

ISLANDS AND SMALL STATES INSTITUTE

Occasional Papers on Islands and Small States

**EXCHANGE RATE STRATEGIES
FOR SMALL ISLAND DEVELOPING**

Stephanie Vella

No: 5/2005

ISSN 1024-6282

This is a discussion paper which the author/s submitted for feedback from interested persons. The author/s are free to submit revised version of this paper for inclusion in other publications. An electronic version of this paper is available at www.um.edu.mt/islands. More information about the series of occasional papers can be obtained from the Islands and Small States Institute, University of Malta. Tel/Fax: 356-21344879, email: islands@um.edu.mt.

ABSTRACT: The choice of exchange rate regime is a crucial decision for any economy, with important implications for inflation and long term economic growth. This paper uses conceptual and empirical approaches to show that relatively hard exchange rate arrangements are typically more suited to the particular circumstances of small island states.

Introduction

Few topics in international economics are as controversial as the choice of exchange rate regime (Ghosh *et al.*, 2002). The exchange rate not only has important links to inflation and economic growth but is itself an indicator of external competitiveness, with important implications for the balance of payments. The choice of exchange rate regime also bears on the duration and extent of cyclical fluctuations in aggregate demand. The choice ultimately lies between the two extremes of a fixed exchange rate and a flexible one. This would typically involve a trade-off between the reduction of volatility in real economic activity and the ability to conduct an independent monetary policy.

Theory of Exchange Rate Regimes

For roughly two decades after the end of the Second World War, the issue of fixed versus flexible exchange rate arrangements was hotly debated. Economic theory states that the choice of optimal exchange rate regime ultimately depends on the source of shocks, whether they are of a nominal or real nature. Fixed exchange rates are viewed to be suitable to insulate the economy against nominal shocks while floating exchange rates are better at absorbing real shocks. The choice of an optimal exchange rate regime would also depend on the country's degree of openness, labour and capital mobility and the ability to affect fiscal transfers. This is known as the optimal currency area theory, which argues that fixed exchange rate arrangements are best suited for open economies with flexible factor markets and effective systems of fiscal transfers. Another criterion related to the choice of an exchange rate regime relates to credibility issues, particularly for countries with high inflation. Fixed exchange rate systems can be viewed to generate credibility by instilling inflationary discipline.

Since the breakdown of the Bretton Woods system in the early 1970s, countries have adopted a wide variety of regimes, ranging from pure floats at one extreme to monetary unions and dollarisation at the other. However, the recent currency crises have sparked off a new debate on the choice of exchange rate regimes. In practice, countries can only choose two of three possible

outcomes: open capital markets, monetary independence and pegged exchange rates. In an increasingly globalised environment, it is often argued that only the polar regimes are sustainable. This has come to be known as the hollowing hypothesis.

In spite of the policy relevance related to the choice of exchange rate regime, economic literature offers relatively few empirical studies on the relationships between different exchange rate regimes and macroeconomic behaviour. Those that do exist make no reference to small island developing states (SIDS). The aim of this paper is to assess which exchange rate regimes have been more successful in terms of the macroeconomic performance of SIDS.

Characteristics of Small Island States

SIDS do not fare badly in terms of GDP per capita or in terms of the Human Development Index (Witter, Briguglio and Bhuglah, 2002). However, most SIDS experience significant fluctuations in their GDP growth rates. According to Easterly and Kraay (2000), part of this greater GDP volatility is due to terms of trade shocks. Given their relatively small share of world trade, SIDS are ultimately price takers. This makes them highly susceptible to terms of trade fluctuations. Moreover, since a large proportion of domestic economic activity is related to exports and imports, even minor disruptions in world markets, such as fluctuating prices and demand can have a large impact on the economy of a small island state.

Economic theory suggests that the effectiveness with which countries cope with changes in their terms of trade shocks depends primarily on the nature of the exchange rate regime. Under a flexible exchange rate regime, terms of trade shocks will be offset by movements in the exchange rate which adjusts immediately to accommodate these shocks while it also neutralises the effect on inflation and export competitiveness. By contrast, a country with a fixed exchange rate will experience substantial fluctuations in output through the monetary channel on account of intervention by authorities. Therefore, the argument for a flexible exchange rate seems to be more plausible in this respect.

An additional argument in favour of floating exchange rates is that a good proportion of SIDS specialise in the production of goods, such as agricultural products, for which demand is inelastic. Therefore devaluation as a policy tool under fixed exchange rates is restricted. Moreover, given a high degree of openness, devaluations are more likely to be reflected in higher domestic price pressures.

Another common characteristic shared by all SIDS is their relatively high dependence on international trade. SIDS tend to have a high degree of openness, implying that a large proportion of the economy is involved in external trade. This high ratio however does not necessarily translate into a drawback. In fact, there are real benefits that accrue from trade such as wider choice of goods at lower prices. Exposure to international trade also gives domestic producers the opportunity to sell their products on world markets thus earning more than if they were to be confined to the domestic market.

In fact, according to Easterly and Kraay (2000), the benefits that can accrue from this higher degree of openness outweigh any of the growth disadvantages related to greater output volatility. This possibly suggests that even though a flexible exchange rate can be more accommodative of external shocks, the exchange rate regime that might be best suited for SIDS is a fixed one, because it is more conducive towards the promotion of international trade by fostering stability and predictability of export and import prices.

Small economies are also characterised by limited domestic markets and by a large number of small firms. These small firms usually face large transport and infrastructure costs as well as high unit costs on account of a lack of economies of scale. Consequently any variability in the exchange rate will translate in higher costs. Small states also lack appropriate hedging devices so that firms cannot counteract these exchange rate fluctuations. A fixed exchange rate will eliminate this exchange rate risk and will ultimately give producers the opportunity to plan their future production levels and investment plans with a lower level of uncertainty. This form of stability would be expected to encourage trade and investment.

Openness to capital flows is particularly important for small states especially since most of them suffer from large current account deficits which need to be financed. Access to international financial markets, not only allows small states to finance their current account deficits and to smoothen consumption in the face of shocks but also to share their risks with the rest of the world by holding claims which are not perfectly correlated to the returns of domestic assets. Openness to capital flows is also expected to attract foreign direct investment (FDI) which is an important source of funds for these SIDS. It is often critical in linking the more isolated small states to developments abroad. It leads to employment creation, increased productivity as well as allocative efficiency in the host country. Moreover, since most FDI targets the external sector, it can also result in higher export receipts for the host country as well as possible diversification in exports. It can be argued that fixed exchange rates, by providing more stability and an anchor for monetary policy credibility, are more likely to be conducive towards attracting FDI (Aizenman, 1992)

Vulnerability and Resilience

The inherent characteristics of SIDS render them 'vulnerable'. Vulnerability refers to the exposure that these economies face from exogenous shocks and it has been associated with SIDS particularly because they tend to be exposed to factors which are outside their control (Witter, Briguglio and Bhuglah, 2002). In fact, vulnerability has important implications on economic growth as well as on per capita output. Cordina (2004) indicates that vulnerability reduces the speed of convergence between economies at different levels of economic development so that the more economically vulnerable economies tend to have a relatively high per capita capital. This however is only sustained by a relatively lower consumption per capita at the steady state. In the vulnerability indices composed by Briguglio (1992 and 1995), most of the SIDS registered significantly high scores. However when the Vulnerability Adjusted Development Index (VADI) was computed, to take into account resilience, most of the small states fared better in terms of vulnerability.

Resilience gives these economies the ability to recover from the economic shock to which they are exposed. One of the policies which should be taken into consideration in relation to resilience is

the exchange rate regime adopted. An appropriate exchange rate system can accommodate macroeconomic stability and strengthen these economies' resilience to shocks.

A report by the General Secretary of the United Nations relating to Island Developing States listed a number of policy options available to SIDS. One of these policy issues listed in the report was in fact related to improved flexibility to enhance the countries' ability to withstand external shocks as well as to improve their ability to compete. The exchange rate definitely meets these criteria and is one of the tools that must be used to reach these goals.

Exchange Rate Regimes Adopted by SIDS

Exchange rate strategies chosen by SIDS tend towards hard regimes. Relevant information in this regard can be obtained from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions. Out of a total of 43 countries which are considered in this study¹, 44% have opted for a regime with no separate legal tender, 30% for conventional pegs, 5% for pegs with horizontal bands and 2% for a crawling peg. Only 19% opted for arrangements involving floating exchange rates, with only one-fourth of these actually using fully floating regimes (see Chart 1).

¹ The sample of SIDS taken in this paper are members of the Alliance for Small Island Economies (AOSIS). AOSIS has a membership of forty-three member states and observers, drawn from the African, Caribbean, Indian Ocean, Pacific, South China Sea and Mediterranean region.

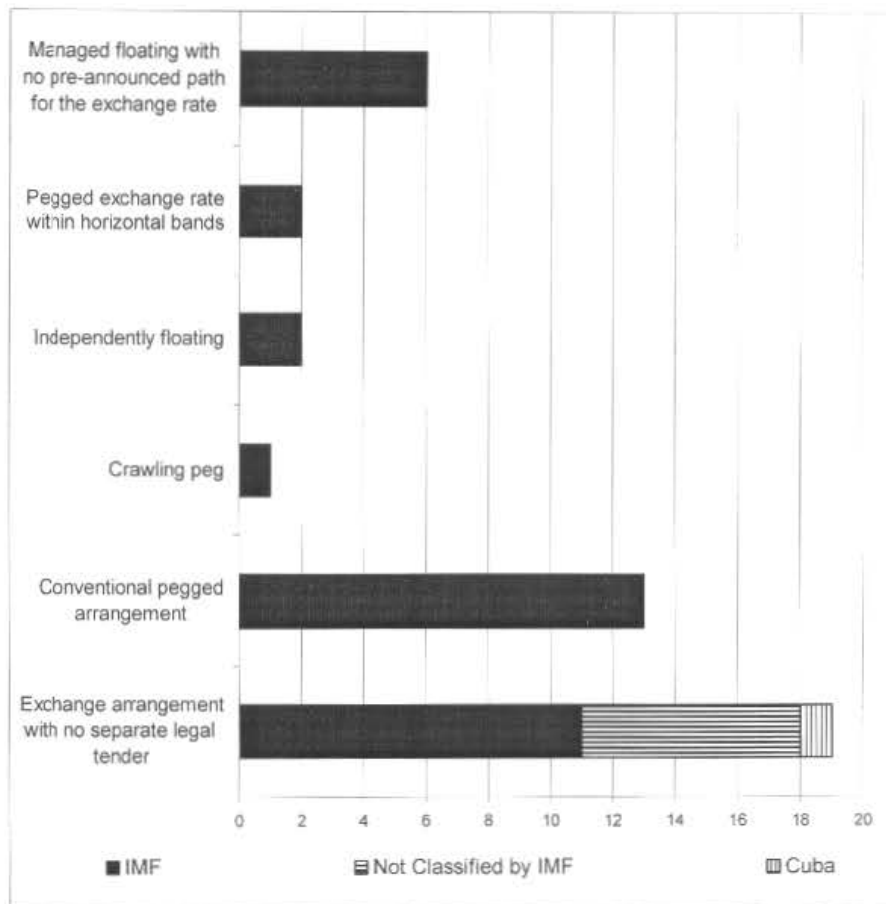


Chart 1-Exchange rate regimes

Out of the eleven countries classified as having an exchange rate arrangement with no legal separate tender, six form part of the Eastern Currency Caribbean Union (ECCU). While these countries are politically independent, their monetary policy autonomy is constrained by their membership in the regional economic union. The union forces all the countries to maintain a degree of macroeconomic discipline through low fiscal deficits and low inflation rates. Guinea-Bissau, another country with an exchange rate arrangement with no legal separate tender, is part of the Western African Economic and Monetary Union (WAEMU). Countries in WAEMU share a

common currency, the CFA Franc, which is pegged to the euro. These members have also implemented macroeconomic convergence criteria and an effective surveillance mechanism. The micro states of the Federated States of Micronesia, the Marshall Islands and Palau have adopted the US dollar as their domestic currency while Kiribati has adopted the Australian Dollar.

Out of the forty-three members and observers of AOSIS, eight are not classified by the IMF in their Annual Report on Exchange Arrangements and Exchange Restrictions. Reference from other sources however indicates that the Cook Islands, Niue and Tuvalu have all adopted the New Zealand dollar while Nauru uses the Australian dollar. In addition, American Samoa, Guam and the US Virgin Islands use the US dollar. As for Cuba, the exchange rate is considered to be 'dollarised' in an informal but also quasi-official manner. Given the fact that this exchange rate system is so different from the other regimes and that data on Cuba is so limited, it was decided to exclude this country from the sample of SIDS.

There are a total of thirteen SIDS which have opted for a conventional pegged exchange rate. Out of these, six are pegged to the US dollar, two to the Euro and the rest are pegged to a basket of currencies. Cyprus and Tonga are the only two SIDS with a pegged exchange rate with horizontal pegs while the Solomon Islands is the only small island state with a crawling peg in the sample.

There are six countries with a managed floating with no pre-announced path for the exchange rate. Three of them- Jamaica, Haiti and Trinidad and Tobago - are in the Caribbean region. In Trinidad and Tobago this managed floating exchange rate regime has helped to ensure a low inflation rate and an orderly foreign exchange rate market in Trinidad (IMF, 2001). Singapore has also adopted this type of regime, allowing the Singapore dollar to fluctuate within an undisclosed target band, as has Mauritius and Guyana. There are only two SIDS, Papua New Guinea and Sao Tome and Principe that are classified as having an independently floating exchange rate regime.

Macroeconomic Analysis

This section presents an analysis of the association between exchange rate regimes and indicators of macroeconomic performance in SIDS. Towards this end, exchange rate regimes are classified

into three categories in a manner akin to Bleaney and Francisco (2003). The first category, hard pegs, includes all countries with an exchange rate which has no legal separate tender. This section includes a total of eighteen countries, six of which form part of the ECCU. Moreover, a total of nine islands form part of the islands in the Pacific region while Guinea Bissau is the only country in this sub-sample which is in Africa. The soft peg exchange rate category accounts for conventional fixed pegs, pegged exchange rates with horizontal bands as well as crawling pegs. This section is made up of sixteen countries spread across all the regions. The last category, floating exchange rates is made up of two sub sections, namely those countries with a managed floating exchange rate and those with a freely floating rate. There are a total of eight countries in this section.

Macroeconomic indicators are viewed to influence as well as be determined by the choice of exchange rate regime. The macroeconomic indicators considered here include volatility in terms of trade, economic growth, the balance of payments, fiscal and monetary policy, exchange rate competitiveness and labour market flexibility. It is to be stated at the outset that this analysis is concerned with establishing stylised facts regarding macroeconomic performance and choice of exchange rate regime in SIDS. The analysis of causality between these two factors can only be construed from the discussion, rather than rigorously analysed in view of modelling and data limitations.

Terms of Trade Volatility

SIDS with a flexible exchange rate experience the most volatility in their terms of trade (see Table 2). This possibly indicates that countries opting for floating regimes are those typically more exposed to external shocks, thus placing the onus of real sector stabilisation on the exchange rate regime. Conversely, those which experience the least degree of terms of trade shocks have opted for the hardest pegs to benefit from the advantages of international trade integration.

	Hard Pegs	Soft Pegs	Floating
Terms of Trade	7.5	9.8	14.0
GDP Growth Rate	4.8	3.4	3.4
Export Growth Rate	10.5	11.5	11.7
CPI	13.4	16.5	24.9
NEER	9.7	9.1	24.1
REER	5.2	4.1	9.4
Reserves	16.4	25.4	56.5

Table 2 – Volatility

Economic Growth

Economic theory has relatively little to say about the effects of the nominal exchange rate regime on the growth rate of output (Ghosh *et al.* 1997). Typically there are two arguments, one in favour of pegged exchange rates while the other is in favour of flexible regimes. Dornbusch (2001) argues that lower inflation associated with rigid regimes such as hard pegs will reduce interest rates which are conducive to higher investment and growth. In addition, when a country pegs its currency through a currency board arrangement or enters a monetary union, transaction costs may be lowered thereby spurring trade and hence growth (Frankel and Rose, 2002). On the other hand, proposers of flexible exchange rates also argue that such regimes may give rise to higher growth in that their ability to act as shock absorbers results in fewer distortions following real shocks (Broda, 2002, Levy-Yeyati and Strutzenegger, 2003, and Edwards and Levy-Yeyati, 2003).

Data for SIDS indicates that the average growth rate over the period 1990-2002 is highest among countries with flexible exchange rates at 3.1%, followed closely by countries with soft pegs at 3%. On the other hand, at 2.3%, countries with hard pegs have recorded the lowest average GDP growth rate (see Table 3).

	Hard Pegs	Soft Pegs	Floating
GDP Growth Rate	2.3	3.0	3.1
Export Growth Rate	5.1	5.7	3.1
FDI/GDP	9.2	3.0	5.3
Fiscal Performance	2.0	0.5	-4.2
Inflation	2.5	4.0	10.9
Money Growth Rate	8.3	10.2	18.2
Interest Rate	7.7	6.6	16.1
Unemployment	11.0	9.5	9.9
Current Account/GDP	-15.6	-5.1	-2.6
External Debt	11.0	7.0	3.0

Table 3 – Average Macroeconomic Performance (1990-2002)

While theoretically models are largely silent on the implication of the exchange rate regime on economic growth, there is a significant body of literature on the stabilising properties of exchange rate regimes. Fixed exchange rates can stabilise output in the face of nominal shocks provided that nominal wages and prices are flexible. However in the case where prices and wages are not flexible and in the face of real shocks, fixed exchange rates tend to intensify output volatility. This appears to be the case for SIDS as countries with hard pegs register the highest volatility in terms of their growth rates (see Table 3). This is consistent with empirical evidence observed by Levy-Yeyati and Sturtzenegger (2001). Edwards and Magendzo (2003) also find similar evidence indicating that GDP volatility has been significantly higher in dollarised economies, than in countries with their own currencies.

Balance of payments

Literature on exchange rate volatility and trade suggests that there is a negative relationship between these two variables. In fact, one of the advantages of fixed exchange rates is that it allows traders to minimise exchange rate risk and increase export trade. This definitely appears to be the case for SIDS as export growth, on average, has been the highest among countries with soft pegs followed by hard pegs, at 5.7% and 5.1% respectively. By comparison, countries classified as having floating exchange rate regimes recorded the lowest growth rate at 3.1%. Furthermore,

countries with flexible exchange rates have experienced the greatest volatility in export receipts (see Table 2).

SIDS with hard pegs as their choice of exchange rate regimes appear to have recorded the highest current account to GDP ratios, followed by those opting for soft pegs. Floating regimes have recorded the lowest ratios. The fact that countries with hard pegs have recorded the largest ratios possibly indicates a situation where the fixed exchange rate is not indicative of market conditions and hence possibly overvalued.

Exchange rate movements can also alter the relative attractiveness of a country in terms of its attractiveness for FDI. Both the level and the volatility of the exchange rate are factors which affect the level of FDI (Bénassy-Quéré, 2001). In terms of volatility, larger variance of the nominal exchange rate under a flexible exchange rate will deter FDI. This argument partly holds for SIDS, as countries with hard pegs have recorded the largest ratio of FDI to GDP, at 9.2%, but countries with soft pegs have recorded the lowest ratio at 3%.² At the same time, countries with floating regimes have over the period 1990-2002 recorded an average ratio of 5.3% (see Table 2). Naturally there are other factors, apart from the exchange rate regime, which are important in attracting FDI. Among these factors are unit labour costs, availability of resources and political stability.

According to conventional economic theory, movements in reserves are to be expected under pegged exchange rates as authorities try to meet market conditions by intervening in the market. On the other hand, reserves under flexible exchange rates should not adjust as any market adjustments are made through the nominal exchange rate. However, data for SIDS indicates that movements in reserves have been amplified under flexible exchange rates as opposed to hard and soft pegs (see Table 2). These movements in reserves can probably be explained by the phenomenon often referred to as *fear of floating* (Calvo and Reinhart, 2000). Given that these small island states have limited access to international markets and that the adverse effects of volatility have more pronounced effects on their macroeconomic variables, it is natural that monetary authorities resist these variations by intervening in the market. In addition, the foreign exchange market for these currencies is thin so that monetary authorities must intervene in the

² Suriname has been excluded from this sample as the ratio was rather erratic over the sample period

market. Therefore despite the fact that these countries are classified as floating, it appears as though in reality they may be peggers.

Fiscal and Monetary Policy

Conventional wisdom indicates that fixed exchange rates provide more fiscal discipline than flexible exchange rates. The underlying reason behind this belief is that lax fiscal policies result in a rundown in reserves and this will ultimately jeopardise the sustainability of the peg. What the conventional wisdom fails to take into account is that a fixed exchange rate regime also gives policy makers an extra incentive to run fiscal deficits because the inflationary costs of such actions will only be manifested in the future – a future which by political standards is too far to worry about. At the same time, it can also be argued that under flexible exchange rates, imprudent fiscal policy will also incur costs. Flexible rates allow the effects of unsound fiscal policies to manifest themselves immediately through movements in the exchange rate. Therefore, under a flexible exchange rate bad behaviour gets punished immediately (Tornell and Valesco, 1995).

Evidence from SIDS indicates that while hard pegs appear to impose more fiscal discipline as opposed to flexible regimes, the same argument does not hold between soft pegs and floating regimes. Once again it

must be borne in mind that the direct relationship between the exchange rate regime and the fiscal balance also depends on other characteristics such as economic and political fundamentals, initial level of development, debt, access to capital markets, institutions and budget making rules.

The theory on exchange rate regimes and inflation is rather extensive. The predominant view is that pegged exchange rate regimes, when accompanied by consistent macro policies, can be an important anti-inflationary tool (Ghosh *et al*, 1997, Quirk, 1994 and Romer, 1993). This is essentially based on the belief that a pegged exchange rate may influence inflation by imposing monetary discipline. Moreover, a pegged exchange rate provides a highly visible commitment which raises the political costs of loose monetary and fiscal policy.

Inflation performance over the three different regimes is consistent with other empirical work (Levy-Yeyati and Sturtzenegger, 2001, Ghost et al. 1997, Bleaney and Fielding 2002) as inflation rates, on average, have been lowest among countries with hard pegs and soft pegs. The average inflation rate was highest among countries with a flexible exchange rate at 10.9%³. At the same time, hard pegs and soft pegs recorded an average inflation rate of 2.5% and 4% respectively (See Table 2).

Literature on the welfare costs of inflation suggests that unexpected movements in inflation matter just as much as the average inflation rate (Ghost et al. 1997). As expected, volatility in prices is higher under a floating exchange rate regime (see Table)In fact the standard deviation in the CPI index is around 25% under a floating exchange rate, 16% under a soft peg and 13% under a hard peg. Therefore not only do countries with hard pegs have, on average, lower inflation but they are also associated with lower inflation variability. There also tends to be a negative relationship between volatility in prices and average GDP growth. Therefore higher price stability under both hard and soft pegs has, *ceteris paribus*, resulted in higher average GDP growth.

A typical argument supporting the connection between pegged exchange rates and inflation is linked to the disciplinary effect on monetary policy. Data for SIDS indicates that hard pegs have registered the lowest monetary growth rate. In fact the average growth rate over the period 1990-2002 stands at 8.3% for countries with hard pegs, 10.2% for countries with soft pegs and 18.2% for countries with a floating exchange rate regime.

This indicates that given that the monetary growth rate is more subdued under a hard peg, there tends to be more credibility associated with this regime. In fact, the sustainability of the peg for the ECCB is related in part to the growth rate of money growth. This is essentially linked to the lower inflation rate which these countries have experienced.

The most direct way to examine credibility effects is through interest rates. Unfortunately, most of the interest rates over the sample period have been administratively set and thus they bear little

³ The higher average inflation rate among countries with a floating exchange rate, particularly in 1992, was due to high inflation in Jamaica.

relationship to the market. However from the limited data that is available it appears that both hard and soft pegs have lower interest rates compared to floating exchange rate regimes.

Exchange Rate Competitiveness

The key theoretical concept underlying both the analysis of regime effects and real exchange rate behaviour is more generally known as the Purchasing Power Parity Theorem. As can be seen from Table 2 flexible exchange rates have exhibited more volatility as opposed to hard and soft pegs.

There are various studies which have stressed the point that RER's exhibit substantial volatility under floating regimes as opposed to fixed exchange rate regimes (Mussa, 1986, Baxter and Stockman, 1989). This higher volatility associated with flexible exchange rates is viewed as a disadvantage for flexible exchange rates as opposed to hard and soft pegs. This is because the higher variability implies that countries with floating regimes in this sample have their economic fundamentals out of line with their potential levels. The fact that the REER is so volatile implies that countries with flexible exchange rates are not moving towards their equilibrium level in a smooth and steady motion. The potential levels referred to above relate to the internal and external balances where the internal balance refers to the economy operating at full employment while the external balance refers to a sustainable current account position⁴.

Furthermore, as can be seen from Table 2 the NEER index is also more volatile amongst countries with floating regimes. The fact that floating regimes have experienced the most volatility in terms of the nominal and real exchange rate has led many observers to believe that the connection is causal: that nominal exchange rate movements have been a source of costly swings in relative prices (Eichengreen, 1989). In the case of flexible exchange rates it appears that the exchange rate has not provided sufficient protection from foreign disturbances or the autonomy for domestic policies. Therefore in terms of movements in the real exchange rate, it appears that one of the advantages often cited for flexible exchange rates - that of neutralising foreign shocks - does not hold as strongly as expected. The apparent reason behind this argument is that benefits from a

⁴ An often cited drawback of the PPP theorem is that it fails to take into account the evolution of these fundamentals.

flexible exchange rate cannot be attained unless countries have the necessary and appropriate policies backing this regime.

Labour Market

Economic literature related to exchange rate regimes and employment indicates that given that exchange rate volatility is negatively related to trade and investment, then this volatility can also be detrimental to employment. Data for SIDS however indicates that hard pegs have recorded the highest unemployment rates.⁵

General Overview

A general overview of the key economic aggregates over the three different regimes for SIDS is shown in Chart 2, whereby 3 signifies the best performance and 1 refers to the worst performance. As can be seen from the chart, hard pegs have outperformed the other two regimes for most of the macroeconomic indicators.

In fact over the sample period, hard pegs have performed better in terms of attraction of FDI, fiscal surplus and discipline in monetary growth. Hard pegs have also recorded high export growth, albeit slightly lower than soft pegs. Moreover, countries with this type of exchange rate regime have recorded the lowest average growth rate in inflation coupled with low volatility in prices. This however appears to be coming at the expense of more instability in the GDP growth rate (see Chart 3). In fact, this regime has experienced the largest volatility when it comes to the average GDP growth rate but has more than compensated in terms of the lowest volatility in export growth and price variability.

Soft pegs have also performed particularly well in terms of export growth and a low average unemployment rate (although this indicator may be unrepresentative). In addition, the interest rate recorded under this regime has been the lowest among the three different samples, followed

⁵ It should however be mentioned that data on this indicator is extremely limited and despite the use of three different sources, there are still many observations which are missing. Therefore in the absence of more comprehensive data, no clear conclusion can be determined as to which exchange rate regime is more conducive towards lower unemployment.

closely by that recorded under hard pegs. Countries with soft pegs have also registered the lowest volatility in terms of movements in the NEER and REER indices as well as volatility in the average GDP growth rate although it is very similar to that record by floating regimes. Therefore it appears that countries with soft pegs, have managed to peg their currencies wisely, so much so that volatility in terms of these indicators has been minimised. On the other hand in terms of fiscal performance and attracting FDI, countries with soft pegs have recorded the lowest ratios.

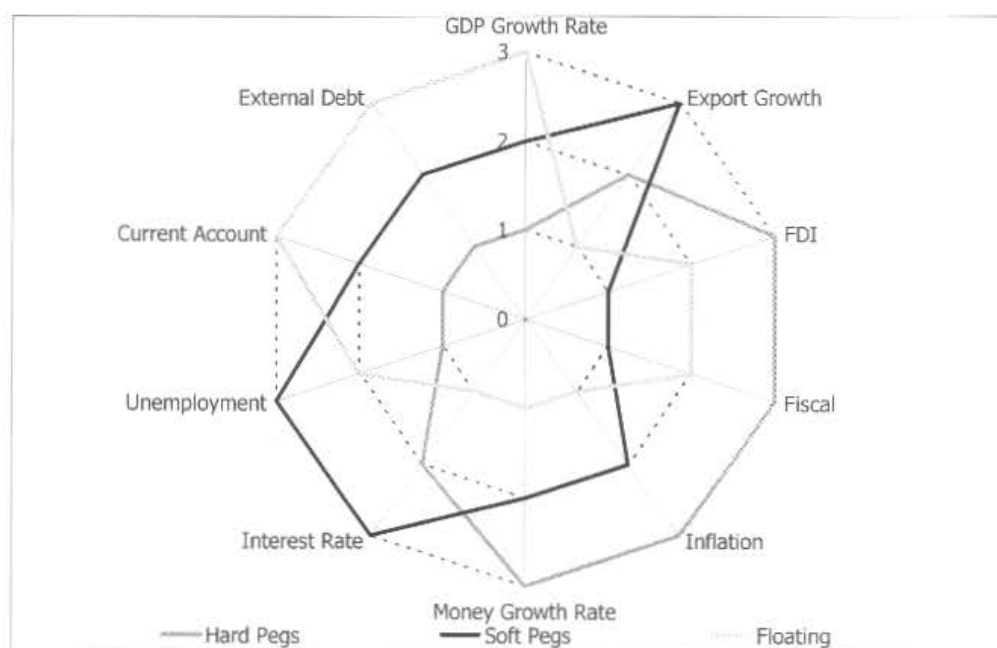


Chart 2 – Average Macroeconomic Performance

At the same time, while average GDP growth has been highest among countries with flexible exchange rates, this regime has performed the worst in terms of four indicators – average inflation, monetary discipline, high interest rates and the growth rate in exports. Flexible exchange rates have also registered the most volatility, as out of the six indicators analysed for instability, floating exchange rates have recorded the largest volatility in five of them. This is somewhat expected for small states and in fact it has been recognised that the costs of an independent currency may actually be higher for small countries (De Brouwer, 2000). The burden of running a set of institutions that can effectively and efficiently manage an independent exchange rate and monetary

policy can be significantly high for these countries. Besides, the foreign exchange market in these countries is too thin so that it is particularly difficult to rely on the market alone to determine the exchange rate.

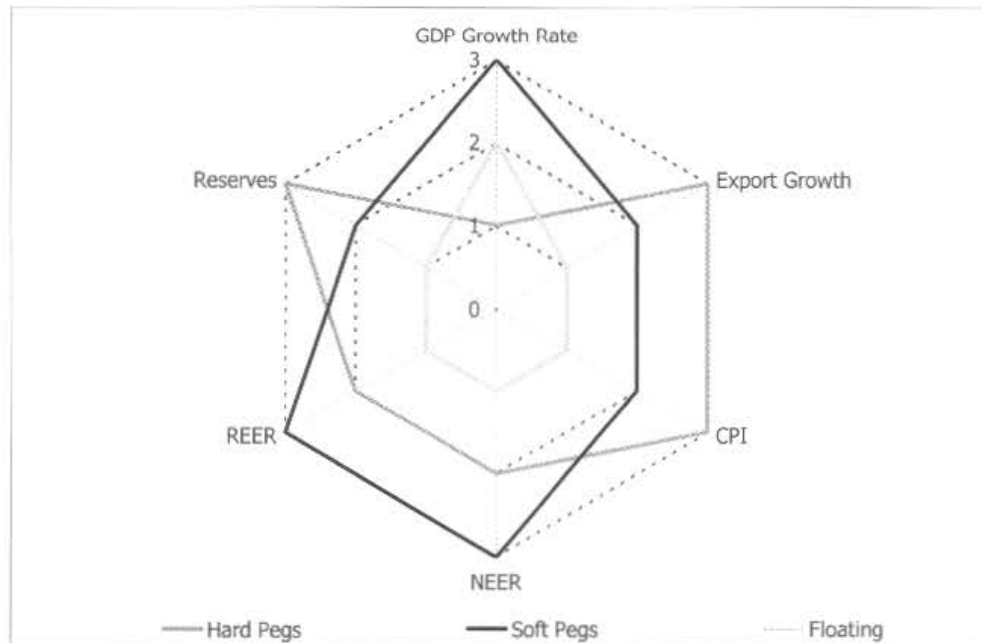


Chart 3 - Volatility

Given the apparent better macroeconomic behaviour under hard pegs, one questions why these small states, despite their similar characteristics, do not all opt for hard pegs. In fact, Hillaire (2001) indicates that the most viable alternative for small states with undiversified economies may be the option of currency boards. Indeed, most SIDS throughout the different regions appear to be considering harder pegs either through currency unions or dollarisation. Either way, discussions have commenced and the issue is not going unnoticed.

Conclusion

The principal conclusions from this research study are that SIDS which have opted for hard pegs such as currency unions and dollarisation have on average performed better than SIDS with other forms of exchange rate regimes, particularly floating ones.

However, while a hard peg appears to have been an important factor in terms of these macroeconomic indicators, this better performance appears to have come at the expense of more volatility in GDP. This in itself is an important factor for SIDS as higher volatility in GDP can have a strong negative effect on growth (Ramey and Ramey, 1995). In fact the average GDP growth rate was lowest amongst countries with hard pegs.

This however does not mean that countries with hard pegs should abandon their regimes. Rather what it does mean is that these SIDS should put more emphasis on building resilience in order to cope with their vulnerability. SIDS need to build nurtured resilience in order to overcome their inherent vulnerability. Witter, Briguglio and Bhuglah (2002) suggests that SIDS should foster strategic alliances to overcome their size constraints and they should adopt policies to strengthen both their public and private institutions so as to target capacity building. In addition, the importance of good governance and sound macroeconomic management cannot be undermined particularly as the two are requisites for competitiveness (Briguglio and Cordina, 2004).

Authorities must also implement prudent macroeconomic policies which are consistent with hard pegs such as prudent monetary and fiscal policy. Moreover, while more liberal trade and financial rules will assist SIDS in increasing their economic efficiency they must be supported by the appropriate policies particularly fiscal soundness and a strong financial system.

It is also important to bear in mind that the choice of an exchange rate regime is not a static decision but a dynamic one which has to be revised often to reflect the economic developments of the countries. As these small SIDS develop economically and institutionally, considerable benefits will accrue from the adoption of a flexible exchange rate system. Therefore despite the fact that hard pegs appear to be the best regimes for SIDS at this particular point in time, it does not necessarily mean that this line of argument should not be questioned in the future. In fact as is

widely recognised 'there is no single currency regime which is right for all countries or at all times' (Frankel, 1999).

References

- AIZENMAN, J., (1992), *Exchange Rate Flexibility, Volatility and the Patterns of Domestic and Foreign Direct Investment*, Working Paper No. W3953, UK: National Bureau of Economic Research.
- BAXTER, M. and STOCKMAN, A.C., (1989), *Business Cycles and the Exchange-Rate Regime: Some International Evidence*, *Journal of Monetary Economics*, 23(3), pp. 377–400.
- BENASSY-QUERE, A., (2001), *Exchange Rate Strategies in the Competition for Attracting Foreign Direct Investment*, *Journal of the Japanese and International Economies*.
- BLEANEY M. and FIELDING D., (2002), 'Exchange Rate Regimes, Inflation and Output Volatility in Developing Countries', *Journal of Development Economics*, Elsevier, vol. 68(1), pages 233-245.
- BLEANEY M. and FRANCISCO. M., (2003), *Exchange Rate Regimes and Monetary Discipline-Only Hard Pegs Make a Difference*, UK: University of Nottingham.
- BRIGUGLIO, L., (1992), *Preliminary Study on the Construction of an Index for Ranking Countries According to their Economic Vulnerability*, UNCTAD/LDC/Misc.4 1992.
- BRIGUGLIO L., (1995), *Small Island Developing States and their Economic Vulnerabilities*, *World Development*, Volume 23, Issue 9.
- BRIGUGLIO, L. and CORDINA, G., (2004), *Competitiveness Strategies for Small States*, Islands and Small States Institute of the Foundation for International Studies, Malta and the Commonwealth Secretariat, London.
- BRODA, C., (2002), *Terms of Trade and Exchange Rate Regimes in Developing Countries*, Federal Reserve Bank of New York.
- CALVO, G. and REINHART, C., (2000), *Fear of Floating*, NBER Working Paper, 7993.
- CORDINA, G., (2004), *Economic Vulnerability and Economic Growth: Some Results from a Neo-Classical Growth Modelling Approach*, Forthcoming: *Journal Economic Development*, Vol. 42, December 2004.
- De BROUWER G., (2000), *Should Pacific Island Nations Adopt the Australian Dollar?*, *Pacific Economic Bulletin* Volume 15 Number 2.
- DORNBUSCH, R., (2001), *Fewer Monies, Better Monies*, NBER Working Paper No. 8324.
- EASTERLY, W. and KRAAY, A., (2000), *Small States, Small Problems? Income, Growth and Volatility in Small States*, *World Development*, Vol. 28, No. 11.
- EDWARDS, S. and LEVY-YEYATI, E., (2003), *Flexible Exchange Rates as Shock Absorbers*, NBER Working Paper No. 9867.
- EDWARDS S., and MAGENDZO, I., (2003), *Strict Dollarisation and Economic Performance: An Empirical Investigation* NBER Working Paper No. 9820.
- EICHENGREEN, B., (1989), *The Comparative Performance of Fixed and Flexible Exchange Rate Regimes: Interwar Evidence*, NBER Working Paper 3097.
- FRANKEL, J., (1999), *No single currency regime is right for all countries or at all times*, NBER Working Paper No. 7338.
- FRANKEL, J. and ROSE, A., (2002), *An Estimate of the Effect of Common Currencies on Trade and Income*, *Quarterly Journal of Economics*, Vol. 117, No. 2.
- GHOSH, A., GULDE, A.M. and WOLF, H., (2002), *Exchange Rate Regimes Choice and Consequences*, The MIT Press.

- GHOSH, A., GULDE, A.M., OSTRY, J. and WOLF, H., (1997), *Does the nominal exchange rate regime matter?*, NBER Working Paper No. 5874.
- HILLAIRE, A., (2001). *Currency Arrangements in Small States*, Paper presented at the Conference on Financial Globalisation: Issues and Challenges for Small States, Eastern Caribbean Central Bank, St. Kitts, March 27-28, 2001.
- IMF Annual Report on Exchange Arrangements and Exchange Restrictions, 2003.
- IMF, 2001, *Trinidad and Tobago: 2001 Article IV Consultation Staff Report; Staff Statement: Public Information Notice on the Executive Board Discussion; and Statement by the Executive director for Trinidad and Tobago.*
- LEVY-YEYATI, E. and STURZENEGGER, F., (2001), *Exchange Rate Regimes and Economic Performance*, IMF Staff papers, Vol 47, Special Issue.
- LEVY-YEYATI, E. and STURZENEGGER, F., (2003), ' *de facto Classification of Exchange Rate Regimes: A Methodological Note*, American Economic Review, Vol. 93, No. 4.
- MUSSA, M. (1986), *Nominal Exchange Rate Regimes and the Behavior of Real Exchange Rates: Evidence and Implications*, Carnegie-Rochester Conference Series on Public Policy, 25, pp. 117-214.
- QUIRK, P., (1994), *Fixed or Floating Exchange Regimes: Does It Matter For Inflation?* , IMF Working Paper, WP/94/134.
- RAMEY, G. and RAMEY, V., (1995) *Cross-country evidence on the link between volatility and growth*, American Economic Review, 85, 1138-51.
- ROMER D., (1993), *Openness and Inflation: Theory and Evidence*, Quarterly Journal of Economics, Vol. 108, No. 4, pp. 869-903.
- TORNELL, A. and VELASCO, A., (1995), *Fixed versus Flexible Exchange Rates: Which Provides More Fiscal Discipline?*, NBER Working Paper No. W5108.
- Currency Union and the CFA Franc Zone: A Comparative Analysis*, IMF Working Paper 01/104, Western Hemisphere Division.
- WITTER, M., BRIGUGLIO, L. and BHUGLAH, A., (2002), *Measuring and managing the economic vulnerability of small island developing states*, For the Global roundtable Vulnerability and small island developing states: Exploring mechanisms for partnerships.