



## Review of Pacific Island Commodity Prices

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### **The conditions of the 1980s**

The 1980s have been a period of adjustment for participants in international trade. In the quarter century ending in 1980, average recorded nominal 'prices' increased by almost 5 per cent per year, when measured by quoted average values of exports and imports expressed in terms of SDRs. (See explanation given for the use of SDRs in 'Current Economic Trends in the South Pacific', in this issue of the Bulletin.) This average value index is not a fully satisfactory price index. It is almost impossible to measure the price equivalents of changes in the quality of goods produced because of statistical difficulties. To the extent that these quality changes are equivalent to price declines, but not reflected in the indexes, any rise in the price index will overstate the 'true' rise in prices. Similarly, any decline will understate the price fall. Quality changes have been particularly marked for manufactured goods, so that the real value of the prices of commodities rose less rapidly than indicated by the movements of quoted price indexes.

However, quality improvements have also been achieved for food and agricultural commodities.

Commodity prices (largely for primary commodities) have varied more than the average prices of all items entering international trade. Moreover, in the short run, supplies of and demands for primary commodities vary more markedly than the supplies of and demands for manufactures. (This difference in variation is particularly marked in the supplies of agricultural products that are influenced by changes in the weather.) On average, commodity prices fell markedly during the period of slow economic growth in 1981 and 1982, but then recovered. By the end of 1985, most of these prices, with some exceptions (for example, vegetable oils, grains, and petroleum) were, on average, back to their 1980 levels.

The marked decline in the average value index in 1986 reflects several factors including the US grain export program and the cumulative effect of the European Common Agricultural Policy. Neither of these has much influence on Pacific island trade. Fiji sells its sugar to the United

Kingdom at EC support prices, and, hence, is not hurt by EC sugar policies. However, the rapidly expanding production of vegetable oils outside the Pacific area lowered prices for Pacific exports without any compensating increases in output (often frustrated by government marketing arrangements), and the decline in copper prices that impinge on Papua New Guinea has a direct impact on the Pacific. These depressive factors were partly offset by the rises in coffee and gold prices. Both of these benefited Papua New Guinea and the gold prices also benefited Fiji.

Even so, the increases from 1955 to 1980 were sufficiently marked to indicate widespread expectations of continuing increases in the money prices of goods entering international trade. This expectation was supported by the widely held beliefs that population growth would outstrip the rise in agricultural production, and that the world's supply of mineral resources, including petroleum, was finite, so that in the last half of the century commodity scarcities would support rising prices.

Since 1980, this index has been remarkably stable. (See charts in 'Current Economic Trends in the South Pacific', this issue of the Bulletin.) In fact, if an allowance of 1 per cent per year is made for the price equivalent effect of quality change, the end-1985 index would have been almost equal to its 1980 average.

Effectively, in the 1980s prices have been stable in international markets. Producers and traders have had to adjust to stable, or even declining, prices. This change in price expectations is reinforced by the disappearance of prospective shortages for many commodities and the emergence of surpluses for many -

petroleum, grains, base metals, vegetable oils, to name only a few - reinforced the change in price expectations. Yet average price stability involves some prices rising, and others declining. The impact of price changes on particular areas or countries will depend on the structure of its export trade. If the price of any product declines in real terms, consumers benefit. If this decline in price arises from increased productivity, the farmers or other producers can also benefit (their 'income terms of trade' improve) with increased output offsetting declining prices. Unfortunately, Pacific island productivity has not improved (the cane/sugar ratio has increased in Fiji, there has been inadequate coconut replanting in Western Samoa, for instance). Hence, declining prices have led to a worsening of real incomes for the region.

### The structure of the Pacific islands exports

Table 1 Exports of selected primary products from Pacific island countries (1981-83 average: \$US million)

|           | Papua<br>New<br>Guinea | Fiji  | Solomon<br>Islands | Vanuatu | Other<br>Oceanic | Total  |
|-----------|------------------------|-------|--------------------|---------|------------------|--------|
| Copper    | 288.8                  | *     | *                  | *       | *                | 288.8  |
| Gold      | 230.7                  | 14.1  | *                  | *       | *                | 244.8  |
| Sugar     | 0.9                    | 132.8 | *                  | *       | *                | 133.8  |
| Coffee    | 109.8                  | *     | *                  | 0.1     | *                | 109.9  |
| Phosphate | *                      | *     | *                  | *       | 106.7            | 106.7  |
| Timber    | 71.1                   | 2.0   | 21.4               | 0.8     | 0.9              | 96.2   |
| Cocoa     | 47.8                   | 0.3   | 1.3                | 1.3     | 1.6              | 52.3   |
| Copra     | 25.0                   | *     | 8.4                | 10.9    | 5.6              | 49.9   |
| Palm oil  | 26.3                   | *     | 7.5                | *       | *                | 33.8   |
| Copra oil | 19.7                   | 8.2   | *                  | 0.1     | 5.0              | 32.9   |
| Tea       | 10.7                   | 0.1   | *                  | *       | *                | 10.8   |
| Rubber    | 3.2                    | *     | *                  | *       | *                | 3.2    |
| Beef      | *                      | *     | *                  | *       | *                | 1.2    |
| Bananas   | *                      | *     | *                  | 1.2     | *                | 1.0    |
| Rice      | *                      | *     | 0.7                | *       | *                | 0.7    |
| Tobacco   | 0.2                    | *     | *                  | *       | *                | 0.2    |
| Sub-total | 834.2                  | 157.5 | 39.3               | 14.4    | 120.8            | 1166.2 |
| Other     | 186.9                  | 135.5 | 22.4               | 14.0    | 27.4             | 386.1  |
| TOTAL     | 1021.1                 | 293.0 | 61.7               | 28.4    | 148.2            | 1552.3 |

\* Zero or less than half the unit shown.

Source: World Bank, Commodity Trade and Price Trends, Johns Hopkins University Press, Washington, 1986.

Exports of gold derived from national sources.

Table 1 outlines the structure of the Pacific area's exports. This structure is highly concentrated in the export of primary commodities, accounting for over three-quarters of the area's total trade. Of these, six commodities - copper, gold, sugar, coffee, phosphate, and timber - account for over 60 per cent of all exports. In any survey of the entire South Pacific area, Papua New Guinea dominates the statistical presentation. Table 2 summarizes the export structure of the islands other than Papua New Guinea.

Table 2 Exports of selected primary products from Pacific islands other than Papua New Guinea (1981-83 average; \$US million)

|                     |     |
|---------------------|-----|
| Sugar               | 134 |
| Phosphate           | 107 |
| Copra and copra oil | 38  |
| Timber              | 25  |
| Gold                | 14  |
| Cocoa               | 5   |
| Beef                | 1   |
| Bananas             | 1   |
| Rice                | 1   |
| SUB-TOTAL           | 326 |
| Other               | 299 |
| Total               | 625 |

Source: Table 1.

Even here, the export structure is highly concentrated with four commodities - sugar, phosphate, coconut products and timber - accounting for nearly 60 per cent of all exports. Almost all the sugar is produced in Fiji, phosphate comes from Nauru and gold is mined only in Fiji. Of the major commodities, only copra and copra oil, fish, timber, and fruit are produced throughout the area. Further, coconut products are the only ones where the Pacific area provides an important part of world output (over 10 per cent), but their total contribution to world vegetable oil seed output is relatively small (less than 4 per cent).

## Individual commodities

**Copper.** Copper prices are now below their 1980 peak levels (Table 3). This price decline may be attributed to a low growth in copper demand resulting from the relatively slow growth of manufacturing in the industrial countries compared to the expansion of the service industries, the substitution of other materials (aluminium, plastics, and recently optical fibres) and material saving technologies such as miniaturization. Since 1980, various uneconomic operations have had to close and production has been increased in the remaining ones. Exchange rate devaluations by major producing countries have tended to lower production costs in real terms.

Table 3 Prices of Pacific islands' major exports (1980 average SDR value = 100)

|      |           | All groups <sup>a</sup> | All commodities <sup>b</sup> | Food <sup>c</sup> | Copper <sup>d</sup> | Gold <sup>d</sup> | Phosphate | Sugar rock <sup>d</sup> | Sugar Free market <sup>d</sup> | Coffee <sup>d</sup> | Copra <sup>d</sup> |
|------|-----------|-------------------------|------------------------------|-------------------|---------------------|-------------------|-----------|-------------------------|--------------------------------|---------------------|--------------------|
| 1980 | June      | 97                      | 98                           | 98                | 100                 | 103               | 97        | 103                     | 91                             | 111                 | 98                 |
|      | December  | 103                     | 102                          | 102               | 100                 | 98                | 103       | 97                      | 109                            | 89                  | 102                |
| 1981 | June      | 111                     | 98                           | 94                | 120                 | 89                | 125       | 56                      | 106                            | 77                  | 107                |
|      | December  | 109                     | 89                           | 86                | 114                 | 83                | 124       | 50                      | 102                            | 122                 | 103                |
| 1982 | June      | 112                     | 87                           | 83                | 98                  | 63                | 113       | 27                      | 103                            | 122                 | 100                |
|      | December  | 108                     | 84                           | 81                | 104                 | 93                | 105       | 23                      | 93                             | 114                 | 91                 |
| 1983 | June      | 108                     | 98                           | 103               | 116                 | 87                | 99        | 43                      | 101                            | 109                 | 131                |
|      | December  | 109                     | 107                          | 108               | 97                  | 80                | 100       | 28                      | 97                             | 124                 | 205                |
| 1984 | June      | 109                     | 104                          | 117               | 96                  | 78                | 109       | 20                      | 96                             | 132                 | 251                |
|      | December  | 112                     | 100                          | 108               | 93                  | 64                | 114       | 13                      | 95                             | 124                 | 172                |
| 1985 | June      | 109                     | 95                           | 98                | 96                  | 66                | 98        | 10                      | 89                             | 124                 | 106                |
|      | December  | 106                     | 100                          | 108               | 98                  | 68                | 89        | 17                      | 94                             | 194                 | 79                 |
| 1986 | June      | ..                      | 84                           | 92                | 93                  | 72                | 83        | 23                      | 92                             | 146                 | 51                 |
|      | September | ..                      | 82                           | 87                | 96                  | 88                | 83        | 16                      | ..                             | 180                 | 51                 |

Sources: <sup>a</sup>IMF, International Financial Statistics; <sup>b</sup>The Economist; <sup>c</sup>International Financial Statistics; <sup>d</sup>Australian Financial Review.

In Papua New Guinea, exports have risen by approximately 40 per cent since 1980. This has more than offset the decline in prices so that the foreign exchange earnings are close to, or above, their 1980 levels. As production from Ok Tedi rises these earnings should increase further.

**Gold.** Gold prices are below their early 1980s levels, but above their 1982 low point and appear set to rise further as the South African situation deteriorates. Papua New Guinea is expanding its gold output, and the current prospects for price increases are encouraging development of new sources. The foreign exchange

value of gold exports from Fiji in the first six months of 1986 were approximately 50 per cent higher than in the same period of 1985, a record year for gold exports.

**Sugar.** The international free market price for sugar is now approximately one-quarter of its 1980 level. However, this price applies only to a relatively small part of world sugar production. Most sugar is sold under long-term or similar contracts - Cuban sugar goes to the USSR, US imports are under quotas that limit foreign purchases to support prices for US producers, European imports are under the Lomé Convention at prices intended to maintain the incomes of domestic producers. The remaining surpluses or deficits of production affect the free market where prices rise and fall markedly from period to period. Fiji sells most of its sugar to the United Kingdom under the Lomé Convention, or on similar long-term contracts. The EC import price has declined since 1980 but its decline is small compared with that of the free market price, that is now approximately one-third of the EC price whereas, in 1980, it was slightly higher. As free market prices appear to be rising slowly, the Fiji export price is likely to be fairly stable.

**Coffee.** As in the late 1970s, the recent movements in coffee prices are bringing windfall gains to Papua New Guinea. Recent price levels appear likely to be maintained for almost a year, but the effects of coffee rust are likely to be felt in a short time, affecting almost a third of Papua New Guinea's population and an important part of its exports (see 'The Coffee Rust Problem in Papua New Guinea', in the first issue of the Bulletin).

Table 4 Numbers of Pacific island countries exporting major commodities

| Commodity   | Number of exporting countries | Exporting countries                                                                                                                                      |
|-------------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copra       | 13                            | Papua New Guinea, Solomon Islands, Western Samoa, New Caledonia, Vanuatu, Tonga, Kiribati, Cook Islands, Pacific Islands, Tuvalu, Guam, Niue, Tokelau    |
| Fish        | 12                            | Papua New Guinea, Fiji, Solomon Islands, Western Samoa, American Samoa, French Polynesia, New Caledonia, Vanuatu, Tonga, Pacific Islands, Kiribati, Guam |
| Timber      | 7                             | Papua New Guinea, Fiji, Solomon Islands, Western Samoa, New Caledonia, Vanuatu, Tonga                                                                    |
| Fruit       | 7                             | Papua New Guinea, Fiji, Western Samoa, French Polynesia, New Caledonia, Tonga, Cook Islands                                                              |
| Coconut oil | 7                             | Papua New Guinea, Fiji, Western Samoa, American Samoa, Tonga, French Polynesia, Pacific Islands                                                          |
| Bananas     | 7                             | Fiji, Western Samoa, French Polynesia, New Caledonia, Vanuatu, Tonga, Cook Islands                                                                       |
| Root crops  | 7                             | Fiji, French Polynesia, Western Samoa, Vanuatu, Tonga, Niue, Cook Islands                                                                                |
| Cocoa       | 6                             | Papua New Guinea, Fiji, Solomon Islands, Western Samoa, Vanuatu, Tonga                                                                                   |
| Coffee      | 4                             | Papua New Guinea, French Polynesia, New Caledonia, Vanuatu                                                                                               |
| Vanilla     | 4                             | Fiji, French Polynesia, New Caledonia, Tonga                                                                                                             |
| Gold        | 3                             | Papua New Guinea, Fiji, Solomon Islands                                                                                                                  |
| Sugar       | 2                             | Fiji, Guam                                                                                                                                               |
| Palm oil    | 2                             | Papua New Guinea, Solomon Islands                                                                                                                        |
| Copper      | 1                             | Papua New Guinea                                                                                                                                         |
| Phosphates  | 1                             | Nauru                                                                                                                                                    |
| Tea         | 1                             | Papua New Guinea                                                                                                                                         |
| Molasses    | 1                             | Fiji                                                                                                                                                     |
| Rubber      | 1                             | Papua New Guinea                                                                                                                                         |
| Beef        | 1                             | Vanuatu                                                                                                                                                  |
| Ginger      | 1                             | Fiji                                                                                                                                                     |
| Rice        | 1                             | Solomon Islands                                                                                                                                          |
| Nickel      | 1                             | New Caledonia                                                                                                                                            |

Source: NCDS, International Economic Data Bank (derived from United Nations trade data)

Copra, coconut oil and palm oil. Vegetable oil prices are among the most volatile of all commodity prices. At present, increasing supplies of palm oil, largely from Malaysia, and of soya beans from Brazil, for example, are pushing prices for vegetable oils and oil nuts down over the medium term. On the other hand, storms and droughts produce sharp price increases over the short term. Prices for fats and oils increased dramatically in 1983-84 as a result of bad weather conditions in Malaysia. Sharp increases in production from the second half of 1984 as well as a slowing in demand have led to an

equally dramatic decline in prices in 1986. Again, bad weather in Sri Lanka and the soya bean producing areas of the United States, and a typhoon in the Philippines raised copra prices by approximately 50 per cent in October 1986.

The rapid expansion in palm oil cultivation reflects the success of breeders in developing hybrids with greatly increased yields. The oil palm produces a higher yield of oil per unit of cultivated area than any other oil crop. Further, marked increases are expected in the production of copra oil, rape-seed oil and sunflower oil. World stocks of oils and fats are projected to reach record levels by the end of the season. In brief, the world is afloat on vegetable oils.

The entry of Spain and Portugal into the European Community is likely to result in the EC extending protection to oilseed and vegetable oil industries. This will inevitably depress the price of copra, copra oil and palm oil. Furthermore, consumption in the industrialized countries is near saturation point even at current low prices. Developing countries already accounted for a substantial amount of the consumption growth in the 1980s.

Phosphates. Over the long term, the price of phosphates is largely determined by how efficiently phosphate is used and on how profitable agriculture is. In the short run, the price of internationally traded phosphate is primarily determined by the prices that the Moroccan Office Cherifien des Phosphates can negotiate for its export contracts. These tend to remain fixed for fairly long periods. The decline in phosphate prices since their 1981 peak reflects an increase in total supplies of fertilizers and a continuing increase in the efficient use of fertilizers. The

1986 decline largely reflects the drop in the exchange value of the dollar as most contracts are denominated in US dollars.

Timber. Tropical timber prices are lower than in 1980, largely as a result of a more rapid growth in supply, particularly from developing countries, than in demand. However, since 1985, prices have tended to rise and Pacific countries' export volumes have also risen.

Cocoa. While cocoa prices are currently below their 1980 and 1984 levels, they are markedly higher than in 1982 when abundant harvests and a world recession reduced world demand for all products and prices fell by approximately one-third. However, the effects of recent price increases are more than offset by the decline in Papua New Guinea's production, combined with increased consumption in countries like Western Samoa, so that Pacific cocoa export incomes are declining.

Tea. Tea prices are below their 1984 peak, but close to their 1980 level, and tending to rise in close alliance with the price of their main substitute, coffee.

Rubber. Rubber prices are well below their 1980 level and lower than the slight peak in 1983 when decreased output produced a moderate upswing. The prices of 1985-86, approximately 20 per cent lower than in 1983, largely reflect the decline in world output of automobiles. New tyres are the largest absorber of natural rubber production.

Beef. World beef prices are well below their 1980-83 levels, largely because production costs (primarily the prices of grains and other foodstocks) are much lower than they were in the early 1980s.

Table 5 Number of commodities exported by Pacific island countries

| Country          | Number of major commodities | Commodities                                                                                             |
|------------------|-----------------------------|---------------------------------------------------------------------------------------------------------|
| Papua New Guinea | 11                          | Copra, gold, coffee, timber, coconut products, cocoa, palm oil, rubber, fruit, fish                     |
| Fiji             | 11                          | Gold, sugar and molasses, timber, coconut oil, cocoa, bananas, vanilla, fruit, fish, root crops, ginger |
| New Caledonia    | 8                           | Timber, coffee, copra, bananas, nickel, vanilla, fruit, fish                                            |
| Solomon Islands  | 7                           | Copra, fish, timber, palm oil, gold, cocoa, rice                                                        |
| Vanuatu          | 7                           | Coffee, timber, copra, cocoa, beef, fish, bananas                                                       |
| Western Samoa    | 7                           | Coconut products, timber, cocoa, bananas, fruit, fish, root crops                                       |
| French Polynesia | 7                           | Coffee, coconut oil, bananas, vanilla, fruit, fish, root crops                                          |
| Tonga            | 6                           | Coconut products, fish, vanilla, cocoa, fruit, root crops                                               |
| Cook Islands     | 4                           | Copra, bananas, fruit, root crops                                                                       |
| Guam             | 3                           | Sugar, copra, fish                                                                                      |
| Kiribati         | 2                           | Fish, copra                                                                                             |
| Niue             | 2                           | Copra, root crops                                                                                       |
| Pacific Islands  | 2                           | Coconut products, fish                                                                                  |
| American Samoa   | 2                           | Fish, coconut oil                                                                                       |
| Tuvalu           | 1                           | Copra                                                                                                   |
| Nauru            | 1                           | Phosphates                                                                                              |
| Tokelau          | 1                           | Copra                                                                                                   |

Source: NCDS, International Economic Data Bank (derived from United Nations trade data).

**Bananas.** It is difficult to obtain meaningful data on banana prices because the fruit is so perishable and this inhibits the development of an international market, and most

shipments are organized by transnational companies at transfer prices. The available evidence indicates that perishability and the incidence of disease and natural disaster on production result in wide fluctuations in price. Prices reached a peak in early 1985 and, after some decline, rose again in early 1986.

**Rice.** Grain prices are at the lowest level in real terms in at least 50 years. The real prices of rice have declined 58 per cent relative to the highs reached in 1981. World stocks of grain are estimated to equal 20 per cent of annual utilization, the highest level since 1968 and about equal to the 1960-64 average. Because rice prices are so low and not expected to rise markedly in the near future, the Solomon Islands authorities are reconsidering their rice development program.

**Tobacco.** Between 1980 and 1983, tobacco prices rose steadily, reaching close to a plateau in 1983-85 when record levels were achieved. In early 1986 prices declined to their 1981-82 levels which were, however, almost 20 per cent higher than in 1980.