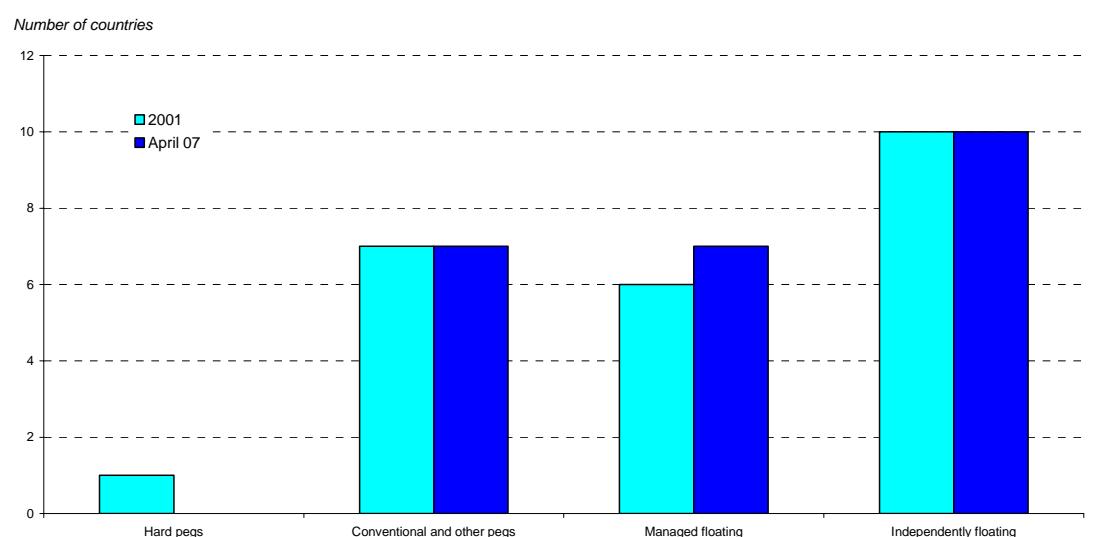
Rose, A. (2006), A Stable International Monetary System Emerges: Inflation Targeting is Bretton Woods, Reversed, NBER Working Paper 12711, Cambridge MA.

Schnabl, G. (2007), Exchange Rate Volatility and Growth in Small Open Economies at the EMU Periphery. ECB Working Paper 773, Frankfurt a.M.

Setser, B. (2007), The Case for Exchange Rate Flexibility in Oil-Exporting Economies, Peterson Institute for International Economics, Policy Brief 07-8, Washington D.C.

White, W. A. (2008), Globalisation and the determinants of domestic inflation, BIS Working Paper No. 250, Basle.

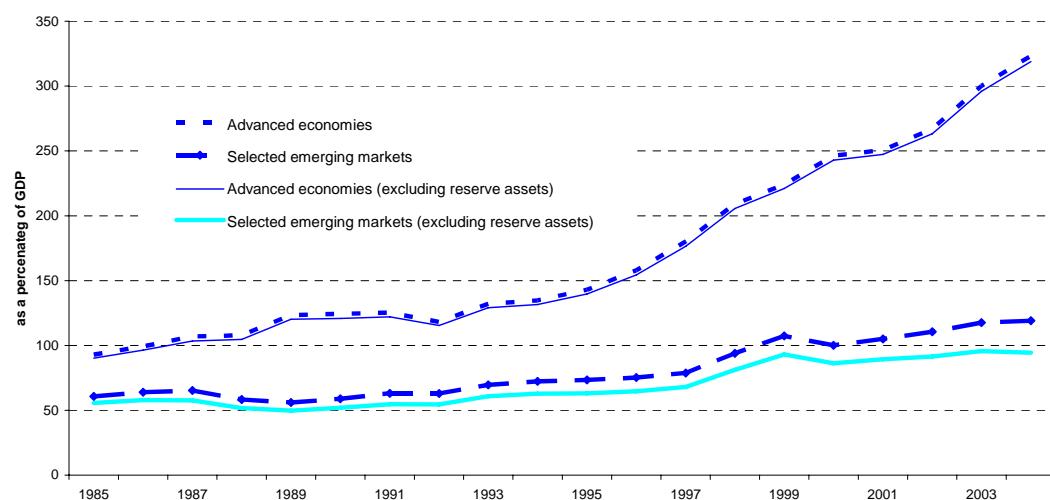
**Chart 1: Exchange rate arrangements in selected emerging economies\*, 2007 vs. 2001**



\* = Argentina, Brazil, Chile, Columbia, Mexico, Peru, China, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Thailand, Czech Republic, Egypt, Hungary, Israel, Jordan, Morocco, Poland, Russia, South Africa, Turkey

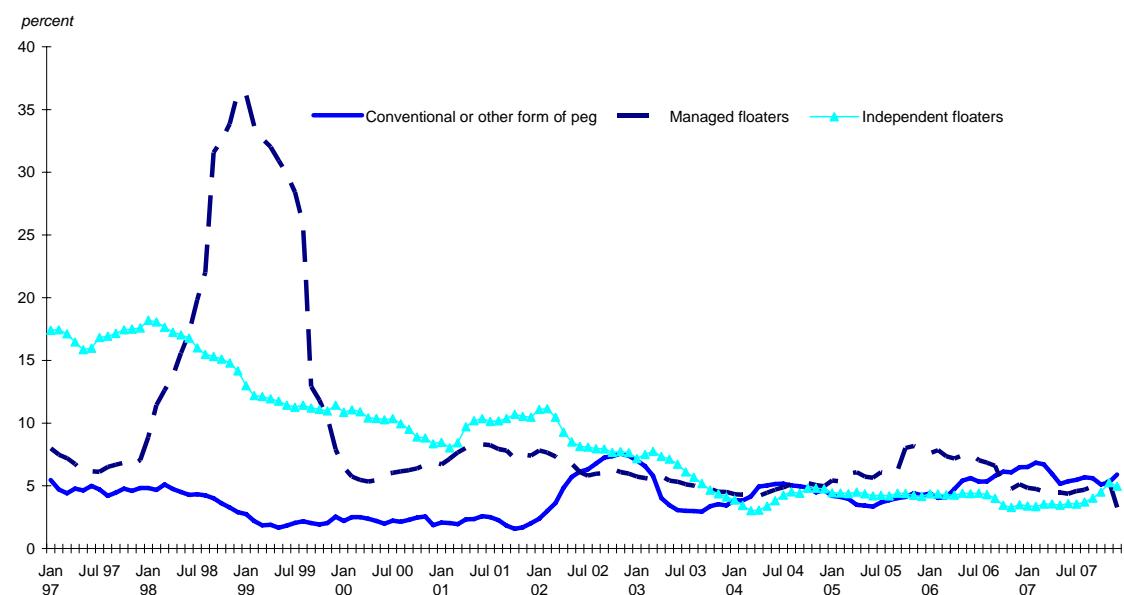
Source: IMF

**Chart 2: Sum of foreign assets and liabilities:  
Advanced economies compared with emerging markets, 1985 - 2004**



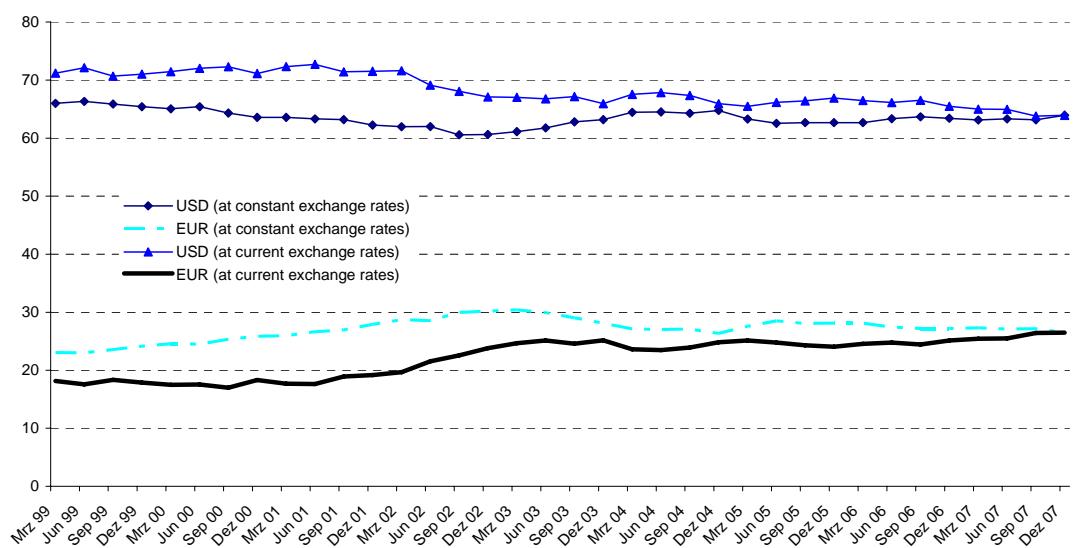
Sources: Lane and Milesi-Feretti

**Chart 3: Inflation developments in selected emerging markets, 01/1997 - 07/2007**



Source: IMF, author's calculations

**Chart 4: Currency composition of official foreign exchange reserves\***



\* only countries reporting the currency composition data to the IMF

Source: IMF, Bundesbank calculations