

Macroeconomy, Economic Bias & Employment

Exchange Rates and Employment: The Experience of Fast-Growing Economies

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1. Introduction

This paper looks at the exchange rate policies of countries that achieved high labour-absorbing growth paths. While exchange rates are only one policy instrument in an employment and growth policy, commonality in policy approach amongst fast-growing economies might give some pointers to South African thinking on these matters. Some of the questions that the paper seeks to answer include: How important has exchange rate stability and the level been in countries that have achieved higher growth and employment, especially in labour intensive manufacturing? How did they achieve exchange rate stability and how where they able to maintain the rate at levels conducive for exports? What is the relationship between exchange rate regime and economic performance?

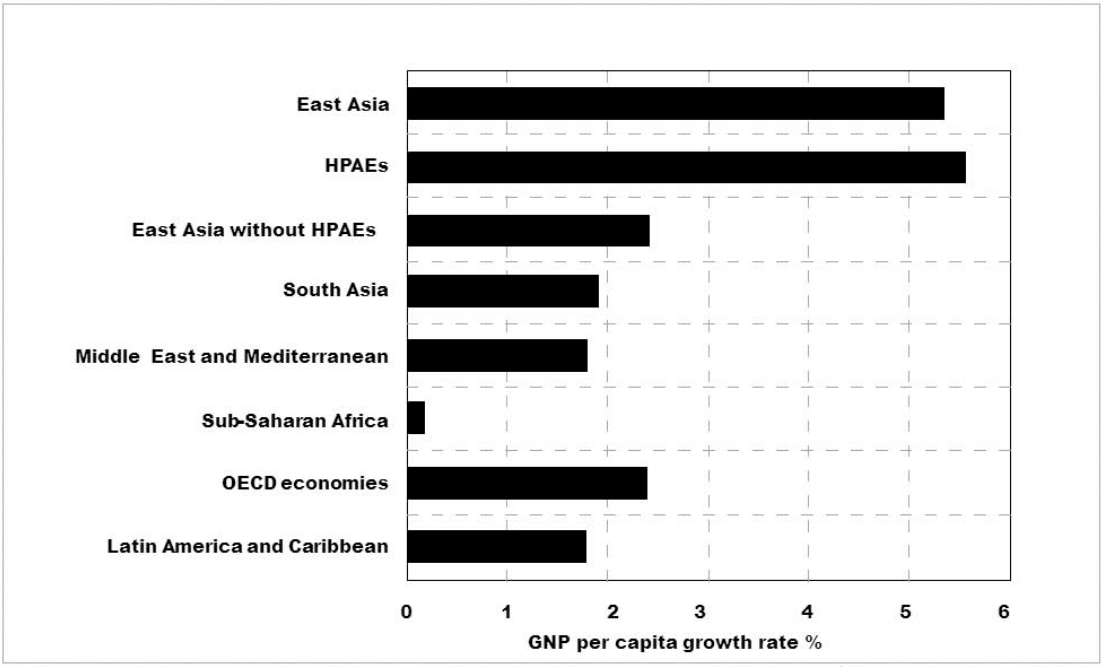
The paper looks at countries that experienced high growth these include two Latin American countries (Brazil, 1963 – 73 and Chile), Ireland, and the High Performing Asian Economies (HPAEs[1]). The reason for focusing on these countries and more so the HPAE experience is based on their history of export performance and the considerable literature that is available on these countries. With respect to the HPAE the Asian Development Bank Institute (ADBI, 2002) says for decades until the crisis hit in mid-1997, East Asian (EA) economies led the developing world in achieving high rates of economic growth, accomplishing what had come to be known as the East Asian Miracle. The ADBI highlights that their success has been the capacity to sustain high export growth over long periods of time. This has involved an on-going process of expanding shares in world markets by increasing the price and quality competitiveness of export products and by specializing in more productive exportable activities that are growing rapidly on world markets. With respect to the role of the exchange rate in the EA miracle Ito and Krueger (1999) go on to say, "The exchange rate is a crucial variable linking a nation's domestic economy to the international market. Thus choice of an exchange rate regime is a central component in the economic policy of developing countries and a key factor affecting economic growth. ... Many East Asian nations maintained exchange rate regimes designed to achieve an attractive climate for exports and an "outer-oriented" development strategy. The result has been rapid and consistent economic growth over the past few decades."

Nelson and Park (1999) further highlight the performance by highlighting that, "over the past 35 years Korea, Taiwan, Singapore and Hong Kong, have transformed themselves from technologically backward and poor, to relatively modern and affluent economies. Each has experienced more than a four fold increase of per capita income over the period." They go on to say, "it took the United Kingdom, the US, France and

[1] Japan; the "The Four Tigers" – Hong Kong, the Republic of Korea, Singapore and Taiwan, China – and the three newly industrializing economies (NIEs) of South East Asia – Indonesia, Malaysia and Thailand.

Germany 80 years or more, beginning in the 19th century to achieve such growth although the Japanese did it even more quickly, between 1952 and 1973. Each now has a large number of firms producing technologically complex products competing effectively against rival firms based in the US, Japan and Europe." According to the World Bank (1993) the twenty-three economies of East Asia grew faster than all other regions of the world (figure 1), with the so-called high performing Asian economies (HPAEs) accounting for most of this growth.

Figure 1 – Average growth of GNP per capita, 1965-1990



[Source: World Bank 1993]

The paper will proceed as follows first it will look at the theory behind the relationship between employment and the exchange rate. It then looks at the role of the exchange rate in Asian concentrating on issues of exchange rate policy, the labour absorbing aspect of their growth is taken as a given since it is well documented in the bulk of the literature that looks at the Asian miracle. It will then proceed by looking at the experience of the other high growth countries, with the analysis on Brazil focusing on its period of high growth from the mid 60s to the mid 70s. It will then proceed by looking at exchange rate regimes and economic performance.

2. Employment and the exchange rate: a theoretical appraisal

Before going into the empirical literature it is important to try and animate the link between the exchange rate and employment. In a Taylor and Frenkel (2005) framework, the real exchange rate of a country affects the imported price of intermediate goods and with a given labour – capital ratio will also affect the price of capital goods and labour. Therefore the RER determines the economy's unit labour costs in terms of foreign currency. To explore the implications, they consider the effects of a sustained real appreciation on different sectors. Producers of importables will face tougher foreign competition. To stay in business, they will have to cut costs, often by shedding labour. If they fail and close down, more jobs will be destroyed. In the non-traded sector, which will have to absorb labour displaced from the tradable sectors, jobs are less likely to open up insofar as cheaper foreign imports in the form of intermediates and capital goods substitute for domestic labour. On the whole, real appreciation is not likely to induce sustained job creation and could well provoke a big decrease in tradable sector employment. In the case of an RER depreciation, the framework predicts an employment-friendly outcome.

The employment and exchange rate framework by Taylor and Frenkel goes on to emphasize the point that for the appreciation or depreciation to have an impact on employment, the resultant set of relative prices must be expected to stay in place for a relatively long period of time. The rational for this can be explained as follows changes in employment/output ratios will not happen swiftly because they involve restructuring firms and sectoral labour market behaviour. This must take place via changes in the pattern of output among firms and sectors, by shifts in the production basket of each firm and sector, and adjustments in the technology and organization of production. These effects arise from a restructuring process in which individual firms and the organization of economic activity adapt to a new set of relative prices. Gradual adjustment processes are necessarily involved. Finally, in the long run if per capita income is to increase there will have to be sustained labour productivity growth with employment creation supported by even more rapid growth in effective demand (Taylor and Frenkel, 2005).

3. Role of exchange rate policy in Asia

This section looks at the contribution of exchange rate stability and the level in countries that achieved higher growth and employment, especially in labour intensive manufacturing. It also looks at how they where able to maintain the rate at levels conducive for exports. Since the break down of the Bretton Woods system it is generally believed that the global economy started moving toward floating exchange rate arrangements. The International Monetary Fund (IMF) classification says only 11% of its member countries are classified as having a pegged exchange rate. In contrast, Calvo and Reinhart (2000) argue that this much-used IMF classification takes at face value that countries actually do what they say they do. With respect to the exchange rate arrangement of East Asian countries Calvo and Reinhart say:

> *Even a cursory perusal of the Asian crises countries' exchange rates prior to the 1997 crisis would suggest that their exchange rates looked very much like pegs to the US dollar for extended periods of time. Only Thailand, however, was explicitly classified as a peg and one to a basket of currencies at that; the Philippines was listed as having a freely – floating exchange rate, while the others were lumped under the catch all label of managed floating. Today, these countries are classified as floaters, yet, as they vigorously recover from the turmoil of 1997-98, their exchange rates have ceased to fluctuate in any significant way.*

In trying to decide whether the official labels of exchange rate classification provide any adequate representation of actual country practice, Calvo and Reinhart examine the behaviour of exchange rates, foreign reserves, monetary aggregates, interest rates, and commodity prices across the range of exchange rate arrangements. They find that countries that say they allow their exchange rate to float mostly do not – there seems to be a "fear of floating." Exchange rate variability is relatively quite low. This low variability of the nominal exchange rate does not signify the absence of real or nominal shocks in these economies. Most of these countries experience large and frequent shocks to their terms of trade more so in the case of commodity exporters. According to Calvo and Reinhart the low relative exchange rate variability stems from deliberate policy actions to stabilize the exchange rate.

They found that reserve volatility is very high; contrary both to what would be expected in a floating exchange rate regime or relative to what is observed in the more committed floaters. Interest rate volatility (both real and nominal) was also found to be significantly high. They argue that the latter suggests that countries are not relying exclusively on foreign exchange market intervention to smooth fluctuations in the exchange rates and that there are chronic credibility problems. Based on these results they argue that because countries that are classified as having a managed float mostly resemble noncredible pegs, the so called "demise of fixed exchange rates" is a myth and that the fear of exchange rate movements is pervasive, even among some of the developed countries. Though Calvo and Reinhart focus on the lack of credibility as one of the major reason why emerging markets (EMs) have a fear of floating they also mention that exchange rate volatility appears to be more damaging to trade in emerging markets (McKibbin and Le, 2002) where trade is predominantly invoiced in US dollars and hedging opportunities are more limited.

Levy-Yeyati and Sturzenegger (2005) also look at the issue of exchange rate classification. They construct a *de facto* classification based on data on exchange rates and international reserves from all IMF-reporting countries over the period 1974–2000, which reflects actual rather than announced policies. They define exchange rate regimes according to the behaviours of three classification variables: changes in the nominal exchange rate, the volatility of these changes, and the volatility of international reserves.

Underlying their selection of these variables is a textbook definition of exchange rate regimes, where fixed exchange rate regimes are associated with changes in international reserves aimed at reducing the volatility in the nominal exchange rate, and flexible regimes are characterized by substantial volatility in nominal rates with relatively stable reserves. Thus, the combined behaviour of these three classification variables should be sufficient to determine the regime to which each country should be assigned at any point in time. They then use cluster analysis, which groups the cases according to similarity in the behaviour of the three variables of reference.

The cluster with high volatility of reserves and low volatility in the nominal exchange rate identifies the group of fixers and, the cluster with low volatility in international reserves and substantial volatility in the nominal exchange rate corresponds to countries with flexible arrangements.

Their results are similar to those of Calvo and Reinhart. They find that the *de facto* pegs have remained stable throughout the last decade, although an increasing number of them shy away from an explicit commitment to a fixed regime ("hidden pegs").

Their study also confirm the "hollowing out hypothesis" that states that intermediate regimes (including conventional pegs) are inherently vulnerable to capital flows and thus bound to disappear in a world with increasingly integrated capital markets. They also find that pure floats are associated with only relatively minor nominal exchange rate volatility that is many countries that claim to float do not allow their nominal exchange rate to move freely, a pattern that Calvo and Reinhart (2000) have referred to as "fear of floating".

According to Rogoff et al (2003) few countries, especially emerging markets and other developing countries, actually allow their exchange rate to float freely (Figure 2). They go on to say that among emerging markets, the proportion of de facto free floaters has remained relatively small at 4-7 percent since the mid-1980s (Figure 2). Even among advanced economies, only about 20 percent allow their currencies to float freely, although close to 40 percent state that they have floating regimes. The figures also show that fewer countries actually peg their exchange rate than announcements would suggest. De facto pegs accounted for about one-third of all de facto regimes in recent years, while de jure pegs comprised about one half all de jure regimes. However, the number of "hard" pegs was significantly higher under the Natural classification than the de jure.

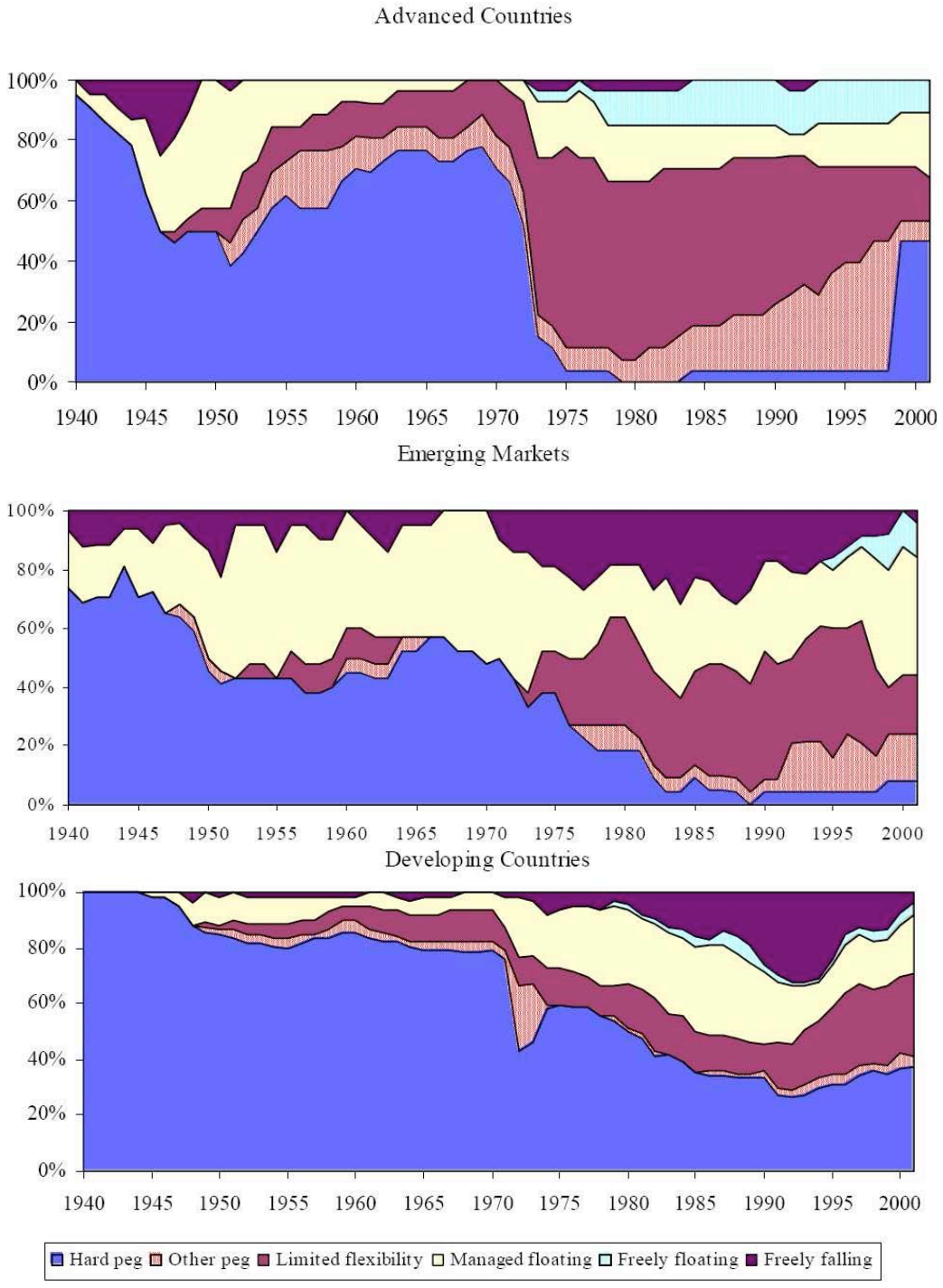
While the proportion of de facto pegs has increased slightly since the early 1990s, this mainly reflected the monetary union in Europe and the adoption of pegs by some of the countries that were previously experiencing freely falling currency values. Interestingly, hard pegs accounted for most of the recent increase in pegs in other

developing countries, while soft pegs accounted for much of the increase among emerging markets. Intermediate regimes have been and continue to be considerably more prevalent than suggested by the de jure classification. While de jure intermediate regimes rose from around 10 percent of all exchange rate regimes in the mid-70s to about a quarter in the late 1990s, the proportion of de facto regimes with an intermediate degree of flexibility has remained at about one half since the mid 1970s.20 Within intermediate regimes, however, managed floats have become more prevalent in emerging markets over the past decade, while other developing countries have tended to move in the opposite direction toward more limited flexibility.

From the above empirical evidence it becomes clear that the most common approach of stabilising the exchange rates of these countries was through the accumulation of reserves. The World Bank (1993) also notes that many of the policies that fostered macroeconomic stability also contributed to rapid export growth. Fiscal discipline and high public savings allowed Japan and Taiwan, China, to undertake extended periods of exchange rate protection. Adjustments to exchange rates in other HPAEs-validated by policies that reduced expenditures-kept them competitive, despite differential inflation with trading partners. The rapid accumulation of reserves is also seen as a sign of the under valuation of a country's currency.

After the 1997 financial crisis in the HPAEs there was general consensus that among other things the system of fixed exchange rate regimes that had been adopted by most EA countries where largely responsible for the crisis. Most of these countries after the crisis found themselves in search of alternative regimes that would both help them recover from the crisis and at the same time regimes that would help them sustain and meet their development goals. According to Rahmatsyah *et al* (2002) the quest to find a more suitable exchange rate policy became an urgent policy challenge facing the EA economies. For most of these countries, such as Thailand and Indonesia, as reflected by their Letters of Intent (LOIs) signed between them and the International Monetary Fund specified the commitment to shift their exchange rate arrangements to more flexible regimes. However as Mckinnon (2000) has warned the "old habit" of keeping a rigid exchange rate policy remains to be popular in most East Asian economies. Mckinnon shows that East Asian developing countries had pegged their currencies to the US dollar for more than a decade before the break of the 1997 financial crisis and that some of these countries had temporarily relaxed their rigid policy against the US dollar during the period immediately after the break of the 1997 crisis – June 1997 to December.

Figure 2 – De facto classification regime distribution by country group, 1940 - 2001 (in percent of annual observations for each group)



[Sources: Reinhart and Rogoff (2004) and IMF staff estimates]

However, driven by the need to stabilize their national currencies and to shield the local markets from the volatilities of the foreign exchange market, the soft-dollar pegged has once again become the exchange rate regime of the EA economies since 1999. Dollar exchange rates, particularly when observed on a high frequency (daily) basis, have become as stable as they were before the crisis. Calvo and Reinhart (2000) showed that during much of the 80s and 90s, the probability that the monthly percentage change of nominal exchange rates for selected EA currencies against the US dollar falls within ±1 percent band and ±2.5 percent band was in average above 96 percent, with the exception of the Philippines and Singapore which had a probability of 75 and 89 percent, respectively.

According to Mckinnon (1999) there where a number of reasons why these EA economies adopted what he calls the East Asian Dollar Standard. By keying on the dollar, the macroeconomic policies of the crisis economies— Indonesia, Korea, Malaysia, Philippines, and Thailand were (loosely) tied to each other— and to those of the non-crisis economies of Hong Kong, Singapore, and Taiwan. Their dollar exchange rates remained fairly stable for more than a decade and, by the purchasing power parity criterion, were more or less correctly aligned with each other and with the American price level. Besides insulating each other from beggar-thy-neighbour devaluations, these informal dollar pegs had successfully anchored their domestic (wholesale) price levels during their remarkably rapid economic growth in the 1980s through 1996. What's more interesting is that in a similar vain, a credible peg of 360 yen to the dollar was the monetary anchor in Japan's own great era of high growth and rapid financial transformation in the 1950s and 1960s.

Bénassy-Quéré (1997) argues that the pegging of Asian currency to the US dollar cannot be justified by the theory of optimal currency areas and as such the peg to the dollar can only be explained in another way. Bénassy-Quéré argues that because their growth heavily relies on the development of exports and on foreign direct investment, monetary authorities seem to stress the stability of the real effective exchange rate as the intermediate target. In such a framework, she shows that pegging to the US dollar is the result of the lack of regional monetary cooperation: each country chooses to peg the US dollar because this is the choice of its Asian partners. As North America and Asian partners other than Japan account for more than a half of foreign trade of each Asian country, this choice leads to a relatively stable external competitiveness.

4. Shifting priorities and approaches in HPAEs in the 2000s

This section serves to highlight the important point that policies are time bound and, what seems appropriate in one phase of growth and development may not be the case in another. This is certainly true for most East Asian economies whose trade structure has changed over the past few years. As such there is growing concern that the old system of pegging against the dollar might no longer be appropriate given the increase in intra regional trade among Asian economies, their reliance on Japan for intermediate inputs and their growing yen debt (Beng, Gan Wee, 2000). Since the 1997 crisis, a significant number of studies (see Slavov, 2004; McKibbin and Le, 2002; Michael *et al.,* 2001; Williamson, 2000; Bénassy-Quéré, 1997) on HPAEs have focused on the appropriate exchange rate regime for the region. McKibbin and Le (2002) reviewed the literature on studies that attempt to come up with an appropriate exchange rate regime for Asia and found that most of these studies have relied on simulating various hypothesized basket fixed exchange rate regimes to determine the effect on various economic indicators. Some have hypothesized the impact of increasing the weighting of the Yen in the basket to take cognisance of the prominent role the Yen plays with respect to the imports of these countries.

In their paper on a framework for exchange rate policy in Korea, Michael et al. (2001) show that Korea should remain with its managed exchange rate regime which it introduced after the crisis but should add inflation targeting and should make the criterion for sterilized intervention explicit. Their proposal is that interest rate policy be used to attain a "flexible" inflation target. Flexibility in this context means that the authorities also care about short-run fluctuations in domestic output and employment. The less powerful policy tool, sterilized intervention in the foreign exchange market, would be used to limit day to day changes in exchange rates. They argue that the government should continue to be an important participant in the foreign exchange market but not attempt to establish a level for the exchange rate. Intervention should be triggered by exchange rate volatility but constrained by an announced target for the government's overall net foreign asset position. Their overall conclusion is that while there are good arguments both for intermediate regimes and hard pegs these regimes are not consistent with Korea's current circumstances. They go on to say in the absence of explicit rules for floating and inflation targeting it seems likely that that policy will drift toward a return to an adjustable peg regime prone to crises.

In another study on the appropriate exchange rate regime for Asia McKibbin and Le (2002) provide some empirical evidence on the impacts of alternative regimes using a global empirical model (G-Cubed (Asia-Pacific) model) containing considerable detail on individual Asian economies including both sectoral dis-aggregation for each economy, macroeconomic features, and the linkages between countries in the region through international trade of goods and financial assets. The exchange rate regimes compared are floating exchange rates throughout Asia (with each central bank targeting inflation) and three forms of fixed exchange rates: a basket peg in which each Asian economy pegs their exchange rate to a basket of the Euro, $US and Yen (with Japan pegging to a basket of the Euro and $US); a Yen zone in which each

Asian economy pegs their exchange rate to the Yen (and the Bank of Japan targets inflation); and an Asian Currency Unit in which a single currency circulates in Asia and an Asian central bank targets average Asia-wide inflation. They consider a number of shocks to test the performance of each regime, the shocks considered are shocks to aggregate demand, aggregate supply and economy wide risk that are either global, Asia wide or country specific. Their overall findings is that no regime dominates for all shocks but the regimes of floating and a basket peg to the $US, Euro and yen generally perform better than the Asian currency union on Yen zone regimes.

5. The intermediate option

The studies in the previous section seem to be proposing some variant of a basket peg in one way or another, with Michael et al. (2001) suggesting that for Korea mild sterilized intervention in the foreign exchange market, can be used to limit day to day changes in exchange rates. Looking at the intermediate option does not imply that this paper is advocating for such a system of exchange rate management but rather it is included to highlight its central role in the HPAEs debate on exchange rate policy. Almost a decade after the East Asian crisis the corner solutions argument also known as the disappearing middle hypothesis has remained a central part of exchange rate policy debate. The debate on exchange rate policy has also centred around what position a country should occupy on this continuum. The above views of an intermediate option are also echoed by Williamson (2000) who believes that this form of exchange rate policy is important for emerging countries. In his book, which is an attempt to revive the intermediate option his main proposal with specific reference to Asia is the use of the basket, band and crawl (BBC) rules for exchange rate management among other intermediate options. Central to the BBC is the need for the monetary authorities to be able to come up with techniques to estimate the fundamental equilibrium exchange rate and whether the variables that could be deployed to influence the exchange rate can do so without having side effects that exceed there benefits. As to the accuracy of such an exercise Williamson argues that the IMF has been making such calculations to guide its own internal decision making since the European Exchange Rate Mechanism Crisis. He goes on to say that no one has confidence that such estimates can be made accurately but precision is not needed to provide useful guidance, given the size of the swings that unmanaged exchange rates have exhibited.

Williamson (2000) then goes on to give a very compelling comparison of what he considers to be a good case of how misalignments can have a significant impact on the economic performance of a country. His analysis looks at India and New Zealand. According to him the former was a good example of a "sclerotic economy" until it implemented microeconomic reforms in 1991. Besides having several fundamental macroeconomic problems it had a heavily managed floating exchange rate and a pragmatic monetary policy. Against all this, Williamson goes to note that India suffered only 1 year of recession in 1991 – 1992, before bouncing back to near its growth rate (5.3% in 1992-93), and then accelerating in the mid-1990s to achieve 3 years of consecutive growth of more than 7 percent.

On the other hand New Zealand was the most "sclerotic" of the countries in the OECD in 1984, when it initiated a much needed liberalisation of its economy. Its microeconomic reforms were accompanied by a policy of a free floating exchange rate, monetary tightening, slow restoration of fiscal discipline and removal of all controls on capital inflows. According to Williamson, these where the kind of reforms that excited Wall Street and as such prompted a capital inflows and a large appreciation of the nominal and the real exchange rate and as such induced a large current account deficit and a slowdown in growth. Per capita income stagnated for 8 years after the initiation of the reform, while unemployment rose from 2 to 11%, income distribution became noticeably more unequal, and the foreign debt built up to

more than 80% of GDP. It was only in 1992 that New Zealand's inflation fell to less than 2%, which had been mandated as the unique objective of the central bank, and thus permit an easing of monetary policy, which brought the exchange rate back to a realistic level that permitted a resumption of growth. In the 7 years following the initiation of microeconomic liberalisation, the growth rate averaged only 0.3%, a full 2% less than the average 2.3 percent growth during the 10 years before the initiation of reform. According to Williamson though growth did finally come in the 1990s it was significantly slower than India.

In trying to explain this difference in the impact of reforms in the two countries Williamson contends that the obvious explanation is in their very differing macroeconomic policy stances, of which their differing exchange rate policies were an integral part. India managed the exchange rate with the objective of maintaining competitiveness and it chose a policy of accumulating reserves, a fiscal-monetary mix and controls on capital inflows that were all reasonably consistent with that objective. New Zealand on the other hand made no attempt to intervene by building reserves and limiting the capital inflows attracted by "an ideological stance congenial to Wall Street" and by not seeking a fiscal-monetary mix consistent with maintaining competitiveness.

Williamson then goes on to support his claim by noting that one factor that appears on almost everyone's list of explanations of the East Asian miracle was the policy of maintaining competitive exchanges rates. He goes on to argue that it is the potential inability of East Asia to achieve the pre-crisis growth rate in their post crisis era of reasonably free floating regimes that underlies the wide spread "fear of floating. Williamson also suggests that once Wall Street discovers a country that has implemented good policies such as the removal of capital controls as was the case in New Zealand the capital inflows will certainly follow. These will push the domestic currency up and undermine the competitiveness of its tradable goods industries as happened in the latter country thus either discouraging overall investment and bringing the boom to a quick halt or else redirect investment toward the non-traded goods industries and making the boom so "lopsided" that it will lead to a balance of payments crisis after a somewhat longer period.

Of these cases, 17 out of 33 had de jure or de facto pegged exchange rates, two (Argentina and Hong Kong) had a hard fixed exchange rate backed up by a currency board. Two (Chile, 1987-89, and Indonesia) had crawling pegs, and three (Chile, 1991-93 and 1995-97, and Poland) had crawling bands. Leaving 9 cases of floating rates, of which in at least 7 (India, South Korea, 1981-89 and 1994-96; Malaysia; Taiwan, 1986-89 and 1991-95; and Turkey) the rate was heavily managed. The two cases of economies with a reasonably freely floating exchange rate achieving rapid growth were Peru in 1995-97 and Uganda in 1993-96. Based on Calvo and Reinhart (2000) even these latter cases are questionable cases of free floating.

In his paper on growth policies in developing countries Rodrik (2004) narrates the disappointing history of reforms in developing countries in the 1980s and 1990s. He notes that economic growth in those countries that adopted the "stabilise, liberalise and privatise" approach remained low in absolute terms. Economic and productivity growth in Latin America was slow in the 1990s and this picture was much worse in the period 1950 – 1980. He goes on to say, "This puzzle would be even more distressing if it were not the case that some of the poorest and most populous countries in the world have done amazingly well in the last two decades. China …,

with an average economic growth rate since 1980 of around 9 percent in per capita terms, a stupendous performance. … India has managed to engineer its own smaller-scale miracle as well, doubling its growth rate since 1980. …". Simply put according to Rodrik the most successful growth performers have followed heterodox policies.

Table 1 – Cases of economies with fast growth since 1980

Country	Period	Average	Exchange rate regime
Poland	1995 - 97	6.7	Crawling band
Chile	1991 - 93	9.1	Crawling band
Chile	1995 - 97	8.4	Crawling band
Indonesia	1988 - 96	7.9	Crawling peg
Chile	1987 - 89	8.2	Crawling peg
Argentina	1991 - 94	8.5	Currency board
Hong Kong	1986 - 89	10.7	Currency board
China	1982 - 88	11.3	De facto peg
China	1991 - 97	11.2	De facto peg
Peru	1993 - 96	9.0	Float
Uganda	1993 - 96	8.9	Float
India	1994 - 96	7.6	Managed float
Malaysia	1988 - 97	8.8	Managed float
Turkey	1995 - 97	7.3	Managed float
South Korea1	1981 - 89	9.1	Managed float1
Taiwan	1986 - 89	10.1	Managed float
Taiwan	1991 - 95	6.6	Managed float
South Korea	1994 - 96	8.2	Managed float
Angola	1995 - 97	10.2	Pegged
Cameroon	1981 - 86	9.0	Pegged
Egypt	1982 - 86	7.5	Pegged
El Salvador	1992 - 96	6.8	Pegged
Mozambique	1987 - 89	9.8	Pegged
Myanmar	1992 - 96	7.3	Pegged
Nigeria	1988 - 91	8.4	Pegged
Pakistan	1980 - 83	7.9	Pegged
Rwanda	1995 - 97	19.8	Pegged
Slovak Republic	1995 - 97	6.7	Pegged
Syria	1990 - 95	7.5	Pegged
Thailand	1987 - 95	9.9	Pegged
Uganda	1988 - 90	7.0	Pegged
Venezuela	1990 - 92	7.4	Pegged
Vietnam	1991 - 97	8.4	Pegged

[Source: Williamson 2000 (World Bank)]

6. Exchange rate depreciation and stabilisation

This section briefly looks at the sequencing of exchange rate intervention with respect to exchange rate movements. It focuses on how depreciation impacts on exports, that is, should exchange rate intervention focus on the level or should it also deal with the question of volatility. It has long been part of a typical World Bank prescription that developing economies depreciate their currency with the aim of promoting exports. The question as to whether a depreciation increases exports has not been conclusively resolved in the literature. Fang *et al* (2005) argue that exchange rate movements affect exports through its depreciation and its variability (risk). A depreciation raises exports by lowering the foreign currency price of exports, but the associated exchange rate risk could offset the positive effect. Some studies find that a depreciation decreases exports (Filiztekin, 2004) whilst others find evidence to the contrary (see Nucci and Pozzolo, 2004; Frenkel, 2004; Sekkat and Varoudakis, 2002; Sauer and Bohara, 2001). Golub and Ceglowski (2002) calculate South African real equilibrium exchange rates (REERs) and examine the quantitative relationships between these REERs and trade in manufactured goods. The main findings by Golub and Ceglowski indicate that for the REER series as a group, South African competitiveness worsened in the early 1980s then improved dramatically in the mid-1980s. There was a period of real appreciation around 1992. The rest of the 1990s have witnessed a substantial real depreciation, which was associated with an increase in the proportion of exports as a percentage of GDP.

The empirical evidence on the effects of exchange rate risk is also mixed. Mckenzie (1998) finds that the impact of exchange volatility differs between traded good sectors although one of the conclusions was that it remains difficult to firmly establish the nature of the relationship. De Vita and Abbott (2004) find that UK exports to the EU14 at both aggregate and sectoral level are generally income elastic, relative price inelastic and largely unaffected by short term ER volatility. Re-estimation of the model using a long-term measure of volatility however provides evidence supporting the hypothesis that ER uncertainty has a negative and significant influence on UK exports to EU countries.

There is a view that sees exchange rate risk as a greater constraint to exports growth, providing the rationale for foreign exchange policies that focus on reducing exchange rate fluctuations. Fang et al (2005) explore the possible respective impacts of currency depreciation versus volatility for eight Asian countries. In the sample, every country experienced depreciation and export growth, on average. Thailand experienced the highest average export growth at 1.031% with a depreciation of 0.196%. Indonesia experienced the highest monthly depreciation at 0.336% with an export growth of 0.486%. It appears that depreciation encourages exports, on average, but with different effects. They go on to note that its contribution to export growth is weak. Exchange rate risk contributes to export growth in Malaysia and the Philippines, leading to positive net effects. Exchange rate risk generates a negative effect for six of the countries, resulting in a negative net effect in Indonesia, Japan, Singapore, Taiwan and a zero net effect in Korea and Thailand. Their overall conclusion is that since the negative effect of exchange rate risk may offset, or even dominate, positive contributions from depreciation, policy makers need to reduce exchange rate

fluctuations along with and possibly before efforts to depreciate the currency. In the South African case this means that the SARB will have to resolve the current volatility of the exchange rate before addressing issues related to its level. Another important conclusion from the study is that little guarantee exists that exchange market intervention will succeed, since exporters react differently to the exchange rate and its associated risk. Furthermore, conditions vary across countries and each requires evaluation on its own merits.

7. The exchange rate and export-oriented FDI: the international experience

The exchange rate affects foreign direct investment (FDI) in two ways: the level of the exchange rate and its variability. According to Bénassy-Quéré *et al* (1999) if the investor aims at serving the local market, FDI and trade are substitutes. An appreciation of the local currency increases FDI inflows due to higher purchasing power of the local consumers. Conversely, a depreciation in the real exchange rate of the recipient country increases FDI through reduced cost of capital. Alternatively, if FDI aims at producing for re-export, it complements trade, and an appreciation of the local currency reduces FDI inflows through lower competitiveness (higher labour costs). Then there is exchange rate variability which affects FDI through the option to wait, in the line of Dixit and Pindyick (1994), in the presence of uncertainty and sunk costs. Notwithstanding such an option, exchange rate volatility affects FDI in various ways. Producing on the destination market is a good substitute to exports if there is a strong uncertainty on exchange rates. However, if the production is partially re-exported this benefit vanishes.

It is interesting to note that along side the growth in East Asian exports there was a surge in FDI inflows a phenomena that has come to be known as the trade – FDI nexus where high export growth has become increasingly linked to surging FDI inflows and deeper regional economic integration (ADBI, 2002). According to the ADBI from 1985 to 1995, the merchandise exports of nine EA2 economies grew by 15 percent per year compared to a rate of 10 percent for world exports, while inward-FDI to the 9 EA economies expanded by 29 percent annually compared to 19 percent worldwide. These economies also outperformed global trends most profoundly from 1990 to 1995, maintaining robust export and FDI growth while world growth rates remained moderate. The latter raises an important issue for South Africa with respect to exchange rate variability and the potential for attracting export growth through FDI.

There seem to be little consensus as to what the impact of exchange rate variability has on FDI inflows. On the one hand, most theoretical models give an ambiguous picture of how exchange rate uncertainty and volatility affect the direction and magnitude of FDI inflows (Russ, 2002; Russ, 2005). On the other hand a number of empirical studies have found a negative relationship (Kiyota and Urata 2004; Brzozowski, 2003). Brzozowski (2003) analyzes theoretically and empirically the likely impact of the reduction in exchange rate uncertainty, due to the EMU accession, on the intensity of FDI inflows into candidate countries. He finds that exchange rate uncertainty and volatility may negatively influence the decision to locate investment in transition and accession countries. Furthermore he finds that nominal exchange rate

[2] Hong Kong, China; Korea; Singapore; Taipei, China; Indonesia; Malaysia; Philippines; Thailand and the People's Republic of China

uncertainty seems to particularly hamper FDI inflows in accession countries. The key finding of his study is that euro adoption is likely to exert a positive influence on FDI inflows in accession countries.

Kiyota and Urata (2004) review studies which have looked at the relationship between the exchange rate and FDI, breaking overall FDI inflows into thirteen separate industries, they found that all of the thirteen coefficients on the exchange rate presented negative signs, indicating that depreciation leads to greater FDI, and five of them were statistically significant. On the relationship between exchange rate volatility and FDI Kiyota and Urata note that compared with the studies analysing the effects of exchange rate and other variables, there have been only few studies that empirically examined the impacts of exchange rate volatility on FDI. Although the effects of the exchange rate on FDI are generally robust in that the depreciation of the host currency promotes FDI inflows to that country, the impacts of exchange rate volatility on FDI have been shown to be ambiguous. They go on to examine the impact of the changes in the real exchange rate and its volatility on FDI. Examining Japan's FDI by industries, they found that the depreciation of the currency of the host country attracted FDI, while the high volatility of the exchange rate discouraged FDI. Their results suggest the need to avoid over-valuation of the exchange rate and to maintain stable but flexible exchange rate in order to attract FDI.

As for the relationship between export performance and FDI Pain and Wakelin (1997) examine the relationship between the location of production and the trade performance of 11 OECD countries since 1971. They try and answer the following questions; has national export performance, that is exports relative to foreign market size, been affected by FDI? Does an increase in either inward or outward FDI raise or lower exports compared to the level they would otherwise have achieved given the level of foreign demand and other characteristics of domestically produced goods? They use a standard export demand model which was extended to include relative prices, market size and measures of relative innovation, with indicators of both inward and outward investment levels. They find that the sign and magnitude of the direct investment effects vary by country. Outward investment has a generally negative impact on trade shares, while inward investment has a generally positive one.

8. Experiences of other high growth countries

For details of the following case studies please see Berry's (2005) paper on high growth in developing countries.

8.1 Chile

Chile has an interesting economic history whose performance in the past and even up to now is still influenced by its mineral endowment. It is this feature of Chile that makes its story of significant relevance to South Africa. For the bulk of the post war period Chile was a slow growth country with a falling growth rate that started in the 20s, averaging about 4.1% during the 1960s and 3.6% over the 1970s. Savings where low which probably explained the low rate of investment, there was wide spread import-substitution with very high rates of protection for some products. At the time Chile's mineral endowment prevented it from venturing into the production of other tradables. This caused a lot of employment challenges for Chile in that by 1970 nearly half (46.7%) of Chile's employment was in services with only 23.2% in agriculture and about 20% in manufacturing (Mamalakis, 1976, 11, 165) in Berry (2005). However, from the mid-70s to the early 80s Chile experienced a boom which was described as unsustainable some of the reasons for this where a large balance of payments deficit created by maintenance of a fixed nominal exchange rate which eventually became severely overvalued but also, according to some authors, because of the "artificial" character of the growth. After this first wave of growth Chile experienced a second wave of growth which has been sustained. As for the employment picture during 1973-84 employment rose by 12% (just over 1% per year) whereas over 1985-93 the increase was of 46.7% (4.35% per year), for a more detailed description of the evolution of unemployment/employment in Chile see Berry. According to Berry (2005) some of the reasons for the recent growth acceleration included the role of export growth in the overall take-off; the sources of rising investment and savings rates, including the impact of FDI and of the reform of the pension system to an individual capitalization model; and the factors which led to the rapid growth of exports, e.g. the relative roles played by the dramatic trade and other market reforms undertaken and the way they were implemented vs. the role of the exchange rate and other forms of support.

The latter thus highlights the two main schools of thought with respect to Chiles growth one that attributes growth to the correct sequencing of macro policies and the other to the role of the exchange rate. Though these schools differ in there focus on what contributed to the growth in Chile it is however undeniable that the exchange rate played an important role in the lasting boom from the early 80s on. For example, Ffrench-Davis (2002, 181) in Berry (2005) sees the export take-off after 1982 as much healthier, based on a sharply depreciated and relatively stable real exchange rate and a more pragmatic and flexible trade reform. Like many other countries, Chile has on occasion used the exchange rate as a tool to fight inflation, accounting for the real appreciation from 1976 on. After the disastrous pegging of the nominal rate to the dollar (leading to the crisis of the early 1980s) and some experimentation in its wake, a

crawling peg was adopted in 1983 and used thereafter. The real exchange rate almost doubled between 1980-82 and 1986-89 (Ffrench-Davis, 2002, 168). Meanwhile some protection was provided for importables and non-traditional exportables, more use made of anti-dumping regulations and price bands set for three main agricultural products, wheat, sugar and oil seeds.

8.2 Brazil

Brazil's economic performance in recent years has been less than satisfactory it might be interesting to look at the period when it experienced a period of high growth (1968 – 73), the growth acceleration itself started in 1963. Brazil has always had a colourful political history which to a great extent influenced its macroeconomic performance; one of these problems with respect to its currency was exchange rate overvaluation which posed a permanent threat endangered by the co-existence of inflation with fixed exchange rates. According to Berry (2005) as Brazil accelerated from its slow-growth (at 3.4%) interval (1963-67) to the fast growth (9.4%) period 1968-1976 the investment ratio rose less than in most other cases of acceleration, from 16.0% to 21.6%, although by the end of the fast-growth period it had reached nearly 25%. And unlike most of the other cases, Brazil's fast growth episode did not appear to be based on exports, the export to GDP ratio having stayed nearly constant--6.9% in the slow growth period and 6.5% in the fast growth phase. In keeping with that constancy, there was not much difference in the real exchange rate between the two periods. As such it can be seen that the case of Brazil during its period of high growth stands in sharp contrast to that of the East Asian economies in that the real exchange rate did not play a major role. Some of the reason that have be given to explain Brazil's growth include; the fact that growth was achieved with a high and rising marginal output/capital ratio, suggesting generally effective resource use and allocation; it was aided by the ability to draw into production previously excess capacity; and both the acceleration and the subsequent strong growth over the remainder of the 1970s took place under repressive military regimes but with strong economic technocrats at the helm.

It should, however, be noted that though the exchange rate is rarely quoted as being an important component of the Brazilian miracle it should however be emphasised that according to Berry (2005) a key step facilitating export success was the adoption of a crawling peg exchange rate in 1968; this allowed a stable real exchange rate over the Miracle years, in spite of the political sensitivity of the exchange rate which made it hard to devalue rapidly. Berry goes on to note that paradoxically, the real exchange rate was higher (more appreciated) during the Miracle years than either in the immediately preceding or succeeding years, due to the large inflows of capital during the period. Still, exports grew faster (25% per year in current dollar terms) than before or after. In part this was due to various types of subsidies for exportables. The real exchange rate was also much more stable at this time than before or since, suggesting (consistent with much literature) the importance for such stability for strong growth of the tradables sector. According to Berry (2005) by 1973 the economy was operating at close to full capacity. Industrial output rose at about 15% per year and. employment at almost 9%--so this growth burst certainly created many jobs; by 1974 employment in that sector was nearly 70% higher than in 1967.

8.3 Ireland

The Irish experience requires special mention as it offers important lessons as to how a country can increase its export oriented FDI in manufacturing. According to Barry (1999) after Ireland's economic collapse in the late 1950s a lot of fundamental and far-reaching policy changes where made. These saw the adoption of free trade and the replacement of policies that prohibited foreign ownership of firms with a policy that systematically cultivated FDI through a zero corporate profits tax on manufactured exports (replaced over the course of the 1980s by a flat rate of 10 per cent on all manufacturing) and attractive investment grants. In the following decades Ireland witnessed quite phenomenal growth of export-oriented FDI in manufacturing, from a zero base in the late 1950s to a situation where almost 65 per cent of gross output and over 45 per cent of employment in manufacturing is in foreign-owned export-oriented firms. It is also interesting to note that FDI inflows into Ireland have not gone primarily into sectors in which the economy had a traditional comparative advantage. Ireland actually had a revealed comparative disadvantage in some of the sectors such as Chemicals, Metals and Engineering, which have attracted strong FDI inflows (Barry, 1999). In trying to explain the Sectoral destination of such flows, Barry, notes that from the Irish experience and that of a number of other countries it appears that manufacturing-sector FDI goes largely into sectors in which there are firm-level increasing returns to scale.3 As for productivity, job length and export orientation Barry notes that foreign plants in Ireland are predominately of US, UK and German ownership. They have a much higher propensity to import their material inputs, are more export oriented (with only the UK plants having any significant reliance on the domestic market), and are larger, more productive and (with the exception of German MNCs) more profitable than the indigenous plants. In Ireland the average duration of a manufacturing sector job is higher (at 13 years) in the foreign sector than in the indigenous sector (where it is 10 years). The results available for Spain are quite similar to those for Ireland.

Barry (1999) shows that foreign owned firms spend most of their expenditures on services, in contrast to indigenous firms that spend most of they expenditure on materials. O'Malley (1995) in his study then shows that it is for this reason, there is more employment created per manufacturing-sector job, by the backward linkages of foreign firms than of indigenous firms. There are increasing numbers of both service sector and indigenous-manufacturing jobs associated with every 100 jobs in foreign manufacturing. The ratio of secondary employment in services to direct manufacturing employment for overseas industry increased from 93 secondary jobs in services per 100 direct manufacturing jobs in 1983 to 105 per 100 in 1992. He approximates that the number of jobs in indigenous manufacturing producing industrial products for overseas industry rose from 10 to 13 per 100 overseas-

[3] Increasing Returns Sectors in Ireland; Vehicles, Other transport, Chemicals, Man-made fibres, Metals, Office machinery, Mechanical Engineering, Electrical Engineering, Ins. Engineering, Pulp paper, Clay production, Cement etc., Glass, glass wear, Rubber production, Brewing, Tobacco, Cocoa, chocolate, Other foods.

manufacturing jobs over the same period. For indigenous industry the trend is less monotonic; nevertheless, after falling between 1983 and 1990, the number of secondary service jobs per 100 indigenous manufacturing jobs rose each year thereafter up to the end of his sample period, 1992.

Still on the issue of the exchange rate and FDI Bénassy-Quéré *et al* (1999) look at the exchange rate strategies that are used by different countries to attract FDI. Their analysis is motivated by the need of most developing countries to starve off destabilising short term capital flows (portfolio investment) by encouraging long term flows (FDI) and the fact that the debate on the way to re-orient capital flows towards long term financing (through microeconomic reforms or capital controls) does not generally include the choice of an exchange-rate regime. They argue that the exchange rate regime influences foreign direct investors more than portfolio investors and hence the composition of capital flows since portfolio investors should be indifferent to the exchange rate regime as far as derivative markets allow them to hedge. But foreign direct investors should worry about the exchange rate regime, because they cannot hedge at their horizon and are mainly interested in macroeconomic variables such as relative labour costs or purchasing power. They fill the exchange rate regime gap by developing a model where the choice of an exchange-rate regime is re-considered by integrating the determinants of multinational firms' locations. They consider the case of a risk-adverse multinational firm, which contemplates relocating to two alternative foreign locations in order to re-export. Their analysis explicitly models the trade-off between price competitiveness and a stable nominal exchange rate. Looking at a panel of 42 developing countries receiving FDI from 17 OECD countries, over 1984-1996 the results confirm the importance of the exchange-rate regime. Specifically, nominal exchange rate instability is detrimental to foreign direct investment, and its impact compares with that of misalignments. In addition, from the perspective of the host country, the correlation between its bilateral exchange rate against the origin country and the one of alternative locations has a sizable impact on inward FDI.

The findings of Bénassy-Quéré *et al* (1999) draw very important policy prescriptions for any developing country that is trying to grow its export oriented FDI. Their results draw three policy implications, which they illustrate through numerical simulations. Firstly, the exchange-rate instability induced by a free-floating regime is detrimental to FDI inflows, even if it prevents the real exchange rate to appreciate. They reach this conclusion after comparing four4 stylised exchange rate regimes for the recipient country. The "successful currency board" appears the best regime for attracting FDI, because the real exchange rate stays constant without any nominal exchange rate volatility. However, in evaluating each exchange rate regime, it should be stressed that exchange rate stability has a sizable impact on FDI, which compares to the impact of price competitiveness. Secondly, each country should stabilize its currency against the country or area, which would potentially be its major FDI supplier. Lastly, and overall, the building of currency blocs could be a way of increasing FDI to emerging countries, since if would allow investors to diversify the exchange rate risk across various locations. Looking at the first two policy prescriptions it becomes easier to see

[4] Currency board, the fixed exchange rate regime, the crawling peg or managed floating regime and the free-floating regime.

how the East Asian economies managed to attract so much FDI inflows. Firstly, the destabilising impact of free floating exchange rates was avoided by pegging their currencies and secondly, they all pegged to the US dollar which was their major trading partner. The third policy implication is in line with the above conclusion by Brzozowski (2003) that euro adoption is likely to exert a positive influence on FDI inflows in accession countries.

9. Exchange rate regime and performance (inflation and growth)

Though the relationship between economic performance and the exchange has been explored in a number of studies the direct channel of causality still has to be established. According to Ghosh et al, (1996) although the theoretical relationships are ambiguous, empirical evidence suggests a strong link between the choice of the exchange rate regime and macroeconomic performance. Adopting a pegged exchange rate can lead to lower inflation, but it can also lead to slower productivity growth. The low rate of inflation is associated with the political costs of abandoning the peg and as such induces tighter policies. In their paper which uses a detailed classification of the exchange rate regime they find that countries that choose fixed exchange rates achieve lower inflation with an average annual inflation rate of 8 percent, compared with 14 percent for intermediate regimes, and 16 percent for floating regimes, see figure 3 below. On the other hand according to the IMF (1997) the major difference between economic performance between pegged and floating exchange rate regimes is with respect to inflation without a corresponding clear cut relationship between the regime and growth. The median growth appeared to be higher in the 90s for countries that had a flexible exchange rate, however, this was due to the inclusion of the fast growing Asian economies. The latter highlights a weakness in the IMFs analysis which only looks at the distinction between pegged and flexible, where the former comprises arrangements in which the domestic currency is pegged to a single foreign currency or to a basket of currencies, including the SDR. With the latter consisting of arrangements in which the exchange rate is officially classified as "managed" or "independently floating." Therefore this narrow definition does not allow one to see the difference in the performance of managed floats and pegged regimes. Another weakness with the exchange rate regime classification which is used by the IMF is that it is derived from the de facto classification which assume that countries do what they say they do.

There is also a link, albeit weaker, between the exchange rate regime and the growth of output. To the extent that fixing the exchange rate engenders greater policy confidence, it can foster higher investment. Conversely, a fixed rate, if set at the "wrong" level, can result in a misallocation of resources. They also found that countries that maintained pegged exchange rates did indeed have higher investment, although productivity grew more slowly than in countries with floating exchange rates. Overall, per capita growth was slightly lower in countries with pegged exchange rates.

In a study by Levy-Yeyati and Sturzenegger (2003) which tried to provide evidence on the implications of the choice of a particular exchange rate regime on economic growth they find evidence that sharply contrasts previous findings. They results strongly suggest that exchange rate regimes indeed matter in terms of real economic performance for non-industrial countries, while this link appears to be much weaker for industrial economies. In particular, they find that, for the 20 former countries, fixed exchange rate regimes are connected with slower growth rates and higher output volatility, an association that proved to be robust to several alternative specifications and checks.

In a recent study by Dubas et al (2005) which also looked at exchange rate regime and growth the results show a different picture to those obtained by Levy-Yeyati and Sturzenegger. Table 2 shows data listed by mean GDP growth and volatility sorted by exchange rate regime. It shows that intermediate regime countries have the highest mean growth rate. Non industrialized countries with an effective intermediate classification also have the lowest volatility in GDP growth. As a group, effective fixers have the second highest growth rate and effective floaters had the lowest growth rates.

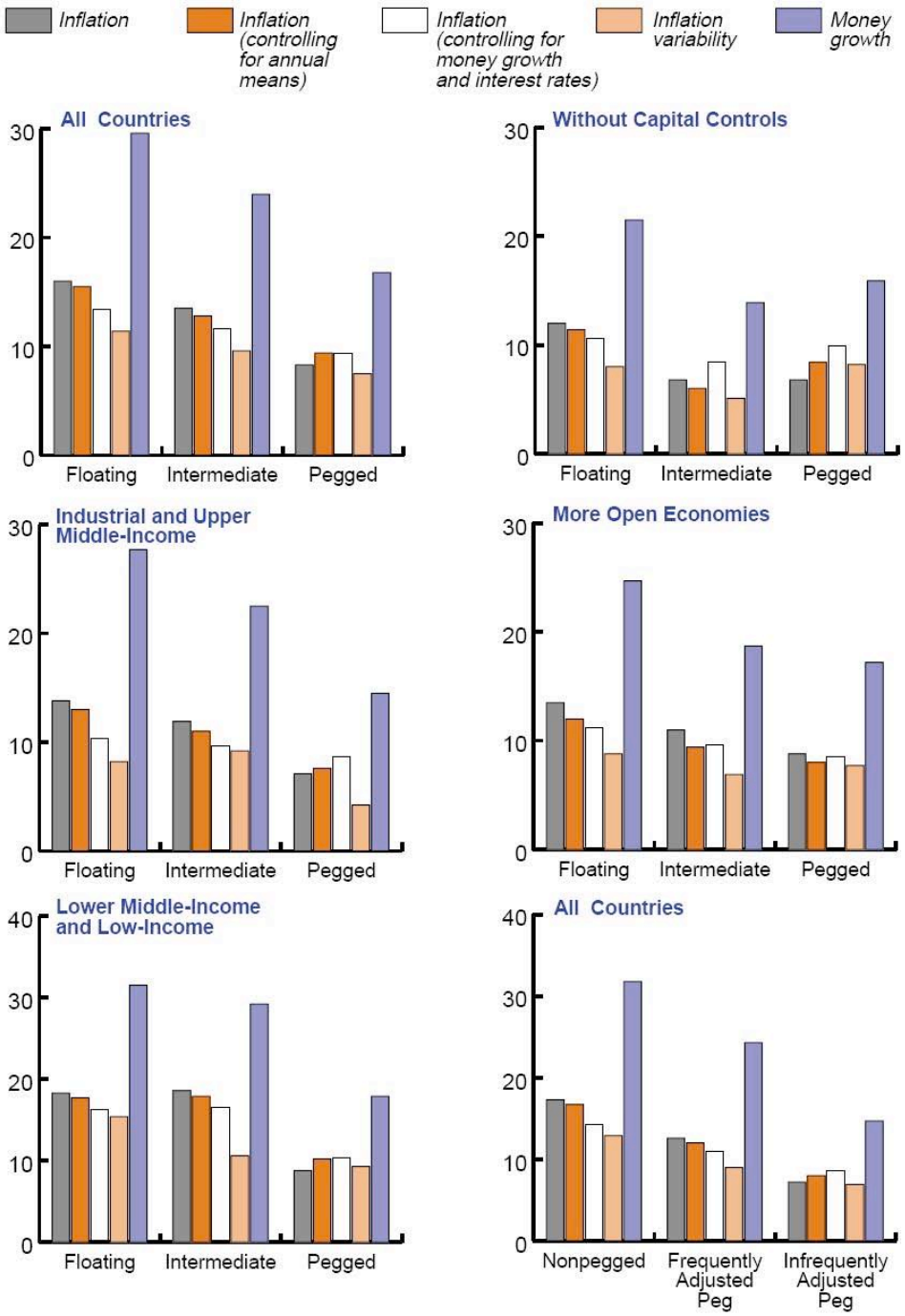
Table 2 - Growth rates, growth volatility and exchange rate regimes

	All Countries		Industrialized		Non - Industrialized	
Classification	**Growth**	**Volatility**	**Growth**	**Volatility**	**Growth**	**Volatility**
Floaters	0.845	3.596	2.048	1.911	0.570	3.988
Intermediates	1.948	2.784	2.223	1.961	1.768	3.323
Fixers	1.687	3.692	2.144	1.640	1.603	4.092

[Source: Dubas et al (2005)]

Dubas et al (2005) verify the above by using an econometric procedure which considers regressions of per capita growth on a set of growth control variables and a set of exchange rate regime dummies. An estimation of the random-effects panel regressions reveals that that the highest growth rates are associated with de facto fixers. With all countries in the sample, the coefficient on the fixer dummy is significant with effective fixers growing a bit more than 1 percent faster than effective floaters. For industrialized countries, the coefficients on the regime dummies are positive and suggest slower growth for effective floaters than effective intermediates and fixers, but these estimates are not statistically significant.

Figure 3 – Inflation and exchange rate regime



[Source: Ghosh et al, (1996)]

For non-industrialized countries, they obtain a significant estimate of the coefficient on the fixer dummy. They go on to note that if this is a causal relationship, their estimates would imply that switching from a float to a fix would increase per capita growth by 1.3 percent. To shade more light on the above results they go on to replace the regime dummies with an index of exchange rate stability: They obtain positive

point estimates in the regressions that are significant in the full sample and for non industrialized countries. A unit increase in the stability index (higher means more stability) is associated with nearly a 1/2 percent increase in per capita growth. They go on to say the above results are in line with much of the extant literature and are consistent with research that has found trade benefits from currency blocs.

There is also evidence in the literature that seems to suggest that there might be a link between the choice of exchange rate regime and the level of economic development of a country, with the specific exchange rate option being largely determined by the economic need of the country at that level of development (Huang and Malhotra, 2004, Rogoff et al, 2003). In a study by Rogoff et al (2003) as economies mature, the value of exchange rate flexibility rises. The advantages of exchange rate flexibility increase as a country becomes more integrated into global capital markets and develops a sound financial system. Free floats have, on average, registered faster growth than other regimes in advanced countries, without incurring higher inflation. Conversely, in developing countries with limited access to private external capital, pegs and other limited–flexibility arrangements have been associated with lower inflation, without an apparent cost in terms of lower growth or higher growth volatility.

However, in emerging market economies with higher exposure to international capital flows, the more rigid regimes have had a higher incidence of crises. Huang and Malhotra's (2004) major finding is that for developing and emerging Asian economies, the choice of regime does affect the economic growth rate non- linearly–managed float outperforms other regimes – but do not affect the variability of growth. They findings suggest that not only but also how the choice of exchange rate regime affects economic growth critically depends on the level of development of that economy. Dubas et al (2005) use an econometric procedure to obtain de facto exchange rate regime classifications. They then use these de facto classifications to analysis the relationship between exchange rate regimes and growth. They find that growth is higher under stable currency-value regimes and that countries that exhibit `fear of floating' experience significantly higher growth. Though they are exchange classification issues in Maier's (2005) study, one of the overall conclusions is that positive effects of intermediate regimes of the Reinhart/Rogoff (2003) classification in developing countries should be emphasized, showing at least a tendency to not negative and possible positive effects of intermediate regimes on the poorest 40 percent in developing countries.

10 Conclusions

Several conclusions can be drawn from the above literature; firstly, the structure of the global economy has changed significantly ever since the East Asian countries started they out-ward oriented development strategies. With respect to the challenges that emerging economies might face in trying to implement HPAEs type policies Weiss (2005) makes a very important distinction between least developed countries and emerging economies, which reflects differences in their broad industrial structure and subsequent industrialisation strategies. In the lower income group exports tend to be dominated by primary products and as such industrialization has proceeded only very slowly. The different needs of today's least developed economies, and those with low incomes that do not fall exactly into this category, are recognized by their differential treatment in the WTO. For this group the policy lesson is that some of the measures of industrial policy used successfully in the NIEs– like export subsidies and measures to support new producers– still have a role to play at a relatively early stage of industrialization and can be used effectively to encourage a diversification of exports and the expansion of new manufactures. These do not contravene WTO regulations. For higher income emerging economies like South Africa, however, the agenda will differ and the objective will be to successfully upgrade the export structure and move up the ladder of comparative advantage. According to Weiss (2005) experience in the 1990's suggests strongly that government initiatives to support the industrial sector will remain important, but should now focus principally on measures like infrastructure provision, particularly related to information communications technology, education and skill development and fostering innovation in frontier technologies. This is a challenging agenda, but quite different from that faced by industrial planners 30 years ago.

Secondly, though this paper concentrates on how exchange policy influences the evolution of labour intensive exports and hence employment, issues about the specificity of exchange rate policy still remain important more so with the recent proposal by the pioneer of inflation targeting New Zealand to have the capacity to intervene in the foreign exchange market. According to the proposal, "…the Reserve Bank is proposing that when the New Zealand dollar is exceptionally and quite clearly unjustifiably high, the Reserve Bank could sell New Zealand dollars to buy foreign exchange, in a manner designed to put downward pressure on the exchange rate. Equally, when the exchange rate is exceptionally and clearly unjustifiably low, we could sell foreign exchange to buy New Zealand dollars, in a manner designed to put upwards pressure on the exchange rate".

Part of the proposal also highlights why the exchange rate is an issue in New Zealand. Firstly, it argues that, "…the amplitude of the New Zealand exchange rate cycle has long been a concern. The exchange rate varies across the cycle to a far greater extent than the underlying economic situation warrants. That is, the degree of exchange rate variation goes beyond that which is useful to the economy in terms of absorbing economic shocks and motivating business and household to adjust to lasting changes in New Zealand's external trading situation. Excess exchange rate variation makes engaging in business more difficult, reducing investment and thereby restricting the opportunities for New Zealand's growth. Excessive exchange rate variability can also make the Bank's task of achieving and maintaining price stability more difficult, potentially leading to unnecessary output, inflation and interest rate variability".

Secondly, "This excess variation is not confined to the New Zealand dollar. It is a feature of floating exchange rates - and indeed the New Zealand dollar is not the most variable exchange rate amongst the developed country group. Nor is it a new issue. But as inflation has been brought down and stabilised around the world, and as a result economies have become more stable overall, exchange rates cycles have not noticeably diminished. Excessive exchange rate variation stands out more obviously in this context as an unresolved issue."

Thirdly, one of the main conclusions from the experience of HPAEs is forceful and well communicated industrial policy and market access arrangements will be critical for success. Furthermore, it is also clear from the above literature that the exchange rate played a very important role in the success of almost all of the EA economies. Exchange rate policy is, however, only one element of a labour absorbing growth strategy and as such the precise causality needs consideration. A free float does not appear to have been the policy adopted by high growth labour absorbing economies. This does not mean that pegged currencies or managed floats are a recipe for success. But they do seem to have offered some stability, with exchange rate policy serving the role of keeping exports competitive to allow them access in international markets. By looking at the array of policies that where used in EA it is clear that though the exchange rate was and in some respects still remains an important arsenal in the EA model, it does not follow that by adopting exchange rate policies similar to those in EA a country will meet with the same success as the EA economies. The success of an intermediate regime should be seen as part of a broader policy framework that wields support from a number of supporting policies. The export led strategy has to reflect the fundamental developmental strategy of a country, which is not only endorsed by government but by all stake holders (the private sector and labour). The phenomenal growth archived by EA economies will be difficult to replicate, very few countries will be able to implement the many different policy instruments which sometimes included extensive government intervention in markets, to guide private sector resource allocation.

With respect to the latter, the World Bank (1993) notes that the HPAEs did not pursue the functions of growth per se but rather, they used multiple shifting policy instruments in pursuit of more straightforward economic objectives such as macroeconomic stability, rapid export growth, and high savings. "Pragmatic flexibility in the pursuit of such objectives -the capacity and willingness to change policies- is as much a hallmark of the HPAEs as any single policy instrument. This is well illustrated by the great variety of ways in which the HPAEs achieved two important objectives: macroeconomic stability and rapid export growth". It is, however, also important to note that the case of a intermediate option as spelt out by Williamson is quite compelling and the evidence on growth accelerations over the past two decades or so seems to suggest that they is definitely a case for considering such a regime. More so in a global economy where unregulated capital flows can cause large swings in a countries exchange rate policy leading to misalignments that can be highly disruptive to a country's export sector.

Fourth, central to the East Asian strategy is the notion of an engine for growth, which was used, in their catch-up process. This engine of growth in all the countries centred around exports with Korea's first five year plan in the 60s promoting the ideology of, "Exports First". One then sees the whole array of developmental policies and energies

in these countries being focused on achieving this all-consuming goal of growing their exports. For South Africa one can argue that it could make significant strides by coming up with what it deems as an appropriate engine of growth in its catch up process and then directing its battery of polices to ensure that this engine is kept running so as to deliver the much needed mileage in terms of reducing unemployment and poverty.

Fifth, the case of Chile shows that it is possible of a country to make significant macroeconomic gains beyond those that are engendered by its resource endowment. The case of Brazil during its period of growth clearly highlights among other things the fact that exchange rate stability is important for export performance. Whereas the case of Ireland shows that industrial policy specifically polices aimed at attracting FDI are important in turning the economic fortunes of a country.

In conclusion there are a number of issues that this paper still needs to look at which will be addressed in future drafts. We need to make a closer link between exchange rates and employment by analysing how they played through the economies of high growth countries. The analysis should also be broadened to include a review of other high growth countries, which do not fall under the HPAEs. Issues that surround specific aspects of their exchange rate policies such as; by how much did they devalue, with what periodisation? What was the impact on other macro-variables such as inflation? What where the incentive structures that encourage domestic investment?

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