

## Consequences of increasing capital flows for exchange rate policy – observations and prospects worldwide

Exchange rate policy issues are at the centre of the ongoing debate on possible improvements to the way in which the international monetary and financial system works. With regard to the recent debt and currency crises in emerging economies, it can be said in retrospect that all of the countries affected by the crises had more or less fixed exchange rate regimes and that most of these had to give way, in the course of solving the crises, to systems with substantially greater exchange rate flexibility. The leading industrial countries are sometimes accused of not achieving sufficient stability in the exchange rates between their own currencies and consequently of having contributed to the failure of fixed-rate systems in the emerging economies. In the light of the rapid growth in capital movements both within the group of industrial countries and between the industrial countries and the emerging economies, however, the call for fixed exchange rates has lost much of its previous attractiveness. Where there are extensive flows of capital, a high degree of exchange rate stability can only be guaranteed on a permanent basis if the exchange rate target is given priority, rigorously and consistently, over a country's own economic policy. This is an extremely demanding precondition, which can be met only in exceptional cases in practice.

## Sharp rise in capital flows alters exchange rate policy environment

*Large-scale capital flows are main feature of advancing integration of world economy*

The dramatic increase in capital flows both within the group of industrial countries and between industrial countries and developing countries is one of the most important developments in recent international economic history. The industrial countries had initially pursued a fairly protracted policy of gradually liberalising their financial transactions. Some countries, including Germany, had acted as permanent pacesetters here. For a long time there was often not only a lack of the basic conditions that were necessary for building up confidence, most notably policies that were consistently geared to monetary stability, if these countries' own financial markets were to reach a considerable degree of openness. Frequently, awareness of the economic advantages of free capital movements (which were taken for granted before the First World War) also had to be given time to develop again. In some industrial countries, for example, the last restrictions on capital movements were not removed until the beginning of the 1990s. Since then, financial innovations and advances in data processing and communications technology have given further impetus to the integration of the financial markets in the industrial countries and have thereby also promoted the growth of financial flows within this group of countries. By contrast, a major liberalisation of international financial transactions did not begin in the developing countries that have made the most progress in the catching-up process (emerging economies) until the past decade. This was encouraged by a worldwide para-

digm change in economic policy which reflected both the final collapse of the Socialist economic and social model and the success of the advancing supply-side policies in the industrial countries. A substantial inflow of direct investment was the main result of these countries opening up their economies for financial transactions. Moreover, many of the commercial banks and enterprises in the emerging markets acquired the opportunity to obtain refinancing funds from foreign financial institutions on favourable terms, with implicit government guarantees and supposedly fixed exchange rates making it difficult for creditors and borrowers to make realistic estimates of the risks associated with their decisions. Owing to instituted reforms and a corresponding amount of built-up trust, many emerging economies were also able to obtain large amounts of funding capital on the international markets through direct government borrowing. To that extent, an unexpectedly strong renaissance of a development which had already emerged in 1973-74 as a result of the oil price increases at that time (marked by a recycling of the income of oil exporters to the energy importing countries) re-emerged but subsequently came to a standstill for a while because of the debt crisis which broke out at the beginning of the 1980s.

According to the IMF, the total net amount of capital flowing into the developing countries including the present countries in transition rose from an average of US\$45 billion per annum from 1980 to 1989 to US\$167 billion annually in the subsequent period up to 1997. Primarily as a result of the many other

*Recent tendencies in developing countries' capital imports*

debt crises since then, however, capital inflows declined again to US\$73 billion on an annual average between 1998 and 2001. If the breakdown of capital flowing into the developing countries since the beginning of the 1990s is compared with that of earlier periods, it emerges that, for one thing, there has been a sharp rise in the share of private creditors and investors in overall capital imports. For example, this ratio rose to 81 % in the period from 1990 to 1999 compared with only 42 % in the previous decade. For another, it is remarkable that of the capital imports emanating from private sources foreign direct investment has been by far the most important component since the 1980s. This satisfactory tendency (which not only helps to curb the risk of sudden withdrawals of capital but is also associated with the transfer of technological and organisational expertise) has recently been encouraged to some extent by privatisation measures that are not repeatable on the same scale. By contrast, a high degree of volatility marked the remaining financial transactions of the developing countries and has given rise to the decline in the total net capital imports of this group of countries since 1998. However, the recent decrease in the amounts of capital flowing into the developing countries is not only an indication of prolonged uncertainty on the part of private creditors and investors. It is also a reflection of a fair degree of restraint in borrowing. By means of necessary adjustment measures many developing countries have now reduced their current account deficits or have actually gone into surplus, with the result that the international financing requirements of this group of countries are decreasing.

The rapidly advancing integration of the financial markets of the industrial countries and the increasing financial transactions between industrial countries and developing countries have had unavoidable consequences for the exchange rate policy of the countries involved. Extensive financial integration of different currency areas means that the countries involved have little difficulty in financing even large current account deficits as long as the creditors and investors are convinced that they can service their debts. Under these conditions changes in the assessment of the economic situation in a country or currency area can result in significant international shifts in capital, and not infrequently these shifts take place rapidly if it is financial capital that is involved. In such a case capital inflows triggered by optimistic expectations open up the prospect of greater economic growth with increased demand for foreign goods and services by local investors and consumers. In these circumstances the appreciation of the local currency would be a market-related lever to make imports less expensive, curb exports and thereby also promote price stability in the currency area of the country concerned. Conversely, the loss of a partner's confidence in economic areas that are closely integrated financially leads to major balance of payments problems if the partner's foreign creditors do not renew investments on maturity and the economic policy makers, on top of everything, continue to be confronted with persistent current account deficits. Here, at least, a depreciation of the currency can be a significant help in regaining as quickly as possible the necessary debt servicing capacity through an improve-

*Extensive  
capital flows  
duly demand  
high degree of  
exchange rate  
flexibility*

## Net capital imports of the developing countries \*

US\$ billion; annual average

Item	1971–1979	1980–1989	1990–1999	2000–2001	Memo item	
					1990–1997	1998–2001
<b>Total</b>	25.5	45.3	154.3	41.0	166.8	72.7
<b>Breakdown by component</b>						
Public donors	9.8	26.1	30.1	21.5	28.4	29.3
Private donors	15.7	19.2	124.2	19.5	138.4	43.4
Direct investment	4.1	11.7	90.1	164.4	72.8	161.8
Portfolio investment	0.4	5.4	48.4	– 17.2	56.9	– 1.3
Bank loans and other financial transactions	11.2	2.1	– 14.3	– 127.8	8.8	– 117.1
<i>Memo item</i>						
Inflows of private donor capital as a percentage of total net capital imports	61.7	42.4	80.5	47.5	83.0	59.7
Direct investment as a percentage of the total inflows of private donor capital	26.3	61.0	72.5	845.2	52.6	372.8
<b>Breakdown by recipient region</b>						
Latin America	14.8	17.1	57.7	49.1	54.8	59.1
East Asian crisis countries <sup>1</sup>	5.6	8.7	27.4	– 12.4	38.1	– 13.9
Other Asian countries <sup>2</sup>	3.7	11.1	17.9	15.8	21.5	9.6
Europe and the former Soviet Union			18.2	3.4	16.2	14.8
Africa and the Middle East <sup>3</sup>	1.4	8.4	33.2	– 14.9	36.1	3.3
<b>Counterpart in the balance of payments</b>						
Balance on current account	– 4.1	– 26.8	– 65.8	108.9	– 79.8	49.5
Change in the foreign reserves (increase: –)	– 16.1	– 10.4	– 68.1	– 124.3	– 68.8	– 94.9
Balancing item	– 5.3	– 8.2	– 20.4	– 25.6	– 18.1	– 27.4

Source: IMF. — \* Including emerging economies and countries in transition as well as Israel, Korea, Singapore and Taiwan. — <sup>1</sup> Indonesia, Korea, Malaysia, the Philippines

and Thailand. — <sup>2</sup> Excluding the Middle East and the successor states to the former Soviet Union — <sup>3</sup> Including Turkey, Israel and Malta.

ment in international competitiveness. Consequently, as a price for the advantage of being able to achieve greater growth potential on the basis of sound policies, extensive international capital flows generally necessitate a large measure of exchange rate flexibility of the currencies concerned. At the same time a regime of floating rates then removes most of the benefits resulting from such financial transactions, which seem to be worthwhile only as long as dispensing with a hedging of the exchange rate risk appears feasible.

#### No alternative to floating of key currencies

#### Transition to freely floating exchange rates as a result of economic divergences

*Domestic  
economic  
targets  
predominate*

The US dollar, the euro and the yen play a role of paramount importance in the present international monetary system. According to the latest sample survey coordinated by the Bank for International Settlements (BIS) on global foreign exchange market turnover (including futures and swap transactions), these three currencies accounted for three-quarters of all doubly recorded transactions (each participating currency is included twice in the calculation, firstly, as the currency being reported and, secondly, as the partner currency of all other currencies being reported). The US dollar, the euro and the yen accounted for 90 %, 38 % and 23 % respectively (while the many other currencies recorded made up the remaining 49 %).<sup>1</sup> The system of freely floating exchange rates that exists between the

three key currencies is the outcome of the collapse of the fixed-rate Bretton Woods system which was triggered by economic divergences and, consequently, increased capital movements. The then crucial step towards a new world monetary system was taken in March 1973 when Germany, as one of the last major industrial countries and under pressure from exceedingly large inflows of dollars, stopped the purchase of the US currency on the foreign exchange market and subsequently went over to joint floating along with other European countries. Subsequent events have shown that the relevant industrial countries are not prepared and probably would not be able to gear their monetary policy – not to mention their entire economic policy – to the service of a new worldwide system of fixed exchange rates. Instead, policy makers everywhere give domestic economic objectives priority. The European Central Bank (ECB) is actually explicitly required by the EU Treaty (in keeping with the tradition of the Bundesbank Act) to safeguard the internal purchasing power of the euro as its primary monetary policy objective. The scope for an active exchange rate policy in the euro area is therefore considerably limited from the outset.

One common basis for the floating of key currencies is the fact that the respective currency area represents a large and therefore with respect to the creation of the domestic product a relatively self-sufficient economic unit. The degree of openness of the euro area – in terms of the average volumes of export-

*Enormous size  
of domestic  
economy  
makes  
exchange rate  
fluctuations  
easier to absorb*

<sup>1</sup> See BIS, *Triennial Central Bank Survey – Foreign Exchange and Derivatives Market Activity in 2001*, March 2002, p 9.

ed and imported goods and services in relation to gross domestic product – is, at currently 19 %, significantly below the comparable figure for Germany in the year before the start of monetary union (28 %). The degree of openness of smaller euro-area countries, such as the Netherlands and Belgium whose transactions in goods and services with partners in other currency areas were previously very significant in relation to their overall economic output (50 % and 73 % respectively), declined even faster still. The corresponding figures for the United States and Japan actually amount to no more than 12 % and 10 % respectively. Owing to the outstanding importance of the respective domestic economies, the movements in the exchange rate associated with floating at least pose no inordinate problems in the three largest currency areas of the world.

#### **Undesirable exchange rate developments not unusual**

As critics of floating systems had expected, rates determined by the market tend to be prone to sharp short-term fluctuations. However, fears that were occasionally voiced to the effect that the volatility of the euro would increase significantly compared with that of the Deutsche Mark owing to the more limited degree of openness of the euro area and a consequent assumption of a pronounced neglect of the exchange rate have not been vindicated. Moreover, the short-term exchange rate fluctuations of the major currencies tend to be at the lower end of the spectrum when compared with other financial market variables such as bond yields and

share prices. Another point is that the highly developed markets for hedging instruments help to overcome this type of volatility.

Even so, fairly large exchange rate movements within a short period can have serious repercussions even for the key currency countries. However, there is no generally accepted yardstick for assessing in economic terms the exchange rates that develop in the market place under the conditions of a floating system. Substantial deviations of the exchange rate from its purchasing power parity must not be seen automatically as an undesirable development (ie a misalignment). As explained above, exchange rate movements in response to inflows and outflows of capital perform a useful function and should therefore be included in the assessment of any exchange rate level. As financial market players are not infrequently prone to displays of herd behaviour, however, capital and exchange rate movements are often accentuated as a result. The pronounced appreciation of the US dollar towards the middle of the 1980s and the excessive strength of the yen at the beginning of 1995 are examples of this. In both cases international monetary policy measures ultimately helped to bring about the necessary reversal. By contrast, the current dollar value is more difficult to assess. The extensive net capital imports of the United States – which offset sluggish US saving, thereby financing investment, consumption and economic growth and thus making a correspondingly large current account deficit sustainable – could quickly recede if foreign creditors and investors were to view the future economic prospects of the USA less favourably than hitherto. The

*Misalignments  
cannot be ruled  
out*

*Short-term  
exchange rate  
fluctuations  
economically  
manageable*

US dollar would then lose more ground. To that extent, the present exchange rate pattern appears to have a certain similarity with previous patterns. Indications that the US dollar is deviating significantly upwards from a reasonable exchange rate level also stem from the revival of greater protectionism in the United States in connection with the recent cyclical weakness.

### Should a spanner be thrown in the workings of the financial markets?

*Proposals for taxing foreign exchange market turnover revived*

Even if no major body questions the sense of free capital movements between the industrial countries nowadays, there is still a widely held view that at least short-term financial transactions and the exchange rate effects associated with such transactions could be significantly curtailed by the worldwide introduction of a relatively small tax on all foreign exchange market turnover, with the resultant tax revenue being allocated to development aid. Advocates believe that such normal market measures would throw a spanner in the workings of the financial markets but only to the detriment of allegedly "superfluous" and "harmful" capital movements. This idea, which dates back to a suggestion by the Nobel prize winner James Tobin in the 1970s, is based on the expectation that foreign trade and longer-term financial transactions would hardly be affected by a slight rise in transaction costs whereas short-term capital movements – a not unimportant component of which is the "haggling" over positions in interbank operations – would become discernibly more expensive and would therefore be uninteresting in many cases.

### Volatility of exchange rates \*

Item	Jan 1980 – Dec 1989	Jan 1990 – Dec 1998	Jan 1999 – Apr 2002
<b>Bilateral exchange rates</b>			
US dollar per D-Mark or Euro	7.2	6.6	6.9
Yen per D-Mark or Euro	4.8	6.8	8.9
Yen per US dollar	6.2	6.8	6.8
<b>Weighted exchange rate</b>			
D-Mark	2.5	2.6	–
Euro	–	–	4.8
US dollar	5.2	4.8	4.0
Yen	4.5	4.0	4.2
<i>Memo item</i>			
<b>Yield volatility <sup>1</sup></b>			
D-Mark	<sup>2</sup> 6.4	6.4	8.3
Euro	–	–	9.2
US dollar	9.9	8.7	11.1
Yen	<sup>3</sup> 13.3	13.7	23.4
<b>Stock market volatility</b>			
DAX	9.8	11.0	14.9
EuroStoxx	–	–	13.2
Dow Jones	9.8	8.0	11.8
Nikkei	<sup>4</sup> 9.0	14.2	14.9

\* Volatility corresponds to the calendar-month standard deviation in the rate of change from the previous day, multiplied by the factor 1,000. — <sup>1</sup> Volatility of the yields of public bonds outstanding with a residual maturity of ten years. — <sup>2</sup> June 1987 to December 1989. — <sup>3</sup> November 1987 to December 1989. — <sup>4</sup> April 1986 to December 1989.

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*Discriminating against short-term financial transactions would not guarantee a curtailment of exchange rate movements*

Measures of this kind do not stand up to scrutiny, however. It is true that priorities should indeed be set with respect to the further liberalisation of the financial transactions of the developing countries, with direct investment and other long-term transactions ranking highest. However, one of the features of the highly advanced integration of the financial markets in the industrial countries is that short-term international financial transactions can ultimately fulfil the same role as those within a country or a currency area. The introduction of a Tobin tax, by contrast, would represent a permanent discrimination against short-term international financial transactions in favour of both long-term international transactions and short-term domestic ones. It must also be remembered that any suppression of short-term capital movements reduces liquidity on the foreign exchange markets and that the exchange rate fluctuations may tend to be greater rather than smaller as a result. Furthermore, all previous experience of other forms of intervention in the field of financial transactions suggests that evasive measures with corresponding distortions in competition can be expected to increase. This is all the more likely given the fact that the introduction of such an instrument on a global scale does not appear to be feasible. The fact that short-term capital movements often have no real effect on problematical exchange rate movements also argues against the proposed taxing of all foreign exchange market turnover. A topical example of this is the flow of capital into the United States, which is responsible for the strength of the US dollar and which in the past few years has consisted mainly of direct investment and

purchases of shares, corporate bonds and mortgage bonds. Consequently, the imposition of only a small tax on foreign exchange market turnover would probably have had little effect in curbing capital imports into the United States and the corresponding strength of the dollar. Nor would a Tobin tax have been a major impediment even for the extremely problematical debt of emerging markets in the form of short-term foreign currency liabilities (and even far less so for the issue of longer-term bonds, which is becoming increasingly important) because borrowers and creditors alike had considerably greater incentives for their frequently inappropriate actions. Despite all of these objections, both public and private sponsors of development aid, in their understandable quest for new sources of funds, are among the most tireless advocates of a Tobin tax. They should give up such unrealistic ideas in order not to end up in a dead end with their legitimate interest in increasing development aid.

#### **Target zones would lack credibility**

In connection with the start of European monetary union (EMU) new impetus was also given to proposals that the key currency countries should cooperate more closely on monetary policy matters. Some players and observers saw the communitisation of the monetary and foreign exchange policies of the euro-area countries as an opportunity to organise the joint efforts of the relevant countries more efficiently in the interests of greater global exchange rate stability. The *raison d'être* behind this was not least the concern that the decreasing degree of real eco-

*Creation of EMU revived debate on target zones*

conomic openness in Europe might ultimately be reflected in further increases in exchange rate fluctuations (a development which did not materialise). Greater monetary cooperation was also urged in view of those other countries which pursue a policy of fixed exchange rates against any of the key currencies. The suggestions aimed at stabilising exchange rates between the main currencies range from rather loose forms of monetary and foreign exchange policy cooperation to an agreement on target zones and even a global monetary union. Target zones here are seen by their advocates as an easy way of limiting exchange rate fluctuations, on the one hand, while leaving the monetary and economic policy makers of the participating countries with a certain degree of latitude, on the other. To safeguard the exchange rate in the event of its approaching the upper and lower limits that would have to be set foreign exchange market intervention would have to play a major role in addition to the monetary and economic policy adjustment measures. The advantages of joint intervention by the authorities in both partner countries are often mentioned in this respect because coordinated action not only demonstrates agreement but also increases the room for manoeuvre. Intervention by a country with a weak currency is limited by the extent of its foreign reserves and its existing credit facilities. By contrast, some proponents think that, in principle, there would actually be no limits to the purchases of a currency that is prone to weakness by the partner country concerned (which is using its own currency for the purpose).

Target zone approaches pose considerable practical problems, however. In particular, the very setting of equilibrium rates that are relatively narrowly defined would be very difficult under the conditions of open financial markets. Not the least of the problems here would be that precisely the major and therefore largely self-sufficient economic areas barely show a high degree of economic convergence over lengthy periods. Fixed exchange rate target zones would therefore have to be continually adjusted in order to prevent their coming into conflict with diverging economic and structural developments.

Substantial reservations must also be expressed about the view that in the event of foreign exchange market tensions a country with a strong currency can purchase virtually unlimited amounts of a partner currency under pressure to depreciate, ie without incurring damages itself. Regardless of the fact that intervention does not alter the fundamental causes of such tensions and, in principle, is therefore to be rejected unless the purpose of the intervention is simply to mitigate the effects of certain excessive fluctuations, the problems for monetary policy that are associated with foreign exchange purchases must not be underestimated either. The advocates of target zones point out that an intervention-related rise in the liquidity reserves of the banking system can be absorbed through fine-tuning measures. In many cases there are actually no serious problems in this respect. The Bundesbank, too, was usually able in earlier currency crises to neutralise much of the expansionary impact of foreign exchange purchases on the banks' central

*Setting  
exchange rate  
targets very  
difficult in  
practice*

*Disturbing  
liquidity effects  
from foreign  
exchange  
purchases*

bank balances. In a number of currency crises, however, it was evident that the central bank's own monetary policy can indeed be adversely affected by foreign exchange purchases if the imported funds accrue to domestic non-banks but are subsequently not used in full to reduce domestic borrowing and therefore result in a corresponding increase in the money stock. If the events on the foreign exchange market are not reversed, such expansionary effects can be brought under control only by tightening monetary policy although such a measure could further accentuate existing foreign exchange tensions and would therefore be counterproductive.

*Intervention  
can have useful  
signal effects in  
isolated cases*

This means in short that target zones for the world's major currencies cannot be regarded as an alternative to freely floating exchange rates as long as a satisfactory convergence of economic developments and of economic policy preferences is not in sight. To achieve a satisfactory degree of exchange rate stability it is necessary, instead, to recognise the possible causes of excessive exchange rate movements as early as possible and to make market players fully aware of the risks associated with their behaviour. Under these circumstances international monetary policy cooperation means above all that, on the basis of joint analyses, the participating countries support and monitor each other in their efforts to keep or to put their "own house" in order. In isolated cases internationally coordinated foreign exchange market intervention can therefore be a useful signal to the markets, indicating policy makers' intentions and thereby helping to steer rates in the desired

direction. However, it would be more important to support the exchange rate policy intentions by adjusting monetary policy appropriately. To that extent, more exchange rate stability would be gained through greater volatility in interest rates. This connection illustrates at the same time the limited scope for a reasonable intervention policy for currency areas in which the exchange rate is of secondary importance owing to the limited degree of real economic openness. It is not least the emerging markets, which depend on access to the international markets, that would suffer if they were confronted with greater interest rate volatility for exchange rate reasons.

### **Emerging markets' exchange rate policies increasingly polarised in favour of "corner solutions"**

Generally speaking, the exchange rate systems of the emerging markets can be classified into three categories. "Hard" exchange rate fixings or comparable solutions, ie currency board regimes or even the adoption of a foreign currency, are the opposite of floating exchange rates. Between these "corner solutions" there are, as a third variant, a large number of "soft" exchange rate regimes, which make it possible to adjust fixed rates in a relatively uncomplicated manner. Since the beginning of the recent wave of international debt crises in the mid-1990s it has emerged that most of the countries involved had previously maintained soft exchange rate fixings but subsequently, under the pressure of their balance of payments problems, switched to floating exchange rates for the most part. As

*Advance of  
floating  
exchange rates*

a result of this development, freely floating rates now predominate in the emerging markets whereas at the beginning of the past decade soft exchange rate fixings had prevailed. At the same time the number of hard exchange rate fixings also increased slightly in the emerging economies under review. These tendencies are consistent with the view expressed increasingly in the past few years, namely that countries which already participate to a large extent in international financial transactions or intend to do so should choose either a floating exchange rate regime or the very opposite solution of an extremely hard fixed-rate system in the interests of preventing crises.

*Soft exchange  
rate fixings  
foster  
susceptibility  
to crises*

Soft exchange rate fixings such as the traditional publication of a parity, the pegging to a currency basket or the fixing of a central rate with an advance announcement of central rate adjustments have, in fact, inevitable weaknesses at a time of increasing capital flows. As a rule, they are suitable only as "fair weather" systems. If the country concerned is in an apparently satisfactory economic situation and if no potential source of disturbance is identifiable either internally or externally, the markets do not question such exchange rate regimes. An apparently reasonable economic policy can actually help soft exchange rate fixings to gain a substantial degree of credibility. In cases of this kind, however, there is a growing risk that exchange rate fixings become nothing more than a catalyst for the emergence of the rudiments of a crisis. For example, a relatively expansionary economic policy or structural policy failings can have significantly detrimental effects

on the current account. If this is not also reflected in a deterioration in the exchange rate, the economic policy corrections that are inevitable in the longer term can easily take longer to be fulfilled. A fixed or inadequately adjusted exchange rate can also be helpful in making it easy to attract foreign capital for financing balance of payments deficits because the usual international interest rate advantages are apparently not offset by a corresponding exchange rate risk (for example, the Russian debt crisis of 1998 was also preceded by considerable investment by foreign investment funds in government rouble-denominated debt securities). A development of that kind becomes particularly problematic if financial institutions in the emerging economies are the main channel for capital imports and incur debts in foreign currency in the process. In such cases exchange rate fixings may be regarded both by the financial institutions themselves and by the foreign creditors (these are likewise predominantly banks or other financial institutions) as a kind of guarantee for the capital importer because currency depreciations with the subsequently sudden surge in repayment commitments would inevitably result in a disruption of the financial system and of the entire economy in the debtor country. Interactions of this kind played a crucial role in almost all of the recent debt crises. As numerous incidents have shown, however, fixed exchange rates cannot be maintained over the longer term if the foreign creditors – for whatever reasons – have lost confidence in the economic policy of the debtor country. Dramatic exchange rate movements then prove initially to be a powerful means of accentuating crises

### Incidence of the various exchange rate systems in the emerging markets \*

Exchange rate system 1	Number of countries			As a percentage		
	December 1990	December 1995	May 2002	December 1990	December 1995	May 2002
<b>"Hard" exchange rate fixing</b>	2	5	6	5	12	15
Use of a foreign currency as legal tender	1	1	2	2	2	5
Currency board	1	4	4	2	10	10
<b>"Soft" exchange rate fixing</b>	26	23	11	63	56	27
Fixed but adjustable exchange rates vis-à-vis a key currency	7	7	7	17	17	17
Crawling peg vis-à-vis a key currency	4	4	1	10	10	2
Link to a currency basket and observance of other regulations	15	12	3	37	29	7
<b>Floating exchange rates</b>	13	13	24	32	32	59
Managed floating	7	6	14	17	15	34
Free floating	6	7	10	15	17	24
<b>Countries, total</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: IMF. — \* The countries captured are those which had access to the international financial markets in the mid-1990s (and were included in JP Morgan's Emerging Markets Bond Index Plus or in the MSCI Index for Emerging Markets Economies drawn up by Morgan Stanley Capital International). The countries concerned are Argentina, Brazil, Bulgaria, Chile, China, Colombia, Cyprus, Czech Republic, Ecuador, Egypt, Estonia, Hong

Kong, Hungary, India, Indonesia, Israel, Jordan, Korea, Latvia, Lithuania, Malaysia, Malta, Mexico, Morocco, Nigeria, Pakistan, Panama, Peru, the Philippines, Poland, Romania, Russia, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Taiwan, Thailand, Turkey and Venezuela. — 1 Classifying the individual countries in accordance with the form of exchange rate system chosen is in line with the assessments by the IMF.

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whereas existing exchange rate flexibility would have helped to prevent the crisis from the outset.

*Hard exchange rate fixings may still be appropriate in exceptional cases*

In the event of increasing international capital flows a policy of fixed exchange rates therefore makes special demands on the soundness and flexibility of economic policy in order to function satisfactorily. In the light of recent experience not the least of these requirements is strict supervision of the country's own financial institutions so that there is absolutely no chance of irresponsible currency risks being taken in the first place. Having said that, fixed exchange rates can still be very useful for small open economies which have little diversity in their production and export structures, whose foreign trade is highly dependent on the currency area concerned

and which have flexible labour markets. Even so, it would be a good thing if the fixed rate system chosen were "hardened" through special mechanisms. For example, arrangements such as currency boards, which are anchored in a country's own political system through special institutional safeguards, may make it easier under certain circumstances to implement any necessary adjustments to economic policy fully and speedily. The typical automatism which in the event of an outflow of foreign exchange immediately reduce the level of liquidity in the domestic economy and thereby compel economic policy makers to take a course of action that counters the more fundamental causes of the balance of payments deficit are crucial here. However, as illustrated by Argentina's experience with the currency board, which had initially been soft-

ened and was subsequently disbanded in December 2001, intention and reality are two very different things even with systems of that kind. By contrast, countries such as the Netherlands and Austria were able, precisely because of their credible policies, to peg their currencies to the Deutsche Mark quite unchallenged over a lengthy period. At all costs, fixed exchange regimes of any kind should always be regarded as an aberration from the flexibility that is recommendable, in principle, where integration into the international financial system is highly advanced. Responsible parties must always be fully aware of the repercussions of such deviations for economic policy and must not have any unrealistic perceptions about the actual adjustment capabilities of their own country as reducing nominal wages to offset setbacks in productivity growth would represent the crux of the problem. Fixed rate systems which only appear to be hard create far more problems than benefits in the long run.

*Adopting a foreign currency requires extremely demanding preconditions*

The objections to fixed rate regimes apply even more in situations where a country has completely given up its own monetary policy and, instead, has adopted a foreign currency as its legal tender. The main examples of such a scenario are cases of dollarisation. Now and again, however, emerging markets are recommended to dispense with their own currency not just as an exceptional solution but actually as a generally advisable measure provided their external debt is also denominated predominantly in the foreign currency concerned. Even so, the protection against the destabilising effects of a depreciation-related increase in debt servicing and price pressures

that this approach is intended to provide presupposes that the countries concerned will never be in a position to rehabilitate their economic circumstances radically and permanently so that they can raise most of their loans at some later date in their own currency. Considering the large number of countries which have succeeded convincingly in making the necessary adjustments, such a pessimistic attitude does not appear justified. Another point is that the disadvantages associated with the adoption of a foreign currency are underestimated. In contrast to the situation in an appropriately organised monetary union, it might be that, in the event of a loss of competitiveness, a unilateral entry into another currency area would not guarantee the freedom of movement of labour as an adjustment safety valve. Nor can access to financial transfers be expected. The possible necessity of reintroducing one's own currency would admittedly be associated with incomparably greater economic costs and difficulties than the simple change from one exchange rate regime to another.

Fundamental support for floating exchange rates for countries which participate or intend to participate intensively in international financial transactions in no way rules out the management of the exchange rate by monetary policy means. It is, in fact, the case that numerous emerging markets still try to influence the exchange rates of their currencies through foreign exchange market intervention and changes in central bank interest rates after changing over to floating exchange rates. This may be partly due to a fear of depreciation-related increases in the cost

*Management of floating exchange rates does not call advantages of flexibility into question*

of debt servicing and of inflation risks (a phenomenon known in the literature as “fear of floating”). However, caution in exchange rate policy does not change the inherent advantages of changing the regime in question to a floating system. What is crucial is that in critical situations monetary policy can quickly respond to changing circumstances on the foreign exchange market and that all market participants are fully aware of this. A managed regime of floating exchange rates is therefore also completely capable of contributing to crisis prevention and of helping to overcome crises. Furthermore, the exchange rate becomes a less important guideline for policy making as soon as the country concerned has succeeded in demonstrating its ability to formulate an economic policy that is permanently geared to maintaining domestic stability. Monetary policy makers can play an important role here by pursuing credible targets in their fight against inflation. Major countries such as Mexico and Brazil that were previously in crisis have made considerable progress in this respect and no longer regard a repeated fixing of the exchange rate of their currencies as an option.

*Fixed but adjustable rates still practicable in countries with low capital flow volumes*

The international debate on the problems posed by soft exchange rate fixings was concerned for a time with a – partly defensive – attitude which essentially argued that there was a tendency to recommend to virtually all emerging markets to switch to “corner solutions” in their exchange rate policy. However, this argument was based on misunderstandings. In reality the question of the chances of survival of soft exchange rate fixings has always been directed at those emerging mar-

kets which are already playing a significant role in international financial transactions or are working towards such a position. By contrast, emerging markets that are economically less advanced and even more so the large group of other developing countries continue to restrict their financial transactions by administrative means. Most of these countries are not yet able to borrow on the international financial markets or can do so only to a very limited extent. Under these circumstances classic systems of fixed though adjustable exchange rates may function perfectly satisfactorily and are therefore capable of performing a useful service, for example, as an instrument for disciplining a country’s own monetary and fiscal policies. In the interests of crisis prevention, however, it would be important not to miss the right moment for a change of regime in the event of advancing integration into the world economy.

### **Regional currency cooperation as a compromise between floating and fixing**

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The countries of western Europe, which have always been closely integrated with one another, responded to the collapse of the Bretton Woods system from the outset by stepping up intra-European currency cooperation. They did so in order to protect their trade with major partners in the region against the disadvantages of volatile exchange rates as far as possible. The EC countries at that time (the Community of Six) responded in April 1972 to the Smithsonian Agreement of December 1971 by narrowing the fluctuation margins for their cross rates to only 2¼%.

*Changeover to floating fostered intra-European monetary cooperation*

The aforementioned Smithsonian Agreement had temporarily ended the dollar crisis, which had reached a peak in August 1971, by realigning the exchange rates of the G-10 currencies and by widening the fluctuation margins for the new dollar rates (from  $\pm 1\%$  to  $\pm 2\frac{1}{4}\%$ ).<sup>2</sup> The EC currencies thereby moved, along with some other European currencies that subsequently became associated with them, in parallel within the fluctuation margins for the dollar rates (snake in tunnel). The bilateral fluctuation margins chosen at that time were retained when, after repeated currency turbulence, a joint floating system for European currencies was finally introduced in March 1973 (by which time there was a slight change in the membership of the monetary arrangement). From these first major steps on the road to greater intra-European monetary cooperation to the introduction of European monetary union (EMU) in 1999, however, it was not just a long journey. It necessarily also involved accepting many setbacks and conflicts, which repeatedly called in question the very survival of any broadly based intra-European monetary cooperation. A gradual improvement in the functioning of European monetary cooperation was not possible until, with the coming into force of the European Monetary System (EMS) in March 1979, all concerned slowly began to realise that a permanently greater degree of intra-European exchange rate stability was obtainable only through sustained economic convergence. The agreements on which the EMS was based made it clear in this respect that the desired convergence must aim at a high degree of domestic stability if it were to be successful. Accordingly, establishing EMU would

not have been possible either if the ECB's executive bodies had not been committed unequivocally to pursue price stability. Monetary union was, after all, the result of the political will to achieve comprehensive economic integration, which, quite without precedent, had been set in motion with the creation of the European Economic Community as far back as 1958 and had led to the completion of the single European market by 1992. Furthermore, EMU can be regarded as a decisive step on the road to political union.

Fixing the exchange rate of their respective currencies against the euro as the currency of the dominant economic area in Europe is a natural option for the European countries that do not (yet) belong to EMU provided the prerequisites for a successful fixed rate policy appear to be met. Even among the three "outsider" countries of the European Union (EU), however, only Denmark has so far joined the fixed rate system of the European exchange rate mechanism (ERM 2) (with a fluctuation margin narrowed to  $\pm 2\frac{1}{4}\%$ ). Switzerland as a non-EU member and international capital hub is a particularly long way away from giving up the flexibility of the Swiss franc. As an energy exporter Norway has likewise retained the free floating of its currency. A variety of exchange rate systems covering the whole range of possibilities still

*EMU has not yet changed the variety of exchange rate systems in Europe*

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<sup>2</sup> The extended fluctuation margin of  $\pm 2\frac{1}{4}\%$  for the dollar rates meant that the cross rates could vary, in principle, by  $\pm 4\frac{1}{2}\%$ . This would have been the case if the currencies concerned had held positions vis-à-vis the dollar that were diametrically opposite and then had reversed their positions over time. With their decision of April 1972 the EC countries had limited the maximum volatility of their bilateral exchange rates to the same extent as that applying to the dollar market.

prevails among the 13 candidate countries as well. A similar polarisation between freely floating rates and hard exchange rate fixings to the one found in all emerging markets that were reviewed emerges within the context of this group of countries.

*Exchange  
rate policy  
outlook for  
EU accession  
countries*

As all present and future EU countries have the chance of becoming an EMU member at some time, they are ultimately able to overcome the dilemma that they inevitably face in deciding on a regime of fixed or floating exchange rates in a satisfactory manner. Before taking such a step, however, each individual country has to fulfil the convergence requirements laid down in the treaty. The relevant criteria demand, among other things, membership of the exchange rate mechanism of the European Monetary System (ERM 2) for at least two years as a standardised test phase to ascertain to what extent the candidate countries can meet the conditions of monetary union without incurring significant exchange rate tensions. The standard fluctuation margin of  $\pm 15\%$ , which was introduced, as a result of the lessons learned from the EMS crises of 1992-93, to the exchange rate mechanism at that time (ERM 1), emphasises how important it is, regarding the liberalisation of capital movements to be completed as a prerequisite for accession to the EU, not to lull the markets into a false sense of security with respect to their exchange rate stability but, instead, to guarantee a substantial measure of exchange rate flexibility. The agreement on narrower fluctuation margins or even the unilateral retention of a currency board will only be considered as exceptions whose justification would have to be thor-

oughly examined in advance. EU accession candidates should not introduce the euro as their own legal tender unilaterally either (euroisation) because "jumping the gun" on the steps laid down in the treaty on the road to full EMU membership might have a detrimental effect on the euro.

Other regions might use the European model of complete monetary integration of countries that are closely linked economically, a development which was partly a response to the collapse of the Bretton Woods monetary system, as an example of how, in the event of increasing capital flows, the desire for stable exchange relationships for a major part of their foreign trade can be linked with the necessary exchange rate flexibility, but this will not happen for quite some time. It is unlikely that other groups of countries might be in a position in the foreseeable future to copy the hitherto unique European example of transferring national areas of sovereignty in large measure to common institutions. Even so, viable intermediate steps are also conceivable, and these, in the light of European experience, should be pursued as early as possible as the road ahead is strewn with many obstacles and setbacks. It would be important in this context to work initially towards achieving a considerable degree of convergence of economic policy and economic developments and also to establish appropriate institutions for this purpose. In Latin America the "Com-

*Initial steps  
towards  
regional  
monetary  
cooperation  
outside Europe  
taken only  
in Asia*

mon Market of the South" (Mercosur)<sup>3</sup> could form an appropriate framework once the crisis in Argentina has been overcome. Simultaneous efforts to create a free trade zone covering North and South America might foster integration within the framework of Mercosur rather than hinder it. In South-East Asia the Association of South-East Asian Nations (ASEAN) constitutes another mechanism of economic integration but is one that is composed of a number of countries at very different stages of economic development. In 2000, moreover, the ASEAN countries together with Japan, China and South Korea began as "ASEAN+3" to extend a regional system of short-term financing facilities which is designed to foster the stability of exchange rates. The extent to which the financing agreements which are the main feature of the project will be useful remains to be seen. At all events, it must be said, partly in the light of problematical European experience, that generous "emergency assistance" can easily lead to the entrenchment of fundamental problems instead of their solution.

*Loose forms of intra-regional exchange rate cooperation also suitable for non-European regions in the long-term*

As an immediate objective, regional groups of countries outside Europe which are rapidly growing together economically and which at the same time would like to become integrated into the world financial markets should initially attempt to float all partner currencies and make use of their regional economic and monetary cooperation to achieve a certain degree of uniformity in their exchange rate fluctuations if this seems reasonable economically. Such a procedure would also help to ascertain which countries are actually suited to working more closely

### Present exchange rate systems of the EU accession countries

Exchange rate system	Country
<b>"Hard" exchange rate fixing</b>	
Currency board pegged to the euro	Bulgaria Estonia Lithuania
<b>"Soft" exchange rate fixing</b>	
Currency pegged to the euro with a broad fluctuation margin ( $\pm 15\%$ )	Cyprus Hungary
Currency pegged to the SDR	Latvia
Currency pegged to another currency basket	Malta
<b>Floating exchange rates</b>	
Managed floating with the euro as a reference currency	Czech Republic Slovakia Slovenia
Managed floating with the US dollar as a reference currency	Romania
Free floating	Poland Turkey

Deutsche Bundesbank

with each other on exchange rate policy matters. A realistic longer-term goal for countries which are cooperating successfully might then be to combine freely floating exchange rates with a system of intra-regional central rates, thereby duly taking account of the European experience that the intra-regional exchange rates should be given the chance from the start not only to be adjusted quickly but, if appropriate, also to fluctuate widely in critical periods. This type of monetary cooperation was easier in Europe by virtue of the fact that the Deutsche Mark had set a yardstick for price stability owing to the credible

<sup>3</sup> Mercosur was founded in 1990 with the aim of creating a customs union and coordinating macroeconomic policy. Member countries are Argentina, Brazil, Paraguay and Uruguay. An agreement was reached with Bolivia and Chile in 1996 that both countries be linked to Mercosur through free trade zones.

## Swap agreements under the Chiang Mai Initiative

The recent debt crises in East Asian countries gave renewed impetus to regional cooperation on monetary policy issues in the Far East. The multilateral swap agreements concluded within the framework of the Association of South-East Asian Nations (ASEAN)<sup>1</sup> as far back as 1977 by five of the association's member states (Indonesia, Malaysia, the Philippines, Singapore and Thailand) are the basis of this development. The five countries committed equal amounts of foreign exchange for these agreements. The total sum initially amounted to only US\$100 million and was increased in 1978 to US\$200 million. In May 2000 the ASEAN countries together with Japan, China and South Korea ("ASEAN+3") agreed on the fringes of the annual conference of the Asia Development Bank in Chiang Mai (Thailand) to extend their economic and monetary policy cooperation in the region. The first step to this end was to include all ASEAN countries in the existing swap network. The level of funds provided rose to US\$1 billion at the same time. Furthermore, additional swap agreements were concluded within the framework of

"ASEAN+3". These were on a strictly bilateral basis and provided for credit lines between what has so far been US\$2 billion and US\$7 billion if two special credit lines which Japan had already approved in October 1998 (the "new Miyazawa Initiative") are also included. The conditions of access to the financial aid available under "ASEAN+3" (excluding special credit lines) state that only the first 10% of the maximum credit limit may be provided irrespective of the IMF programme concerned. The swap credits run for 90 days and may be extended seven times. Remuneration is based on the London money market rate (LIBOR) plus a premium of 150 basis points (with increasing remuneration for extended credits). In many cases, however, the negotiations on corresponding swap agreements have either not yet been concluded or have not even been initiated. Over and above their financial cooperation the countries participating in the Chiang Mai Initiative have declared their intention to subject their economic policies to a joint surveillance procedure and to improve the exchange of information on financial transactions.

Swap agreements so far concluded under "ASEAN+3"	Currency	Volume in US\$ billion <sup>2</sup>
Japan-Korea	US dollar/won	7
Japan-Thailand	US dollar/baht	3
Japan-Philippines	US dollar/peso	3
Japan-Malaysia	US dollar/ringgit	3.5
Japan-China	Yen/renminbi	3
China-Thailand	US dollar/baht	2

<sup>1</sup> ASEAN was established as long ago as 1967 to promote trade and investment on an intra-regional basis. The following ten countries currently belong to this organisation: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. — <sup>2</sup> In-

cluding the special credit lines under the "new Miyazawa Initiative" of October 1998 (called after the then Japanese finance minister) amounting to US\$5 billion in favour of South Korea and US\$2.5 billion in favour of Malaysia.

policies pursued by the Bundesbank. The European partners therefore had a standard for their domestic economic policy which they had to follow if they wanted to maintain a high degree of exchange rate stability. However, the anchor function of the Deutsche Mark was not based either on a Community decision or even a formal German demand. The Deutsche Mark gradually assumed the role of the leading European currency as Germany's partners increasingly became convinced in their own minds that the primary

objective of monetary policy was price stability. Even if other regions do not currently have currencies which might convincingly perform a comparable anchor currency function, the countries concerned, remembering that in Europe, too, the key role of the Deutsche Mark materialised only gradually, should not see this shortcoming as a reason for easing up on their efforts to create the preconditions for regional exchange rate co-operation.