Macroeconomic policies for growth in small Pacific island economies

Anis Chowdhury and Yogi Vidyattama

University of Western Sydney, School of Economics and Finance;
Research School of Pacific and Asian Studies, The Australian National University and
University of Indonesia-LPEM

The Pacific island economies are among the most vulnerable economies in the world. They are highly prone to natural disasters and terms-of-trade shocks. In the past two decades, however, some have maintained remarkable macroeconomic stability in terms of low inflation and low budget deficits. Most of these economies have, however, failed to grow at a reasonable rate. Aid inflows (grants) have been an important source of government finance. The lack of economic progress in the presence of large aid flows has been described as the ‘Pacific paradox’ (World Bank 1993).

This paper examines the macroeconomic performance of the Pacific island countries. It includes analyses of economic growth, inflation and balances of payment, and the possible contributions of fiscal, monetary and exchange rate policies. Wherever possible, comparisons are made with small island economies in other regions, such as in the Caribbean. Finally, the paper provides a general framework for macroeconomic policies as part of a state-led development strategy.

The Pacific island economies

There are 22 Pacific island economies, spread across some 30 million square kilometres in the South Pacific Ocean (Fairbairn 1999:44). The total land area of those countries is, however, just more than 500,000 square kilometres. Papua New Guinea is the largest economy, accounting for 83 per cent of the region’s land area and 80 per cent of the total population of just more than seven million. The next largest economy is Fiji, with an estimated population of 848,000 and total land area of 18,376 square kilometres; followed by Solomon Islands, with an estimated population of 470,860 and a total land area of 27,556 square kilometres. Other large sovereign countries are Vanuatu (population 214,970), Samoa (population 179,000) and Tonga (population 101,800). New Caledonia (18,734 square kilometres), with a population of 230,790, is a French territory. Four micro-states are federated into the Federated States of Micronesia. The Federated States of Micronesia is a sovereign state in free association with the United...
States—as are Palau and the Republic of the Marshall Islands. The rest of the economies are micro-states, such as Nauru, Niue, Tuvalu and Palau.

The structure of the Pacific island countries fits Khatkhate and Short’s (1980:1018) description of mini-states.

Goods which are produced tend to be exported, goods which are sold in the mini state tend to be imported, and the commodities which are both produced and consumed within the mini state tend to be services. Even a substantial amount of these services may be purchased by foreigners in a mini state which specialises in tourism, offshore banking, offshore insurance or tax avoidance facilities.

Almost all Pacific island countries fall within the low-income group of developing countries as defined by the United Nations, with gross national product (GNP) per capita ranging from US$700 (in Kiribati) to US$3,900 (in Cook Islands). Some have substantial mineral deposits—Papua New Guinea (gold, copper, oil and nickel), Fiji (gold) and Solomon Islands (gold)—however, agriculture and fisheries are the main economic activities, and the public sector is the largest employer. Most are highly dependent on foreign aid; some are among the highest aid recipients in the world, with annual average per capita aid as high as US$1,250.

Although most of these economies have low per capita incomes, quite a few have managed to achieve high literacy rates and long life expectancies. Their achievements therefore, in terms of the United Nations Development Program’s Human Development Index, are much higher than would be expected at their level of per capita income.

Pacific island countries face serious constraints to growth and development stemming from their geographical and demographic characteristics. The Economic and Social Survey 2006 of the UN Economic and Social Commission for Asia and the Pacific (ESCAP) observes that Pacific island economies face many daunting problems in their quest for economic growth and sustainable development. These include the

### Table 1 Economic vulnerability of Pacific island countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Output volatility index</th>
<th>Rank</th>
<th>Composite vulnerability index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanuatu</td>
<td>3.61</td>
<td>90</td>
<td>13.295</td>
<td>1</td>
</tr>
<tr>
<td>Tonga</td>
<td>13.18</td>
<td>4</td>
<td>10.439</td>
<td>3</td>
</tr>
<tr>
<td>Fiji</td>
<td>6.84</td>
<td>32</td>
<td>8.888</td>
<td>8</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>11.21</td>
<td>9</td>
<td>8.398</td>
<td>11</td>
</tr>
<tr>
<td>Samoa</td>
<td>6.92</td>
<td>30</td>
<td>7.371</td>
<td>20</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>5.03</td>
<td>65</td>
<td>6.308</td>
<td>30</td>
</tr>
<tr>
<td>Kiribati</td>
<td>16.6</td>
<td>1</td>
<td>5.082</td>
<td>59</td>
</tr>
</tbody>
</table>

**Note:** Small states are defined as those with populations of 1.5 million or less. The sample includes 111 developing countries. Output volatility is defined as the standard deviation of annual rates of growth of per capita constant price (purchasing power parity, PPP) gross domestic product during 1980–92. **Source:** Commonwealth Secretariat, 2000. Small states: meeting challenges in the global economy, Report prepared for the Commonwealth Secretariat/World Bank Joint Task Force on Small States, World Bank, Washington, DC:Table 2).
physical disadvantages of remoteness, smallness and dispersion, significantly rising transport and other development costs and limited opportunities for realising economies of scale. In many cases, rapid population growth exerts pressure on scarce resources and frustrates efforts to raise living standards. The severe shortages of professional and technical skills, paucity of domestic savings and vulnerability to external shocks pose further constraints (ESCAP 2006:66–7).

According to the composite vulnerability index (CVI) of the Commonwealth Secretariat, the level of economic vulnerability of Pacific island countries is among the highest in the world (Commonwealth Secretariat 2000). This index is based on the experience of 111 developing countries’ vulnerability to natural disasters, terms-of-trade instability and capital flows during the 1990s. Vanuatu ranks as the most vulnerable economy in the world (Table 1); Tonga ranks third, Fiji eighth, Solomon Islands eleventh and Samoa twentieth.

The economic vulnerability of Pacific island countries is, however, a common characteristic of small economies. For example, similar small island states such as the Maldives, Mauritius and Seychelles (in the Indian Ocean) and Antigua, Barbuda, Bahamas, Dominica, Grenada, Jamaica, Saint Lucia, Saint Vincent and Saint Kilda (in the Caribbean) have CVI scores within the highest 30. The evaluation of the macroeconomic performance and policies of these countries must, therefore, take their exceptional vulnerability into account. Macroeconomic policies in highly vulnerable economies have to be different from those in more stable economies, and policymakers should refrain from looking for universal prescriptions. It is pertinent to bear in mind the recent reflection of the World Bank in this regard: ‘[t]here is no unique universal set of rules...we need to get away from formulae and the search for elusive “best practices”’ (World Bank 2005:xiii).

**Macroeconomic performance: confluence of supply shocks and constrained demand**

Growth rates in selected Pacific island countries are highly volatile. According to World Bank estimates, in the 1990s alone natural disasters cost the Pacific region US$2.8 billion (in real 2004 values). The latest major natural disasters include the 1997–98 drought in Papua New Guinea, Cyclone Heta in January 2004 and the subsequent drought that devastated Samoa’s agriculture, and Cyclone Ivy in Vanuatu. In addition, Pacific island countries have had to cope with sharp increases in crude-oil prices and major fluctuations in other commodity prices. The economic vulnerability of some Pacific island countries has been compounded by political instability. For example, the Asian Development Bank (ADB 2000) estimated that political instability contributed to the decline in the GDP of Fiji and Solomon Islands by 15–20 per cent in 2000.

Volatility in GDP has, however, declined since 2002 and most economies have grown between 2 and 5 per cent per annum since then. Although modest, this is a significant improvement compared with the 1980s, when their average annual growth rate was about 0.6 per cent. As opposed to the dismal performance of the Pacific island countries, the small island economies in the Caribbean grew at an average annual rate of more than 5 per cent in a similar global economic environment in the 1980s (World Bank 1991).

The World Bank (1991:25) attributed the dismal performance of the Pacific island countries in the 1980s to ‘an inability
to adopt needed structural reforms'. It identified (1991:34) ‘a need to reduce the public sector’s relative command over the economy’s resources’ and recommended standard reforms in the areas of trade, finance and other economic activities. Critics, such as Lodewijks (1994), pointed out that most Pacific island countries followed the World Bank’s advice and some (for example, Kiribati and Samoa) became models of orthodox economic policies. These model island economies failed, however, to register rapid economic growth. Lodewijks (1994) offered the hypothesis of ‘structure-constrained’ growth to explain the poor growth performance of the Pacific island economies. According to him, structural impediments to growth arise from poor management of natural resources, low levels of human resources, inadequate savings, high labour out-migration, vulnerability to trade and aid volatility and non-conducive cultural factors.

The Pacific island economies have generally maintained macroeconomic stability. Inflation rates have been low (less than 5 per cent), except in Papua New Guinea, Solomon Islands and Tonga. Budget deficits in recent times have been below 2 per cent of GDP, except in Fiji and Tonga. The inflation rate in Papua New Guinea has decelerated sharply since 2003, and in Solomon Islands and Tonga it has dropped below 10 per cent. The occasional spikes in the inflation rate have been due mainly to supply shocks such as natural disasters. For example, Cyclone Heta in 2004 contributed substantially to the sharp rise in the inflation rate in Samoa. The rise in world oil prices has been responsible for recent increases in inflation rates. The predominantly supply shock inflation in the Pacific island countries is evident from the weak correlation of inflation with the developments in budget balances and money supply (Table 2). Rigorous econometric studies confirm the importance of supply factors and import prices for inflation in the Pacific island countries (Dewan et al. 1999).

Despite higher world commodity prices, especially of oil and gold, Papua New Guinea’s current account surplus has declined. Declines in the prices of palm oil, cocoa and copra since 2004 could have contributed to the large current account deficit in the Solomon Islands. It seems, however, that Vanuatu might have avoided the same consequences from declining prices for palm oil, cocoa and copra by allowing its real exchange rate to depreciate. While Solomon Islands’ exchange rate has remained stable, its higher inflation rate could have contributed to this outcome.

In sum, while the Pacific island countries are vulnerable to various supply shocks, their growth appears to be demand constrained. This is evident from weak correlations between inflation and indicators of demand shocks such as money supply growth and budget deficits. The lack of correlation between budget deficits and the current account position provides further evidence of the demand-constrained nature of these economies (Table 3). It seems therefore that despite various obstacles to supply (as Lodewijks 1994 points out), most Pacific island countries have excess capacity. The limited domestic market, not compensated for by export markets, can explain part of this. As the next section demonstrates, however, the inadequate effective demand has been largely policy induced.

**Constraining macroeconomic policies**

Some of the larger Pacific island economies, such as Papua New Guinea, Fiji, Solomon Islands and Samoa, suffered serious economic shocks in the 1980s and 1990s and had to seek adjustment and
stabilisation support from the International Monetary Fund (IMF). The IMF-supported stabilisation measures included the usual mix of reducing expenditure and switching policies (Siwatibau 1993). The Pacific island economies have, therefore, generally had conservative fiscal and monetary policies since the late 1980s or early 1990s. Improvement in the fiscal situation, however, was not achieved on the revenue side. The revenue-raising efforts did not yield much despite tax reforms, including the introduction of the value-added tax, since government revenue was heavily dependent on exports of commodities. Fiscal improvement was achieved mostly by cutting development and public investment expenditure, since the governments could do very little with the public sector wage bill. Even the World Bank, which supported the conservative macroeconomic agenda, admitted that ‘[t]he effect of budget tightening on government investment is most pronounced in Fiji’ (World Bank 1998:25). The Fijian government’s development expenditure declined from 9 per cent of GDP in the early 1980s to 3 per cent by 1995—’a level which is

Table 2  Correlation between inflation, budget deficits and monetary supply growth in selected Pacific island countries, 1995–2005

<table>
<thead>
<tr>
<th></th>
<th>Inflation and monetary supply growth</th>
<th>Inflation and budget deficits</th>
<th>Monetary supply growth and budget deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>−0.104</td>
<td>0.503</td>
<td>−0.059</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>−0.413</td>
<td>−0.434</td>
<td>0.508</td>
</tr>
<tr>
<td>Samoa</td>
<td>−0.520</td>
<td>0.345</td>
<td>−0.574</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.041</td>
<td>0.193</td>
<td>0.084</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.535</td>
<td>−0.258</td>
<td>−0.439</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>−0.048</td>
<td>−0.476</td>
<td>−0.250</td>
</tr>
</tbody>
</table>

Note: Monetary supply refers to M2 and budget balance includes grants.


Table 3  Correlation between current account balances and budget balances, 1995–2005

<table>
<thead>
<tr>
<th></th>
<th>Correlation coefficient</th>
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</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>0.152</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>0.051</td>
</tr>
<tr>
<td>Samoa</td>
<td>0.746</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>0.038</td>
</tr>
<tr>
<td>Tonga</td>
<td>0.013</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>−0.756</td>
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</table>


Public investment has historically been the dominant component of total investment in the Pacific island economies, due to their underdeveloped private sectors. The decline in public investment has therefore meant a sharp drop in capital accumulation. Research done in the Department of Economics of the University of the South Pacific reveals that the contribution of total factor productivity in Pacific island economies is very small, implying mainly factor accumulation-driven growth (Rao et al. 2006). The declines in public investment must therefore have constrained economic growth in the Pacific island countries.

Due to the absence of a well-developed domestic capital market in developing countries, their fiscal deficits are financed mainly by borrowing from central banks. In the case of Pacific island economies, however, donor funds provide an important avenue for non-inflationary financing of deficits. Perhaps this explains the lack of association of inflation with budget deficits and money supply growth. More importantly, in the Pacific island economies that have central banks, there is a legislative limit on the government’s ability to borrow from the central banks. Such limits are generally set at a fixed percentage of average annual revenue over a number of years immediately preceding the budget year (Siwatibau 1993). This restraint on government borrowing from the central banks has been put in place because of the fear of inflation. Although this limit has been broken at times, monetary authorities have generally prevailed over fiscal authorities (Ali and Jayaraman 2001). As a result, the macroeconomic policy mix remains by and large conservative.

While the conservative fiscal and monetary policies have been successful in restraining demand, the switching policy of devaluation or large depreciations in countries with their own currencies does not seem to have produced the expected results. In highly import-dependent economies, devaluation immediately translates into higher domestic prices, leading to upward adjustments of nominal wages. Such developments neutralise the effects of devaluation on relative prices between tradables and non-tradables.

In sum, for the past two decades, the Pacific island economies have been pursuing orthodox macroeconomic policies aimed at stabilising nominal variables (for example, very low inflation rates, low budget deficits or balanced or surplus budgets). This policy stance is based on the assumption that nominal stabilisation will lead to a brighter investment climate and enhanced international competitiveness, and hence, higher economic growth. The stabilisation of nominal variables, however, failed to generate supply-side responses. This was due to reductions in development and public investment expenditure and the failure of devaluation to alter relative prices. What we observe in the Pacific island countries is therefore a combination of low inflation and subdued economic growth—a situation that can be described as a ‘stabilisation trap’ (Chowdhury 2005a). It is unlikely that the Pacific island countries can generate the high growth needed for improvements in per capita real income in the face of rapid population growth when they are focused on keeping the inflation rate at a very low level and are unable to
restructure their government expenditure towards public investment in infrastructure and human resource development.

Focus on very low inflation rates when inflation is due predominantly to supply shocks has also contributed to excessive output volatility. Beddies (1999) demonstrated that inflation-targeting monetary policy does not lead to optimal output stabilisation of aggregate supply shocks; in fact, a price-stabilisation target leads to greater output variability. This can be explained using Figure 1.

In Panel A, the response to an adverse supply shock is an expansionary monetary policy to stabilise output at $Q_0$, whereas in Panel B, the response is a contractionary monetary policy to stabilise the price level at $P_0$. When the response is an expansionary policy, the price level rises further to $P_2$—that is, higher inflation. On the other hand, when the objective is price stabilisation through a contractionary monetary policy, output declines further to $Q_2$.

The legacy of the stabilisation programs of the 1990s remains. Fiscal and monetary policies in the Pacific island countries by and large continue to be conservative. This is evident from the relatively high lending interest rates (Figure 2a) and near-balanced budgets.

Assessing the impact of high real interest rates in the Caribbean island economies, Worrell observes that

...the increased costs of finance appear to have made firms that depend on bank credit less competitive in the production of tradables and more expensive in the production of non-tradables (1987:213).

One can expect very similar consequences of high real interest rates in Pacific island countries, since bank credit is the dominant form of external financing for most firms. On the other hand, high real interest rates did not attract significant capital inflows, as other confounding factors, such as extreme vulnerability, outweighed expected gains.

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Figure 1  Adjustment to supply shocks

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Panel A

Panel B
from higher interest rates. Their major sources of capital inflows—foreign aid and workers’ remittances—are not sensitive to interest rate differentials.

While the real lending rates are high, the real deposit rates have been negative in a number of countries (Figure 2b). One can expect this to have disincentive effects on household savings decisions. The monetary and interest rate policies have not therefore been conducive to savings and capital formation.

Macroeconomic policy options

What role can macroeconomic policies play in very open small island economies? Khatkhate and Short (1980) believe very little. According to them, the degree of policymakers’ control over macroeconomic target variables (for example, output, inflation and external balance) is inversely proportional to the degree of openness of product markets. Because mini-states are price takers in international markets, the volume of exports, and therefore output, is determined by the mini-state’s productive capacity, which is influenced more by factors such as weather than by macroeconomic policies. At the same time, because they are highly import dependent, their inflation is by and large determined by their trading partners.

Corden (1984), using the example of Singapore, developed a model of a small open economy in which all products were tradable, and demonstrated that the exchange rate could be used to target inflation and wages policies to target competitiveness, and hence, employment. Since the aggregate demand for output is perfectly price elastic, domestic demand and hence monetary and fiscal policy do not have any direct effects on the price level or employment. To the extent that the monetary authority pegs the exchange rate to a predetermined level, money supply becomes endogenous. Monetary policy works therefore only through its effects on the exchange rate. When the exchange rate is allowed to float, perfect capital mobility renders fiscal policy ineffective due to induced exchange rate effects.

Treadgold (1992) provided a critique of Khatkhate and Short, and extended Corden’s model to suit the conditions of small Pacific island economies. To begin with, most Pacific island economies do not have separate currencies; they use Australian, New Zealand or US dollars. They therefore cannot have the exchange rate instrument as the Corden model suggests, but they can still use wages policy to target employment. Second, even for those economies that have their own currencies, the assumption of perfect capital mobility is not relevant, as this would require perfect substitutability between domestic and foreign bonds. Even when the assumption of perfect capital mobility is replaced with incomplete capital mobility, Treadgold shows that under different labour-market conditions the policy implications of the basic Corden model remain relevant. When money wages are inflexible downward, the achievement of the employment target would require abandoning an independent inflation target. That is, the exchange rate should be varied to achieve the domestic inflation needed to reduce real wages for the employment target. On the other hand, the downward real-wage inflexibility excludes the possibility of achieving any independent employment target, and macro policy (that is, exchange rate policy) should be directed to controlling the price level only. Finally, the micro-states that have a high degree of labour mobility with larger economies face essentially a given real wage determined in the larger economies. Their labour market mimics a competitive labour market,
Focus

Figure 2a  Real lending rates, 1995–2005 (per cent)

Figure 2b  Real deposit rates

Note: Real interest rate = nominal rate – inflation.
Source: International Monetary Fund (IMF), various years. International Financial Statistics, International Monetary Fund, Washington, DC.
and hence employment is determined endogenously. As in the case of downward real-wage inflexibility, these micro-states should use the exchange rate to achieve the inflation target.

In sum, fiscal and monetary policies cannot play a stabilising role in any of the three theoretical models reviewed above. In the Corden model and its modified version, the stabilisation (price level and employment) role is assigned to the exchange rate and wages policies. The fact that the Pacific island economies can maintain very low inflation rates using conventional demand-management policies proves Khatkhate and Short’s conclusion wrong. To the extent that the effectiveness of policy instruments (exchange rates) in the Corden–Treadgold framework depends on falling real wages, it does not offer much hope in economies in which poverty is high and the real wage is at the subsistence level. In these countries, real-wage resistance does not have to be an outcome of a centralised wage-setting mechanism and/or the nature of labour market institutions. The real wage is already so low that it cannot be reduced any further.\textsuperscript{13}

All three models focus on the demand-side role of fiscal and monetary policies and ignore the fact that in developing countries these policies are used predominantly for economic growth and hence enhancing aggregate supply. Thus, employment creation in these models implies movement along the labour-demand curve (that is, a reduction in real wages). They also assume symmetry in capital inflows and outflows, and consider only short-term portfolio investment, not long-term foreign direct investment. Most developing countries, especially the small Pacific island economies, do not attract much capital flow. As noted earlier, vulnerability risks outweigh the expected gains from interest rate differentials, and Pacific island countries are more prone to capital flight than to capital inflow. For their long-term economic growth, they need foreign direct investment and foreign aid, which are not sensitive to interest rate differentials. Once these considerations are taken into account, fiscal and monetary policies assume radically different roles from those derived from the Mundell–Fleming model and its variants.

In particular, when the direct long-term (growth) and short-term (demand) aspects of macroeconomic policies are juxtaposed or treated simultaneously, employment creation does not depend on lower real wages (movement along the demand curve); instead, employment is created by shifting the labour-demand curve—that is, what is needed in fragile economies such as Pacific island countries are state-led development strategies.

**A state-led development strategy**

**Fiscal policy**

Given the poor state of infrastructure and human resources and other critical factors influencing economic growth, and the lack of private investment in these areas (due to market failure or inadequate markets), the government has to play a leading role. This means a predominant role for fiscal policy and the acceptance of larger budget deficits than currently aimed for. Obviously, the question arises as to the financing of deficits and its implications for inflation and external balance, as well as the sustainability of government debt. First, we should note the ‘golden rule’: borrow to finance investment and balance recurrent/routine expenditure. If borrowing is done to invest productively, then debt will remain sustainable—economic growth will generate revenues to repair the budget deficit.
Due to poor credit ratings in the international capital markets and the lack of well-developed domestic capital markets, Pacific island country governments have two options for borrowing: central banks and foreign aid. Foreign aid has indeed been a significant source of government financing in Pacific island countries. Borrowing from central banks will increase money supply. The endogeneity of money supply will prevent interest rates from rising, and hence, there will be no possibility of a crowding-out effect. On the contrary, government investment in infrastructure and human resource development is likely to crowd-in private investment. While improved infrastructure reduces business costs, subsidised provision of public health and education can be regarded as social wages, which dampen wage demand; both factors enhance the investment climate.

As noted earlier, the Pacific island economies are demand constrained, and expansionary policies are therefore unlikely to cause inflationary pressure or balance of payments problems. Additionally, since the productive capacity of the economy is likely to expand with public investment, the increase in money supply will not be as inflationary. In any case, a moderate level of inflation is found not to be harmful for economic growth. Figures 3a and 3b show that the experience of Pacific island economies with regard to fiscal balance, inflation and growth is consistent with evidence in other developing countries. In the absence of a well-developed taxation system, inflationary tax (or seigniorage) becomes an important source of government revenue for financing development.

Foreign aid
Foreign aid is a non-inflationary source of finance for the government. Pacific island economies are among the highest aid recipients in the developing world. There is a general perception, however, that the large aid flows have failed to spur rapid economic growth. Significant amounts of aid go to support civil servant salaries and the government’s recurrent expenditure, which are drags on development. A recent comprehensive study of seven Pacific island countries has, however, found a statistically significant positive relationship between aid and growth but with diminishing returns. This finding is consistent with findings elsewhere and is not sensitive to either the policy environment or institutions. The findings imply therefore that many of the lessons learnt in other countries are largely applicable to the Pacific island countries.

The apparent lack of aid effectiveness or diminishing returns to aid can be traced to a number of confounding factors: the first is the uncertainty of disbursements and the divergence between commitments and disbursements. Aid volatility can cause significant problems for project implementation and the government budget. Second, aid is fraught with principal-agent problems. The recipient countries not only renege on commitment to reforms, they divert aid funds to undesirable uses, such as government consumption or development projects chosen purely on political grounds. Third, diminishing returns to aid could result from the lack of absorptive capacity. This could arise for a number of reasons, such as an inability to provide counterpart funds, deficiencies in planning and sequencing or lack of administrative capacity. Finally, large aid flows can cause real appreciation of local currencies to the detriment of the tradable sector; this is known as the ‘Dutch disease syndrome’.

The key element for addressing the above issues is the predictability of aid flows and confidence in donor–recipient
Focus

Figure 3a  Fiscal balance, inflation and growth, 1990–97

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal Balance (%GDP)</th>
<th>Inflation (%)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
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<td>Vanuatu</td>
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Note: Countries: (1) Cook Islands; (2) Fiji; (3) Federated States of Micronesia; (4) Kiribati; (5) Papua New Guinea; (6) Marshall Islands; (7) Samoa; (8) Solomon Islands; (9) Tonga; (10) Tuvalu; (11) Vanuatu.

Source: International Monetary Fund (IMF), various years. International Financial Statistics, International Monetary Fund, Washington, DC.

Figure 3b  Fiscal balance, inflation and growth, 1998–2003

<table>
<thead>
<tr>
<th>Country</th>
<th>Fiscal Balance (%GDP)</th>
<th>Inflation (%)</th>
<th>Growth (%)</th>
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<tbody>
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<td>Cook Islands</td>
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<tr>
<td>Vanuatu</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Countries: (1) Cook Islands; (2) Fiji; (3) Federated States of Micronesia; (4) Kiribati; (5) Papua New Guinea; (6) Marshall Islands; (7) Samoa; (8) Solomon Islands; (9) Tonga; (10) Tuvalu; (11) Vanuatu.

Source: International Monetary Fund (IMF), various years. International Financial Statistics, International Monetary Fund, Washington, DC.
relationships. The Pacific island economies experience high volatility of fiscal revenues due to their heavy reliance on trade. Aid is needed to smooth out fluctuations in revenues and should not be another source of shocks to the budget. Perhaps a ‘fiscal insurance scheme’ could be developed with donor funds for the entire region to address volatility in fiscal revenues. That is, donors could contribute a portion of aid to a regional common pool to be drawn on by countries facing unforeseen declines in fiscal revenues. The recipient countries should also contribute a portion of their revenue windfalls to this regional common pool. A jointly managed regional common pool or the fiscal insurance scheme suggested above could play a positive role in improving donor-recipient relations.

Donors can help overcome some of the absorptive-capacity problems by not requiring counterpart funds and by providing technical assistance in aid management and administration. Other measures to monitor aid administration could also be considered. For example, aid could be used to help national governments to strengthen democratic institutions designed as checks and balances on government expenditure.

Finally, the possibility of Dutch disease from aid is remote, as these countries do not operate at full employment—a vital assumption of the Dutch disease hypothesis. Moreover, the Dutch disease syndrome can be avoided. First, if aid is used for direct imports and/or technical assistance, there is no need for real appreciation for resource transfer to occur. Second, if aid is used for productivity enhancing investment, it offsets the impact of the real exchange rate on competitiveness (Chowdhury and McKinley 2006).

**Monetary policy**

Growth-oriented monetary policy has two features. First, monetary policy has to accommodate the government’s investment needs. This is premised on the large body of empirical evidence showing that moderate inflation does not harm economic growth, and could even be necessary. There is no evidence of a negative relationship between inflation and growth in Pacific island economies when inflation rates are within the moderate range of 10–12 per cent (Figure 4). The East Asian experience also confirms this. Furthermore, an accommodative monetary policy is needed to ease the counterpart funding problem for the utilisation of aid and hence to enhance the absorption of aid.

Second, the monetary authorities should use low-cost, directed credits to support labour-intensive small and medium enterprises (SMEs). Of course, subsidised special credit programs distort the credit market as well as running the risk of being infected with rent-seeking behaviour. The costs of distortions and rent seeking have, however, to be weighed against the costs of market failure in the credit market, which results in discrimination against SMEs and the agricultural sector.

One might have concerns about the impact of low-interest policies on savings and financial sector development. To begin with, low real interest rates must not mean negative real deposit interest rates, which is the case in a number of Pacific island countries. Second, empirical evidence shows that in low-income countries, financial development is mainly demand led—that is, it follows growth. This is consistent with the observation that current income plays a more dominant role in household savings decisions than the interest rate.

**Exchange rate and capital account policies**

The Pacific island economies have exchange rate systems ranging from dollarised to floating, and hence, offer excellent scope for evaluating different exchange rate regimes.
There is no clear evidence of superiority of any one regime (Table 4). As expected, the dollarised economies have inflation rates close to the rates in the country whose currency they use, and the only country with an independently floating system (Papua New Guinea) has higher inflation rates. The economies with a pegged exchange rate system have mixed experiences with inflation—among the countries and between the two periods. There is, however, no significant difference in the growth and budget balance experiences across different exchange rate regimes, except for those using the US dollar. This is perhaps due to the high volatility of US grants to these economies.

As opposed to the IMF’s suggestion of freer and more flexible currency regimes, some observers have recently argued for a dollarised regime, and the use of the Australian dollar in the Pacific economies (de Brouwer 2002; Duncan 2002). The argument is based on the insufficient depth of domestic financial and foreign exchange markets to support the liquidity necessary to maintain a freely floating exchange rate, and the lack of skilled personnel to run a central bank. The adoption of a strong foreign currency is also likely to impose fiscal discipline in economies in which maintaining central bank independence is difficult. Some commentators have also examined the possibility of forming a currency union like the East Caribbean Monetary Union (Jayaraman et al. 2005).

While dollarisation improves macroeconomic stability, the main objection to it could arise from the vastly different types of shocks between the Pacific island economies and the country of the strong currency (Australia, New Zealand and the United States). Responses to these shocks therefore require some macroeconomic

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**Figure 4  The inflation–growth relationship, 1970–2005**

![Graph showing the inflation–growth relationship for various Pacific island economies from 1970 to 2005.](image)

**Note:** Not all countries have data from 1970.

**Source:** World Bank, various years. *World Development Indicators*, World Bank, Washington, DC.
policy independence, which will be lost if the currency is dollarised. As highlighted earlier, the low inflation rates of the strong-currency country might be too constraining for the Pacific island economies, which are prone to supply shocks and need to undergo structural change. Furthermore, dollarisation will deprive them of seigniorage—an important source of revenue for countries with a poor domestic revenue base.25

A case can be made, however, in favour of a currency or monetary union, despite the fact that there is a lack of significant convergence of macroeconomic indicators. The Pacific island economies have already taken major steps towards regional cooperation by signing two agreements in 2001. One, signed by all 14 independent island countries, known as the Pacific Island Countries Trade Agreement (PICTA), aims to usher in free trade among them by 2012. The second agreement, the Pacific Agreement on Closer Economic Relations (PACER), covers all 14 Pacific island countries and Australia and New Zealand.26

The question is whether they should adopt a common currency before economic convergence, as in the case of the European Union. Convergence is not, however, a necessary condition. As Scitovsky observes

Table 4  Exchange rate regimes and economic performance

<table>
<thead>
<tr>
<th>Pacific island economies</th>
<th>Exchange rate regime</th>
<th>Overall fiscal balance (% of GDP)</th>
<th>Inflation (%)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook Islands</td>
<td>NZ$</td>
<td>–4.0</td>
<td>–1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Fiji</td>
<td>Peg*</td>
<td>–3.2</td>
<td>–3.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Federated States of Micronesia</td>
<td>US$</td>
<td>–15.9</td>
<td>–7.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Kiribati</td>
<td>A$</td>
<td>6.8</td>
<td>4.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>Float</td>
<td>–2.7</td>
<td>–1.7</td>
<td>5.6</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>US$</td>
<td>–20.3</td>
<td>11.1</td>
<td>–0.9</td>
</tr>
<tr>
<td>Samoa</td>
<td>Peg*</td>
<td>–2.8</td>
<td>–0.7</td>
<td>–3.1</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>Peg*</td>
<td>–5.1</td>
<td>–3.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Tonga</td>
<td>Peg*</td>
<td>0.1</td>
<td>–0.8</td>
<td>3.3</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>A$</td>
<td>–6.1</td>
<td>18.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>Peg*</td>
<td>–4.0</td>
<td>–3.1</td>
<td>4.4</td>
</tr>
</tbody>
</table>

* pegged to a basket of currencies whose composition and weights are generally kept confidential

Note: Percentage inflation rates (1995–2005): US = 2.5; A = 2.7; NZ = 2.4

(1958), the formation of a currency union itself could lead to convergence.

In addition, there are other advantages. First, the currency union will expand the regional market and can offer a buffer against terms-of-trade shocks, which might differ for member countries. Second, individual member countries do not have to keep large foreign exchange reserves, which have high opportunity costs when they need large investment in infrastructure and human resource development. Third, it allows them as a group to follow a pegged system with the outside world without having to expose themselves excessively to speculative attacks. An adjustable pegged system is essentially a real-target approach (targeting export competitiveness) instead of a nominal-target approach (targeting inflation).

An economy (or economic union) cannot, however, have macroeconomic policy independence and an open capital account under a pegged exchange rate system. This means there should be some restrictions on capital mobility. As pointed out earlier, the Pacific island countries do not receive much short-term private capital. Their main sources of outside capital are foreign aid and worker remittances, which are not sensitive to interest rates. Their main problem is capital outflow, and it makes sense to have some controls on capital flight (Chowdhury 2005b). Restrictions on short-term capital outflows do not necessarily create any disincentives for long-term foreign direct investment.

**Concluding remarks**

This paper reviews the macroeconomic performance of, and policies in, small Pacific island economies. These are among the most vulnerable economies situated in a fragile environmental zone. Their geography and demography pose serious obstacles to development. This paper argues for a more activist government in the Keynesian mode in such economies. Given their poor revenue base and meagre domestic savings, this means accepting higher budget deficits and inflation rates than what they have targeted during the past two decades under the conditionality of the IMF and the World Bank’s structural-adjustment programs. Government expenditure needs to be restructured away from recurrent expenditure to development projects and human resource development. Monetary policy, too, needs to be accommodative and geared to support small enterprises rather than property or consumption booms. Donors need to support well-designed development projects in a more predictable manner. The paper also argues for a monetary union with an adjustable peg common currency with the rest of the world.

Finally, it must be noted that the success of the state-led development strategy depends on the quality of governance and the administrative capacity of the government; both are scarce in Pacific island countries. Although there are doubts about the effectiveness of aid conditionality, donors can play an important role in improving governance by supporting democratic institution building through technical assistance. Donor-funded civil service training programs can go a long way in building administrative capacity. In other words, aid strategy must strike a balance between hard-core development projects (for example, infrastructure) and soft-core projects (for example, institution building, technical assistance and civil service training).
Notes

1 See Armstrong et al. (1998). They find that size is not a barrier to micro-states' growth; instead, their fortune is tied to the region in which they are situated and to their larger neighbours.

2 Between 1950 and 2004, extreme natural disasters such as cyclones, droughts and tsunamis accounted for 65 per cent of the total economic impact of disasters on the region's economies. Ten of the 15 most extreme events reported in the past half-century occurred in the past 15 years (World Bank 2006:viii; AusAID 2005).

3 In assessing the economic impact of political instability, Chand (2003:6) concludes: 'Nature has also contributed to the [Pacific island countries'] troubles in the form of cyclones, earthquakes, floods and drought. Man-made disasters such as coups, violent conflicts, corruption, and crime have acted as major distractions from productive activity.' In an earlier study, the same author found that in Fiji the growth effects of coups were much more debilitating than cyclones.

4 Countries that do not have their own currency (such as Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands and Tuvalu) cannot have an independent monetary policy; but since they are tied to low-inflation countries (Australia, New Zealand and the United States), their monetary framework can be characterised as conservative.

5 Vanuatu has no income tax and this seriously limits its domestic revenue-raising capacity.

6 The World Bank (1998:23) summarises the situation as follows: '[i]n all of the PMCs [Pacific island member countries] there are two imbalances in the economic composition of expenditure: the first is between recurrent expenditure and investment and the second is between the wage and non-wage components of recurrent expenditure. Both of these imbalances impede growth and development. For example, when there is a shortfall in the government's resources for current expenditure, fiscal adjustment often cuts development expenditure creating an imbalance between them.'

7 For similar experiences in the Caribbean small island economies, see Worrell (1987).

8 Drake (1983) notes that output in micro-states is inelastic to relative price changes due to structural rigidities, such as difficulties in retraining the labour force for redeployment. This inhibits the resource-switching remedy of devaluation. Even when the economy is flexible, the impact of devaluation on the traded sector is limited. Since the market for non-traded goods and services is very small, the relative price effect will be negligible.

9 Sharp declines in real rates were caused by sudden increases in inflation due to supply shocks such as cyclones.

10 By the mini-state's 'exposure to foreign trade such that the economic targets of its economy are largely beyond its control' (Khatkahate and Short 1980:1018). Caram (1989:39–56) holds a similar view: 'Under the conditions now prevalent in small developing countries, it is not to be expected that monetary financing and the ensuing increase in effective demand will result in an appreciable increase in domestic production. The domestically generated supply of goods is insufficiently diversified and, as a result of physical and organisational bottlenecks, has barely any short-term elasticity. Owing to this and to the ample opportunities for imports, despite the exchange controls in force, the additional demand will focus largely on the supply from abroad. The so-called monetary approach to the balance of payments...proves to be highly topical for these countries.'

11 In an economy (closed or open) with a downward aggregate demand (Figure 1), expansionary monetary and fiscal policies raise the price level. The increased price level reduces real wages and hence increases employment and output. When an economy faces a perfectly price elastic aggregate demand, however, the domestic price level cannot differ from the world price.

12 This follows from the standard Mundell-Fleming IS-LM-BP model with flexible exchange rates and perfect capital mobility.


14 The World Bank (1998:xii) notes that in Pacific
island economies, ‘basic education, health care, and physical infrastructure are the highest priorities to improve living standards for the widest group of poor people, and to lay the foundations for sustained, broad-based income growth’.

15 This is the experience of the successful East and Southeast Asian economies.

16 Extreme openness of island economies reduces the size of the expenditure multiplier as demand spills over to imports. This means the balance of payments could be an effective constraint to growth. Here lies the importance of foreign aid—a point discussed later. Helleiner (1982) also highlights the importance of foreign aid in addressing balance of payments shocks.

17 See, for example, Feeny (2007). A negative correlation between aid flows and economic growth could, however, be just a statistical artefact. It could be due to the fact that in most cases, aid flows respond to natural disasters and other negative supply shocks, which retard growth. None of the studies that report a negative aid growth relationship conducted any counter-factual analysis. That is, what would have happened in the absence of aid? If aid responds to negative supply shocks then the non-availability of aid is likely to exacerbate the impact of negative supply shocks and there will be a deeper drop in income.

18 The seven Pacific island countries studied are Cook Islands, Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu.

19 For evidence of ‘Dutch disease syndrome’ in Pacific micro-states, see Laplange et al. (2001).

20 dos Reis (2004) highlights the usefulness of a fiscal insurance scheme for the countries of the Caribbean Currency Union. Such a scheme can alleviate problems of policy coordination within a currency union. We suggest a currency union for the Pacific island economies later in the paper.

21 Some Pacific countries already have a fiscal stabilisation fund. The regional stabilisation fund can supplement the national fund.

22 The traditional rationale for aid is to fill the savings–investment gap and the current account gap. The savings–investment gap is generally related to government budget deficits. Aid funds are converted into domestic currency to be spent by the government and this causes inflationary pressure leading to real appreciation. The real appreciation, in turn, causes higher imports to be financed by foreign currencies made available through aid in the first place. This is the normal channel through which aid is ‘spent’ and ‘absorbed’. Conservative fiscal and monetary policies therefore lead only to accumulation of foreign reserves and defeat the purpose of aid (Chowdhury and McKinley 2006).

23 See Chowdhury (2005) for an illustration of various monetary policy instruments for achieving employment and moderate inflation targets.

24 Jayaraman (2005) does not find much support for using the Australian dollar. Based on trade-flow statistics, he argues that there is a stronger case for adopting an Asian currency. Bowman (2005) concludes, ‘dollarisation to the US dollar, the de-facto standard in Asia, or a move to a common currency may be preferable alternatives to dollarising to the Australian dollar.’

25 See Drake (1983) for a comprehensive discussion of exchange rate choices for small open economies. Drake suggests an intermediate regime between an absolutely fixed exchange rate regime with no monetary discretion and a fully flexible exchange rate regime with monetary discretion.

26 The PACER became effective on 3 October 2002, as it required only six ratifications. Australia and New Zealand and four other Pacific island countries ratified to make it effective earlier than PICTA. Two other Pacific island countries followed them. The PICTA became effective on 13 April 2003, immediately after the minimum seven ratifications were obtained. Subsequently, two more Pacific island countries ratified. As of May 2004, five Pacific island countries had not ratified either PICTA or PACER: Republic of the Marshall Islands, Federated States of Micronesia, Palau, Tuvalu and Vanuatu.

27 On average, the Pacific island country central banks hold foreign reserves equivalent to four to five months of imports of goods.
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