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Macroeconomic Policies for Growth in Small Pacific Island Economies

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Abstract

This paper examines macroeconomic performance and policies in small Pacific island economies (SPIEs). These economies are highly prone to various supply shocks and face severe obstacles to development arising from their geography and demography. However, the paper contends that their lacklustre growth performance over the last two decades has also been due to excessively conservative macroeconomic policies. That is, a confluence of supply shocks and policy-induced constrained demand has resulted in poor economic performance. Given a very weak private sector, poor state of infrastructure and low-level human capital, the paper argues for the leading role of the government. It then elaborates on the elements of macroeconomic policies within a state-led development strategy.

Keywords: Pacific islands, macroeconomics, growth, aid, fiscal policy

JEL classification: E63, E66, O23, O56

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Acronyms

CVI   composite vulnerability index

FSM   Federated States of Micronesia

IMF   International Monetary Fund

PACER   Pacific Agreement on Closer Economic Relations

PICs   Pacific island countries

PICTA   Pacific Island Countries Trade Agreement

PMCs   Pacific Island Member Countries

PNG   Papua New Guinea

SMEs   small and medium enterprises

SPIEs   small Pacific island economies

Introduction

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. Some possess a substantial amount of natural resources, and have maintained remarkable macroeconomic stability in terms of low inflation and low budget deficits over the last two decades. Large aid inflows (grants) have been an important source of government finance. Yet these economies have failed to grow at a reasonable rate. Their lack of economic progress in the presence of large aid flows is described as the 'Pacific Paradox' (World Bank 1993).

This paper examines the macroeconomic performance of small Pacific island economies (SPIEs). It includes analyses of economic growth, inflation and balance of payments, and the possible contributions of fiscal, monetary and exchange rate policies. Wherever possible, comparisons are made with similar small island economies in other regions, such as in the Caribbean, to draw lessons. Finally, the paper provides a general framework for macroeconomic policies as part of a state-led development strategy. The paper begins with a brief background of SPIEs, and is organized as follows: section 2 examines macroeconomic performance, section 3 analyses macroeconomic policies during the last two decades, section 4 explores macroeconomic policy options, section 5 elaborates fiscal, monetary and exchange rate policies within the framework of state-led development strategy, and section 6 contains concluding remarks.

1   Small Pacific island economies (SPIEs): a brief background[1]

There are 22 island economies, spread over a vast estimated area of 30 million km^2 in the South Pacific Ocean (Fairbain 1999: 44). However, the total land area is just over 500,000 km^2. Papua New Guinea (PNG) is the largest economy, accounting for 83 per cent of the region's land and 80 per cent of the region's total population of just over 7 million. The next largest economy is Fiji, with an estimated population of 848,000 and total land area of 18,300 km^2, followed by the Solomon Islands, with an estimated population of 470,861 and total land of 1.35 million km^2. The other larger sovereign countries are Vanuatu (population 214,969), Samoa (population 179,000) and Tonga (population 101,803). New Caledonia (18,575.5 km^2) with a population of 230,789, is a French territory, and the rest of the economies are microstates, such as Nauru, Tuvalu and Palau, each of which is no more than 30 km^2. Four microstates are federated into the Federated States of Micronesia (FSM), which includes Chuuk, Kosrae, Pohnpei and Yap. The Federated States of Micronesia is a sovereign state in free association with the United States.

The structure of SPIEs 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

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[1] For details, see Rao et al. (2006).

specializes in tourism, offshore banking, offshore insurance or tax avoidance facilities.

Almost all SPIEs fall within the low-income group of developing countries as defined by the United Nations, with GNP per capita ranging from US$700 (Kiribati) to US$3,900 (Cook Islands). Although some (e.g., PNG, Fiji, Solomon Islands) have substantial mineral deposits (gold, copper, bauxite, phosphate and nickel), agriculture (including fisheries) is the main economic activity, and the public sector is the largest employer in the formal sector. Most SPIEs are highly dependent on foreign aid, accounting for about 30 per cent of GDP. They are among the highest aid recipients in the developing world, with annual average per capita aid as high as US$1,250.

Tables 1 and 2 present selected basic statistics of SPIEs. Although these economies have low per capita income, quite a few of them managed to achieve high literacy rates and long life expectancies. Thus, they have a high human development index. In other words, their achievement in human development is much higher than what can be expected at their level of per capita income.

SPIEs face serious constraints to growth and development, stemming from their geographical and demographic characteristics.[2] Urwin (2004) lists the following constraints:

— remoteness and insularity;
— susceptibility to natural disasters;
— small population size;
— limited diversification; and
— openness.

While Pollard (1989) has a similar list of constraints, he also identifies rapid population growth (e.g., 3.5 per cent per annum in Marshall Islands and over 2 per cent in Samoa) as a significant obstacle to achieving rising living standards. Kakazu's (1994) list of economic difficulties includes:

— severe shortage of technical and professional skills;
— inadequate domestic savings; and
— vulnerability to both external and internal shocks.

The *Economic and Social Survey* 2006 of the United Nations Economic and Social Commission for Asia and the Pacific observes (ESCAP 2006: 66-7):

> Pacific island economies face many daunting problems in their quest for economic growth and sustainable development. These include the physical disadvantages of remoteness, smallness and dispersion, significantly rising transport and other development costs and limiting opportunities for realizing 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.

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[2] For earlier assessments see, Ward (1967 and 1982).

Table 1

Basic economic statistics of the SPIEs

Land (km²)	Sea ('000 km²)	Population (m.) 2004	GDP (m. 2000 USD)	Major economic activity [a]	Natural resources	Foreign aid	
						Aid/GDP (%)[b]	Aid p.c. (USD)[b]
Papua New Guinea							
462,243	3,220	5.89	3,610			11.82	76.64
Fiji							
18,272	1,290	0.85	1,930	agriculture: 15.4 industry: 25.9 services: 58.7	timber, fish, gold, copper, offshore oil potential, hydro	2.92	49.4
Solomon Islands							
27,556	1,340	0.48	309	agriculture: 42 industry: 11 services: 47	fish, forests, gold, bauxite, phosphates, lead, zinc, nickel	23.63	120.13
Samoa							
2,935	120	0.18	287	agriculture: 16.8 industry: 26, services: 57.2	hardwood forests, fish, hydropower	22.32	166.52
Tonga							
747	700	0.1	171	agriculture: 29 industry: 15.2 services: 55.9	fish, fertile soil	21.08	185.64
Cook Islands							
237	1,830						
Kiribati							
690	3,550	0.1	48	agriculture: 9 industry: 13.4 services: 77.6	phosphate (discontinued in 1979)	38.78	190.81
Vanuatu							
12,190	680	0.21	255	agriculture: 15 industry: 8.8 services: 76.2	manganese, hardwood forests, fish	22.06	207.33
Marshall Islands							
181	2,131	0.06	129	agriculture: 9.4 industry: 18.6 services: 72.1	coconut prod., marine prod, deep seabed minerals	46.10	913.41
Nauru							
21	320				phosphates, fish		1,241.5
Palau							
		0.02	128	agriculture: 3.13 industry: 19 services: 76.8	forests, gold, marine, prod, deep-seabed minerals	17.66	1,136.21
Tuvalu							
26	900	0.01	NA		Fish	NA	520.0
Federal States of Micronesia							
701	2,978	0.11	222	agriculture: 50 industry: 4 services: 46	forests, marine products, deep-seabed minerals	40.66	804.14

Source: World Bank (WDI, various years); CIA Fact Sheet.

Notes: [a] = Figures are % shares in GDP; [b] = Average 1970-2005.

Table 2
Selected social statistics of SPIEs

Economies	Poverty rate	Life expectancy	Infant mortality rate	Adult literacy rate	HDI
PNG	37.5	55.3	69	57.3	0.523
Fiji	–	67.8	16	92.9	0.752
Solomon Islands	–	62.3	19	76.6	0.594
Samoa	–	70.2	19	98.7	0.776
Tonga	–	72.2	15	98.9	0.810
Cook Islands	–	–	–	–	–
Kiribati	–	–	49	–	–
Vanuatu	–	68.6	31	74.0	0.659
Marshall Islands	–	–	53	–	–
Nauru	–	–	25	–	–
Palau	–	–	23	–	–
Tuvalu	–	–	37	–	–
FSM	–	67.6	19	67.0	–

Source: UNDP (2005).

Table 3
Vulnerability of SPIEs

Country	Output volatility index	Rank	Composite vulnerability index	Rank
Vanuatu	3.61	90	13.295	1
Tonga	13.18	4	10.439	3
Fiji	6.84	32	8.888	8
Solomon Islands	11.21	9	8.398	11
Samoa	6.92	30	7.371	20
PNG	5.03	65	6.308	30
Kiribati	16.6	1	5.082	59

Note: Small states are defined as those with population 1.5 million or less. The sample includes 111 developing countries. Output volatility is simply the standard deviation of annual rates of growth of per capita constant price (PPP) GDP during 1980-92.

Source: Commonwealth Secretariat (2000: Table 2).

In sum, being excessively dependent on agriculture and other primary products as well as on aid, most SPIES are highly vulnerable to natural disasters, terms of trade shocks and aid volatility. According to the composite vulnerability index (CVI) of the Commonwealth Secretariat, the level of economic vulnerability of SPIEs is among the highest in the world (Commonwealth Secretariat 2000). This index is based on 111 developing countries' experience of vulnerability to natural disasters, terms of trade instability and capital flows during the 1990s. Vanuatu ranks as the most vulnerable economy. Tonga ranks third, Fiji eighth, Solomon Islands eleventh and Samoa twentieth (Table 3).

However, the vulnerability of the SPIEs is a common characteristic of small economies.[3] For example, similar small island states like Maldives, Mauritius and

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[3]   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 where they are situated and larger neighbours.

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 of, within the highest, 30. Thus, the evaluation of the macroeconomic performance and policies of these countries must take their exceptional vulnerability into account. In particular, macroeconomic policies in highly vulnerable economies have to be different from more stable economies, and policymakers should refrain from looking for generalized and universal prescriptions. It is pertinent to bear in mind the recent reflection of the World Bank (2005: xiii) in this regard that, '… there is no unique universal set of rules … [W]e need to get away from formulae and the search for elusive "best practices"…'.

2 Macroeconomic performance: confluence of supply shocks and constrained demand

Figure 1 presents GDP growth rates in selected SPIEs. As can be seen, their growth rates are highly volatile. As identified by the Commonwealth Secretariat (2000), this high output volatility is the result of their vulnerability to various supply-side shocks, such as natural disasters and changes in terms of trade. According to the World Bank's estimates, in the 1990s alone natural disaster cost the Pacific islands region US$2.8 billion (in real 2004 value).[4]

The latest natural disasters include cyclone Heta in January 2004, and the subsequent drought that devastated Samoa's agriculture, and cyclone Ivy in Vanuatu. In addition, SPIEs had to cope with high oil prices, fluctuations in world commodity prices and uncertainty arising from WTO rules and regulations. For example, the expiration of the WTO Agreement on Textiles and Clothing on 1 January 2005, caused 5,000-8,000 job losses in Fiji. The economic vulnerability of a number of Pacific island economies has been compounded by political instability. For example, ADB (2000) estimates show that political instability contributed to the decline in both Fiji and Solomon Islands' GDP by about 15-20 per cent in 2000.[5]

However, volatility has declined since 2002, and most economies have grown between 2 per cent and 5 per cent per annum since then. Although very modest, this is an improvement compared to the 1980s, when their average annual growth rate was about 0.6 per cent. As opposed to the dismal performance of the SPIEs, the small island economies in the Caribbean grew at an average annual rate of over 5 per cent in a similar world economic environment of the 1980s (World Bank 1991).

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[4] Since 1950, natural disasters have directly affected more than 3.4 million people and led to more than 1,700 reported deaths in the region (outside of PNG). In the 1990s alone, reported natural disasters cost the Pacific islands region US$2.8 billion in real 2004 value. Between 1950 and 2004, extreme natural disasters, such as cyclones, droughts and tsunamis, accounted for 65 per cent of the total economic impact from disasters on the region's economies. Ten of the 15 most extreme events reported over the past half a century occurred in the last 15 years. See World Bank (2006: viii). Also see AusAid (2005).

[5] In assessing the economic impact of political instability Chand (2003: 6) concludes, 'Nature has also contributed to the PICs' 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 also finds that in Fiji the growth effects of coups were much more debilitating than cyclones.

Figure 1
GDP growth in selected SPIEs
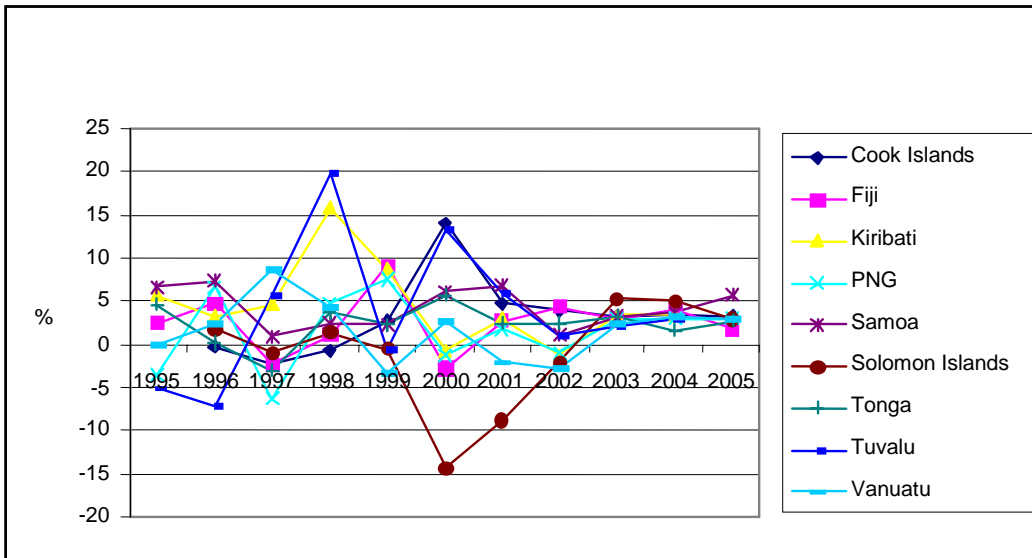
Figure 2
Inflation in selected SPIEs
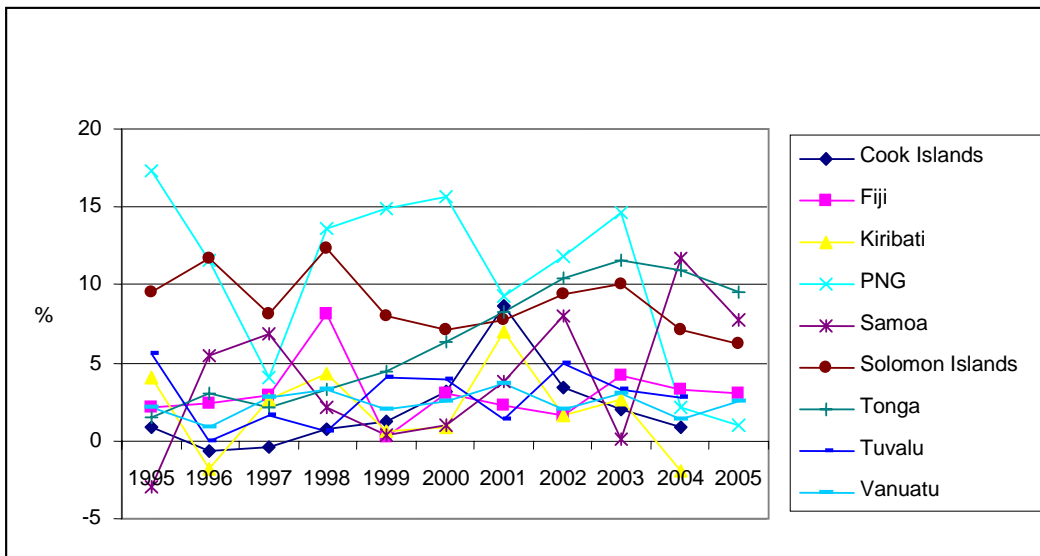
The World Bank (1991: 25) attributes the dismal performance of the Pacific island economies in the 1980s to 'an inability to adopt needed structural reforms'. It recommends (1991: 34) 'a need to reduce the public sector's relative command over the economy's resources' and standard reforms in the area of trade, finance and other economic activities. However, critics, such as Lodewijks (1994), point out that most Pacific island countries did follow World Bank's advice and some (e.g., Kiribati and Samoa) became models of orthodox economic policies. Yet these model island economies failed to register rapid economic growth. Lodewijks (1994) offers 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 level of human resources, inadequate savings, high labour out-migration and vulnerability to trade and aid volatility and non-conducive cultural factors.

As can be seen from Figures 2 and 3, the SPIEs, generally, have maintained macro economic stability. The inflation rates are low (less than 5 per cent), except in PNG, Solomon Islands and Tonga. The budget deficits in recent times have been below 2 per cent of GDP, except in Fiji and Tonga. The inflation rate in PNG decelerated sharply since 2003, and in both Solomon Islands and Tonga, it dropped below 10 per cent. The occasional spikes in the inflation rate have been due to mainly supply shocks such as natural disasters. For example, cyclone Heta in 2004 contributed to the sharp rise in the inflation rate in Samoa. The high world oil price has also been responsible for recent increases in the inflation rates. The predominantly supply shock type inflation in the SPIEs is also evident from the weak correlation of inflation with the developments in

Figure 3
Budget balance in selected SPIEs
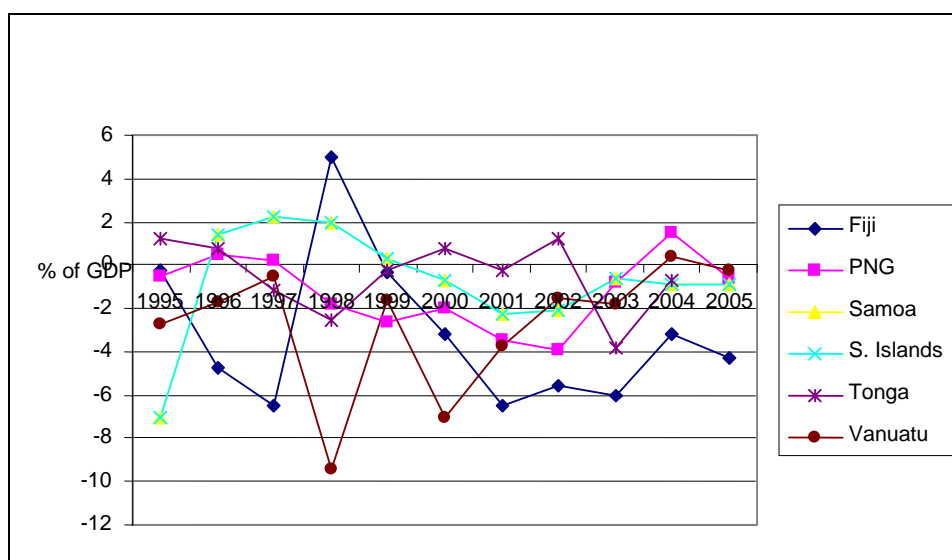
Note: Budget balance includes grants.
Source: ESCAP (2006).

Table 4
Correlation between inflation, budget deficit and money supply growth in selected SPIEs, 1995-2005

	Inflation and money supply growth	Inflation and budget deficits	Money supply growth and budget deficits
Fiji	-0.104	0.503	-0.059
PNG	-0.413	-0.434	0.508
Samoa	-0.520	0.345	-0.574
Solomon Islands	0.041	0.193	0.084
Tonga	0.535	-0.258	-0.439
Vanuatu	-0.048	-0.476	-0.250

Note: Money supply refers to M2 and budget balance includes grants.
Source: ESCAP (2006).

Figure 4
Current account in selected SPIEs
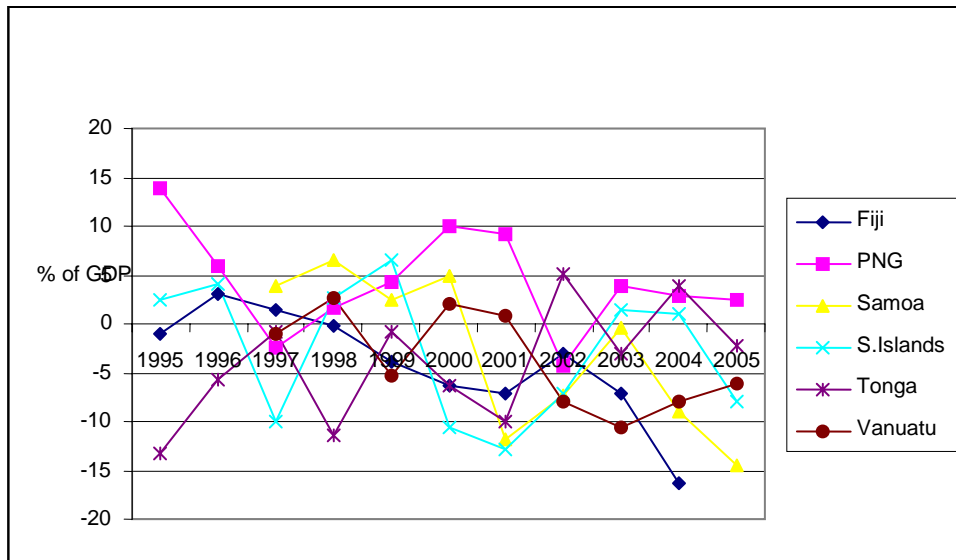
Source: ESCAP (2006).

Table 5
Correlation between current account balance and budget balance, 1995-2005

	Correlation coefficient
Fiji	0.152
PNG	0.051
Samoa	0.746
Solomon Islands	0.038
Tonga	0.013
Vanuatu	-0.756

Source: ESCAP (2006).

budget balance and money supply (Table 4). Rigorous econometric studies confirm the importance of supply factors and import prices for inflation in SPIE (see Dewan, Hussein and Morling 1999).

Despite higher world commodity prices, especially of oil and gold, PNG's current account surplus declined (Figure 4). Declines in the prices of palm oil, cocoa and copra since 2004 may have contributed to large current account deficit in the Solomon Islands. However, it seems Vanuatu may have avoided the same consequences of declining prices of palm oil, cocoa and copra by allowing its real exchange rate to depreciate. While the Solomon Islands exchange rate remained stable, its higher inflation rates may have contributed to this outcome.

In sum, while the SPIEs are vulnerable to various supply shocks, the growth in the SPIEs 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 current account position provides further evidence of the demand-constrained nature of these economies (Table 5). Thus, it seems that despite various obstacles to supply (as Lodewijks 1994 points out), most SPIEs have excess capacity. Part of this can be explained by limited

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domestic market, not compensated by export markets. However, as the next section demonstrates, inadequate effective demand has been largely policy induced.

3   Constraining macroeconomic policies

Major Pacific island economies, e.g., PNG, Fiji, Solomon Islands and Samoa, suffered serious economic shocks in the 1980s and had to seek adjustment and stabilization support from the International Monetary Fund (IMF). The Fund-supported stabilization measures included the usual mix of reducing expenditure and switching policies (see Siwatibau 1993). Thus, the Pacific island economies generally had conservative fiscal and monetary policies since the late 1980s.[6] However, improvement in fiscal situation was not achieved on the revenue side. The revenue raising efforts did not yield much despite some tax reforms and the introduction of the value added and goods a services tax, since government revenue was heavily dependent on exports of commodities.[7] On the other hand, 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.[8] Even the World Bank, which supported the conservative macroeconomic agenda admitted, 'The effect of budget tightening on government investment is most pronounced in Fiji'. The government development expenditure dropped from 9 per cent of GDP in the early 1980s to 3 per cent by 1995—'a level which is generally considered too low to sustain government's strategy of private sector-led growth' (World Bank 1998: 25).

Historically, due to an underdeveloped private sector, public investment has been the dominant component of total investment in the Pacific island economies. Thus, the decline in public investment meant a sharp drop in capital accumulation. Research done in the Department of Economics of the University of South Pacific reveals that the contribution of total factor productivity in Pacific island economies is very small, implying mainly factor accumulation-driven growth (see Rao, Singh and Fozia 2006). Hence the declines in public investment must have constrained the economic growth in the SPIEs.

Due to the absence of a well-developed domestic capital market, fiscal deficits in less developed countries can mainly be financed by borrowing from central banks. In the case of Pacific island economies, however, significant amount of donor fund provided an important avenue for non-inflationary financing of deficits. This, perhaps, explains the apparent lack of association of inflation with budget deficits and money supply growth. More importantly, in the Pacific island economies that have central banks, there

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[6] Countries which do not have their own currency, and are dollarized, cannot have an independent monetary policy. But since they are tied to low inflation countries (Australia, New Zealand and the US), their monetary framework can be characterized as conservative.

[7] Vanuatu has no income tax and it seriously limits Vanuatu's domestic revenue raising capacity.

[8] World Bank (1998: 23) summarizes the situation as follows: 'In all of the PMCs [Pacific Island Member Countries] there are two imbalances in the economic composition of expenditure: the first is between recurrent and investment and the second is between the wage and nonwage components of recurrent. 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'.

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 due to fear of inflation. Although this limit was broken at times, overall monetary authorities prevailed on fiscal authorities (see Ali and Jayaraman 2001). As a result, by and large the macroeconomic policy mix remains conservative.

While the restrictive fiscal and monetary policies have been successful in restraining demand, the switching policy of devaluation or large depreciations in countries with their own currencies did not seem to have produced expected results. In highly import-dependent economies, devaluation immediately translates into higher domestic prices, leading to upward adjustments of nominal wages. Such developments neutralize the effects of devaluation on relative prices between tradables and non-tradables. This phenomenon occurred in Pacific island economies which imitated Australia's centralized wage fixation system or indexed wages to inflation (see Treadgold 1992 and Smith 1987).[9] In such situations, devaluation, instead of improving international competitiveness, basically reduces demand by cutting real income. As a result, there is a net decline in aggregate demand.[10]

In sum, for the past two decades the Pacific island economies are pursuing orthodox macroeconomic policies aimed at stabilizing nominal variables (e.g., very low inflation rates, low budget deficits or balanced or surplus budget). This policy stance is based on

Figure 5
Adjustment to supply shocks

Panel A   Panel B

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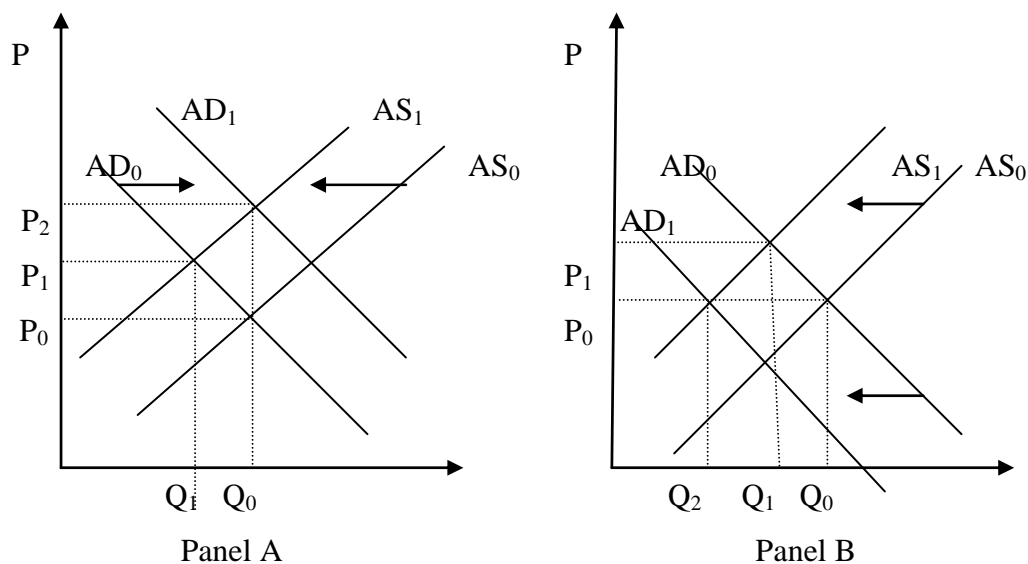
[9] For similar experiences in the Caribbean small island economies, see Worrell (1987).

[10] 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 inhabits resource switching remedy of devaluation. Even when the economy is flexible, the impact of devaluation on traded sector is limited. Since the market for non-traded is very small, the relative price effect will be negligible.

the assumption that nominal stabilization will lead to a brighter investment climate and enhanced international competitiveness, and hence, higher economic growth. However, the stabilization of nominal variables failed to generate corresponding supply-side response. This was due to reductions in development and public investment expenditure and the failure of devaluation to alter relative prices. Thus, what we observe in the SPIEs is a combination of low inflation and subdued economic growth—a situation that can be described as 'stabilization trap' (see Chowdhury 2005a). It is unlikely that SPIEs 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 unable to restructure their government expenditure towards public investment in infrastructure and human resource development.

Focus on very low inflation rates and price stability when inflation is predominantly due to supply shocks has also contributed to excessive output volatility. Beddies (1999) demonstrates that inflation-targeting monetary policy does not lead to an optimal output stabilization of aggregate supply shocks. That is, a price-stabilization target leads to greater output variability (see Beddies 1999). This can be explained by using Figure 5.

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

The legacy of the 1990s stabilization programmes still remains. Both fiscal and monetary policies in SPIEs by and large continue to be conservative. This is evident from relatively high real lending interest rates (Figure 6a) and near balanced budget deficits (Figure 3).[11]

Assessing the impact of high real interest rates in the Caribbean island economies, Worrell (1987: 213) observes, '… 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 nontradables. One can expect very similar consequences of high real interest rates in SPIEs, since bank credit is the dominant form of external financing for most firms, as the capital market is very rudimentary. On the other hand, high real interest rates did not attract significant capital inflows as other confounding factors, such as extreme vulnerability, outweigh expected gains 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 6b). One can expect this to have disincentive effects on household savings decisions. Thus, the monetary and interest rate policies have not been conducive for both savings and capital formation.
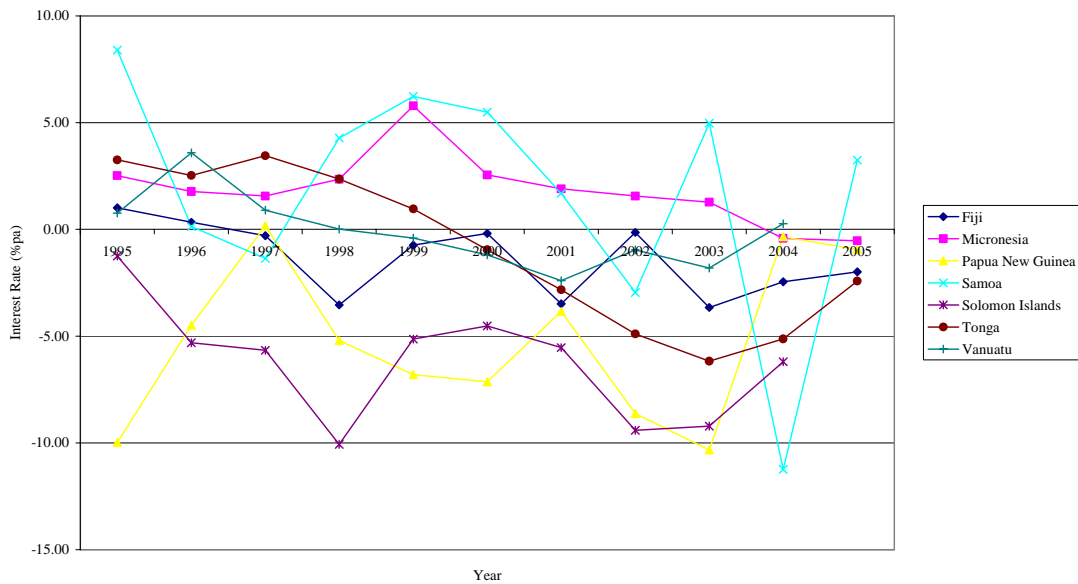
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[11] Sharp declines in real rates were caused by sudden increase in inflation due to supply shocks like cyclones.

Figure 6A
Real lending rates
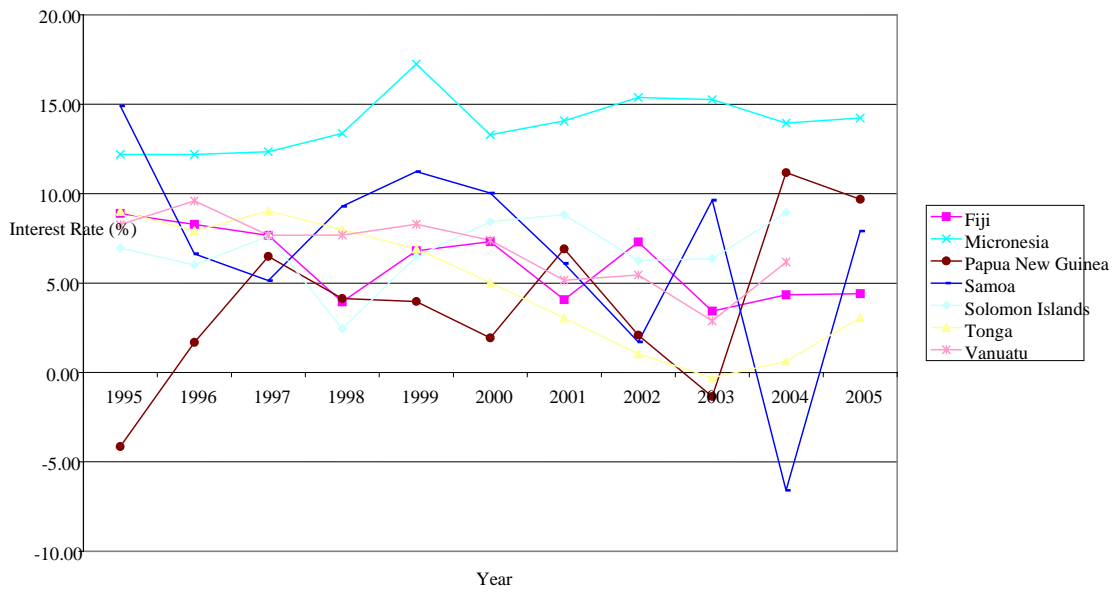
Note: Real interest rate = nominal rate – inflation.
Source: IMF, IFS (various issues).

Figure 6B
Real deposit rates

Source: IMF, IFS (various issues).

4 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 policymaker control over macroeconomic target variables (e.g., output, inflation and external balance) is inversely proportional to the degree of openness of product market.[12] The fact that mini states are price takers in the international market, the volume of exports, and therefore output, is determined by the mini state's productive capacity, which is influenced more by such factors as weather than macroeconomic policies. At the same time, being highly import dependent, their inflation is by and large determined by their trading partners.

Corden (1984), on the other hand, using the example of Singapore, has developed a model of a small open economy where all products are tradable, and demonstrates that exchange rate can 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 policy and fiscal policy do not have any direct effects on the price level or employment.[13] To the extent the monetary authority pegs the exchange rate to a pre-determined level, money supply becomes endogenous. Thus, monetary policy works 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.[14]

Treadgold (1992) provides a critique of Khatkhate and Short, and extends Corden's model to suit the conditions of small Pacific island economies. To begin with, a number of Pacific island economies do not have separate currencies; they use either Australian, New Zealand or US dollars. Thus, they cannot have the exchange rate instrument as the Corden model suggests, but they can still use wages policy for employment target. Second, even for those economies which have their own currencies, the assumption of perfect capital mobility is not relevant, as this would require perfect substitutability between domestic and foreign bonds. However, 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

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[12] ' … by its [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 very 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 organizational 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'.

[13] In an economy (closed or open) with a downward AD, expansionary monetary and fiscal policies work by raising the price level. Increased price level reduces real wage and hence increases employment and output. But when an economy faces a perfectly price elastic AD, the domestic price level cannot differ from the world price.

[14] This follows from the standard Mundell-Fleming IS-LM-BP Model with flexible exchange rates and perfect capital mobility.

abandoning an independent inflation target. That is, the exchange rate should be varied to achieve the domestic inflation needed to reduce real wage 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 (i.e. exchange rate policy) should be directed to controlling the price level only. Finally, the microstates which experience a high degree of labour mobility with larger economies, e.g., New Zealand and Australia, face essentially a given real wage determined in the larger economies. Their labour market mimics a competitive labour market, and hence employment is determined endogenously. As in the case of downward real wage inflexibility, these microstates should use the exchange rate to achieve the inflation target.

In sum, fiscal and monetary policies cannot play stabilizing role in any of the three theoretical models reviewed above. In the Corden model and its modified version, the stabilization (price level and employment) role is assigned to the exchange rate and wages policies. The fact that the Pacific island economies could successfully maintain very low inflation rates by 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 where poverty is high and real wage is at the subsistence level. In these countries, real wage resistance does not have to be an outcome of a centralized wage-setting mechanism and/or the nature labour market institutions. Real wage is already so low that it cannot be reduced any further.[15]

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 creations in these models imply movement along the labour demand curve (i.e. the reduction in real wage). They also assume symmetry in both 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 flows. As noted earlier, vulnerability risks outweigh the expected gains from interest rate differentials, and they are more prone to capital flights than capital inflows. 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 role from what can be 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 creations do no 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 islands is state-led development strategies.

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[15] Lodewijks (1988) exhaustively deals with the limitations of real wage cuts in the context of PNG.

5   State-led development strategy

5.1 Fiscal policy

Given the poor state of infrastructure, human resources and other critical factors for 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 is 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 rating in the international capital markets and the lack of a well-developed domestic capital market, the governments have two options for borrowing: (i) borrowing from central banks and (ii) foreign aid. Foreign aid, indeed, has been a significant source of government financing in SPIEs.

Borrowing from central banks: Borrowing from central banks will increase money supply. The endogeniety 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.[16] While improved infrastructure reduces business cost, subsidized provisions of public health and education can be regarded as social wage, which dampens wage demand. Both factors enhance investment climate.[17]

As noted earlier, the Pacific island economies are demand constrained, and hence, expansionary policies are unlikely to cause inflationary pressure or balance of payments problems.[18] 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 not found to be harmful for economic growth (see Chowdhury 2005a). Figures 7A-B show that the experience of Pacific island economies with 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 (see Kalecki 1976).

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[16] 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'.

[17] This is in fact the experience of the successful East and Southeast Asian economies.

[18] Extreme openness of island economies reduces the size of the expenditure multiplier as demand spills over to imports. This means 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.

Figure 7A
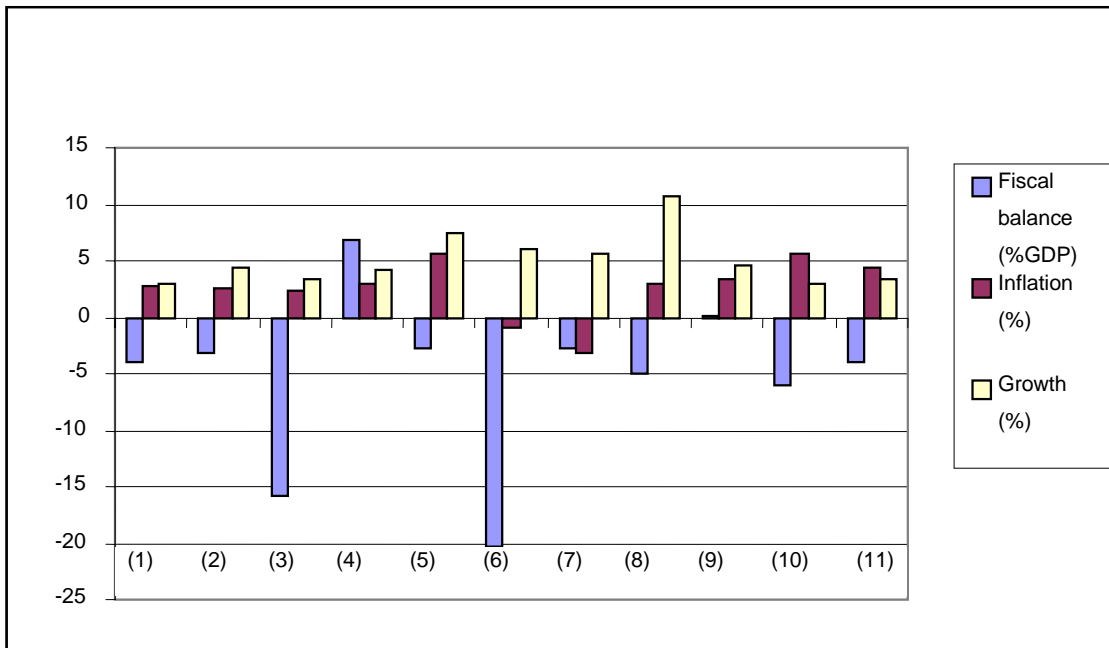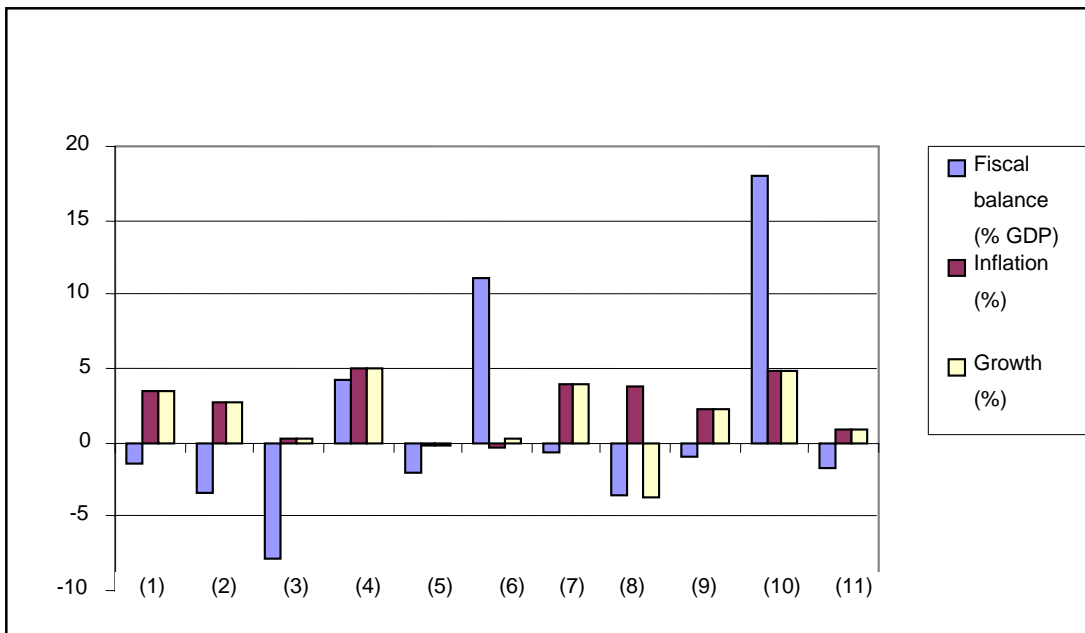Fiscal balance, inflation and growth, 1990-97

Figure 7B
Fiscal balance, inflation and growth, 1998-2003

Note: Countries: (1) Cook Islands; (2) Fiji; (3) FSM; (4) Kiribari; (5) PNG; (6) Marshall Islands; (7) Samoa; (8) Solomon Islands; (9) Tonga; (10) Tuvalu; (11) Vanuatu

5.2 Foreign aid

It is a non-inflationary source of finance for the government. Foreign aid already plays a significant role. Pacific island economies are one of the highest aid recipients among the

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developing world. There is a general perception, however, that the large aid flows failed to spur rapid economic growth.[19] Significant amounts of aid go to support civil servant salaries and government's recurrent expenditure, which are drags on development (World Bank 1998). A recent comprehensive study of seven PICs, however, has found a statistically significant positive relationship between aid and growth with diminishing returns (Pavlov and Sugden 2006).[20] This finding is consistent with findings elsewhere and is not sensitive to either policy environment or institutions. Thus, the findings imply that much of the lessons learnt in other countries are largely applicable to the PICs.

The apparent lack of aid effectiveness or diminishing returns to aid can be traced to a number of confounding factors. First is the uncertainty of disbursements and the divergence between commitments and disbursements. Aid volatility can cause significant problems for project implementation and government budget. Second, aid is fraught with principal-agent problems. The recipient countries not only renege on commitment to reforms, but also 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 may arise from a number of reasons, such as inability to provide counter-funds, deficiencies in planning and sequencing as well as 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'.[21]

The key element for addressing the above issues is the predictability of aid flows and the confidence in donor-recipient relationship. 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.[22] That is, donors can contribute a certain portion of aid to a regional common pool to be drawn by the country facing unforeseen declines in fiscal revenues. The recipient countries should also contribute a certain portion of their revenue windfalls to this regional common pool.[23] A jointly

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[19] See, for example, Feeny (2007). However, a negative correlation between aid flows and economic growth could be just a statistical artefact. It may 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 would be a deeper drop in income.

[20] The seven PICs studied are Cook Islands, Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu.

[21] For evidence of Dutch disease syndrome in Pacific micro states, see Laplange, Treadgold and Baldry (2001).

[22] 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 have suggested a currency union for the Pacific island economies later in the paper.

[23] Some Pacific countries already have a fiscal stabilization fund. The regional stabilization fund can supplement the national fund.

managed regional common pool or the fiscal insurance scheme as suggested above can play a positive role in improving donor-recipient relations.

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

Finally, the possibility of 'Dutch disease' 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 in a number of ways. First, if aid is used for direct imports and/or technical assistance, then there is no need for real appreciation for resource transfer to occur. Second, if aid is used for productivity enhancing investment, then that offsets the impact of real exchange rate on competitiveness (see Chowdhury and McKinley 2006).

5.3 Monetary policy

Growth-oriented monetary policy has two features. First, as noted in the discussion about fiscal policy, monetary policy has to be accommodative to governments investment needs. This is premised on the large body of empirical evidence that moderate inflation does not harm economic growth, and may even be necessary. As can be seen from

Figure 8
Nature of inflation-growth relation, 1970-2005
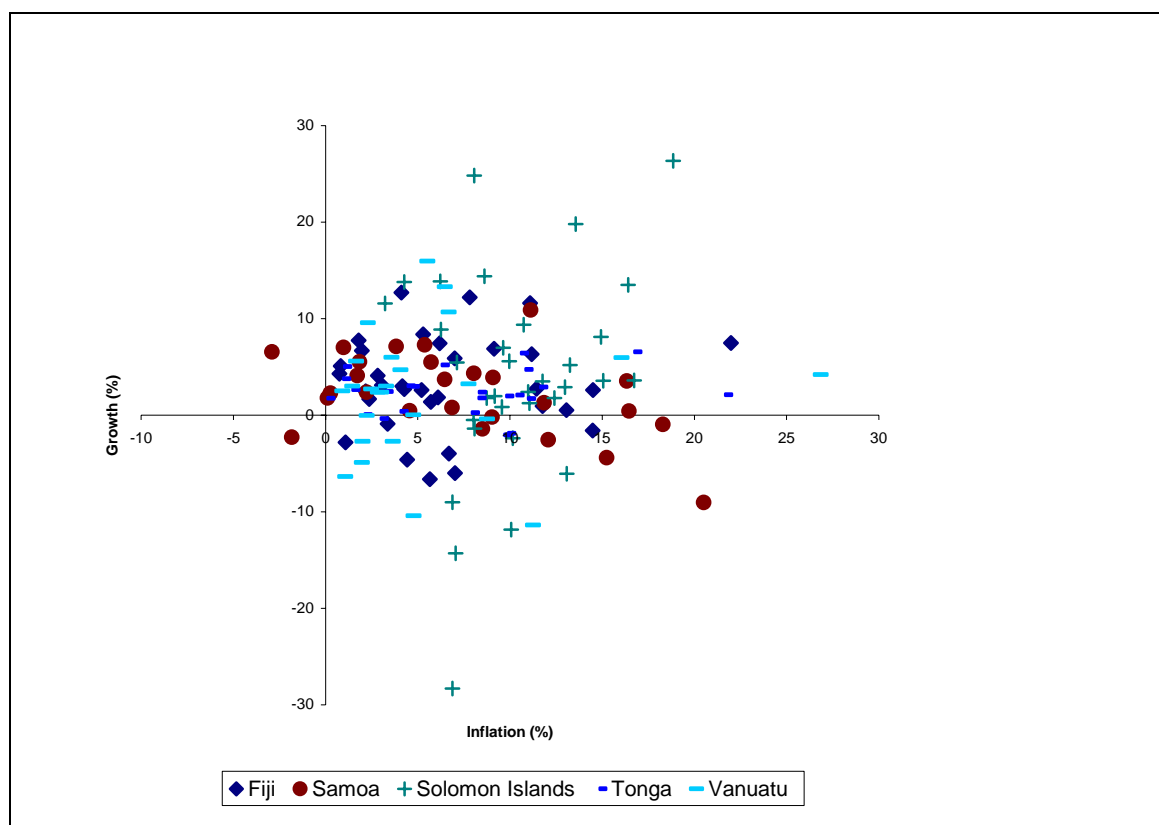
Note: Not all countries have data from 1970.

Source: WB (WDI, various years).

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Figure 8, there is no evidence of a negative relationship between inflation and growth in Pacific island economies when the inflation rates are within the moderate range of 10-12 per cent. The East Asian experience also confirms this (Appendix Figures A-C). Furthermore, an accommodative monetary policy is needed to ease the counter-fund problem for the utilization of aid and hence enhance the absorption of aid.[24]

Second, the monetary authorities should use low cost directed credits to support labour intensive small and medium enterprises (SMEs). The subsidized special credit programmes, of course, distort the credit market as well as run the risk of being infected with rent-seeking behaviour. However, the costs of distortions and rent-seeking have to be weighed against the costs of market failures in the credit market which result in the discrimination against the SMEs and the agriculture sector.[25]

One may 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, in fact, is the case in a number of PICs. 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 decision than the interest rate.

5.4 Exchange rate and capital account policies

The Pacific island economies have exchange rate systems ranging from dollarized to floating, and hence, offer excellent scope for evaluating the exchange rate regimes. As can be seen from Table 6, there is no clear evidence of superiority of any one regime. As expected, the dollarized economies have inflation rates close to the rates in the country of the currency they use, and the only country with an independently floating system (PNG) has higher inflation rates. The economies with a pegged exchange rate system have mixed experiences with inflation, both among them and between the two periods. However, there is 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 IMF's suggestion for freer and more flexible currency regimes, recently some observers have argued for a dollarized regime, and the use of the Australian dollar in the Pacific economies (de Brouwer 2002; Duncan 2002).[26] The argument is based on the insufficient depth of domestic financial and foreign exchange markets to support the

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24 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 deficit. 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 gets *spent* and *absorbed*. Conservative fiscal and monetary policies, thus, only lead to accumulation of foreign reserves and defeat the purpose of aid. See Chowdhury and McKinley (2006).

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

26 Jayaraman (2005) does not find much support for using Australian dollar. Based on trade flow statistics, he argues that there is stronger case of adopting an Asian currency. Bowman (2006) concludes, 'Dollarization to the US dollar, the de-facto standard in Asia, or a move to a common currency may be preferable alternatives to dollarizing to the Australian dollar'.

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 where maintaining central bank independence is difficult. Some have also examined the possibility of forming a currency union like the East Caribbean Monetary Union (Jayaraman, Ward and Xu 2005).

While dollarization improves macroeconomic stability, the main objection to it may arise from the vastly different types of shocks between the Pacific island economies and the country of strong currency (Australia, New Zealand and the US). Thus, responses to these shocks require some macroeconomic policy independence which will be lost if dollarized. As highlighted earlier, the low inflation rates of the strong currency country may be too constraining for the Pacific island economies which are prone to supply shocks, and need to undergo structural change. Furthermore, dollarization will deprive them of seigniorage, and hence an important source of revenue for countries with a poor domestic revenue base.[27]

However, a case can be made 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 Pacific Island Countries Trade Agreement (PICTA), aimed at ushering free trade among them by 2012. The second agreement, Pacific Agreement on Closer Economic Relations (PACER) covers all 14 PICs and Australia and New Zealand.[28]

Table 6
Exchange rate regimes and economic performance

Pacific island economies	Exchange rate regime	Overall fiscal balance (% GDP)		Inflation (%)		Growth (%)	
		1990-97	1998-2005	1990-97	1998-2005	1990-97	1998-2005
Cook Islands	NZ$	-4.0	-1.0	2.7	2.9	3.0	4.3
Fiji	Peg*	-3.2	-3.0	2.6	3.2	4.3	2.9
FSM	US$	-15.9	-7.8	2.3	0.2	3.3	0.2
Kiribati	AU$	6.8	4.2	3.0	2.2	4.2	4.6
PNG	Float	-2.7	-1.7	5.6	10.4	7.4	2.6
Marshall Islands	US$	-20.3	11.1	-0.9	0.3	6.0	0.3
Samoa	Peg*	-2.8	-0.7	-3.1	4.4	5.7	3.9
Solomon Islands	Peg*	-5.1	-3.7	2.9	8.5	10.8	-1.4
Tonga	Peg*	0.1	-0.8	3.3	8.1	4.6	3.0
Tuvalu	AU$	-6.1	18.0	5.6	3.0	2.9	6.4
Vanuatu	Peg*	-4.0	-3.1	4.4	2.6	3.4	0.9

Note: * pegged to a basket of currencies whose composition and weights are generally kept confidential. Percentage inflation rates (1995-05): US = 2.5, AU = 2.7, NZ = 2.4

Source: IMF & ESCAP (various issues).

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[27] 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.

[28] The PACER became effective on 3 October 2002, as it required only six ratifications. Both Australia and New Zealand and four other PICs ratified to make it effective earlier than PICTA. They were followed by two other PICs. The PICTA became effective on 13 April 2003, immediately after the minimum seven ratifications were obtained. Subsequently two more PICs ratified. As of May 2004, five PICs have not ratified both PICTA and PACER. These PICs are Republic of the Marshall Islands, Federated States of Micronesia, Palau, Tuvalu and Vanuatu.

The question is whether they should adopt a common currency before economic convergence, as in the case of the EU. However, convergence is not a necessary condition. As Scitovsky observes (1958), the formation of a currency union itself may 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 may differ for member countries. Second, individual member countries do not have to keep large foreign exchange reserves, which have high opportunity cost when they need large investment in infrastructure and human resource development.[29] Third, it allows them as a group to follow a pegged system with the outside world without having to excessively expose themselves to speculative attacks. An adjustable pegged system is essentially a real target approach (targeting export competitiveness) instead of a nominal target approach (targeting inflation).

However, an economy (or economic union) cannot have macroeconomic policy independence and open capital account under a pegged exchange rate system. This means there should be some restrictions on capital mobility. As pointed out earlier, the PICs do not receive much short-term private capital. Their main source of outside capital is 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 flights (see Chowdhury 2005b). Restrictions on short-term capital outflows do not necessarily create any disincentives for long-term foreign direct investment.

5.5 Summary of state-led development strategy

Macroeconomic policy elements of the state-led development strategy, elaborated above, can be summarized in a flow diagram (Figure 9).

Figure 9
Macroeconomic policy elements of the state-led development strategy
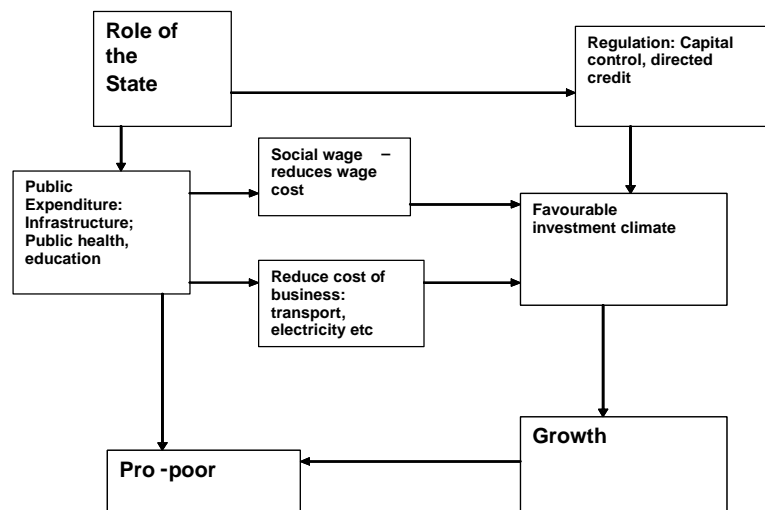
Source: Compiled by the authors.

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[29] The central banks in PICs, on an average, hold foreign reserves equivalent to 4 to 5 months of imports of goods.

6   Concluding remarks

This paper reviewed macroeconomic performance 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. In such economies, this paper argues for a more activist government in the Keynesian mode. Given a 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 programmes. However, 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 boom. 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 these 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 buildings through technical assistance. Donor funded civil service training programmes can go a long way in building administrative capacity. In other words, aid strategy must balance between hard-core development projects (e.g., infrastructure) and soft-core projects (e.g., institution building, technical assistance and civil service training).

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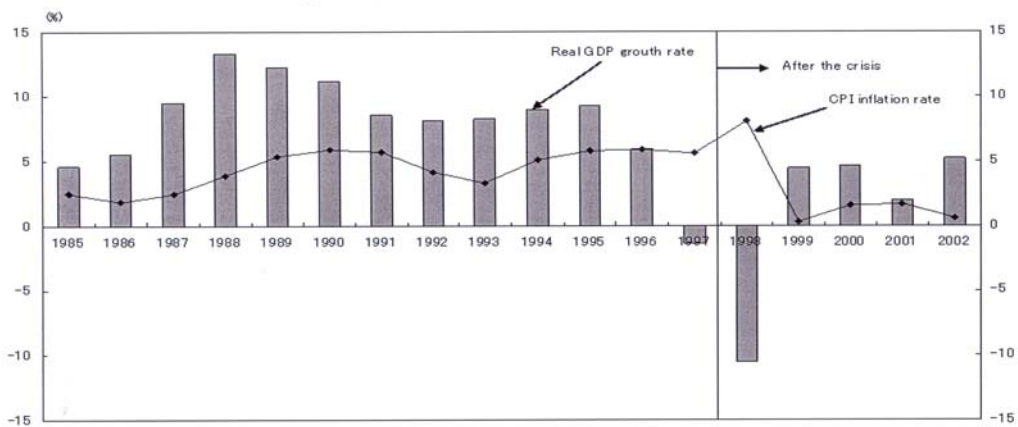
Appendix: Growth and inflation in selected East Asian countries

Figure A
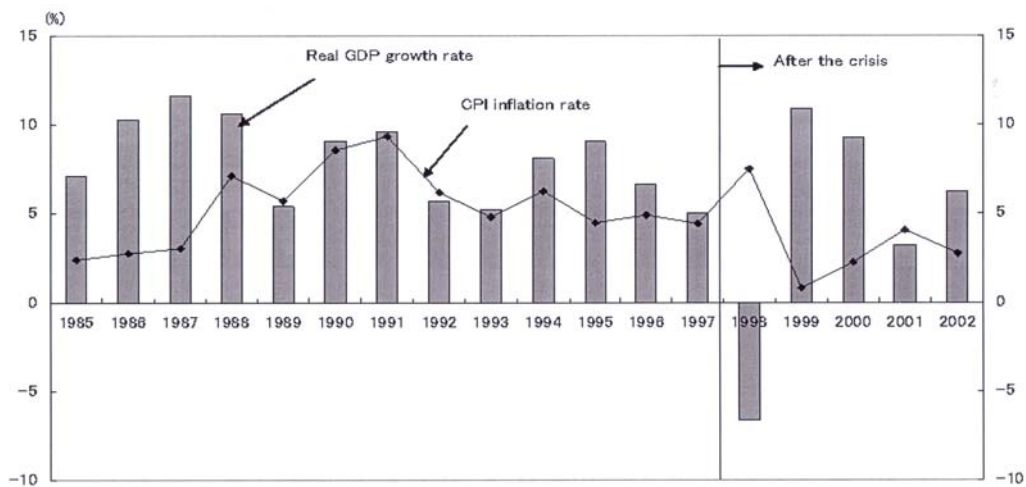Real GDP growth and inflation rate in Indonesia
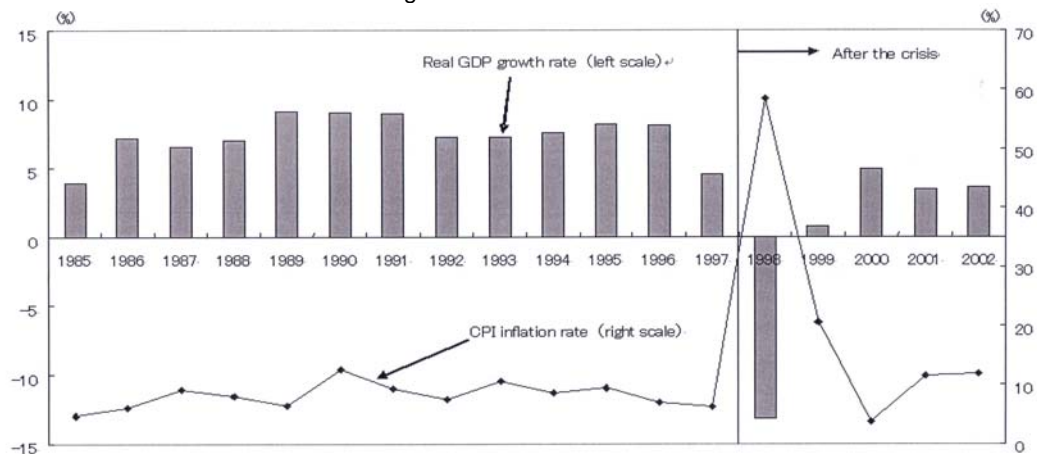
Source: IMF (IFS).

Figure B
Real GDP growth and inflation rate in Thailand

Source: IMF (IFS).

Figure C
Real GDP growth and inflation rate in Korea

Source: Bank of Korea (various issues).