Indexation: Some Problems

Angus Hone

Introduction

The dispute between development economists and economic historians on the long-term "terms of trade" from the middle of the 19th century, from the 1890's, from 1912, 1931 or 1950-52 has been revived by the events of the 1973-1974 Commodities Boom. By any standard, prices at the end of 1973 of key primary commodity exports had fallen from 1950-52 levels in *real terms,* although the fall from 1950-1952 levels had been only approximately ten to 12 per cent and the fall from 1953 had been minimal. In 1973 and 1974 prices of petroleum and non-petroleum primary products rose sharply and the World Bank terms of trade index briefly exceeded 100 in the period March-June, 1974, (for non-petroleum primary products). The onset of the 1974-75 global recession has again taken the index of primary product prices back to 88-90 on a 1950-52 base and the overall "terms of trade" of important *non-petroleum producers and exporters* has worsened even more dramatically. (I calculated in early 1975 that the Indian "terms of trade" declined from 100 in December, 1973, to around 65 in December, 1974.)

The basic division of the world into "Gainers" and "Losers" was made in an article in the *ODI Review,* 1(1), 1974 (pp. 24-37) and it was already clear that South Asia and East and West Africa (excluding Nigera) were likely to be the biggest losers over the period 1974-1976.

The losses as a result of the world recession (in terms of reduced prices for primary product exports) have been compounded by sharply higher food prices and massive increases in the price of crude oil and refined petroleum products. The sharp price increases between July/September, 1975 and February 1976, in key export products such as coffee, rubber, cotton, cocoa and tropical hardwood timber ahead of OECD revival in output may suggest that the 1976-78 recovery may see another upsurge in the worst of affected products such as copper, oilseeds, sugar etc., but the damage of 1973-1975 price and volume fluctuations to a number of developing countries is widely recognised.

Professor Alasdair MacBean in *Export Instability and Economic Growth* (London 1967) was examining the relatively minor fluctuations of the 1950's and 1960's and concluded that the damage caused by price fluctuations had been exaggerated, although his findings were disputed by Alfred Maizels in his review article in the *American Economic Review,* December, 1967. However, the price instability in 1973-75 was the most violent since the Korean War (1950-52) and the price fluctuation in copper, tropical hardwoods, cotton and rubber, combined with the severe impact of increased oil and fertilizer prices, has crippled the 1975-77 development programmes of a number of South Asian and African developing countries. Certain specific price fluctuations in a limited group of commodities have frustrated and will continue to frustrate rational economic planning and foreign exchange budgeting in a limited number of important developing countries.

Overall, the 1952/1972 period of stagnation, the 1973/1974 boom and the 1974/1975 slump in commodity prices have reinforced demands from the developing countries for a system which links the prices of the bundle of primary products (raw materials and semi-finished articles) that they export to their bundle of imports (largely manufacturing inputs and finished, intermediate and capital goods).

Alternative systems of indexation

The problem of indexation and export earning stabilisation schemes (linking primary product exports to manufactured goods imports) lies essentially in the variety in the trade structure of the developing world. There are food exporters such as Argentina, Uruguay, Thailand, Burma and Parkistan and food importers such as Nigeria, Ghana, India and the countries of North Africa and West Asia. Should the basket of commodities include foodgrains, sugar, edible oils etc.?

Any basket of commodities including foodstuffs would cause grave embarrassment to the Asian and African food importers, who are unlikely to be able to rely on a repetition of the excellent monsoons, which have produced an excellent 1975 summer harvest throughout Asia. It would also have the severe disadvantage of giving disproportionate diplomatic power to the temperate zone food exporters: the United States, Canada, Australia and also the European Economic Community (given the subsidised power of the EEC's common Agricultural Policy). The United States has spent 1975 examining the possible uses of the food weapon against the oil weapon and there is

little doubt that further poor harvests in 1977 and 1978 will see serious attempts to link food prices to oil prices as part of the overall negotiating framework.

The price of oil has been suggested as a possible negotiating base for an international agreement on indexation, but although the OPEC countries do include a number of members with a large population base (Indonesia, Nigeria, Iran, Algeria and Iraq), and although a barrel of oil could be linked to the *ex-post* price inflator for the United Nations index of manufactured export prices, the exercise would do nothing to guarantee the purchasing power of the non-oil developing countries, who in the event of 10-15 per cent global inflation would be forced to pay 10-15 per cent more for petroleum imports *and* 10-15 per cent more for their imports of manufactured goods from developed countries.

Any index for food and oil would have to take into account the important number of developing countries who now export manufactured goods but who remain basically in deficit in either oil or food. In Latin America this includes Brazil, Argentina and Mexico, in the Mediterranean, Israel and Yugoslavia, and in Asia, Hong Kong, Korea, Taiwan, Singapore, India and Pakistan. Only Mexico from this group of manufactured goods exporters (with $9-10 billion in 1975 value of processed and manufactured exports) is self-sufficient in both oil and food. Argentina is basically in balance, but the small Far East manufacturing processing countries are totally dependant on imports for important quantities of food and oil.

Exporters of food, oil and manufactured goods represent interests within the developing world which are likely to be very difficult to reconcile with the basic Latin American, South Asian and East and West African group of countries which are numerically dominant within the Group of 77. These countries are *importers* of food (in limited quantities), oil and refined petroleum products *and* a wide range of manufactured goods (largely intermediate and capital goods) and exporters of an important range of beverages (coffee, cocoa and tea), oilseeds, fibres (cotton, jute and sisal), metals and mineral ores (copper, tin, bauxite and iron ore) and industrial raw materials (rubber, leather, tropical hardwood, phosphates).

The problem of indexation on closer examination usually turns on the short and medium-term performance of the most important of these products (by value) such as coffee, copper, cotton, oilseeds and rubber, or on the dismal long-run relative price decline of products such as rubber, tea, jute, sisal and leather, which have been very badly affected by changing consumer tastes, inadequate marketing and promotion and the impact of technical progress which economises on use or provides price-competitive synthetics with superior technical qualities.

The indexation of the major group of items (coffee, copper etc.) would be exceptionally difficult to arange even if an "agreed import basket" of food, petroleum and manufactured goods could be agreed. Each country would have vastly different *import weights and export weights.* Any fixed ratio would risk technical substitution (aluminium for copper, tea for coffee and synthetic fibres for cotton) and heavy over-production by those countries with low production costs for raw material exports relative to their basket of imports. In the case of products facing synthetic competition, notably rubber, cotton, jute, sisal and leather etc., indexation will solve no problems. Their price levels and share of total final demand in any technical use is determined by price, availability and technical qualities in competition with synthetic materials. (Marketing and promotion can make a difference at the margin, but only at the margin.) These industrial raw materials are only likely to maintain their export volume by remaining price-competitive with synthetic materials and any index-linking to general manufactures (measured by UN developed country export prices) would be irrelevant and disastrous.

Conclusion

A very large number of developing countries are largely importers of food, oil and manufactured goods and exporters of beverages, metals and minerals and industrial raw materials. A number of their exports have suffered sharp short-term price falls, or long-term relative price decline when measured against the price of manufactured imports. The reasons for these falls are linked to the 1974/75 global recession in the short term or the competition of a wide range of synthetic materials and overproduction in the longer term. Indexation cannot be a solution for the non-oil developing countries of Asia, Africa and parts of Latin America unless oil producers through OPEC, temperate zone food exporters and a miscellany of developed and developing country exporters of manufactured goods can agree on a basket of imports to be used against an export basket of beverages, metals, minerals and industrial raw materials. The chances of this are remote, but the gains of an oil/manufactured imports link (as proposed by Iran and other APEC members) or an oil and food/manufactured goods

link would be worthless for countries which are basically short of food and dependant on oil imports.

The interests of oil, food and manufactured goods developing country exporters are too diverse to be reconciled with the interests of the numerical bulk of the developing world within an overall framework of indexation. However, the possibilities of a series of individual commodity pacts negotiated within the framework of the UNCTAD integrated programme (following the International Tin Agreement) is likely to have a better chance of success provided, firstly that the buffer stocks are adequately financed and second, that the buying and selling prices for each commodity are realistically set in relation to production costs and medium-term supply and demand conditions in world markets.

Indexation is far too complicated as a global solution to commodity problems, but as a measure to hold the rise of the price of oil to 8-12 per cent per year it has a certain acceptability to OPEC exporters and OECD importers, but the price of arms and military aircraft will be impossible to index and the non-oil developing world will be forced to pay more for oil and more for manufactured goods.

Indexation cannot provide price or earning stability for the largest number of countries in the developing world. Commodity pacts linked to buffer stocks will not either insulate their earnings from a global recession of 1974/75 dimensions nor protect them from new, low-cost synthetic substitutes thrown up by technical progress, but they are likely to be more effective than further talks about indexation.