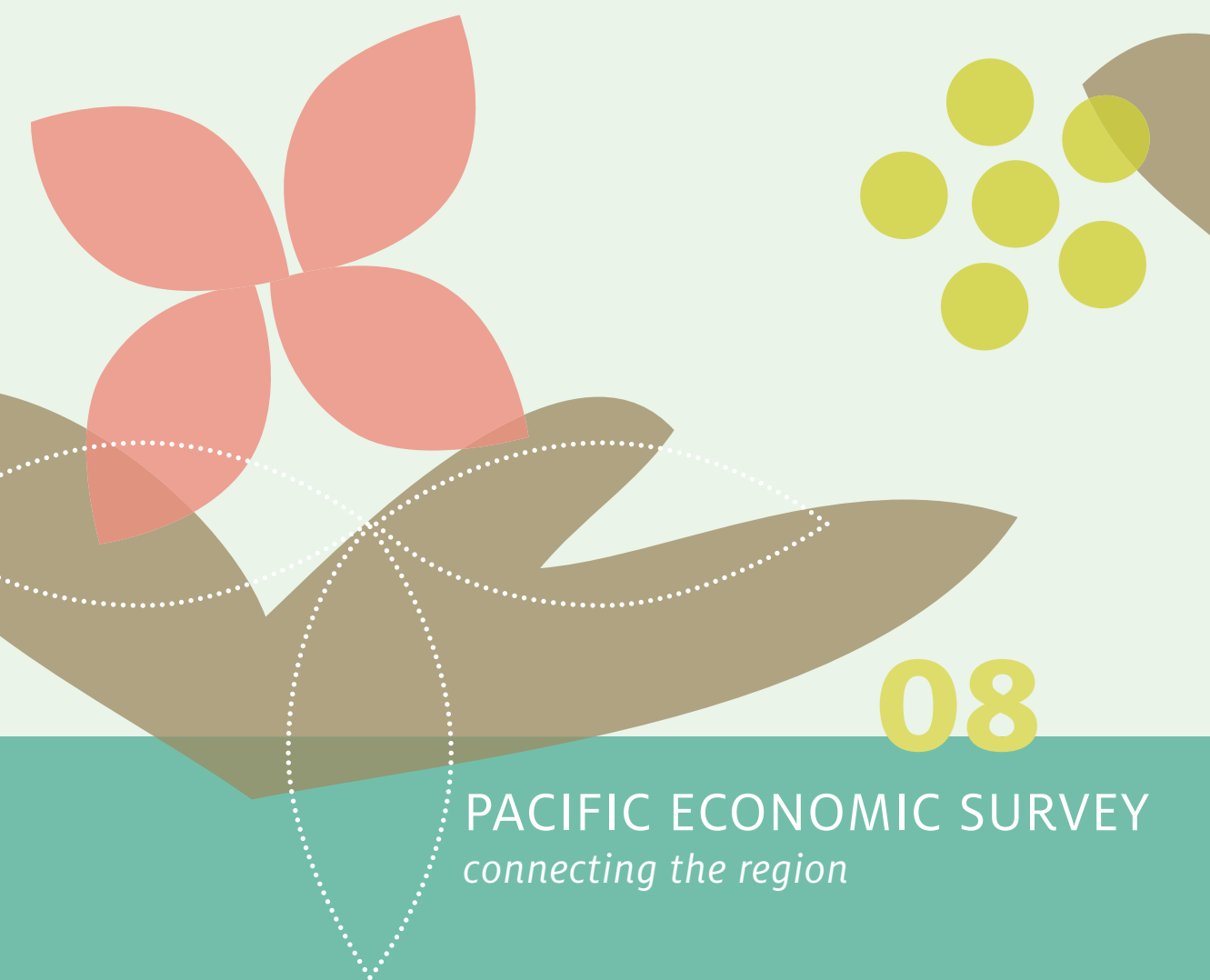




08

PACIFIC ECONOMIC SURVEY
connecting the region



08

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connecting the region

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Overview

Recent performance shows that faster growth is possible in the Pacific.

Faster economic growth will help create employment, reduce poverty and provide resources to combat health and environmental threats. *Pacific Economic Survey 2008* looks at recent growth performance in the Pacific region, focusing on progress made in connecting the Pacific to the rest of the world, and also within the region, through improved telecommunications, aviation and shipping services.

Growth update

Recent performance shows that faster growth is possible in the Pacific. After virtual stagnation in the early years of this decade, regional economic growth increased to 3.5 per cent in 2004. Growth averaged 2.8 per cent between 2005 and 2007, and is forecast to reach 4.5 per cent in 2008. This higher growth will help the region reduce poverty and joblessness and get back on track to achieve the Millennium Development Goals (MDGs), but will need to be quickened and sustained. This improved regional performance masks considerable variation across island countries, with some being held back by political instability.

While Papua New Guinea (PNG) and Timor-Leste are experiencing massive increases in government revenue due to high commodity prices and increases in oil production, most Pacific island countries have to import oil and are suffering. Several—Fiji, Vanuatu, Cook Islands, Samoa and Palau—have shown that the Pacific can succeed in tourism if domestic policies are supportive. Opportunities to work abroad are unevenly spread across the Pacific, but remittances have grown dramatically, with annual average growth of 36 per cent from 2000 to reach US\$425 million in 2005. Most countries are showing good macroeconomic management, but microeconomic performance is mixed. Some countries show improvements in governance, but control of corruption has worsened in others.

Connecting the region

The Pacific has traditionally been an isolated region: hard and expensive to reach. A few years ago, it was serviced by monopoly mobile phone providers, and its aviation sector was in crisis. Today, the arrival of new mobile telecom and aviation entrants in a number of countries has led to lower prices and improved reliability, which in turn has boosted growth, especially in tourism. Other countries can encourage new entrants by introducing competition, and restructuring and divesting state-owned enterprises.

Raising the standard of the region's airports and ports is also important for improving connectivity, and regional examples show that this can be done. Experience shows that promoting competition is the best way to service remote areas, but public funds can help, especially if provided in a transparent, arms-length way. Regional collaboration can help Pacific island countries overcome regulatory challenges in the telecommunications, aviation and shipping sectors.

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Preface

This is the first *Pacific Economic Survey*, a new annual report that will provide an overview and update of economic development in the Pacific islands region.

The surveys build on the 2006 report, *Pacific 2020*, which used extensive regional consultation to analyse long-term growth opportunities and challenges in the region.

Each Survey will include an update on economic performance in the Pacific and the outlook for the region. As such, Part One of this report highlights key economic developments, opportunities and risks.

Each Survey will also include a thematic section—a focused analysis of an issue of importance to the Pacific. This Survey's thematic focus is connectivity. Part Two of this report addresses the challenge of better connecting the Pacific through telecommunications, air and shipping services.

Like *Pacific 2020*, *Pacific Economic Survey 2008* covers the 14 island member countries of the Pacific Islands Forum, as well as Timor-Leste because of its proximity to the Pacific and the similarity of many of its development challenges.

Pacific Economic Survey 2008 was guided by a regional steering committee, which reviewed the concept note for the report as well as drafts of this report and background papers. These documents were also subject to peer review by experts around the region. (See Annex 1 for more details.)



Executive summary

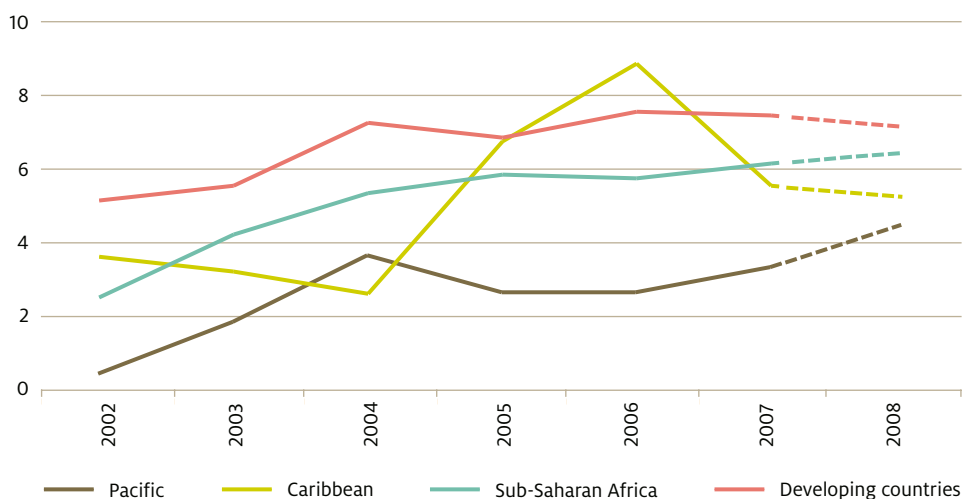
Economic growth has picked up, but remains low by international standards.

The Pacific island countries and Timor-Leste face daunting challenges. Not one country is on track to achieve all the MDGs, the internationally agreed set of development targets for 2015. Many face growing health problems, increasing environmental threats (including climate change), high levels of joblessness and poverty, and population pressures. Without higher, sustained economic growth these challenges will not be effectively addressed.

Growth update

Growth has quickened in the Pacific, but still lags behind other regions

Gross Domestic Product, annual average change (%)



Growth in the Pacific has historically been low, at about 2 to 3 per cent per year. After negligible growth in the early years of the decade, growth in regional Gross Domestic Product (GDP) increased to 3.5 per cent in 2004. Growth averaged 2.8 per cent between 2005 and 2007 and is forecast to reach 4.5 per cent for 2008.

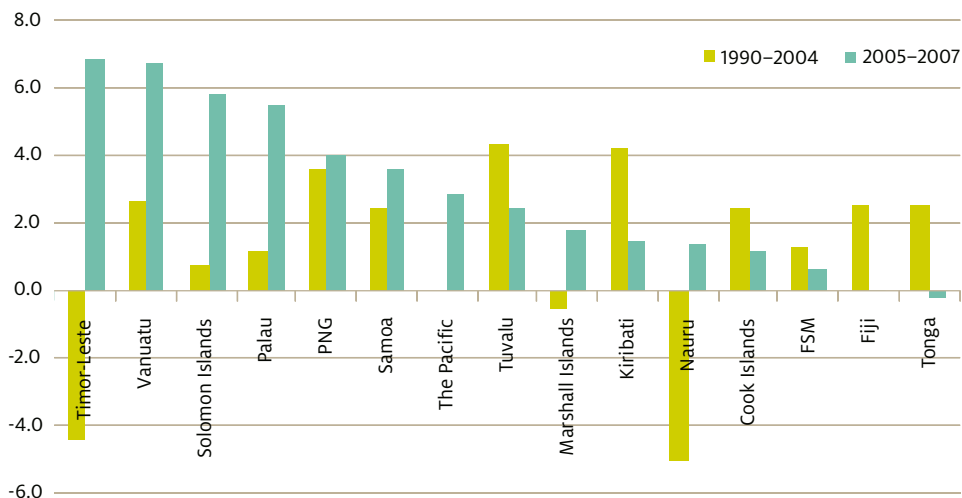
This improved performance shows that faster growth is possible in the Pacific, but needs to be put in context. East Asia is growing at 9 per cent and South Asia at 8 per cent. Both sub-Saharan Africa and the Caribbean regions have performed better than the Pacific in recent years, although the gap is narrowing.

Individual country growth performance is diverse

Rapid growth in Timor-Leste and Solomon Islands reflects post-conflict recovery. Growth in Samoa, Palau and Vanuatu is driven by tourism. Vanuatu’s growth is notable: its fiscal reforms, expanded aviation sector, relatively liberal investment policies, active land market and recent political stability have helped place it on a higher growth path—averaging six per cent per year since 2003. PNG and Timor-Leste are benefiting from the global commodity boom. Apart from Palau and Samoa, the other Polynesian and Micronesian countries show lower (or continued stagnant) growth, although Nauru has recently demonstrated improved economic performance due to an increase in phosphate production. Fiji and Tonga have suffered from recent political instability. Growth has slowed in recent years in Cook Islands, one of the Pacific’s better performers, due to damage from cyclones and the falling value of pearl exports.

Six Pacific island countries have grown at an average of three per cent or more for the last three years

Gross Domestic Product, annual average change (%)

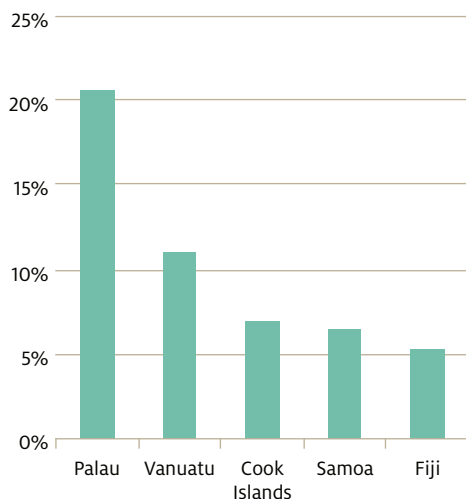


Tourism is driving growth in a number of Pacific island countries

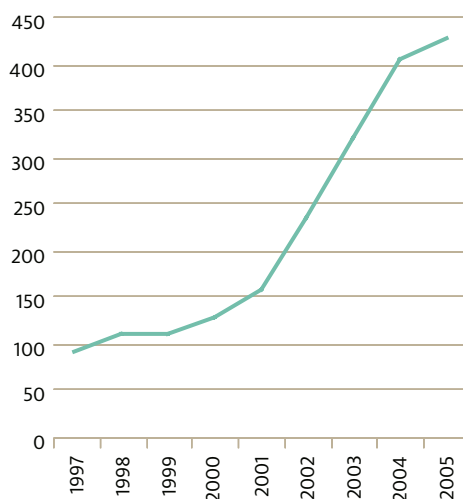
Fiji continues to dominate Pacific tourism, although its success in continuing to grow the market has been tempered by successive coups.

More flights and cheaper fares, together with political stability, have helped drive tourism growth in Samoa and Vanuatu. Cook Islands and Palau are also attracting increasing numbers of tourists.

Average annual growth (%) in visitor arrivals, 2002–2007



Total remittances (US\$ millions)



Remittances have increased dramatically

Remittances benefit women and the poor in the Pacific. Since 2000, Pacific island remittances have increased rapidly, with annualised average growth of 36 per cent to reach US\$425 million in 2005. Unlike in other parts of the developing world, in the Pacific aid is still larger than remittances in the aggregate, although at recent rates of growth, they will overtake aid by 2009.

However, opportunities to work abroad are unevenly spread across the Pacific. Four countries—Fiji, Kiribati, Samoa and Tonga—received almost 90 per cent of the Pacific’s remittances in 2005. Recent initiatives, namely the New Zealand seasonal workers scheme and the Australia-Pacific Technical College, will expand labour mobility opportunities across the region.

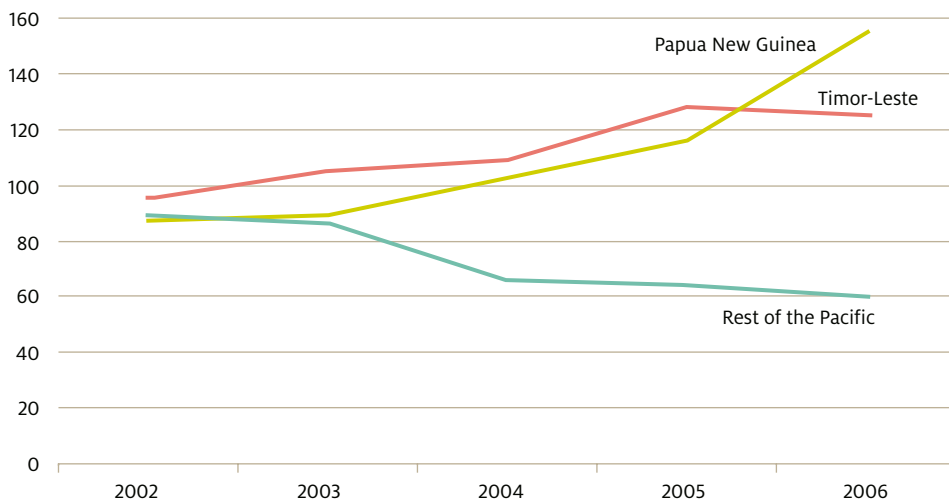
High commodity prices are helping PNG and Timor-Leste, but hurting most other Pacific countries

Perhaps the most profound impact on economic performance in the Pacific in recent years has come from the commodity boom.

PNG and Timor-Leste have recently experienced rapid increases in government revenue due to high prices for oil (both countries), copper and gold (PNG only), and the start of off-shore oil

production under revenue-sharing arrangements (Timor-Leste). In PNG, mineral revenue increased roughly seven-fold, from just over US\$100 million in 2002 to about US\$700 million in 2007. In Timor-Leste, GDP, which excludes oil income, was virtually unchanged in 2006 from its 2002 level at about US\$350 million. But petroleum income rose over the same period from virtually zero to almost US\$1.2 billion in 2007. Both countries suffer from a limited capacity to translate these large financial gains into improved physical and social infrastructure.

Terms of trade (2000 = 100)



High oil prices have put pressure on inflation and exchange rates in other Pacific island countries, most of which have seen a widening of the current account deficit and a decline in foreign exchange cover in recent years. More efficient, competitive procurement of oil would partially mitigate this negative impact.

Most countries are showing good macroeconomic management, but microeconomic performance is mixed

Responsible macroeconomic policies have kept fiscal deficits in check and inflation under control in most Pacific island countries. Progress in microeconomic reform, however, has been slower. Overall, there has been little progress in making the Pacific an easier place to do business—in fact, the region’s international rankings on ‘cost of doing business’ indicators worsened in 2007.

Some sectors have progressed. As discussed in Part Two of the Survey, the connectivity of the Pacific to the outside world (by phone, air or sea) has traditionally been poor, but is at last improving. New entrants, and in some cases the threat of competition in mobile phones and in aviation are pushing down prices and improving connectivity. Progress has also been made in the financial sector, where banking restructuring, new entrants and a number of new rural banking and microfinance initiatives have improved access and increased credit volumes.

Some countries show improvements in governance, but corruption has worsened in others

World Bank Institute data shows variable standards in governance across the Pacific. Some countries improved between 2002 and 2005, namely Solomon Islands (from a very low base), Vanuatu and the Federated States of Micronesia (FSM). But the indicators also suggest lower control of corruption over the same period for Fiji, PNG and Tonga.

Political stability has worsened in some countries and improved in others

Political instability has a big impact on the region's growth. The November 2006 riots in Tonga and the December 2006 coup in Fiji, for example, damaged growth performance and prospects. Internal stability in Timor-Leste and Solomon Islands is fragile, but for now is protected by an international military and police presence. Political stability has improved in PNG and Vanuatu, possibly contributing to higher growth in both countries.

Outlook

2008 regional prospects are generally positive

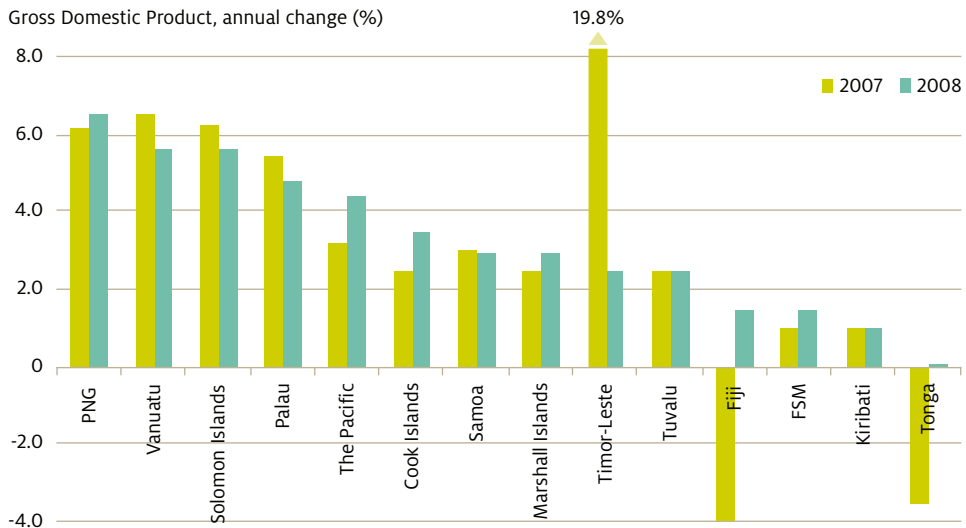
The Pacific's combined GDP is projected to grow by 4.5 per cent in 2008, up from 3.3 per cent in 2007. The region's fastest growth is forecast to be in PNG, at 6.6 per cent. Three other countries are projected to grow faster than the regional average of 4.5 per cent in 2008: Vanuatu, Solomon Islands, and Palau, at rates in line with their growth of 2005–07. Only two other countries are forecast to grow at above 3 per cent: Samoa and Cook Islands.

It is striking that the Melanesian countries of PNG, Vanuatu and Solomon Islands (which make up more than 70 per cent of the Pacific's population) are now growing at around 6 per cent, a rate which, if sustained, can make a serious dent in poverty and improve human development indicators.

External shocks and political instability are key risks for 2008.

Although global growth is expected to remain strong, the region faces risks from external shocks. A sharp decline in commodity prices would have a major impact on all countries. While commodity prices are expected to remain high, they may become more volatile, especially if there are supply disruptions. Most Pacific island economies are vulnerable to a further spike in oil prices, which would put pressure on their current accounts. Financial market turbulence and the large current account deficit in the United States could lead to lower than expected global growth, which would in turn dampen Pacific prospects.

Regional projections for growth in 2008 assume social and political stability, including orderly outcomes from elections in Vanuatu and Tonga, and the easing of social and political tensions as Fiji moves towards elections in 2009. Political instability would result in lower or negative growth.



These projections also assume that good macroeconomic policies will continue and that planned reforms and public investments will be implemented.

A resurgence of inflation remains a risk in the Melanesian countries due to heavy financial inflows.

Three distinct groups of Pacific island countries face different growth challenges in the coming years

The main immediate challenge for the resource rich countries of PNG and Timor-Leste is to take full advantage of the commodity boom which has created a unique opportunity for development and sustainable employment creation if the revenue accruing to these countries’ governments is used wisely.

A number of countries have demonstrated potential for growth through tourism, namely Fiji, Samoa, Cook Islands, Vanuatu and Palau. For these countries, continuing to grow the tourism market will require political stability, and further reforms and investments to reduce the cost of connectivity and improve infrastructure.

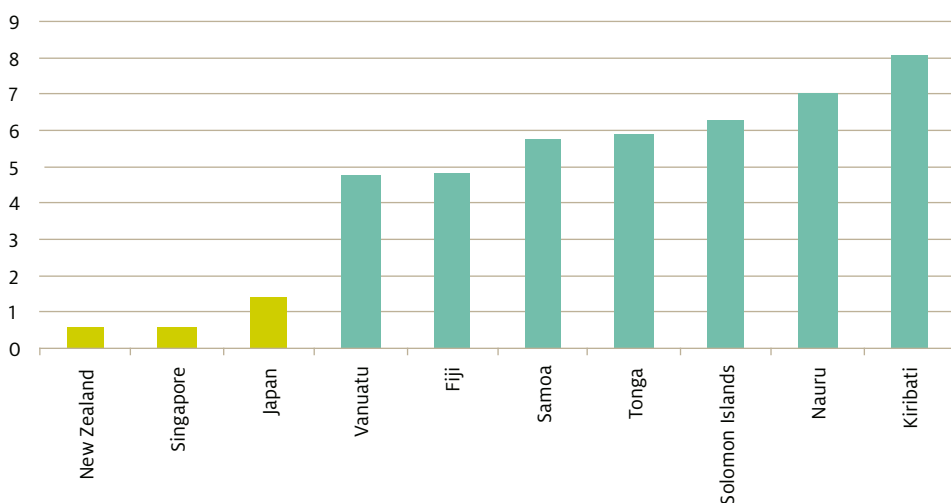
The growth potential of other Pacific island countries is uncertain. This is a diverse group. The smallest and most remote will benefit from reforms and improved governance but may never achieve rapid growth, while the larger ones, such as Solomon Islands, probably could if the basic prerequisites for growth—social and political stability—were in place.

Connecting the region

The Pacific has traditionally been an isolated region

The Pacific has traditionally been hard and expensive to reach. The region has by and large missed out on the mobile phone revolution, with mobile phone penetration rates much lower than in island economies located elsewhere in the world. It also remains expensive to connect with the Pacific by air. As the figure below shows, air freight from the East coast of Australia to the Pacific is four to 16 times more expensive than air freight by air to New Zealand, Singapore or Japan. The situation is similar for sea freight.

Air freight rates from the East coast of Australia (US\$ per kg)



Improving connectivity improves the quality of life for people in the Pacific

Improving connectivity has numerous benefits. It brings in tourist income, creates jobs, keeps overseas communities in touch, provides access to work and study opportunities for Pacific islanders, enables trade, makes life easier for rural and remote communities, helps governments govern and helps businesses do business.

Experience around the world, and now in the Pacific, is that the spread of mobile phones in particular can be transformative, making a real difference to the lives of poor people and creating new business opportunities.

In some Pacific island countries, allowing or encouraging new entrants has already led to better connectivity

A few years ago, the region was characterised by monopolistic mobile phone providers, and an aviation sector in crisis. However, the arrival of new mobile telecommunications and aviation entrants in a number of countries has led to lower prices and improved reliability (shipping has always been competitive so the same issue does not arise in this sector).

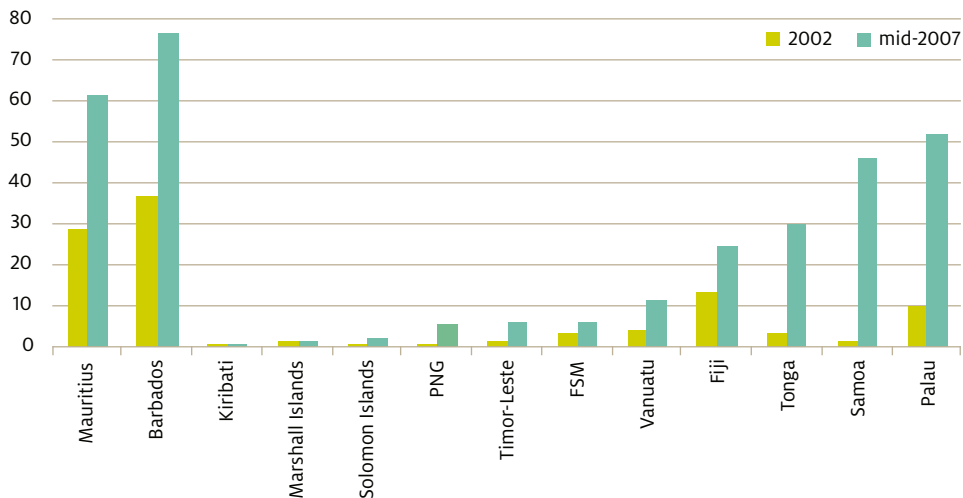
The introduction of competition in the mobile phone sector has had a dramatic impact

Telecommunication services in the Pacific have traditionally been provided by national monopolies. But an increasing number of countries are moving towards competitive arrangements, with impressive results:

- > In Samoa, in 2002, only 2 per cent of the population had mobile phones. By mid-2007, after competition was introduced, this shot up to 46 per cent.
- > In Tonga, competition over the same period led to an increase in mobile penetration from 3 per cent to 30 per cent.
- > In PNG, competition was introduced in 2007 and quickly led to a dramatic increase in coverage and a doubling of mobile phone subscribers.

(Palau has also recently introduced competition, but most of the growth in subscribers came before this.)

Mobile phone penetration (number of subscribers per 100 people)

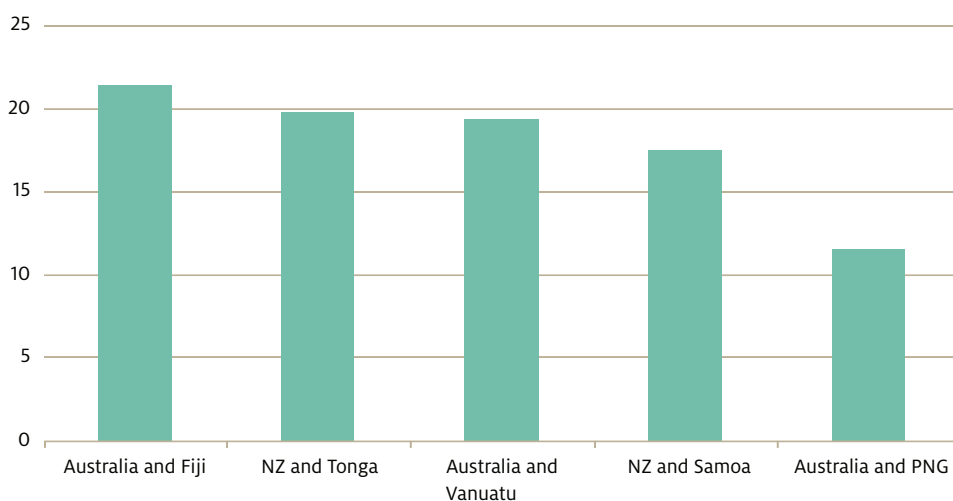


Mobile phone prices have also fallen with competition. In Samoa, the price of a three-minute mobile call to the United States, which was 4 tala per minute in March 2006, fell by more than half to 1.79 tala a year later. In Vanuatu, the mere threat of competition was enough to cause the price of a mobile SIM card to fall from Vt5000 in November 2006 to Vt2000 in February 2007 and to Vt1000 in November 2007.

New entrants into the aviation market have also boosted access and reduced prices

Fiji, Vanuatu, Samoa, Tonga and PNG all have new entrants in their aviation markets, in most cases as a result of competition, but in the case of Samoa, through restructuring the national airline by merging it with Pacific Blue in 2005. As the figure shows, the increase in the number of airlines in the region led to a large increase in passenger traffic in the 12 months subsequent to new entry and in most cases boosted tourism significantly.

Percentage increase in passenger traffic in year following entry of new airlines



New entrants have also pushed down prices. The emergence of Pacific Blue reduced airfares on Pacific routes by as much as 30 to 40 per cent. Once Our Airline started competing with Solomon Airlines on the Brisbane-Honiara route, prices fell by up to 75 per cent.

The success achieved so far shows that Pacific island governments should continue to encourage new entrants in the telecommunication and aviation sectors

Several countries are following the example of the early liberalisers, and attempting to unwind mobile telecommunication monopolies. The governments of Fiji, the Marshall Islands, Micronesia, Solomon Islands, Timor-Leste and Vanuatu are all considering or introducing competition. Unwinding existing arrangements can be difficult if long-term exclusive licenses must first be

renegotiated. Solomon Islands, for example, has to deal with exclusive licenses which do not expire until 2018. Timor-Leste's run until 2017.

The transition to competition in the telecommunication sector is proving a bumpy ride in some Pacific island countries. Liberalisation in Solomon Islands has been locked up in the courts since 2006 with incumbent mobile providers challenging the granting of new licenses. In PNG the situation is in flux. While a new entrant is now operating, the government's policy towards competition has been unclear.

Yet, as the Samoa and indeed other global experience shows, unwinding monopolies in telecommunications can be achieved through an orderly, consensual approach. The most recent successes are Fiji and Vanuatu. Following agreements with their monopoly providers (in November 2007 and 2008 respectively) both countries have announced the introduction of competition.

In aviation, partnerships between national and larger, international airlines—reflecting the Polynesian Blue model in Samoa—will help bring new entrants to the market. Some other Pacific island countries are looking to emulate Samoa's success. In August 2007 the Vanuatu Government engaged the IFC to advise it on selling part of the airline. In February 2008 the Government agreed to seek expressions of interest in purchasing a minority stake in Air Vanuatu.

Encouraging new entrants, and running these sectors along competitive lines, puts a premium on good regulation, and more broadly good governance and transparency, to ensure a level playing field.

Promoting competition is the best way to service rural or remote areas, but public funds can also help if provided in a transparent, arms-length way

Connecting rural or remote areas with reliable services is a real challenge in the Pacific.

Removing restrictions on entry is the best way to expand telecommunications, aviation and shipping services to rural or remote areas. Several Pacific island countries still do not allow domestic competition in these sectors even though new entrants are often better placed than incumbents to provide more cost-effective services. In PNG, for example, there has been a marked increase in mobile phone services in rural areas since the introduction of competition in July 2007.

Despite advances in technology, the cost of serving rural and remote areas is likely to remain high. Public funds may be required to increase the incentives for providers to service these areas. Universal Service Funds, successfully used in a number of developing countries in other parts of the world (including Uganda and Nepal) to promote telecommunications access, are being discussed in some Pacific island countries. These funds are typically financed through industry levies and/or general tax revenue, and subsidise service provision in commercially marginal areas, often through competitive tenders.

Ensuring affordable public access to telecommunications is an important feature of universal service-type schemes. Subsidised village phone initiatives, where business risk is taken by the self-employed agent, have proven to be the most sustainable approach. For shipping and aviation

routes (including some uncompetitive international aviation routes), subsidies are best provided on a competitive basis, as they are in Fiji for non-commercial domestic shipping routes.

Upgrading infrastructure is another important connectivity challenge

More investment in upgrading infrastructure is needed throughout the Pacific, but so is a more commercial orientation, and where appropriate, competition.

Significant investment is needed to increase the availability of telecommunications-network capacity to meet growing demand in the region. Plans for a new regional backbone are being considered. The key issues for policymakers are to ensure that decisions on how to use public funds are based on careful due diligence, on keeping construction costs in line with international benchmarks and on ensuring appropriate competitive safeguards are in place.

Insufficient investment in airports remains a significant barrier to the growth of air services, particularly within domestic markets. It also continues to hamper tourism development. Corporatising has helped airports in Fiji, Vanuatu and Samoa to operate more efficiently but some problems persist.

Pacific ports are generally run down. A few are relatively modern, with better-equipped container and dedicated bulk facilities, but most are well below international standards (both infrastructure and operations). All Pacific ports are state-owned, but most of the best ones are operated by private-sector firms competing for business. This suggests again that encouraging competition, in this case in port operations, is likely to improve service standards.

Financial injections will not be adequate to improve port performance if underlying port management problems are not addressed. But where ports are performing reasonably efficiently, port investment programs should be treated as priorities.

Regional collaboration can help Pacific island countries overcome regulatory challenges in telecommunications, aviation and shipping

The three connectivity sectors considered in this report are all ones where regional solutions along the lines promoted in the Pacific Plan have an important role to play, especially with regulation, where required technical skills are in short supply, or not available at all, in the small countries of the region. Experience in the Caribbean's telecommunications sector has shown that regulatory capacity can be strengthened through region-wide cooperation. One way forward for the Pacific would be to establish a regional regulatory technical advisory facility. In aviation, the Pacific Aviation Safety Office and the Pacific Islands Air Services Agreement hold considerable potential for, respectively, enhancing aviation safety and providing a liberal regulatory framework for the region. In the maritime industry, safety and other regulatory issues would also benefit from a regional approach, for example, by building on the success of the Regional Maritime Program and by enhancing the advisory role of the Pacific Islands Maritime Association.



Introduction

The Pacific is a diverse region: its countries face daunting development challenges.

Pacific island countries cover a sea area larger than the United States, and form one of the most remote regions in the world.

Table 1 Background characteristics of the Pacific island countries, 2006

	Population	Population growth	Population density	Urban population	GDP per person
	'000	% change/year	people/km ²	% total	US\$
Melanesia and Timor-Leste					
Fiji	853	1.0	47	51	3,306
PNG	5,995	2.5	13	14	943
Solomon Islands	489	2.8	17	17	684
Vanuatu	215	2.7	18	24	1,799
Timor-Leste	1,029	3.2	69	27	346
Polynesia					
Cook Islands	22	0.6	91	70.2	7,549
Niue	1.8	-2.2	6.9	33	4,364
Samoa	186	0.8	66	23	2,277
Tonga	102	0.4	142	24	2,176
Tuvalu	10	1.6	381	48.1	1,346
Micronesia					
FSM	111	2.0	159	22	2,205
Kiribati	101	2.2	138	48	703
Marshall Islands	65	1.9	363	67	2,363
Nauru	10	0.6	482	100	3,500
Palau	20	2.0	44	70	7,785
Comparators					
Low income countries		2.0	85	12	671
Middle income countries		1.1	45	53	6,564

Sources: World Bank (2007d), Asian Development Bank (ADB) (2007d). Population growth is for the period 1990-2004 and comes from AusAID (2006), except for Timor-Leste which is for 2005 from World Bank (2007c).

The basic characteristics of Pacific island countries vary enormously. PNG is the region's giant: its economy is twice the size of the second biggest economy (Fiji) and two-thirds of Pacific islanders are Papua New Guinean. But PNG is also one of the poorest countries: its GDP per person is less than US\$1000. Timor-Leste has the second biggest population of these 15 countries, and is by far the poorest of them all, with a GDP per person of less than US\$350. At the other end of the spectrum, 6 countries in the region have populations of less than 100 000.

Population growth rates in Melanesia exceed 2.5 per cent (except for Fiji). Population growth is also high in Micronesia, and exceeds 3 per cent in Timor-Leste, but is much lower in Polynesia.

Table 2 Many Pacific island countries are off-track on the Millennium Development Goals

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	Poverty and hunger reduction	Universal primary education	Gender equality in education	Reduced child mortality	Reduced maternal mortality	Reverse major diseases	Access to water and sanitation
Indicator	% population under-nourished	Children reaching grade 5 (% grade 1 pupils)	Secondary school enrolment ratio	Deaths per 1,000 live births (children under 5)	Deaths per 100,000 births	TB Death rate per 100,000	% rural population with access to improved water source
Melanesia and Timor-Leste							
Fiji	4	95.8	1.07	18	75 ¹	3.6	51
PNG	13	58.2	0.79	74	300 ¹	46.3	32
Solomon Islands	20	78.0	0.83	29	130	23.4	65
Vanuatu	12	70.6	0.86	38	32	9.7	52
Timor-Leste	8	-	1.00	61	660 ¹	88.2	56
Polynesia							
Cook Islands	-	-	1.02	20	-	2.7	88
Niue	-	-	0.95	-	-	9.0	100
Samoa	4	95.9	1.12	29	15	3.2	87
Tonga	-	94.6	1.08	24	-	2.9	100
Tuvalu	-	62.6	0.93	38	-	54.8	82
Micronesia							
FSM	-	-	-	-	-	-	-
Kiribati	6	81.4	1.13	65	-	49.3	53
Marshall Islands	-	-	1.05	58	-	31.9	96
Nauru	-	25.4	1.07	30	-	17.5	-
Palau	-	-	1.08	11	-	7.0	94

■ Of concern - No data available

Source: UNESCAP/ADB/UNDP Report: Millennium Development Goals: Progress in Asia and the Pacific 2007

Note: Data drawn from different years.

¹ Model estimates, data cannot be verified.

At current trends, the Pacific region will not come close to achieving the Millennium Development Goals

Many countries in the region are off track in meeting the MDGs, the internationally agreed set of development targets to be achieved by 2015. As Table 2 shows, many are unlikely to achieve the targets of universal primary education, reducing child mortality by two-thirds and halving the proportion of people with access to water and sanitation. Some of the poorest countries—PNG, Timor-Leste and Solomon Islands—have the highest mountains to climb.

Poverty in the Pacific is on the increase

More than 80 per cent of the region's population lives in the four poorest countries: Kiribati, PNG, Solomon Islands and Timor-Leste (Table 1). Data on poverty in the Pacific is limited, but alarming (Box 1).

Box 1: Poverty in the Pacific: serious and rising

A 2004 Asian Development Bank (ADB) poverty assessment estimated that at least one-quarter of people in the Pacific have insufficient incomes to meet their basic needs. Poverty and employment data are limited. However, the picture emerging from the limited data available is cause for concern.

Timor-Leste—A 2001 survey found that 40 per cent of the population was living below the poverty line. Youth unemployment is currently estimated at 43 per cent nationally and 58 per cent in the capital, Dili.

Fiji—Data from three National Income and Expenditure Surveys (NIES) shows that poverty has risen steadily since independence: from 11.4 per cent in 1977 to 25.4 per cent in 1990, and then 34.4 per cent in 2002. The most recent data shows rates of underemployment of 22 per cent for males and 35 per cent for females. These numbers increase to 26 per cent and 45 per cent respectively for men and women in rural areas; and to 45 per cent and 67 per cent for young men and women (under the age of 20).

PNG—The World Bank has estimated that more than half of the population lives below a basic needs poverty line (allowing for 2200 calories per adult per day and an allowance for basic non-food expenditure), rising from 38 per cent in 1996 to 54 per cent in 2005.

Solomon Islands—A recent survey found that 23 per cent of people live below the basic needs poverty line. Women and children are disproportionately affected and nearly one-third of the population of the capital, Honiara, live in poverty.

Sources: ADB (2004); World Bank (2007c); Chand (2007a); Narsey (2007); Abbot (2006); UNDP (2007)

Note: Poverty rates are based on national poverty lines and so do not support cross-country comparisons.

Health threats facing the Pacific region are growing

Epidemics of communicable and non-communicable disease threaten to sweep the region, which includes countries with the highest rates in the world of malaria (Solomon Islands) and diabetes (Nauru). PNG has a generalised HIV/AIDS epidemic with an estimated prevalence of one to two per cent.

Climate change is the biggest long-term threat

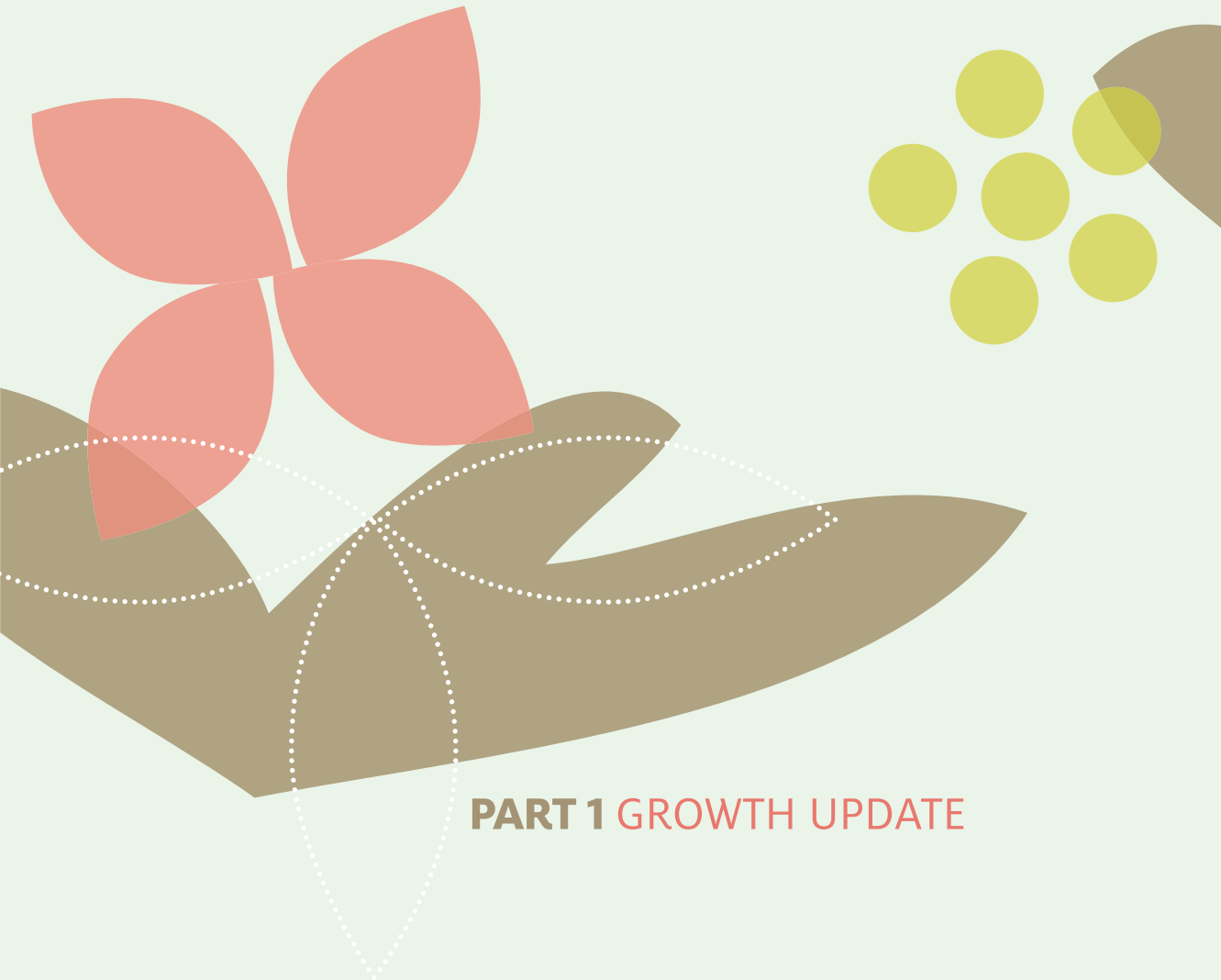
The most recent assessment by the International Panel on Climate Change (IPCC, 2007) highlighted the special vulnerability of small island states to climate change, including changing rainfall patterns and temperature increases, the potential for an increase in extreme weather events, and, in the longer term, rising sea levels.

Even with significant emission reductions, climate change will continue because of greenhouse gases already in the atmosphere. Pacific island leaders—through the Pacific Islands Framework for Action on Climate Change—have identified the need to adapt to avoid the worst impacts.² In some worst case scenarios, training and resettling of affected communities may be required.

Growth is critical if the Pacific is to combat these threats

Economic growth has been slow in the Pacific. While growth alone will not solve all of the region's challenges, without faster growth the Pacific will be unable to halt rising poverty and achieve the MDGs. Without faster economic growth, there will be neither the employment available to meet community aspirations (especially of youth) nor the resources to enable governments to respond to emerging threats. *Pacific Economic Survey 2008* documents that faster growth is possible in the Pacific, and is starting to be seen in some countries.

² See World Bank (2006d) for a discussion of the adaptation challenges facing Pacific island countries.



PART 1 GROWTH UPDATE



1 Pacific growth performance

Faster regional growth is being driven by a turnaround in Melanesia. But there are questions around sustainability.

This chapter sets out the key features of recent growth in the Pacific.³ Economic data on the region is often of poor quality. Accordingly, the Survey looks for broad trends instead of emphasising data for an individual country in an individual year.⁴

Recent economic growth

Growth in the Pacific is quickening, but still lags other regions

Economic growth—the rate of increase in GDP—in the Pacific in the nineties was at around the rate of population growth: 2 to 3 per cent per year. After negligible growth in the early years of this decade, growth increased to 3.5 per cent in 2004. Growth averaged 2.8 per cent between 2005 and 2007. In 2008, growth is forecast to accelerate to 4.5 per cent. This recent acceleration in growth shows that faster growth is possible in the Pacific, but needs to be put in context. The world economy has enjoyed strong growth in recent years of around 5 per cent. East Asia is growing at 9 per cent and South Asia at 8 per cent. Both sub-Saharan Africa and the Caribbean region show better performance than the Pacific in recent years, although this gap is narrowing.

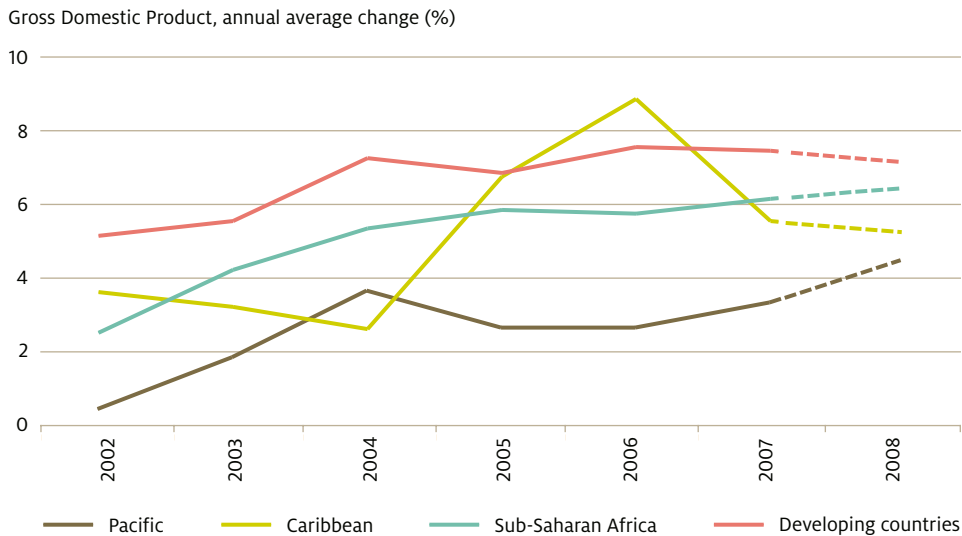
Recent growth experience in the Pacific has been diverse

Growth estimates for 2007 range from a 19.8 per cent increase for Timor-Leste to a 4 per cent decrease for Fiji. To reduce the impact of volatility, Figure 1.2 compares growth in the last three years for the region (2005 to 2007) to growth in the previous 15 years (1990 to 2004).

³ The chapter is not intended to be a comprehensive economic survey of the Pacific region, for which see AusAID (2006) and Chand (2006). It draws on the background paper by Fallon (2008).

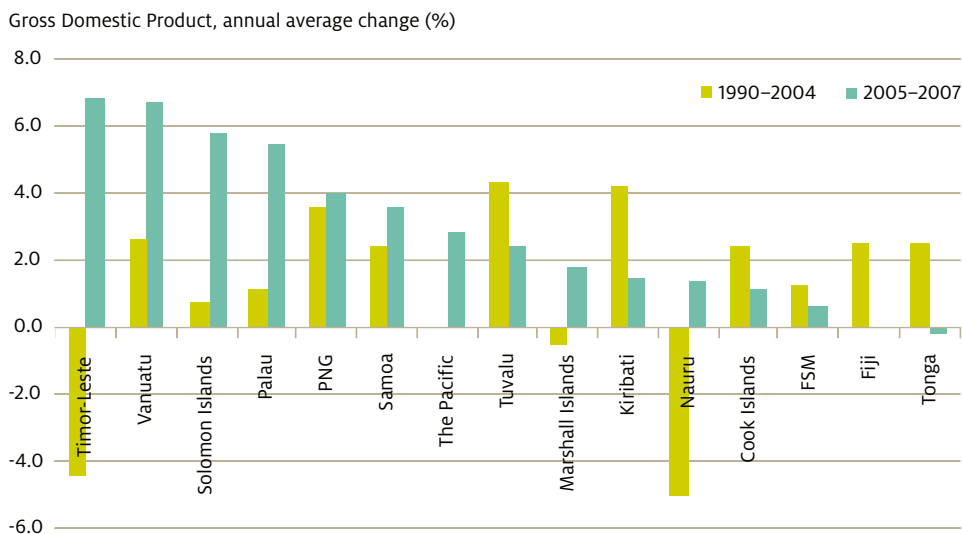
⁴ Growth data for the region is largely drawn from ADB (2007b). Some 2007 and 2008 data is updated using other sources, including ANZ (2007d) and national sources. 2007 figures are estimates and 2008 forecasts.

Figure 1.1 Growth in the Pacific: catching up with Africa and the Caribbean



Note: For Pacific data, see Annex 3, Table A1; for other regions the source is the World Bank (2008b).

Figure 1.2 Six Pacific island countries have been growing at greater than three per cent in recent years



Source: Annex 3, Table A1 for 2005-07 growth; AusAID (2006) for 1990-2004 growth; data for Nauru is unavailable beyond 2005; there is no data for Niue.

Melanesian growth performance has turned around

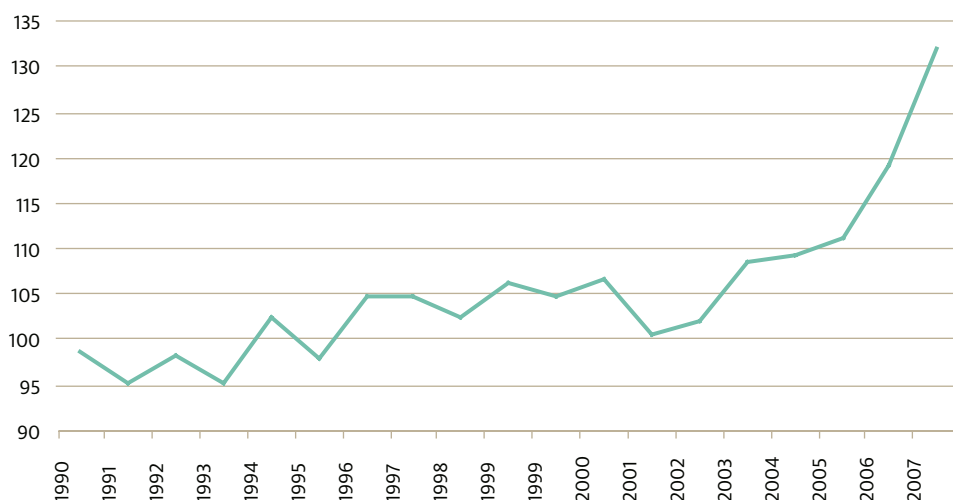
Vanuatu (6.8 per cent), Solomon Islands (5.8 per cent) and PNG (4.1 per cent) experienced higher average growth in the last 3 years (2005 to 2007) than they did in the previous 15. These 3 countries are among the fastest 6 growing countries in the Pacific. Timor-Leste is a special case, with its 2005–07 average (6.8 per cent) being driven by exceptionally strong growth in 2007 due to post-violence recovery and international support. (Oil income does not appear in Timor-Leste’s GDP, but the country’s gross national income has more than doubled since 2003 due to increased oil receipts.) Fiji has moved the other way, with its economic problems compounded by the December 2006 coup. Two of Fiji’s leading employment sectors, textiles and sugar, are in long-term decline.

PNG’s economic growth has accelerated

Official GDP data shows PNG’s economy gathering pace in 2007 with growth of 6.2 per cent, compared to 3 per cent on average for the 3 previous years. As well as rapid growth in the mineral sector, PNG has also seen strong non-mineral growth driven by construction, telecommunications and more recently agriculture. Other data suggests PNG’s economy is buoyant. After a decade of stagnation, formal-sector employment has grown by a quarter in the last 3 years (though note that formal-sector employment is less than 10 per cent of the total). Non-mineral corporate tax has doubled since 2000.⁵

Figure 1.3 PNG has enjoyed rapid formal-sector employment growth in the last few years

Formal-sector employment (1990 = 100)



Source: Bank of PNG (2007)

Note: Formal-sector employees work in larger private companies. In PNG, they make up less than one-tenth of the workforce.

⁵ Bank of PNG (2007); Government of PNG (2007).

Most smaller Pacific economies are stagnating

While Palau and Samoa show improved performance in the last 3 years, the other Polynesian and Micronesian countries show lower growth. During 2005 to 2007, Palau has grown at almost 6 per cent and Samoa at almost 4 per cent. The other Polynesian and Micronesian countries have grown at less than 3 per cent for the last 3 years, 2 of them at less than 2 per cent. Cook Islands has experienced success with tourism but has suffered from recent cyclones. The other smaller Pacific economies have not been able to cash in on growth sectors, such as tourism and commodities, and rely instead on aid, remittances and fishing receipts.

Growth in the Pacific's better performers is being driven by the commodity boom, tourism, aid and logging...

The growth of the Pacific's best performing countries is being driven by the commodity boom, tourism, logging and aid. Vanuatu, Samoa and Palau have benefited from expanding tourism sectors. Record levels of commodity exports are fuelling PNG and Timor-Leste economies. The rebounding Solomon Islands economy is being driven in large part by substantial aid flows and unsustainable logging. (Sectoral developments are discussed further in Chapter 3.)

... and by better policies

Sound macroeconomic policies in PNG, Timor-Leste and Solomon Islands have built a foundation for growth. Vanuatu's fiscal reforms, expanded aviation sector, relatively liberal investment policies, and active land market have helped put the country on a higher growth path—averaging six per cent per year since 2003. Samoa's reforms, including encouraging new entrants into telecommunications and aviation (Boxes 4.1 and 5.2), have supported its growth. Samoa is the only Pacific island country to score highly on the World Bank's Country Policy Institutional Assessment—it is ranked the seventh highest out of 77 low-income countries.⁶ Palau's growth is being driven by tourism, accounting for about 45 per cent of the economy, and is supported by liberal immigration policies, which have resulted in rapid growth in the workforce (today there are about 6000 Palauan workers and about 8000 non-Palauan).

Political developments

Pacific 2020 concluded that 'without more effective political leadership, sustained growth will remain elusive.' (p. 46). This section reviews recent political developments in the region. Instability has hurt growth in several Pacific island countries.

Fiji's economy contracted in 2007 as tourism and construction suffered in the uncertain security and political environment following the December 2006 coup. A number of countries outside the

6 Country Policy and Institutional Assessment (CPIA) scores are calculated for low-income countries based on performance in: economic management; the business and regulatory environment; structural policies; social inclusion and equity (including gender equality); property rights and rule-based governance; and public sector management and institutions. Annex 3, Table A6, gives scores for all rated Pacific island countries.

region, including Australia and New Zealand, imposed travel bans on regime supporters, curtailed high-level contact and suspended defence cooperation and some development assistance.

Tonga's economy also contracted in the wake of the demonstration that led to the burning and looting of the capital in November 2006. The government estimates that the riot cost business nearly US\$60 million (about 30 per cent of GDP) and a Business Recovery Facility was established to help affected enterprises.⁷ Modest recovery is occurring with an increase in tourism, remittances and aid-funded reconstruction activity, but overall the economy shrank in 2007 by 3.5 per cent.

Timor-Leste's economy was affected by violence in 2006. The country's strong recovery in 2007 reflected the restoration of order, a sharp increase in government expenditure and the re-establishment of a United Nations (UN) mission. Timor-Leste held presidential and parliamentary elections in 2007, the latter resulting in a change of government from Fretilin to a coalition of non-Fretilin parties under Prime Minister Xanana Gusmao. Following widespread civil unrest in late 2006, Timor-Leste still has around 100 000 internally displaced people. Despite the presence of a large UN-led police and military force, outbreaks of violence continue. The February 2008 attacks on President Ramos-Horta and Prime Minister Gusmao highlights the fragility of security in the country.

Solomon Islands experienced prolonged political instability in 2007, culminating in a change of government in December. The Regional Assistance Mission to Solomon Islands (RAMSI) continues to support law and order, as well as economic reform.

Faster growth in PNG and Vanuatu may be linked in part to extended periods of political stability

Recent political stability may have helped PNG and Vanuatu grow. While PNG (with five prime ministers between 1992 and 2002) and Vanuatu (with seven prime ministers between 1991 and 2001) went through periods of political instability in the nineties, in recent years both countries have enjoyed more stable, longer-tenured governments. The PNG elections in July 2007 returned the National Alliance government of Sir Michael Somare, while Vanuatu goes to the polls in 2008.

Elections in 2007 in PNG and Timor-Leste led to different outcomes in terms of the number of women elected

In PNG, only four women have been elected to Parliament since independence in 1975. The 2007 elections returned only one woman member of parliament out of 109. PNG is not the worst performer in this regard though—five countries in the Pacific have no female parliamentarians. Timor-Leste is at the other end of the spectrum. The year's elections saw a small increase in the number of women elected to 28 per cent.

Other countries also held elections in 2007

Immanuel Mori was elected as the new president of the FSM in May 2007. In Nauru, the government led by Ludwig Scotty was re-elected in August. However, it lost office in a vote of no-confidence in December. In Kiribati, President Anote Tong easily secured a second term in October.

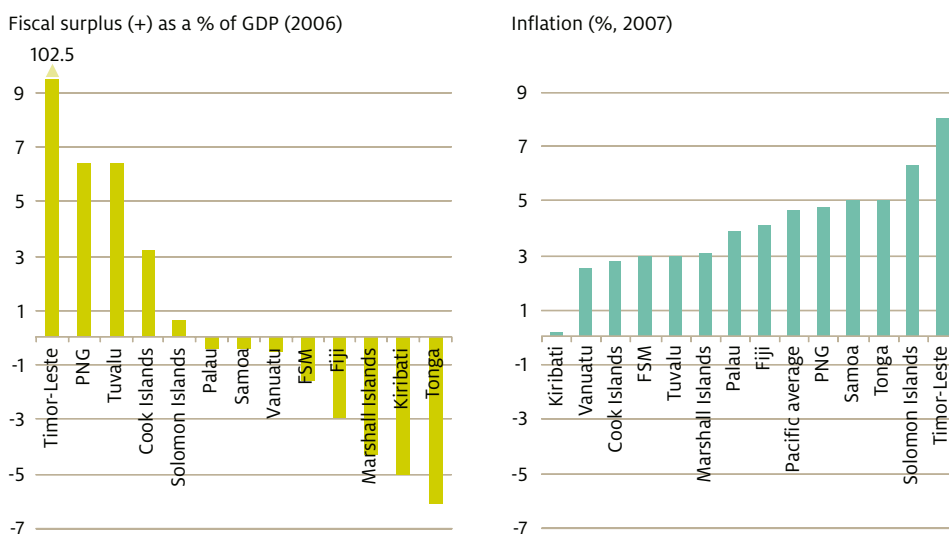
⁷ Economist Intelligence Unit (2007a)

Macroeconomic developments

Sound macroeconomic policies are helping most Pacific island countries

The progress by Pacific island countries in improving their macroeconomic management, as reported in *Pacific 2020*, was sustained throughout 2006 and 2007. Responsible fiscal policies have reduced deficits and together with sound monetary policies kept inflation low in most countries (Figure 1.4).⁸

Figure 1.4 Most Pacific island countries are running responsible fiscal policies and have contained inflation



Source: ADB (2007d), IMF (2007d), Republic of Kiribati (2007).

Note: For Kiribati, the deficit is calculated by including the drawdown of interest from the Revenue Equalisation Reserve Fund (RERF) and fishing licenses as revenue.

PNG's macroeconomic performance stands out. A massive increase in mineral revenues has boosted government revenues from 28 per cent of GDP in 2002 to 36 per cent in 2006. This increase, with controls on spending, reduced public debt from 72 per cent of GDP in 2002 to 35 per cent in 2007. Foreign exchange reserves passed US\$2 billion in November 2007, while inflation has remained below 5 per cent. PNG's strong performance has been reflected in its Standard and Poor's (S&P) credit rating, which was upgraded in 2007 to B+ for long-term foreign borrowings.⁹

⁸ For more detail on macroeconomic trends in the Pacific, see the ANZ Pacific Quarterly and IMF (2007d).

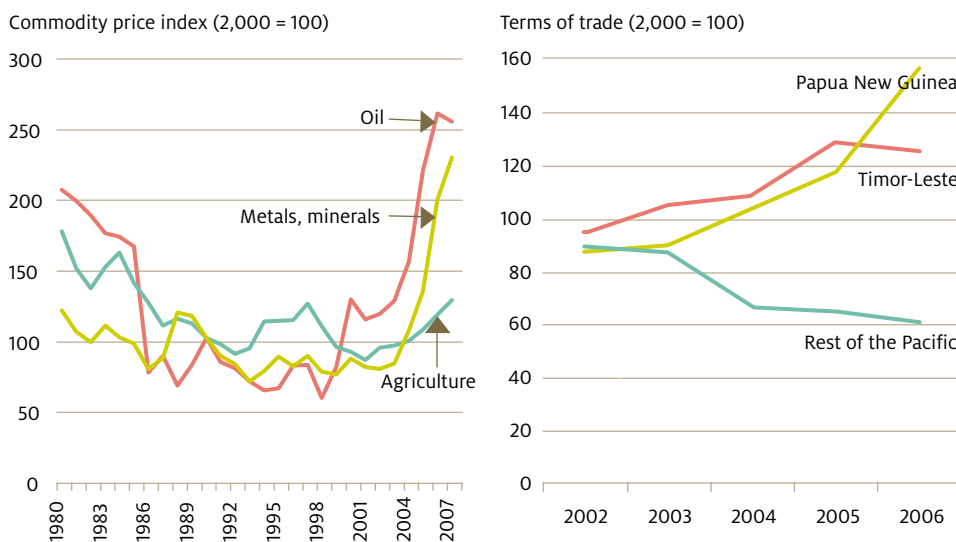
⁹ S&P's rates countries on a scale from AAA to D. B+ is at the upper-end of the non-investment grade ratings.

The macroeconomic performance of Nauru, one of the Pacific's smallest countries, has also turned around. The government has maintained a fiscal surplus since 2005. This recent return to stability follows many years of fiscal mismanagement and the depletion of public trust fund assets. Past mismanagement resulted in enormous public debt—equivalent to about 2500 per cent of Nauru's annual GDP, making it one of the most heavily indebted countries in the world. The Nauru government is developing a debt management strategy and aims to negotiate a substantial write-down in debt and commit to a credible, sustainable repayment schedule.

Other Pacific island countries continue to face fiscal pressures, including the FSM and the Marshall Islands as aid is reduced, Tonga and Vanuatu following large civil-service pay increases and Fiji in part due to its recession. Inflation is still relatively high in the post-recovery countries of Timor-Leste and Solomon Islands, and remains a risk for several other countries, including Vanuatu and PNG, which are also experiencing large financial inflows.

Record commodity prices have had a profound impact in the Pacific, creating winners and losers. PNG and Timor-Leste are experiencing a commodity boom

Figure 1.5 Rapidly rising commodity prices have transformed the Pacific's terms of trade: positively for PNG and Timor-Leste, negatively for the rest of the region



Source: World Bank, Commodity Price Data Base; IMF (2007a)

Note: 'Rest of the Pacific' is the average for Fiji, Vanuatu, Solomon Islands, Samoa, Tonga, the FSM and the Marshall Islands.

Since the beginning of the decade (to end-2007), gold prices have more than doubled, oil prices have increased three-fold and copper prices four-fold. In Timor-Leste, off-shore petroleum production has begun, under arrangements which guarantee the country a revenue share.

Mining and petroleum create little direct employment, so the benefits of the boom for the commodity-rich countries of PNG and Timor-Leste are largely through flow-on effects, in particular government spending. PNG and Timor-Leste experienced rapid increases in government revenue in recent years. In PNG, mineral revenue increased roughly seven-fold, from just over US\$100 million in 2002 to about US\$700 million in 2007; these revenues are now equivalent to about three times Australia's aid to PNG. In Timor-Leste, whereas GDP (which excludes the country's petroleum income) was virtually unchanged in 2006 from its 2002 level at about US\$350 million, petroleum income rose over the same period from virtually zero to almost US\$500 million. Oil revenues are expected to reach about US\$1.2 billion in 2007. While both countries have taken different approaches to managing their mineral surpluses (Box 1.1), both suffer fundamentally from a limited capacity to invest productively in roads, schools and hospitals.

Box 1.1 PNG and Timor-Leste have different approaches to managing the mineral boom

The mineral boom provides a unique opportunity for PNG and Timor-Leste to address their pressing development needs. Both countries need to avoid the resource curse: a surge of corruption and uncompetitive non-mineral exports.

PNG is targeting its additional mineral revenue largely to infrastructure (especially rehabilitation) and repaying public debt. Since 2005, nearly K3 billion (almost US\$1 billion) has been set aside in special trust funds to allow priority investments to be made over a period of several years.

Over the next two decades, Timor-Leste could receive US\$20 billion or more in oil and gas revenues. The country is saving its oil revenues (currently about 150 per cent of non-oil GDP) in a petroleum fund that maintains the real value of proceeds from oil and allows the interest to be used for government spending. At the end of September 2007 the fund's balance was US\$1.8 billion. Some argue that the focus on saving and intergenerational equity is not appropriate for a poor country with urgent development needs, but at the moment the Government does not have the capacity to spend its entire budget.

On the exchange rate side, Timor-Leste has adopted the United States dollar as its currency. Its challenge is to avoid high domestic inflation which would lead to real exchange rate appreciation. PNG has a managed float for its currency, the Kina, which has been stable against the United States dollar in recent times.

The mineral boom presents a huge opportunity to transform Timor-Leste and PNG, especially if commodity prices stay high, though mineral revenues are expected to fall for PNG as existing operations come to the end of their life. So far the macroeconomic effects have been well managed in both countries. The task facing policy-makers in both countries is to increase productive spending so basic development needs, such as fixing up roads and ports, and getting children into school, can be addressed.

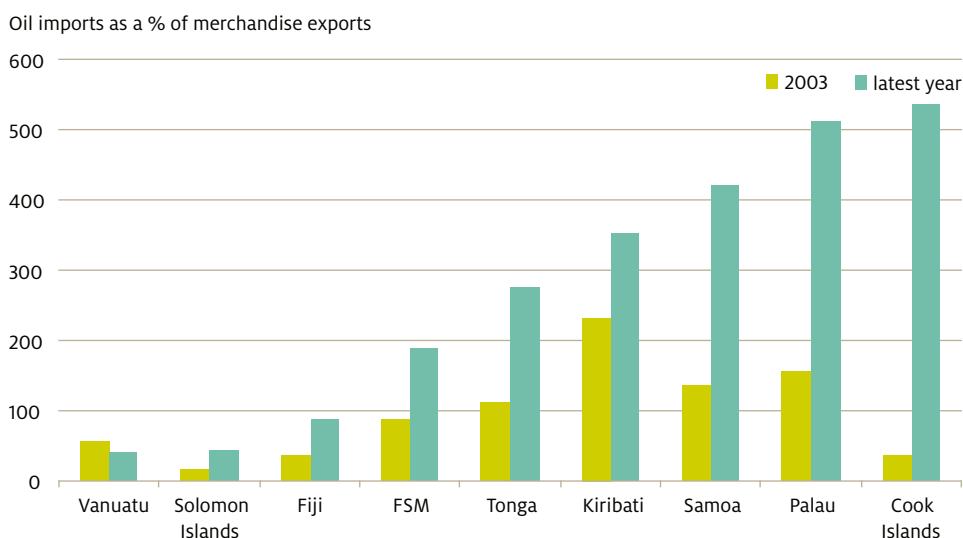
High oil prices are hurting other Pacific island countries

While incomes in PNG and Timor-Leste have been boosted by the mineral boom, high oil prices have put pressure on inflation and exchange rates in other Pacific islands.

Pacific island countries depend heavily on oil-based fuel for their energy needs and surging oil prices have made them vulnerable. The small Micronesian and Polynesian economies, with their very limited export bases and reliance on aid, remittances and tourism, have been most affected by high fuel prices, and there has been a rapid rise in oil imports relative to exports (Figure 1.6). There has also been a negative impact on incomes.

While there is nothing Pacific island countries can do about the global price of oil, there is much governments can do to offset recent price increases (Box 1.2).

Figure 1.6 Oil imports are now a large multiple of all exports for many Pacific island countries



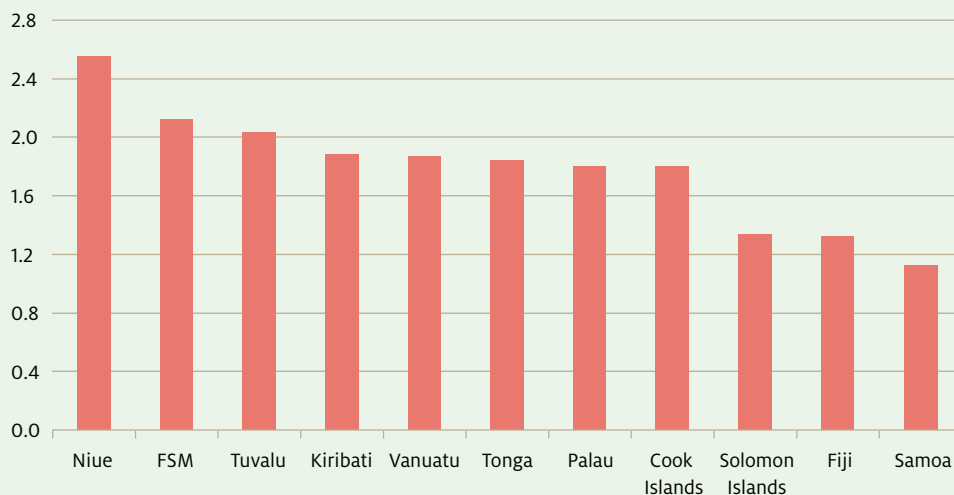
Source: ADB (2007d)

Note: the latest year is 2006 for all except Kiribati (2005), the FSM (2005), Tonga (2005) and Palau (2004).

Box 1.2 What can oil importers do about high oil prices?

Fuel prices vary considerably in the Pacific. Retailers in Niue, for example, pay twice as much for fuel as those living in Samoa.

Ratio of wholesale fuel prices to the ex-Singapore price, 2005



Wholesale fuel prices show huge variation across the Pacific

Samoa (and American Samoa) have some of the cheapest fuel prices in the Pacific thanks to the model of competition they use, which is based on public ownership of their fuel importation terminals. Every three to five years, both countries call for multinational oil companies to compete for the right to import fuel. Samoa awards this right to one company while American Samoa awards this right to two companies. These arrangements rely on regular price reviews and contract compliance. If other Pacific countries could successfully reorganise their import regimes along these lines, they would achieve considerable gains in national income. For example, if Tonga reduced its margin on fuel imports to the same level as Samoa, it would reduce its fuel importation bill by about one-third (approximately US\$9 million) or nearly four per cent of GDP. For Fiji, the direct impact on national income would also be four per cent, for Kiribati nine per cent, Solomon Islands four per cent and Vanuatu three per cent. The Pacific Islands Forum Secretariat is developing a proposal for regional bulk fuel procurement.

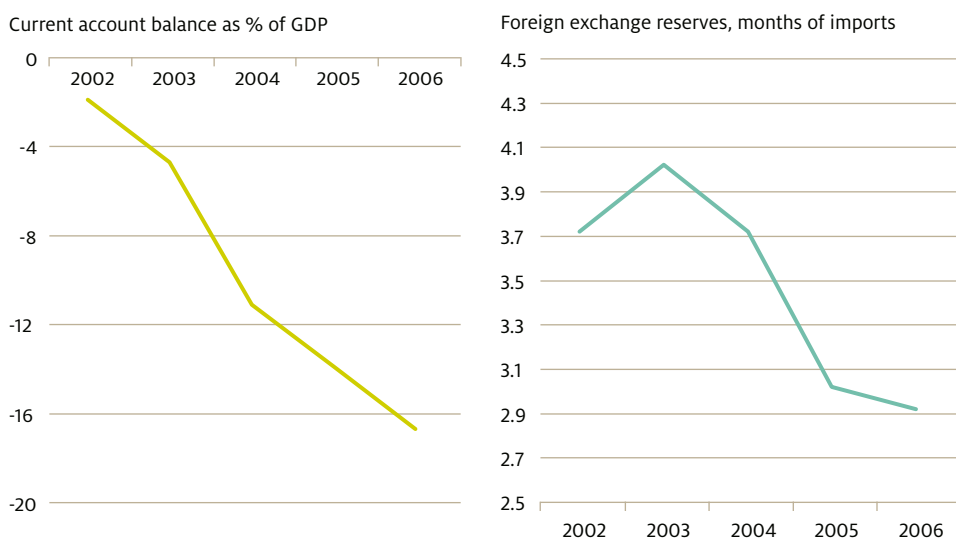
Over the longer term, these countries could reduce dependence on oil by diversifying into alternative sources of energy, such as bio-fuels, solar and wind power and hydropower. A World Bank (2005) study found several renewable energy options that would cost less than diesel electricity generation (based on oil prices half their current level), including wind, solar/wind hybrids, biomass and mini-hydro. Fiji's first F\$30-million wind farm, opened in October 2007, will save about F\$2.5 million of diesel a year.

Sources: Levantis, Groeger and McNamara (2006), Sanghi and Bartmanovich (2006)

Except in the commodity rich countries, external vulnerability has increased

Largely as a result of high oil prices, but also reflecting economic downturns in Fiji and Tonga, current account deficits have widened in most Pacific island countries, and the import cover provided by reserves has fallen (Figure 1.7). In March 2007, S&P's downgraded Fiji's foreign currency credit rating to B. After the coup, both S&P and Moody's initially downgraded the outlook to negative. In November 2007, S&P lifted the outlook to stable 'in response to a stabilisation of near-term external pressures'.¹⁰

Figure 1.7 Pacific island countries (excluding PNG and Timor-Leste) have experienced higher current account deficits and lower foreign exchange reserves



Source: IMF (2007d)

Note: Countries included are Fiji, the FSM, Samoa, Solomon Islands, Tonga and Vanuatu.

¹⁰ *Islands Business* (2007a). For more on Fiji, see Duncan (2007) and Chand (2007a and 2007b).



2 Structural reforms and sectoral developments

Microeconomic performance has been mixed. Tourism is the region's success story and minerals are booming in PNG and Timor-Leste.

This chapter documents progress made with governance and microeconomic reforms. It also examines developments in the five sectors highlighted in *Pacific 2020*, and progress made by Pacific island economies over the last couple of years to integrate with the global economy.

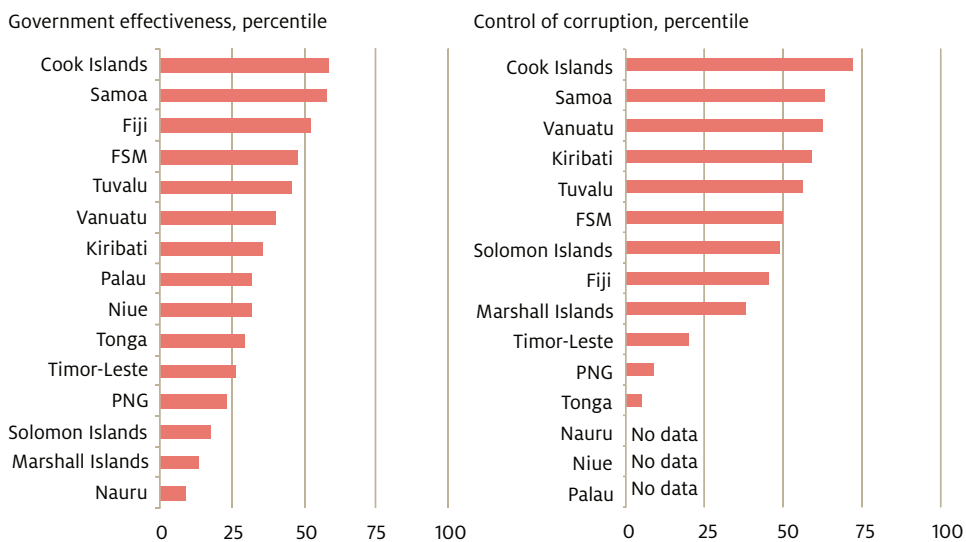
Structural reforms

Pacific 2020 noted that reforms in the region have focused on macroeconomic stabilisation rather than growth. While the macroeconomic outlook for most Pacific island countries is favourable, the story on governance and microeconomic reforms is more mixed.

Some countries are improving their standards of governance, but control over corruption is weakening in others

Measuring governance is notoriously difficult. The World Bank Institute's Governance Indicators are the most comprehensive dataset on the topic, covering six dimensions of governance. Pacific island countries show variable performance, as the two rankings for 2006 in Figure 2.1 illustrate. Generally, Cook Islands and Samoa do relatively well, and Timor-Leste and PNG poorly, with other countries coming in between.

Figure 2.1 The quality of governance varies across the Pacific



Source: 2007 Worldwide Governance Indicators from the World Bank Institute, http://info.worldbank.org/governance/wgi2007/mc_chart.asp#

Note: Rankings are given in relation to the percentile position of each country for 2006 in relation to 208 developed and developing countries. The higher the percentile the better the performance.

A comparison of changes between 2002 and 2005 shows significant improvements in Solomon Islands (from very low levels in 2002), Vanuatu and the FSM (Table 2.1). But Fiji, PNG and Tonga show a worsening of corruption over the same period.

Table 2.1 Governance has improved in some Pacific island countries in recent years, but corruption has worsened in others

Dimension of governance	Improvement (2002–2005)	Deterioration (2002–2005)
Voice and accountability		
Political stability	FSM, Kiribati, Tuvalu, Vanuatu	
Government effectiveness	FSM, Solomon Islands	
Regulatory quality	FSM, Solomon Islands, Tonga, Vanuatu	
Rule of law	FSM, Timor-Leste, Solomon Islands, Vanuatu	
Control of corruption	Solomon Islands, Vanuatu	Fiji, PNG, Tonga

Source: 2007 Worldwide Governance Indicators from the World Bank Institute, http://info.worldbank.org/governance/wgi2007/mc_chart.asp#

Note: The table summarises the statistically significant changes in the World Bank Institute Governance Indicators between 2002 and 2005 for countries in the region. Comparisons with 2006 are not yet available.

The connectivity of the Pacific is poor but improving

Connectivity is the special theme of this Survey. As Part Two discusses, the connectivity of the Pacific to the outside world (by phone, air or sea) has been poor, but is now improving. New entrants, and in some cases the threat of competition, in mobile phones and in aviation are pushing down prices and increasing access.

Some countries are also investing more in their road network, which in many countries has been poorly maintained. In PNG, for example, as a result of increased funding for the roads network, the proportion of national roads rated to be in a good condition rose from 20 per cent in 2005 to 27 per cent in 2007.

Some Pacific island countries are pursuing land reform

Land forms the economic basis of Pacific island communities and is central to each country's social, cultural and spiritual make-up. It is therefore not surprising that land policy reform has been difficult and contentious in the region. However, there are positive signs of consensus with attempts underway to make land more accessible for development on an equitable basis within a framework of customary land ownership.

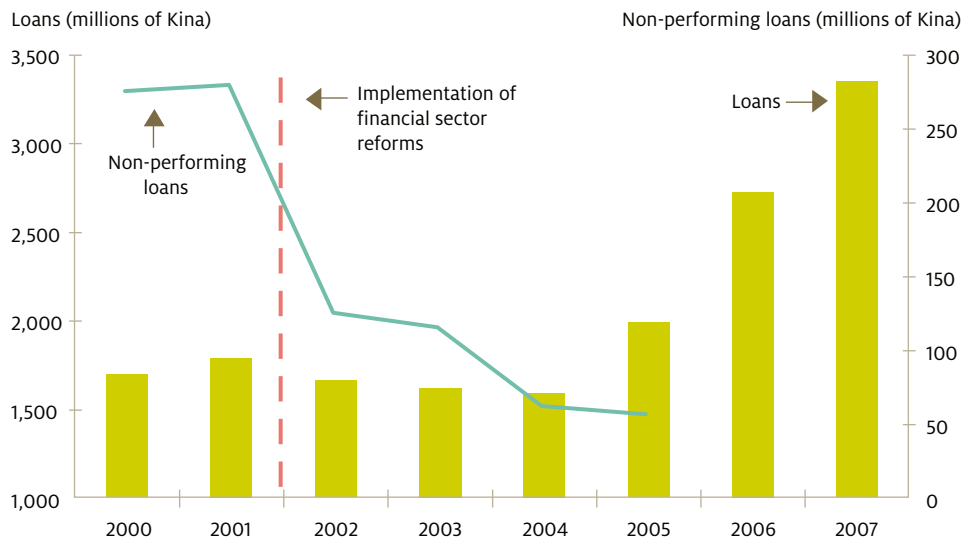
The Marshall Islands has established a land registry. PNG and Vanuatu have each started significant land reform programs. Vanuatu has an active land market (based on long-term leases), and land transactions and development are helping drive the country's rapid growth. However, these transactions can completely alienate communities from their coastal land. And the development on them will not be sustainable unless the transactions are based on informed consent, are accurately recorded and are consistent with planning regulations. PNG faces the opposite and more common problem for the Pacific: it lacks an active land market which makes it difficult to access land for development. While the problems PNG and Vanuatu face are different, in both countries land reform initiatives, though still at an early, preparatory stage, have won support by being locally-driven and emphasising broad community participation.

New entrants and new products are improving financial services

The International Monetary Fund (IMF, 2007d) recently noted that in the Pacific: 'The cost of financing is high, and its availability limited.' Although financial markets remain underdeveloped, the recent rapid expansion of credit reflects increased confidence in the region's macroeconomic environment and the outcome of financial sector reforms.

PNG's experience is instructive. Following its financial crisis in the late 1990s, reforms were undertaken, including the sale of the loss-making PNG Banking Corporation (PNGBC) to the locally-owned Bank of South Pacific (BSP). The sale allowed for effective professional management of the business and the value of the government's 25 per cent shareholding in BSP exceeds the value of the entire PNGBC prior to privatisation. This reform also helped lay the groundwork for the recent

Figure 2.2 Banking sector reforms in PNG have led to more and better loans to the private sector



Sources: Biggs (2007) and Bank of PNG (2007).

Notes: 'Loans' are loans by the commercial banks to the private sector. The 2007 loans figure is as of September 2007.

expansion of the PNG banking sector, including a doubling of loans to the private sector since 2004 and the rapid reduction in non-performing loans (Figure 2.2). BSP now accounts for more than 50 per cent of the banking system's total loans.

A number of other Pacific island countries are also pursuing financial reforms. Many have passed or drafted secured transaction laws to make it easier for potential borrowers to put up collateral and access loans. Solomon Islands, Fiji and Vanuatu have recently attracted new entrants into their financial sectors. Rural banking and microfinance are taking off in PNG and Fiji (Box 2.1).

Box 2.1 Rural banking and microfinance are taking off in PNG and Fiji

It is estimated that more than six million people in the region have no form of banking service. Innovative approaches in PNG and Fiji are starting to meet this need.

PNG—PNG Microfinance Ltd (PNGMFL) has grown rapidly since it was established in 2004; by October 2007 it had 125 000 depositors, with average savings of K200 (\$60), and nine branches across the country. PNGMFL also has 8500 active borrowers, mostly informal businesses and smallholders. The average loan is about K1 000 (\$330) and the institution has a loan portfolio of K9 million. PNGMFL shareholders include the PNG Sustainable Development (49%), the BSP (32%) and the IFC (19%).

Fiji—ANZ is partnering with the United Nations Development Programme (UNDP) to provide banking services in rural areas. Rural Banking Fiji began in October 2004 and customers can open accounts with as little as F\$1. The programme targets the more than 300 000 rural villagers who previously did not use a bank enabling them to carry out banking services in the convenience of their own village, settlement or rural town. The UNDP has provided financial literacy training.

Other countries—ANZ has since rolled out this rural banking model to other Pacific island countries, including Samoa, Solomon Islands, Tonga and Vanuatu. Earlier in 2007, ANZ also commissioned the world's first solar powered ATM in Solomon Islands and the world's first solar powered branch in Cook Islands.

Progress in reducing the cost of doing business is slow

Some individual Pacific island countries have implemented reforms to make it easier to do business. For example, in Solomon Islands, the Foreign Investment Act (2006) has streamlined business regulation procedures, particularly those related to foreign investment, and reduced investment approval times from three months to just a few days. Applications for foreign investments have increased sevenfold since the Act was introduced. In Fiji, legal disputes are being more quickly resolved. In Timor-Leste, business startup procedures are simplified and no longer require Ministry of Land and Health approval—this has reduced costs by almost 75 per cent, and the time required from 92 to 82 days. Tonga has cut the time required to enforce contracts from 510 to 350 days and has computerised case management, which should speed up commercial cases.

Despite these positive changes, the World Bank's Doing Business indicators show slippage in rankings for many Pacific island countries between 2006 and 2007, as Table 2.2 shows. The 'ease of doing business' index ranks 178 developed and developing economies (with smaller values indicating greater ease in doing business). Most of the decline across the Pacific, however, is due to a change in methodology. Nevertheless, even adjusting for changes on this account, as Table 2.2 does, ten Pacific island countries slipped in their ranking by one to four places (comparing 2007 with 2006 revised rankings). Only Timor-Leste improved, from a very low base. Clearly overall

progress on the regulatory environment in the Pacific is not widespread or rapid enough to keep up with the progress of other countries.

Table 2.2 The Pacific is being left behind on indicators for ease of doing business

Country	2007	2006 revised	2006 original
Fiji	36	34	31
Tonga	47	45	51
Samoa	61	60	41
Vanuatu	62	59	58
Kiribati	73	70	60
Solomon Islands	79	75	69
Palau	82	79	62
PNG	84	81	57
Marshall Islands	89	86	87
FSM	112	111	106
Timor-Leste	168	176	174

Source: World Bank (2006b and 2007a) for 2007 and 2006 original indicators; 2006 revised indicators have also been calculated by the World Bank.

Notes: The Ease of Doing Business Index ranks economies from one to 175, with smaller values indicating greater ease in doing business. The 2006 revised ranking takes account of changes in methodology in 2007 which affected three out of the ten topics—dealing with licenses, employing workers and enforcing contracts—and the addition of three economies to the 2007 rankings. Unlike the 2006 original ranking, the 2006 revised ranking is comparable with the 2007 ranking.

Sectoral developments

Pacific 2020 focused on five sectors: agriculture; forestry; fishing; mining; and tourism. This section revisits progress in each.

Agricultural commodity growth is mixed

Agriculture could play a much greater role in improving living standards for Pacific islanders, but in general production increases have lagged behind population growth. However, recent experience has shown that the Pacific island smallholder can be highly responsive to price signals if other factors, such as infrastructure and security, are in place.

The contrasting fortunes of palm oil and coffee in PNG are instructive. Between 2001 and 2005, international palm oil prices grew by more than 60 per cent and coffee prices by more than 70 per cent. PNG's palm oil production increased over the same period by 20 per cent, whereas coffee production fell over the same period, also by 20 per cent. Indeed, the country's coffee production was no greater in 2004 than it was in 1990. A large part of the difference between the performance of the two crops in PNG is infrastructure and institutions. Washed-out roads and poor law and order have prevented the Highland coffee growers from getting to market. But the private-

sector model for palm oil (with a central company responsible for buying from smallholders) and the relatively good access palm oil companies have to ports enables farmers to respond to price signals.

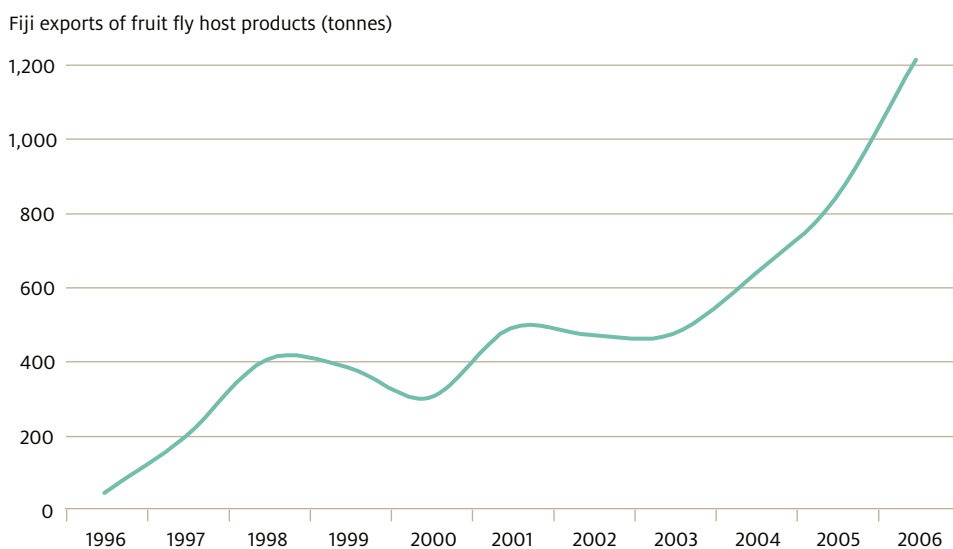
A resurgence in cocoa production has helped Bougainville (PNG) recover following the cessation of conflict. Cocoa production increased from 4500 tonnes in 2000 to 16 000 tonnes in 2005 and is now at a record level, based entirely on small holder production. In Solomon Islands, cocoa production is also now at a record level (4500 tonnes annually in recent years compared with 2000 tonnes in 2002) and copra production recovered from zero in 2001 (due to the conflict) to more than 30 000 tonnes in 2005 (the highest level in 15 years).

In Fiji, sugar production is declining and, although production increased in 2006, its long-term future looks bleak now that European Union (EU) preferences are being withdrawn. (Farmers had become used to receiving a cane price based on selling sugar to the EU at usually three times world market prices.) Some believe ethanol will save the industry. However, for most Fiji cane farmers, ethanol is unlikely to yield prices anywhere sufficient to provide a worthwhile return.

Horticultural exports hold potential, but quarantine restrictions are a big hurdle

Quarantine restrictions are major obstacles to agricultural exports from the Pacific region to developed country markets. Horticultural exports from Fiji, however, though on a much smaller scale than sugar, have overcome quarantine restrictions and achieved rapid increases (Figure 2.3). This points the way forward for the region as a whole. It has been estimated that improving quarantine procedures for taro (the most important Pacific island country fresh export product) would increase export earnings by some US\$13 million annually and benefit at least 25 000 small farmers across three Pacific island countries.

Figure 2.3 Fiji shows it is possible to comply with quarantine restrictions and grow horticulture exports



Source: McGregor (2007)

Over-fishing threatens the Pacific's biggest resource

Oceanic fishing is important in the Pacific as a source of government revenue, employment, and export earnings, but overfishing is threatening the Pacific's biggest resource. More than two million tonnes of tuna are caught annually in Western Pacific tuna fisheries, with a landed value in excess of US\$3 billion. Almost half of this catch is taken from the waters of Pacific island countries—17 per cent by vessels flagged to Pacific island countries and the rest by distant-water fishing nations including Japan, Taiwan, Korea, China, the United States and the European Commission (EC).

There are growing concerns in the region about the sustainability of current catches, expressed most recently by Pacific Leaders in the Vava'u Declaration.¹¹ The Scientific Committee of the Western Central Pacific Fisheries Commission (WCPFC) has assessed recent levels of fishing of bigeye and yellowfin tuna as unsustainable, and has recommended reduction in catches, relative to 2001–2004 levels, of at least 25 per cent for bigeye and 10 per cent for yellowfin tuna. However, in 2005 and 2006 the highest and second highest ever total tuna catch was recorded and provisional figures for 2007 indicate that total catches, although likely to be slightly reduced, will remain too high. While the WCPFC has made progress in other areas, it has been unable—as recently as December 2007—to agree on binding and effective measures to reduce bigeye and yellowfin catches. The consequences of continued unsustainable catches will be severe, especially for countries that depend highly on access fees (60 per cent of government revenue in Kiribati comes from this source, for example). It will also negatively impact on domestic tuna fisheries.

Illegal, unreported and unregulated (IUU) fishing remains a serious issue, increasing pressure on resources and diminishing returns to Pacific island countries and other legitimate operations. There are no statistics on global IUU fishing levels in the Pacific. Greenpeace has estimated that IUU fishing levels in the Western and Central Pacific Ocean is between five and 15 per cent of all catch.

By some estimates, the Pacific island countries should receive at least one-fifth more in revenue per unit of volume from access fees than they have to date (Parris and Grafton, 2005). Recently, steep increases in fuel costs have reduced profit margins and increased resistance to higher access fees.

The situation is not all bleak, however. Tuna prices rose in 2007 and are forecast to continue rising in 2008 and beyond as global supplies fall and demand continues to grow. This should result in significantly higher revenues for countries that have negotiated a price-based component in their access arrangements.

Albacore and skipjack tuna could, on current assessments, sustain higher catches. In the longer term, if stocks are managed to allow recovery, both yellowfin and bigeye tuna could provide significantly higher direct revenues and other benefits in the region.

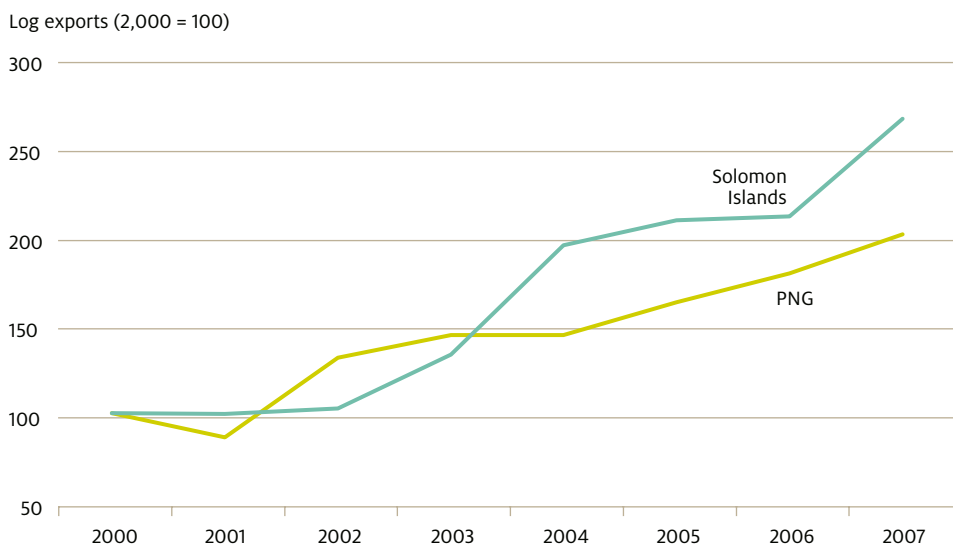
¹¹ The Vava'u Declaration on Pacific Fisheries, Pacific Forum Leaders, 17 October 2007. The declaration also addressed the importance of coastal fisheries in small-scale economic development and rural livelihoods and their limited potential in addressing regional food security.

There has been a change in allocating fishing rights in the region. The Vessel Day Scheme¹² came into effect December 1, 2007. Under this new scheme, purse-seine fishing days in Pacific island waters are capped at 2004 levels. Pacific island countries can licence purse-seine fishing in their waters within their national allocation, and can potentially trade excess fishing days. This system is a step in the right direction—it should reduce year-to-year volatility in revenues, increase transparency and provide a basis for trading in allocations that should increase benefits from access arrangements. Overall, increasing the flow of benefits from oceanic fisheries to Pacific island countries requires clear, strategic national direction and strong regional cooperation and cohesion. It also requires hard negotiations and decisions by Pacific island countries over the next two to three years.

Logging is growing in PNG and Solomon Islands, raising concerns about sustainability

Higher economic growth in Solomon Islands is due to higher rates of logging (Figure 2.4). Logging currently makes up around 17 per cent of the economy, 18 per cent of government revenue and 70 per cent of export earnings. A National Forest Assessment in 2007 concluded that by 2013 there will be no significant stock of natural logs left. Some predict that the decline in logging—and therefore government revenues and GDP—will start as early as 2009.

Figure 2.4 Log exports from PNG and Solomon Islands are booming



Source: Bank of PNG (2007), Central Bank of Solomon Islands (2007)
 Note: PNG Treasury and AusAID estimates for 2007

¹² Purse-seine fisheries in the Pacific now produce more than 60 per cent of the world’s canning-grade tuna. In any one year, between 60 and 70 per cent of that is from the waters of the FSM, Kiribati, the Marshall Islands, Nauru, PNG, Palau, Solomon Islands and Tuvalu. These eight countries, under the Nauru Agreement, have introduced the Vessel Day Scheme to allocate purse-seine fishing days for a trial year. Under the scheme, each country has access to an agreed national allocation of purse-seine fishing days, based on average estimated tuna biomass over a ten-year period, and vessel days fished over a seven-year period.

Following a decline in the late 1990s, PNG logging more than doubled since the moratorium on new licenses was lifted in 2001. There is continuing debate, however, on sustainability and management of the sector, including criticism in a 2007 report to the intergovernmental International Tropical Timber Council (ITTO, 2007).

Some estimate that the Government of Solomon Islands is missing out on more than SBD\$1 million a week in foregone revenue from under-taxing logs. PNG has been promoting in international meetings the idea of paying developing countries to avoid deforestation as part of global efforts to mitigate climate change.

Mining and petroleum activity is expanding, especially in PNG and Timor-Leste

PNG and Timor-Leste are experiencing a sharp increase in mining and petroleum exploration activity and investment. PNG's spending on mining exploration increased from about US\$15 million in 2003 to US\$35 million in 2006 and was expected to reach US\$50 million in 2007 (*Islands Business* 2007b). The country's mining department reports a rapid increase in applications for exploration licences, from just five in 2003 to 130 in 2006. Drilling programs are underway around the country and new mining projects being developed, including the US\$450-million Hidden Valley and US\$80-million Simberi gold projects. The US\$650-million Ramu nickel-cobalt project is expected to begin production in 2009. Planning is also underway for a US\$10-billion project to build and operate a liquefied natural gas plant (Economist Intelligence Unit 2007b). This increase in activity is potentially a bonanza for PNG, but close attention is needed for the environmental and fiscal aspects of the operations to maximise social benefits.

Timor-Leste's petroleum production is primarily from the Bayu-Undan gas field, which is forecast to generate US\$9.4 billion in accumulated revenue over the next 20 years. In February 2007, Australia and Timor-Leste agreed to equally share the revenues from the Greater Sunrise gas field. However, the two countries have not yet agreed on how to develop the field. Greater Sunrise could generate a further US\$24 billion (starting in 2013), half of which would go to Timor-Leste. Timor-Leste has also recently awarded exploration rights for oil in its own territory (World Bank, 2007c).

Mining may also help Fiji, Nauru and Solomon Islands

In Fiji, the reopening of the Vatukoula gold mine will give a much needed boost to the economy. Nauru, which exhausted the wealth it derived in early years from its immense phosphate deposits, has recently resurrected its phosphate industry, albeit on a much smaller scale. There are no official estimates of GDP since 2005, but rough calculations suggest mining-driven growth of between 10 and 15 per cent in 2007. Meanwhile, commercial production of 150 000 ounces of gold per annum is planned at Solomon Islands Gold Ridge mine, although progress in opening the mine (now scheduled for mid-2009) has been slow.

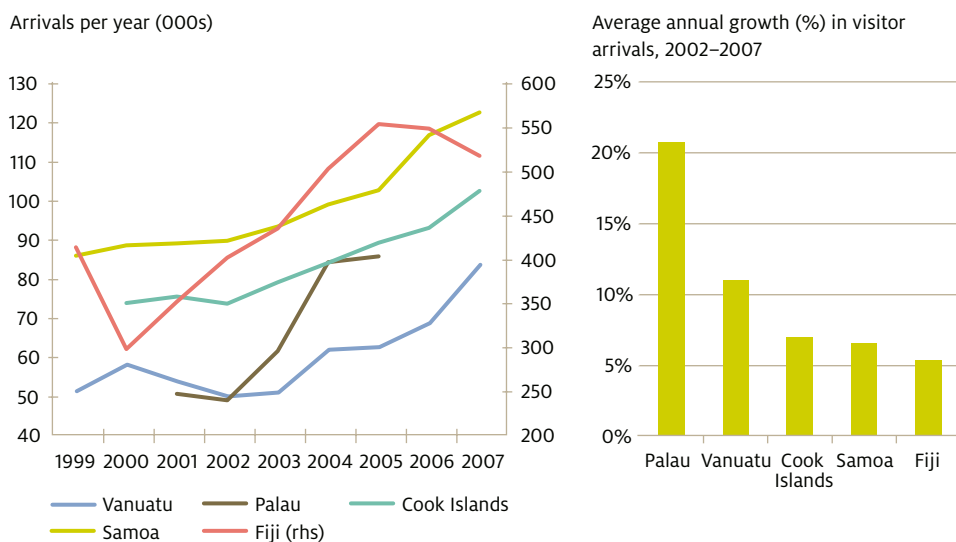
Tourism has grown rapidly in several countries

Several Pacific island countries have overcome constraints to developing tourism, including transport costs, security and infrastructure, and are benefiting from the results. Fiji was the first country in the Pacific to tap into its tourism potential in a big way. The industry grew rapidly between Fiji's 2000 and 2006 coups, from 348 000 visiting the country in 2001 to 555 000 in 2005. Numbers fell after the 2006 coup, as they did after the 2000 coup, but past experience suggests the sector will rebound—even taking into account the impact of the 2000 coup, the number of tourists visiting Fiji grew at an annual average rate of 11 per cent between 1999 and 2006.

Other countries are also seeing growth in tourism (Figure 2.5). Tourism in Samoa and Vanuatu, for example, is benefiting from aviation reforms which have reduced prices and increased reliability (Chapter 5). In 2006, visitors to Vanuatu grew by 10 per cent¹³ and in Samoa by 14 per cent. As a service export, tourism is also helping improve the balance of payments in these countries.

PNG's annual international arrivals increased by 32 per cent in 2007 to surpass 100 000. The biggest increase came from Asian visitors (65 per cent), with significant contributions from traditional tourist markets. Tourism is still a small part of PNG's economy and accounts for about one-third of total arrivals (Economist Intelligence Unit 2008).

Figure 2.5 Tourism is growing in the larger Fiji and several smaller Pacific island markets



Sources: Various national and UN sources.

Notes: Annual average growth for Palau for 2002-2005. 2007 figures are estimates based on six to seven months worth of data.

¹³ Cruise visitors to Vanuatu (not counted in these figures) have also doubled since 2004, reaching 86 000 in 2006.

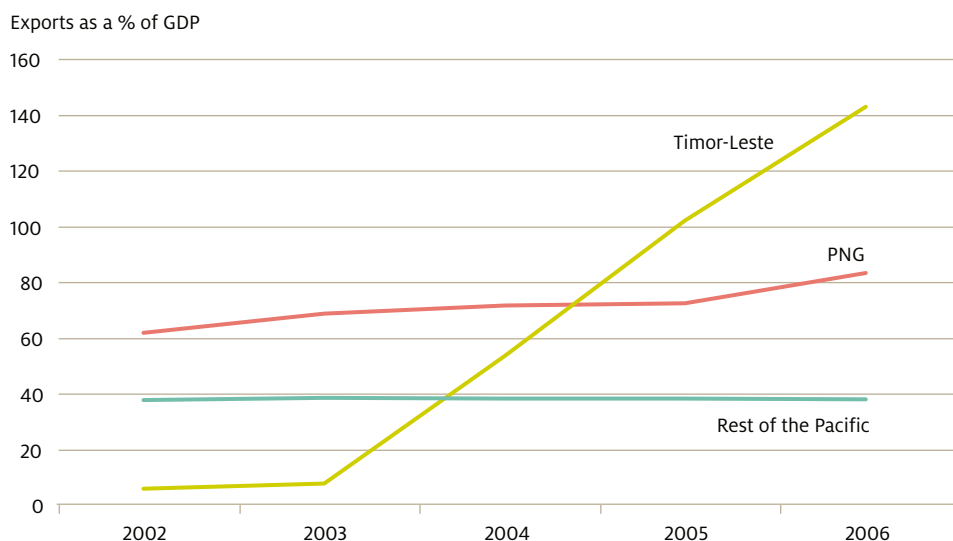
Pacific economic integration: trade, aid and remittances

Pacific 2020 highlighted the importance of economic integration for small Pacific island economies. In 2007, Pacific trade ministers continued negotiating an Economic Partnership Agreement with the EU to improve trade and economic cooperation with Europe, with PNG and Fiji signing agreements in late 2007. Negotiations with Australia and New Zealand on a PACER-Plus agreement are possible in the next year or so. Against this backdrop, this report examines recent Pacific performance with trade, and more generally volume and direction of aid and remittances.

Exports are flat in the Pacific, except for the commodity-rich countries

Pacific 2020 noted that the Pacific was an 'un-integrating' part of the world, with a declining ratio of trade to output between 1980 and 2000 (by comparison, East Asian trade more than doubled during the same period). While in recent years commodity-rich countries in the Pacific have benefited from increased exports of oil and minerals, the ratio of exports to GDP for the rest of the region stayed flat (Figure 2.6).

Figure 2.6 Commodity exports for Pacific island countries

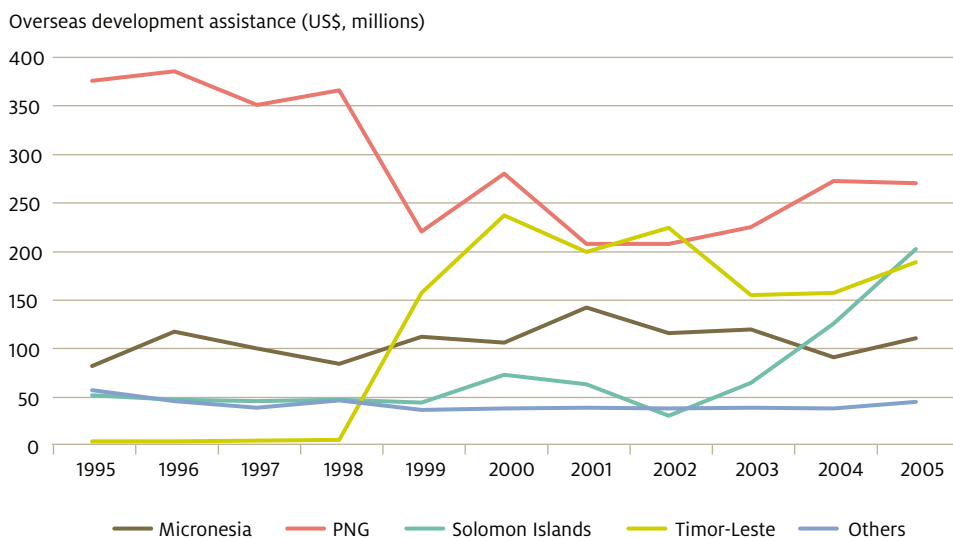


Aid is becoming more important to some Pacific countries, less to others

Overall, the Pacific is the most aid dependent part of the world, but dependency varies greatly from country to country. Micronesia, for example, relies much more on aid than do the larger Melanesian countries. The FSM and Marshall Islands receive aid of about 50 per cent of their GDP, whereas PNG and Fiji receive aid equal to about 6 per cent and 2 per cent respectively of their GDP.

In 2005, total aid to the Pacific region hit US\$1 billion, up from \$US868 million the previous year. This largely reflected the increased allocations to Timor-Leste and Solomon Islands, in response to their instability (Figure 2.7). Looking back further, aid to the Pacific remained stable, with volumes in 1995 at US\$866 million—almost identical to 2004 levels. This is because of offsetting long-term declines in aid volumes to PNG and three Micronesian compact states.

Figure 2.7 Different parts of the Pacific show different aid volume trends



Source: World Bank (2007d).

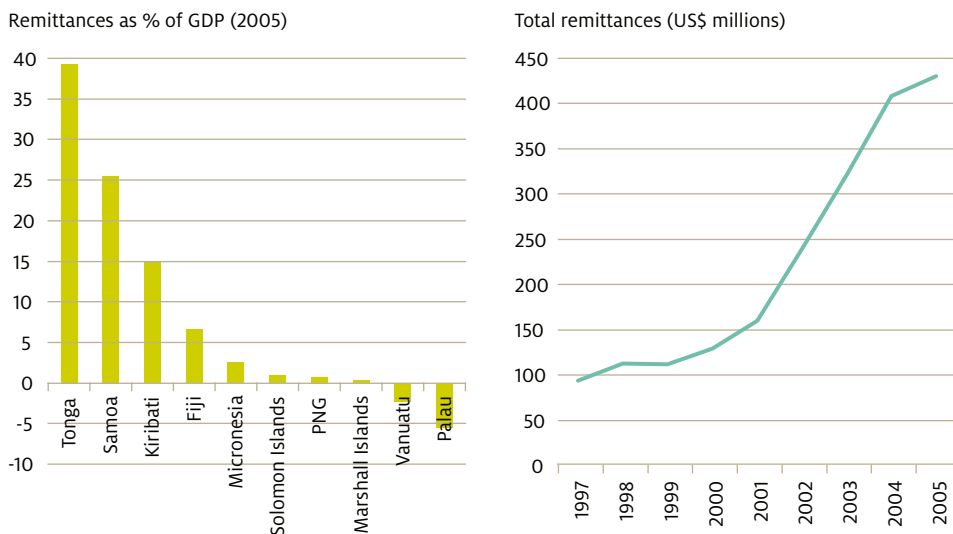
Remittances have grown dramatically

Remittances are a major source of income and a safety net for the poor in some Pacific island countries. The World Bank (2006e), citing household survey data from Tonga and Fiji, notes that migration and remittances have had a positive impact on migrant-sending countries. In Tonga, 90 per cent of households received remittances, averaging about US\$3000, and more than 40 per cent of households in Fiji received remittances, averaging about US\$1300. United Nations (2006) data shows that half of Oceania migrants are women (51 per cent in 2005 up from 44 per cent in 1996).

Unlike in other parts of the developing world, aid is still more important than remittances in the Pacific. (Worldwide, remittances are worth more than twice as much as aid to developing countries.) However, since 2000 remittances have been growing rapidly in the Pacific, with an annualised average growth of 36 per cent to reach US\$425 million in 2005 (Figure 2.8). (These official numbers significantly underestimate actual remittance volumes because they ignore informal transactions, which can be one-third or more of total remittances.)

More recent data (post-2005) is not available for all countries. Remittances appear to have fallen in Fiji and Tonga, but further increased in Samoa. Extrapolating growth rates between 2000 and 2005 (36 per cent for remittances and 2.7 per cent for aid), remittances to the Pacific will overtake aid (in terms of the size of flow) by 2009. Even with an expected slowing of remittance growth, and year-to-year volatility, remittances will likely grow in importance for the region.

Figure 2.8 Remittance volumes are growing rapidly, but unevenly spread across the Pacific



Source: Browne and Mineshima (2007)

Note: Remittances are negative in Vanuatu and Palau because they have relatively few outward migrants and a large number of expatriates. Total remittances are for countries in the left-hand graph; data is unavailable for others.

Opportunities to work abroad are unevenly spread across the region

Four Pacific island countries—Fiji, Kiribati, Samoa and Tonga—received \$370 million in remittances in 2005, compared with only \$140 million in aid. Melanesia, apart from Fiji, receives much more aid, but hardly any remittances.

High demand and new partnerships are leading to increased opportunities for migration and remittances

Demand for migration continues to be much greater than the opportunities available. In 2006, 27 000 Samoans (one in every four) applied for 1100 places under New Zealand’s Samoan Quota Scheme.

In October 2006, New Zealand launched a scheme to attract seasonal workers, with a preference for workers from Pacific Islands Forum countries, to fill shortages in the horticulture and viticulture industries. Under the scheme, recognised New Zealand employers can recruit up to 5000 workers

for up to nine months. Special attention is provided to workers from Kiribati, Tuvalu, Tonga, Samoa and Vanuatu to facilitate their participation. Due to the sanctions imposed following the December 2006 coup, workers from Fiji are currently ineligible to participate. Around 100 horticulture and viticulture employers applied to the scheme in its first six months, including a cooperative representing more than 30 employers. It is expected that in its first year of operation, starting 1 July 2007, the full quota of 5000 workers under the scheme will be filled.

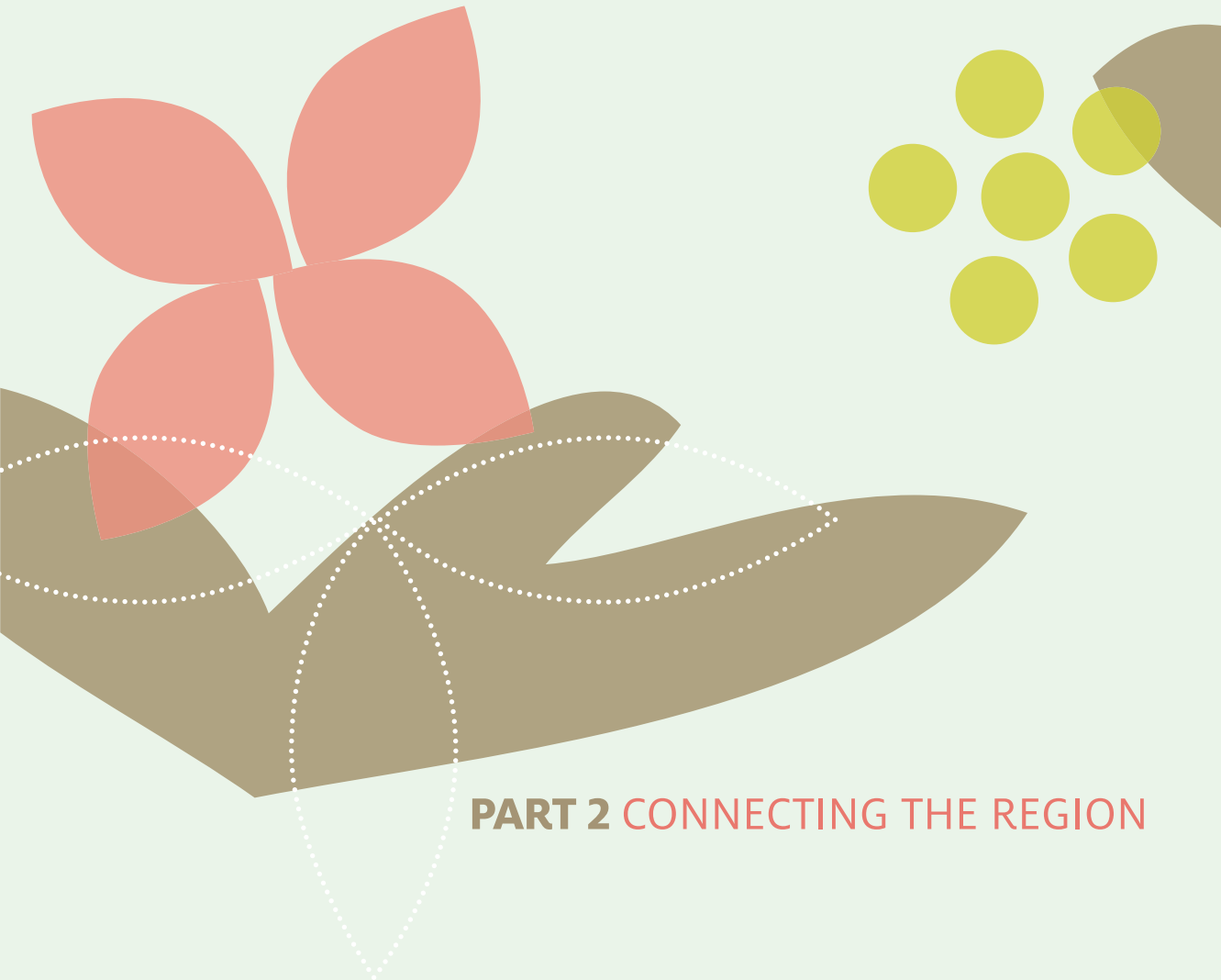
In 2007, Australia opened the Australia-Pacific Technical College to provide Australian-level trade qualifications to islanders, which should facilitate international mobility. Australia has also started an off-shore training program for Kiribati nursing students, to provide them with international qualifications.

The cost of sending remittances is high

While remittances are important to the Pacific, the cost of sending them home from overseas is high.

A recent analysis by the World Bank suggests that up to 17 per cent of the value of remittances sent home to the region can be lost in the course of transaction. By contrast, in the Philippines, the cost of sending remittances is estimated to be between 1 and 4 per cent of the value. Comparisons between the United Kingdom—Ghana and New Zealand—Tonga corridors revealed similar market sizes but much different cost structures. Fees to Ghana were around 5 per cent compared with fees to Tonga at 15 per cent, indicating that cost and volume are independent.

Global experience shows that initiatives to introduce greater transparency around the cost of sending remittances and financial literacy training can have a real impact in reducing the cost of remittances.



PART 2 CONNECTING THE REGION



3 Connecting the Pacific

What solutions are available to better connect the Pacific, both internally and to the outside world? This is the central question of Part Two of *Pacific Economic Survey 2008*.

The focus is on the three connectivity sectors of telecommunications, aviation and shipping. These three bridges connect the Pacific to the outside world. They are also all important for internal connectivity: they link disparate islands and communities with towns, cities, governments, and markets. The three sectors are similar in terms of structure: they are all operated by companies (some government-owned and some private) and generate internal revenue by charging user fees.

This chapter explains how the Pacific has suffered from not being well connected and why improving the region's contact with the rest of the world is so vital. Subsequent chapters address the telecommunications, aviation, and shipping sectors individually, and the solutions starting to emerge in each.¹⁴

The Pacific—a poorly connected part of the world

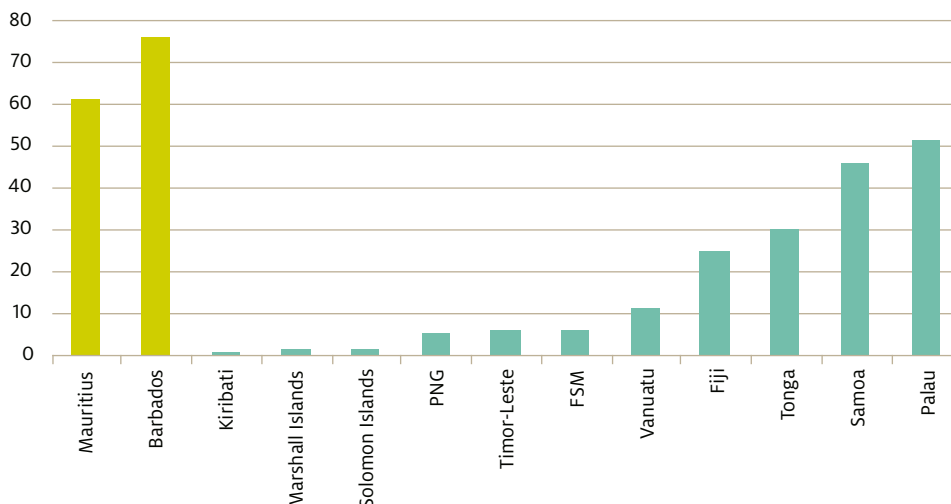
Mobile phone usage is limited and expensive

Mobile penetration remains low in the Pacific. In 2007, mobile coverage as a percentage of the total population was as high as 46 per cent in Samoa, but as low as 0.5 per cent in Kiribati—six island countries had penetration rates of less than 10 per cent (Figure 3.1). Other island countries outside the Pacific have much higher penetration rates. For example, rates are above 70 per cent in Barbados and above 60 per cent in Mauritius.

¹⁴ Roads are also important for improving connectivity in the Pacific. However, since roads are used only for domestic not for international connectivity, and since they typically generate no revenue through user charges, they raise a different set of issues, and so are not covered by this report. See Annex 1 for the background papers and other important sources for Part Two of the Survey.

Figure 3.1 Pacific island countries have been slow to embrace the mobile telecommunications revolution

Mobile phone penetration, mid 2007 (number of subscribers per 100 people)



Source: World Bank (2008a)

International phone calls from the Pacific are among the most expensive in the world (Figure 3.2). Using the rates charged by Skype for international computer-to-phone calls, Fiji has the cheapest outgoing international calls in the region (28 cents per minute) but this is still expensive. Rates are even worse in other parts of the Pacific—other Melanesian countries and Kiribati, for example, pay in excess of 75 cents per minute, and Timor-Leste US\$1.40 per minute, which is nearly 50 times more expensive than neighbouring Indonesia.

High international air and sea freight costs

Pacific island countries have some of the highest air and sea freight costs in the world. Air freight from Australia to the Pacific is four to 16 times more expensive than to New Zealand, Singapore and Japan, and sea freight from Australia to the Pacific is three to 10 times more expensive (Figure 3.3).

Domestic shipping is often unreliable and unprofitable

Distance, low population densities, low demand for freight and low passenger numbers make the economics of many domestic shipping routes marginal at best. As a result, fleets are often old, unsafe and erratic. A 1997 UN-Economic and Social Commission for Asia and the Pacific Economic Survey of seven Pacific island countries found that more than 50 per cent of domestic ships were more than 20 years old.

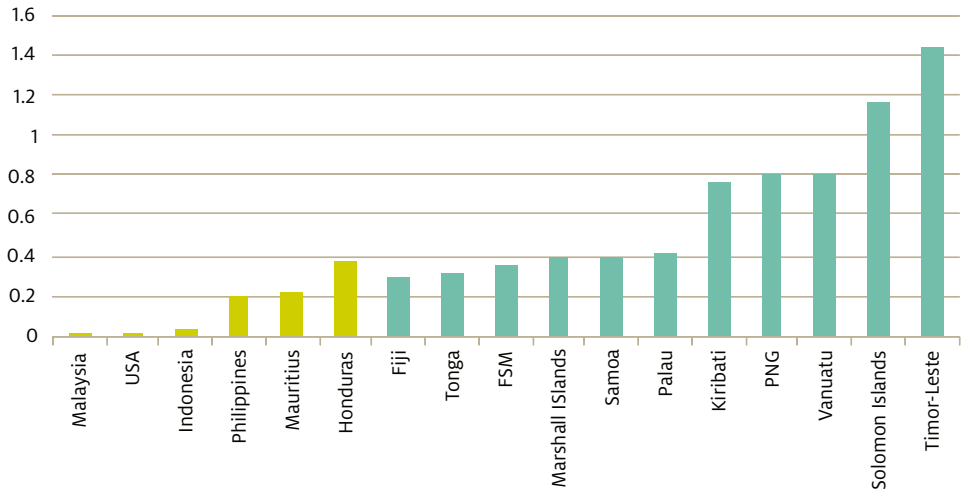
Export clearance times from Pacific ports are slow

Pacific airports and ports are generally rundown and inefficient making export clearance times far greater than international standards (one day or less).¹⁵ It only takes three days to clear exports from Port Moresby, but much longer from most other Pacific ports (Figure 6.2).

¹⁵ World Bank (2007a).

Figure 3.2 International calls from the Pacific are among the most expensive in the world

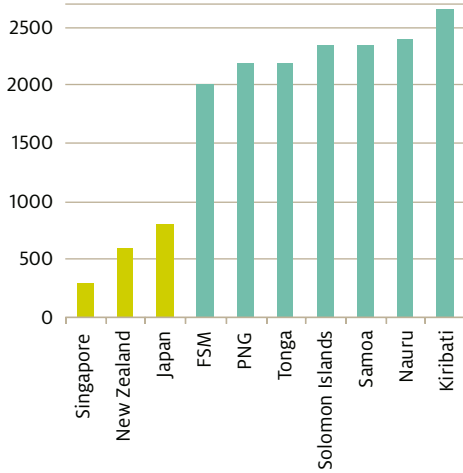
International call costs (2007, US\$ per minute)



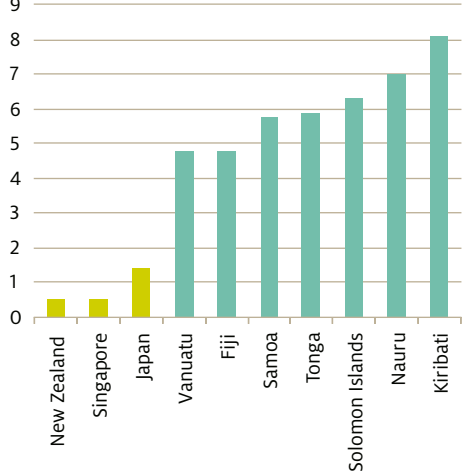
Source: World Bank (2008a). Note: These are Skype-out rates: the rates charged by Skype for making a call from a computer to a phone in any other country. They are a useful, internationally-comparable indicator of the cost of making an international phone call from different countries. Actual phone-to-phone international call costs may be more expensive.

Figure 3.3 Air and shipping freight rates to the Pacific are expensive

Shipping freight rates from Australia (US\$ per 20-foot, dry container)



Air freight rates from the East coast of Australia (US\$ per kg)



Source: ADB (2007a), Meyrick and Associates (2007), individual carrier price lists

Why connectivity is important to the Pacific

An isolated Pacific is a recipe for continued poverty and instability. This section outlines six main reasons why connectivity is important to the region.

1. Bringing in tourist income and jobs

Tourism has emerged as the Pacific's most dynamic growth sector, important for the region's economies and jobs. In 2005, tourism accounted for 49 per cent of GDP in Palau and 47 per cent in Cook Islands, and for 18 per cent of employment in Vanuatu and 13 per cent in Fiji.

Developing tourism needs more than improved connectivity. Preserving natural attractions, ensuring law and order, and political stability are also important, but without external connectivity there can be no tourism. The most important prerequisite is sustained growth in air passenger volumes: this requires competitive prices and reliable air services. Facilities at which cruise ships can dock will also help attract tourists. And tourists today are more likely to visit countries where they can use their mobile phones cheaply to organise travel arrangements and stay in touch with family and friends back home.

2. Keeping overseas communities connected

Most Pacific island countries have expatriate communities of various sizes living abroad. The Polynesian countries of Cook Islands, Niue, Samoa and Tonga have more people living abroad than in their home country. Affordable air and phone services make it easier for Pacific islanders living abroad to stay in touch with their families. This helps to preserve links to home countries and may encourage continued remittance flows. Visiting family and friends is an important component of total visitor numbers to many Pacific island countries, such as Samoa and Tonga, and makes an important contribution to local economies.

3. Providing access to work and study opportunities

Many Pacific islanders work and study within or outside the region. Dependable and reasonably priced air and shipping travel improves access to work and study opportunities and makes it easier for those living away to visit home. Modern and efficient phone and IT services also makes it easier for students to study remotely and take advantage of distance learning opportunities.

4. Enabling trade

Trade is highly sensitive to transportation costs and if the Pacific is going to expand trade it will need to lower these costs. Research shows that an increase in transportation costs of 10 per cent can reduce trade volume by more than 20 per cent (Limao and Venables, 2001). In the Pacific, where most exports and imports travel by sea and where airfreight is used for exporting high-value goods such as fresh fish, and for importing time-critical goods such as medical supplies and spare parts, trade depends heavily on transportation and associated costs.

5. Connecting remote communities

Remote communities in the Pacific, particularly in rural areas and the outer islands, are isolated and often live without basic phone and travel services. Regular links to the main island or capital city by air or sea, although a lifeline, are time-consuming, expensive, unreliable and/or uncertain. So too is the ability to communicate easily with other parts of the region and beyond. For many living in remote communities, contacting relatives can involve sending a handwritten note using a passing vehicle or boat; or visiting a radio station and paying for a broadcast message. For many it also means no access to vital information in a range of areas such as healthcare, education, government policies, business opportunities and market conditions.

6. Helping governments govern and business conduct business

Better connectivity will help both the public and private sectors. Domestic air and shipping services help keep elected representatives and public officials in touch with other leaders, government officials and their local communities. They also help conduct business more efficiently and effectively.

Reliable and competitively priced air and shipping services are essential to government operations and to facilitating investment in island economies. Private-sector development also requires connectivity, as local and overseas businesspeople travel to and around the region. Healthy telecommunications services are also essential. Currently in the Pacific, companies or producers have to make long, costly journeys to the nearest public phone or wireless signal in another town to conduct business. Local governments, clinics, schools and other institutions rely on brief communication and distant exchanges through two-way high frequency radio which can be expensive and unreliable. Modern telecommunications networks are much cheaper and more dependable communication essentials.

In summary, enhancing connectivity improves the quality of life for ordinary people.

Most islanders use shipping services for their personal transportation needs. Many use shipping for business—for transportation, for fishing or to get products to market. There is no highway between Lae and Port Moresby, for example, making shipping the only way to supply goods to markets in PNG's capital.

Far fewer Pacific islanders make direct use of mobile phone services, although this is changing. International experience shows that mobile telephony opens up a raft of opportunities for poor households (Box 3.1).

Box 3.1 Mobile phones in developing countries—not a plaything for the rich

Mobile phone usage has increased rapidly in many countries in the world. Research by the London Business School (Waverman, Meschi and Fuss, 2005) estimates that an increase of 10 mobile phones per 100 people can raise economic growth by 0.6 per cent a year. Here are examples of the benefits of mobile phones, for women, industry, small business owners and others.

Bangladesh—Microfinance has helped women set up mobile phone exchanges in villages where there are few landlines. The women charge for the use of their phone and earn close to three times the country's annual average income. Their earnings enhance their status in the community and enables them to send their children to school.

Ghana—Mobile phones enable farmers to access prices and offers from traders.

Kerala, India—Fishermen use mobile phones to determine which market offers the best price for their catch.

PNG—With fixed phone lines and road infrastructure damaged by the cyclone that hit Oro province in November 2007, mobile phones were used to expedite disaster relief.

Philippines—People use text messaging prepaid vouchers as a simple but innovative way of transferring and remitting funds (including to rural areas), making loan repayments, expanding access and reducing transaction costs.

Tanzania—Airtime vouchers in low denominations help those who can only afford to pay for one call at a time. A roadside call service is available for those who do not have a phone. Customers save on the costs of time and money used to travel to a landline in town, while the operators make money and provide a service that reduces the digital divide.

Source: UK Parliamentary Office of Science and Technology (2006), *The Economist* (2007)

The price of airline services remains out of reach for most Pacific islanders. However, as noted above, the indirect benefits of airline services (for example, for shipping and telecommunications) are enormous for those living in the Pacific. Airline services are critical for generating jobs in the tourism sector, and for getting fresh agricultural produce out of the country.

4 Telecommunications

Today the Pacific is starting to benefit from the worldwide telecommunications transformation.

Chapter 3 showed that the Pacific has lagged behind the rest of the world in telecommunications access and affordability. It is still lagging, but the region is starting to catch up, particularly in countries that have introduced competition¹⁶. Tonga and Samoa were the first to introduce competition and have gone the furthest in liberalising their mobile telecommunications sectors—Tonga in 2002 and Samoa in 2006 (Box 4.1). A second mobile operator also began operating in PNG in 2007.

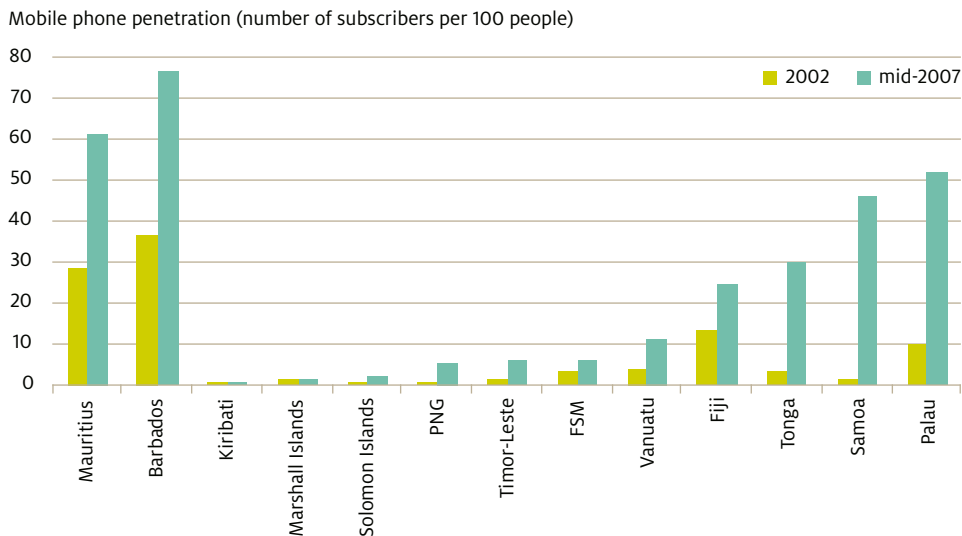
Mobile phones and the Internet

Competition has led to explosive mobile phone growth and lower prices

The impact of competition has been dramatic (Figure 4.1). In Samoa, only 1.5 per cent of the population had mobile phones in 2002; by mid-2007, this had increased to 46 per cent. During the same period in Tonga, competition increased mobile phone ownership from 3.4 per cent to 30 per cent. In PNG, the introduction of competition in mid-2007 led to a sharp increase in coverage and a doubling of mobile phone subscribers in a short period. The PNG Government has estimated that expanding mobile phone services in PNG—from Telikom and Digicel—has contributed around 0.7 percentage points to GDP growth in 2007. Palau, which introduced competition in 2006, has also done well in expanding mobile coverage.

¹⁶ This chapter focuses on mobile phones rather than landlines since in all Pacific countries today (except Timor-Leste and Niue), more people have access to mobiles than landlines.

Figure 4.1 Access to mobile phones has grown fastest in countries which have allowed competition



Source: World Bank (2008a).

Tonga’s and Samoa’s mobile prices are today among the cheapest in the region. Calls in Samoa start from 10 cents per minute and prices fell by about 20 per cent in the first year of competition in Tonga. The Pacific island countries which have not yet introduced competition, but which are planning to do so, have already seen significant price reductions. In Vanuatu, the threat of competition alone caused the price of a mobile SIM card to fall from Vt5000 in November 2006 to Vt2000 in February 2007, and further to Vt1000 in November 2007. In July 2007, PNG Telecom, also facing competition, reduced the prices of its SIM card from Kina 125 to Kina 25.

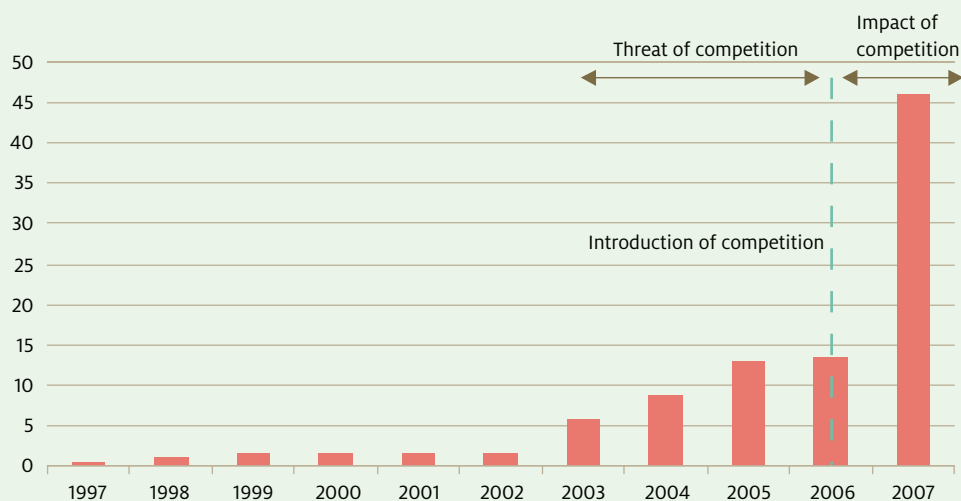
Box 4.1 Introducing mobile phone competition in Tonga and Samoa

Tonga was the first Pacific country to admit mobile phone competition, when the Communications Act 2000 ended the previous monopoly franchise arrangement. In 2002, Shoreline Communications (TonFon) was awarded a license to provide mobile services. In the same year it launched an advanced Global System for Mobile Communication (GSM) service providing mobile coverage across Tonga's main islands. Within a year, the tariff for almost all services dropped by more than one-fifth and the number of mobile subscribers and Internet users doubled.

In 2005, the Government of Samoa passed a new Telecommunications Act allowing for competition and creating the Office of the Regulator. The Government also negotiated its own telecommunications contract with TSC, a joint venture between the state-owned enterprise, SamoaTel, and Telecommunications New Zealand. TSC gave up its exclusivity in return for a licence to operate based on GSM technology. In 2006, the government issued two other licenses to operate mobile phone technology—one to Digicel (which also bought up TSC) and the other to SamoaTel.

Subscriber numbers in Samoa started rising in 2003 as the Government began planning to introduce competition, but they skyrocketed once it was introduced, increasing from 22 000 in March 2006 to 80 000 a year later. Now half of the population has a mobile phone. Prices also fell with competition. The price of a three-minute mobile call to the United States, which was 4 tala per minute in March 2006 dropped more than half to 1.79 tala a year later.

Mobile phone penetration in Samoa, number of subscribers per 100 people

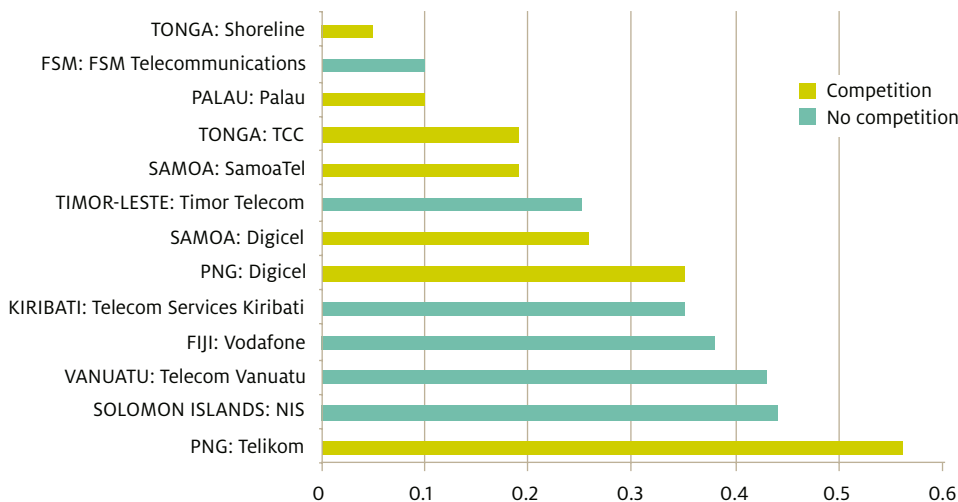


Source: Favaro, Halewood and Rossotto (2007)

Figure 4.2 details mobile rates in the region by comparing peak rates. In general, calls in countries where there is competition (Tonga, Palau and Samoa) are cheaper than calls in countries where there is no competition (Fiji, Vanuatu, Solomon Islands and Kiribati—the FSM is an exception). In PNG, Digicel (the new entrant) is undercutting the incumbent, but still charges more than it does in Samoa and Tonga where competition is well-established.

Figure 4.2 Mobile rates in the Pacific tend to be cheaper where there is competition

Cost of peak mobile calls (US\$ per minute)



Source: World Bank (2008a).

Note: Prices and exchange rates effective September 2007. In some cases operators offer per minute, per two-minute or per 30-second rates. Some have introduced per second billing. Where more than one rate provided by a company (for example, mobile-to-mobile and mobile-to-landline) a simple average was taken.

The Internet is slowly catching on

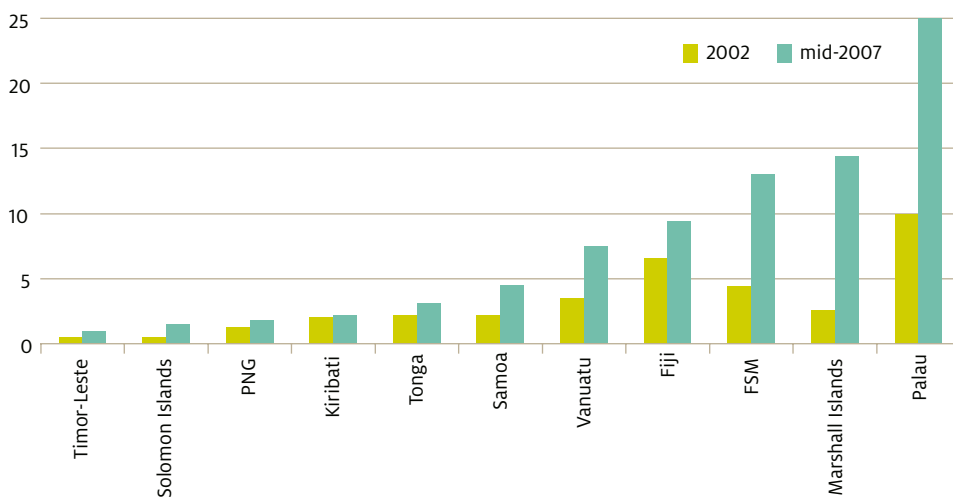
Access to the Internet in the Pacific is increasing, albeit from a very low base (Figure 4.3). It remains limited outside capital cities, the majority of subscribers are institutional and access is overwhelmingly through dial-up, limiting access to availability of fixed lines. Access speeds are slow due to limited bandwidth. The Micronesian countries lead the way in Internet access in the Pacific, probably a reflection of the much higher income levels in the FSM, the Marshall Islands and Palau.

A number of countries have liberalised Internet provision, including Samoa, Tonga, Fiji and PNG. As Figure 4.4 shows, the countries that have liberalised provision enjoy much lower prices. Residential access to the Internet costs \$20 per month in Fiji (which has competition) and as much as \$500 per month in Timor-Leste (which does not have competition).

Broadband or high-speed Internet is emerging, particularly in countries with liberalised service provision (although on a more limited scale in Vanuatu). Internet access is also increasing in Micronesia.

Figure 4.3 Access to the Internet—increasing from a low base

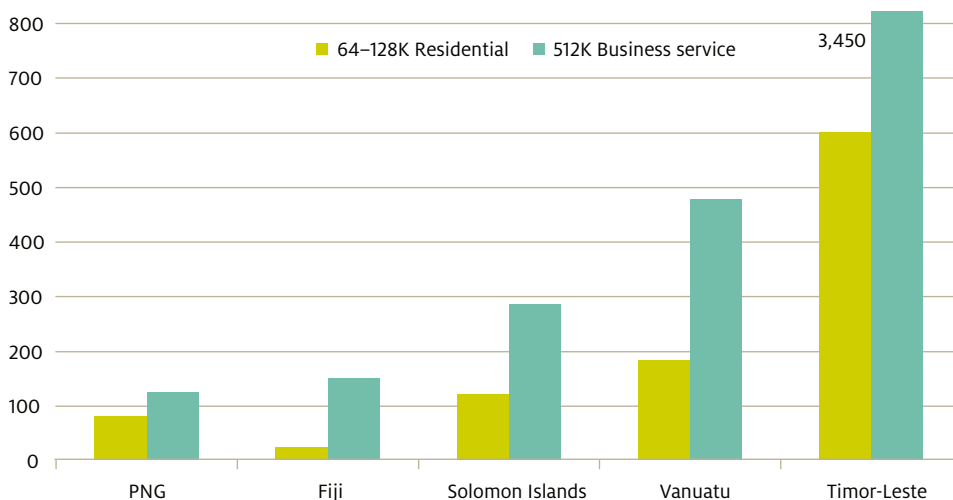
Internet access, users per 100 people



Source: World Bank (2008a)

Figure 4.4 Internet is cheaper in Pacific island countries with competition (Fiji and Papua New Guinea)

Cost of Internet connection, US\$ per month



Source: World Bank (2008a). Note: PNG and Fiji allow Internet competition. Solomon Islands, Vanuatu and Timor-Leste do not.

In general, access to the Internet is poor or non-existent in remote, rural areas, except through Very Small Aperture Terminals. In Solomon Islands a non-governmental organisation, PFNet, has pioneered the use of email using high frequency radio in remote, rural areas. The University of the South Pacific has pioneered distance learning using the Internet and videoconferencing, in effect creating its own network.

Several other countries are implementing or planning telecommunications reforms.

Demand for change is intensifying as the benefits of competition become clear. Several other Pacific island countries have begun implementing reforms to gradually introduce competition, or are at least considering telecommunications reform options. In mobile telephony, prospective new entrants are knocking on the door of a number of Pacific island countries, including Fiji, Kiribati, Nauru, Solomon Islands and Vanuatu. Table 4.1 summarises the latest on telecommunications market structures.

Table 4.1 Telecommunications market structures in the Pacific, 2007

Country	RETAIL				WHOLESALE	
	Telephony		Internet service		Leased lines	International gateway
	Fixed lines	Wireless (mobile)	Dial-up access	Broadband access**		
Melanesia and Timor-Leste						
Fiji	M	M*	M	C	M	M
PNG	M	C	M	C	M	M*
Solomon Islands	M	M	M	M	M	M
Vanuatu	M	M*	M	M	M	M
Timor-Leste	M	M	M	C	M	M
Polynesia						
Samoa	M	C	C	C	C	C
Tonga	M	C	M	C	C	C
Micronesia						
FSM	M	M	M		M	M
Kiribati	M	M	M		M	M
Marshall Islands	M	M	M		M	M
Palau	M	C	M		M	M

Source: World Bank (2008a)

Note: M=monopoly, C=competition. *=competition planned.

The governments of Fiji, the Marshall Islands, Micronesia, Solomon Islands, Timor-Leste and Vanuatu are considering or introducing competition. This involves issuing new policies, reviewing existing (exclusive) licenses, updating or drafting new legislation and establishing regulatory bodies. Competition policies have already been issued by Fiji, Solomon Islands and Vanuatu, and are being developed in the Marshall Islands and Timor-Leste.

Unwinding existing licenses is difficult for technical and political reasons due to the long-term, exclusive arrangements which must be renegotiated if competition is to proceed.

Solomon Islands has exclusive licenses which expire in 2018 and in Timor-Leste 2017 (Box 4.2).¹⁷

The telecommunications companies with exclusive licenses are largely private. This makes renegotiations more difficult, as new agreements have to be voluntary.

Box 4.2 The telecommunications market structure in Timor-Leste is restrictive

The telecommunications operator, Timor Telecom, holds a 15-year monopoly in the form of a build operate transfer (BOT) concession contract. This is an unusual legal instrument for telecommunications service provision. Current laws and regulations favour Timor Telecom's interests, restricting the role of the regulatory authority and offering little or no consumer protection. This has limited further development of the sector.

The BOT Concession Agreement broadly defines exclusivity but is weak in outlining obligations for quality of service. The concession is long-term and has no reasonable termination provisions. The concessionaire is exempt from paying for the use of frequencies until the end of the concession, but gets to own numbers, which may be considered scarce public resources. The nature of the arrangement, in which the provider is required to transfer assets to the Government at the end of the concession period, is a disincentive to long-term investment. Instead, it encourages the operator to maximise short-term profits.

Source: World Bank (2007c)

The transition to competition in the telecommunication sector is proving to be a bumpy ride in some Pacific island countries. Liberalisation in Solomon Islands has been locked up in the courts since 2006 when the incumbent mobile provider challenged the granting of new licenses. In PNG the situation is in flux. While a new entrant, Digicel, is now operating, there were lengthy delays in permitting interconnectivity with the existing Telikom PNG network, and the government's policy towards competition has been unclear.

Yet, as the Samoa (Box 4.1) and other global experience shows, unwinding monopolies in telecommunications can be achieved through an orderly, consensual approach. The most recent successes are Fiji and Vanuatu. Following agreements with their monopoly providers (in November 2007 and February 2008 respectively) both countries have announced the introduction of competition.

¹⁷ A Solomon Islands High Court decision in 2007 suggests there is doubt that the exclusive license of Solomon Telekom will be valid beyond 2009.

Successful reforms will require the establishment of strong regulation

International experience with telecommunications liberalisation underscores the importance of having clear government policy and strong regulation to protect consumer interests, particularly in the immediate post-liberalisation period.

Samoa now has a full set of telecommunications regulations and an independent regulator. PNG established an independent multi-sector regulator, the Independent Consumer and Competition Commission (ICCC) to oversee licensing and tariffs in 2002; a technical regulator, PANGTEL, handles spectrum and licensing issues. Fiji, Solomon Islands, Vanuatu and Timor-Leste are looking to establish separate regulatory bodies.

Keeping up with changing technology is challenging, even for advanced economies, and regulatory capacity is scarce in the small countries of the Pacific. In some instances governments have, by default, delegated some regulatory responsibilities to the industry itself. In Vanuatu and Timor-Leste for example, the incumbent telecommunications operators have been managing spectrum, though this is usually treated as a scarce public resource, and a source of revenue. Further development of regulatory capacity is an area crying out for a regional approach, as discussed further at the end of this chapter.

Microstates can also benefit from the telecommunications revolution

The Pacific's smallest countries may not be able to support significant competition or a utility regulator. But Palau's experience suggests they can still participate in the telecommunications revolution. Palau, a country of 20 000 spread over eight main islands, is the Pacific's most successful country for telecommunications connectivity. It has the highest penetration rates for landlines (41 per cent), mobile phones (52 per cent), and Internet users (25 per cent). Samoa is close behind Palau in mobile coverage, but no other Pacific island country comes close to its landline or Internet coverage.

The Palau National Communications Corporation provides the country's telecommunication services. The corporation was privatised in 1982 and has a universal service obligation which it fulfils through cross-subsidisation. International rates are cheap by Pacific standards. Entry into the telecommunication sector is not restricted (there is no regulator) and new entrants began servicing the Internet and mobile markets in 2006. In the late nineties, the corporation received aid funding to modernise and extend its network. It has also collaborated with foreign operators from Japan and Sri Lanka.

A number of factors have contributed to Palau's success. The country has the second highest per person income in the Pacific, an efficient and profitable private operator, good use of aid funding, collaboration with foreign companies and the threat of contestability.

Access to remote areas

Introducing competition is the best way to reach rural and remote areas

Getting services to rural and remote areas is important but difficult. Despite advances in technology, the cost of serving these areas remains high. Removing restrictions on entry is the best way to expand the geographical coverage of telecommunication services. New entrants are often better placed than incumbents to provide cost-effective services. New entrepreneurs tend to bring in additional capital and management resources and are often smaller and nimbler than incumbents—faster to adopt new, lower-cost technologies, more focused on customer needs and marketing, better attuned to local conditions and business opportunities, and better able to assess and deal with local risks.

In the Pacific, the experience in Samoa shows that with competition mobile phone usage spreads well beyond capitals. Although the population inhabits a narrow coastal strip around each island, there is 95 per cent coverage. PNG has experienced a marked increase in mobile phone services in rural areas since competition was introduced in July 2007.

Government support may be required in remote and rural areas

In some cases public funding may be required to fill market gaps in remote and rural areas. Despite advances in technology, the cost of serving these communities is likely to remain high and with uniform tariffs returns will always be greater in urban areas. Ways to create incentives for greater rural access, including public access, particularly in areas where individuals cannot afford their own handsets, need to be developed.

Universal Service Funds are successfully used in some developing countries around the world, including Uganda and Nepal (Box 4.3). These funds are typically financed by a combination of industry levies (for example, taxes on net revenues) and government and/or external contributions. They subsidise service provision in commercially marginal areas, often through competitive tenders. Vanuatu's agreement in February 2008 with telecommunications incumbent TVL will see the establishment of a Universal Access Fund to assist in the provision of coverage to some of Vanuatu's most remote areas.

In addition, or alternatively, governments can provide other incentives, including help with land acquisition and tax incentives for equipment and handsets. Ensuring affordable public access to telecommunications is important to rural access/universal service schemes. The more sustainable public-access approaches have proven to be subsidised village-phone-type initiatives where business risk is taken by the self-employed agent, rather than publicly-funded telecentre programs, where business risks are left with government.

Box 4.3 International experience in promoting rural access

Chile pioneered the use of competition and contestable subsidies. A Telecommunications Development Fund periodically invites bids for non-exclusive licenses to install and operate village pay phones. While the fund was financed by the national budget, subsidies cost the government less than 0.3 per cent of total telecommunications sector revenue during the funding period. The fund succeeded in reducing the proportion of Chile's population living without phone services from 15 per cent in 1994 to 1 per cent in 2002.

Uganda became the first country in Africa to offer competitive subsidies (10 years ago). It did so by establishing the Rural Communications Development Fund, funded through a one per cent levy on operators' gross annual revenue and supplemented by a seed contribution from the World Bank. Under licensing obligations, Uganda's two major operators were granted exclusive rights to service but were required to install basic telephone services on a geographic basis and identify sub-counties they were not going to serve because they were not commercially viable. These areas (154 of Uganda's 920 sub-counties), were opened to private operators who bid for competitive subsidies. Subsidies were awarded to the lowest bid.

Nepal's high proportion of remote, mountainous and low-income localities was challenging for the telecommunications sector. In 2000, a 10-year renewable license, specifying standards for quality and availability of service, was offered to the private sector along with a one-time subsidy. The license was awarded after a transparent auction process in which bidders specified their required subsidy and the lowest bid won. The subsidy is paid based on outputs delivered (that is, network roll-out, making it an explicit performance based subsidy). Despite a difficult political and regulatory environment, the project made progress towards simulating market conditions and telecommunications services are now being rolled out to about four million people.

Source: World Bank (2002), Parkinson (2005), Intven et al (2004)

Telecommunications infrastructure

Increasing communications capacity or bandwidth

Significant investments are needed to meet the region's growing demand for increased telecommunications network capacity. If the Pacific follows global trends, demand for data services will continue to accelerate rapidly in the coming years, including for mobile data capability (for example, 3G mobile), broadband (for high speed Internet and telephony) and value-added services (such as banking using mobile phones). This means more investment is needed in domestic and international communications backbones.

The majority of operators in the region now rely on high-cost, limited capacity satellites for international traffic. For example, Timor Telecom routes its international traffic by satellite to Frankfurt and Hong Kong because it has no access to international backbone networks. The number of submarine cables directly serving the Pacific is limited (Figure 4.5). Other than in Guam and Fiji, there are no Pacific landing stations. Access to the Southern Cross cable in Fiji is through the incumbent operator.

Figure 4.5 Fibre-optic cables serving the Pacific region



Source: World Bank (2008a), AusAID

Pacific island countries need to secure sufficient data transmission capacity or bandwidth at a reasonable cost, both at national and international levels. This entails mobilising increased investment (public, private, external) in national backbone networks, and ensuring users can access competitive rates (so new types of monopolies are not created).

Plans for a new regional backbone are being considered. Pacific island leaders support developing regional backbone networks and recently agreed to explore a regional sub-marine cable project, to be funded by the public and private sectors. Key issues for policymakers are to ensure that decisions are based on careful due diligence, that costs of construction are in line with international benchmarks and that appropriate competitive safeguards are in place (including open access, fair pricing and transparent governance structures).

Regional solutions

Regional solutions are important for the telecommunications sector, particularly for regulation and infrastructure. The Pacific Island Forum's 2005 Pacific Plan includes a Digital Strategy to improve information and communication technology in the region.

Regulatory capacity in particular can be strengthened by regional cooperation, and is an active area for the Pacific Islands Forum Secretariat in the context of the Pacific Plan. One model was developed by Caribbean countries. In 1998 these countries agreed on a common regulatory framework and in 2000 they established a regional regulatory authority, ECTEL, which was instrumental in liberalising the Caribbean telecommunications market.¹⁸ While ECTEL has regulatory responsibilities, its main role is to provide guidance to nation states and national regulators. As liberalisation proceeds in the Pacific, it would be sensible to move to harmonise regulations across countries and to establish a regional technical advisory facility.

¹⁸ This experience has been extensively documented. See www.ectel.int and www.worldbank.org/ict

5 Aviation

Small passenger numbers and remote destinations make aviation in the Pacific a risky business. Good policy can make the difference between success and failure.

In 2004 and 2005, the aviation sector in the Pacific was in crisis. Royal Tongan Airlines collapsed in 2004, Air Nauru's only aircraft was repossessed in 2005, and the Samoan Government was forced to restructure Polynesian Airlines in the face of huge and chronic losses.

Since then, even though some Pacific countries still face serious problems, the sector has been revitalised overall, thanks to new carriers competing or merging with national carriers.

International flights

New entrants have turned around international aviation in the Pacific

The low-cost carrier, Virgin Blue, now operates in Pacific markets through its subsidiary, Pacific Blue, and a joint venture with the Samoan Government, Polynesian Blue. Using bilateral agreements with Australia which allow Australian airline landing rights, Pacific Blue started flying between Australia and Fiji and Australia and Vanuatu in 2004. Pacific Blue received approval to start flying between Australia and Solomon Islands from March 2008. Pacific Blue and Polynesian Blue now also connect Samoa and Tonga with Australia and New Zealand.

Another important development was the entry of the privately-owned Airlines PNG into the PNG-to-Australia market in 2005. Though not a new entrant, Air Nauru is flying again as Our Airline, with donor support from Taiwan. Air New Zealand also expanded its services by introducing flights to Vanuatu in 2006.

Competition has resulted in lower prices and more passengers (Box 5.1)

Samoa and Tonga now have more frequent and competitively priced international services. Competition on services to Fiji and Vanuatu has boosted tourism. Most recently there has been a greater number of competitive international services to PNG.

Box 5.1 New entrants have dramatically increased travel volumes

New entrants now operate in the Fiji, Vanuatu, Samoa, Tonga and PNG aviation markets. As the numbers below show, this has resulted in a large increase in passenger traffic, by:

- > 21% between Australia and Fiji, the year after Pacific Blue entered the market in September 2004
- > 19% between Australia and Vanuatu, the year after Pacific Blue entered the market in September 2004
- > 18% between New Zealand and Samoa, the year after Polynesian Blue began operating in October 2005
- > 20% between New Zealand and Tonga, the year after Pacific Blue began operating in October 2005
- > 12% between Australia and PNG, the year after Airlines PNG entered the market in November 2005.¹⁹

Some of the experiences after the initial year are of interest. While passenger numbers between Australia and Fiji increased by 5 per cent in the 12 months to September 2006, they were 10 per cent lower in the first six months of 2007 due to the December 2006 coup.

In Vanuatu, passenger numbers grew by only 1 per cent in the second 12 months after Pacific Blue entered the market. The year to September 2007 saw further growth of 16 per cent.

Source: McNamara (2008).

Figure 5.1 shows maximum, minimum and median airfares for one-way, economy-class travel in January 2008 (assuming an advance booking made in October 2007). Three points are apparent:

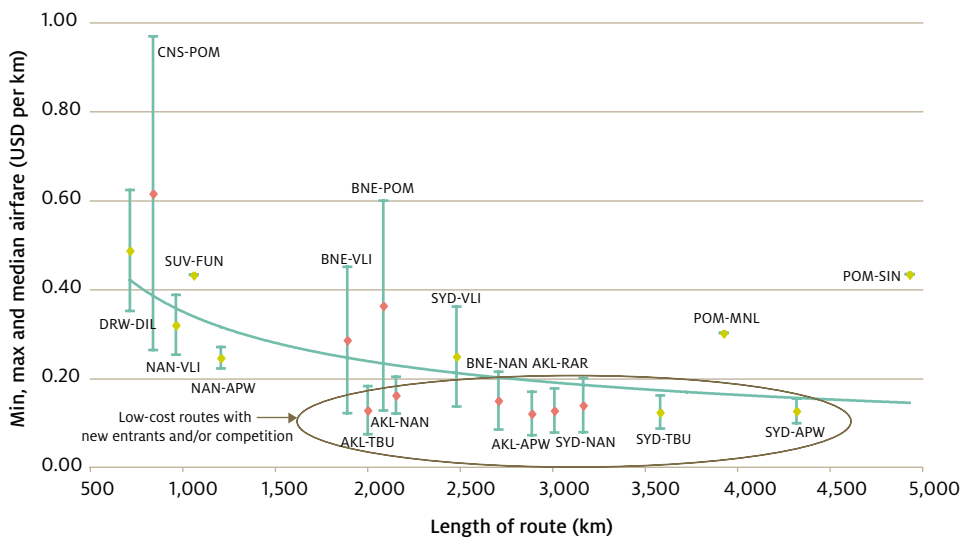
- > First, on average, air travel becomes less expensive on a per kilometre basis as the length of the route increases.
- > Second, after controlling for length of route, routes that are competitive or serviced by a new entrant are mostly lower cost. The routes circled in the chart are either competitive (e.g., Auckland–Nadi), served by a new entrant (e.g., Sydney–Tonga) or both (e.g., Auckland–Apia). Fares on these routes are generally less than US\$0.20 per kilometre and the gap between the highest and lowest fare offered is relatively small.

¹⁹ Measures of passenger travel vary between country pairs. The growth rates for Australia-Fiji and Australia-PNG are for total passengers. The growth rate for Australia-Vanuatu is for Australian residents departing for Vanuatu and Vanuatu residents arriving in Australia. The growth rates for NZ-Samoa and NZ-Tonga are for short-term (less than 12 months) departures by NZ residents to Samoa or Tonga and short-term arrivals by Samoa or Tonga residents in NZ.

- Third, there are several routes where the gap between the highest and lowest fare is very large. This is particularly so for the Brisbane-Port Moresby and the Cairns-Port Moresby routes. While two airlines now fly these routes, median fares are high. One explanation is the high proportion of business travellers on these routes who are willing to pay higher prices than tourists. However, travellers on these routes can benefit from shopping around. The lowest fare offered on the Cairns-Port Moresby Route is US\$0.26 per kilometre, less than a third of the highest fare.

The impact of competition can also be seen over time. After Pacific Blue entered the market, airfares reduced by as much as 30 to 40 per cent. Once Our Airline started competing with Solomon Airlines on the Brisbane-Honiara route, prices fell from about A\$2000 (return), down to between A\$500 and A\$600.

Figure 5.1 One-way airfares for economy-class travel in January 2008



Source: McNamara (2008). Fares include all taxes and charges. Bars show highest and lowest fares offered by any airline for travel on any day in January 2008. Median fares for routes with direct competition are shown by pink dots; fares for routes without direct competition are shown by green dots. AKL = Auckland, APW = Apia, BNE = Brisbane, CNS = Cairns, DIL = Dili, DRW = Darwin, FUN = Funafuti, MNL = Manila, NAN = Nadi, POM = Port Moresby, RAR = Rarotonga, SIN = Singapore, SUV = Suva, SYD = Sydney, TBU = Tonga, VLI = Port Vila.

Partnerships are the way forward

Code-share agreements, where Pacific airlines operate services on behalf of each other or a larger external airline, have existed for many years. They allow Pacific airlines and their home countries to benefit from the domestic aviation networks of the larger airline in tourist-source countries such as Australia and the United States.²⁰ But there are limits to what code sharing can achieve. The frequency of service, availability of seats, and even whether a service is provided at are all up to the operating airline. Also, code-share agreements can be terminated, sometimes at short notice, which means there is no guaranteed service or potential for expanding service.

The partnership between Qantas and Air Pacific goes well beyond code-sharing and is the most enduring airline partnership in the Pacific. Arrangements between the two airlines date back to 1985 with the current commercial relationship starting in 1997. As well as code-sharing, the agreement covers engineering, spare parts management, holiday marketing and frequent flyer programs. Since 1999, Qantas has owned 46 per cent of Air Pacific, with the Fiji Government holding 51 per cent. The partnership benefits Qantas by giving it access to the Fiji market. It benefits Air Pacific by giving it access to Qantas's marketing, technical support and connections to the Australian and New Zealand domestic markets. Qantas and Air Pacific also coordinate on fleet strategies. For example, both airlines have ordered new Boeing 787 aircraft.

A recent global pattern has seen partnerships go further than the Qantas-Air Pacific case by giving a larger airline a direct management role as well as an equity stake. For example, in 1998 Emirates took a 40 per cent stake in Sri Lankan Airlines and took over management, allowing the smaller airline to improve its viability and expand its routes. The first example of this in the Pacific is Samoa's Polynesian Airlines which, following years of losing money, has been replaced on international routes by Polynesian Blue. Pacific Blue has a 49 per cent stake in the Samoa airline and also manages Polynesian Blue (Box 5.2).

²⁰ Currently a number of Pacific airlines sell seats on their flights to external carriers or each other. For example, Air Niugini, Air Pacific and Air Vanuatu sell seats to Qantas. Air Pacific also flies the Los Angeles–Nadi route on behalf of American Airlines. Air New Zealand and Air Vanuatu have a code-share agreement where both airlines provide some services between Auckland and Port Vila. Air Pacific operates services on behalf of other Pacific airlines such as Air Vanuatu and SolAir. Air Kiribati has no international services of its own but sells seats on Air Pacific services to Kiribati. The two French Pacific carriers, Aircalin and Air Tahiti Nui, are also involved in code-share agreements. Air North, which flies from Darwin to Timor-Leste, code-shares with Qantas.

Box 5.2 Samoa's Polynesian Blue—a new model for the region

Polynesian Airlines was acquired by the Samoa Government in 1971. It came close to collapsing on several occasions due to poor management and over-ambitious expansion efforts. In the 10 years to 2004, Polynesian Airlines cost the Government US\$71 million in subsidies, including a US\$7 million injection in 2003.

In 2005 the Government decided drastic action was necessary. It engaged the IFC to act as its adviser, and went out to tender to source an operator for its international services. Pacific Blue, Air Pacific and Air New Zealand submitted proposals. Pacific Blue's proposal was selected.

Polynesian Blue was established with Pacific Blue holding 49 per cent and Samoa private investors 2 per cent. As a majority locally-owned company, the airline maintains Samoa's air-traffic rights. Polynesian Blue is managed by Pacific Blue under an agreement that provides for some input from the Government.

Polynesian Blue has already brought several benefits for Samoa. Airfares have been slashed with the cost of flying from Australia or New Zealand to Samoa falling by around 50 per cent in 2006. Traffic volumes are up, providing a significant boost to tourism. In the 12 months after Polynesian Blue started flights from New Zealand to Samoa (the 12 months to October 2006), short-term departures to Samoa by New Zealanders plus short-term arrivals in New Zealand by Samoans increased by 18 per cent. Traffic to and from Australia (including on indirect services) increased by 32 per cent in the same period.

After years of subsidising Polynesian Airlines, the Samoa Government now expects an annual dividend of US\$1.4 million from the airline. The airline returned a healthy profit, from October 2005 to December 2006, of WST9 million (US\$3.3 million). In addition, a number of Samoans have been re-employed by Polynesian Blue. While the Government is responsible for underwriting shortfalls in Polynesian Blue's revenue below an agreed target this has not happened to date.

Polynesian Airlines has also been restructured and its workforce reduced. Lack of passengers has forced it to stop flights between Samoa and Tonga, but the airline continues to fly between Samoa and American Samoa. Domestic flights between the two main islands of Samoa have also ceased. The Government's 2007–08 Budget provides an additional WST6 million (US\$2.3 million) to the airline, mostly to cover the costs of it moving out of international operations.

The Polynesian Blue joint venture has involved some short-term costs to the Samoa Government. For example, it had to pay US\$7 million to cancel the lease on an aircraft operated by Polynesian Airlines and for redundancy costs from restructuring. However, some form of restructuring was inevitable and by incurring these costs now the Government has stopped the chronic losses from Polynesian's international operations.

Sources: ADB (2007a), McNamara (2008).

Vanuatu is moving towards the Samoa model ...

The Vanuatu Government is looking to emulate Samoa's success in reforming its national airline.

Air Vanuatu has been fully government-owned since 1988. It incurred losses in three of the five years from 1998 to 2002 and again in 2004. Competition forced the airline to reduce its workforce and improve efficiency. Air Vanuatu recently introduced weekly direct services between Brisbane and Espiritu Santo, increasing tourism to Vanuatu's largest island. The airline returned to net profits in 2005 and 2006. In August 2007 the Vanuatu Government engaged the IFC to advise it on selling part of the airline. In February 2008 the Government agreed to seek expressions of interest in purchasing a minority stake in Air Vanuatu.

... but the future of Solomon Airlines is unclear

Solomon Airlines (SolAir) is also government owned, but currently faces a financial crisis (Box 5.3).

Box 5.3 Solomon Airlines: facing financial crisis

Since the mid-1980s SolAir has operated its international services using various forms of aircraft leases, but with little success. In March 2007, SolAir entered into a new damp lease (that is, a lease on the aircraft with flight, but not cabin crew) to obtain the use of an Embraer jet from the newly-created Australian company SkyAirWorld. Apparently, however, it is not possible to fully load the plane with passengers, their luggage and enough fuel for the Brisbane–Honiara leg. According to one source a maximum of 58 passengers could be carried instead of the 75 in the lease contract. Moreover, the airline was operating close to eight hours per day, rather than the industry standard of 16 or more. Competition from Nauru's Our Airline also drove down prices and cut further into SolAir profits.

In August 2007, after defaulting on lease payments, the Embraer jet was repossessed. SolAir has since entered into a short-term charter arrangement for a Boeing 737 with Ozjet to fly the Brisbane–Honiara route.

The airline's financial crisis led to the board being sacked twice in 2007. In October of that year, the recently appointed (but subsequently dismissed) SolAir Board Chairman, Rick Hou (also Governor of the Central Bank of Solomon Islands), issued a statement that the airline had lost SBD55 million (US\$7.9 million) in the first eight months of 2007. According to Mr Hou, a combination of unwise business decisions, bad management and misuse of company resources had put the airline in a 'very weak financial condition'.

Sources: ADB (2007a), McNamara (2008), *The Age*, *Solomon Star*, *Solomon Times* articles (2007).

Some international routes may require government support

While most international routes in the Pacific have enough potential traffic to support at least one commercial provider, some that are essential to connecting small countries to the rest of the region and the world require some form of government subsidy or underwriting. Smaller countries that are not significant tourist destinations face this problem most acutely. Three of them—Nauru, Niue and Kiribati—illustrate different solutions to the problem of operating unviable jet services to small population centres.²¹

Since forming in 1970, Air Nauru flew from Nauru and several other Pacific states to Australia. The Government of Nauru provided considerable subsidies for this, but the country's economic decline meant these subsidies were not sustainable. The airline's only aircraft was repossessed in December 2005 and services suspended. With financial support from Taiwan, Air Nauru bought a Boeing 737 and relaunched as Our Airline in October 2006. Our Airline now provides weekly services on a Brisbane–Honiara–Nauru–Tarawa route.²²

Despite Taiwan's assistance, operating an airline, especially with ageing and costly aircraft, remains a financially risky business for a country as small as Nauru. It raises the question of whether a more viable solution is tendering for the services of an external airline.

Niue adopted this approach, with support from the New Zealand Government. Niue, with a population of only 1500, relies on Air New Zealand for its international connection. In 2005 Niue tendered for its air services and entered into an agreement with Air New Zealand (backed by funding from the New Zealand Government) to underwrite up to an agreed level of losses should these arise. The New Zealand–Niue route has been operating successfully for two years and recourse to government funding has not been required.

While international services to Tarawa in Kiribati are viable, connecting Tarawa to Kiritimati, also in Kiribati but some 3600 kilometers away, is more challenging. The government of Kiribati entered into an agreement with Air Pacific to provide a service from Nadi to Kiritimati and on to Honolulu, starting in October 2005. Through a same-day connection in Nadi it is possible to travel between Tarawa and Kiritimati, the first such link in more than a decade. The service effectively operates as a charter by the Government of Kiribati—Air Pacific receives a fee, but the Government keeps all revenue from the Honolulu–Kiritimati leg and a share of the revenue from the Kiritimati–Nadi leg. Both parties hope to make the service more viable by developing Kiritimati as a tourist destination, but it is uncertain what growth potential this market has. The latest Kiribati budget indicates that the cost of this subsidy in 2006 was around A\$2.8 million (US\$2.1 million).

21 Tuvalu's relative proximity to Fiji means it is possible to operate a viable turboprop service (turboprop aircraft are expensive per passenger but less costly to operate than jet services on routes with low traffic). Services between Suva and Funafuti are provided by Air Fiji, which is partly owned by the Tuvalu Government. Competition from Air Pacific's subsidiary, Pacific Sun, is a near-term possibility, but it is unclear whether the route can sustain two airlines.

22 A direct Brisbane–Nauru service is not viable due to low passenger numbers.

Ideally such subsidies or support should be awarded through competitive and transparent processes. Examples of good-practice subsidies are provided in the next section.

Domestic flights

Domestic air service traffic levels and commercial sustainability varies considerably in the Pacific. Some domestic routes—for example between major centres in PNG and on popular tourist routes in Fiji—support competition between different airlines. Other routes are only commercially viable, but can only support one airline while many others are not commercially viable and are only serviced through subsidies. Other countries have no domestic services—some are too small to need them while others, for example Timor-Leste, does not currently have the income levels and infrastructure to support scheduled domestic services on a commercial basis.

Competition and private sector involvement can improve domestic air services

Not all countries allow competition in their domestic aviation markets. PNG does, with competition focused on links between major centres such as Port Moresby–Lae and Port Moresby–Mt Hagen. A 2006 review by PNG’s Independent Consumer and Competition Commission found that, on a per-kilometre basis, full-economy airfares on major domestic routes were about nine per cent higher than those in Australia, New Zealand and Indonesia. Routes with the lowest fares were those with competition.

Fiji has maintained a competitive domestic market for many years. Competition recently intensified when the Air Pacific subsidiary, Pacific Sun, began competing with Air Fiji on domestic routes. Average air fares reduced significantly (in some cases discounts of 50 per cent or more). Pacific Sun’s lowest Bula fare for Nadi–Suva, for example, was F\$53 compared to F\$140 for Air Fiji. However, these discounts may not be sustained in the long term once Pacific Sun has established itself in the market.

In PNG and Fiji, the market is divided between the main routes where airlines compete and minor routes are served by a single airline.

After Royal Tongan airlines collapsed in 2004, Tonga initially allowed two airlines to fly domestically and then granted an exclusive licence to Peau Vava’u Airlines. When Peau Vava’u failed to meet its service commitments the government went back to a two-airline policy by inviting tenders for a second operator. Airlines Tonga, a joint venture between Teta Tours of Tonga and Air Fiji, started servicing the market in 2005. Tonga is, however, back once more to a single domestic airline after Peau Vava’u’s operations were suspended following the destruction of its offices in the November 2006 riots.

Domestic air services in most Pacific island countries are entirely or partly provided by government-owned airlines, which often suffer from the same problems as many other government businesses, including poor governance and management, lack of clarity around

commercial and community-service objectives and inefficient business practices. Involving the private sector in providing domestic air services, either through joint ventures or direct operations, generally leads to more sustainable services and reduces the drain on government funds.

One of the more successful, stand-alone private airlines in the Pacific has been Air Rarotonga, established in 1978. The airline is owned by three investors and flies to nine destinations within the Cook Islands. Routes that are not commercially viable are cross-subsidised by more profitable routes without government support.

Airlines Tonga provides an alternative model for involving the private sector in domestic aviation. The minority shareholder, Air Fiji, provides the aircraft and crew while the majority shareholder, local travel agent Teta Tours Tonga, handles distribution and marketing.

If subsidies are required, they should be contestable and transparent

While market competition between commercially-oriented airlines is usually the best way to provide domestic air services, as it is for international services, governments still need to decide whether to subsidise services that would otherwise be unviable.

Subsidies for unprofitable domestic air services in the Pacific are provided in several ways. A common model is for airlines to mix profitable and unprofitable services and cross-subsidise. Many Pacific carriers have sought to establish or access higher-yielding international services directly or indirectly in order to cross-subsidise domestic services. But the outcome has often been disastrous for governments with their national carriers accumulating substantial losses.

Subsidies are also provided through direct funding to underwrite cheaper fares, covering the losses of unprofitable government airlines, and various concessions on taxes and other government charges. Some subsidies, such as the Fiji Government's annual payment of F\$370 000 (US\$230 000) to Air Fiji for unprofitable routes, are clearly identified by governments, but many are not.²³

A better approach, where governments have the capacity to implement it, would be to hold a competitive tender for the right to provide subsidised services on designated non-commercial air routes.²⁴ Companies would present proposals for the type of service they can offer, and how much subsidy they would require, for individual routes. The relevant government agency would decide, subject to the total funds available, which companies should be given rights to which routes, based on the tenders offering the best value-for-money. This provides airlines and shipping companies with an incentive to offer services on these routes.

Fiji's approach to providing domestic shipping subsidies and the models used in Australia, at both the federal and state level, to subsidise domestic aviation are also of interest (Box 5.4).

23 Kiribati and Solomon Islands also provide examples of on-budget subsidies to domestic aviation. The subsidy to Air Kiribati of around A\$219 000 (US\$165 000) in 2006 covers the difference between fare revenue and operating costs on domestic services. Given that fares are capped by the government, the size of the subsidy depends on the level of operating costs and provides little incentive to provide services as efficiently as possible.

24 The same approach can be used for shipping routes.

Box 5.4 Examples of competitive approaches to transport subsidies

Fiji—The Government uses a franchise system for uneconomic shipping routes, calling for bids and subsidising winning bidders (Chapter 6 has more detail).

Australia's Indian Ocean Territories—Australia's federal government uses a contestable process for allocating subsidies for air services. In 2004, after a competitive tender, it awarded a five-year contract for jet services from Perth to Christmas Island and the Cocos Islands. The contract requires minimum service levels and sets a revenue threshold. A subsidy is paid if revenue falls below the threshold. In 2004, changes were made to the formula for calculating the revenue threshold so it only covers fixed costs. This encourages a more commercial focus by the provider and reduces the cost to government.

Queensland—The state government uses a competitive tender process for services to remote areas. Following a tender process in 2002, contracts were awarded for five years. Operators tendered for exclusive contracts on selected routes based on minimum services levels (such as aircraft type), frequency of service and fares. In their tenders, operators specified the level of subsidy needed to provide their proposed service. The government allocates around A\$7 million (US\$6 million) a year for subsidies. Two of the routes tendered for are not subsidised. These are viable, but only for a single provider. By requiring tenders, the government achieves a degree of contestability in markets that would otherwise be subject to monopoly pricing. A new round of tenders began in late 2007.

Source: McNamara (2008)

Airports

Better airports are needed to support aviation growth

Under-investing in airports is a significant barrier to growing more efficient air services, particularly in domestic markets, and it hampers tourism development. With few exceptions, the departments or public corporations managing Pacific island airports have encountered severe difficulties in servicing the capital intensive nature of infrastructure development, upgrading and maintenance. This is proving to be a drain on government budgets and infrastructure in many areas is inadequate. Typically, international airports are maintained to an acceptable standard, but smaller domestic airports and airstrips suffer from limited resources.

Airport reforms in the region have been limited to date. All major airports are government-owned. Some are also managed by government departments while in six countries (Fiji, the FSM, the Marshall Islands, Samoa, Tonga and Vanuatu) they are administered by statutory corporations.²⁵

²⁵ Tonga was the most recent to corporatise its airports when Tonga Airports Ltd was formed in July 2007.

Some governments have sought to place their airports on a commercial footing and reduce or remove dependence on external funding through corporatisation.

Many Pacific island governments have followed the International Civil Aviation Organisation's recommendations to separate airport regulation from airport management, and in doing so remove potential conflicts. However, several countries, including Timor-Leste and PNG, still combine these two functions and do not, therefore, have an independent regulator to oversee airports. PNG's Civil Aviation Authority manages 22 airports, is responsible for air traffic management and acts as aviation regulator. The PNG Government is considering establishing a separate Airports Corporation in 2009.

Airport corporatisation has not worked everywhere, although it has in Fiji

Forming statutory corporations with autonomous corporations to control airports has produced mixed results. In some cases, there is a lack of transparency in management structures and the roles and responsibilities of government and the corporation are unclear.

One country where corporatisation has worked, however, is Fiji where the well-maintained Nadi Airport is critical to tourism success (Box 5.5).

Box 5.5 Airports Fiji Ltd: a corporatisation pioneer in the Pacific

Airports Fiji Ltd (AFL) was formed in 1999 through restructuring the Civil Aviation Authority of Fiji. The AFL is responsible for managing, maintaining and developing Fiji's two main airports in Nadi and Suva and 13 outer island airports, as well as providing air traffic services. In 2007–08, operating and maintaining the outer island airports is being supported by a government grant of F\$750 000 (US\$476 000).

The AFL is required to achieve a minimum 10 per cent return on shareholder funds under the Public Enterprise Act. However, as the last published results for FY2004 reported, the company had not come close to meeting this target. One reason for this related to the AFL's community obligations, including operating the outer airports and also the absence of air navigation charges for domestic air services. Despite these issues, however, the AFL made a record profit in the 2004 fiscal year, which enabled it to spend F\$19 million (US\$11.3 million) in capital works at Nadi Airport.

Source: CAPA (2007)

Corporatising Vanuatu's airports has been reasonably successful. Airports Vanuatu Ltd was formed in 2000 and operates without a government subsidy. The corporation reduced costs and increased revenue in its first five years and recorded a small profit in 2005. It still relies on international development finance (such as a recent loan from the European Investment Bank) to fund capital development.

The Samoa Airport Authority, formed in 1986, manages airports on a commercial basis, but a series of operating losses have prevented it from generating enough income to internally finance asset

maintenance, replacements or upgrades. However, the Authority has improved performance since a new business plan was adopted in 2006 (World Bank, 2006). It recovered 78 per cent of operating and capital costs in 2003–04 and is expected to break even in 2007–08.

Private-sector participation in airports would help inject capital and operational experience, but this has yet to take off. Privatisation has been considered from time to time by a number of island countries. The Fiji Government indicated in November 2006, for example, that it would consider divesting or privatising Airports Fiji Ltd, among other government entities. However, no Pacific island country, including Fiji, has proceeded with privatisation.

Private-sector involvement in airports does not have to involve full privatisation. Governments could offer long-term leases or concessions over airports, with clauses to address issues of national interest such as operating smaller airports.

Public or private, airports should run on commercial lines

A recent report by the PNG Independent Consumer and Competition Commission (2006) highlighted general principles that need to apply to airport management in the region:

- > As far as possible, airport costs, including for upgrades and maintenance, should be recovered from airlines. Where operating or capital subsidies are provided by governments or donors this should be done in a transparent manner.
- > Investments in airport infrastructure should be based on an analysis of costs and benefits, including reasonable projections of future demand. With scarce resources it is not sensible to adopt a 'build it and they will come' approach.
- > The process for setting airport-user charges should be transparent, with opportunities for parties to negotiate. Airports and airlines often disagree about the level of user charges but negotiating can provide an opportunity to agree on future infrastructure needs and how best to finance them.
- > Where possible, opportunities should be provided for commercial activity at airport terminals. According to the Centre for Asia Pacific Aviation (2007), revenue from non-aeronautical operations (such as rents from retailers) is typically less than 30 per cent of revenue for Pacific island airports. Australian airports on the other hand generate 50 per cent or more of their revenue from such sources. If airport managers were more proactive in encouraging commercial activity this could boost revenue and provide opportunities for local business men and women.

Regional solutions

A mixed record, but PASO and PIASA point the way forward

Attempts to create regional airlines have not been successful. Air Pacific was intended to be a sub-regional airline for British Commonwealth states in the Pacific. While a small number of Air Pacific shares are still held by the governments of Kiribati, Nauru, Samoa and Tonga, each of these countries

created their own airlines and Air Pacific instead became Fiji's national airline. A recent proposal from Nauru to establish its Our Airline as a sub-regional airline has not yet met with any takers.²⁶

Regional efforts targeted at strengthening the regulatory environment as opposed to directly providing services are likely to be more successful. Important regional agreements have been reached in recent years for safety and liberalisation (Box 5.6).

Box 5.6 Recent regional agreements on aviation safety and liberalisation

The **Pacific Islands Air Services Agreement (PIASA)** came into force on 13 October 2007 after being endorsed at a Pacific Islands Forum leaders meeting in 2003. Since then, 10 Pacific island countries have signed PIASA and six (Cook Islands, Nauru, Niue, Samoa, Tonga and Vanuatu) have ratified. PIASA is expected to deliver benefits to the region and will be implemented in these three stages.

During Stage 1, starting in April 2008, designated airlines from the six parties to PIASA can operate direct services between their home country and other member countries (third and fourth freedom rights), and services through their home country between two other countries that have ratified (sixth freedom rights). During Stage 2, starting in October 2008, designated airlines can operate indirect services between their home country and any other member country, through a third member country (fifth freedom rights). During Stage 3, starting in April 2010, a full Single Aviation Market will commence, and Australia and New Zealand may also join PIASA. Other countries may also join subject to the agreement of PIASA members.

The PIASA provisions governing which airlines can be designated as national airlines are liberal, potentially broadening the number of airlines competing in the region. By opening up a greater range of possible routes to designated airlines from all members, the agreement has the potential to improve competition in the regional market and introduce more innovative route structures. For small countries, expanding fifth freedom rights may facilitate more 'milk-run' services, linking several countries. However, the fact that Fiji has not signed up to PIASA will limit impact since Fiji has a hub location in the Pacific and currently only Fijian airlines can fly indirect services using this hub.

The **Pacific Aviation Safety Office (PASO)** aims to provide a regional solution to the limited regulatory capacity in aviation safety in many Pacific island countries by providing technical assistance to member states to help them comply with international safety standards. PASO has 12 members—10 Pacific island countries plus Australia and New Zealand. Member countries have agreed to adopt the New Zealand Civil Aviation Authority rules as a harmonised standard. The Pacific Islands Civil Aviation Safety and Security Treaty, which came into force in 2005, gives PASO inspectors legal recognition to undertake their duties. PASO holds considerable potential but although preparatory work has been underway for several years, it is only now becoming operational.

Source: ADB (2007a), McNamara (2008)

²⁶ Air Fiji is something of a sub-regional airline with shareholdings from the Fiji and Tuvalu governments.



6 Shipping

Shipping is the Pacific's lifeline. It plays a critical role on both domestic and international fronts.

According to one global study, doubling shipping costs reduces GDP per person growth by one-half to one per cent (Radelet and Sachs, 1998). Given that most commodities and manufactured goods are transported by ship in the Pacific, and that much domestic travel is by ship, the cost and quality of shipping immediately affects the welfare of the poor as consumers and producers.

International shipping

International shipping is competitive

Unlike telecommunications and aviation, the international shipping market in the Pacific has always been competitive or at least contestable. There are four main routes: east–west and north–south, where ships sometimes stop at Pacific island countries; to and from Australia and New Zealand; and intra-Pacific. Entry is not generally regulated by inter-governmental agreements and the fixed costs of entry are relatively modest. The sector is predominantly the province of the private sector (the significant exception is the Pacific Forum Line—discussed further at the end of this chapter) and there is competition, or at least contestability, on many routes.

International shipping provides a reasonable level of service

International sea freight prices are high due to low cargo volumes on Pacific routes and the long distances travelled (Figure 3.3). Many Pacific island countries import more goods than they export, which means importers pay for the empty space on ships going out through higher freight rates. Shipping lines usually add a surcharge, such as Port Services Charges, for delays and extra supervision, which can be as much as one-third of the freight rate.

Shipping services are of a reasonable standard. The Regional Transport Study (AusAID, 2004) found that ‘... international services [in] the region are generally considered to be adequate and

efficient. Container shipping services to and from the [Forum Island Countries] are reliable; vessels adhere to published schedules and offer sufficient space for the needs of importers and exporters.’

The smallest Pacific island countries face some difficulties. Nauru, for example, is only serviced by one shipping line that operates every month or so between Sydney, Brisbane and Nauru. Since other shipping lines have withdrawn, Nauru can no longer access cheap goods from PNG. Tuvalu also receives infrequent services, and runs out of some items before the next ship arrives. However, regional feeder services are becoming more common and are changing shipping patterns. A Guam-centre transshipment service provides an alternative to direct services to the FSM and the Marshall Islands, and an Auckland centre services the South Pacific. Samoa is also trying to position itself as a transshipment hub. Kiribati, Tuvalu and Nauru are discussing a sub-regional strategy to provide more efficient services.

Regulation is not a prominent feature in Pacific shipping. The Micronesian Shipping Commission (MSC) is the only Pacific body regulating international shipping. A recent review of its operation found the commission had little impact (positive or negative) on market structure (Box 6.1).

Box 6.1 The Micronesian Shipping Commission

The MSC, which meets annually, controls market access for international shipping services to and from the FSM. Access is regulated through an Entry Assurance System. The commission approves five-year licenses, known as Entry Assurances, which cost US\$5000 per year—applicants must submit performance bonds of between US\$75 000 and US\$1 million depending on the size of the vessel. Each trade route is serviced by two companies.

While the commission is popular with both government and shipping lines, it has been criticised for being political and for its weak capacity, lack of consistency and lack of transparency in approval criteria (which included awarding a licence to a line with no ships). ADB (2007a) found no evidence either that the FSM is better served than other Pacific islands as a result of the commission’s activities or that the licenses act as a binding barrier to entry for lines wishing to service the trade routes.

Source: Asian Development Bank (2007a)

Domestic shipping

Given that international shipping is already competitive, the policy priorities in shipping lie on the domestic front, in improving domestic shipping and strengthening ports.

Domestic shipping is essential, but services are often unreliable

Domestic shipping plays an integral role in linking dispersed island communities. In many places coastal transport is the only way to get products to market. Informal services provided by small craft are often the only form of transport between remote coastal villages and towns where agricultural products can be consolidated and shipped to processing centres. Domestic services are also critical for distributing imported goods. Inbound freight is typically shipped to transshipment centres and then distributed using smaller domestic vessels.

Providing adequate, efficient and reliable domestic shipping services is one of the most difficult challenges for Pacific countries, especially for the more remote islands. Many routes are commercially marginal, some unviable.

Shipping schedules are often erratic, and it is not uncommon for services to be suspended for many months. The ships used are sometimes unsuitable and often old, badly maintained and in poor condition (Asian Development Bank, 2007a). Many vessels used for domestic shipping do not meet recognised safety standards, and arguably should be banned from service. However, they provide essential services to remote communities, so this step is rarely taken.

Small-scale coastal shipping operators have problems accessing finance for repair and replacement. Commercial banks do not find coastal shipping an attractive sector for lending because of the high risk and lack of adequate collateral for loans. As a study of domestic shipping in Solomon Islands noted (EC, 1999):

Under the present circumstances the shipping sector is locked into a situation where old vessels are replaced by other old vessels and there are no prospects of reducing the high average age of the fleet.

Government-run domestic shipping is not the answer

Coastal and inter-island shipping services are generally operated by government or small, independent shipping companies.

Delivering domestic shipping through a government shipping operation (either a government company or department) is fraught with peril, and most schemes have proved immensely costly and incapable of delivering adequate levels of service. In the FSM, for example, domestic commercial shipping services are provided almost entirely by the public sector. No domestic shipping service operates to a regular schedule, and all services lose money because regulated prices are below the cost of operation. Hence ships deteriorate, and safety is jeopardised.

Furthermore, competition from government services—sometimes encouraged by donors who provide boats to governments—tends to inhibit private-sector alternatives from developing.

In larger countries competition can be nurtured. In PNG, for example, there are 14 licensed coastal shipping operators. A review by PNG's economic regulator in 2007 recommended restructuring licensing arrangements to make market entry easier and remove price controls on freight rates. In Solomon Islands, following the sale of the government-owned National Shipping Services in the mid-1990s, the private sector and some provincial governments began operating inter-islands services. The role of private-sector operators has increased and they now dominate the market.

Fiji provides a model for reaching remote areas

Even if competition is maximised, and private-sector participation encouraged, some important routes governments want to see serviced will only be operational if they receive government support. Though this is best done by subsidies to the private sector, good design and implementation of such assistance makes the difference between success and failure. In the Marshall Islands, private operators focus on services to nearby islands, while the government runs a field-trip service to remote communities. Faced with increasing costs, the government introduced a franchise scheme for services to some remote islands, but it has nonetheless struggled to secure private-sector interest.

In Fiji, domestic shipping services operate on a commercial basis, and the main Viti-Levu and Vanau-Levu routes are subject to competition, including from aviation. However, many smaller outer islands depend entirely on shipping services but may not generate sufficient revenue to support commercially viable operations.

Fiji's Shipping Franchise Scheme started in 1997 and was subsequently revised in 2004. The scheme is now overseen by an independent entity, the Fiji Shipping Corporation Ltd., which reports to the Minister for Transport. The corporation does not itself own or operate ships, but instead competitively auctions subsidies to private-sector operators for services on non-commercial routes. Suppliers are allocated routes for three years through a tender process which considers vessel safety and cost. Successful bidders receive a subsidy worth about two-fifths of the assessed operational cost of each route and keep all collected revenue. The subsidy is not provided to reduce the cost of fares and freight, but to make uneconomical routes commercially viable and ensure regular services. As a result, monthly shipping services are provided to remote locations, passenger numbers have increased by more than 60 per cent and cargo volumes by 80 per cent since April 2005 (ADB, 2007a). While there have been concerns over various aspects of the operation of the scheme (e.g., *Fiji Times*, 2007), it seems to be the type of approach Pacific island countries should consider to provide a sound framework for shipping subsidies.

Ports

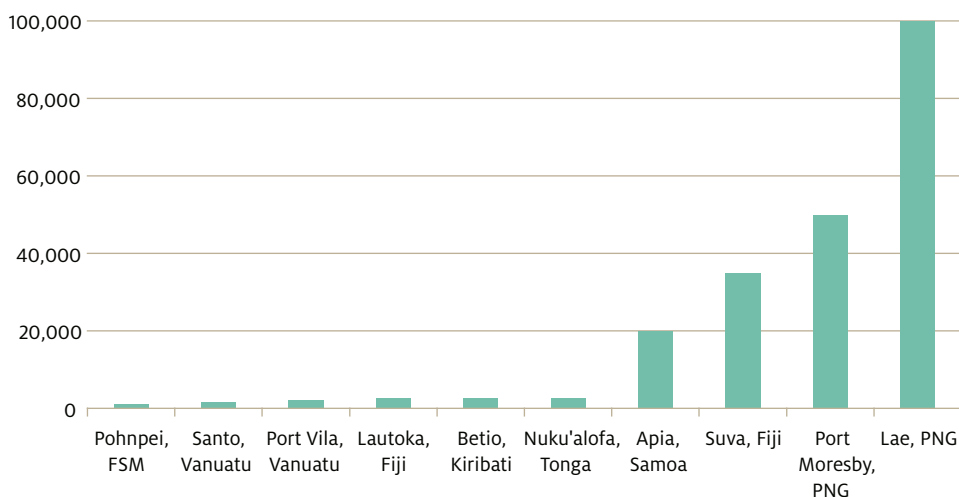
The most important contribution governments can make to improving international shipping services is to ensure their ports are adequate facilities and operate efficiently. This will also help improve domestic shipping.

Pacific island ports are diverse, but run-down

Pacific island ports range from basic wharves to more sophisticated facilities with significant cargo handling capability. Only one or two ports in each country are involved in international liner trades. Secondary ports provide domestic services and some privately owned, dedicated facilities exist for bulk exports and imports. The two largest Pacific island ports are in PNG (Figure 6.1).

Figure 6.1 The throughput of the Lae Port in Papua New Guinea is about equal to that of all other major Pacific island ports combined

Container throughput per annum (20-foot container equivalent)



Source: World Bank (2006a) and Asian Development Bank (2007a)

Note: the unit refers to a 20-foot container equivalent.

Port productivity is on average low

Pacific island ports are generally run down. A few are more modern, with better-equipped container and dedicated bulk facilities, but most are well below international standards for infrastructure and operations. Equipment is old and maintenance poor.

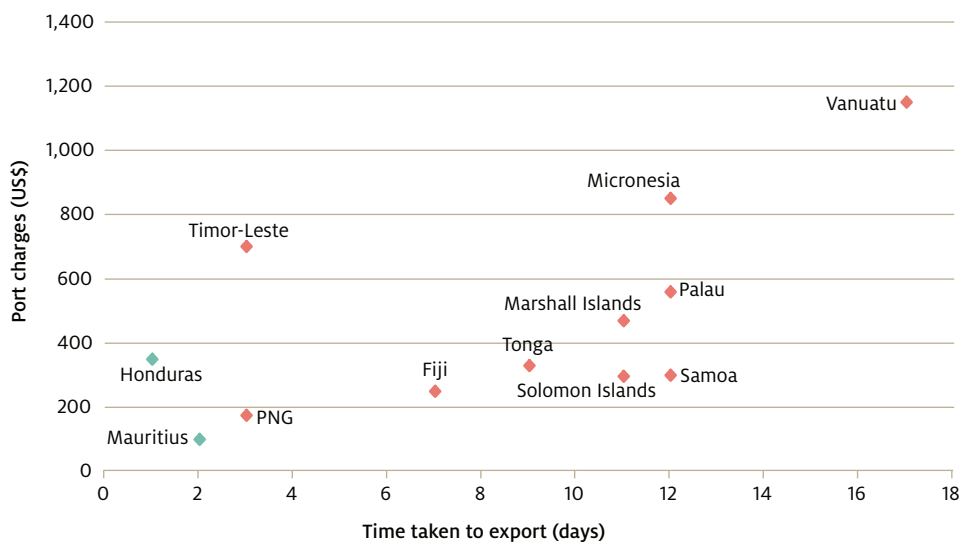
Most Pacific island ports lack shore-based container cranes, relying instead on slower ship-based lifting gear. The 'Pacific standard' rate of 10 to 12 lifts per hour is roughly one-third of what is expected at a modern, well-equipped container terminal.

Regional port facilities are also in poor condition. They tend to be under-funded and are managed to varying degrees of competence by public works departments or similar organisations, rather than by reputable national port authorities. Most are cramped, poorly maintained, lack adequate cargo sheds and passenger terminals and possess little or nothing in the way of cargo handling facilities. The sector is further characterised by a lack of expertise in business and financial management, particularly in government activity. Well-qualified individuals are more inclined to work for private industry where salaries are considerably higher.

Service standards and costs lag behind international standards

The World Bank's Doing Business indicators show that the best-run international ports impose a cost to shippers of less than \$150 dollars (per 20-foot container) and allow shippers to clear exports within two days or less. No Pacific island port achieves these indicators (Figure 6.2).

Figure 6.2 Port charges and time to clear exports



Source: World Bank (2007a)

Some ports do much better than others

The Port Moresby port comes close to achieving the World Bank's Doing Business indicators. It is the Pacific's most efficient port, with relatively short clearance times (three days for exports) and reasonable costs (\$200 per 20-foot container). The worst performing port is Port Vila, where it takes 17 days to clear exports and costs more than \$1000 per 20-foot container.

Pacific island ports are publicly owned but some are privately operated.

The typical Pacific country has its one or two major ports owned and operated by government or government corporations, and a range of smaller port facilities owned and operated by provincial bodies or local communities, but with facilities, navigational, safety and security aspects overseen by central government entities.

Worldwide there are four models of port ownership based on whether the basic port infrastructure is publicly or privately owned, and whether port operations are publicly or privately managed.

In the Pacific, although there are some privately owned facilities dedicated to specific bulk exports and imports, ownership of port infrastructure generally lies with national or provincial governments.

Some ports are also operated and owned by the public sector. This includes the ports in Kiribati, Timor-Leste and Fiji. More common in the Pacific is the landlord port model, under which one or more private operators are employed on contract to the port authority to provide specialist port services. Samoa, the FSM, Tonga, Vanuatu and PNG use this model.

Box 6.2 Institutional arrangements and reforms in the region's four largest ports

PNG. The PNG Harbours Board was corporatised in 2002. PNG Harbours Ltd now operates 16 ports in the country, however, only two, Port Moresby and Lae, are viable. PNG's economic regulator (the Independent Consumer and Competition Commission or ICCC) and PNG Harbours Ltd have entered into a regulatory contract which controls the prices PNG Harbours can charge for essential port services. The contract also includes commitments from PNG Harbours on service levels and future investment. PNG Harbours does not undertake stevedoring (loading and unloading), but issues licenses to private companies to carry this out. Licenses are issued for five years and are then renewed annually. In Port Moresby, international and domestic stevedoring is handled by two separate companies. In Lae, the biggest port, three operators share the market and two are engaged in servicing coastal and overseas shipping. Since the extent of competition is limited, the ICCC monitors prices.

Samoa. Before commercialisation, the Ministry of Transport managed all activities at the Apia port. However, budget allocations proved to be insufficient to cover operating costs, let alone to fund capital works, and by 1999 the port was operating at a loss. Since the Samoa Port Authority (SPA) was established in 1999 as a profit-oriented commercial organisation, Apia Port has become one of the best performing in the Pacific, doubling volumes, improving storage facilities and successfully achieving compliance with the international (IMO-ISPS) security standards. Moreover it has run at a profit every year, pays the government a dividend and subsidises domestic ports in Samoa out of its profits. The SPA's General Manager credits its success to its focus on being 'a facilitator'. Operating under the landlord model, the SPA has outsourced most port services to the private sector. Competition between private operators in clearing and forwarding has resulted in efficient and better customer service. Private operators buy all superstructure equipment and the SPA can therefore channel profits back into port improvements.

Fiji. Port reforms are incomplete. New investments into Fiji's two biggest ports, Suva and Lautoka, have resulted in upgraded and new capital equipment being acquired. In 2006, the Government corporatised the Maritime and Ports Authority of the Fiji Islands and the four major ports are now administered by the Fiji Ports Corporation Limited. Ports Terminals Limited, a 100 per cent subsidiary of the ports corporation, has a monopoly over stevedoring at all major ports. Performance may be improving in Fiji ports, helped by new investments in Suva and Lautoka. Although Suva in particular is well-equipped by Pacific standards, cargo handling performance is still generally regarded by users as costly and disappointing. Planned divestment of Ports Terminals Limited and introducing competition will likely help, but the fact that PTL currently cross-subsidises FPCL makes this difficult.

Sources: World Bank (2006a), ADB (2007a), PNG ICCC (2007b)

Port reforms have focused on commercialisation, with mixed success

Pacific island country governments have not been willing to privatise their ports, but several have shifted responsibility for them from government departments to government-owned companies or authorities. This occurred in PNG and Samoa in 2002 and in Fiji in 2006. As with airports, however, commercialisation on its own does not do much to improve efficiency. However, if it is part of a larger reform process—to improve corporate governance, and introduce competition and/or improve regulation—and when backed by a serious commitment by government, commercialisation can improve port management (as Samoa demonstrates).

Privatisation of port services does not guarantee better performance

As with commercialisation, simply shifting towards greater private-sector participation does not guarantee better port performance. Productivity and customer satisfaction in the FSM's Pohnpei port are both low: the port operates as a classic landlord port with a fully private stevedoring (loading and unloading) operator. Productivity and customer satisfaction in Solomon Islands, where the port is administered by the public service, are both high.

International and Pacific evidence suggests that introducing more competition will help. The best-managed ports in the Pacific include the Apia Port in Samoa and the PNG ports of Lae and Port Moresby. These have relatively low port charges but still manage to return a profit. They are based on the landlord model, with more than one private-sector operator competing to provide port services.

Contracting out loading and unloading services to different operators may not be appropriate for smaller ports, since their traffic levels may be too low to generate sufficient competition. In such a case, it may make more sense for the government to contract out port services to a single entity, supported by effective regulation to ensure reasonable prices and good service standards. Even in PNG, where there is competition in stevedoring, the Independent Consumer and Competition Commission maintains regulatory oversight of prices and service standards.

Investment is needed to expand and modernise facilities.

Some Pacific island ports cannot cope with the increased demand for services caused by the commodity boom and growing economies. The ADB (2007a) shows that port congestion in Lae is a major cost to business, with delays of three to five days the norm. Delays in Lae are estimated to cost \$20 000 per day, which increases costs for local businesses and hurts consumers.

Many Pacific island ports need significant investment to modernise and lift productivity. While smaller ports, such as those in the FSM and Kiribati, may not have the throughput volumes to justify installing shore-based cranes, it is surprising that the larger PNG, Suva and Apia ports do not have these facilities.²⁷

²⁷ Their throughput volumes are at least as high as the ports of St Lucia and Barbados which have shore-based cranes.

Financial injections will not be adequate if management problems are not addressed. But where ports are performing reasonably efficiently, port investment programs should be treated as priorities, as in the case of Lae (Box 6.3).

Box 6.3 Lae: the Pacific's biggest port is soon to get bigger

Lae port is a victim of its own success. A 15 per cent rise in cargo volume since 2003 has stretched the port beyond capacity. Located in the business hub of PNG, and linking the agricultural commodities of the highlands to global markets, the port cannot cope with the dramatic increase in demand created by the commodity boom. Up to 60 per cent of the country's imports and exports go through Lae, and a growing economy results in bottlenecks.

Initial work to repair and improve existing infrastructure will be complemented by an ADB funded US\$110-million expansion program that will add another 700 metres of berthing space, increasing the port's capacity by 50 per cent. Onshore cranes will reduce turnaround times, and dredging will make the port more easily accessible.

Source: ADB (2006).

Regional solutions

Regional cooperation will be important but should not focus on service provision

Few Pacific island countries can, on their own, meet the financial and human resources required to deal with the complexity associated with regulating the sector. Even much larger Pacific Rim states struggle to meet new maritime codes by the prescribed deadlines. Regional maritime administrations typically range in size from two to ten professionals. By comparison, Australia has about 240 employees in its Maritime Safety Authority. Given limited regional resources, and extensive private-sector participation, regional provision of shipping services should not be a priority. After two decades, the regionally-owned Pacific Forum Line is now viable, but only because it was forced to restructure its operations along more commercial lines and focus its services on profitable routes just as any other line would.

Existing institutions should be strengthened

The Pacific's network of 12 maritime training institutions is a successful, regionally-led, vocational training system. The network has enabled international seafaring to become an important source of employment and income for the region. In 2003, an estimated 4000 Pacific island seafarers engaged in international shipping remitted approximately US\$19 million in foreign exchange to their countries.

The success of the training institutions is largely attributable to coherent management, close collaboration with industry and reliance on international standards. They are jointly supported by the Secretariat of the Pacific Community, through its Regional Maritime Programme, and by the Pacific Islands Maritime Association, whose membership includes industry participants such as shipping operators and port authorities, as well as government safety and regulatory authorities. This balance of membership from administrative, regulatory and industry bodies ensures that the institutions can simultaneously satisfy the requirements of curriculum relevance to industry, accessibility to students, and accreditation of courses by the International Maritime Organization. Further strengthening the Regional Maritime Programme, and enhancing the role of the Pacific Islands Maritime Association as a peak advisory body with a more explicit mandate from regional governments to advise on maritime harmonisation and reform, would seem to be the most effective regional approach.

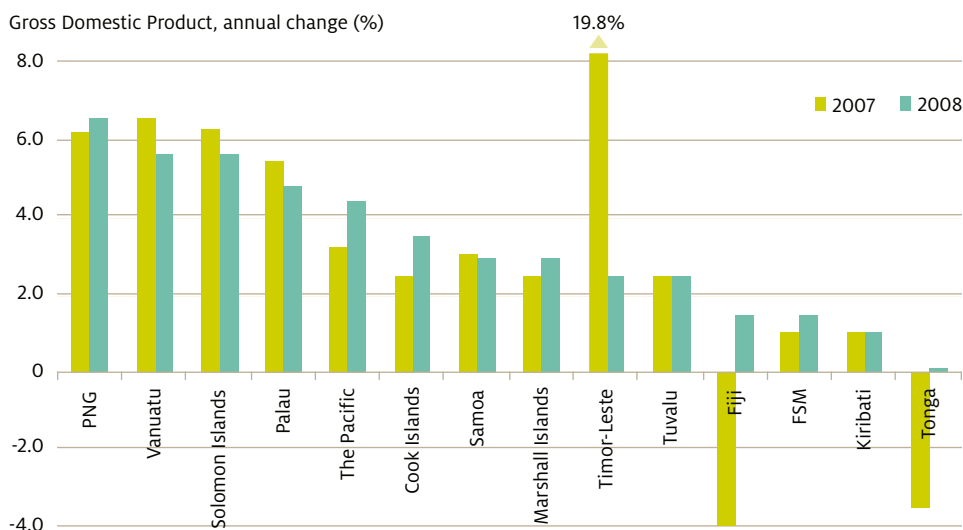


Outlook and conclusion

Prospects in 2008 are generally positive—although different countries face different challenges and opportunities.

The Pacific region as a whole is projected to grow by 4.5 per cent in 2008, above the 2007 (3.2 per cent) and the 2005–07 averages (2.8 per cent).

Figure 7.1 Overall, the Pacific is forecast to grow faster in 2008 than 2007



Source: Annex 3, Table A.1

Note: There is no data for Nauru or Niue.

Melanesia will continue to lead the region

The mineral boom is expected to continue to carry PNG and Timor-Leste. Growth in PNG (forecast to increase to 6.6 per cent) will be underpinned by continued expansion of the mining sector and growth in cash-crop production as new investments and transport infrastructure improvements

are made. GDP growth in Timor-Leste is forecast at 2.5 per cent in 2008, supported by government infrastructure investment but moderating after the deployment of 2000 peacekeepers and a jump in government spending which helped produce an estimated 20 per cent growth in 2007. Timor-Leste's oil and gas income, though not included in its GDP, is projected to more than double in 2007–08 as production from existing fields increases. In Vanuatu strong growth is expected to continue as a result of aid-funded construction, expansion of tourism and continued growth of agricultural exports. In Solomon Islands aid-funded projects, logging and palm oil production are expected to be the main contributors to growth.

A return to positive economic growth of 1.5 per cent is projected for Fiji in 2008, largely due to a recovery in tourism. Fiji's recovery will depend, however, on a return of confidence, which will in turn depend on progress towards a return to democracy.

In the smaller states, only in Palau, Cook Islands and Samoa is growth forecast to exceed three per cent

Tourism and aid-funded projects are expected to support continuing growth in Palau. Cook Islands are forecast to grow at 3.5 per cent, driven by expansion of the tourist sector. Growth of tourism and recovery of the local, long-line tuna fishing industry are expected to support Samoa. The forecast for the other small states is continued low growth, at or under 3 per cent. Recent growth data and forecasts for Nauru are unavailable. 2008 growth will be assisted by the resumption of phosphate mining (Chapter 3), but may be negatively impacted by the closure of the Nauru Offshore Processing Centre for asylum-seekers.

External shocks and political instability are the key risks for 2008

The projections for 2008 assume the continuation of good macroeconomic policies and the implementation of planned reforms and public investments.

According to the IMF, growth is expected to slow to 4.1 per cent in 2008, down from 4.9 per cent in 2007. Downside risks to global growth have intensified with the prospect of recession in the United States following financial market turbulence (IMF, 2008). However, developing country growth is expected to remain strong at 6.9 per cent in 2008, even though this is down from the 7.8 per cent estimated for 2007.

A sharp decline in commodity prices would have a major impact on all countries. While commodity prices are expected to remain high, they may become more volatile, especially if there are supply disruptions. While a slowdown in global growth would affect demand for Pacific island exports, most of the oil-importing economies are vulnerable to a further spike in oil prices.

Political stability and security deserve special attention. Crises are sometimes difficult to foresee but their impact can be catastrophic, especially for the poor. Projections for growth in 2008 are based on a benign political and security situation: free and fair elections in Vanuatu and Tonga, an easing of social and political tensions in Fiji, and stability in the democratically elected

governments in Timor-Leste, PNG and elsewhere. In the case of Timor-Leste and Solomon Islands, a strong international presence is expected to underpin security.

A resurgence of inflation remains a risk in the Melanesian countries due to the heavy financial inflows they are receiving.

In the medium term, there are some shared growth challenges

Achieving and sustaining political stability is a huge challenge for many Pacific island countries, but a critical one for growth. Fiji's inability to meet this challenge has badly affected the country, with one estimate concluding that each coup in Fiji has cost the country three years of economic growth (Chand, 2007b). Improving governance is also important for all countries in the region. As documented in Chapter 2, some have made progress, but in others, reducing corruption and improving law and order will be essential to higher growth.

Different groups of countries also face different sets of growth challenges

1. Resource rich countries—PNG and Timor-Leste have a unique opportunity in the context of the global commodity boom to use their large mineral revenues to address urgent development needs and spur growth in the non-mineral sector. The challenge will be to identify high-quality expenditure areas and address capacity constraints affecting service delivery.

2. Countries with demonstrated growth potential—Fiji, Vanuatu, Palau, Samoa and Cook Islands have all shown they can deliver tourist-led growth (Figure 2.5). All are enjoying stronger growth in this area, except for Fiji where tourism prospects have once again been affected by a coup. These five countries have other growth opportunities also, but tourism is important—it is almost half of GDP in Cook Islands and Palau (both of whom import labour to service an expanding tourism sector), closer to 20 per cent in Vanuatu, and 10 to 15 per cent in Samoa and Fiji. Tourism also appears to be the future of these countries: they have all sustained growth of 5 per cent or more over the last five years in tourism arrivals. The only other sector which matches this growth is remittances. While remittances provide a stable and sustainable source of income and can help power growth, there is no Pacific island country that has developed on the back of remittances alone.

For these tourism success stories, political and social stability is essential to ensure continued market growth. Further economic reform and greater public investment in physical and social infrastructure will be required to make them easier places to do business in and to visit. Careful attention to environmental management is also needed to preserve natural assets.

3. Countries with unproven growth potential—The remaining Pacific island countries—the FSM, Kiribati, the Marshall Islands, Nauru, Solomon Islands, Tonga, Tuvalu and Niue—have mostly been unable in recent years to generate growth much in excess of population. Solomon Islands has, but it remains unclear whether its growth can be sustained in the absence of continued large volumes of aid and log exports.

These countries are a disparate group, and the potential of each remains unproven. For some, especially the smallest and most remote, rapid growth may never be achieved, so these should focus on prudent application of aid and fishing rents, and maximising remittances. But for others, faster growth is possible, as evidenced by the success of countries as diverse as Cook Islands and Samoa and more recently Palau and Vanuatu. Growth can come from tourism, and it can be driven by remittances. For the larger countries, where the large majority of people live in rural areas, the prospects for improved livelihoods lie with increasing agricultural productivity, at least for the foreseeable future.

Improving connectivity is critical to the prospects of all Pacific island nations

Efficient telecommunications, aviation and shipping are essential for developing all Pacific island countries, regardless of size. Improving connectivity is an urgent task given the growing importance of tourism, and the impact it has on the everyday lives of Pacific islanders. As Part Two of this Survey shows, there is much the economies of the region can do to improve internal and external connectivity.

Encouraging new entrants—Countries with new entrants in aviation and telecommunications have benefited from increased access and lower prices. Other countries can encourage new entrants by introducing competition, and restructuring and divesting state-owned incumbent enterprises. Encouraging new entrants, and running these sectors along competitive lines, puts a premium on good regulation, and more broadly on good governance and transparency so as to ensure a level playing field.

Upgrading infrastructure—Improving ports, airports and telecommunications infrastructure are important challenges. The most successful airports and ports operate on commercial lines, without political interference. All Pacific island ports are owned by the public sector, but most of the best ones are operated by private-sector firms competing for business. In telecommunications, the demand for new infrastructure (to meet the needs of remote areas) and anticipated demand for broadband Internet, is growing rapidly. National investments need to be met mainly by private firms. International links may require a regional approach and government support, but should rely on competitive mechanisms as much as possible.

Reaching remote areas—Competition between private-sector-led firms is the best way to maximise access to domestic shipping, aviation and telecommunications services. Sometimes governments will want to help provide access to remote areas through subsidised services. The transparent franchising model Fiji has adopted for domestic shipping has lessons not only for other countries, but also for its domestic aviation and telecommunications sectors.

Finding regional solutions—Telecommunications, aviation and shipping all require regulation and government oversight—to promote competition, to ensure safety and to provide public financial support. They are all complex and rapidly changing sectors. The information technology sector is particularly difficult to regulate, and safety and security standards have been tightened

for aviation and shipping. For small countries, it makes sense to draw on regional resources to help fulfil regulatory functions, and to harmonise to make it easier to share expertise across the region. There are success stories on which to build, such the Pacific Aviation Safety Office and the Regional Maritime Programme.

In conclusion

Growth of six per cent or higher in the Melanesian region has not been seen for more than a decade. But it has been seen before. From 1992 to 1994, PNG grew at an average of 12.7 per cent (although it plummeted the following three years), Solomon Islands at 6.1 per cent and Vanuatu at 6.8 per cent. Sustaining growth is as important as igniting it, and generally more difficult.

Political and social stability and continued reform, especially to reduce the Pacific's isolation and improve its connectivity, are critical to the growth prospects of all Pacific island countries, large and small, and thus a central part of the region's quest to create a secure and prosperous future.

Annex 1

Contributors to *Pacific Economic Survey 2008*

This annex acknowledges the people who were involved in *Pacific Economic Survey 2008*. The views and policies expressed in this survey report do not necessarily represent the views of any sponsoring individual and/or organisation involved in the project.

The production of *Pacific Economic Survey 2008* was guided by a regional Steering Committee that reviewed the concept note for the report,²⁸ the drafts of this report and its background papers. These documents were also subject to peer review by experts around the region.

The Pacific Economic Survey Steering Committee

The *Pacific Economic Survey 2008* project was directed by a Steering Committee of leading regional figures from the Pacific.

Margaret Callan (Chair)	Assistant Director General, PNG Branch, AusAID
Makurita Baaro	Consultant and former Cabinet Secretary, Kiribati
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Afamasaga Toleafoa	Consultant and former Member of Parliament, Samoa
Mishka Tuifua	CEO, Westpac Bank of Tonga, and Chair, Tonga Public Service Commission
Sakiusa Tuisolia	Consultant and former CEO of Airports Fiji Ltd

28 www.ausaid.gov.au/publications/pdf/pacificsurvey08.pdf

Background papers

The background papers prepared for *Pacific Economic Survey 2008* are:

Fallon, J 2008, 'Pacific Performance and Outlook', Economic Insights Pty Ltd.

McNamara, S 2008, 'Aviation in the Pacific: building on recent gains'.

World Bank 2008, 'Telecommunications in the Pacific', World Bank.

More information on *Pacific Economic Survey 2008* and background papers can be found at www.pacificsurvey.org

The Survey chapters on shipping and aviation also draw heavily on the ADB 2007 report, *Oceanic Voyages: Aviation and Shipping in the Pacific*. All four chapters in Part Two use the 2006 World Bank report, *The Pacific Infrastructure Challenge: A Review of Obstacles and Opportunities for Improving Performance in the Pacific Islands*.

Authors

Stephen Howes (Chief Economist, AusAID) and Matt Morris (Economic Adviser, AusAID) were the principal authors for this final report, with contributions from Chakriya Bowman (Trade Adviser, AusAID) and Scott McNamara (Economic Analyst, AusAID). Jacqueline Lees and Melissa Davies provided research assistance and editorial support.

Peer review

In addition to review by the Steering Group, the draft *Pacific Economic Survey 2008* report was reviewed by regional experts in November 2007. Reviewers included staff from multilateral institutions (including the IMF, World Bank and ADB), bilateral aid agencies (NZAID), regional organisations (including the Forum Islands Secretariat and South Pacific Commission), Australian government departments, and academics (Professor Ron Duncan from the University of the South Pacific and Professor Satish Chand from the Australian National University). James Gilling and Theo Levantis of AusAID also provided useful comments.

Pacific Economic Survey 2008 Working Group

Pacific Economic Survey 2008 was supported by a secretariat consisting of AusAID Directors and research and support staff: Nicholas Cumpston, Scott McNamara, Erin Anderson, Elizabeth James and Jacqueline Lees. AusAID posted officers provided assistance throughout the writing process.

Annex 2

Millennium Development Goals

The MDGs were developed out of the eight chapters of the United Nations Millennium Declaration, signed in September 2000. The MDGs were revised in October 2007 when the United Nations General Assembly adopted four additional targets. The eight goals and 21 targets include:

1. Eradicate extreme poverty and hunger

- i. Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.
- ii. Achieve full and productive employment and decent work for all, including women and young people.
- iii. Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

2. Achieve universal primary education

- iv. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

3. Promote gender equality and empower women

- v. Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.

4. Reduce child mortality

- vi. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

5. Improve maternal health

- vii. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.
- viii. Achieve, by 2015, universal access to reproductive health.

6. Combat HIV/AIDS, malaria, and other diseases

- ix. Have halted by 2015 and begun to reverse the spread of HIV/AIDS.
- x. Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.
- xi. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

7 Ensure environmental sustainability

- xii. Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources.
- xiii. Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.
- xiv. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.
- xv. By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers.

8 Develop a global partnership for development

- xvi. Develop further an open trading and financial system that is rule-based, predictable and non-discriminatory. Includes a commitment to good governance, development and poverty reduction—nationally and internationally.
- xvii. Address the special needs of the least developed countries. This includes tariff and quota free access for their exports; enhanced programme of debt relief for heavily indebted poor countries; and cancellation of official bilateral debt; and more generous official development assistance for countries committed to poverty reduction.
- xviii. Address the special needs of landlocked and small island developing States.
- xix. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.
- xx. In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries.
- xxi. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.

Progress towards the Millennium Development Goals in the Pacific

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6	Goal 7
	Poverty and hunger reduction	Universal primary education	Gender equality in education	Reduced child mortality	Reduced maternal mortality	Reverse major diseases	Access to water and sanitation
Indicator	% population under-nourished	Children reaching grade 5 (% grade 1 pupils)	Secondary school enrolment ratio	Deaths per 1,000 live births (children under 5)	Deaths per 100,000 births	TB Death rate per 100,000	% rural population with access to improved water source
Melanesia and Timor-Leste							
Fiji	4	95.8	1.07	18	75 ¹	3.6	51
PNG	13	58.2	0.79	74	300 ¹	46.3	32
Solomon Islands	20	78.0	0.83	29	130	23.4	65
Vanuatu	12	70.6	0.86	38	32	9.7	52
Timor-Leste	8	-	1.00	61	660 ¹	88.2	56
Polynesia							
Cook Islands	-	-	1.02	20	-	2.7	88
Niue	-	-	0.95	-	-	9.0	100
Samoa	4	95.9	1.12	29	15	3.2	87
Tonga	-	94.6	1.08	24	-	2.9	100
Tuvalu	-	62.6	0.93	38	-	54.8	82
Micronesia							
FSM	-	-	-	-	-	-	-
Kiribati	6	81.4	1.13	65	-	49.3	53
Marshall Islands	-	-	1.05	58	-	31.9	96
Nauru	-	25.4	1.07	30	-	17.5	-
Palau	-	-	1.08	11	-	7.0	94

■ Of concern - No data available

Source: UNESCAP/ADB/UNDP Report: Millennium Development Goals: Progress in Asia and the Pacific 2007

Note: Data drawn from different years.

¹ Model estimates, data cannot be verified.

Annex 3

Pacific statistics

Table A1 Growth in Gross Domestic Product at constant prices (%)

	2002	2003	2004	2005	2006	2007	2008
The Pacific	0.4	1.8	3.6	2.6	2.6	3.2	4.5
Melanesia and Timor-Leste							
Fiji	3.2	1.0	5.3	0.7	3.4	-4.0	1.5
PNG	-0.2	2.2	2.9	3.4	2.6	6.2	6.6
Solomon Islands	-1.6	6.4	8.0	5.0	6.1	6.3	5.7
Vanuatu	-7.4	3.2	5.5	6.5	7.2	6.6	5.7
Timor-Leste ³⁰	-6.7	-6.2	0.3	2.3	-1.6	19.8	2.5
Polynesia							
Cook Islands	2.6	8.2	4.3	0.1	0.8	2.5	3.5
Samoa	1.0	3.1	3.4	5.2	2.6	3.1	3.5
Tonga	3.0	3.2	1.4	2.3	0.7	-3.5	0.1
Tuvalu	5.5	4.0	4.0	2.0	3.0	2.5	2.5
Micronesia							
FSM	1.4	3.3	-4.3	1.5	-0.7	1.0	1.5
Kiribati	2.7	-1.5	2.3	2.5	1.1	1.0	1.0
Marshall Islands	3.8	3.4	5.6	1.7	1.3	2.5	3.0
Nauru	0.1	-6.3	1.2	1.4			
Palau	-3.5	-1.3	4.9	5.5	5.7	5.5	4.8
Comparators							
Caribbean	3.6	3.2	2.6	6.7	8.8	5.5	5.2
Sub-Saharan Africa	3.6	4.2	5.3	5.8	5.7	6.1	6.4
Developing Asia	7.0	8.3	8.8	9.0	9.6	9.9	8.6

Source: Asian Development Bank (2007c); World Bank (2008b); IMF (2008); national sources.

³⁰ Timor-Leste's GDP is non-oil GDP.

Table A2: Inflation (%)

	2002	2003	2004	2005	2006	2007
The Pacific	6.2	8.0	3.3	2.4	3.2	4.7
Cook Islands	3.4	2.0	0.9	2.4	3.4	2.8
Fiji	0.7	4.2	2.8	2.4	2.5	4.1
FSM	-0.1	0.1	2.3	4.2	3.0	3.0
Kiribati	3.2	1.9	-1.0	-0.3	-1.5	-
Marshall Islands	0.4	1.2	2.2	4.4	4.3	3.1
Nauru	-	-	-	-	-	-
Palau	-1.3	0.9	5.0	3.9	4.4	3.9
PNG	11.8	14.7	2.2	1.7	2.9	4.8
Samoa	8.1	0.1	16.3	1.9	3.8	5.0
Solomon Islands	9.4	10.1	6.9	7.2	8.0	8.0
Timor-Leste	-0.4	0.1	0.8	1.8	4.2	8.0
Tonga	10.0	10.7	11.8	10.0	7.2	5.0
Tuvalu	5.1	3.3	2.8	3.2	3.8	3.0
Vanuatu	2.0	3.0	3.2	0.6	2.6	2.5

Source ADB (2007c). Notes: Data are on a calendar year basis except for the Marshall Islands, the FSM, Palau and Tonga, which are on a fiscal year basis.

Table A3: Fiscal balance of central government (% of Gross Domestic Product)

	2002	2003	2004	2005	2006	2007
The Pacific						
Cook Islands	0.2	-0.8	-1.0	2.1	3.2	
Fiji	-8.5	-8.7	-6.5	-3.3	-2.9	-2.0
FSM	6.8	0.3	-6.4	-5.7	-1.6	-2.5
Kiribati	-0.7	-28.1	-37.1	-23.3	-24.7	
Marshall Islands	-9.4	-1.8	-1.3	-2.9	0.1	
Nauru	-	-	-	-	-	-
Palau	-28.3	-2.4	-6.9	-3.9	-0.4	
PNG	-3.9	-1.0	1.6	0.0	0.0	-0.2
Samoa	-2.0	-0.6	-0.8	0.3	-0.4	-0.5
Solomon Islands	-10.9	-0.2	8.0	2.3	0.6	1.0
Timor-Leste	-59.0	-56.9	-48.6	75.2	102.5	153
Tonga	0.7	-2.9	1.7	2.4	-6.1	-4.5
Tuvalu	30.8	-11.0	-9.0	-6.8	-6.4	
Vanuatu	-2.3	-1.9	1.3	0.9	-0.5	-0.5

Source ADB (2007b) and Fallon (2008). Notes: Data are on a calendar year basis except for the Marshall Islands, the FSM, Palau and Tonga, which are on a fiscal year basis.

Table A4 Central government expenditures (% of Gross Domestic Product)

	2002	2003	2004	2005	2006
The Pacific					
Cook Islands	36.0	33.0	32.5	32.5	27.5
Fiji Islands	34.3	33.1	31.3	27.4	28.8
FSM	64.9	68.3	65.8	62.3	-
Kiribati	146.1	139.4	105.5	86.7	89.4
Marshall Islands	79.0	71.0	60.9	65.2	-
Nauru	-	-	-	-	-
Palau	66.3	62.6	61.7	54.2	61.7
PNG	32.1	30.0	32.8	34.7	35.7
Samoa	34.9	32.5	31.1	45.2	31.8
Solomon Islands	29.6	39.0	39.5	52.2	53.1
Timor-Leste	69.4	72.9	71.1	21.1	33.7
Tonga	29.9	31.3	28.1	26.7	-
Tuvalu	136.6	-	-	85.8	98.2
Vanuatu	26.3	23.7	21.9	21.7	-

Source ADB (2007b) and Fallon (2008). Notes: Data are on a calendar year basis except for the Marshall Islands, the FSM, Palau and Tonga, which are on a fiscal year basis.

Table A5 Current account balance (% of Gross Domestic Product)

	2004	2005	2006	2007
The Pacific	-0.9	6.2	4.9	7.3
Cook Islands	6.6	14.6	21.9	23.4
Fiji Islands	-13.1	-12.3	-20.2	-24.0
FSM	-18.1	-15.4	-12.7	-
Kiribati	-58.0	-62.4	-	-
Marshall Islands	-3.1	-5.0	-3.8	-
Nauru	-	-	-	-
Palau	9.6	10.6	2.5	-
PNG	3.1	12.3	7.3	7.9
Samoa	-5.6	-5.6	-5.9	-5.1
Solomon Islands	25.3	0.8	3.2	-15.9
Timor-Leste	30.4	83.5	115.5	139.6
Tonga	4.0	-2.9	-6.8	-5.0
Tuvalu	-	-	-	-
Vanuatu	-4.7	-10.9	-	-

Source: ADB (2007c). Notes: Data are on a calendar year basis except for the Marshall Islands, the FSM, Palau and Tonga, which are on a fiscal year basis.

Table A6 Country policy and institutional assessment scores in 2006

Rank	Country	Economic management	Business regulatory environment	Structural policies	Social inclusion and equity	Property rights and rule-based governance	Public-sector management	Overall
7	Samoa	3.8	3.5	4.0	3.9	4.0	3.9	3.9
50	PNG	3.8	3.0	3.3	2.5	2.0	2.9	3.1
	Vanuatu	3.5	3.0	3.2	2.8	3.0	3.1	3.1
55	Kiribati	3.2	3.0	3.0	2.9	3.5	3.2	3.1
61	Tonga	2.7	3.0	3.0	3.2	3.5	2.7	2.9
64	Solomon Islands	3.2	2.5	2.8	2.6	2.5	2.5	2.8
67	Timor-Leste	3.0	1.5	2.5	2.6	1.5	2.6	2.7

Source: World Bank <http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/IDA/0,,contentMDK:21359477~menuPK:2626968~pagePK:51236175~piPK:437394~theSitePK:73154,00.html>

Note: Country Policy and Institutional Assessment (CPIA) scores are calculated by the World Bank for low-income countries based on performance in: economic management; the business and regulatory environment; structural policies; social inclusion and equity (including gender equality); property rights and rule-based governance; and public sector management and institutions. They give a rating from 1 (worst) to 5 (best). The ranking giving in the left-hand column gives country rankings in relation to all 77 low-income countries which have CPIA scores (with 1 being the highest-ranked country).

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