

**END OF PROJECT RESEARCH REPORT**

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# **SUSTAINABLE GROWTH: COMMODITIES AND UPGRADING**

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## BACKGROUND AND OBJECTIVES

Many developing countries have participated actively in the global economy as producers of primary products. The problem they have encountered with this form of global insertion has been that the prices of these primary products have:

- ❑ been volatile
- ❑ experienced falling terms of trade.

Consequently, the widely accepted policy prescription has been for these countries to diversify out of primary products into industrial products in general, and manufactured products in particular. However, in recent years this latter strategy has been subject to significant challenge. Most importantly, the threat has been one of growing competition in manufactured products, particularly since China's accession into the global economy in the mid-1980s. Consequently the terms of trade of developing country manufactured trade fell by 20% between 1985 and 1995.

But at the same time as this industrial route to development has become more problematic, there has been growing awareness that many primary products may not be as undifferentiated as is commonly thought. New Zealand producers have managed to segment their markets and to develop and brand organic and gold-coloured fruit; Costa Rican banana exporters are striving to achieve similar differentiation, and Brazilian timber exporters are branding and positioning eucalyptus as a new hardwood in global furniture markets. So, perhaps there are **prospects** for other primary product producers to examine whether there are prospects for differentiating their primary materials, and in so doing, to enhance producer incomes?

This research project has explored the prospects for differentiating coffee. It is based on the fact that coffee, although seemingly undifferentiated, is in fact characterised by enormous variation, as least as much as in the case of wine. Global coffee markets are becoming increasingly discriminating (as one major retail buyer put it, "coffee is now where wine was 10 years back").

Three key objectives of this project have been:

1. to determine the extent to which the variation in the natural product has been accompanied by the growing segmentation of final product markets
2. if this has occurred, who has gained from this growing segmentation, and
3. can policies be identified which might assist producers to obtain a larger share of these product rents?

## METHODOLOGY

Four primary methods have been used. The first involves a review of the literature, encompassing not just the classic material on falling terms of trade (Singer, 1950;

Prebisch 1950), but also the recent literature which is beginning to apply value chain analysis to primary materials, notably for coffee (Talbot, 1997a and 1997b), for fish (Gibbon, 2001), for fresh fruit and vegetables (Dolan and Humphrey, 2000) and for deciduous canned fruit (Kaplan and Kaplinsky, 1998). This literature has been particularly useful in identifying the key role played by global buyers, and also in suggesting a framework to analyse the distribution of gains from the global coffee value chain.

Arising from this review of the literature, we have made extensive use of the database provided by the International Coffee Organisation (ICO), in analysing the terms of trade of coffee, the growing dispersion of coffee prices, and the inter-country and intra-value chain distribution of returns. We have also accessed the US Census Bureau's Census of Manufactures in an attempt to calculate the functional distribution of income.

A third methodological approach has been to interview key respondents in this sector. We have visited and interviewed one of the world's largest coffee roasters, one of the UK largest coffee houses, and the UK supermarket with the largest market share in coffee. In addition we have also had discussions with the President of the Specialty Coffee Association of Europe, and with numerous officials at the ICO. Finally, and this is an underdeveloped part of our research, we have had preliminary discussions with policy makers, in UNCTAD and at a senior level in the ICO.

## **KEY FINDINGS**

### ***Terms of trade performance***

There are essentially two families of coffee – higher quality arabicas, and lower quality robustas. Latin American economies dominate in arabicas; Vietnam, Indonesia and African producers tend to specialise in robustas. Over the past decade, the biggest change in country market shares has been the rise in Vietnamese production, although Colombia has lost significant market share. Although only one African economy (Uganda) features amongst the top ten exporters, a number of African countries are particularly dependent on coffee as a source of export earnings. For example, coffee represents 76 percent of Burundi's exports and more than 60 percent of Ethiopian, Rwandan and Ugandan exports. The lower the level of per capita income, the more dependent producing economies are on coffee exports.

Relatively slow growth rates of consumption in the context of low barriers to entry and new entrants (such as Vietnam) have led to long-term pressures on coffee prices. Real coffee prices (deflated by the developed market economy export index) fell sharply, to a level in 2000 which was around half that of the mid 1960s (and around 20 percent of peak market values in 1978). In May 2001, the global coffee price is less than \$0.50/lb, which is both below the prices ruling in 1963 (from when time-series data are available) and, more importantly, significantly below production costs.

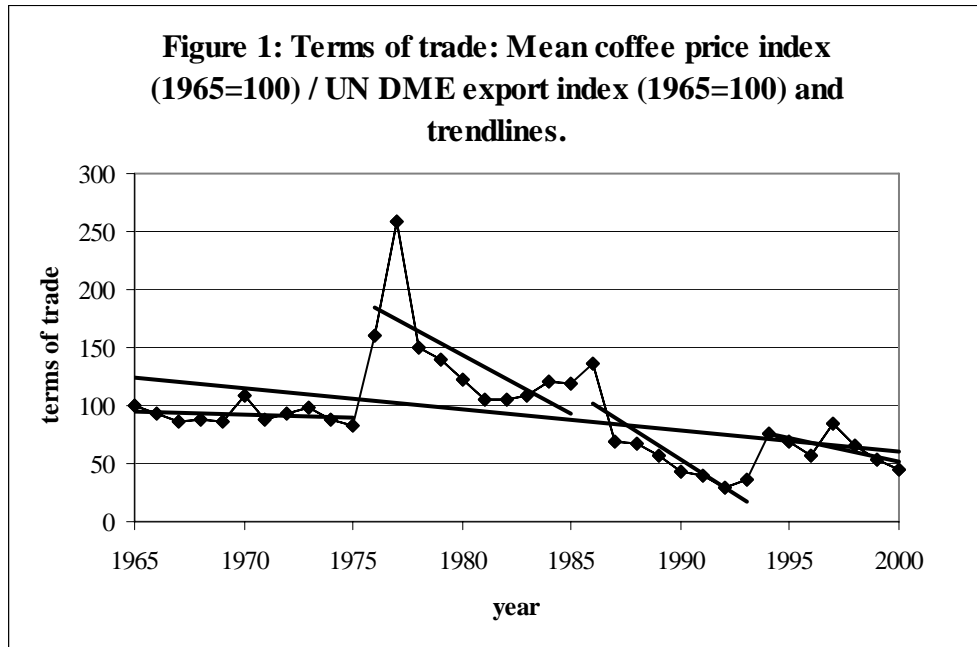
The impact of these declining prices on producing countries has been severe, especially where coffee comprises a major share of export receipts. For example, falling prices over the past two years have cost Uganda almost 50 percent of the HIPC

debt relief package (Oxfam, 2001). The impact on particular regions which specialise in coffee, such as the slopes of Mount Kenya and Kilimanjaro and the Chiapas region in Mexico have led not only to household poverty, but also to emigration and urban squalor.

In the context of these declining prices, coffee producers and importers have made a number of attempts to establish cartels, to limit supply into the final market and to drive up prices. The key **development** was the development of a quota system by the ICO in 1963. This worked well for a decade, but in the face of low barriers to entry in the industry, these quotas were increasingly circumvented, and the system finally collapsed when the US pulled out in 1989. A renewed attempt was made to re-establish a quota system in 1994, but this worked poorly and had little impact on prices.

Upward pressure on prices was not confined to quota restrictions, and nature has also played an occasional role. Most significant was the frost in Brazil in 1975. The severe Brazilian drought in 1985 had a similar, albeit less marked effect on prices, as did further frosts in the mid-1990s.

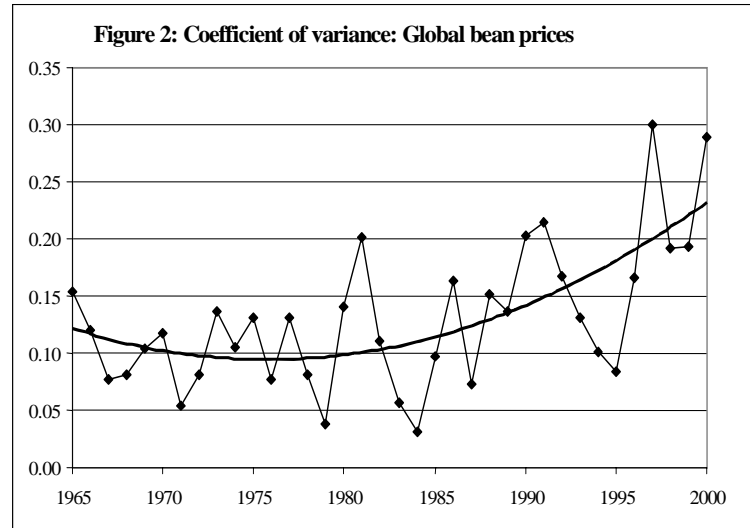
Despite these occasional price-rising events – resulting from both human-made and environmental interventions – there has been a systematic long term decline in coffee's terms of trade. This shows up both in relation to the whole period (1965-2000) and in each of the sub-periods which follow from each of the exogenous shocks which led to temporary hikes in coffee prices (Figure 1).



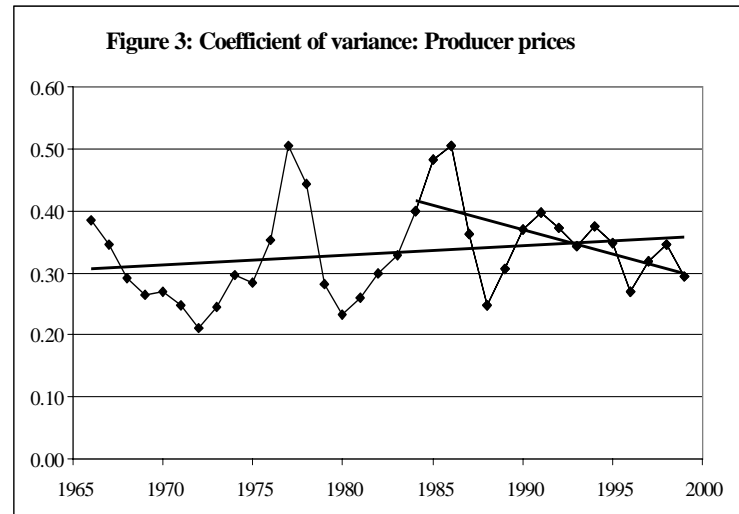
*Has the variation in the natural product been accompanied by the growing segmentation of final product markets?*

Space constraints in this final report limit our reporting of data analysis. However the key findings are that:

- ❑ There is growing product differentiation in final markets, associated with a widening spread of final product prices
- ❑ This growing final product price variation shows up in the price of different coffee varieties traded on global markets (Figure 2)



- ❑ However, none of this price variation is finding its way through to coffee producers (Figure 3). In fact, if anything the degree of variation at the farm-gate level is declining.



***Who has gained from this growing segmentation?***

An analysis of the spreading of gains in the coffee value chain distinguishes between

- ❑ different links in the chain
- ❑ different countries (producing and consuming)
- ❑ different classes (employers and employees)

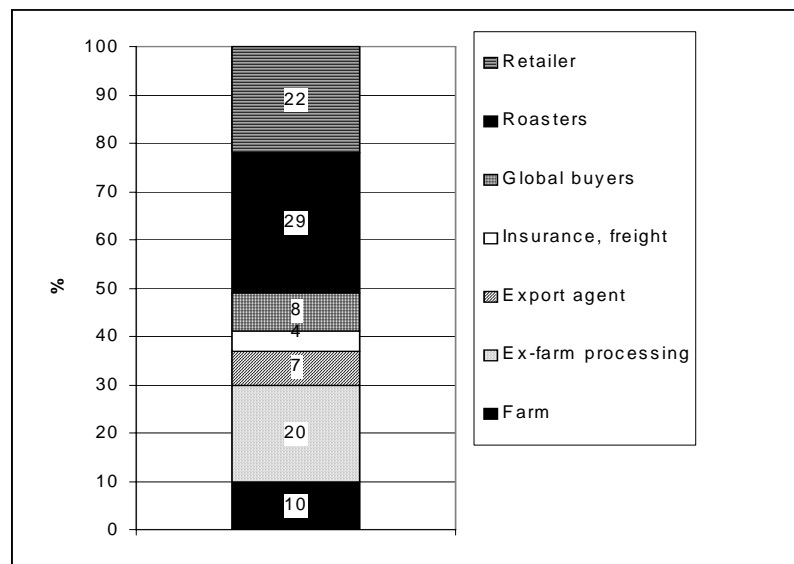
- different types of producers (large and small farms and firms)

Space constraints in this Final Report limit our discussion to the first two of these:

#### *Different links in the value chain*

Seven major links in the coffee value chain can be identified – these are the farmers, farm-level processing, export agents, international transport, global coffee traders, coffee roasters and the retailers. (We have excluded from this the coffee-house sector). Figure 4 displays how the share of final retail price was distributed between these links in the chain in the mid-1990s. From this data it is evident that the roasters receive almost one third of the final retail price. The post-farm processors and the retailers receive about 20 percent each, and the balance is spread between other links in the chain. The farm activity itself only accounted for 10 percent of total product price, although this has fallen to only 7 percent in 2001 (Oxfam, 2001).

Figure 4. Share of final sales value accruing to different links in the coffee value chain



But this share of total sales value does not tell us anything about the relative incomes which these returns support. For example, although the numbers of people involved in farming exceed 25m, they only receive 10 percent or less of total returns. By contrast a much fewer number will be involved in the firms buying coffee at a global scale, yet they receive almost the same share. Roasters may account for almost one-third of final product prices, but their operations involve very capital-intensive technologies and they invest significant sums in marketing. Retailers, too, absorb a high proportion of final product prices, yet have extensive working capital costs, invest heavily in marketing and are labour-intensive in nature.

Despite these limitations it is possible to draw the following conclusions:

- ❑ Incomes are higher in the importing, roasting and retailing links than they are in the growing and coffee processing stages, even if account is taken of different costs of living (for example, by using PPP \$ rates).
- ❑ The profit rates of entrepreneurs in these activities are more difficult to assess. There is a widespread prejudice that retailers appropriate most of the surplus which is generated in the chain. However, a recent UK Monopolies and Mergers Commission Report on the retail sector (and an earlier report on instant coffee) distinguished between the (high) absolute levels of profit earned (on very large scale operations) and their rate of profit (which was not high, due to the competitiveness of this sector).
- ❑ The unknown factor is the profitability of global coffee traders. Here the roasters and retailers both believe that profit rates are abnormally high.

*Distribution between different countries*

A second distributional outcome is that which emerges between different countries, in this case developing countries who export coffee beans, and the high-income countries who import and roast the beans. Figure 5 shows the inter-country distribution of coffee proceeds from which it is evident that since 1985 a growing share of total incomes in this chain have accrued to economic agents in the importing countries. A particularly striking aspect of this data is that the margins which formerly went to intermediaries in the producing countries – notably marketing boards – have been eroded. In large part this follows from the pressure emanating from multilateral and bilateral agencies designed to eliminate what were seen to be surplus-extracting and parasitic intermediaries. However, not only does recent evidence suggest that growers are suffering from the absence of the extension which these marketing boards once provided (Gibbon, 2001), but more importantly that instead of their share having gone to the producers, it has almost entirely been appropriated by chain-participants residing in the high-income consuming countries.



A major reason for the inter-country distributional outcome observed in Figure 5 is the producing structure in global coffee production. Seventy percent of global coffee is grown on farms of less than 5 hectares. The abolition of the marketing boards proposed (or perhaps, more accurately, imposed) by multilateral agencies on developing countries through structural adjustment programmes has meant that producers sell atomistically into commodity markets. These atomistic producers lack the capacity to combine (as do their governments, although the reasons for this are more problematic).

Contrast this with the market power at the importing end of the value chain. The top five importers account for over 40 percent of total global trade, and the top 10 for more than 60 percent. Even greater levels of concentration are found at the roasting link in the chain, as well as in the retailing link. And in the UK coffee house market, Starbucks and Costa Coffee account for 43 percent of the total market. The pattern in Europe is not dissimilar. In France and Italy the top five roasting companies account for 90 percent and 70 percent of their respective markets, and for Europe as a whole, the top five companies produced 52 percent of the coffee in 1995, increasing to 58 percent three years later .

***Can policies be identified which might assist producers to obtain a larger share of these product rents?***

The current policy agenda, discussed at the May 2001 meeting of the World Coffee Council, is to find ways of restricting the supply of coffee beans onto to the global market, either by physically destroying crops (Oxfam, 2001), or by limiting production. It is unlikely that either of these initiatives will prove to be successful.

However, our research suggests a different (and perhaps complementary) policy agenda. We strongly believe, as do virtually all participants in the industry, that coffee consumption will become increasingly discerning and that price spreads will continue



to grow (as they have in wine and mineral water). The key issue is who gains from this price differentiation. Here there are two alternatives:

- If “quality” coffee is defined by brands and blends, then it is almost certain that the beneficiaries will be the large TNC roasters.
- If “quality” is defined by location of origin – where factors such as cultivars, climate, soil and farming practices play the major role in defining taste – then it is more likely that growers (“estate coffees”) will gain. If this is the case, there will of course be a growing role for agricultural extension services.

Left to market forces alone, it is likely that the first of these outcomes will result. But public policy has a role to play in helping to educate consumers to recognise that location of origin is in fact the primary determinant of taste, and therefore of quality. We have discussed this issue with some stakeholders and believe that it is possible to put together a “coalition” which includes growing interests (through the ICO), retail chains (a major UK chain is very interested in promoting location of origin) and coffee houses (who have much to gain from growing customer sophistication). Both UNCTAD and ICO would like to play a role in such an initiative, but we believe that so too might bilateral agencies such as DFID.

## **DISSEMINATION**

Our dissemination activities comprise:

- ❑ a press release issued at the time of the WCC meeting
- ❑ an article to be published in the forthcoming edition of the IDS Bulletin Special Issue on “The Value of Value Chains”
- ❑ an IDS Working Paper
- ❑ one or more journal articles.

However, we believe that the policy implications which flow from this research project deserve much more detailed consideration. We propose that funds be made available to present these ideas to a range of stakeholders, including DFID itself, the ICO and UNCTAD and, if these meetings are successful, that a more ambitious policy initiative be launched.

## **A CAVEAT**

This has been a limited project conducted in a short time-frame. Consequently not only are important dissemination activities not currently planned, but some sets of analysis remain incomplete. The work we have undertaken on the ICO database has shown the growing differentiation of prices at the importing and consuming end of the chain, but not at the producing end. The roasters and retailers believe that the failure to transmit these price premia to growers is due in large part to the role played by global coffee trading houses. But little is known of their activities.<sup>1</sup> This is an urgent research hole to fill, and not only has wider implications for other primary commodities, but also for a successful policy outcome to this research project.

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<sup>1</sup> “Surprisingly, policymakers, economists, and consumers seem to remain largely unaware of these [trading] companies, even though they are often bigger than developing economies and play a determinant role in most commodity transactions worldwide” (Morisset, 1998: 520).

### Bibliography

- Dolan, K. C. and J. Humphrey (2000), "Value chains and upgrading: The impact of UK retailers on the fresh fruit and vegetables industry in Africa", Journal of Development Studies, Vol. 37, No.2, pp. 147-176.
- Gibbon, P. (2001), "Upgrading primary production: A Global Commodity Chain Approach", World Development, Vol. 29, No. 2, pp 345-364.
- Kaplan, D. E. and R. Kaplinsky (1998), "Trade and Industrial Policy on an Uneven Playing Field: The Case of the Deciduous Fruit Canning Industry in South Africa", World Development, Vol. 27, No.10, pp. 1787-1802.
- Oxfam (2001), Bitter Coffee: How the Poor are Paying for the Slump in Coffee Prices".
- Prebisch, R. (1950), "The Economic Development of Latin America and Its Principal Problems", Economic Bulletin for Latin America 7, N. York: United Nations.
- Singer H W (1950), "The Distribution of Gains between Investing and Borrowing Countries", American Economic Review, 15, pp. 473-85.
- Talbot, J. M. (1997a) The struggle for control of a commodity chain: Instant coffee from Latin America. *Latin American Research Review* 32 (2), pp. 117-135.
- Talbot, J. M. (1997b) Where does your coffee dollar go?: The division of income and surplus along the coffee commodity chain. *Studies in Comparative International Development* 32 (1), pp. 56-91.