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POLICEIS FOR STABILISATION AND GROWTH IN SMALL VERY OPEN ECONOMIES

BY

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Policies for Stabilisation and Growth in Small Very Open Economies

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Synopsis

Small very open economies are different from large economies, in that they face a foreign exchange constraint that cannot be alleviated by depreciation of the real exchange rate or other policy. This constraint affects monetary, fiscal and exchange rate policy; fiscal sustainability and debt management; and patterns of economic growth. With respect to monetary/fiscal/exchange rate policy, the most accessible framework for such economies is an exchange rate anchor, where the foreign currency market is balanced by managing aggregate demand, using fiscal policy. With respect to debt, the most sensitive indicators of fiscal sustainability are the ratio of external debt service to foreign earnings, and the rollover risk on foreign currency loans. With respect to growth, expansion in the small open economy is sustainable only if led by the sectors that earn or save foreign exchange. This paper explains.

It is widely recognised that small states are very heavily impacted by the volatility of international prices of commodities, and by uncertainties in international financial markets. What needs to be better appreciated, however, is that such countries have very limited potential to substitute for imports as a way of reducing their external vulnerability.[1]

Moreover, small economies with modern banking systems that are widely accessible, and that are hosts to regional and international conglomerate firms, do not have an option to close the capital and financial account. This is true even where local securities markets do not exist or are of trivial importance, because the bulk of cross-border finance is motivated by non-price considerations, and all economic agents, both firms and households, have alternatives to the banking system for effecting cross-border transfers. These avenues include transfer pricing,

[1] Except possibly for subsistence economies.

offsetting transactions, the use of trade credit rather than domestic financing for working capital needs, exchange of services in kind, and informal transfers. These transactions are motivated by interest rate differentials, relative country risk premiums, and other factors more difficult to measure, such as the credibility of official policy.

The openness of small states, what I refer to as small very open economies (SVOEs), is therefore structural, and may not be ameliorated by policy or strategy of any kind. There is a hard foreign exchange constraint that conditions all economic policy, whether for short term economic stabilisation or for medium to long term sustainable growth. The SVOE is an economic engine that runs on foreign exchange; in the short run it must conserve what is available, and in the medium and long run the economy accelerates as the inflow of foreign exchange increases.

This paper will argue that the simplest and most effective policy for stabilisation of small emerging market economies is to anchor a market-determined exchange rate,[2] by means of adjusting aggregate demand, using fiscal policy. Furthermore, sustained growth in the very open economy must be led by the sectors that earn or save foreign exchange. These are the sectors that produce tradable goods, which may be sold at the ruling internationally competitive prices on world markets. Because economies of scale are universal (in marketing, transport, financing, etc.) small economies find that they must concentrate available human and material resources in only a few tradables, in which they may attain sufficient scale to be internationally competitive. Growth is sustainable when the surplus of foreign exchange earned or saved in the tradable sectors is sufficient to meet the demand from producers of nontradables, and from consumers. What matters for growth prospects is the competitiveness of the tradable sectors; the national competitiveness indices commonly used are misleading, since they are based on an amalgam of domestic tradable and non-tradable prices. Both stabilisation policies and growth prospects are therefore constrained by foreign exchange inflows.

Openness is structural and the foreign exchange constraint is hard

The economies under consideration typically have an import propensity of 50 percent or more, and a ratio of foreign exchange income and spending to GDP well in excess

[2] The foreign exchange market is to be viewed as a "Fixprice" rather than a "flexiprice" market, in the terminology of Sir John Hicks (see Christopher Bliss, "Sir John Hicks," *The New Palgrave Dictionary of Economics*, 2008, Edited by Stephen Durlauf and Lawrence Blume).

of 100 percent.[3] They produce a limited range of exportables, almost all of which are sold abroad at world market prices. In the Caribbean the list includes tourism, sugar and its by-products, international business and financial services, and, in the case of Trinidad-Tobago, petroleum products. Earnings from exports of goods and services, together with foreign investment and financial inflows, finance imports which reflect the full gamut of modern consumption and investment goods. Because the range of exports is very narrow, and the range of imports very wide, there is very little scope for import substitution. An important policy tool available to large economies is therefore not available to small emerging economies, that is, the ability to boost domestic output at the expense of imports by making imports more expensive, for example by an exchange rate depreciation. What is more, exchange rate depreciation does not necessarily provide an incentive for higher exports either. The depreciation leaves export prices unchanged in foreign currency terms, and therefore has no immediate effect on the market. Whether there is a later effect depends on the extent to which the domestic producers of exports are able to reduce costs, measured in foreign currency. That in turn depends on the extent to which they use domestic rather than imported inputs, and the responsiveness of domestic input and factor prices to the exchange rate depreciation. [4]

The defining characteristic of small very open economies (SVOEs) is the foreign exchange constraint, and the fact that this constraint is unaffected by exchange rate changes. This has implications for monetary policy and the exchange rate, for fiscal sustainability and debt management, and for competitiveness and growth strategies.

Monetary policy and the exchange rate

SVOEs need an alternative to inflation or monetary targeting with a flexible exchange rate (the standard recipe for stabilisation policy) because both the domestic interest

[3] Carter, Adrian, "Economic size, openness and export diversification: a statistical analysis," Central Bank of Barbados *Economic Review*, December 1997.

[4] The responsiveness of wages tends to be the critical factor. There is a long standing controversy as to whether domestic costs will decline sufficiently after a depreciation, and the speed and extent of the pass-through from the changes in local currency prices of imports. This literature gives no reason to be confident there are worthwhile cost effects. See, for example, Towbin, Pascal and Weber, Sebastian, Limits of Floating Exchange Rates: The Role of Foreign Currency Debt and Import Structure (February 2011), IMF Working Papers, pp. 1-51; Berg, Andrew, Eduardo Borensztein and Paolo Mauro, "An evaluation of monetary policy regime options for Latin America," IMF WP/02/211, Dec 2002; and Mohanty, M. S. and Michela Scatigna, "Has globalisation reduced monetary policy independence?", *BIS Papers*, No. 23, May 2005.

rate and the exchange rate are governed by short-term financial flows.[5] Such an alternative is available in the form of the market-determined exchange rate anchor,[6] managed by containing aggregate spending (and therefore imports) through timely forward-looking fiscal adjustment. In effect, the external accounts are managed by controlling the fiscal contribution to aggregate expenditure. Fiscal targets are derived from a forecast of foreign exchange inflows and the forecast impact of fiscal policy on aggregate expenditure and imports. A continuous monitor of the balance of payments is maintained via the foreign exchange reserves of central bank, which buys any foreign exchange in excess of the system's needs, and sells on demand, always at the same exchange rate. This continuous monitor is evaluated against the year-end target, taking account of seasonalities, and from time to time fiscal adjustments are made as needed.

The advantages of this framework are that the predictability of the exchange rate is highly valued by economic agents, and the ability to keep the rate unchanged over the long term lends credibility to economic policy. Conversely, a history of exchange rate fluctuation often robs economic policy of credibility, even when the policy is well thought out. A second advantage is that the lack of exchange rate volatility has long been known to be a strong incentive to investment.[7] Thirdly, an exchange rate anchor is an effective anti-inflationary policy, because it does not aggravate the effects of imported inflation.[8] The exchange rate is a highly visible target, one that is recognised by everyone, and one whose inflationary consequences are feared by everyone.

Exchange rate targeting was at one time quite popular, and many countries attempted strategies ranging from targeting an unchanged rate to various degrees of floating.[9] What my proposal shares with those strategies is the achievement of the

[5] Worrell, DeLisle, "Monetary policy in small open economies," Central Bank of Barbados *Economic Review*, xxiv:2, September 1996. That paper concludes that monetary tools such as interest rates and credit limits have temporary effects at best.

[6] The choice of anchor will depend on the direction of foreign trade and finance of the SVOE. For most countries it will be the currency of a dominant neighbour, but countries such as Singapore have used a basket (see Parrado, Eric, "Singapore's unique monetary policy: how does it work?" IMF WP/04/10, Jan 2004).

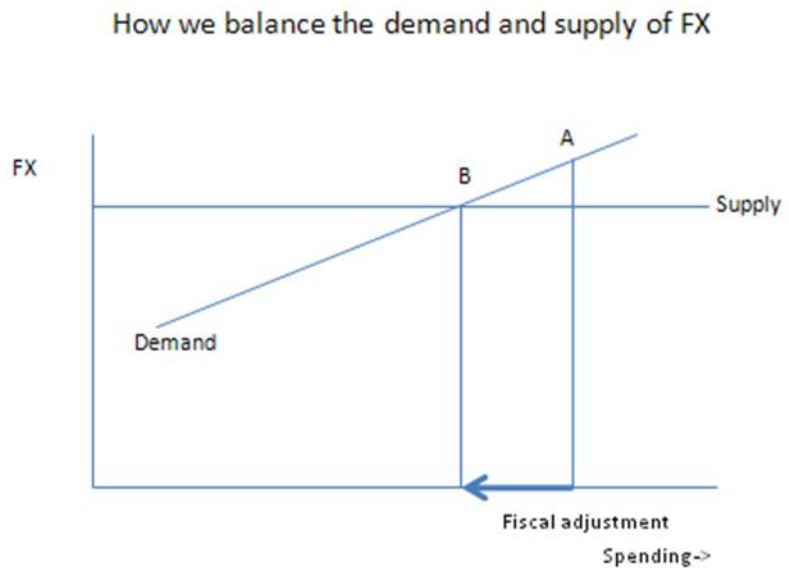
[7] Pindyck, Robert, "Irreversibility, Uncertainty, and Investment," *Journal of Economic Literature*, xxix:3, September 1991.

[8] In effect the SVOE may borrow credibility from the anti-inflationary policies of the anchor country.

[9] See Cottarelli, Carlo and Curzio Giannini, *Credibility without Rules? Monetary Frameworks in the Post-Bretton Woods Era*, IMF, 1997.

target, in this case an unchanged rate, by means of intervention in the interbank foreign exchange market by the central bank. What is added is the management of aggregate demand via fiscal policy as the means of equilibrating the foreign exchange market, and ensuring that the central bank always has an adequate supply of foreign reserves to support the interbank market at the target exchange rate peg.

Figure 1.



This process of foreign exchange market adjustment is shown in Figure 1, which plots foreign exchange demand and supply against aggregate domestic spending. The higher is aggregate spending, the higher will be the demand for foreign exchange. In the short run, for reasons just explained, the supply of foreign exchange is invariant to policy. Therefore, if the expected demand for foreign exchange is at Point A, aggregate demand must be reduced sufficiently, using fiscal policy, to reduce foreign exchange demand to Point B.[10] As a practical matter, this means that decisions on

[10] A model of the impact of fiscal adjustment on aggregate demand appears in Anton Belgrave, Jason LaCorbiniere, Delisle Worrell and Denisa Applewhaite, "Fiscal sustainability in an open economy with an exchange rate peg," Central Bank of Barbados *Economic Review* March 2011. Other frameworks may be used to estimate the impact of fiscal adjustment on aggregate demand and imports. The argument is not model specific.

fiscal adjustment should be taken well in advance of the expected excess demand, and there should be a robust mechanism of monitoring the external balance and feedback to the policy makers, so that corrections can be made from time to time to keep the foreign exchange market on course.[11]

Fiscal sustainability and debt management

The foreign exchange constraint also informs the way in which the deficit is financed, in particular the extent of foreign currency financing. The servicing of the foreign debt should be kept within limits which foreign exchange market agents consider acceptable, and the maturities of foreign liabilities should be timed to be within the limits of acceptable rollover risk. The government debt profile of the SVOE becomes unsustainable when either of these conditions is violated, even when the fiscal strategy is thought to be sustainable on other grounds.

The criteria for judging the sustainability of the fiscal strategy and the ensuing debt profile are threefold:

- Is there a risk of insolvency of the government or of the country?

- Is the servicing of foreign debt manageable without the sacrifice of essential imports or the building of arrears, and can the foreign debt be rolled over if need be?

- Is the overall servicing of debt manageable without impinging on essential public services or building of arrears, and can the overall debt be rolled over if need be?

In the SVOE the foreign exchange criteria are the most sensitive. The indicators that warn of unsustainability corresponding to each criterion are:

- For the solvency criteria, the trend in the ratios of government debt and external debt to GDP;

- For the external debt criteria, the ratio of external debt servicing to foreign exchange inflows and the external debt maturity profile; and

[11] A description of the institutional arrangements used in Barbados appears in Worrell (2012).

- For the overall liquidity and rollover risk criteria, the ratio of interest payments to government revenue, and the overall debt maturity profile.

In the SVOE the hard foreign currency constraint manifests itself in the fact that the external debt criteria cannot be alleviated by domestic monetary or fiscal policy (for example, by tightening fiscal policy). This distinguishes them from the domestic solvency, liquidity or rollover risk criteria. A sufficient tightening of fiscal policy will reduce the ratio of debt to GDP, but it leaves the ratio of foreign debt service to foreign earnings unchanged, *ceteris paribus.* The primacy of the foreign exchange constraint is also reflected in the fact that SVOEs may experience economic crisis triggered by inability to service external debt when other indicators are relatively benign.[12]

Competitiveness and growth

The foreign exchange constraint, and the fact that it cannot be relieved by an exchange rate depreciation, limits the overall rate of growth of the SOE in the medium term to the maximum that can be supported by the foreign exchange surpluses of the tradable sectors. All production in the SVOE has a high import content, both tradables and nontradables. The nontradables, which earn no foreign exchange, use the tradables' surplus of foreign exchange over their own needs and the needs of consumers, to buy imported inputs. If that surplus is reduced for a year or two, it may be possible to finance the difference by foreign borrowing or running down reserves, but eventually the growth of nontradables will slow down if the tradable foreign surplus is not restored.

The foreign exchange constraint on growth may not be alleviated by an exchange rate depreciation because of the low substitutability of nontradables for tradables. The (often temporary) increase in the relative price of tradables which results from the depreciation provokes no switch of consumption from tradables to nontradables because education or health or other nontradables cannot be substituted for tourism or other tradables. The range of tradables in which there is competitive domestic production is very narrow, as previously noted, and therefore there is no significant scope for import substitution (or expansion of tradable output to meet local needs

[12] At the time of the crisis in 1997, the Thai government debt to GDP ratio was 10 percent (Furman, Jason and Joseph Stiglitz, 'Economic crises: evidence and insights from East Asia,' *Brookings Papers on Economic Activity,* 1998:2, 1-127). In the case of the Barbados crisis of 1991/92 the ratio was 50 percent (See Belgrave, Anton, Jason LaCorbiniere, Delisle Worrell and Denisa Applewhaite, "Fiscal sustainability in an open economy with an exchange rate peg," Central Bank of Barbados *Economic Review* March 2011).

instead of exporting).[13] In cases where an exchange rate depreciation is seen to reduce the excess demand for foreign exchange in the SVOE, it will be observed that the real demand for imports has fallen because of the income effect of the depreciation, but there has been no substitution effect.[14] The depreciation makes imports more expensive, without creating any avenue for an increase in income, either in the production of tradables or nontradables, and therefore fewer imports can be afforded.

An exchange rate depreciation in a SVOE does not typically result in any increase in output, and may precipitate a contraction. The depreciation does not increase the country's competitiveness, even in cases where there is less than full pass through to the prices of domestic goods and factor prices, if competitiveness is judged by market penetration, or, in this case, output growth. Conventional REER measures, which combine exchange rate changes and changes in relative prices at home and abroad, are indices of a more limited concept of competition, where the least costly is the most competitive. What is more, they are not a good proxy of the offer price of domestic product. The SVOE sells tradables at the ruling international price, whether at home or abroad. It is only in the nontradable sector that producers may sell at prices that are not fully determined abroad. The ratio of tradable to nontradable prices is therefore the most useful proxy of price competitiveness in SVOEs.

Competitiveness for SVOEs is not about relative prices

Growth strategies for SVOEs are by necessity country specific, and depend on the production structure and composition of the foreign exchange sector, and the sources of the country's comparative advantage.[15] In a world of rapidly changing tastes and technology, where new products and new competition are constantly emerging, it is more likely that structural changes will drive the relative prices of nontradables, than the other way around. In any case, a sustainable way to increase the relative prices of tradable goods, should that be deemed necessary, is through the use of fiscal policy.

[13] The latter would in any case be unhelpful, because it would not help to alleviate the foreign exchange constraint.

[14] Depreciation is therefore an inferior tool for achieving what may be effected at lower inflationary costs by appropriate fiscal adjustment, at an unchanged exchange rate (Worrell, 1992, page 53).

[15] For example, see World Economic Forum, *Global competitiveness report 2010-11,* www.weform.org, the 12 pillars of competitiveness.

Small states are different

SVOEs are more vulnerable to external shocks than larger economies simply because the external transactions coefficients are so much larger, both on the current and the capital and financial account. Small states may build resilience to excess volatility, and achieve levels of economic performance comparable to larger, less vulnerable economies, but building resilience comes at a cost. These issues have been thoroughly investigated by the World Bank, the Commonwealth Secretariat and the University of Malta.[16]

SVOEs are also more limited than large economies in what they can do in response to an economic shock. There is little scope for countercyclical fiscal policy, unless it can be financed by prudent foreign borrowing, because the ensuing increase in aggregate demand generates an excess demand for foreign exchange. Further, there are no possibilities for import substitution, through an exchange rate depreciation or any other means, and no way to boost exports of goods and services through price adjustment, since their prices are governed by the international market. Therefore, in contrast to large economies and closed economies (which, if small, are at subsistence levels of living), SVOEs have no way to respond to a shock which reduces output , other than to absorb the loss of real income.

The third important distinction of SVOEs has to do with the policy framework. A market determined exchange rate anchor has proved to be a simple, credible and effective framework for stabilisation policy which delivers what is possible (equilibrium of external payments and the avoidance of balance of payments crises) and does not pretend to deliver what is not possible (growth in the face of declining demand for exports of goods and services, or containment of imported inflation). What is more, the exchange rate anchor can be maintained in the absence of sophisticated policy frameworks, so long as fiscal policy is sufficiently prudent.

In contrast, the popular monetary and inflation targeting frameworks have proved to be problematic for SVOEs. The studies of the predictability of monetary aggregates, and their relation to prices, must by now run into the tens of thousands, but policy makers are still forced to shoot in the dark in determining the extent of monetary adjustment that is needed for achieving their targets. What is more, in SVOEs the

[16] See Briguglio, Lino, Gordon Cordina and Ellawony Kisanga, *Building the Economic Resilience of Small States*, University of Malta and the Commonwealth Secretariat, 2006.

open financial account often nullifies the thrust of monetary policy.[17] The inflation targeting framework faces a credibility problem in SVOEs: "core" inflation, which is the central bank's target, excludes food and fuel, which are imported and typically account for more than 50 percent of the consumer basket. It becomes immaterial if the central bank has achieved its target for "core" inflation, if the retail price index rises twice as fast.

[17] See Worrell, DeLisle, "Bank behaviour and monetary policy in small open economies with reference to the Caribbean," *Social and Economic Studies*, 46: 2&3, Oct. 1997.