Exchange Rate Policy After the Crash in Argentina: A Free Float As The Only Alternative?

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Abstract

Since the Mexican crisis in 1994/95, a large number of developing countries and emerging markets have been hit by financial crises. In 2002 and 2003, Argentina and Brazil are experiencing dramatic economic and financial problems. Exchange rate regimes have played a prominent role in all recent financial crises. Whereas up to the Asian crisis of 1997 a number of exchange rate regimes appeared to be available and useful, after 1997 the so-called bipolar view gained prominence. Proponents of the bipolar view argued that developing countries and emerging markets should opt for either a currency board or for a free float.

The collapse of the Argentinean currency board has demonstrated that the bipolar view has serious weaknesses. A free float suddenly appeared to be the only option. This, however, is not the case. Developing countries and emerging markets have at least three options: A free float, an intermediate exchange rate regime supported by restrictions on capital flows or a regional exchange rate regime. Whilst none of these three options is without disadvantages, monetary regionalism appears to be the most promising solution for the medium term.

Key words: Financial crises; exchange rate regimes; monetary regionalism

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1. Introduction

The financial crises of the past eight years have intensified the debate on a new international financial architecture. Exchange rate regimes have been at the core of the debate. The Argentinean case in particular demonstrates the risks associated with the implementation of a currency board, an exchange rate regime staunchly defended by the International Monetary Fund in the aftermath of the Asian crisis.

The discussion on exchange rate regimes is a recurring feature. Since the gold standard of the 19th and early 20th century there have been frequent changes in the mainstream understanding of the most appropriate regimes. From a historical perspective, today's preference for a liberal exchange rate regime is nothing new, but rather a repetition of earlier periods of economic development. In comparison with the system of Bretton Woods, operational from 1945 to 1971, the current system reflects a change of political priorities. In the Bretton Woods era, the interests of the financial sector were subordinated under the wider interest of societies for a stable development of the economy. Also, the experiences with unregulated markets in the 1920s were still sufficiently well-remembered to encourage policy makers to limit the power of financial markets. In other words: The liberalisation of financial markets from the beginning of the 1970s was not only a push for more efficiency of the financial sector, but also reflected the increased political influence of the financial sector and a declining interest in a steady development of the entire economy.

It should not be forgotten that today's liberal economic order has not been created by market processes without decisive influence of public actors. Quite the opposite: A coalition of public and private players have jointly pressed for the liberalisation of financial markets. The creation of global financial markets was the strategy of an alliance of players. Private preferences for liberalised markets were transformed into government policies for the dismantling of barriers for financial markets (see Underhill 2001).

In this paper, I am firstly looking at the current discussion on currency regimes. Both a rigid currency board, applied in Argentina, as well as a fully flexible exchange rate regime, used in South Africa, display major weaknesses. The currency board contributed to Argentina's drift into economic depression. But completely flexible rates are no alternative

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either, as the case of South Africa shows. For developing countries and emerging markets, the discussion on the appropriate exchange rate regime has gained fresh momentum after the Argentinean crisis. Dollarisation, intermediate regimes and monetary regionalism are the options available to those countries. Whereas dollarisation is not an option for countries that seek a certain degree of political autonomy, both intermediate exchange rate regimes as well as monetary regionalism have specific and important advantages.

2. Exchange Rate Regimes: Is the Bipolar View correct?

The dramatic economic crisis in Argentina has refocused the attention on the issue of exchange rate regimes. In 1991, Argentina had pegged its exchange rate to the US-Dollar at a rate of one to one. The instrument used was a currency board. After initial success the Argentinean economic policy ran into a deadlock from 1998 on. The exchange rate regime did not permit an adjustment to the new economic circumstances that had been dramatically changed by the Asian crisis and the devaluation of the Brazilian real in early 1999. Needless to say that the exchange rate regime was not the only cause of Argentina's catastrophic economic situation, but the inflexibility of this currency regime has impeded an appropriate response to the external shocks caused by the Asian and the Brazilian crises.

After the financial crises of the 1990s, the International Monetary Fund and prominent economists have suggested that developing countries and emerging markets should choose between two corner solutions: They should either opt for a currency board or for a flexible exchange rate (see Fischer 2001). All intermediate exchange rate regimes were dismissed as being too risky. In 2003, this bipolar view itself now has to be re-examined.

The reason is not only the trouble in Argentina. The other corner solution, a fully flexible exchange rate, has proven to be very dangerous for advanced developing countries as demonstrated by the South African case. From 2 August 2001 to 2 January 2002 the Rand fell vis-à-vis the Euro from 7.2 Rand per Euro to 11.1 Rand per Euro.[1] The Rand lost more than half of its value against both the Euro and the Dollar without a plausible economic explanation. The macroeconomic data of South Africa do not provide a cause for the devaluation of the Rand. However, the consequences of a devaluation of this magnitude are

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[1] See Deutsche Bundesbank, Zeitreihe WT 5648, www.bundesbank.de/de/statistik/zeitreihen/html/wt5648.htm.

substantial. To name just two consequences: The service of debt denominated in foreign currency is becoming much more burdensome and the risk of a so-called imported inflation rises dramatically.

Both corner solutions show substantial weaknesses. If these exchange rate regimes are difficult to implement and, perhaps even more important, to sustain, it has to be asked which options remain for economic policy in a developing country. Three solutions will be considered: Firstly, developing countries can forego the right to have an own currency and can use the money of another country. This can be dollarisation or euroisation. Secondly, countries can select intermediate regimes between a hard peg and a flexible rate. This is the main recommendation of a recent proposal of the OECD: "Don't fix, don't float" is the programmatic title of a book that was published well before Argentina collapsed (see Braga de Macedo et al. 2001). Thirdly, countries can engage in monetary regionalism: A group of countries can, similar to the countries of the Eurozone, establish their own regional currency union.

3. The currency board

Three elements are characteristic for a currency board: A fixed exchange rate vis-à-vis the anchor currency, e.g. the British pound or the Dollar; the unlimited convertibility of the local currency into the anchor currency and thirdly the complete coverage of the domestic money supply with currency reserves (see Cohen 1998, p. 52).

The concept of a currency board is not new, but rather more than 90 years old. The idea was first developed by British colonial authorities. In 1912 the British established the "West African Currency Board" for the colonies Gambia, Gold Coast (Ghana), Nigeria and Sierra Leone. The model was subsequently also implemented in other British colonies. By guaranteeing a fixed exchange rate, trade with the colonies was put on a stable monetary foundation. Not only trade was strengthened by the fixed exchange rate but also capital transactions. British banks could treat overseas territories as if they were a part of the United Kingdom (see Cohen 1998, p. 52f).

This exchange rate regime, developed in colonial times, quickly lost importance after World War II. The advantage of monetary stability was less important. Currency boards were condemned as symbols of the suppression of developing countries by colonial powers. Apart from the British colony Hong Kong currency boards were no longer used.

The were considered to be relicts of a bygone era. The renaissance of this exchange rate regime started with introduction in Argentina in 1991, Estonia 1992 and Lithuania 1994 (see Cohen 1998, p. 53). The main protagonists of this concept were the IMF and the American Ministry of Finance (see Braga de Macedo et al. 2001).

Supporters of this exchange rate regime stress that currency boards provide credibility, transparency, low rates of inflation and monetary as well as fiscal stability. By eliminating exchange rate risk, interest rates can be very low, which in turn supports economic development (see Edwards 2000, p. 27).

It is true that currency boards can, in specific circumstances, provide monetary stability for an economy. However, the price for that stability is substantial. The following points should be considered:

- A country with a currency board forgoes its own, independent monetary policy.
- In a currency board, the central bank does not have any instruments to influence economic development. It has no direct influence on the domestic interest rate.
- The domestic interest rates in a country with a currency board by definition have to be higher than in the country providing the anchor currency. Otherwise investors would have no incentive to hold the domestic currency rather than the anchor currency. Furthermore, the interest rates are not only higher than in the country providing the anchor currency, they may also rise when this is utterly unwanted. In the event of a recession at home, rising interest rates in the anchor currency country may deepen or at least prolong the existing recession.
- The central bank has no influence of the provision of liquidity for the domestic financial sector, because domestic money supply cannot be raised if the reserves of foreign currency are not rising. This has two consequences: Firstly, in the event of a crisis the central bank cannot encourage the domestic financial sector to lend more freely by implementing a loose monetary policy. Secondly, the central bank cannot act as a lender-of-last-resort, i.e. a crisis in the domestic banking system cannot be fought by the central bank. It cannot provide liquidity for it has no control over money supply.
- The exchange rate cannot be adjusted when external shocks induce just that. In the event of a devaluation of the exchange rate of a major trading partner vis-à-vis the anchor currency deteriorates the competitive position of the domestic enterprises. To

restore the competitive position, prices in the domestic economy have to be reduced. A major element is the reduction of wages to a significantly lower level. This, however, is a formidable task for any economy. Not only is a reduction of the level of wages difficult, it also requires a long implementation period.

- When selecting an anchor currency, careful choices have to be made and trade flows have to be considered. Ideally, the anchor currency should be that of the main trading partner.

Since the reserve bank can no longer act as a lender-of-last-resort, instruments have to be developed that result in the provision of liquidity in the event of a crisis. Argentina had addressed this problem in three ways: Firstly, the local banks were asked to hold very high reserves. They had to hold 21 percent of deposits in international reserve currencies either in accounts at the Argentinean central bank or with the New York branch of Deutsche Bank (see Braga de Macedo et al. 2001, p. 24). Secondly, the central bank had negotiated substantial liquidity credit lines with major international banks.[2] Thirdly, the liberalisation of the financial sector had led to an increase of the influence of foreign banks. These, in turn, would have had access to liquidity provided by their parent companies. Out of the eight largest banks in Argentina, seven were owned by foreign banks (see Edwards 2000, p. 30).

It has been demonstrated that a currency board is a rather complex exchange rate regime that requires comprehensive measures to make it sustainable. In comparison with the frequently discussed alternative, dollarisation or euroisation, a currency board has some advantages: The symbolic value of an own currency remains, and the country does not have to give up seignorage, which can be as much as 0.5 percent of GDP (see Cohen 1998, p. 54).

4. Argentina's currency board

Argentina had introduced a currency board under finance minister Domingo Cavallo in March 1991. After years of hyperinflation not only the Argentinean government, but also many economists considered the introduction of a rigid exchange rate regime a necessary

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[2] The sum of these credit lines amounted to 10 percent of all deposits in the Argentinean financial system (see Braga de Macedo et al. 2001, p. 24).

cure. After the hyperinflation of the 1980s there were virtually no other options left for Argentina.

Table 1: Macroeconomic Development of Argentina, 1981 to 2002

	1981-90	1991-00	1997	1998	1999	2000	2001	2002[a]
Real GDP in %	-1.5	4.5	8.1	3.9	-3.4	-0.8	-4.4	-11.0
Change of consumer prices, in %	/	9.2	0.3	0.7	-1.8	-0.7	-1.5	40.9
Exports of goods, change in %	4.4	7.9	9.9	0.0	-11.8	13.3	1.0	-5.1
Imports of goods, change in %	-8.8	20.4	28.1	3.4	-18.4	-1.0	-19.9	-53.4
Balance in trade, in billion $	/	/	-2.1	-3.1	-0.8	2.6	7.6	16.4
Balance on current account, in % of GDP	-2.2	-3.1	-4.2	-4.9	-4.2	-3.1	-1.7	8.5
Net capital flows from private creditors, in billion $	/	/	17.3	10.7	6.4	3.4	-15.3	/
Bond emissions abroad, in billion $ (gross)	/	/	16.0	15.0	13.5	12.2	1.5	0.0
Foreign debt, public and private, in billion $	/	/	128.4	141.5	145.3	145.9	136.7	/

a) estimate

Quelle: Global Development Finance 2003 (April), Vol. I, pp. 183-221.

The “convertibility plan” reduced inflation from 5000 percent in 1989 to 4 percent in 1994. Despite today’s problems, the strategy to reduce inflation with the introduction of a currency board was a just and adequate measure. The high growth rates achieved in 1993 and 1994 confirm that monetary stability can make an important contribution to economic growth.

This phase of prosperity, however, did not last long. In 1995, Argentina was faced with a massive external shock. Already then it was obvious that the inflexibility of a currency board prevented an adequate response of monetary policy to a change in the external economic environment. The Mexican crisis, which broke out in December 1994, resulted in the abandoning of the fixed exchange rate regime in Mexico. The crisis spread to the rest of the continent, quickly being called the Tequila crisis. The inflexibility of the currency board immediately was a burden. Although trade with Mexico is not relevant for Argentina, the country could not escape the turbulence caused by Mexico. Argentinean economic policy had no tools to fight the shock.

Already then it could and should have been asked what the consequences of a change in the exchange rate regime in Brazil would have been. That this was not done is partly due to the

fact that economic recovery commenced quickly. Argentinean economists as well as the IMF should have realised that the time for an orderly departure from the currency board had come. This was particularly important since trade with Brazil had grown dramatically.

Table 2: Argentinean foreign trade 1992-2000 (in billions of US-Dollars)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Exports	12.2	13.1	15.7	21.0	23.8	26.4	26.4	23.3	26.3
Imports	14.9	16.8	21.5	20.1	23.8	30.5	31.4	25.5	25.1
Exports to Brazil	1.7	2.8	3.7	5.3	6.6	7.8	7.8	5.6	6.8
Exports to the USA	1.3	1.3	1.7	1.5	2.0	2.0	2.0	2.6	3.0
Exports To the EU	3.8	3.7	4.1	4.3	4.6	4.0	4.6	4.7	4.6

Source: International Monetary Fund, Directions of Trade Statistics Yearbook 1992-1998 and 2001.

The exchange rate regime contributed to the massive increase in foreign trade. From 1992 to 1997 exports more than doubled. Exports to Brazil grew strongly. Form 1992 to 1997 they almost grew fivefold. Whilst their share in total exports was only 13.9 percent in 1992, that ratio had grown to 29.5 percent in 1997. This rapid growth of trade was the direct result of the creation of the Mercado Comun del Cono Sur (Mercosur). In 1991, Argentina, Brazil, Paraguay and Uruguay had created a custom union, which turned out to be one of the more successful regional integration projects in Latin America.

The growth of exports to the USA, however, was limited. In 2000, only about 10 percent of exports went to the United States. The advantage of a stable exchange rate regime was of limited use to Argentinean exporters. At the same time, exports to the European Union developed much better. The stagnation of exports to the EU from 1996 correlates with the rise of the Dollar vis-à-vis European currencies and later the Euro.

The second external shock for the Argentinean economy has been the Asian crisis, which caused trouble for a range of developing countries, including neighbouring Brazil. In early 1999 the Brazilian government had to give up the previously fixed exchange rate of the Brazilian real, which subsequently lost half of its value against the Dollar. The fuse of the bomb that has exploded in 2002 was lit. The dynamic increases in the fastest growing market stalled. The devaluation of the real and the weakness of the Euro led the Argentinean export economy into crisis.

After this second external shock the only possibility to restore competitiveness was a lowering of wages and prices. Generally speaking, these adjustments took place in Argentina, if only at a very slow pace. The speed of improvement was far too low to drag the economy out of its complicated economic crisis.

This development highlights a major weakness of a currency board: If that regime shall be sustainable, labour markets have to be very flexible. In other words: Wages have to be reduced drastically in the event of a severe external shock. In Argentina, this was impossible because unions are strong and redundancies expensive. High non-wage labour costs also contribute to the low downward flexibility of wages.

The obvious lesson from this experience is that exchange rate regimes cannot be designed without careful consideration of both trade flows and socio-economic conditions of a country. In the case of Argentina the rigid exchange rate regime caused harm for two reasons: Firstly, only a very small part of exports went to the US, the country that provided the anchor currency, and a much greater part went to Brazil and the EU. Secondly, labour markets in Argentina were not nearly as flexible as they should have been for a sustainable currency board.

Supporters of a currency board have been suggesting that its introduction will lead to a reduction of interest rates. For Argentina, this should have resulted in a lowering of interest rates to the level of the USA, at least to a low spread. However, empirical evidence does not support this claim. Throughout the existence of the currency board, the spread between bonds denominated in Pesos and similar Dollar bonds has been above 500 basis points, i.e. 5 per cent. The spread frequently was above 10 per cent, towards the end of 2001 even more than 20 per cent (see Braga de Macedo 2001, S. 24). These high interest rates made a return to economic growth difficult if not impossible. In the absence of inflation, real interest rates of 25 per cent had to be earned. Needless to say that this would have been a tough task for any economy, let alone for one which had lost its competitive edge due to an overvaluation of its currency.

But it would be unfair to argue that national economic policy and the ill-designed exchange rate regime were exclusively responsible for the crisis. The International Monetary Fund has to bear a substantial part of the responsibility for the economic drama that Argentina is confronted with. Firstly, the IMF supported the currency board far too long. At the latest after the devaluation of the real in 1999 the IMF should have made proposals for an orderly

departure from the currency board. Secondly, the IMF, as always, demanded a restrictive fiscal policy which deepened the crisis. A pro-cyclical economic policy that lowers government expenditure in the midst of a crisis is not wise. The failure of the austerity policy prescribed by the fund was followed by a call for even stricter austerity (see Krugman 2002). This also shows that the IMF is unwilling to learn from past failures: During the Asian crisis, the IMF has made the same mistake. Countries had to simultaneously lower government expenditure and raise taxes. The pro-cyclical fiscal policy that the IMF called for caused severe economic harm both in East Asia and in Argentina.

The IMF has asked for a reduction of government expenditure at a time when Argentina was already virtually cut off from international financial markets. This policy recommendation was accompanied by fresh money from the Fund. In 2000, the IMF lent $ 40 billion to Argentina, followed by another $ 8 billion in August 2001. The combination of these two policies was inconsistent. The Fund should have either provided credit for a stimulation of the domestic economy, but without the call for a tight fiscal policy, or the IMF should have stopped lending earlier and should have made it clear that overcoming the crisis would require tougher measures.

Up to now the focus was on the problems related to the implementation of a currency board. A mayor disadvantage of a currency board, however, is the astronomical cost of giving up the currency board during a severe economic crisis. This is evident when looking at the choices that the Argentinean government had to make. They could choose between dollarisation, i.e. giving up their currency all together, or letting the exchange rate float. Dollarisation would not have solved the problem of weak demand and high foreign debt, but would instead have created new, additional problems.[3] However, shifting to a floating exchange rate regime also created new economic nightmares.

The first issue concerns the change from the old fixed exchange rate to the new rate. This is not a problem if both debt and claims are exchanged at the same rate. If, like in Argentina, savings are exchanged at a better rate than debt, the banks have a shortfall.[4] The value of their own claims is reduced, whilst their liabilities stay the same (in Dollar terms). As a

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[3] See also the section on dollarisation.
[4] President Duhalde had suggested such an asymmetric exchange of debt and claims because he claimed Argentineans should not become the victims of the financial system (Frankfurter Allgemeine Zeitung, 7.1.2002, p. 14).

consequence, many banks in Argentina are facing bankruptcy. The foreign banks also suffer a shortfall, and although they could be re-capitalised by their parent company, it is hard to see that this would be a reasonable procedure. If foreign banks have to cover the cost of the asymmetric exchange of debts and claims, this constitutes a massive tax burden for them.[5]

A reduction of the debt burden for both the Argentinean government and the local companies is desirable. However, the cost of such a measure, whichever form it has, will eventually have to be covered not only by foreign holders of Argentinean debt, but also by Argentinean savers. They will have to face a reduction in the real value of their assets. This creates a major long-term burden for the economy. After many years of hyperinflation, the citizens had developed a certain trust in the stability of their currency, and of the domestic financial system. Since early 2002, these hopes have been destroyed. Argentineans are bitterly disappointed that once again they have lost their savings. It is very unlikely that this shock will be overcome quickly. Instead, it will be entirely rational not to keep any savings in Argentina, but deposit them elsewhere. Capital flight will again be a regular feature of life in Argentina. This, in turn, will make the financing of investment out of domestic sources very difficult. Both for savings and for credit, Argentina will in the future depend even more on other financial markets rather than its own. The currency board appears to have destroyed more faith in the financial sector than the hyperinflation of the 1989s. Furthermore, it is hard to envisage a return to both a credible monetary policy and to a path of economic growth under these circumstances.

But there additional problems of monetary policy following the devaluation of the peso. Servicing the country's foreign debt is now even harder. Although the exports of Argentina may rise, the cost of debt service expressed in peso has risen substantially. In 2001, the country had an external debt, both public and private, of about $ 145 billion. With the old exchange rate, this was 54.1 percent of the country's GDP of $ 268 billion. Even with the exchange rate of February 2002, about 2 pesos per Dollar, the picture has changed dramatically. GDP is reduced by half, but external debt has remained the same. $ 145 billion is now 108 percent of GDP. And a few weeks later, in early April, the current exchange rate of 3 pesos per Dollar has raised the relative burden of the foreign debt even

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[5] Consequently, the EU finance ministers warned the Argentinean government not to put too great a burden on the banks. The financial sector could not cover an unreasonable share of the cost of the devaluation (Financial Times, 22.1.2002,. p. 6).

higher to roughly 160 percent of GDP. Argentina will under no circumstances be able to pay back its external debt completely. Although in 2003 the Peso has gained value against the Dollar, the foreign debt is unmanageable even with an exchange rate of Peso 2.75 per Dollar, the rate on 13 May, 2003.[6]

Despite this very negative assessment, the currency board cannot be evaluated without due consideration of the early successes. This exchange rate regime initially worked well and enabled the country to overcome the hyperinflation of the 1980s. However, the Mexican crisis of 1995 demonstrated how vulnerable Argentina has become because of its rigid exchange rate regime. The numerous mistakes and mishandlings in Argentinean economic policy cannot be attributed to the currency board. But this exchange rate regime can only be sustained if a number of conditions are guaranteed, e.g. the downward flexibility of wages and a very disciplined fiscal policy. Such a demanding exchange rate regime is not a good recommendation in particular for developing countries with democratically elected governments. Currency boards were designed for colonies, not for independent economies.

5. Flexible exchange rates: The better option?

The experience of Argentina shows that fixed exchange rates are hard to maintain even in a currency board. Other types of more or less fixed exchange rate regimes, e.g. a crawling peg or a crawling band, are similarly difficult over a longer period, at least if they are not supported by restrictions on capital flows. In virtually all recent financial crises, fixed exchange rates that had to be abandoned played an important role. In Mexico, the crises in Thailand, Indonesia and South Korea as well as in Brazil, fixed exchange rates were given up soon after the pressure started to built up. The bipolar view, developed after theses crises and asking for either a currency board or flexible exchange rates, suggests that other exchange rate regimes are crisis prone and not sustainable. But how crisis prone and sustainable is a regime of fully flexible exchange rates?

The assessment of flexible and other exchange rate regimes cannot be made without identifying the primary goals. The first and foremost goal is the facilitation of international trade. Export and import of both goods and services should be supported by the exchange rate regime. The second goal is the promotion of investment. Both foreign direct

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[6] From 1 January to 13 May 2003, the Peso has risen against the Dollar from 3.37 to 2.75. Against the Euro, the appreciation of the currency was more limited (data from www.oanda.com).

investment as well as domestic investment financed from foreign sources, either by credit or by bonds, should be assisted. Third, macroeconomic stability, in particular of the domestic currency, should not be undermined by the exchange rate regime. Reaching moderate inflation shall not be made impossible.

It is quite obvious that flexible exchange rates pose a substantial risk for developing countries. First of all trade is affected. If the exchange rate fluctuates wildly, exporters and importers either have to accept these changes or they have to hedge their business. The latter means that they have to buy exchange rate stability from suppliers of that insurance. These are mainly big international banks. Hedging, however, is quite expensive for exporters and importers. The greater the volatility of the exchange rate, the higher the cost of hedging.

Looking at this problem from a different angle, one can argue that a stable exchange rate is a public good that should be provided by governments. In a regime with flexible exchange rates, the cost of stabilising exchange rates has to be covered by private actors, the ex- and importers, who have to hedge their deals against exchange rate fluctuations. These costs reduce the competitive position of exporters on world markets compared to a system in which governments do provide that stability. Although flexible exchange rates are less problematic in developed countries with strong, competitive companies, for the developing world this is a severe problem. Flexible exchange rate regimes make the integration of developing countries into world markets significantly more difficult.

With regard to foreign debt and foreign direct investment, flexible rates are also problematic. A lack of capital is a common feature of developing economies. In most cases, investment has to be financed by using capital from abroad, either in form of credit or direct foreign investment. When borrowing abroad, domestic investors have to cover the exchange rate risk, because virtually the entire foreign debt of developing countries is denominated either in Dollars or in another OECD-currency. If the exchange rate deteriorates, the debt service rises.

But even in the case of foreign direct investment the instability of the exchange rate can influence investment behaviour negatively. Although the foreign investor covers the exchange rate risk, the result of a weaker exchange rate is that in order to achieve an expected return in dollars, the profit in domestic currency has to rise. If that rise in profit cannot be achieved, the likeliness of further investment will probably be reduced.

Finally, volatile exchange rates endanger macroeconomic stability. In the event of a substantial devaluation, the likely consequence is imported inflation: The domestic price level rises if imports get dearer. Imported inflation can wipe out previous successful programmes of macroeconomic stabilisation.

6. The South African case: Why did the exchange rate of the Rand collapse?

A recent example for the problems that can result from flexible exchange rates is South Africa. Since 1994, the country has implemented comprehensive measures of deregulation and liberalisation, including the dismantling of capital controls. The Rand floats freely.[7]

For more six months in 2001, the South African economy was hit by a sharp drop of the exchange rate vis-à-vis Dollar and Euro. Since the beginning of 2002 the Rand has recovered all its losses against the Dollar. In May 2003, a Dollar costs about 7.3 Rand, less than before its temporary descent.

A declining exchange rate as such is not new: In January 1990, the exchange rate was Rand 2.56 to the Dollar. From then, the nominal exchange rate declined slowly, but steadily. However, in itself this is not a problem, since South Africa had a higher inflation rate than the US. The real exchange rate remained relatively stable.

In 2001, the speed of devaluation increased dramatically. On 2nd January, 2001, the exchange rate was Rand 7.56 to the Dollar and on 2nd July 8.01. At the end of December 2001, the South African currency was only traded at over 12 Rand to the Dollar.[8] With such a strong devaluation, the macroeconomic data of South Africa should provide at least a partial explanation. However, this is not the case.

Table 4: South Africa's macroeconomic development 1999-2002

	1999	2000	2001	2002
Real GDP, annual change in %	1.9	3.1	3.5	3.0
Consumer prices, change against previous year in %	5.3	5.3	5.5	4.3
Balance of budget, in % of GDP	-2.3	-2.0	-2.3	-2.0
Balance of current account in %	-0.4	-0.1	-0.8	-1.1

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[7] See IMF Annual Report 2001, p. 125.
[8] Data from the US Federal Reserve Bank, www.federalreserve.gov/releases/H10/hist/dat96_sf.txt.

of GDP				
External debt in % of GDP	29.6	29.4	32.0	34.1
Debt service in % of exports	15.8	13.8	12.3	9.1

Source: Deutsche Bank Research, Perspektiven Südafrika, Februar 2001. Data for 2000 are estimates, for 2001 and 2002 forecasts of Research.

The macroeconomic data do not provide a hint: Neither with regard to economic growth nor with regard to inflation is South Africa's economy in an alarming constitution. South Africa's foreign debt is not high. The country's fiscal policy is prudent: At 2% of GDP, the budget deficit is even low enough for the strict criteria of the Treaty of Maastricht. Therefore, it is entirely justified that the South African President Thabo Mbeki denied that the Rand's weakness has anything to do with problems in the real economy.[9]

Economist were confronted with a riddle. Without a doubt, South Africa is struggling with massive economic and social problems. The entire region is suffering from instability and political problems in neighbouring countries, e.g. Namibia, Angola and Zimbabwe, are unsolved (see Dieter/Melber/Lamb 2001). The Aids pandemic is a huge burden for the economy. However, all these problems are not new, but well known for a long time.

Explanations for the Rand's temporary weakness have to be found elsewhere. Firstly, the weakness of the currency could have been the result of a sudden and collective drop of investor confidence due to the recent political developments in Zimbabwe. In particular the absence of free and fair elections could have caused a change of investors' perspectives. Thus, the weakness of the Rand would have had less to do with economic and political developments in South Africa and more with the trouble in Zimbabwe. The currency would function as a barometer for investor sentiment, although one that has consequences for the real economy.

Although this explanation can claim a certain plausibility, second thoughts remain. South Africa's government has no decisive influence on developments in Zimbabwe. The comparatively solid macroeconomic policy of South Africa would be less important than political developments in the neighbourhood. The bottom line would therefore be that developing countries with flexible exchange rate regimes do not only have to provide good

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[9] Financial Times, 11th January 2002, p. 13.

governance and democratic regimes in their own territory, but also in the entire region if they want to have relatively stable exchange rates.

A second explanation can also claim some plausibility. To curb already existing pressure on the Rand, in October 2001 the South African central bank introduced measures that should have made speculation more difficult. As a result, the amount of foreign exchange traded was reduced. Unexpectedly, these measures made the Rand more vulnerable against speculation, because selling pressure had a higher impact. The limitations on currency trading also resulted in a reluctance of exporters to exchange foreign currency into Rand, and this subsequently led to a reduced demand for Rand.[10]

Presumably both factors have contributed to the devaluation of the currency. This, however, does not make the consequences of the lower exchange rate less severe. For a while, the Rand was probably the world's most undervalued currency.[11] The repercussions for South Africa's economy have been dramatic. Three consequences have to be considered: Servicing foreign debt was more difficult, foreign investors will expect a higher return in domestic currency for their investments and inflation will rise. However, the temporary undervaluation of the currency also has two advantages: The competitive position of exporters rises and on the domestic market competition with importers is made much easier. The fact that the extreme undervaluation of the currency was only a temporary event results in lower pressure on the inflation rate and servicing foreign debt is also easier. But whether foreign investors will consider the wild fluctuation of the exchange rate just as an episode is an open question.

The example of South Africa shows that flexible exchange rates are not a simple solution for developing countries and emerging markets. Although flexible exchange rates have fewer disadvantages than currency boards, they still display enough faults. Both currency regime render the national economic policy toothless. In both cases the dependence on external influences compared with other exchange rate regimes rises dramatically. Whether a depreciation in neighbouring Brazil or political trouble in the region, the effects for the domestic economy are severe. Neither a currency board nor a fully flexible regime can be the standard solutions for developing countries.

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[10] Financial Times, 11th January 2002, p. 13.

[11] Following the Economist's surprisingly accurate Big Mac index, the Rand at the end of 2001 was traded 68% below its real value (The Economist, 22.12.2001, p. 134).

6. Dollarisation and Euroisation: An expression of desperation?

Following the collapse of the Argentinean currency board, some economists have suggested the complete disposal of an own currency and have proposed the introduction of the Dollar as the only legal tender (see Schuler/Hanke 2001). Exchange rate risk would be completely eliminated. A number of countries have chosen this path for quite some time: Panama is using the US-Dollar, Liechtenstein has opted for the Swiss Franc, Monaco for the French Franc and now the Euro. Up to 2002, Andorra used both the French Franc and the Spanish Peseta as legal tender. Both El Salvador and Ecuador have decided to give up their national currencies and have declared the US- Dollar as the only legal tender. In Kosovo and Macedonia, the Euro has been introduced. But these countries are all small and, from an economic point of view, insignificant. For large countries, there are a number of good reasons why an own currency should not be given up:

- An own currency can contribute to the development of a spirit of community, which my be beneficial for the political stabilisation of a territory.
- Without an own currency one loses the so called seignorage. This profit from coinage can reach substantial levels. In the case of Argentina, seignorage has been about $ 780 million per annum (see Deutscher Bundestag 2001, p. 30).
- Without own currency an economy cannot be managed by the government. In particular the inability to develop an own interest rate policy is causing harm.
- Without an own currency it is impossible to insulate an economy from the rest of the world. Without a monetary border the creation of an independent economic policy cannot fully succeed.
- Using foreign currency makes a country subject to potential blackmail. Since the provision of liquidity is not guaranteed, an economy can be severely damaged if the government of the country that provides the legal tender interrupts supply. In the case of dollarisation a dependence on the goodwill of the American government is created. In 1988, Panama had to learn that this dependence can be dangerous.[12]

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[12] The Reagan Administration decided that deposits of Panama in American banks would be frozen. A transfer of dollars to Panama was prohibited. The shock was severe: Most banks had to close and the entire economy suffered from an acute shortage of liquidity. The attempt of the government to quickly create a new currency to substitute the Dollar was not successful. The economy was demonetised. Within one year output declined by 20 per cent (see Cohen 1998, p. 45).

The bottom line is simple: If political and economic independence is desired, then the adoption of another country's currency is not advisable.

7. Intermediate exchange rate regimes

The debate on the appropriate exchange rate regime for developing countries and emerging markets has gained momentum after the collapse of the Argentinean currency board. Before looking at the remaining options, I would like to point out that stable exchange rates in the periphery of the world economy are hard to achieve as long as volatility continues to exist between the Dollar, the Euro and the Yen. In a number of recent financial crises, in particular the crises in Asia and in Argentina, fluctuations of exchange rates in the core of the world economy played an important role. In Asia, the countries that had tied their currencies to the Dollar suffered a severe blow to the competitiveness of their companies when the Dollar appreciated against the Yen and the European currencies. In Argentina, the continuing strength of the Dollar reduced the competitive position of exporters and import competing domestic producers.

Without a mechanism for the stabilisation of exchange rates between Dollar, Euro and Yen, developing countries will not be able to provide stable exchange rates of their own currencies. However, currently the call for at least an exchange rate band does not receive a lot of support on both sides of the Atlantic, let alone in Japan, which has more dramatic economic problems to solve.[13]

[13] Nevertheless, immediately after the Asian crisis 11 out of 29 experts of a working group of the American Council on Foreign Relations supported the call for a target zone between the major currencies. Among those advocates of more stable exchange rates were the economist Fred C. Bergsten, the former chairman of the Federal Reserve Bank, Paul Volcker, and the hedge fund manager and successful speculator, George Soros (see Council on Foreign Relations 1999, p. 129).

Table 5: Exchange rate regimes

Type	characteristics	main advantages	main disadvantages	examples
1) without own currency/ dollarisation	complete adoption of a foreign currency as legal tender	monetary stability	no monetary autonomy, loss of profit from coinage	Ecuador, Panama, Palau
2) currency board	fixed exchange rate, convertibility in anchor currency, domestic money supply is completely backed by foreign reserves	monetary stability, sustaining profit from coinage	loss of monetary autonomy	Argentina (1991-2002), Bosnia, Brunei, Bulgaria, Hong Kong, Estonia, Lithuania
3) fixed exchange rate with a single anchor currency	exchange rate fixed to one currency within a narrow band and infrequent adjustments	monetary autonomy can be sustained	without capital controls risk of instability, appreciation of anchor currency worsens competitive position of companies	China, Iran, Malaysia, Namibia, Trinidad
4) fixed exchange rate with a currency basket	Fixing of exchange rate to a basket of currencies	stable real exchange rate can be provided	without capital controls risk of instability	Botswana, Morocco, Latvia, Tonga
5) fixed exchange rate with exchange rate bands	co-operative regime	stable exchange rates within the system, adjustments possible, flexibility vis-à-vis other currencies	without capital controls risk of instability	European Monetary System (until 1998), Denmark
6) crawling pegs	frequent adjustments of the exchange rate using one indicator, e.g. the different inflation rates of domestic and anchor currency	stable real exchange rate can be provided	without capital controls risk of instability, need for macroeconomic discipline	Bolivia, Nicaragua, Zimbabwe
7) crawling bands	exchange rate bands with frequent adjustments	stable real exchange rate can be provided	without capital controls risk of instability, need for macroeconomic discipline	Israel, Uruguay
8) managed floating	central bank tries to managed the exchange rate without using specific indicators	stable real exchange rate can be provided	without capital controls risk of instability, need for macroeconomic discipline	Jamaica, Slovenia, Norway
9) flexible exchange rate	central bank only monitors the development of the exchange rate	markets determine the development of the exchange rate, no risk of costly an unsuccessful intervention	high cost of hedging for exporters and importers	Australia, Brazil, Eurozone, Chile, Indonesia, USA

Source (for examples): International Monetary Fund Annual Report 2001, S. 124f.

If both currency boards and fully flexible exchange rates are excluded, a number of intermediate regimes are available. Both corner solutions, however, have one thing in common: central banks have to be rather passive in both systems. In all intermediate

regimes, the central bank has a much more prominent role to play and is more or less actively trying to influence the exchange rate.

The seven intermediate exchange rate regimes have a common disadvantage: They do not work very well if capital flows are fully liberalised. With high, volatile capital flows, central banks have problems to stabilise exchange rates. The underlying dilemma is described in the impossible trinity of international finance. Monetary policy tries to reach three goals at the same time: independence of monetary policy, unrestricted flows of capital and stable exchange rates. However, it is impossible to reach more than two goals at the same time. Monetary policy can only choose between the following three options:

- Either a stable exchange rate and an independent monetary policy. This option requires the use of capital controls.
- Or unrestricted capital flows and an independent monetary policy. In this case the exchange rate will have to be flexible.
- Or unrestricted capital flows and a stable exchange rate. The central bank gives up an independent monetary policy and concentrates its activities on the stabilisation of exchange rates (see Frenkel/Menkhoff 2000, p. 11ff; Fischer 2001, p. 8).

The first option describes the system of Bretton Woods. Capital controls were a central feature of that monetary regime. These controls are necessary to enable the implementation of an independent monetary policy. For instance, in the absence of capital controls the lowering of domestic interest rates would lead to an outflow of capital with subsequent pressure on the exchange rate. Bretton Woods was a stable financial system for more than 20 years. Moreover, Bretton Woods was a period of rapid economic growth of the global economy. Another example is China, which also generated exceptional growth over a long period of time. During the Asian crisis China could maintain its fixed exchange rate vis-à-vis the Dollar primarily because of the tight capital controls it implements.

The second case describes our current system in the OECD outside the Eurozone. Exchange rates fluctuate and capital flows are more or less unrestricted and national monetary policy enjoys a certain autonomy, at least in the larger OECD-countries.

The third case is plausible from an economic point of view, but not politically. The reason is that in such a scenario, monetary policy has to give absolute priority to the stabilisation

of the exchange rate. The consequence is that the central bank may have to raise interest rates even if that is counterproductive for the domestic economy. In democratic societies very few interest groups would support such a monetary policy. Both trade unions and employers' associations are not willing to accept a stable exchange rate as the primary target of monetary policy. Also, many sectors of an economy are not affected by changes in the exchange rate and would therefore not support a policy that ignores the consequences for the domestic economy.

Before the First World War, such policies were implemented under the gold standard. The participating countries made the stability of the exchange rate an absolute priority of their economic policy. In the three core countries of the gold standard, i.e. France, Germany and the United Kingdom, the gold reserves and the convertibility at a given exchange rate were defended regardless of the short-term cost for the domestic economy (see Eichengreen 2000, p. 51). The political opposition against these policies was limited, mainly because trade unions were too weak to argue their case: Full employment was not yet on the political agenda.

The bottom line is: Stable exchange rates and an independent monetary policy are only achievable with capital controls.[14] For developing countries and, to a degree, emerging markets there are many reasons why they should not liberalise capital flows completely. Whereas the contribution of stable exchange rates to the economic growth of an economy is well documented, liberalised capital flows do not always have the same positive effects. Selective restrictions of capital flows should be the norm, not the exception, for developing countries.

The support for such restrictions should not be put on a level with protectionism in trade, quite the opposite. The American economist and staunch supporter of free trade, Jagdish Bhagwati, immediately after the Asian crisis declared that free trade suffers from frequent financial crises. Liberalised trade is supporting economic growth, whilst the same cannot be said about unrestricted capital flows (see Bhagwati 1998, pp. 7-12).

Although restrictions on capital flows can be implemented unilaterally, it would be positive if the IMF would support their implementation. Without such support, many countries will

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[14] Stanley Fischer, for many years the most important figure in the IMF, accepts this conclusion and asserts that the implementation of capital controls permit a stable exchange rate. In Fischer's opinion , the problem is the declining efficiency of capital controls. Over time, the evasion of capital controls rises (see Fischer 2001, p. 10).

be reluctant to return to capital controls, partly because their implementation will, at least in the medium to long term, require the support of the IMF and the major financial centres. National capital controls can be implemented much better if international co-operation on the control of capital movements will be strengthened. As long as this does not exist, the illegal export of capital is no big risk. If the money is not detected at the border, there is no future risk for the exporter of capital. In case receiving countries would also have to report the import of capital, the sustainability of capital controls would greatly rise.

The move of OECD countries to discipline offshore financial centres is a step into the right direction. If offshore financial centres can no longer be used to hide the financial resources of terrorists, this also means that capital flight from developing countries could, at least theoretically, be controlled more easily. Needless to say that this would constitute a major policy shift in Washington, which still appears to be politically unrealistic. Beyond the fight against terrorism there is little will to limit the freedom of the owners of capital.

8. Monetary regionalism: A new strategy for stable exchange rates?

The introduction of the Euro has motivated other regions to consider the benefits of regional monetary integration. The creation of a joint currency only eliminates exchange rate risk between the participating countries and not vis-à-vis third countries. But this additional stability is important enough to make monetary regionalism a promising project. Outside of the European Union, discussion on the creation of a joint currency has started in East Asia, in the Mercosur, the Gulf Co-operation Council (GCC) and the Eurasian Economic Community.[15]

Both the Asian crisis and the current disaster in Argentina have demonstrated the need for monetary co-operation. In East Asia, up to the crisis many policy makers had the illusion that they could integrate their economies into the world market without having to co-operate on a regional level. Furthermore, until the crisis erupted policy makers had no incentive to expect a dramatic collapse of their economies with the subsequent need to ask the IMF for assistance. Today, the views have changed: The elite in East Asia see the need

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[15] The Eurasian Economic Community comprises Russia, Belarus, Kazakhstan, Tajikistan and Kyrgyzia. In spring 2002, the governor of Kazakhstan's central bank suggested a single currency (International Herald Tribune, 24 April 2002, p. 19).

for monetary regionalism in East Asia, although the exact shape of the integration process is far from clear.[16]

In the countries forming the Mercosur, there has been a discussion on the need for monetary co-operation for some time. At the end of 2000, the participating countries agreed on joint convergence criteria. Following the model of the treaty of Maastricht, the countries developed a plan for the years 2002 to 2005 and agreed on maximum levels for inflation (less than 5 percent), government debt (less than 40 percent of GDP) and allowed deficit in the public sector (3 percent of GDP at the most). The associated countries Chile and Bolivia have accepted these convergence criteria (see Frankfurter Allgemeine Zeitung, 18 December 2000, p. 18). Needless to say that these plans are an illusion. There will not be any monetary co-operation in the Mercosur before Argentina has not reached somewhat safer territory. It would be foolish to further weaken the Mercosur for the sake of rescuing Argentina. Even though a solution for Argentina is hard to envisage at this stage, policy makers in the region have continued to put the creation of a joint currency on their agenda. For instance, for the Mercosur Summit in February 2002 the issue was put on the program (see Handelsblatt, 21 January 2002, p. 6). In May 2003, the call for monetary co-operation in the Mercosur has been renewed. The Argentinean Vice-Foreign Minister Martín Redrado has suggested a combination of exchange rate bands combined with a co-ordination mechanism (see Sueddeutsche Zeitung, 9 May 2003, p. 23).

The creation of a joint currency is not a simple, technical task. The preconditions for the successful implementation of monetary regionalism are high. Before a common currency can be introduced, a number of intermediate stages have to be taken. These are both economic measures to generate convergence as well as political measures to create intra-regional policy networks (see Dieter/Higgott 2002; Kim/Ryou/Wang 2000). Against the background of the financial crisis of the recent past, it seems plausible to expect that a number of regions will follow the example of the European Union and will decide to give up their own currency in favour of a regional currency, despite substantial difficulties (see Fischer 2001, p. 17). Considering the existing alternatives, monetary regionalism appears to provide substantial benefits at a reasonable price.

After Argentina, the decision for an appropriate exchange rate regime for developing countries and emerging markets has to be answered in a more differentiated manner. If

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[16] For a discussion of the changing nature of regionalism in East Asia see Dieter and Higgott 2002.

countries do not want to use capital controls, it appears that only flexible exchange rates are sustainable in the long run. However, the experience of South Africa has clearly demonstrated that flexible exchange rates are causing severe trouble for an economy: The uncertainty about future exchange rates makes international trade more expensive, shortens the time horizon of the private sector and consequently reduces investment and growth perspectives.

Exchange rate regimes that are supported by selective capital controls currently are more recommendable for many developing countries than the so called corner solutions (see Braga de Macedo et al 2001, p. 24). If countries wish to benefit from the integration into international financial markets and at the same time want stable exchange rates, the only option is monetary regionalism. However, the implementation of such a far reaching scheme will take quite some time.

8. Conclusions

After the recent financial crises, the search for the adequate exchange rate regime for a developing country or an emerging market has not become any easier. It has become clear, however, that the bipolar view is too simplistic. Neither corner solution has enough to offer for the great majority of countries.

In the recent past, the IMF has been surprisingly quiet on exchange rate regimes. The reason could have been that the bipolar view, discredited since the Argentinean crash, was an IMF invention. The Fund ought to come up with new proposals for exchange rate regimes. However, the central dilemma for the Fund is that intermediate regimes do not work without restrictions on capital flows, and the liberalisation of capital flows has become one of the dogmas of the IMF in recent years. The Fund's position has not become easier with the Bush Administration. For instance, in the Chile-US bilateral free trade agreement, the US insisted that Chile will not (re-) introduce restrictions on capital flows.

For these and other reasons, finding an international consensus on exchange rate regimes and their accompanying policies will be difficult. One should not forget that the financial industry is unlikely to give up profitable opportunities without resistance. Just one example: Floating exchange rates enable banks to offer insurance against volatility. Companies can hedge their future earnings, but for this service the banks charge their

clients. If exchange rates would be stabilised, banks would loose an important source of profit.

In such an environment, developing countries can opt for monetary regionalism or intermediate regimes, but these countries will do that without any support from the USA and from the IMF, who continue to insist on unrestricted capital flows. Such dogmatic and selfish recommendations are against the interests of many developing countries. But it is wishful thinking to expect sufficient support from both the Fund and the US for an exchange rate policy that would alter this approach.

Few developing countries will be strong enough to implement an economic policy against these two powerful players. The EU, a power in trade policy, is not (yet) in a position to support countries and regions that wish to implement monetary regionalism or an intermediate exchange rate regime. Without a joint EU foreign financial policy, this is simply not possible.

Two developments appear to be plausible: Most developing countries will move towards flexible exchange rates. Quite a few will continue trying to stabilise their exchange rates by some sort of intervention. A dirty float. And two regions, East Asia and the Mercosur, might sufficiently strong to implement monetary regionalism, if only in the long run.

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