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THE PERFORMANCE AND
PROSPECTS OF THE PACIFIC
ISLAND ECONOMIES IN THE
WORLD ECONOMY

by
A. P. Thirlwall



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**THE PERFORMANCE AND PROSPECTS
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ECONOMIES IN THE WORLD
ECONOMY**

by
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1991

A report for the Pacific Islands Development Program,
as a contribution to its research project on
The Role of the Private Sector in
Pacific Islands Development

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Biodata

A. P. THIRLWALL is Professor of Applied Economics at the University of Kent at Canterbury, England, and has held visiting positions in several developing countries. Recently, he has been Consultant to the Pacific Islands Development Program (PIDP) at the East-West Center, Hawaii. Among his many books are: *Growth and Development: with Special Reference to Developing Countries* (4th edition, 1989); *Inflation Saving and Growth in Developing Countries* (1974); *Financing Economic Development* (1976); *Regional Growth and Unemployment in the United Kingdom* (1975); *Balance of Payments Theory and the United Kingdom Experience* (4th edition, 1991), and an intellectual biography of the influential Cambridge economist, Nicholas Kaldor (1987).

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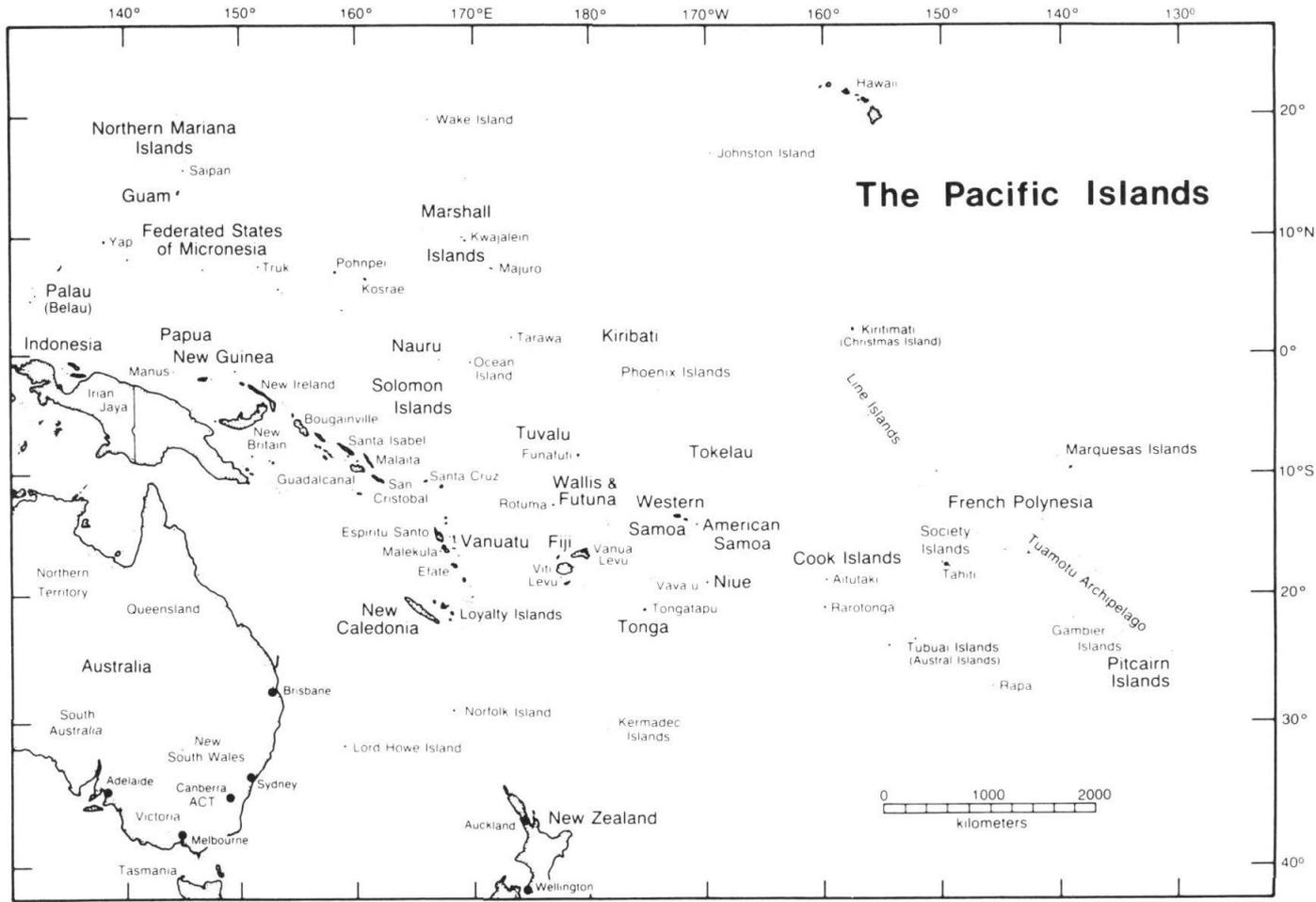
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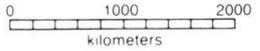
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The Pacific Islands



INTRODUCTION

Every country is concerned with its level of economic and social development, and with its economic performance, both absolutely and relative to other countries in the world economy. The Pacific Island Economies (hereafter, PIEs) are no exception.¹ How have the PIEs fared in the turbulent years of the 1970s and 1980s, and what are their prospects for growth and development in the 1990s? The analysis to follow will address these issues, as far as the data will allow. Three themes will run through the report:

1. the comparative performance of the PIEs themselves;
2. the performance of the PIEs relative to other developing economies, and particularly relative to other small low income countries. (Small economies measured in terms of population size and purchasing power have problems peculiar to themselves.)
3. the relationship, or link, if any, between the performance of the PIEs and trends in the world economy relating to such factors as world output growth, world trade growth, and commodity price trends and fluctuations.

The study will be divided into seven parts:

Part I will give a statistical picture of gross domestic product (GDP), and per capita income, of the PIEs relative to other developing economies, including small economies with a population size of less than one million.

Part II will contain a brief overview of the performance of the world economy in the 1970s and 1980s as a background to Part III.

Part III will be concerned with the performance of the PIEs in the 1970s and 1980s in terms of a variety of macroeconomic indicators including: the growth of output; investment (including direct investment from overseas); exports and imports; the balance of payments; the terms of trade; and inflation. Particular attention will be focused on whether any discernable relationship exists between investment and growth, and between export per-

formance and growth. Economic theory suggests that there should be such a relationship. On the other hand, these island economies, dominated by the production and export of primary commodities (and sometimes affected by political upheaval), may be subject to such supply shocks that no statistical relation is observable. This is a matter for inquiry.

Part IV will attempt to examine the extent to which the functioning of the PIEs appears to be affected by the performance of the world economy. In other words, are the cycles observable in the world economy mirrored in the performance of the PIEs, or do the PIEs function largely independently of trends in the world economy? It is well established, for example, that world trade growth and the growth performance of developed, industrialized countries are closely linked. Is there a similar link between world trade growth and the growth of the PIEs?

Answers to these questions will also be important in helping to answer the question posed in Part III of whether growth is demand-led by investment and/or exports or determined primarily by erratic shocks in supply.

Part V will look at the structure and direction of Pacific Island trade, with particular emphasis on the changing direction of trade in the 1980s. This type of information is important for knowing what is happening to the magnitude of intra-Pacific Island trade; whether Pacific Island exports are being directed to the fastest growing markets, and whether trade agreements such as SPARTECA are having any noticeable effect on the pattern of trade. In this section, we shall have things to say about the future prospects for exports; about the importance for economic development of countries moving out of the production and export of basic raw materials into the processing of manufactured goods, and about the wisdom of free trade for structural change particularly in small economies without a large domestic market to reap economies of large scale production. Economic theory indicates several legitimate (economic) arguments for protection for the maximization of social welfare.

Part VI will examine more closely the export and balance of payments performance of the PIEs in relation to movements in commodity prices, and the extent to which changes in export earnings have been dominated by price or volume changes. The perni-

cious and wasteful effects of violent swings in primary product prices will be highlighted, and the ways in which these may be compensated for either at the national or international level. The use made by the PIEs of the IMF's Compensatory Financing Facility and the EEC Stabex Scheme under the Lomé convention will be looked at.

Part VII will give some forecasts for the world economy in the 1990s, made by the National Institute of Economic and Social Research (London), the IMF, UNCTAD and the World Bank, and attempt to assess the prospects of the PIEs in the light of these forecasts, drawing where possible on the statistical analysis of the previous sections.

I

COMPARATIVE INCOME LEVELS IN THE PACIFIC ISLAND ECONOMIES

For data on gross domestic product and income per head, we rely primarily on figures collected and published by the World Bank.² The statistics for 1987 (together with estimates of the population) are given in Table 1 (measured in \$US at current prices).

In terms of the value of output produced, by far the largest economy is Papua New Guinea, followed by Fiji, the Solomon Islands, and Vanuatu. In terms of income per head, however, the positions of Fiji and Papua New Guinea are reversed, with Fiji registering a level of living standards more than double that of Papua New Guinea. Income statistics for developing economies with a large subsistence or non-monetized sector must, of course, be treated with caution, but the relative ranking of countries indicated in Table 1 is probably broadly correct. Aggregate figures for per capita income also say nothing about the distribution of income between households or classes of people in different sectors of an economy, which is also important as a determinant of welfare. In the case of the PIEs, it is difficult to make any judgment in this regard since little, if any, information exists on the distribution of income. This may be a major topic for future research.

The average per capita income for the PIEs as a whole is approximately \$US 800. This puts the PIEs somewhere between the 42

Table 1: GDP and Income Per Head for the Pacific Island Economies, 1987 (\$US)

	GDP (\$US million)	Income Per Head	Population
Fiji	1,139.04	1,570	725,500
Papua New Guinea	2,424.31	700	3,463,300
Solomon Islands	122.64	420	292,000
Vanuatu	122.52	845	145,000
Western Samoa	89.10	550	162,000
Kiribati	32.50	480	67,700
Tonga	68.26	720	94,800
Cook Islands	34.44	2,014	17,100

low income countries identified by the World Bank with an average per capita income of \$290 per annum and the 34 lower middle income countries with an average per capita income of \$1,200 per annum. The World Bank data also allows a comparison between the PIEs and other economies with populations of less than one million. The data for some of these countries are given in Table 2.

There are other small islands for which data are not available or published, but they are estimated by the World Bank to have per capita incomes in the lower-to-upper middle income range. The data suggests, therefore, that apart from Fiji, the average living standards in the other PIEs are relatively low compared with many other small economies.

If we look at the list of countries in Table 2, however, one obvious explanation for this is that most of the richer countries with income per capita in excess of \$1,000 are basically tourist resorts in close proximity to the large markets of the United States and

Table 2: Per Capita Income and Population for Countries with Less Than One Million People, 1987

	Per Capita Income (\$US)	Population
Guinea-Bissau	160	922,000
Gambia	220	797,000
Sao Tomé and Príncipe	280	115,000
Maldives	300	192,000
Comoros	370	426,000
Guyana	390	797,000
Cape Verde	500	344,000
Swaziland	700	712,000
St. Vincent and Grenadines	1,000	120,000
Belize	1,240	176,000
Grenada	1,340	100,000
St. Lucia	1,400	142,000
Dominica	1,440	80,000
St. Kitts and Nevis	1,700	44,000
Suriname	2,270	420,000
Antigua and Barbuda	2,540	83,000
Seychelles	3,120	67,000
Malta	4,190	345,000
Cyprus	5,200	680,000
Barbados	5,350	254,000

Source: World Development Report, 1989.

Europe. Without tourism, many of these countries would be extremely poor.

This raises the general issue of the obstacles faced by small countries in the growth and development process, compared to countries of larger size. Firstly, there is a general tendency for small countries to be more highly specialized and less diversified than larger countries which makes them more vulnerable to both internal and external shocks and outside influences. Specialization may be partly the result of natural factors (god-given comparative advantage) relating to a narrow range of natural resource endowments, and partly a function of production disadvantages in other activities associated with the small size of market when production is subject to economies of scale. This leads on to the second major reason why small countries may suffer a development disadvantage. In many activities, particularly infrastructure projects and manufacturing, production is subject to scale economies which means that profitable and competitive production depends on the scale of population or the size of market. Because of indivisibilities in the use of capital, for example, there are large economies of scale involved in the provision of infrastructure—such as roads, public utilities, public health facilities, etc.—which only become “economical” to provide when population has reached a certain size, yet many of these types of infrastructure are vital to the development process and the productivity of other activities depends on them. In the case of most manufactured goods, costs per unit of output fall as output increases because of the ability to reap technical, financial, and risk-bearing economies. In the development history of the now industrialized countries, the export of goods was invariably based on a large home market which enabled the goods to be marketed competitively. Without a large home market base, it is always going to be extremely difficult for the PIEs to market abroad a large range of processed goods, at least in competition with larger economies, except in the field of highly specialized or “niche” products. Thirdly, to the extent that small economies are island economies and geographically remote, which many are including the PIEs, transport and communications can present formidable obstacles to the competitive production and export of goods, not the least by raising the transport costs of inputs and outputs. All these obstacles must be borne in

Table 3: Gross Domestic Product by Economic Sector (%)

	Primary Production	Manufacturing	Transport, Utilities, Construction	Services (including retailing)	% GDP Exported
Fiji	25.0	11.0	32.5	31.5	40
Papua New Guinea	43.5	9.1	9.3	38.1	49
Solomon Islands	47.9	4.7	12.2	35.2	83
Vanuatu	23.0	4.7	14.1	58.2	66
Western Samoa	34.2	13.0	6.4	46.4	62
Kiribati	17.9	2.1	23.1	56.9	102
Tonga	22.9	9.2	16.1	51.8	78
Cook Islands	12.8	5.1	17.0	65.1	n.a.

Source: South Pacific Commission, *South Pacific Economies: Statistical Summary* No. 11, 1987.

mind in considering the development potential and prospects of small (island) economies in general, and the PIEs in particular.

We conclude this section with a brief summary of the structure of production in the PIEs. Table 3 shows the distribution of the GDP between the production of primary commodities, services, and manufactured goods, plus the proportion of GDP exported.

Two things stand out from Table 3. The first is the very low proportion of total output contributed by the manufacturing sector (although this is growing quickly in some of the islands, such as Fiji and Tonga). The second is the high proportion of GDP exported, which is indicative of the level of specialization in production. Moreover, over 90 percent of the value of exports comes from the primary sector. While agriculture and primary exports are important in the early stages of development (for the purpose of what Marx once called "primitive accumulation"), primary production alone cannot provide the basis for sustainable long-run development. Only three countries in the world have ever become "rich" based on the development of primary products alone—namely, Australia, New Zealand, and Canada—but they were blessed with exceptional natural resource endowments and a very low population to resource ratio giving the potential for scale economies through extensive "cultivation," (countries "born free" as Rostow once described them³). If history has any lessons to teach, it is that there must be structural change in favor of a higher proportion of output and exports coming from the non-primary

sector if countries are to achieve high levels of per capita income without unemployment. The crucial question is how to bring about this structural change as expeditiously and as efficiently as possible. Structural change can be highly disruptive for a small island economy with its narrow economic base. What is required is a balanced growth strategy which consolidates the traditional commodity base but at the same time encourages new areas of activity such as high value niche products. We will return to this question in Section V when the issue of trade strategy is discussed.

II THE PERFORMANCE OF THE WORLD ECONOMY IN THE 1970s AND 1980s

The decades of the 1970s and 1980s were punctuated by three major shocks to the world economy, the effects of which still linger and which continue to affect adversely the functioning of the world economy and the development process in many developing countries, particularly in Africa and Latin America. The first two shocks were the explosion of oil prices in 1973 and 1979; the third, and related, shock was the debt crisis which was building up in the late 1970s and which came to a head in the summer of 1982 when Mexico announced the suspension of debt repayments of dollar denominated loans to the private banking system and sovereign lenders. The effect of the first oil shock in December 1973, when OPEC raised the price of oil by 400 percent, was a massive transfer of purchasing power away from the oil consuming countries in favor of the oil producing countries. This directly and automatically reduced the demand for domestically produced goods in the oil consuming countries, initiating deflationary tendencies throughout the world economic system since the oil producing countries were unable, largely through a lack of absorptive capacity, to use their surpluses to buy an equivalent amount of industrial goods. At the same time, governments of the oil consuming countries introduced deflationary policies both to cut imports to protect their balance of payments and to contain the rate of inflation. The end result was a marked slowdown in the growth of world trade and output. In the ten years prior to 1973 world output grew on average at 5 percent per annum, and expanded by 5.9 percent in 1973. In 1974, growth slowed to 1.9 percent, and in 1975 to a mere 0.5 percent. There was some recovery between 1976 and 1978 before the second oil price rise in 1979.

The surpluses accumulated by the oil producing countries were largely deposited in the western banking system through the Euro-dollar market. The banks, flushed with liquidity, were anxious to on-lend and did so with alacrity to the developing countries with minimal risk analysis and often with each bank not knowing what others were doing in the same country. The developing countries

were equally anxious to borrow. Real interest rates were low, and even negative, and commodity prices were high. The seeds of the subsequent debt crisis had been sown. None of the participants in this shared indulgence foresaw the second oil shock, the excessive tightening of monetary policy in the United States and the United Kingdom, and the appreciation of the dollar, which heralded the deepest recession since the great depression of the 1930s. Between the 1970s and 1981, nominal interest rose from an average of 8 percent to 16.5 percent; the price index of all primary commodities fell 20 percent; world industrial production stopped growing in 1980 and then fell by 10 percent over the next two years. The growth of world output as a whole slowed from 3.6 percent in 1979 gradually down to only 0.2 percent in 1982. After 1983 there was some recovery of world output growth, but the average rate since 1984 of 3.7 percent is still some 20 percent below the average growth of the pre-1973 era. Africa and Latin America have fared particularly badly owing largely to the burden of debt and the need to adjust (a euphemism for deflation) in order to earn balance of payments surpluses to meet debt service obligations. In Africa, real output fell by 1.6 percent between 1981 and 1984, and in Latin America by 4.5 percent between 1980 and 1983. Only Asia seems to have weathered the economic storm of the 1980s.

The debt burden of the developing countries, and the payments imbalances between the developed countries (with Japan and Germany in colossal surplus, and the United States and the United Kingdom in substantial deficit), exert considerable deflationary bias into the world economic system. All countries in the world economy are linked together through trade. If deficit countries must contract because surplus countries are unwilling or unable to eliminate their surpluses, import volumes and therefore export volumes will also contract. The world is caught in a negative sum game. It was precisely to avoid deflationary bias in the world economy that, in preparation for the Bretton Woods conference of 1944, Keynes drew up proposals for an International Clearing Union (or world central bank) with the power to create international money for collectively agreed purposes (such as development aid, debt relief, for the support of primary product prices, etc.), and to penalize surplus countries by charging interest on their credit balances. Keynes's plan was not accepted. Instead the

IMF was created (which is a fund and not a bank) with no teeth to penalize surplus countries, and which itself exerts a strong deflationary bias throughout the developing countries by generally insisting on deflation as a precondition for loan support because it interprets all balance of payments deficits as symptoms, not of structural maladjustment, but of excess demand.

Trends in world output growth and world trade growth in the 1970s and 1980s are given in Tables 4 and 5, respectively. The individual industrial countries identified are those to which the PIEs export most of their goods, i.e., Australasia, North America, the United Kingdom, Japan, and Germany. The developing countries are categorized by continent, and a category of small low income countries is also identified comprising 45 countries (excluding India and China) whose per capita income in 1986 was less than \$426.⁴ As far as output growth is concerned, in the 1970s the

Table 4: World Output Growth, 1970-90 (% change)

	Average										
	1970-80	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990*
World	3.6	1.6	0.2	2.2	4.9	3.6	3.0	3.6	4.0	3.1	2.9
Industrialized											
Countries	3.1	1.4	-0.3	2.5	5.1	3.6	2.8	3.4	4.1	3.5	2.9
United States	2.5	2.0	-2.5	3.7	6.8	3.8	3.0	3.5	4.0	2.9	2.1
Canada	4.3	3.0	-3.4	3.7	6.1	4.6	2.9	4.3	4.5	2.6	2.0
Australia	3.6	3.3	-0.3	0.8	7.2	5.1	2.0	4.7	4.0	-	-
New Zealand	2.2	1.4	3.1	2.7	5.6	1.6	1.4	-	-	-	-
Japan	5.1	3.7	3.1	3.2	5.1	4.7	2.7	4.5	5.6	-	-
U.K.	2.0	-1.1	1.3	3.9	1.8	3.7	3.5	4.3	2.6	3.0	2.7
Germany	3.1	0.1	-0.9	0.9	2.8	2.1	2.6	1.8	3.6	4.0	3.0
Developing											
Countries	5.7	2.0	1.8	1.5	4.0	3.8	3.7	4.5	4.2	3.2	4.0
Africa	4.5	-1.9	0.6	0	-0.3	3.9	2.7	1.6	3.5	2.8	2.8
Asia	6.1	6.1	5.5	7.7	7.3	7.0	6.1	7.0	9.2	6.1	6.1
Europe	5.4	1.4	1.6	0.6	3.2	2.7	3.6	2.0	1.3	1.9	3.0
Middle East	6.6	2.7	3.7	0.5	1.0	-1.8	0.6	-1.5	3.5	3.5	3.0
Western Hemisphere	5.8	-0.4	-1.5	-2.6	3.3	3.4	3.6	3.1	0.7	0	2.5
Small Low Income											
Countries	3.2	3.0	3.0	1.9	2.6	3.5	4.2	3.6	4.2	4.5	4.2

Source: IMF Financial Statistics and World Economic Outlook.

*estimate

Table 5: World Trade Growth, 1971-90 (% change)

	Average											
	1971-80	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990*	
World Trade												
Volume	5.7	1.2	-1.8	2.7	8.6	2.9	4.5	6.6	9.0	6.9	5.7	
Export Volume												
Industrialized												
Countries	6.3	3.8	-2.0	3.0	9.8	4.7	2.6	5.5	8.9	7.4	6.0	
Developing												
Countries ¹	3.5	-5.5	-6.6	1.6	7.0	0.7	8.8	11.2	10.9	6.6	5.9	
Developing												
Countries ²	6.7	4.7	1.8	6.9	11.7	4.2	8.0	15.0	10.7	6.8	6.5	
Africa	2.1	-13.8	-5.5	0	8.9	6.6	3.7	-0.4	3.4	3.4	4.0	
Asia	11.1	7.6	1.4	9.3	13.5	3.8	16.4	19.1	13.1	9.4	7.8	
Europe	5.6	1.6	4.6	6.1	12.7	2.3	0.2	8.5	5.8	2.5	2.4	
Middle East	0.5	-16.5	-17.8	-10.3	-4.8	-7.1	13.8	3.7	14.6	5.8	3.1	
Western												
Hemisphere	1.8	7.8	-1.9	7.7	8.0	-0.3	-3.2	7.7	8.5	2.5	5.6	
Small Low												
Income Countries	0.3	-1.3	-2.9	3.5	-0.9	3.5	10.3	3.3	1.8	5.7	6.2	
Import Volume												
Developing												
Countries	6.1	2.2	-4.5	1.8	7.1	3.2	1.6	9.8	11.9	9.5	6.7	
Industrialized												
Countries	5.4	-1.6	-0.6	4.5	12.3	4.7	8.6	7.3	9.5	6.4	5.6	
United States	5.7	0.5	-3.7	13.0	24.8	4.5	13.2	5.6	7.0	4.1	7.2	
Canada	8.5	10.1	-16.5	11.1	19.6	10.4	7.5	9.1	14.6	9.1	3.8	
Japan	4.8	-2.5	-0.8	0.8	10.5	0.6	9.7	9.1	16.7	6.6	7.7	
U.K.	3.7	-4.0	5.6	8.6	11.4	3.2	6.9	7.0	12.8	5.9	1.7	
Germany	4.9	-5.0	1.4	4.0	5.1	4.1	6.2	5.4	6.7	8.0	6.4	

Source: IMF, World Economic Outlook, 1989.

Notes: ¹Including Fuel Exporters
²Excluding Fuel Exporters
*Forecast

developing countries as a whole fared better than the industrialized countries with an average growth rate of 5.7 percent per annum compared to 3.1 percent. Asia and the Middle East were the fastest growing continents, while Japan was the fastest growing industrialized country. The PIEs have close trading ties with

Japan and many Asian countries. In the 1980s, the performance of the developing countries deteriorated relative to the industrialized countries with both sets of countries growing on average at 3.2 percent per annum. The relative performance of Asia improved, however, with a remarkable average growth rate in the 1980s of 6.9 percent, while the Japanese economy slowed down to a relatively modest rate (by Japanese standards) of 4 percent per annum.

In Table 5 showing world trade growth, we focus on the export performance of the developing countries for later comparison with the PIES, and on the import growth of the selected industrialized or developed countries to which the PIES primarily export. The volume of world trade grew on average by 5.7 percent per annum in the 1970s and by 4.5 percent in the 1980s. The ratio of world trade growth to world output growth is exactly the same for both periods, namely 1.5. In other words, for every one percent growth of world trade, world output grows at 0.6 percent. The ratio for the industrialized and developing countries is variable between the two periods, but averages the same at approximately 1.7.

The export performance of the developing countries in the 1970s was roughly the same as that of the industrialized countries if fuel exporters are excluded from the calculations. In the 1980s, the export performance of the developing countries (excluding fuel exporters) has surpassed that of the industrialized countries, with a rate of 7.7 percent per annum compared to 7.9 percent per annum. The superior performance, however, was entirely due to the success of the Asian countries. The performance of Africa was particularly poor, and also that of the small low income countries, both in the 1970s and the 1980s.

The import volume growth rate of the industrialized countries, to which the export performance of the developing countries is likely to be linked, averaged 5.4 percent per annum in the 1970s and 5.7 in the 1980s. This gives an *average* ratio of developing country export growth to industrialized country import growth of approximately 1.3. Closer inspection shows *changes* in the growth of imports into industrialized countries to be mirrored fairly closely in *changes* in the export growth of the developing countries. We have calculated by regression analysis the precise (marginal) elasticity of developing countries' export growth to indus-

trial countries' import growth for all the categories of "countries" listed in Table 5. The results are as follows⁵:

Country	Elasticity of Export Growth to Developed Countries' Import Growth	Correlation Coefficient
All Developing Countries	0.901	0.78
All Developing Countries (excluding fuel exporters)	1.129	0.86
Africa	0.548	0.39
Asia	1.516	0.83
Western Hemisphere	0.431	0.43
Small Low Income Countries	0.443	0.44

Notice the interesting contrast between continents, with the elasticity of Asian exports much higher than for elsewhere. For a one percent growth of imports into the industrialized countries export growth from Asia has been three times higher than from Africa or the Western Hemisphere (Latin America).

The graphs in Figures 1 and 2 show the parallel movement of

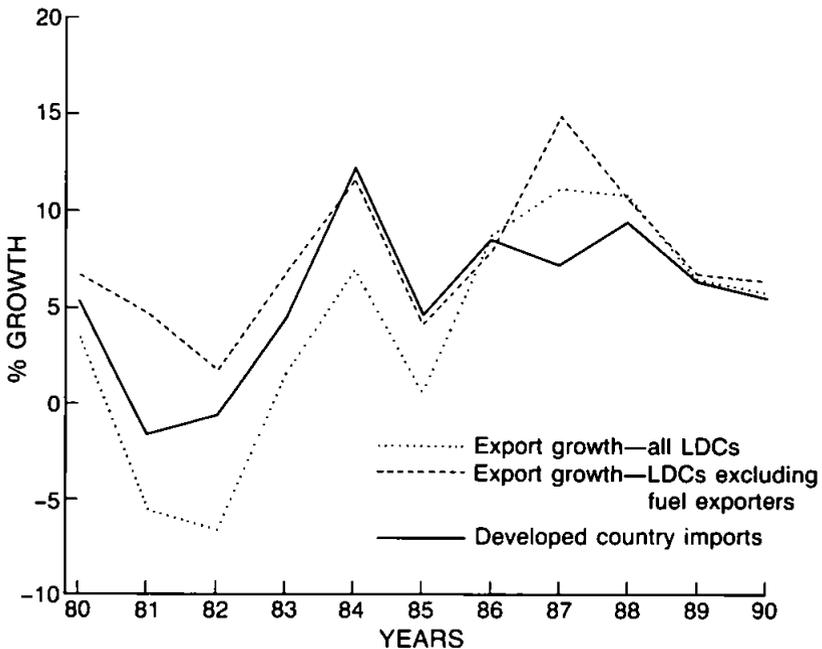


Figure 1. Export and import growth

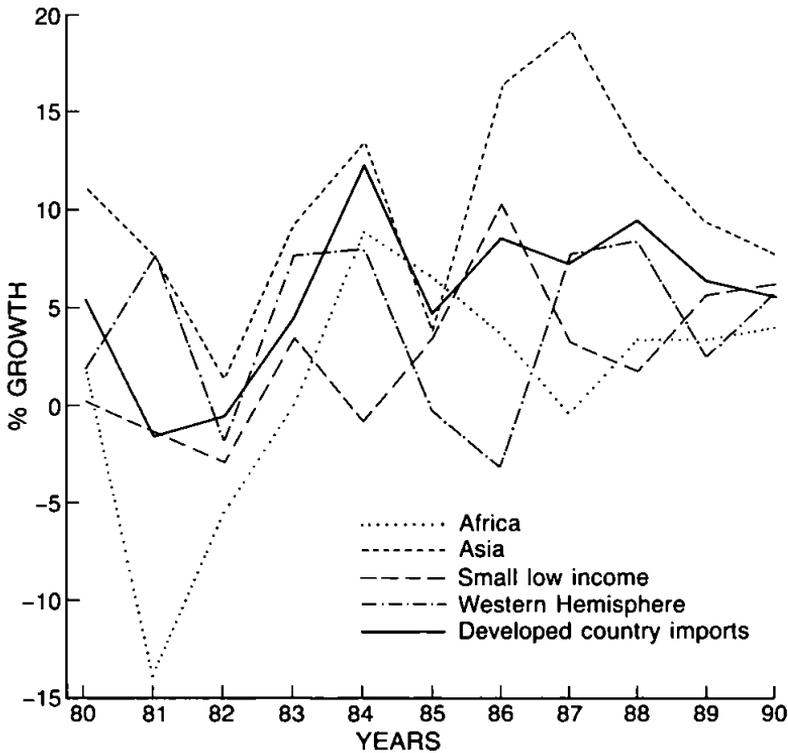


Figure 2. Export and import growth

developing country export growth and industrialized country import growth for the various groups of "countries" (continents).

One of the most significant manifestations of the recessionary tendencies in the world economy in the early 1980s was the fall in commodity prices and the effect this had on the terms of trade and balance of payments of developing countries. The year by year changes in the prices of basic commodities, and how these affected the prices of exports in different continents is shown in Table 6. Table 7 shows changes in the terms of trade. The first collapse of commodity prices came in 1981-82 when non-fuel commodity prices of developing countries fell by nearly 25 percent affecting all parts of the developing world. All broad commodity groups suffered. There was some recovery between 1982 and 1984, but then another collapse in 1985-86. Some recovery took place up to 1988, but prices are still very precarious, reflecting the precariousness of the world economy itself. The forecasts for commodity

**Table 6: Commodity Prices Changes by Type and by Continent
(% per annum)**

Commodities	Average										
	1971-80	1981	1982	1983	1984	1985	1986	1987	1988	1989	
Non-Fuel Commodity Prices											
of Developing Countries	11.6	-13.5	-9.9	6.9	4.2	-12.9	-1.2	3.4	18.2	-1.7	
Food	10.0	-6.5	-19.2	11.2	2.9	-18.7	-12.0	7.4	25.3	-0.9	
Beverages	12.1	-21.1	1.1	7.9	15.9	-11.6	16.2	-28.7	0.2	-15.2	
Agricultural Raw Materials	16.5	-13.2	-6.6	4.8	4.3	-14.8	-1.1	29.4	8.2	0.4	
Minerals and Metals	8.0	-15.0	-10.7	2.8	-6.5	-4.2	-9.0	17.2	40.3	4.4	
Continent											
Africa	10.4	-16.1	-9.7	6.0	3.7	9.1	3.0	-1.9	16.5	0.8	
Asia	11.0	-11.7	-16.6	8.2	11.0	-20.9	-12.1	16.4	20.9	-0.4	
Europe	9.9	-6.5	-4.6	5.1	1.3	-10.8	-6.3	14.8	15.5	1.6	
Middle East	11.8	-7.4	-15.8	11.0	0.1	-14.5	-5.8	19.4	19.3	7.5	
Western Hemisphere	10.0	-14.4	-8.1	6.0	-0.4	-8.5	4.9	-6.4	20.8	0.7	
Small Low Income Countries	9.3	-14.6	-12.6	9.0	6.7	-12.2	0.6	0.5	20.0	0.7	

Source: IMF, World Economic Outlook, 1989.

Table 7: Changes in the Terms of Trade (% per annum)

	Average										
	1971-80	1981	1982	1983	1984	1985	1986	1987	1988	1989	
All Developing Countries	6.8	2.9	-0.8	-3.1	1.7	-2.3	-18.3	1.8	-3.5	2.1	
Non-Fuel Exporting											
Developing Countries	-1.1	-3.9	-1.8	0.7	2.4	-1.7	-2.1	-1.1	1.5	0.2	
Africa	5.1	0.1	-5.0	0.7	-1.1	-3.2	-24.9	0.4	-4.7	0.5	
Asia	-0.7	-0.8	0.4	0.5	3.1	-2.2	-6.6	2.6	0.2	1.3	
Europe	-1.3	0.4	-	-2.2	0.2	0.5	-1.9	-2.8	2.3	0.9	
Middle East	17.8	11.7	2.1	-8.3	0.2	-3.6	-45.3	8.1	-19.2	8.4	
Western Hemisphere	4.5	-5.7	-6.0	-3.2	3.8	-1.4	-12.0	-2.6	-1.6	0.9	
Small Low Income Countries	-2.0	-7.5	-2.7	6.8	8.3	-3.9	-7.8	-3.8	2.4	-2.9	

Source: IMF, World Economic Outlook, 1989.

prices for the 1990s, however, are generally good and are given in Section VII later.

The result of the general fall in commodity prices, without a commensurate fall in the price of industrial goods imported by developing countries, has been a deterioration in the terms of trade in all continents as shown in Table 7. Small low income countries appear to have been particularly badly hit.

The effects of ups and downs in commodity prices and the terms of trade show up in the balance of payments statistics in Table 8, with serious deficits emerging in 1981-83 and again in 1986. A part of the deficits were financed by official transfers and net direct investment from overseas, but as Table 9 shows, the actual overall level of net external borrowing decreased in the 1980s as a result of the large outflow of debt service payments and a reduction in private capital inflows.

Despite recessionary tendencies and balance of payments difficulties, the level of investment relative to GDP remained relatively high in the 1980s, with only a slight tendency to deteriorate compared to the 1970s.

Table 8: The Balance of Payments of Developing Countries (\$ billion)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990*
All Developing Countries	-43.3	-77.1	-57.6	-27.5	-21.8	-41.3	4.1	-9.1	-7.3	-16.3
Africa	-22.4	-21.6	-12.2	-8.0	-1.2	-10.4	-5.1	-9.4	-8.3	-7.5
Asia	-18.7	-16.6	-14.2	-4.2	-14.0	3.8	21.5	12.3	4.3	2.8
Europe	-8.6	-2.9	-2.2	-0.3	-0.2	-1.3	1.8	7.0	5.1	2.1
Middle East	48.5	4.8	-19.4	-13.8	-3.6	-17.1	-3.6	-8.3	0.6	-0.6
Western Hemisphere	-42.0	-40.8	-9.6	-1.3	-2.9	-16.2	-10.4	-10.7	-9.0	-13.0
Small Low Income Countries	-10.5	-9.6	-6.0	-7.2	-7.3	-7.4	-8.3	-10.4	-10.2	-11.2

Source: IMF, World Economic Outlook, 1989.

*Forecasts

Table 9: Financial Flows into Developing Countries (\$ billion)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990*
Official Transfers	7.0	7.9	9.1	10.1	13.0	14.8	13.9	15.0	15.1	14.9
Net Direct Investment	17.6	19.8	12.7	13.6	10.6	9.5	12.4	13.5	13.1	15.6
Net External Borrowing	1,21.0	98.4	72.1	49.3	34.9	43.6	43.5	15.8	37.2	46.4

Source: IMF, World Economic Outlook, 1989.

*Forecasts

Table 10: Gross Investment as a Share of GDP (%)

	Average									
	1970s	1981	1982	1983	1984	1985	1986	1987	1988	1989
All Developing Countries	25.1	26.5	25.2	23.8	23.5	23.4	23.2	23.0	23.2	22.9
Africa	27.3	26.4	23.8	20.6	19.8	18.1	18.9	17.9	18.0	17.6
Asia	22.7	28.5	27.3	27.5	27.1	29.0	28.4	28.2	28.4	28.0
Europe	32.7	28.1	29.6	26.6	26.8	27.4	28.5	27.4	27.3	28.0
Middle East	24.9	27.0	26.3	28.4	29.3	24.0	21.9	18.9	19.2	17.5
Western Hemisphere	23.8	23.2	21.2	17.4	16.6	17.4	17.9	19.8	20.2	19.8
Small Low Income Countries	-	17.6	17.2	15.1	15.7	15.9	16.5	17.1	17.0	17.4

Sources: IMF, World Economic Outlook, 1989 and IMF Financial Statistics.

Table 10 shows the investment ratio by continent. The largest declines in the investment ratio in the 1980s occurred in Africa and the Middle East, while the ratio in the small low income countries continued to be below the average for all developing countries. These figures for investment will be compared later with those of the PIEs.

III

PERFORMANCE OF THE PACIFIC ISLAND ECONOMIES

The growth performance of the PIEs is given in Table 11. For Fiji and Papua New Guinea, estimates of real GDP extend back at least to the beginning of the 1970s, so that growth estimates can be made for the 1970s and 1980s. For the other islands, reliable measures of real GDP are not available for the whole of the 1970s, and in some cases only become available in the 1980s.⁶ Regardless of the number of years for which data are available, the average growth rate has been calculated to obtain an impression of the growth performance of the islands relative to other developing countries and particularly as compared to the small low income countries. In the 1970s, both Fiji and Papua New Guinea grew at the respectable rates of 5.3 percent and 5.4 percent per annum, respectively, which was close to the average for all developing countries of 5.7 percent, and above the average for small low income countries of 3.2 percent. The other PIEs also seem to have performed well. In the 1980s, by contrast, the performance of all the PIEs appears to have been uniformly bad. Up to 1987-88, Fiji hardly grew at all; Papua New Guinea grew at 2.2 percent per annum, and the growth of the other islands averaged no more than 2 percent. This compares with an average growth of all developing countries of 3.3 percent per annum, and growth in the small low income countries of 3.5 percent.

The question naturally arises of what accounts for this deterioration in the comparative growth performance of the PIEs in the 1980s. Apart from supply shocks, the weather, and political upheaval, were there changes in any purely economic variables that might presage a worsening of the economic situation? Two major determinants of the long run growth performance of countries are the quantity and quality of investment, and the value of export earnings which determine the ability to import. Exports are important for growth both as a component of demand, and also from the supply side if the import requirements for development cannot be produced domestically, or only at higher cost relative to world prices.

Table 11: The Rate of Growth of Real GDP in the Pacific Island Economies (% per annum)

	Fiji	Papua New Guinea	Solomon Islands	Vanuatu	Western Samoa	Kiribati	Tonga
1970	12.7	11.2	-	-	-	-	-
1971	6.9	10.6	-	-	-	-	-
1972	7.5	2.5	-	-	-	-	-
1973	11.6	20.0	-	-	-	-	-
1974	2.5	3.8	-	-	-	-	-
1975	0.1	0.9	-	-	-	-	-
1976	1.8	-1.6	-	-	-	-	-
1977	-3.5	-4.3	9.2 ^b	-	-	-	7.5 ^b
1978	1.8	10.5	15.6	-	-	-	8.5
1979	12.0	-	25.0	-	-	-24.0 ^b	4.9
1980	-1.7	-2.3	-5.5 ^a	-	-	-43.5	9.6
1981	6.0	-0.3	7.0	-	-	-5.0 ^a	10.4
1982	-1.1	0.4	-0.3	-	-	7.6	9.3
1983	-4.0	3.9	4.1	3.0 ^a	0.5 ^a	-3.4	1.2 ^a
1984	8.4	1.2	6.8	6.9	1.3	5.0	2.4
1985	-4.6	4.8	3.8	1.1	6.0	-1.9	5.6
1986	8.8	5.0	-0.5	-2.0	0.5	-1.5	3.0
1987	-7.8	4.8	-4.6	0.7	1.0	-	3.5
1988	-2.5	-	-	-	-	-	-2.5
Average							
1970s	5.3	5.4	-	-	-	-	-
Average							
1980s	0.2	2.2	1.4	1.9	1.9	0.13*	-
Overall							
Average	2.9	3.9	-	-	-	-	-

Source: IMF Financial Statistics unless otherwise indicated:

^a from C. Browne, 1989;

^b from UN Statistical Yearbook for Asia and the Pacific.

* excluding 1980.

Investment statistics for the PIEs are hard to come by. Figures for real investment over any length of time are only available for Fiji and Papua New Guinea. Both countries show year to year fluctuations in the ratio of investment to GDP without any noticeable trend deterioration if the exceptional years of the early 1970s (particularly in Papua New Guinea) are discounted. For both

countries, regression analysis shows a statistically significant relationship over time between the growth of output and the proportion of resources devoted to investment, with a coefficient linking the two variables of 0.15, i.e., a one percentage point change in the investment ratio has been associated with a 0.15 percentage point change in the growth rate. This implies a capital-output ratio of approximately 6 (which is high by international standards) and a correspondingly low productivity of investment. This undoubtedly partly reflects the capital-intensive nature of mineral sector exploitation. The investment ratio was high in both countries in the early 1970s (largely the result of mineral developments), and then fell. It rose again between 1979 and 1981 in Fiji and between 1979 and 1983 in Papua New Guinea, and then fell again. The average ratio for Fiji in the 1970s and the 1980s was 23.2 percent and 25.0 percent, respectively, while in Papua New Guinea, the respective figures were 25.9 percent and 26.4 percent. The meagre figures available for other countries reported in Table 12 suggest slightly higher ratios. These figures compare with an investment ratio for all developing countries in the 1980s of 23.9 percent, and for the small low income countries of 16.6 percent (see Table 10). The investment record, therefore, of the two major PIEs at least, looks good by international comparison, and yet the growth record in the 1980s was inferior. In other words, the productivity of investment must be lower (and, indeed, must have fallen compared to the 1970s). This may reflect one of two things or a combination of both: either a different structure (or lower quality) of investment, or a greater degree of under-capacity utilization owing to constraints on output.

A common constraint on output growth in many developing countries is a balance of payments constraint resulting from insufficient foreign exchange from exports to finance the growth of imports required for full capacity working of the economy. This constraint cannot be gauged by looking at the balance of payments itself since balance of payments figures are recorded *ex post*, after any adjustment to output growth (and hence import growth) has been made. Assuming that the relation between output growth and import growth remains relatively unchanged over a given period, a tightening of a balance of payments constraint is best gauged by what is happening to the growth of export value.

Table 12: Real Investment as a Percentage of GDP in the Pacific Island Economies

	Papua New Guinea			Western Samoa		Kiribati	Tonga
	Fiji	Guinea	Vanuatu	Samoa			
1970	22.2	35.4	-	-	-	-	-
1971	24.8	46.9	-	-	-	-	-
1972	24.0	38.8	-	-	-	-	-
1973	22.2	18.6	-	-	-	-	-
1974	18.9	12.9	-	-	-	-	-
1975	20.6	22.1	-	-	-	-	-
1976	21.5	18.1	-	-	6.6 ^b	19.8 ^b	
1977	24.4	21.6	-	-	6.4	19.2	
1978	22.8	21.0	-	-	20.6	24.7	
1979	30.1	23.5	-	-	22.6	28.1	
1980	31.8	25.2	-	-	39.4	25.7	
1981	34.3	27.2	-	-	45.9	26.5	
1982	25.6	32.1	-	-	46.6	-	
1983	21.2	31.7	32.6	27.4 ^a	-	-	
1984	18.8	28.4	28.3	29.5	-	-	
1985	18.1	21.9	27.0	28.4	-	-	
1986	-	21.9	-	25.5	-	-	
1987	-	22.5	-	29.6	-	-	

Source: IMF Financial Statistics unless otherwise indicated:

^a C. Browne, 1989;

^b UN Statistical Yearbook for Asia and the Pacific.

For all the PIEs, the growth of exports in the 1980s shows a marked deceleration compared to the 1970s. The figures for the period 1971-87, and the average experience for the 1970s and 1980s, are shown in Table 13, together with the figures on world trade growth. It can be seen that the rate of growth of export earnings fell by at least 75 percent in the 1980s compared to the 1970s. This fall was also experienced by other developing countries, yet output growth did not decline so much. This suggests other structural differences and weaknesses in the PIEs, reflecting, perhaps, the greater openness of the PIEs and their greater dependence on imports for the productivity of domestic resources. Countries with a low ratio of imports to GDP invariably weather better shocks to their foreign exchange position, either emanating from rises in import prices or falls in export earnings. The most likely explana-

Table 13: Rate of Growth of Export Earnings (%)

	Papua New Guinea		Solomon Islands		Western Samoa			World Trade
	Fiji	Guinea	Islands	Vanuatu	Samoa	Tonga	Kiribati	Trade
1971	0	16.3	25	8.3	20	0	-	12.6
1972	8.3	83.5	10	15.4	-16.7	-33.3	-	19.2
1973	20.5	132	27.3	40	40	150	-	38.9
1974	63.8	27	85.7	42.9	85.7	40	-	49.1
1975	10.4	-32.5	-42.3	-63.3	-46.2	-14.3	-	3
1976	-20.6	24.9	60	54.5	0	-33	-	13.6
1977	33.3	24	37.5	117.6	114.3	75	-	13.4
1978	10	4.5	15.2	13.5	-26.7	-28.6	-	15.6
1979	30	23.7	78.9	11.9	63.6	40	-	27.6
1980	46.7	16.8	7.4	-23.4	-5.5	14.3	-88.1 ^a	20.4
1981	-17.5	-18.7	-9.6	-11.1	-35.3	-12.5	53.2	-1.6
1982	-8.7	-8	-12.1	-28.1	18.2	-42.9	-37.8	-7.1
1983	-15.5	5.4	6.9	30.4	38.5	25	55.7	-3
1984	6.7	9.7	50	46.7	11.1	80	217.4	6.1
1985	-7.4	2.2	-21.5	-31.8	50	-44.4	-60.7	1.4
1986	15.6	13.3	-5.7	-53.3	-63.3	20	-66.3	10.1
1987	9.1	12.4	-3	21.4	9.1	0	-	17.7
Average								
1970s	17.3	33.7	33	26.8	26	21.8	-	21.4
Average								
1980s	3.6	4.1	1.6	-6.2	6	4.9	10.5	5.5

Source: IMF Financial Statistics;

^a from C. Browne, 1989.

tion of the slowdown in economic growth in the PIEs in the 1980s was the virtual stagnation of export earnings.

The figures for the trade balance and the balance on current account are shown in Table 14. There is no apparent tendency for the deficits to widen, but this is merely a reflection of the inability (or unwillingness) of countries to finance larger and larger deficits. It does not necessarily mean that the balance of payments position did not worsen. The balance of payments position of countries must always be assessed against the background of the achievement of the objectives of macroeconomic policy, such as steady growth and the full utilization of resources. If the growth of output of the PIEs in the 1980s had been maintained at the level of the 1970s, the recorded deficits on the balance of payments would have been considerably greater. Notice that the deficit recorded on

Table 14: The Balance of Payments of the Pacific Island Economies (US\$ million)

	Fiji		Papua New Guinea		Solomon Islands		Vanuatu		Western Samoa		Kiribati		Tonga		Cook Islands*	
	Trade	C/A	Trade	C/A	Trade	C/A	Trade	C/A	Trade	C/A	Trade	C/A	Trade	C/A	Trade	C/A
1972	-68	-32	-78	5	-	-	-	-	-16	-11	-	-	-4	-1	-	-
1973	-112	-58	225	217	-	-	-	-	-15	-8	-	-	-5	-1	-	-
1974	-92	-29	226	221	-	-	-	-	-11	-1	-	-	-6	1	-	-
1975	-73	-26	-63	-37	-13	-13	-	-	-26	-12	-	-	-11	-	-	-
1976	-106	-51	117	41	-1	2	-15	-	-20	-10	-	-	-11	-2	-11.1	-
1977	-94	-26	123	99	4	6	-16	-	-23	-11	10	-	-11	-2	-15.1	-
1978	-114	-36	26	-55	-	3	-20	-	-38	-18	7	-	-11	-1	-15.8	-
1979	-170	-66	226	78	10	10	-26	-	-49	-22	8	16	-17	-2	-18.7	-
1980	-150	-25	-35	-312	-1	-12	-36	-	-40	-13	7	-	-20	-4	-19.4	-
1981	-226	-175	-257	-521	-10	-27	-26	-	-41	-15	-18	-6	-30	-7	-23.7	-
1982	-189	-93	-248	-483	-1	-11	-33	12	-32	-7	-22	1	-31	3	-21.8	-
1983	-204	-65	-155	-376	1	-6	-28	8	-26	4	-21	10	-34	-	-30.2	-
1984	-163	-27	-48	-322	26	5	-19	19	-27	1	-14	6	-26	-	-29.6	-
1985	-175	-13	47	-155	1	-23	-34	1	-30	2	-7	7	-24	-1	-40.9	-
1986	-122	4	102	-105	-1	-9	-38	-3	-32	7	-11	-	-26	1	-44.3	-
1987	-27	-5	-10	-325	-3	-4	-	-	-44	6	-13	-	-28	7	-	-
1988	-54	30	238	-	-22	-16	-	-	-	-	-	-	-	-	-	-

Source: IMF Financial Statistics.

*In New Zealand Dollars (mil.) from U.N. Statistical Yearbook for Asia and the Pacific.

the current account is invariably less than on the trade account owing to a surplus on the invisible account from tourist receipts and emigrant remittances.

A part of the balance of payments deficits of the PIEs has been financed by direct private investment from overseas. The role of direct private investment in the development process is a controversial one that divides development economists on the left and right of the political spectrum. This is not the place to enter that debate. It is worth pointing out, however, that direct private investment from overseas does have two important attributes that other capital flows do not possess. First, it adds to productive capacity directly, and is much less volatile than financial capital. Secondly, it is a "non-debt" creating flow with no predetermined repayment obligations. There will, of course, be a future foreign exchange outflow if profits are remitted abroad, but more than matched by an increase in output. The record of direct private investment into the PIEs is shown in Table 15 for the countries for which data are available.

Table 15: Direct Private Investment into the Pacific Island Economies
(\$US million)

	Fiji	Papua New Guinea	Solomon Islands	Vanuatu	Cook Islands
1970	6.4	-	-	-	-
1971	6.5	-	-	-	-
1972	8.5	-	-	-	-
1973	13.2	-	-	-	-
1974	12.0	-	-	-	-
1975	10.9	-	7.9	-	-
1976	4.5	22.7	4.9	-	-
1977	7.3	18.0	4.4	-	-
1978	8.5	34.0	4.6	-	-
1979	10.2	41.0	3.5	-	-
1980	34.2	59.8	2.4	-	-
1981	37.6	85.6	0.2	-	-
1982	35.9	84.1	1.0	6.9	-
1983	32.0	137.7	0.3	5.9	-
1984	23.0	113.4	1.9	7.4	-
1985	33.6	82.4	0.9	4.6	0.018
1986	23.8	99.5	2.1	2.0	0.117
1987	-6.4	115.4	10.4	12.9	0.210
1988	44.7	89.1	1.7	-	0.057

A major cause of the slowdown in export earnings, and of balance of payments deterioration, in the 1980s was a weakening of export prices relative to import prices—or, in other words, a deterioration in the terms of trade. It has not been possible to obtain estimates for the terms of trade directly for all the PIEs on a consistent basis. We have therefore estimated terms of trade movements indirectly by taking the difference between the rate of change of the unit values of exports of the PIEs, and the rate of change of the unit value of exports exported by developed countries as a measure of the change of the price of imported goods into the PIEs. The results of these calculations are shown in Table 16. In the 1970s the four countries of Fiji, Papua New Guinea, Solomon Islands, and Western Samoa

Table 16: Changes in the Terms of Trade of the Pacific Island Economies (% in \$US)*

	Fiji	Papua New Guinea	Solomon Islands	Western Samoa
1970	+2.6	-	-	-13.9
1971	-6.1	-	+4.3	-15.5
1972	+20.7	-	-22.9	-18.7
1973	+4.0	-	+52.0	+31.0
1974	+38.1	+30.2	+37.5	+85.8
1975	+21.4	-21.2	-51.7	-57.6
1976	-20.0	+18.5	+31.0	+6.7
1977	-1.8	+25.0	+23.0	+63.5
1978	+4.0	-14.3	-16.4	-10.4
1979	-15.1	+19.5	+31.8	+5.0
1980	+23.9	-3.2	-11.7	-39.6
1981	-11.7	+18.0	-12.6	-17.1
1982	-6.7	-6.4	-4.8	-11.1
1983	+0.2	+6.1	-7.5	-9.5
1984	-4.3	+5.8	+37.1	+15.0
1985	-14.7	-6.7	-16.8	-34.9
1986	+20.9	-14.2	-	-50.6
1987	-9.9	+5.2	-	-
Average Change 1970s	+4.8	+9.6	+9.8	+7.6
Average Change 1980s	-0.3	+0.6	-2.7	-21.1

Source: IMF Statistics.

* Measured as the percentage change in Export Unit Value minus the percentage change in the Export Unit Value of industrialized countries.

Islands, and Western Samoa, all show an average improvement in the terms of trade ranging from 4.8 percent to 9.8 percent. In the 1980s, by contrast, only Papua New Guinea registered a slight improvement, while Western Samoa was very badly hit by falls in the price of copra and cocoa beans. One of the important features to notice from Table 16 is the extreme year to year fluctuations in the commodity terms of trade for the countries listed ranging from an improvement in some years of nearly 100 percent to a deterioration in other years of as much as 50 percent. In section VI, we shall comment on the inefficiency, futility, and waste associated with such extreme fluctuations in commodity prices and the accompanying changes in the terms of trade of commodity exporters.

Lastly, we turn to the record of inflation. The rate at which domestic prices is rising is a key macroeconomic variable since, for many reasons, stability of the price level is a major objective of macroeconomic policy in most countries. Inflation has welfare implications for the citizens of a country in a number of respects. First, it redistributes income in an arbitrary fashion, normally from the poorer groups in society to the rich. Secondly, it may discourage investment, particularly if inflation is of the cost variety and is expected to accelerate. Thirdly, rising domestic prices affect a country's ability to compete in international markets for commodities for which it is not a price taker. In markets where it is a price taker, domestic inflation will reduce the profitability of exporting, adversely affecting the supply of exports. This is not to say that all inflation is necessarily bad for growth. A mild demand inflation, financed by monetary expansion, may be beneficial for development by reducing real interest rates, increasing profitability, and stimulating investment. In this respect, the price of financial conservatism and low inflation may be a reduction in the growth rate below potential. It is an interesting empirical question of what the optimum rate of inflation is which will maximize the savings-investment ratio.⁷ In particular, inflation in most countries is a mixture of demand and cost elements, and in very open economies, such as the PIEs, it tends to be dominated by movements in the price of imports. The inflationary experience of the PIEs in the 1970s and 1980s is shown in Table 17. In the 1970s, the inflation rate for the four PIEs for which data are available was

Table 17: The Rate of Inflation in the Pacific Island Economies
(% per annum)

	Fiji	Papua New Guinea	Solomon Islands	Vanuatu	Western Samoa	Kiribati*	Tonga*
1970	4.1	-	-	-	2.9	-	-
1971	9.1	-	-	-	4.6	-	-
1972	22.0	6.1	6.9	-	7.7	-	-
1973	11.1	8.3	3.2	-	11.8	-	-
1974	14.5	23.2	18.9	-	24.9	-	-
1975	13.1	10.5	10.1	-	8.8	-	-
1976	11.4	7.7	4.3	-	5.0	-	-
1977	7.0	4.5	8.6	5.7	14.4	-	17.7
1978	6.1	5.8	6.3	6.5	2.2	-	9.5
1979	7.8	5.8	8.1	4.2	11.1	8.3	5.1
1980	14.5	12.1	13.1	11.2	33.0	16.7	22.8
1981	11.2	8.1	16.4	27.5	20.5	7.1	15.2
1982	7.0	5.5	13.0	6.2	18.3	4.4	10.7
1983	6.7	7.9	6.2	1.7	16.5	6.4	9.7
1984	5.3	7.4	11.0	5.5	11.9	5.0	-
1985	4.4	3.7	9.6	1.0	9.1	4.8	19.7
1986	1.8	5.5	13.6	4.8	7.2	-	21.8
1987	5.7	3.3	11.0	14.8	3.2	-	-
1988	11.8	5.5	7.3	-	8.5	-	-
Average							
1970s	10.6	9.0	8.3	-	9.3	-	-
Average							
1980s	7.6	6.6	11.2	9.1	14.2	7.4	14.3

Sources: IMF Financial Statistics; C. Browne, 1989;

*denotes taken from UN Statistical Yearbook for Asia and Pacific.

remarkably uniform ranging from 8.3 percent per annum in Solomon Islands to 10.6 percent in Fiji. These rates compare with an average rate for all developing countries of 18.5 percent, and for the industrialized countries of 8.4 percent. Among the regions of the developing world, Asia had the lowest inflation rate of 9.6 percent. By these standards, the inflation performance of the PIEs in the 1970s was good. In the 1980s, the inflationary experience of the PIEs was more variable ranging from just over 14 percent in Western Samoa and Tonga to 6.6 percent in Papua New Guinea. These rates compare with the average for all developing countries of 35.1 percent, and for the industrialized countries of 5.7 percent.

The high rate for all developing countries is dominated by the extremely high rates of inflation experienced in some of the Latin American countries. Again, the region with the lowest rate of inflation was Asia, with an average rate of 8.1 percent. The PIEs inflation record in the 1980s, therefore, may be said to have worsened slightly relative to Asia and the industrialized countries, but on the whole, the PIEs have been successful in holding their inflation rates in line with those in other parts of the world.

IV THE LINK BETWEEN THE PACIFIC ISLAND ECONOMIES AND THE WORLD ECONOMY

An interesting question to explore at this stage is the extent to which the economic fortunes of the PIEs are related, if at all, to the pace and rhythm of world industrial growth, working through the medium of trade. It is well established that world trade growth and the economic performance of industrialized countries are closely linked. When one set of countries slows down, the demand for imports is reduced which means a fall in the growth rate of exports of other countries, which slows down the growth of output in these exporting countries, and so on. Because of the trading links between countries, poor macro-performance spreads like a contagious disease throughout the system. Using data from the IMF Financial Statistics over the period 1970 to 1987, we estimate by regression analysis that the elasticity of industrial country output growth to world trade growth is 0.24. In other words, a one percent change in world trade tends to be associated with a 0.24 percent change in output growth in developed countries. For the developing countries, the elasticity is slightly lower at 0.20. Is there a similar link between the growth performance of the PIEs and world trade growth, or are the PIEs a "law unto themselves" in the sense that economic performance is largely independent of the state of demand in the world economy, and determined much more by erratic fluctuations in supply? This question will be examined first by looking at the relationship between output growth and export growth in the PIEs, and secondly by estimating the relationship between Pacific Island export growth and world trade growth.

The relationship between output growth and export growth can only be examined for Fiji and Papua New Guinea since there are not sufficiently long data runs available for the other economies. Export growth is measured by export value to capture both the demand side and the supply side impact of exports on economic performance. The second equation for Fiji includes tourist receipts

which average 50–60 percent of earnings from visible exports. The regression results estimated over the period 1970–87 are as follows (with the standard errors of the coefficients in brackets):

$$\text{Fiji: (1) Output Growth} = 2.32 + 0.028 \text{ Export Growth} \quad r^2 = 0.012$$

$$(1.66) \quad (0.067)$$

$$\text{(2) Output Growth} = 0.72 + 0.029 \text{ Export Growth} \quad r^2 = 0.004$$

$$(2.72) \quad (0.132)$$

$$\text{Papua New Guinea: Output Growth} = 1.83 + 0.086 \text{ Export Growth} \quad r^2 = 0.304$$

$$(1.39) \quad (0.033)$$

It can be seen from the results that in the case of Fiji there is no statistically significant relationship apparent between export growth and the growth of GDP, not even when tourist receipts are allowed for. For Papua New Guinea, on the other hand, there is a statistically significant relationship. A one percent change in export growth has been associated with a 0.086 percent change in the growth of GDP. It is clear from the data for Fiji (see Tables 11 and 13) that the growth of output has fluctuated wildly from year to year bearing no relationship at all to the growth of export earnings. For example, in 1974, export earnings grew by 63.8 percent, yet the growth of GDP slowed to 2.5 percent. In 1977 GDP fell, yet export earnings rose by 33.3 percent. Then again in 1980, there was negative growth of GDP, with export earnings increasing by 46.7 percent.⁸ Fiji seems to have experienced too many erratic shocks for any clear relation between export growth and output growth to be discernable.

On the other hand, Fiji and some other PIEs do show links with the world economy. The relationship between export growth and world trade growth can be tested for six of the PIEs. The elasticities of export growth to world trade growth are estimated by regression analysis over the period 1971 to 1987 using data from the *IMF Financial Statistics*. The results are shown in Table 18.

The results indicate that using the crude data without any adjustment for "deviant" observations, there is a statistically sig-

Table 18: The Elasticity of Pacific Island Export Growth to World Trade Growth (Value)

	Elasticity Coefficient	Standard error of estimate	Correlation Coefficient
Fiji	1.195	(0.259)	0.587
Papua New Guinea	1.646	(0.507)	0.412
Solomon Islands	1.579	(0.463)	0.436
Vanuatu	1.095*	(0.727)	0.131
Western Samoa	1.216*	(0.765)	0.144
Tonga	1.798	(0.781)	0.261

* Not statistically significant at the 95 percent confidence level.

nificant relation between country export growth and world trade growth for four of the PIEs, namely Fiji, Papua New Guinea, Solomon Islands, and Tonga. By the measure used here, the performance of these economies does seem to depend on demand conditions prevailing in the world economy. When world trade is booming, the export earnings of these economies benefit, and when world trade slumps, export earnings suffer. Looked at another way, it would be wrong to argue that the export earnings of these countries depend only on supply conditions. For Vanuatu and Western Samoa, it is not possible to speak with the same confidence since, although the elasticity coefficients are positive, they are not significantly different from zero at the 95 percent confidence level.

It will be noticed that for all the countries, the elasticity coefficient is greater than unity, which indicates that when world trade value rises or falls by one percent, the export value of these countries rises or falls by more than one percent. Since trade is measured by value, this could be a reflection of the fact that the prices of commodities exported by the PIEs are more cyclically sensitive than the average of all prices of goods that enter into world trade. It is well established that primary product prices are more cyclically sensitive than industrial goods' prices.⁹ To examine this possibility, we test separately whether the growth in the value of Pacific Island exports is related not only to the growth in the value of world trade but also to the *volume* of world trade. If it is, an even stronger integration of the PIEs with movements in the world economy is suggested. The results of the test are shown in Table 19.

Table 19: The Elasticity of Pacific Island Export Growth to the Growth in the Volume of World Trade

	Elasticity Coefficient	Standard error of estimate	Correlation Coefficient
Fiji	0.710*	(1.007)	0.032
Papua New Guinea	5.034	(1.067)	0.597
Solomon Islands	4.337	(1.098)	0.509
Vanuatu	4.978	(1.150)	0.419
Western Samoa	3.152*	(1.938)	0.149
Tonga	4.130	(2.050)	0.212

* Not statistically significant at the 95 percent confidence level.

In four of the six countries, the elasticity coefficient is statistically significant and high, reflecting, no doubt, both the sensitivity of price and export volume to movements in the volume of world trade. Western Samoa seems to be the only country where the growth in the value of exports bears no systematic relationship to the growth in either the value or volume of world trade.¹⁰ With the exception of Fiji, too, it can be concluded that the elasticities in Table 18 are not simply a reflection of the greater cyclical sensitivity of the prices of PIEs exports to world prices, but reflect a genuine improvement and deterioration in export performance as world trade conditions change.

The overall conclusion of this section is that at least four of the PIEs seem to be firmly linked into the world economy in the sense that given their economic structure and the supply conditions prevailing over the last two decades, their export performance has reflected the ups and downs of the world economy measured by world trade growth. If the coefficients estimated are regarded as stable (and that may be a big "if") this can be used for forecasting future export performance given forecasts for the future growth of world trade. All forecasting is hazardous, however, and no forecasts based on past data and past relationships can anticipate supply shocks which may play havoc with the forecasts in any one year. Forecasts for the world economy are discussed in section VII. It remains an interesting finding, nonetheless, that the export earnings of at least four of the PIEs should be closely related, statistically speaking, to the ups and downs in the value and volume of world trade.

V

THE DIRECTION OF PACIFIC ISLAND TRADE AND TRADE STRATEGY

The growth of a country's export earnings is a function of the *type* of goods it produces and exports, and of the *markets* it exports to, i.e., whether they are expanding quickly, slowly, or not at all. The type of goods produced and exported relates to economic structure and the demand characteristics of different types of goods, and the question of markets relates to the direction of trade. This section addresses both topics, but first discusses briefly some policy issues involved concerning the relationship between trade and development.

1. Issues of Trade Strategy

The output and exports of the PIEs are dominated by primary commodities: commodities such as sugar, coconut products, cocoa, coffee, timber, fish, palm oil, and minerals. The PIEs may have a "natural" comparative advantage in the production of these commodities, but they cannot alone provide the basis for sustained development in the future for two main reasons. Firstly, all land-based activities are subject to diminishing returns so that the productivity of the variable factors of production diminishes as output expands unless there is offsetting technical progress. Even if technical progress does compensate, land-based activities are still at a disadvantage compared with non-land based activities, such as manufacturing, where production is subject to increasing returns. In addition, in diminishing returns activities, there is always a limit to employment set by the subsistence wage, whereas in increasing returns activities there is no limit to employment set by supply conditions since the marginal product of labor does not fall as employment rises. This basic fact about diminishing returns activities, such as agricultural production and mining, is one of the major reasons why so much disguised unemployment exists in many raw material-based developing countries.

The second main reason why primary production cannot alone provide the basis for sustained development is that the demand for most primary products grows relatively slowly as world income grows compared with the demand for other types of goods, particularly manufactures and sophisticated services. Many primary commodities are subject to Engel's Law which predicts that as income grows, the demand for commodities grows by less than in proportion so that the share of total expenditure on these products falls as societies become richer. This must be a major worry for all primary product exporters because it means that, other things remaining the same, their export growth is likely to be slower compared to exporters of other types of commodities. If all producers attempt to expand exports by increasing supply, the price simply falls, and what is gained in terms of volume is lost through a deterioration in the terms of trade. Having said this, however, there are, of course, some low value-added manufactured commodities which have a relatively low income elasticity of demand, while there are some agricultural commodities, particularly those catering for a specialist market (niche commodities) which have a high income elasticity of demand. What is important for long run development is that the PIEs diversify their output and export structure in favor of those commodities (manufactured and agricultural) with more favorable production and demand characteristics, with a particular eye to high value-added commodities. Generally speaking, the higher the value-added, the more favorable the demand characteristics tend to be.

The vital question is how to bring structural change and diversification about. There is a school of thought, which has its roots in classical liberalism and the comparative cost doctrine of Ricardo, which argues that the more free trade the better. One manifestation of this is that it is usually part of a standard IMF adjustment package to insist on the liberalization not only of trade, but of all other foreign exchange transactions as well. I don't belong to this school. Firstly, the historical evidence does not support the view that free trade is the route to development. Britain is the only country now developed that reached its industrial pre-eminence based on free trade, and that was because it was the first country to industrialize. All other countries now developed achieved structural change and industrialization behind protective barriers,¹¹

and many of the successful industrialized countries still today practice various forms of overt and covert protection. Secondly, there are many valid theoretical arguments for protection premised on certain conditions which are generally satisfied in developing countries. These arguments include (i) the well-known infant industry argument to allow industries to reap their optimum size in terms of minimum average cost of production, (ii) the existence of external economies in production where the social cost of production is less than the private cost, and (iii) distortions in the labor market, which makes the social (or opportunity) cost of labor less than the private cost. The most common labor market distortion in most developing countries is unemployment caused by a variety of factors. As long as unemployment exists there is a case for protection to use a costless resource. The doctrine of free trade based on comparative advantage *assumes* full employment, but in practice, this is not something that can be taken for granted. A third major reason for being wary of the doctrine of free trade is that it is silent on the distribution of the gains from trade. In practice, free trade seems to make the strong stronger and the weak weaker.

All these considerations need bearing in mind in discussing the issues of whether the PIEs should form a free trade area or customs union between themselves, and whether the PIEs should become part of a wider free trade area with Australasia and some Asian countries. The history of free trade areas between "adjacent" developing countries is that the strongest partner tends to dominate to such an extent that the agreement eventually breaks down. This simply goes to illustrate that there is nothing in the doctrine of free trade that guarantees an equal distribution of the gains from trade. Free trade is a doctrine that makes those who are comfortable feel comfortable or, as Prince Bismark once put it, "a policy for the strong." If the PIEs formed a free trade association between themselves, Fiji and Papua New Guinea would almost certainly dominate to the possible detriment of the other islands. There is a case for specialization and relative freedom of trade in non-competitive goods, but there is also a strong case for selective protection in relatively weak economies attempting to establish competitive industries, based on a judicious mix of tariffs and subsidies depending on the nature of the problem within the country or the particular distortion that exists.

It can be shown theoretically¹² that most of the arguments for protection in small developing economies are arguments for subsidies. The only major argument for tariffs is the infant industry argument. But subsidies require financing. In the short run, this may cause budgetary problems, but in the long run subsidies will be self-financing if they are successful in stimulating output and raising the level of income (and therefore the tax base). Many of the studies and recommendations in the PIDP reports concerned with private sector development¹³ advocate subsidies (or remission of taxes) of one form or another to give a degree of help (or protection) to industries to assist them to become more productive or to export more. These include areas (such as the provision of infrastructure and training) where there would be under-investment or no investment at all because the private cost is too high or the private benefit too low, but where the net social return would be substantial.

Turning to the question of the PIEs as part of a wider free trade area with Australasia, I would urge great caution. Unequal partners need to be treated unequally if the outcome is to be greater equality. There is a strong case for duty free access in Australia and New Zealand for all Pacific Island products (i.e., including those at present exempted under the SPARTECA agreement of 1981), but not for total reciprocity. First, the point has to be repeated that there is very little hope for structural change in any of the PIEs without a measure of protection from the imports of countries already more competitive. Secondly, and not an insignificant consideration, the abolition of import duties would deprive the governments of the PIEs of an important source of revenue.

In short, my view is that the PIEs should retain a relatively protectionist stance but at the same time make sure that the protective measures take the form prescribed by economic theory, and are orientated primarily toward export promotion rather than import substitution. Such examples would be the Tongan Small Industries Center that provides access to land and factory space at subsidized rentals, Fiji's Trade and Investment Board that conducts trade missions to promote Fiji's exports, and the newly established Fiji Garment Training School subsidized by the government. One reason why protection has acquired a bad name is that it is frequently associated in people's minds with substituting imports for relatively inefficient domestic production (so-called "inward-looking"

policies), and protection and export promotion are regarded as incompatible and mutually exclusive. But they are not. The really successful developing countries, particularly those in South East Asia, combine protection with export promotion, and this would seem the most sensible route for the PIEs to follow.

2. Direction of Pacific Island Trade

We now turn to the direction of Pacific Island trade in order to do three things: first to measure the value of trade between the PIEs themselves (i.e., intra-PIE trade), second, to see the extent to which intra-PIE trade has increased in the 1980s, and thirdly to see the pattern of Pacific Island trade with the outside world with particular reference to the SPARTECA agreement and the orientation of trade to fast growing markets. The analysis relies heavily on the IMF's publication, *Direction of Trade Statistics*. Two years, 1982 and 1988, have been taken, and three matrices constructed. The first two matrices, in Tables 20 and 21, use export data (measured CIF) for 1982 and 1988 to show which countries each of the PIEs export to. The third matrix, in Table 22, shows the change in the direction of Pacific Island trade between 1982 and 1988 both in terms of the *change in proportion* of exports going to different markets (row a) and the percentage change in the share of each market (row b).

Focusing first on trade between the PIEs themselves, two observations are immediately apparent. Firstly, intra-Pacific Island trade is dominated by Fiji, and secondly that the value of intra-Pacific Island trade is miniscule relative to its trade with other parts of the world and showed no tendency to grow in the 1980s. Table 20 shows that Fiji exported nearly \$US 29 million worth of goods to other PIEs in 1982—or 10 percent of its total exports—and this was ten times more than any other PIE.¹⁴ Indeed, the exports of Fiji to other PIEs accounted for almost 90 percent of total intra-Pacific Island trade. The situation was little changed in 1988 (see Table 21) with Fiji accounting for 76 percent of intra-Pacific Island trade.

If we look at the total value of intra-Pacific Island trade, we see that in 1982 it amounted to \$US 33.33 million, or 2.9 percent of the total exports of the PIEs. In 1988, the value of trade had fallen to \$US 29.14 million, or 1.5 percent of the total value of exports.

Table 20: Trade Matrix for 1982 (\$US m.)

Intercountry trade		Using export data (CIF)													
Exports	Imports	Papua New Guinea	Solomon Islands	Western Samoa	Vanuatu	Tonga	Kiribati	Total Pacific Islands	United Kingdom	Australia & New Zealand	United States & Canada	Japan	Rest of Asia		
	Fiji												Other		
Fiji		0.21 0.07%	0.92 0.30%	7.96 2.80%	5.12 1.80%	9.94 3.50%	4.83 1.70%	28.98 10.20%	63.24 22.40%	58.00 20.50%	33.89 12.00%	5.54 2.00%	50.99 18.00%	- -	
Papua New Guinea	0.10 0.01%		2.70 0.40%	- 0%	0.10 0.01%	- 0%	- 0%	2.90 0.40%	44.40 5.70%	84.10 10.90%	14.80 1.90%	253.30 32.70%	89.30 11.60%	201.20* 26.00%	
Solomon Islands	0.74 1.30%	0.41 0.70%		- 0%	- 0%	- 0%	- 0%	1.15 2.00%	8.32 14.50%	2.86 5.00%	0.54 0.90%	33.48 58.50%	2.78 4.90%	- -	
Western Samoa	0.06 0.50%	- 0%	- 0%		- 0%	- 0%	- 0%	0.06 0.50%	0.02 0.10%	4.95 37.10%	3.73 28.00%	1.09 8.20%	2.58 19.40%	0.78* 5.90%	
Vanuatu	0.01 0.04%	- 0%	0.03 0.01%	- 0%		- 0%	- 0%	0.04 0.20%	0.03 0.01%	0.17 0.70%	5.83 25.50%	0.62 2.70%	1.83 8.00%	7.14** 31.20%	
Tonga	0.18 4.10%	- 0%	- 0%	0.02 0.50%	- 0%		- 0%	0.20 4.60%	0.06 1.40%	3.50 80.10%	0.41 9.40%	0.003 0.07%	0.12 2.80%	- -	
Total Pacific Islands	1.09	0.62	3.65	7.98	5.22	9.94	4.83	33.33 2.90%	116.07	153.58	59.20	294.03	147.60	209.12	

Source: Compiled from IMF Direction of Trade Statistics 1989.

*Germany

**Benelux Countries

Table 21: Trade Matrix for 1988 (\$US m.)

Intercountry trade		Using export data (CIF)												
Exports	Imports	Papua New Guinea	Solomon Islands	Western Samoa	Vanuatu	Tonga	Kiribati	Total Pacific Islands	United Kingdom	Australia & New Zealand	United States & Canada	Japan	Rest of Asia	Other
	Fiji		1.54 0.40%	0.61 0.20%	8.05 2.20%	4.26 1.20%	4.68 1.90%	2.96 0.80%	22.10 6.70%	105.02 29.20%	77.31 21.50%	23.35 6.50%	22.81 6.30%	63.90 17.50%
Papua New Guinea	0.40 0.03%		2.30 0.20%	- 0%	- 0%	- 0%	- 0%	2.70 0.20%	73.60 5.30%	100.40 7.20%	37.60 2.70%	571.40 40.90%	211.30 15.10%	306.70* 22.00%
Solomon Islands	2.05 2.60%	0.55 0.70%		- 0%	0.43 0.50%	- 0%	- 0%	3.03 3.80%	8.30 10.60%	2.65 3.40%	2.66 3.40%	29.43 37.50%	24.18 30.80%	-
Western Samoa	0.28 1.90%	- 0%	- 0%		- 0%	- 0%	- 0%	0.28 1.90%	1.07 7.30%	6.44 43.80%	1.11 7.60%	0.06 0.40%	2.47 16.80%	3.25* 22.10%
Vanuatu	0.01 0.03%	0.07 0.20%	0.02 0.06%	- 0%		- 0%	- 0%	0.10 0.30%	0.01 0.03%	0.78 2.30%	7.27 22.10%	2.43 7.40%	1.94 5.90%	8.96* 27.20%
Tonga	0.36 3.40%	- 0%	- 0%	0.57 5.50%	0.005 0.05%			0.93 9.00%	0.13 1.30%	5.20 50.30%	2.67 25.80%	1.08 10.50%	0.29 2.80%	-
Total Pacific Islands	3.10	2.16	2.93	8.62	4.695	4.68	2.96	29.14 1.50%	188.13	192.78	74.66	627.2	304.08	318.91*

Source: Compiled from IMF Direction of Trade Statistics 1989.

*Germany

Table 22: Changing Pattern of Pacific Island Trade, 1982-88

Exports	Imports								Total Pacific Islands					
	Fiji	Papua New Guinea	Solomon Islands	Western Samoa	Vanuatu	Tonga	Kiribati	United Kingdom	Australia & New Zealand	United States & Canada	Japan	Rest of Asia	Other	
Fiji	a	+0.33	-0.1	-0.6	-0.6	-1.6	-0.9	-3.5	+6.8	+1.0	-5.5	+4.3	-0.2	-
	b	+471%	-33%	-21%	-33%	-46%	-53%	-34%	+30%	+5%	-46%	+215%	-1%	-
Papua New Guinea	a	+0.02	-0.2	-	-0.01	-	-	-0.2	-0.4	-3.7	+0.8	+8.2	+3.5	-4.0*
	b	+200%	-50%	-	-100%	-	-	-50%	-7%	-34%	+42%	+25%	+30%	-15%
Solomon Islands	a	+1.3	0	-	+0.43	-	-	+1.8	-3.9	-1.6	+2.5	-21.0	+25.9	-
	b	+100%	0%	-	∞	-	-	+90%	-27%	-32%	+277%	-34%	+530%	-
Western Samoa	a	+1.4	-	-	-	-	-	+1.4	+7.2	+6.7	-20.4	-7.8	-2.6	+16.2*
	b	+280%	-	-	-	-	-	+280%	+7200%	+18%	-73%	-95%	-13%	+274%
Vanuatu	a	-0.01	+0.07	-0.04	-	-	-	+0.1	-0.07	+1.6	-3.4	+4.7	-2.1	-4.0**
	b	-25%	∞	-40%	-	-	-	+50%	-70%	+228%	-13%	+174%	-26%	-13%
Tonga	a	-0.7	-	-	+5.0	+0.005	-	+4.4	-0.1	-29.8	+16.4	+10.4	0	-
	b	-17%	-	-	+1000%	∞	-	+95%	-7%	-37%	+174%	∞	0	-

^a represents change in proportion of exports going to different markets.

^b represents the percentage change in the share of the market.

*Germany

**Benelux Countries

In other words, the value of intra-Pacific Island trade fell both absolutely and relative to the total value of trade.

As far as trade with other countries is concerned, Tables 20 and 21 show the total value of each island's exports to the major markets, and the total share of exports taken by each market. Australasia, North America, the United Kingdom, Japan, Germany, and parts of Asia are the major markets for Pacific Island exports, but the importance of these markets varies from one Pacific Island economy to another. In 1982, the United Kingdom was the most important market for Fiji; Japan was the most important market for Papua New Guinea (largely accounted for by minerals) and Solomon Islands; Australasia was the most important market for Western Samoa and Tonga, while the Benelux countries were the most important market for Vanuatu. In 1988, this pattern was unchanged, except that Germany replaced the Benelux countries as the most important outlet for Vanuatu's exports.

Table 22 shows how market shares have changed between 1982 and 1988. For example, the share of Fiji's and Vanuatu's exports going to Japan show big increases of 215 percent and 174 percent, respectively. The share of Tonga's and Solomon Islands' exports going to North America shows a big increase, and also Solomon Islands' exports to the rest of Asia. One interesting finding is that despite the SPARTECA agreement with Australia and New Zealand, there is very little evidence of trade diversion to these countries, except in the case of Vanuatu. For Papua New Guinea, Solomon Islands, and Tonga, the share of their exports going to Australasia actually fell. One reason for this is probably the fact that Australia and New Zealand were the two slowest growing markets in the 1970s and 1980s measured in terms of the rate of growth of import volume.

The growth of import volume of each of the major markets for Pacific Island exports, and the growth of Pacific Island exports to each of these markets is given in Table 23. Dividing the rate of growth of exports to each of the markets by the rate of growth of the market (measured by import volume) gives some measure of the degree to which either higher value added products are being sold by the Pacific Islands to the various markets, or where extra effort has been used to penetrate these markets—what is called an index of "success" in column 3 of Table 23.¹⁵

Table 23: Import Volume Growth of, and Export Growth to, the Major Markets of the Pacific Island Economies

	Import Volume Growth (Percent Per Annum)			Export Growth of PIEs to Each Market (1982-88) (%)	Index of "Success" in the 1980s
	1970s	1980s			
Canada	8.5	8.2	}	27	3.3
USA	5.7	8.1			
Japan	4.8	5.5		113	20.5
Germany	4.9	3.5		57	16.2
UK	3.7	6.4		62	9.7
Australia	0.8	1.4	}	26	13.0
New Zealand	2.9	3.1			
Asia	12.2	13.9		107	7.7

By the measure used here, the export growth performance to Australasia does not look as bad as the crude figures would suggest. Allowing for the slow growth of the Australasian market, the export growth performance of the PIEs to Australia and New Zealand ranks third after Japan and Germany. The most rapid export growth was to Japan and Asia, exceeding 100 percent in both cases. The success in penetrating the market was much higher, however, in the case of Japan than the rest of Asia since import volume growth was much slower in Japan than in Asia in the 1980s. Japan was not a particularly fast growing market and yet Fiji, Papua New Guinea, Tonga, and Vanuatu all increased the share of their exports going to Japan. By contrast, North America was a fast growing market, yet Pacific Island exports to North America increased by only 27 percent in the 1980s. This represented a poor measure of success.

VI COMMODITY PRICE ISSUES

The PIEs are plagued by commodity price fluctuations. The instability of primary product prices both plays havoc with individual economies, and is also a major source of instability, and a contributory factor toward stagflation, in the world economy. Price volatility has a number of detrimental consequences. First, it leads to a great deal of instability in the foreign exchange earnings and balance of payments position of countries that rely on the export of primary commodities, which makes investment planning and economic management much more difficult than otherwise would be the case. Second, because of asymmetries in the economic system, volatility imparts inflationary bias combined with tendencies to depression in the world economy at large. The reason is that when primary product prices fall, the demand for industrial goods falls but their prices are sticky downwards. When primary product prices rise, industrial goods prices are quick to follow suit and governments depress demand to control inflation. Either way, the result is stagflation. Thirdly, the volatility of primary product prices leads to volatility in the terms of trade which may not reflect movements in the equilibrium terms of trade between primary products and industrial goods in the sense that supply and demand are equated in both markets. In these circumstances, it can be shown that world economic growth becomes either supply constrained if primary product prices are "too high" or demand constrained if primary product prices are "too low." On all these macroeconomic grounds there is a *prima facie* case for attempting to introduce a greater degree of stability into markets for primary commodities. This was an issue that very much preoccupied the great English economist, John Maynard Keynes, both during the depression of the 1930s and during the Second World War in drawing up proposals for a new international economic order at Bretton Woods. In a memorandum, in 1942 on the "International Regulation of Primary Commodities"¹⁶ he remarked that "one of the greatest evils in international trade before the war was the wide and rapid fluctuations in the world price of primary commo-

dities. . . . It must be the primary purpose of control to prevent these wide fluctuations." He devised a scheme for what he called "Commod Control," an international body representing leading producers and consumers that would stand ready to buy "commods" (Keynes's name for typical commodities), and store them, at a price (say) 10 percent below the fixed basic price and sell them at 10 percent above. Finance for the storage and holding of "commods" would have been provided through Keynes's other proposal for an International Clearing Union, acting like a world Central Bank, with which "Commod Controls" would keep accounts. Neither his scheme for "Commod Control," nor for a world Central Bank, got off the ground, but they are as relevant today as they ever were. There is a need to be able to create international money for collectively agreed purposes, and for commodity prices to be controlled. The world now possesses international money in the form of Special Drawing Rights (SDRs), but, to paraphrase Molière, if ever there was an instrument in search of a policy, it is SDRs. They are put to no socially useful purpose. One socially useful purpose would be for the finance of a "Commod Control" scheme on Keynesian lines. UNCTAD's proposal for an Integrated Programme for Commodities has not been successful. The IMF's Compensatory Finance Scheme, and Stabex established by the Lomé Convention, which compensate poor countries for shortfalls in export earnings below trend, are welcome, but they represent a drop in the ocean (see later), and do not get to the crux of the problem of price instability.

Just how volatile the prices have been of commodities exported by the PIEs, and their correlation with export earnings instability, is shown in Figures 3 through 9 where the export earnings of the PIEs and the unit values of their major exports are plotted over time. Equations have also been estimated to show the correlation and elasticity of changes in export value to the change in the prices of the major commodities exported by each country (where a sufficiently long run of data was available). The results are shown in Table 24. For Fiji, changes in the prices of sugar and coconut oil explain 84 percent of the variation in export earnings. Variations in the price of sugar alone explain 80 percent of the variation in export earnings. For Papua New Guinea, the prices of coffee, cocoa, and copra explain 66 percent of the variation in export

earnings, with cocoa and coffee being the most significant. For Western Samoa, variations in the price of cocoa explain 54 percent of the variation in the value of export earnings. Finally, for Solomon Islands, movements in the prices of copra, fish, and timber explain 97 percent of the variation in export earnings. The price variation of each of the commodities individually has strong explanatory power, with all the prices highly correlated.

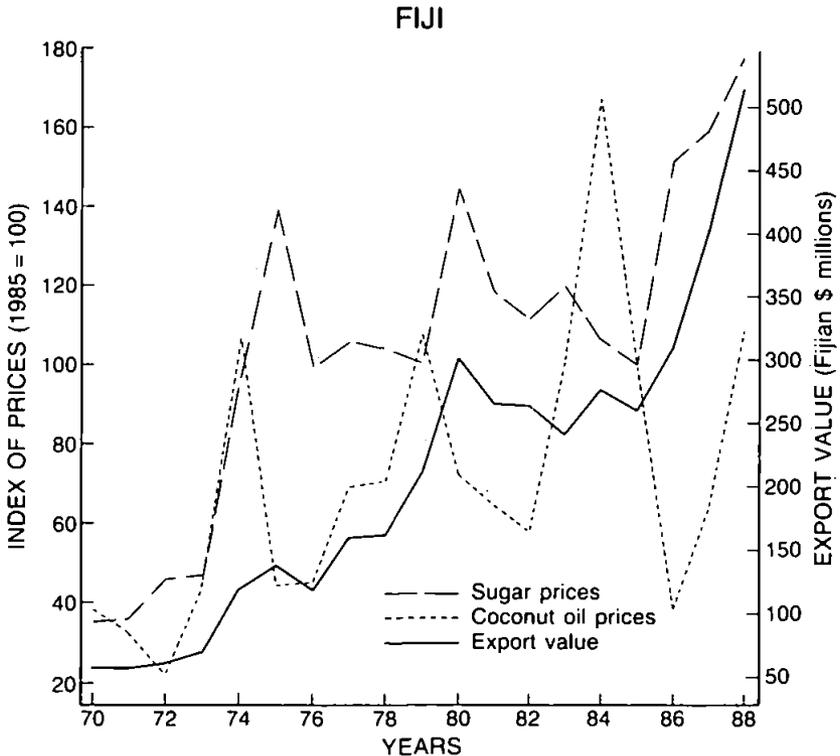


Figure 3. Commodity prices and export value

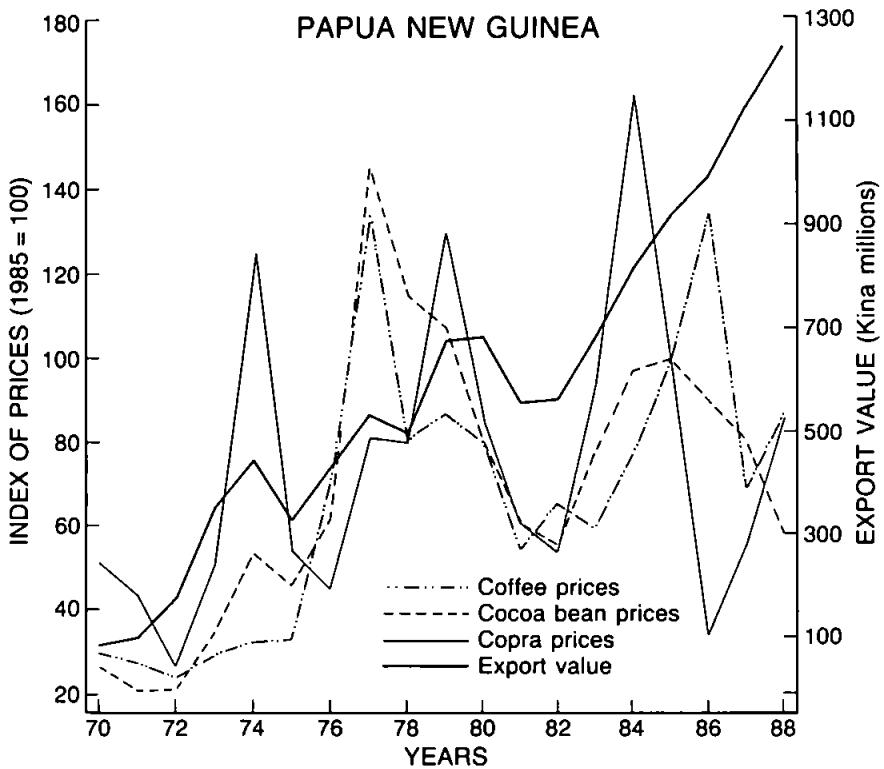


Figure 4. Commodity prices and export value

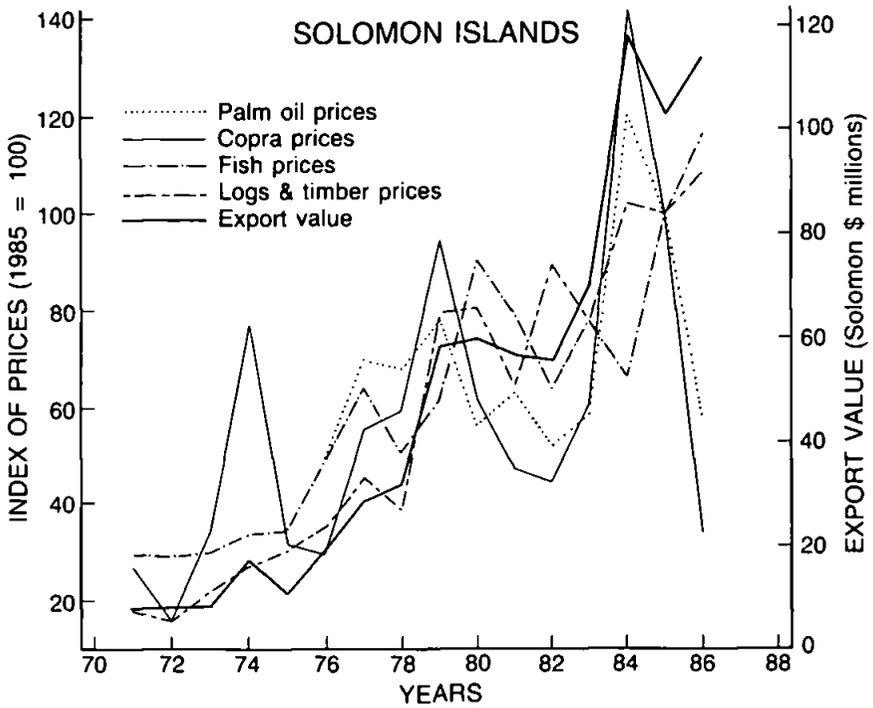


Figure 5. Commodity prices and export value

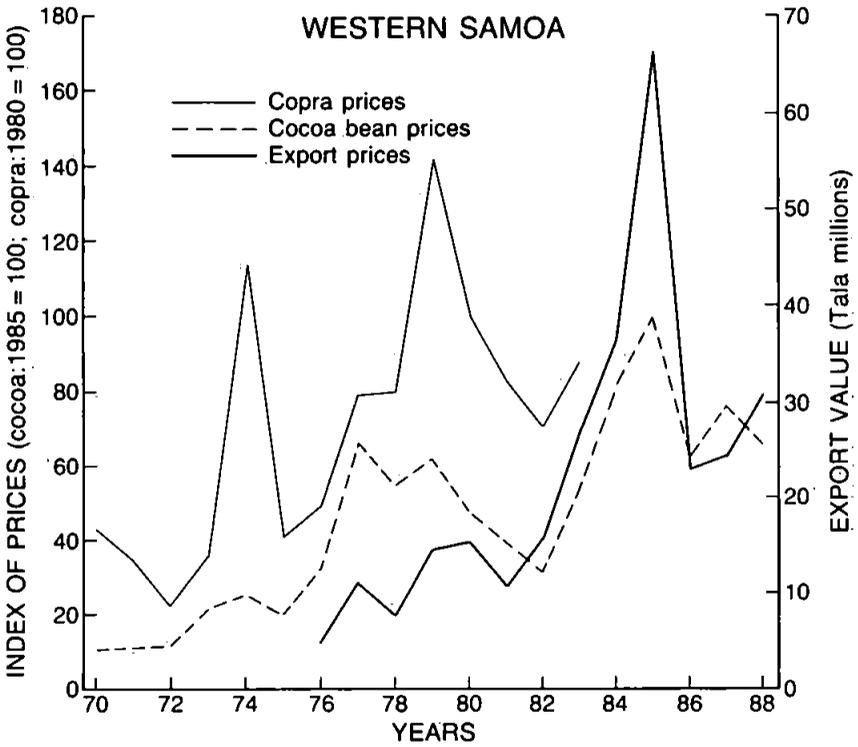


Figure 6. Commodity prices and export value

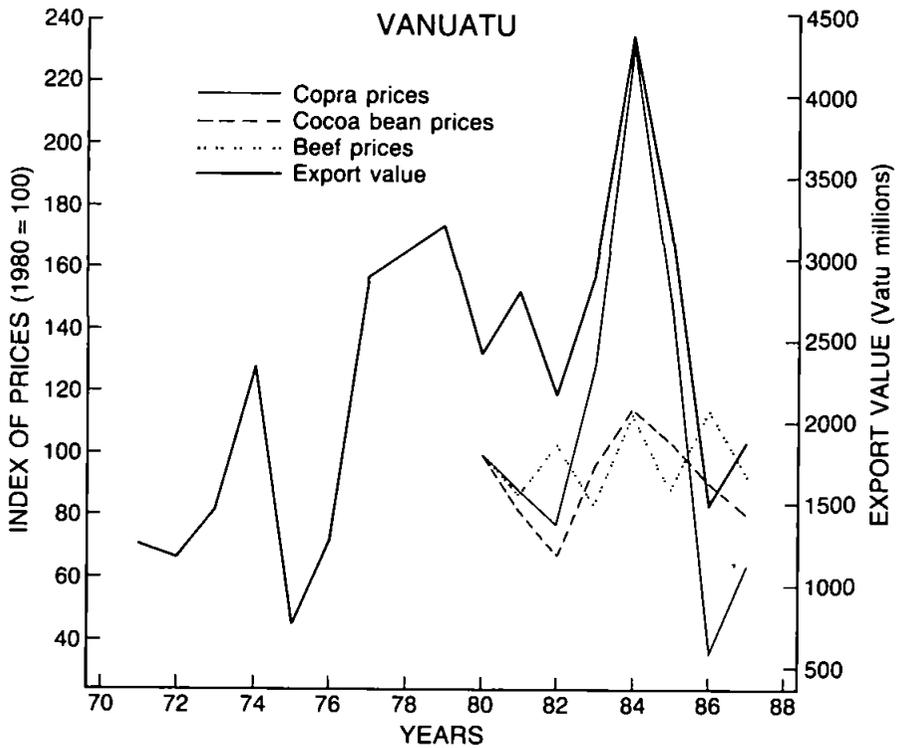


Figure 7. Commodity prices and export value

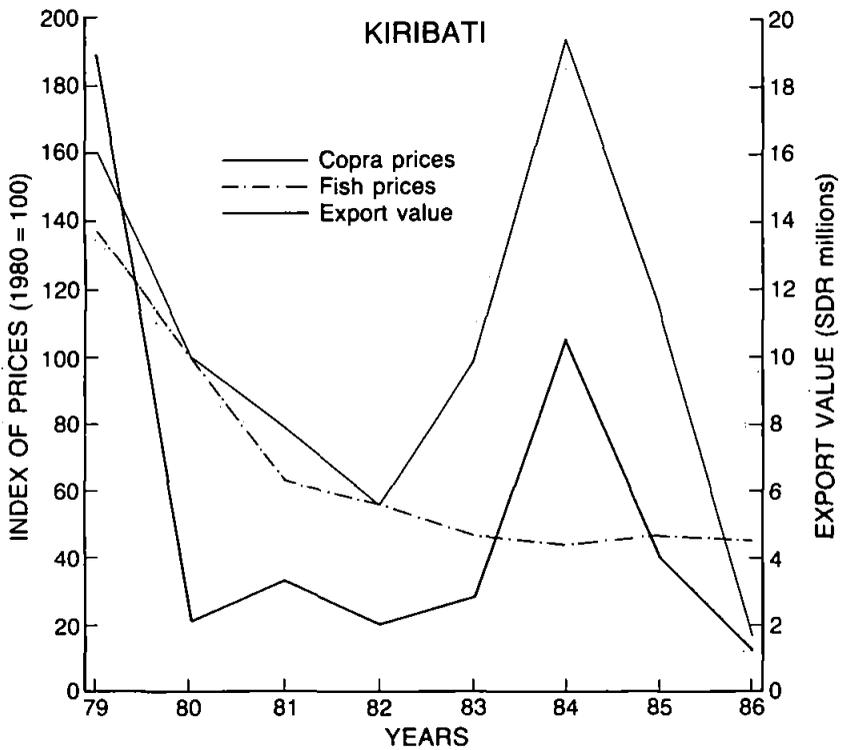


Figure 8. Commodity prices and export value

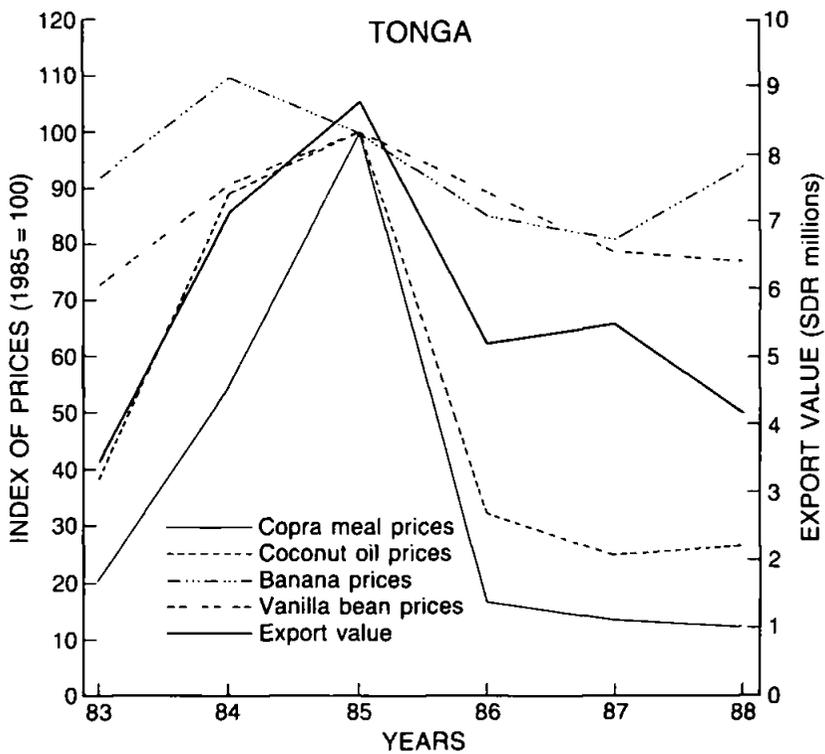


Figure 9. Commodity prices and export value

Table 24: The Correlation Between Export Prices and Export Earnings

<u>Fiji (1970-88)</u>					
log Exports	= -0.48	+ 1.02	log sugar price	+ 0.24 log coconut oil price	$r^2 = 0.84$
		(0.15)		(0.14)	
log Exports	= -0.07	+ 1.15	log sugar price		$r^2 = 0.81$
		(0.14)			
log Exports	= 2.12	+ 0.73	log coconut oil price		$r^2 = 0.36$
		(0.24)			
<u>Papua New Guinea (1970-88)</u>					
log Exports	= 1.39	+ 0.58	log coffee price	+ 0.45 log cocoa price + 0.15 log copra price	$r^2 = 0.66$
		(0.52)		(0.58) (0.33)	
log Exports	= 1.97	+ 1.04	log coffee price		$r^2 = 0.61$
		(0.20)			
log Exports	= 1.99	+ 1.02	log cocoa price		$r^2 = 0.63$
		(0.19)			
log Exports	= 3.18	+ 0.72	log copra price		$r^2 = 0.22$
		(0.33)			
<u>Western Samoa (1976-78)</u>					
log Exports	= -2.82	+ 1.42	log cocoa price		$r^2 = 0.54$
		(0.35)			
<u>Solomon Islands (1971-86)</u>					
log Exports	= -1.99	- 0.002	log copra price	+ 0.25 log fish price + 1.18 log timber price	$r^2 = 0.97$
		(0.050)		(0.29) (0.21)	
log Exports	= 2.38	+ 0.40	log copra price		$r^2 = 0.76$
		(0.06)			
log Exports	= -4.01	+ 1.88	log fish price		$r^2 = 0.87$
		(0.19)			
log Exports	= -1.58	+ 1.33	log timber price		$r^2 = 0.96$
		(0.06)			

Notes: r^2 = correlation coefficient squared.

Bracket terms represent standard errors of coefficients.

Compensation for Falls in Export Earnings

International compensation for shortfalls in export earnings comes from two main sources: the Compensatory Financing Facility (CFF) of the IMF and the Stabex scheme operated by the EEC under the Lomé Convention. To date, Fiji, Papua New Guinea, Solomon Islands, and Western Samoa have used the CFF, and all the PIEs (except the Cook Islands) have received support from Stabex. The CFF compensates developing countries for shortfalls of export earnings below a five year trend centered on the middle year. Countries may draw up to approximately 100 percent of their quota with the IMF, but the drawings must be repaid. The drawings of the four PIEs that have used the CFF are shown in Table 25, together with the fall in export earnings experienced (generally) in the previous year. The proportion of compensation is seen to be relatively low. In Fiji, for example, between 1981 and 1983, export earnings fell by over 100 million SDRs (or \$US 127 million) and CFF payments were only 13.5 million SDRs. Likewise in Papua New Guinea, export earnings fell by 157 million SDRs in 1981, and compensation amounted to 45 million SDRs.

Table 25: Drawings on the IMF Compensatory Financing Facility by PIEs, (million SDRs)

	Fiji		Papua New Guinea		Solomon Islands		Western Samoa	
	Export Fall	Compensation	Export Fall	Compensation	Export Fall	Compensation	Export Fall	Compensation
1975			88.9				4.7	0.5
1976	27.5			10.0				0.5
1977		6.5						0.4
1978							3.1	0.9
1979								
1980								
1981	52.0		157.5	45.0	5.5		4.7	1.3
1982	21.2	13.5			6.3	1.6		
1983	34.6							0.5
1984								
1985								
1986								
1987								
1988								

Source: IMF Financial Statistics Yearbook, 1988.

Table 26: Stabex Receipts ('000 ECUs)*

	Lomé I (1975-79)	Lomé II (1980-84)	Lomé III (1985-87)
Fiji	2,115	3,001	264
Kiribati	2,287	1,599	2,458
Papua New Guinea	-	50,691	52,097
Solomon Islands	2,173	4,335	27,718
Western Samoa	2,873	6,489	7,971
Tonga	1,208	4,011	2,774
Vanuatu	1,431	8,932	16,440

Source : General Reports of the Activities of the European Communities, EC Commission.

*One ECU is worth \$US 1.2

The Stabex scheme compensates participants in the Lomé Convention for shortfalls of export earnings from individual products exported to the EEC. The basis for compensation is against a moving average of the export earnings of the four years preceding the year of shortfall, but only agricultural products (plus iron ore) are included. Compensation is not necessarily complete and in most cases has to be repaid (but without interest). The receipts from Stabex are shown in Table 26.

Some individual PIEs operate their own internal schemes to insulate producers against price fluctuations, and these are to be welcomed, both from the point of view of maintaining the continuity of production, and for overall macroeconomic stability, but adequate funding is essential. Papua New Guinea has operated highly successful stabilization schemes for cocoa, coffee, and palm oil, but recently ran out of funds. At present, funds are provided largely out of tax revenues, and from levies on the commodities concerned, from within the countries. In the absence of international commodity agreements to stabilize prices, international bodies might consider subscribing to the stabilization funds within the countries themselves. There is a role here, perhaps, for some of the international financial organizations concerned with the Pacific Islands, such as the Asian Development Bank, and the World Bank itself.

VII PROSPECTS FOR THE 1990s

To the extent that the PIEs are integrated into the world economy, the economic prospects for the PIEs in the 1990s look reasonably favorable, particularly compared with the first half of the 1980s. All the major forecasts of the world economy show the growth of output in the industrialized and developing countries proceeding at a rate slightly slower than the last three years of the 1980s but faster than in the first half of the 1980s. World trade is expected to grow commensurately fast. Furthermore, the outlook for most (although not all) commodity prices is good. In Table 27, the fore-

Table 27: Forecast Growth of GNP in Industrial and Developing Economies (%)

National Institute							Av.	Av.
	1987	1988	1989	1990	1991	1992	1993-95	1996-99
Seven Major								
Industrialized Countries	3.4	4.4	3.3	2.6	2.5	2.5	2.7	2.9
USA	3.6	4.6	3.3	1.9	1.9	1.7	2.1	-
Japan	4.5	5.8	5.4	5.2	4.8	4.5	4.5	-
Germany	1.7	3.6	4.2	2.5	2.6	2.5	2.4	-
<hr/>								
IMF World Economic Outlook								
			1988	1989	1990	Av. 1991-94		
Developed Countries			4.5	3.5	3.0	3.0		
Net Debtor Developing Countries			-	-	4.7	..		
<hr/>								
UNCTAD								
	1990			1990-95			1995-2000	
World	3.3			2.9			3.1	
North America	2.2			2.2			2.5	
Western Europe	2.7			2.1			2.2	
Pacific Developed	4.0			3.6			3.3	
Developing Countries	4.0			3.4			3.7	
Latin America	2.8			2.3			3.0	
Africa	2.5			0.5			0.6	
Asia	5.4			2.5			2.5	

casts for growth of the world economy are taken from three sources: the IMF World Economic Outlook; the world model of the National Institute of Economic and Social Research in London, and the UNCTAD Trade and Development Report 1989. All the forecasts seem to concur that the average growth of the world economy in the 1990s will be of the order of 3 percent per annum, with no major recession anticipated. The growth of the developed industrialized countries will average just under 3 percent, while the average rate for the developing countries as a whole will be close to 4 percent. A study being prepared by the World Bank for its 1990 World Development Report concludes "the long term economic prospects for the industrialized countries and a number of leading economies in the developing regions are quite favorable." It predicts that out of a sample of 87 developing countries, the 13 best performers in the 1980s can look forward to 6 percent per annum growth in the 1990s. The rest will grow at an average of 3.7 percent.

These forecasts for developing countries assume a growth rate of 3 percent for the industrialized countries and that the net flow of financial assistance to developing countries will remain in the 1990s at the level of the 1980s, with direct private investment remaining depressed, but with some slight increase in official financing. The experience of individual continents, however, will continue to diverge, with Africa hardly growing at all, so that per capita income will continue to decline until the end of the century. Debt will continue to be a drag on the world economy, and high real interest rates are likely to continue as long as payments imbalances remain among the major industrialized countries.

Table 28 shows the forecasts for total world trade growth. World trade grew fast in 1988 and 1989, and is expected to slow down until 1992 from when it will accelerate until the end of the century with an average rate of 6.5 percent from 1993-99. With an expected growth of prices of just over 3 percent per annum, this means that the value of world trade is forecast to grow at approximately 10 percent per annum during the 1990s as a whole. If we use our elasticity estimates in Table 18, which link the growth of Pacific island exports to world trade growth, we would expect the following average annual growth in the value of Pacific Island exports during the 1990s: Fiji (12%), Papua New Guinea (16.5%),

Table 28: Forecast Growth of World Trade (%)

	1987	1988	1989	1990	1991	1992	1993-95	1996-99
National Institute								
Forecast	5.4	10.2	8.0	6.1	5.4	5.2	5.9	6.8
IMF Forecast				5.7				
UNCTAD Forecast								
World Exports				6.5				
North America				6.7				
Western Europe				6.1				
Pacific Developed				8.8				
Developing Countries				6.2				
Latin America				5.6				
Africa				5.8				
Asia				6.4				

Solomon Islands (15.8%), Vanuatu (10.9%), Western Samoa (12.2%), Tonga (18.0%). These figures can only be rough estimates, however, based on past experience. They take no account of known developments in the field of mineral exploitation, for example, and obviously take no account of unknown supply side shocks. The forecasts compare with the average experience of the 1980s (up to 1987) of: Fiji (3.6%), Papua New Guinea (4.1%), Solomon Islands (1.6%), Vanuatu (6.2%), Western Samoa (6%),

Table 29: Price Forecasts of Major Commodities Exported by the Pacific Island Economies

	1989	1990	1995	2000	Percentage change 1989-95
Coffee (¢ per kg)	287	267	364	492	26.8%
Cocoa (¢ per kg)	127	117	142	264	11.8%
Sugar (\$ per mt)	278	364	363	525	30.5%
Palm oil (\$ per mt)	400	443	634	724	58.5%
Coconut oil (\$ per mt)	550	535	790	915	43.6%
Copra (\$ per mt)	370	430	565	651	52.7%
Copper(\$ per mt)	2,600	1,850	2,450	3,000	-5.8%
Gold (\$ per ounce)	390	380	420	520	7.7%
Manufactures*	-	-	-	-	21.2%

Source: World Bank Commodities Division.

*Forecast by National Institute of Economic and Social Research, London.

Tonga (4.9%) (see Table 13). The prospects, therefore, are for a substantial improvement in export performance in the 1990s compared to the dismal performance for most of the 1980s.

Table 29 presents forecasts made by the World Bank of the prices of the major commodities exported by the PIEs. The prices of all commodities, except copper, are expected to rise between 1989 and 1995. For most of the commodities, the expected rise is also above the forecast rise in the price of industrial goods, implying an improvement in the terms of trade for those commodities. For the developing countries as a whole, the IMF forecasts no change in the terms of trade up to 1994. However, the price of oil is expected to rise by nearly 70 percent between 1990 and 1995 which will cause difficulties for those developing countries heavily dependent on oil and oil imports.

VIII

SUMMARY OF MAJOR FINDINGS AND CONCLUSIONS

1. Apart from Fiji, the average living standards in the PIEs are low compared with many other small economies (measured by population size). On the other hand, there are many poorer countries in the world.
2. The PIEs suffer many development disadvantages from their small population and the small size of the market.
3. The PIEs are too heavily dependent on the production and export of primary commodities. Long-run sustainable development requires structural change in favor of non-primary production.
4. The PIEs grew rapidly in the 1970s and their record compared favorably with the average for all developing countries, but performance in the 1980s was uniformly bad and worse than in other developing countries, including small low income countries.
5. The deterioration in the comparative growth performance of the PIEs in the 1980s cannot be explained by a decline in investment, at least in Fiji and Papua New Guinea. There is, however, a statistically significant relation between growth and the investment ratio in both these countries, but the capital-output ratio appears to be high and the productivity of investment correspondingly low. Given the fall in the growth rate in the 1980s, the productivity of investment must have fallen even further.
6. The PIEs were badly hit in the 1980s by a fall in the growth of export earnings, and this is the most likely explanation of the deterioration in economic performance. But other developing economies experienced a similar slowdown in export growth, yet output growth did not suffer so much. This suggests other structural weaknesses in the PIEs, probably the greater openness of the economies and the greater dependence on imports for the productivity of domestic resources.
7. The PIEs suffered a serious deterioration in their terms of trade in the 1980s and also in their balance of payments to

the extent that had output growth been maintained in the 1980s at the rate of the 1970s, the deficits would have been unsustainable. In this sense, growth in the 1980s was balance of payments constrained.

8. The record of inflation has been reasonably good, comparing favorably with other developing economies, particularly in the 1970s.
9. When the relationship between export growth and output growth was tested for Fiji and Papua New Guinea, only in the latter case was a statistically significant relationship found. In Fiji, the growth rate has fluctuated widely (and wildly), bearing no relationship to the growth of export earnings.
10. There is strong evidence that most of the PIEs are closely integrated with the functioning of the world economy. Four of the PIEs—namely, Fiji, Papua New Guinea, Solomon Islands, and Tonga—show a statistically significant relationship between the value of their export growth and the growth of world trade value. Moreover, this is not, in general, the result of the fact that the prices of Pacific Island exports are more cyclically sensitive than world prices, since the growth of the value of exports is also closely linked to the growth in the volume of world trade, at least in four of the countries—Papua New Guinea, Solomon Islands, Vanuatu, and Tonga. Of all the islands, only Western Samoa seems to be a “law unto itself.”
11. As part of a long term development strategy, it is important for the PIEs to diversify their output and export structure in favor of commodities with more favorable production and demand characteristics, such as various types of manufactures and service activities.
12. Free trade is not conducive to structural change. It ossifies a productive structure according to static comparative advantage. It tends to benefit the strong at the expense of the weak. There are many legitimate economic arguments for protection that the PIEs should take note of. A customs union between the PIEs would be dominated by Fiji and Papua New Guinea. A free trade area with Australasia and other Asian countries could be potentially disastrous for the

PIEs. The PIEs should maintain a protective stance but ensure that the protective measures take the form prescribed by economic theory and are orientated primarily toward export promotion rather than import substitution (although the two are not mutually exclusive).

13. As far as the direction of trade is concerned, *intra*-Pacific Island trade is dominated by Fiji which accounts for approximately 80 percent of the total. The value of *intra*-Pacific Island trade is miniscule compared with total trade (less than 5 percent) and has not grown in the 1980s. There is little evidence that the SPARTECA agreement has diverted trade to Australasia. On the other hand, Australia and New Zealand were the two slowest growing markets in the 1970s and 1980s. Penetration of the Japanese market has been the most impressive.
14. The world as a whole suffers from severe primary product price instability which leads to stagflation. There is a strong case for internationally supervised "Commod Control" schemes on Keynesian lines, financed by Special Drawing Rights. The PIEs suffer from extreme commodity price movements. Statistical analysis shows that the major part of fluctuations in the export earnings of the PIEs can be accounted for by the variations in the prices of their major commodity exports.
15. Compensation from the IMF's Compensatory Financing Facility and the EEC's Stabex scheme has been small in relation to fluctuations in export earnings experienced by the PIEs. There is a role for some of the organizations concerned with the Pacific Islands to contribute directly to internal stabilization funds.
16. The prospects for the world economy in the 1990s look reasonably favorable, compared with the performance of most of the 1980s. World output is expected to grow on average by 3 percent per annum, and the value of world trade by about 10 percent per annum. If this is so, then the value of export earnings of the PIEs might be expected to grow by something in excess of 10 percent per annum.
17. The prices of all the major commodities exported by the PIEs, except for copper, are forecast to rise up to 1995, and

for the terms of trade to improve. A 70 percent forecast increase in the price of oil might, however, prove problematic.

18. There is an important need for the development of a comprehensive data base on a consistent basis for all PIEs to facilitate quantitative analysis of economic performance. This is missing within the Pacific Island Development Program.

Endnotes

- 1 Fiji, Papua New Guinea, Solomon Islands, Vanuatu, Western Samoa, Kiribati, Tonga, Cook Islands.
- 2 As contained, for example, in the *World Bank Development Report* (1989) and on the World Bank Data Tapes.
- 3 W. Rostow, *Stages of Economic Growth*, (Cambridge University Press, 1960). These countries now seem to be converging to the historical experience.
- 4 Identified in the IMF's *World Economic Outlook*. Of the PIEs, only Vanuatu is included in this category.
- 5 All the elasticities are significant at the 95 percent confidence level or above.
- 6 Three major sources have been used: the *IMF Financial Statistics*; the report for the IMF by C. Browne, *Economic Development in Seven Pacific Island Countries* (1989), and the *UN Statistical Yearbook for Asia and the Pacific*. In the last source, where nominal values of GDP are given, real GDP was calculated by deflating by an index of the retail price level. The sources used are indicated in Table 11.
- 7 This issue is addressed in my book, *Inflation, Saving and Growth in Developing Economies*, (Macmillan, London and St. Martins Press, New York, 1974). Some would argue that financial conservatism does characterize the Pacific Island Economies.
- 8 The growth in tourist receipts in the three years was: 22 percent (1974), 5 percent (1977), and 5 percent (1980).
- 9 See, for example, A. P. Thirlwall and J. Bergevin, "Trends, Cycles and Asymmetries in the Terms of Trade of Primary Commodities from Developed and Less Developed Countries," *World Development*, July 1985.
- 10 This could be the result of the growing importance of the export of taro which has risen independently of world economic conditions.
- 11 See D. Senghaas, *The European Experience: A Historical Critique of Development Theory*, (Berg Publishers, 1985).
- 12 E.g., H. G. Johnson, Tariffs and Economic Development: Some Theoretical Issues, *Journal of Development Studies*, October 1964.
- 13 For an overview, see J. McMaster, *Incentives, Regulatory Mechanisms and Risk Climate for Private Investment*, East-West Center, Pacific Islands Development Program, March 1990.

- 14 It should be noted, however, that approximately one-half of the value of Fijian exports to other PIEs is accounted for by the re-export of oil products.
- 15 It should be remembered, however, that many mineral exports are sold under long-term contracts.
- 16 D. Moggridge (ed.), *The Collected Writings of J. M. Keynes, Vol. XXVII: Activities 1940–1946 Shaping the Post-War World: Employment and Commodities*, (London, Macmillan, 1980).

PACIFIC ISLANDS DEVELOPMENT PROGRAM

The purpose of the Pacific Islands Development Program (PIDP) of the East-West Center is to help meet the special development needs of the Pacific islands region through cooperative research and training. PIDP conducts specific research and training activities based on the issues and problems prioritized by the Pacific Islands Conference of Leaders, which meets every three years. The Standing Committee, composed of eleven island leaders, reviews PIDP's research projects annually to ensure that they respond to the issues and challenges raised at each Pacific Islands Conference. This unique process enhances the East-West Center's capability in serving the Pacific.

The East-West Center is a public, nonprofit educational institution established in Hawaii in 1960 by the United States Congress. The Center's mandate is "to promote better relations and understanding among the nations of Asia, the Pacific, and the United States through cooperative study, training, and research."

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