



Macroeconomic Impacts of Energy Prices in the Pacific



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MACROECONOMIC IMPACTS OF ENERGY PRICES IN THE PACIFIC

EXECUTIVE SUMMARY

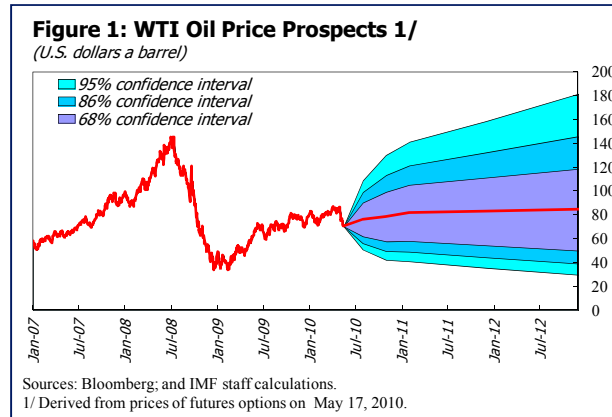
Energy prices, in particular oil, have a huge impact on the small open economies of the Pacific. Pacific islands countries (PICs) are dependent on imported fossil fuels for the bulk of their energy production and consumption. As they are small, remote, import dependant countries, the direct and indirect impacts of energy prices increases can be significant. At the macroeconomic level they can pose significant challenges to policy makers through their effects on growth, inflation, foreign reserves and government resources. This feeds directly and indirectly into production and household well being through transport, electricity and cooking fuel prices.

This paper briefly reviews the macroeconomic impacts and policy implications of energy prices and consumption for the net-oil importers of the Pacific. The paper draws on, and updates, previous ADB and IMF analyses. To illustrate the particular impacts in the Pacific, comparisons are made where possible to developments in countries in low-income Asia that face some similar constraints to the Pacific. Key points to note are:

- Oil makes up a greater share of the import bill and export proceeds than in low-income Asia.
- Price increases above current projections are likely to increase inflation, reduce growth and put pressure on international reserves.
- Poor households will be particularly hard-hit by price increases.
- Energy policy measures that reduce the reliance on imported fossil fuel will contribute to macroeconomic growth, stability and aid poverty reduction.
- Macroeconomic policy should guard against sustained inflation without avoid interfering with the pricing mechanism.
- Assistance to the population should as much as possible be through targeted transfers rather than universal subsidies.

A. Oil Prices—Background and Outlook

Oil prices are expected to continue their climb upwards following the sharp drop in 2009. Oil prices rose rapidly between 2002 and 2008, reaching a peak of over US\$140 a barrel in mid-2008 before the global financial crisis saw prices drop rapidly to a low of around US\$30 a barrel in late 2008. This, however, is likely to be a relatively short-lived cyclical drop. The pressures that previously drove prices up remain present—burgeoning demand from emerging market nations, particularly China and India, coupled with rigidities in supply. As a result, oil prices have recovered steadily and currently stand at around US\$70 per barrel. Current IMF forecasts are that prices will reach around US\$85 in 2012. There is, however, a great deal of uncertainty—prices of above \$100 a barrel lie within the 68 percent confidence interval (Figure 1).



The Pacific Islands are particularly vulnerable to oil prices and are likely to remain so. Many countries—Cook Islands, Kiribati, Nauru, Solomon Islands and Tonga—rely almost entirely on imported oil for their commercial energy requirements and all the others remain heavily reliant. As countries’ per capita incomes rise, their dependence on oil normally decreases. In the Pacific, however, dependence on oil is likely to remain high even in the medium to long term as small islands countries tend to have fewer options for diversification. Looking at vulnerability in a broader sense, ADB (2009) work has shown using the UNDP index of oil price vulnerability found that PICs dominate the category of most vulnerable countries. This index takes account of economic strength, economic resistance to reflect local petroleum resources and oil use intensity.

B. Macroeconomic Impacts of Energy Prices

The high food and fuel prices of 2007-2008 illustrated the vulnerability of the Pacific Islands to external price shocks. In late 2008, inflation in PICs was averaging almost 10 percent. Trade and current account balances in a number of countries (Fiji, Federated States of Micronesia, Tonga, Solomon Islands) deteriorated to unsustainable levels and as a result, international reserves fell, with some countries falling to very low levels (Table 1).¹ Despite the price shock, some countries’ (Samoa, Kiribati) external balances

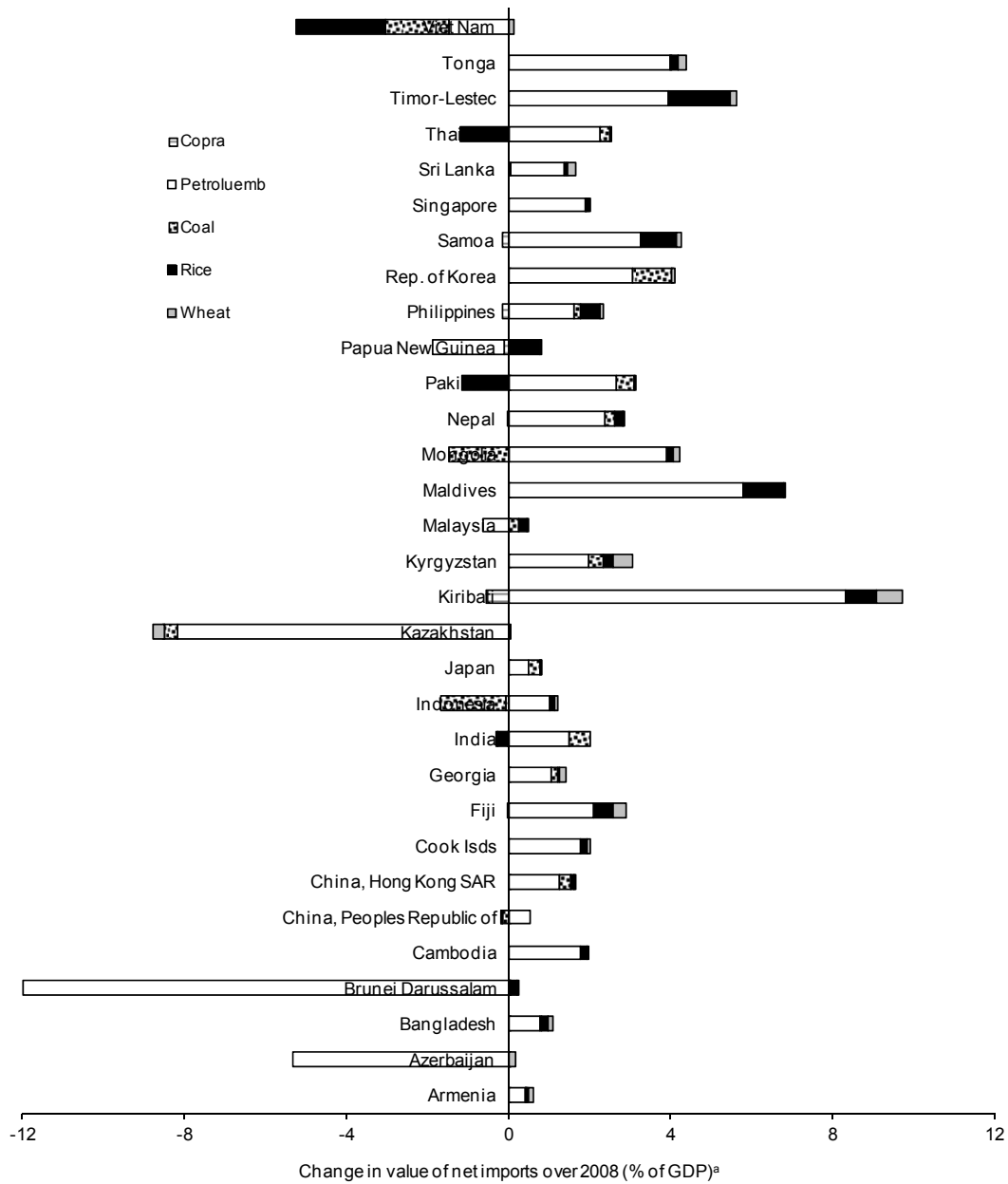
¹ Quantitative analysis is restricted to ADB and IMF member countries due to constraints on data availability.

were better in 2008 than 2000-07. Papua New Guinea's balances improved markedly due to its oil and mineral exports. In low-income Asia significant deteriorations also occurred. The IMF's analysis of the impact of the 2008 crisis, which only covered a subset of PIC countries, showed that Tonga and Fiji were particularly susceptible to the impacts of a simulated oil price shock (IMF, 2008).

The relative severity of the surge in oil prices for the PICs can be gauged from the terms of trade impact. Figure 2 estimates the change in the value during 2008 of key commodities, at pre-2008 volumes for a sample of Asia-Pacific economies, including 6 PICs. These estimates portray the first-round effects of the change in international prices, without any demand or supply responses. Crude oil prices dominated the terms of trade impacts in 2008. The figure shows that the adverse impacts are generally higher for the smaller and/or more remote economies of Asia and the Pacific (e.g. the Pacific Islands shown, Timor-Leste, and the Maldives), reflecting their higher dependence on petroleum. Within these smaller countries, the impacts tend to be higher at lower incomes.

The declines in prices associated with the global financial crisis provided a temporary respite but pressures are set to reemerge. Inflation and balance of payments positions in PICs and low-income Asia generally improved over 2009. Fiscal deficits, however, remained under pressure as weak growth and lower imports hit revenue collections (Table 2). With oil and other commodity prices set to rise, the pressures of 2008 may reemerge, putting pressure on macroeconomic policy. Table 2 shows forecast macroeconomic conditions in 2012 for IMF member countries in the Pacific and low-income Asia. The remainder of this section provides more detail on the ways in which the pressures may emerge and then reviews the policy responses available to PIC macroeconomic managers.

Figure 2: 2008 Terms of Trade Impact of Commodity Price Increases



^a The additional costs of net imports 2008 = $P_t((P_{i08} - P_{i07})/P_{i07}) * Q_t$, where P_t = unit value of net imports in local currency units, P_i = international price in local currency units, Q = quantity of net imports, t = latest period for which country data are available and 07 and 08 refer to 2007 and 2008, respectively. Ratios are expressed relative to the latest available estimate of GDP.

Note:

1. Petroleum refers to both crude oil and refined liquids.
2. The estimate for Timor Leste excludes government revenue earned from offshore petroleum operations.

Source: Sugden (2009).

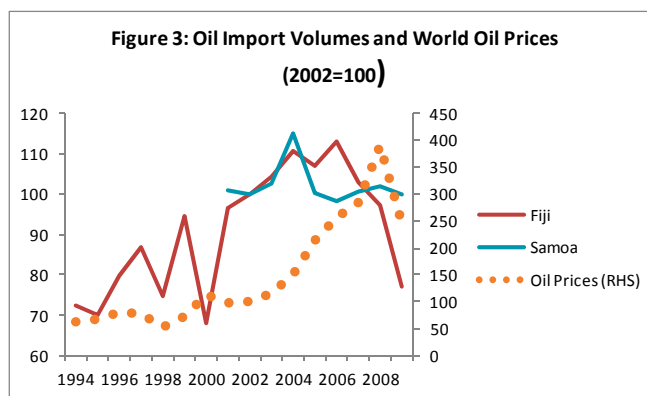
Balance of payments

The primary impact of high fuel prices is on the import bill. Fuel imports are worth on average over a tenth of PICs national income, and over a fifth in Fiji and Palau. They make up a substantial proportion of PICs' overall imports, averaging around a fifth and over a quarter in Palau, Fiji and Tonga (Table 4). In low-income Asia the picture is broadly similar, although proportions are slightly smaller. The main difference is in relation to exports. Pacific Island countries' oil imports massively outweigh goods exports in smaller countries and over a third of total exports in countries with significant goods exports, such as Solomon Islands and Samoa. Taking into account exports of services (such as tourism), oil imports average over 40 percent of total exports, compared to just over 20 percent in low income Asia. This means that PICs are more reliant on other sources of financing to cope with shocks to the oil import bill. With current IMF assumptions on oil prices, import bills are expected to rise as a share of GDP over coming years in most Pacific Islands countries. With exports largely stagnant this is expected to lead to rising trade deficits.

The volume of oil imported by Pacific Islands is sensitive to price but rising prices still increase trade deficits. As international oil prices rise, demand does decrease, but the PICs fuel dependency means that rising prices lead to increases in the import bill, both directly through a higher cost of fuel and indirectly through higher delivered prices of goods. Figure 3 shows that the volume of oil imports in Fiji and Samoa declined as oil prices reached their peak in 2007/8. Fiji's numbers are particularly relevant as they include oil imported for re-export to other countries in the Pacific. However, their interpretation is also complicated by the slowdown in the economy in Fiji that predated the global economic crisis.²

Rising trade deficits lead to an increased need for financing from abroad.

Additional flows of foreign currency are needed to replace the increase in hard currency needed to pay the import bill. This may come from other areas of the current account—from tourism receipts, grants from development partners or private remittances. If this is not forthcoming, countries have to draw on foreign savings—through foreign direct investment or borrowing.



² Fiji and Samoa were chosen for data quality reasons. Volumes are derived from information on world prices and total value of oil imports.

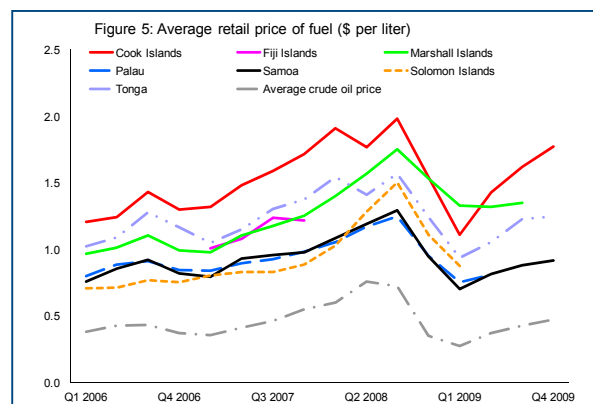
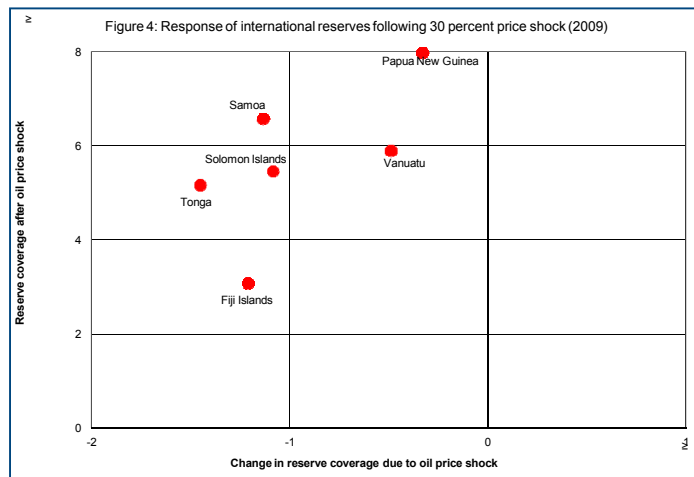
If foreign financing is not available, foreign reserves would have to be drawn down to cover the shortfall. The scope for PICs to do this is limited, as they on the whole have low levels of reserves that are vulnerable to sharp turnarounds. PICs generally aim to keep reserves that cover at a minimum 3-4 months of imports. When reserves fall below these levels there is a danger that international payment obligations will become harder to meet and policy measures are normally required (see figure 4). At current levels of reserves, the ADB has estimated that a shock of about 30% to oil prices³ at 2009 levels would result in a loss of over one month's worth of import coverage in most PICs. Given the region's vulnerability to external shocks, the current comfortable levels of reserves may be depleted rather rapidly amid high world oil prices. Declining reserves can also affect the availability of credit and interest rate levels in countries as declines in foreign reserves deplete banking sector liquidity, as was the case in Fiji in early 2009.

Growth and inflation

Domestic fuel prices in the Pacific closely follow world prices.

Most PICs have pricing mechanisms that have automatic adjustments to the wholesale and retail price of fuel, often with a lag or a form of smoothing mechanism. There are significant differences in prices between individual countries, however, reflecting differing costs of supply (e.g., in shipping, distribution costs), particularly in small islands (see figure 5). Procurement practices, and specifically whether the right of access to markets was allocated on a competitive basis, also appear to be important.⁴ Fuel and electricity prices in the Pacific are relatively high by international standards, reflecting their remoteness, small markets and lack of access in many countries to effective renewable energy sources (Table 4).

Rises in oil prices feed directly into inflation in the Pacific. In the first

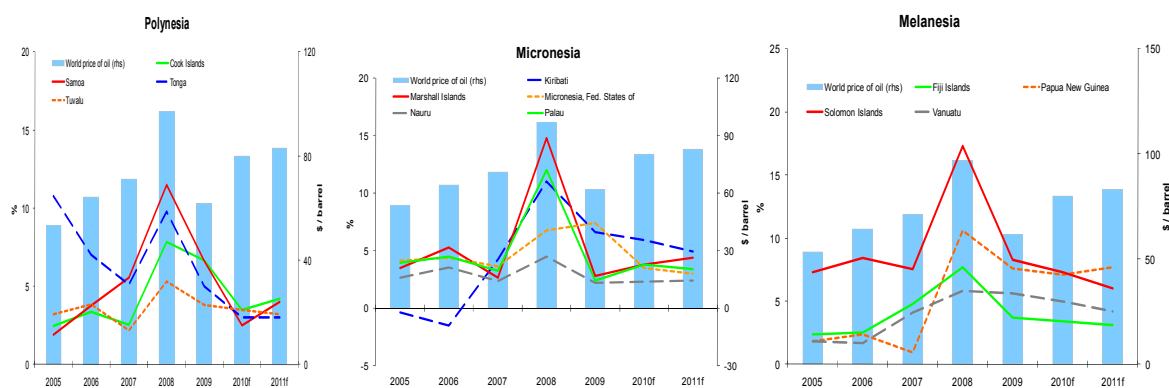


³ The 30% shock is equivalent to the projected increase in average crude oil prices over 2010 (i.e., from \$61.8 per barrel in 2009 to \$80.0 in 2010).

⁴ This is evidenced by the relatively low prices that Samoa has achieved through the competitive tendering of access to publicly owned fuel farms.

instance this is through the direct impact on transport and energy and their feed through into food and other goods. A review of inflation rates in PICs over the last several years suggests a moderate pass-through at the aggregate level (see figure 6). However, weak data integrity and lags in price-adjustment mechanisms mean that oil price increases may take some time to flow through. This inflationary effect is particularly damaging to the poor who do not have the flexibility in their household budgets to adapt to the price shock. If the price shock becomes entrenched in wage increases it can lead to persistent inflation and the consequent threat to macroeconomic stability through increased uncertainty, erosion of competitiveness and declines in investment and saving.

Figure 6: Pass through of Oil Prices to Inflation in the Pacific



Rising prices tend to slow economic growth. The key channel of transmission to growth is from lower consumer and investment spending. Increases in retail fuel prices act as a surcharge on household income, reducing discretionary income and the volume of household consumption expenditure. Businesses experience rising input costs, but since consumer prices are often hard to adjust in the short run, full cost increases cannot be passed onto final prices. Businesses must therefore rationalize spending to maintain profitability. The effect is worsened for those parts of the economy that face regulated final prices, such as electricity tariffs and bus and taxi fares, providing additional financial pressures for these businesses. There will be further negative impacts on economic growth through reduced exports to the extent that growth in major trading partners is reduced. While no direct measurement of the impact on growth in the Pacific has been undertaken, at the global level the IEA and IMF have estimated that a \$10 increase in the price of a barrel of oil reduces global GDP by around ½ percent and increases prices by slightly more. There is no clear pattern to growth in the Pacific Islands (Table 5), however the slowdown in 2009, which was mainly the result of global factors, may also reflect the effects of the previous surge in oil and food prices.

Fiscal Impacts

High oil prices tend to hamper the government’s ability to provide services to the population. There are a number of channels from oil prices to the government budget,

and some work in opposite directions to each other. The overall impact is generally to put pressure on the resources available for government spending on services and investment.

- Increasing **costs of government operations**—the inflationary effects described above inevitably place pressure on government expenditures. The costs of running schools, hospitals and offices, transporting people and goods and importing materials all increase. In the absence of increases in revenues, this leaves less money available for other goods and services.
- **Revenue impacts**—there can be some offsetting gains from the revenue side, as many countries tax the import and sale of oil on an ad valorem (proportion of the price) basis, thus if oil prices increase so do nominal revenues. These gains are limited, of course, by declines in consumption caused by the price increase and by reductions in profit taxes as growth and profit margins are affected. During the last price spike in 2008, some countries (Samoa, Marshall Islands) decided to reduce tax rates on petroleum products to offset the burden placed on consumers. Excise duties on oil for commercial sea and air transport operators in Tonga were also removed.
- **Fuel subsidies** can place further pressure on the expenditure side of the budget. This was a major problem in many regions of the world during the 2008 crisis where fuel prices were controlled to well below market levels. Governments in these regions had to cover the shortfall either through direct subsidies to fuel and power companies or through implicit subsidies as a result of reduced profits/absorbing losses of state-owned companies. In the Pacific, these effects have thus far been relatively controlled. Retail fuel prices are normally linked to world prices and this limits the need for subsidies. Samoa has provided a direct subsidy to its electricity authority equal to the VAT paid on its fuel and Fiji provides a duty concession on fuel imports by its electricity company. There have also been examples of targeted subsidies, for instance concessions to the fishing industry in Fiji. However, other fuel-related prices have been more controlled leading to significant losses emerging from the state-owned enterprise sector. The Marshall Islands government injected US\$8 million to the state-owned electricity company to allow it to continue fuel procurement. In Fiji Islands, the Fiji Electricity Authority (FEA) incurred a pre-tax financial loss of US\$0.8 million in 2008 as a result of Government delaying the implementation of the scheduled tariff rate increase for 19 months and fuel surcharge by 6 months. Subsidies were provided to electricity consumers in Tonga, as well as for the oil inputs of the country's fishing industry. Cook Islands increased its fuel allocations to the Outer Islands and provided subsidized fertilizer, a fuel-dependent agricultural farm input.
- If the pressures on expenditure are accommodated by **increased budget deficits** and/or state-owned enterprise borrowing, then the macroeconomic consequences can become more sustained. This may crowd out access of the private sector to the domestic banking system and further dampen growth prospects. Increasing the

debt servicing costs for future years reduces room to increase spending on social services.

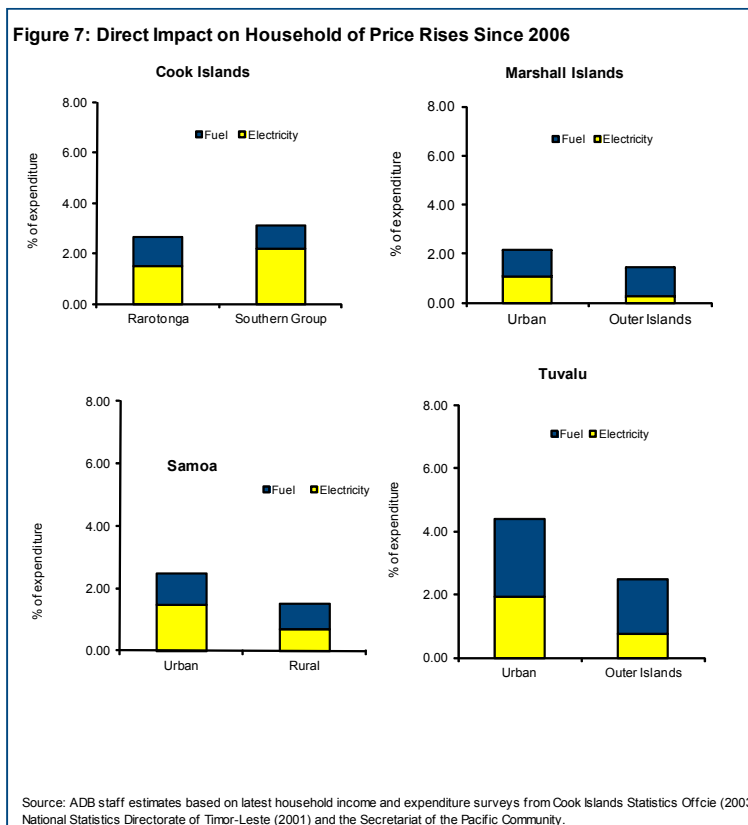
Impact on households

The macroeconomic effects of energy price increases have direct consequences on the daily lives of Pacific Islanders. The impacts of high oil prices are felt in both urban and rural areas and affect the poor more than the rich. Urban dwellers tend to spend more on direct consumption of electricity and fuel, while in the rural areas cost increases are felt more through increased costs of transportation required to take goods to markets and bring food and other necessities to the rural areas. Figure 7 shows the impact on household budgets of the rises in fuel prices since 2006 for a sample of Pacific Island countries. It shows that those price rises tended to increase household expenditure by around 2 percent. These shocks particularly affect the poor as they have less flexibility in their household budgets to protect consumption of food and other necessary items

Progress towards the Millennium Development Goals (MDGs) is hindered by high oil prices. Households' reductions in consumption of other goods and services have a direct impact on the whole range of objectives captured by the MDGs. For instance, higher transport costs can lead to children being withdrawn from school and lower take-up of medical services.

C. Policy Implications

Energy policy has a clear link to long term economic growth and stability. Addressing the Pacific's reliance on imported fuel and the cost-efficiency of energy supply has clear implications for macroeconomic management. However, the scope for solutions is likely to be limited and time frames for many measures are likely to be long.



Economic policy will therefore have to continue to manage the impacts of price movements. It can also contribute to management of supply and demand of energy and to

managing the impact of prices on households and the private sector. Key issues for macroeconomic managers to consider are:

- **Allowing price signals to work is vital both for macroeconomic stability and for the success of any viable energy policy.** Although price controls moderate the impact on households and the private sector, they have serious consequences. By suppressing price signals they prevent demand adjusting to supply conditions and discourage energy efficiency. They can also have serious fiscal consequences..
- **Social protection is best achieved through targeted transfers.** General budget subsidies arising from controls on the retail price of fuel or electricity, price controls (for instance through transfers to state-owned enterprises) generally benefit the rich far more than the poor.
- **Tax policy needs to balance the needs of consumers and the government budget.** Reductions in consumption taxes, such as VAT, to moderate the impact on consumers of high prices should be avoided as they distort relative prices and have similar impacts on demand as price controls. If tax decreases are targeted then moderations in import duties are less distortionary and are consistent with longer-term trade policy. Increases in taxation to discourage consumption, perhaps to take account of environmental consequences, are best achieved through specific excises. These would not normally be related to the price of the product and so would not increase as world prices increase, and could be moderated if the impacts on consumers are judged to be excessive. PIC governments need to take care not to rely too heavily on taxation of oil products for financing expenditure. As outlined above, the PICs are particularly reliant on oil as a result of their location and geography, making demand for oil products quite inelastic. Taxes designed to discourage consumption can be useful for the budget but can have stark effects for the domestic private sector.
- **Monetary and exchange rate policy should be used to controll inflation.** The immediate pass-through of a price shock (the “first-round” effect) can be accommodated but monetary policy needs to remain vigilant against sustained inflation, particularly if second round effects on wages and other prices in the economy begin to emerge. Price shocks are therefore often met with increases in interest rates to contain domestic demand and decrease inflationary pressures. The tightening also helps protect external reserves, which are often put under threat by increases in import prices. In the medium-term, policies that increase the attractiveness of imports, such as a systematically overvalued exchange rate, can work against energy policies that aim to contain the demand for imported fuels.

References

ADB (2008) Living with High Prices: A Policy Brief, Pacific Studies Series

ADB (2009) Taking Control of Oil: Managing Dependence on Petroleum Fuels in the Pacific, Pacific Studies Series

IMF (2008) Food and Fuel Prices—Recent Developments, Macroeconomic Impact and Policy Responses

Sugden, Craig (2009) Responding to High Commodity Prices, Asian Pacific Economic Literature, ANU

Table 1: Macroeconomic Impact of Food and Fuel Crisis

Country	Inflation		Trade Balance		Current account balance		International Reserves		Fiscal balance	
	(in percent, end of period) 2/		(percent of GDP)		(percent of GDP)		(months of imports, end of period)		(percent of GDP)	
	2000-07	2008	2000-07	2008	2000-07	2008	2000-07	2008	2000-07	2008
Cook Islands +	3.3	7.8	...	...	10.8	4.7	...	...	1.9	-0.8
Fiji Islands *	3.1	6.6	-20.1	-31.0	-8.7	-17.9	3.2	0.7	-3.9	-0.1
Kiribati *	1.5	18.6	-58.4	-52.4	-3.8	-0.6	62.4	46.3	-12.2	-13.5
Marshall Islands, Rep. of **	1.9	5.5	...	...	-13.6	-2.0	...	...	2.3	-0.3
Micronesia, Fed. States *	2.1	5.0	-47.7	-57.7	-10.9	-20.3	...	...	-3.8	-2.0
Nauru + 1/	3.2	4.5	...	...	-50.5	...	...	...	-19.9	0.6
Palau *	2.3	16.8	-56.3	...	-9.8	...	...	...	-9.2	-5.4
Papua New Guinea *	6.6	11.2	22.8	33.4	4.7	10.0	3.1	4.8	0.6	2.5
Samoa *	5.2	8.8	-40.0	-38.1	-8.6	-6.2	4.8	3.9	-1.0	-5.7
Solomon Islands +	8.8	18.1	-6.3	-10.7	-1.5	-16.4	4.8	2.9	0.4	-0.3
Tonga *	8.3	12.2	-30.4	-37.2	-3.5	-11.6	4.1	4.8	-0.4	1.7
Tuvalu +	3.2	5.3	...	...	-4.6	...	...	...	-13.5	-8.3
Vanuatu *	2.6	5.8	-21.3	-32.5	-4.2	-5.9	4.1	4.1	-1.3	2.1
Bangladesh *	5.6	6.0	-4.6	-5.9	0.0	1.9	2.1	2.8	-3.9	-4.3
Cambodia *	1.8	12.5	-14.1	-19.7	-2.3	-10.2	2.6	4.3	-4.4	-2.8
Lao *	9.2	3.2	-18.7	-23.1	-13.2	-17.8	2.1	2.7	-4.0	-2.9
Mongolia *	7.7	23.2	-2.1	-2.7	-2.0	-14.0	3.0	4.0	-1.0	-4.9
Nepal *	4.5	12.1	-13.7	-18.0	2.7	2.7	6.6	6.6	-2.1	-0.2
Sri Lanka *	11.6	14.4	-9.8	-14.8	-3.1	-9.4	2.5	2.6	-7.9	-7.0
Vietnam *	5.7	19.9	-4.9	-14.2	-2.0	-11.9	2.4	4.0	-4.0	-2.9
PIC Average	4.0	9.7	-28.6	-28.3	-8.0	-6.6	12.4	9.6	-4.6	-2.3
LIC Asia Average	6.6	13.0	-9.7	-14.1	-2.8	-8.4	3.0	3.9	-3.9	-3.6

Source: IMF staff estimates (*) and Asian Development Outlook 2010 Database (+)

Notes:

1/ Nauru: Current account balance (Column 4) is average for 2004 to 2007; Fiscal account balance (Column 8) is average for 2005 to 2007.

2/ Asian Development Outlook data is period average inflation

Table 2: Macroeconomic Outlook 1/

Country	Total Imports		Trade balance		Current Account Balance		Fiscal Balance	
	per cent of GDP		per cent of GDP		per cent of GDP		per cent of GDP	
	2009	2012	2009	2012	2009	2012	2009	2012
Fiji	-59.7	-63.7	-23.4	-25.2	-9.6	-12.7	-3.7	-2.0
Kiribati	-84.0	-82.3	-49.3	-49.1	-4.1	-9.0	-11.0	-13.3
Marshall Islands, Republic of	...	...	...	...	-2.5	...	...	...
Micronesia, Federated States of	-84.5	...	-51.0	...	-13.9	...	...	...
Palau	...	...	...	...	...	...	-1.3	...
Papua New Guinea	-63.6	-86.2	15.0	3.7	-6.8	-16.4	-7.4	1.1
Samoa	-52.7	-68.5	-38.9	-51.4	-2.0	-15.7	-4.1	-2.3
Solomon Islands	-46.9	-56.0	-9.4	-17.9	-21.1	-22.3	2.2	2.0
Tonga	-53.2	-59.2	-37.6	-41.1	-15.7	-19.1	1.3	-2.3
Vanuatu	-48.7	-44.5	-26.1	-25.3	-2.2	-5.0	0.1	0.2
Bangladesh	-25.7	-26.8	-5.1	-5.8	2.9	0.8	-2.9	-2.9
Cambodia	-59.5	-62.6	-14.8	-20.3	-4.8	-10.4	-3.3	-3.4
Lao	-50.0	-52.4	-22.0	-18.7	-16.5	-14.9	-8.9	-4.4
Mongolia	-62.1	-61.9	3.6	-8.4	-5.6	-15.3	-5.4	-2.4
Nepal	-35.1	-38.9	-21.5	-26.2	4.3	-0.1	-2.4	-3.0
Sri Lanka	-28.4	-33.3	-7.0	-9.7	0.3	-1.0	-9.7	-4.7
Vietnam	-78.2	-86.5	-9.0	-6.6	-7.8	-5.7	-8.9	-4.4

Source: IMF Staff Estimates

1/ Projections reflect the impact of a range of factors, not just oil prices. For instance in Samoa, tsunami reconstruction has a large influence.

Table 3: Oil imports: Pacific Islands and Low Income Asia

	Oil imports														
	(percent of imports of goods and services)					(percent of GDP)					(percent of goods and services exports)				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Cook Islands 1/	9.1	21.5	18.4	27.2	31.4	4.0	11.5	9.7	20.0	28.8	140.9	591.7	377.5	982.0	2070.1
Fiji Islands	23.6	27.5	27.7	28.9	21.2	15.4	19.0	17.5	21.5	12.6	29.0	38.1	36.2	39.7	26.6
Kiribati	13.3	21.6	18.5	...	...	15.1	18.8	16.3	...	...	98.6	175.9	156.8	...	...
Marshall Islands, Rep. of	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia, Fed. States	11.0	13.3	13.2	14.7	9.2	9.4	11.3	11.4	13.8	7.8	58.7	72.6	63.1	67.2	37.7
Nauru 1/	4.5	...	...	...	...	4.5	...	...	...	...	30.8	...	...	...	...
Palau	31.7	38.1	39.0	...	...	18.7	23.8	19.5	24.3	0.0	33.2	45.9	36.8	...	...
Papua New Guinea	4.9	4.5	4.4	5.1	3.3	3.4	2.9	3.3	3.1	2.1	4.5	3.4	4.0	4.0	3.3
Samoa	13.8	14.1	15.0	17.2	17.9	7.6	8.6	9.2	9.2	9.4	23.9	25.7	28.1	28.3	30.1
Solomon Islands	24.8	23.2	21.5	22.6	17.7	10.4	12.3	12.1	13.1	8.3	30.9	34.6	33.1	35.0	24.7
Tonga	21.6	24.4	25.2	29.6	28.4	11.6	12.5	12.7	15.4	15.1	79.1	100.1	99.8	109.5	103.1
Tuvalu 1/	21.7	...	...	...	...	12.6	...	...	...	...	4553.6	...	...	...	...
Vanuatu	8.2	8.9	14.5	14.0	14.3	4.1	4.2	6.7	7.7	6.9	9.5	10.3	16.9	17.9	15.9
Bangladesh	11.0	11.3	10.9	10.9	11.3	2.7	2.9	3.0	3.0	2.9	15.1	15.1	15.2	15.1	15.6
Cambodia	18.5	20.4	21.5	27.0	24.2	13.4	15.5	15.7	18.4	14.4	20.9	22.5	24.1	34.1	28.9
Lao	12.0	12.6	13.9	14.5	7.2	5.9	5.9	7.4	7.9	3.6	17.4	15.5	19.5	20.9	10.8
Mongolia	19.2	22.5	23.2	25.4	14.8	13.1	13.4	14.2	18.8	9.2	20.4	20.8	22.2	32.2	16.7
Nepal	14.9	16.8	13.4	14.7	10.2	4.5	5.1	4.6	4.6	3.6	30.5	39.1	33.2	38.3	28.5
Sri Lanka	16.4	17.8	19.6	21.6	17.2	6.8	7.3	7.7	8.5	4.9	20.9	24.3	26.5	33.2	21.8
Vietnam	12.0	11.9	11.0	13.5	9.4	8.9	9.3	10.2	12.6	7.3	12.9	12.6	13.3	16.2	10.8
Average PICs 2/	17.0	19.5	19.9	18.9	16.0	10.6	12.6	12.1	13.5	7.8	40.8	56.3	52.8	43.1	34.5
Average Low Income Asia	14.9	16.2	16.2	18.2	13.5	7.9	8.5	9.0	10.5	6.6	19.7	21.4	22.0	27.1	19.0

Source: IMF staff estimates

1/ From Asian Development Outlook database-imports and exports of goods only.

2/ Excludes Cook Islands, Nauru and Tuvalu as data on services trade is unavailable.

Table 4: Retail fuel prices in Asia and the Pacific, as of November 2008,
(US cents per liter)

	Diesel	Super Gasoline
<i>Southeast Asia</i>		
Brunei	21	38
Cambodia	89	94
Indonesia	42	50
Lao PDR	76	92
Malaysia	53	53
Myanmar	52	43
Philippines	81	91
Singapore	90	107
Thailand	64	87
Viet Nam	77	80
<i>East Asia</i>		
PRC	101	99
Hong Kong, China	116	195
Japan	130	142
Korea, Republic of	140	151
Taipei, China	69	64
<i>South Asia</i>		
Bangladesh	70	117
Bhutan	...	91
India	70	109
Nepal	82	113
Pakistan	77	84
Sri Lanka	75	143
<i>Pacific</i>		
Australia	94	74
Fiji Islands	104	115
New Zealand	85	109
Papua New Guinea	90	94

Source: GTZ

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Table 5: Real GDP Growth in Pacific Island Countries (percent)

	2002	2003	2004	2005	2006	2007	2008	2009
Cook Islands	2.6	8.2	4.3	0.0	0.7	9.5	-1.2	-0.1
Fiji	3.2	1.0	5.5	0.6	1.9	-0.5	-0.1	-2.5
Kiribati	6.1	2.3	2.2	3.9	1.9	0.4	-1.1	-0.7
Marshall Islands, Republic of	4.7	3.2	5.9	1.7	0.8	2.3	1.2	...
Micronesia, Federated States of	0.9	2.9	-3.3	-0.5	-1.6	-3.6	-1.0	0.5
Nauru	...	...	...	-14.5	6.3	-27.3	1.0	0.0
Palau	1.7	1.3	7.1	4.7	-2.7	-0.2	-2.0	-3.0
Papua New Guinea	2.0	4.4	0.6	3.9	2.3	7.2	6.7	4.5
Samoa	6.2	3.8	4.2	7.0	2.2	2.3	5.0	-4.9
Solomon Islands	-2.8	6.5	4.9	5.4	6.9	10.7	7.3	-2.2
Tonga	3.3	2.4	1.3	-1.0	0.3	-1.7	2.6	0.4
Tuvalu	5.5	84.8	-1.3	-4.1	6.6	4.9	1.3	1.5
Vanuatu	-4.2	3.7	4.4	5.1	7.2	6.7	6.3	3.3
Average growth	2.1	3.1	3.3	3.1	1.9	2.4	2.5	-0.5
Average Oil Prices	25	29	38	53	64	71	97	62

Source: IMF staff estimates

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