

1 Introduction

Central to the development challenge is the search for sustainable growth, for without this, there is little prospect of meeting the physical, social and emotional needs of the population. But growth in itself is not sufficient – if it is unevenly distributed, then there may be little increase in welfare.

Recent experience in the global economy highlights the importance of these growth and distributional issues. On the back of high growth rates associated with globalisation, 670m. people around the world moved out of conditions of 'absolute poverty' between 1990 and 1998. That is, their incomes exceeded \$1 per day (measured in 1985 purchasing-power-parity consumption standards, which take account of living costs in different countries). In historical terms this represents a major advance in human welfare. But there has also been a downside to globalisation. Despite the rise in living standards of many, the numbers continuing to live in absolute poverty remain stubbornly large and unchanged, at something over 1.2bn. Moreover, there is overwhelming evidence that patterns of income distribution within and between countries have become significantly more unequal.¹

There are essentially two (non-contradictory) ways of meeting these poverty-related concerns. The first is through *redistribution*, intra-nationally and internationally. Recent experience in Europe illustrates how important this can be, since this is one of the few regions where the distribution of consumption standards has not become markedly more unequal in recent decades, despite a worsening in the patterns with which incomes have been distributed. This follows directly from social welfare programmes introduced by European governments (Förster and Pearson 2000). The second path is more direct, and involves *enhancing the incomes earned by the poor*.

From the perspective of poor countries, there is little evidence that the redistributive path has been pursued successfully. In terms of the international redistribution of income, the last two decades have seen a weakening of income transfers. And very few developing countries have the political and fiscal capacity to introduce structured programmes of intra-national income transfer.

Who Gains from Product Rents as the Coffee Market Becomes More Differentiated?

A Value-chain Analysis

**Robert Fitter
and Raphael Kaplinsky***

IDS Bulletin Vol 32 No 3 2001

Hence, the key challenge is to take steps to enhance directly the income-earning capacities of poor countries and poor groups in poor countries.

Globalisation and integration into global product markets have become major elements in this poverty-focused growth agenda. The East Asian economies and China have illustrated how international specialisation can provide for scale economies and help producers and economies enter a virtuous circle of capability building. It has been largely through this that so many people have been lifted out of absolute poverty. If the 'losers' in the globalisation era had been confined to those who have been excluded from global processes, then the policy conclusions would have been clear – enter the global economy as rapidly as possible and take advantage of these economies of specialisation. However, the 'losers' in recent decades include those producers who have participated in the global economy, but who have done so in ineffective ways. The key challenge thus confronting policy design and implementation is not *whether* to participate in global processes, but *how* to do so in ways that provide for sustainable income growth.

This is of course not a new agenda. The way in which developing countries and poor producers have entered the global economy, and the pattern of their global insertion, have long been a focus of concern. It has now been shown conclusively that their adopted paths of specialisation in primary materials have been a major cause (and perhaps even a consequence) of their low levels of income. This is because the terms of trade of these primary products – the prices which they realise compared to the prices paid for developing country manufactured imports – have systematically declined.

The observation of declining terms of trade and the recognition of what this implied for developing economies goes back to the 1950s (Prebisch 1950; Singer 1950). From this it was concluded that poor countries and poor producers should shift out of the production of primary materials, industrialise and move into the production of manufactures. Manufactures had characteristically been produced by high-income countries and were the flip side of the declining terms of trade of primary product producers. From this it was widely concluded that

developing countries should industrialise and become producers and exporters of manufactures.

For early entrants, this strategy proved to be highly successful. The newly industrialising economies of East Asia began their transition during the 1960s, and by the turn of the millennium had achieved high standards of living on the back of a sustained push towards industrial development. But by the early 1990s, it was beginning to become evident that this path was not without its dangers. In the same way that primary producers had suffered from low barriers to entry, global overproduction and declining terms of trade, so similar trends were beginning to become evident in many manufacturing sectors. The entry of China into global markets – particularly in the manufacturing sector – was particularly important here. Between 1985, when China first became a major exporter, and 1995, the terms of trade of developing-country exports of manufactures declined by 20 per cent (Wood 1997).² So, even manufacturing is no longer a protected domain – indeed the speed of its declining terms of trade is rapid by comparative standards.

Two major linked conclusions can be drawn from this. The first is fairly obvious and arises directly from the observation of the declining terms of trade of manufactures. It is that the concept of a 'commodity' applies to a factor or a product (both goods and services) where there are low barriers to entry, which is subject to intense competition, and hence to declining terms of trade. Because these characteristics were in the past associated uniquely with primary products, they were often characterised as 'commodities'. Yet unskilled labour and many manufactures now exhibit the same tendencies and hence can also be seen as commodities (Kaplinsky 1993). The development challenge is thus not to move out of commodities defined as primary products, but out of all activities which are subject to sustained falls in their terms of trade.

The second conclusion relates to the nature and importance of barriers to entry as a factor protecting producers and products from 'commoditisation'. These can be created by attempts to 'fix the market' (for example, through producer or buyer cartels). But barriers can also be created through a process of upgrading. This

Box 1: Reconfiguring the kiwi fruit

The kiwi fruit originated in China as the Chinese Gooseberry, but as its name suggests, its commercialisation on a global scale was achieved by New Zealand growers who introduced the new name in 1959. It is reasonably easy to grow, and competition has expanded. By the early 1990s the largest exporter was Italy, whose production grew to 262,000m.t in 1998 (versus 240,000m.t in New Zealand) and to 330,000m.t in 2000. Chilean exporters were also entering the market on a global scale, with production growing to 156,000m.t in 1998. Not surprisingly, global prices have been on the decline. Given that it is New Zealand's single largest horticultural export crop – with annual sales of \$US225m. – this represented a real challenge for New Zealand growers.

Their response was to develop:

- a new, gold-coloured variety, ZESPRI™ GOLD. Marketing began in Asia in 1998, emphasising the fruit's health properties, linking it to roller-board displays in large supermarkets and aerobics in smaller stores. The New Zealand Marketing Board has copyrighted the variety, and organised contract growing in four Italian cooperatives.
- new varieties of organic kiwi fruit (also copyrighted as ZESPRI™ GREEN) which are being marketed at a premium price, with exports doubling in 1999.

'It's an excellent product: after 25 years selling traditional green you don't know how exciting it is to sell something different'. (European marketing manager)

Source: *Financial Times*, 17 August 2000 and www.zespri-usa.com

occurs routinely in high-tech sectors, but there is no intrinsic reason why upgrading cannot also apply in sectors historically characterised by low barriers to entry, including in the agricultural sector. The attempt to reposition kiwi fruit by New Zealand producers suggests the possibilities that are open in the primary-products sector (Box 1). But what of other primary products?

Drawing on some of the insights offered by value-chain analysis, we consider the prospects for decommodifying segments of the coffee market. Coffee is an important case in point for two reasons. First, it has a large 'footprint' in poor countries, and amongst poor producers in these countries; indeed, it is the second most important traded commodity. And, second, it is a product that has long been seen as an undifferentiated commodity. Yet, as the Nestlé's Vice-president for International Relations points out 'The degree of variety of coffee and the variation in taste is at least as great as that of wine'. Thus, coffee is a product with enormous potential for differentiation. Some decades back substitute products such as wine and mineral water were also marketed as relatively undifferentiated products,

but are now sold as highly differentiated lines, with significant premiums for specific products. Are we going to see the same pattern emerging in the case of coffee? And, if so, who will reap the rewards of price differentiation? Will it be the global branders (such as Krafts, Nescafe, Doewe Egberts, Tchibo and Lavazza), global traders (such as Rothfos, E. D. and F. Man, Volcafe and Cargill), producer governments using export taxes, or will it be the growers? And is it possible to identify policies which might help to ensure that some or all of these decommodifying gains are reaped directly by poor producers rather than large TNCs?

Three elements of value-chain analysis are relevant to this study of the coffee value chain. The first is the mapping of inter-country input-output relations (section 2). The second is the analysis of inter-country distributional outcomes (section 5), and the third is the role that value-chain analysis plays in highlighting the power and governance relations which explain these distributional outcomes. These are complex issues and can only be considered in outline within the confines of this article.³ Sections 3 and 4 cover respectively the

historic commodification and emerging de-commodification of the coffee value chain.

2 The Coffee Value Chain

Figure 1 maps the major inter-country input-output relations in the coffee value chain:

- Farmers either pick and dry-process or wet-process coffee cherries, receiving a *farm-gate price*
- The cherries are then processed – the end result of the two forms of input (dry- or wet-process beans) is the same *factory-gate price*
- The beans then go to an intermediary for export, reflected in *fob prices*
- They are shipped to importing countries (landed at *cif prices*)
- Importers then pass the beans on at *wholesale prices*
- Roasters process the beans and sell them at *factory-gate prices*⁴
- Retailers sell the coffee on to the public (*retail prices*) for domestic consumption, as do restaurants, caterers and coffee bars for out-of-home consumption.

From Figure 1 it is evident that around 40 per cent of the final product price (that is, for supermarkets, rather than for coffee houses) accrues in developing countries.⁵ It is important to note that these figures are a snapshot in a particular period of time, and refer to the price breakdown in 1995.

2.1 Coffee as a commodity

Many tropical and sub-tropical countries are able to grow coffee, and it is the second largest global commodity export after oil, with a 1999–2000 value of \$9bn., employing more than 25 million people on more than 5m. farms. It fills approximately 400 billion cups a year and is estimated to be consumed regularly by more than 40 per cent of the world's population. Although there are between 25 to 100 different species of *Coffea*, almost all commercial coffee comes from either *C. arabica* or *C. canephora*, which are known as Arabica and Robusta respectively.⁶

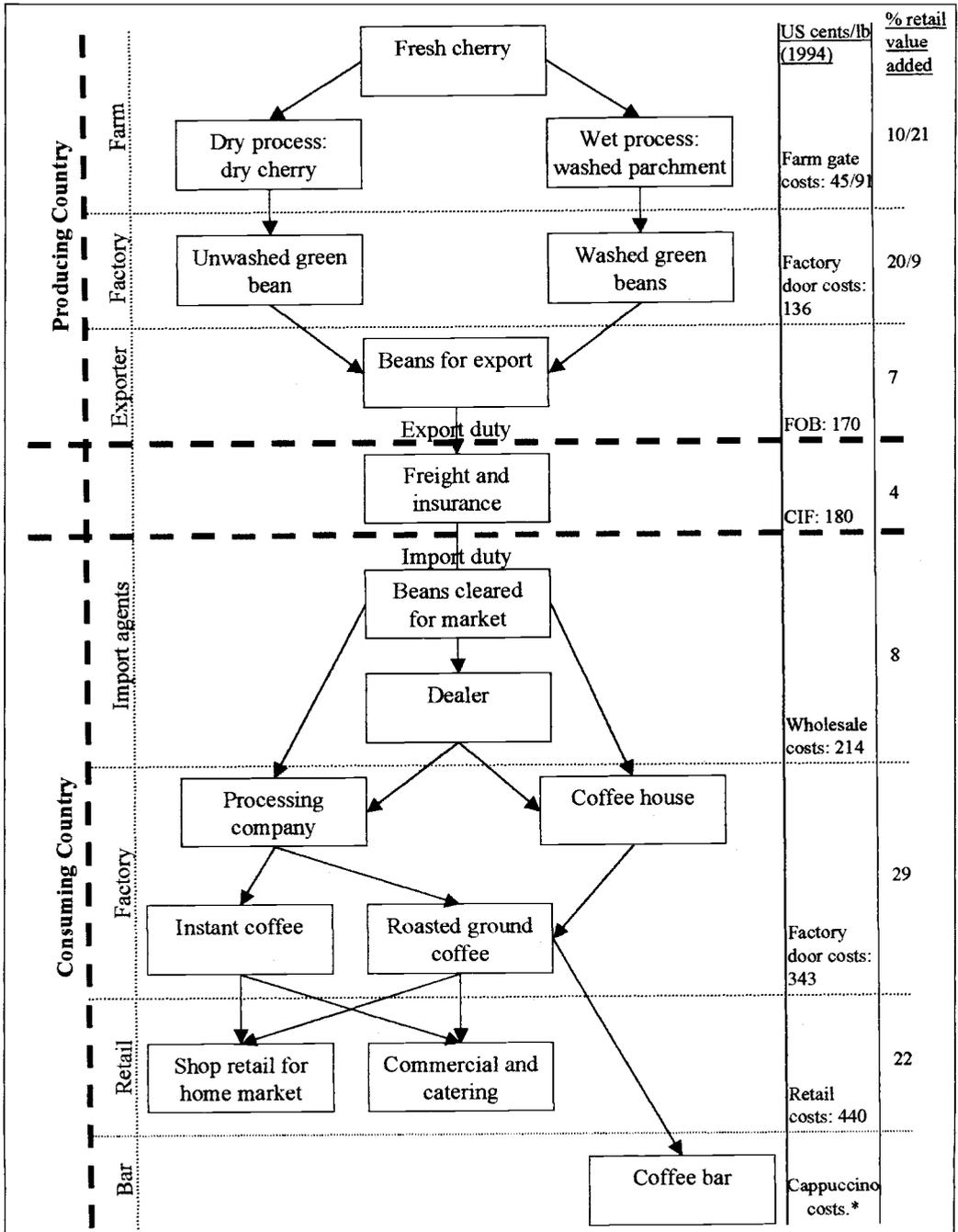
Arabica is grown at altitudes over 1000m, produces superior quality beans that possess the greatest

flavour and aromatic characteristics, and accounts for 80 per cent of the total global coffee. Robusta plants can grow at lower altitudes, have higher yields, are more resistant to disease, but produce beans of inferior taste to Arabica, usually with a woody and astringent flavour and about twice the caffeine content. Robusta beans command a lower price and are generally used for cheap instant coffees, or to increase the caffeine 'kick' in products such as espresso.

The traditional way to make coffee is to roast the dry green beans and then to grind them. This is referred to as '*roasted ground*' coffee. This form of preparation can use blends of beans or beans of a single origin, and is popular in the main consuming regions: the USA, Japan and Europe. There are numerous sub-varieties of roasted ground coffee – for example, flavoured coffees, Espresso and Cappuccino. *Instant coffee* was developed by the American military in 1862 during the Civil War as a psychological restorative and to increase energy and aggression among the troops.⁷ After the war domestic consumption of instant powder coffee rocketed as soldiers returned from their military posts with the habit. There have been further developments in the instant sector in the form of freeze-dried and 'quality/gourmet' instant granules, but the bulk is still made from lower quality bean blends. In most of the major markets, instant coffee comprises only 20 per cent of the market (except in the UK where it accounts for 85 per cent of consumption). Finally, in relatively recent years, and especially in Japan, coffee has been marketed as a *canned ready-to-drink* product, predominantly from dispensing machines.

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 per cent of Burundi's exports and more than 60 per cent of Ethiopian, Rwandan and Ugandan exports. It would appear that the lower the level of per capita income, the more dependent producing economies are on coffee exports (Table 1). (Table 1 uses a 5-year average export figure to iron out year-on-year price fluctuations.)

Figure 1: The coffee value chain



*Costs variable but very high. Include: overheads, advertising, other products (i.e. milk) and the 'experience' of the coffee bar (see breakdown of the price of a cup of coffee)

Source: Data provided by M. Wheeler

Table 1: Share of coffee in total export receipts (average 1995–99)

	Share of total exports (1995–99 average)	GNP/capita (1995–99) average
Burundi	76	146
Ethiopia	68	106
Rwanda	62	274
Uganda	60	310
El Salvador	26	1,886
Guatemala	26	1,608
Honduras	25	734
Colombia	17	2,424
Brazil	5	4,684

Source: Coffee exports from ICO, GNP and total exports from IMF International Financial Statistics

Europe is the largest market with annual consumption of around 2m. tonnes, accounting for over 40 per cent of total global demand. The US accounted for 24 per cent of total consumption and Japan for just over 10 per cent. Total market growth (in volume terms) during the 1990s was slow at 1.1 per cent p.a., although this increased to an annual rate of 2.6 per cent during the second half of the decade. Coffee consumption grew much more rapidly outside of Europe (especially outside of the Triad), at annual rates of 9 per cent.

Relatively slow growth rates in the context of low barriers to entry and new entrants (such as Vietnam in recent decades) have led to long-term pressures on coffee prices.⁸ Although the current prices of the four main categories of traded coffee grew from under \$50cts./lb in the mid 1960s to around \$60cts./lb in 2001, 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 per cent of peak market values in 1977). The current price in May 2001 is around 60cts./lb, above the marginal costs of production. Growers in diverse regions such as Ethiopia, Guatemala, Mexico and Kenya are either not harvesting coffee, using it for agricultural mulch or burning it as a source of fuel.

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. Upward

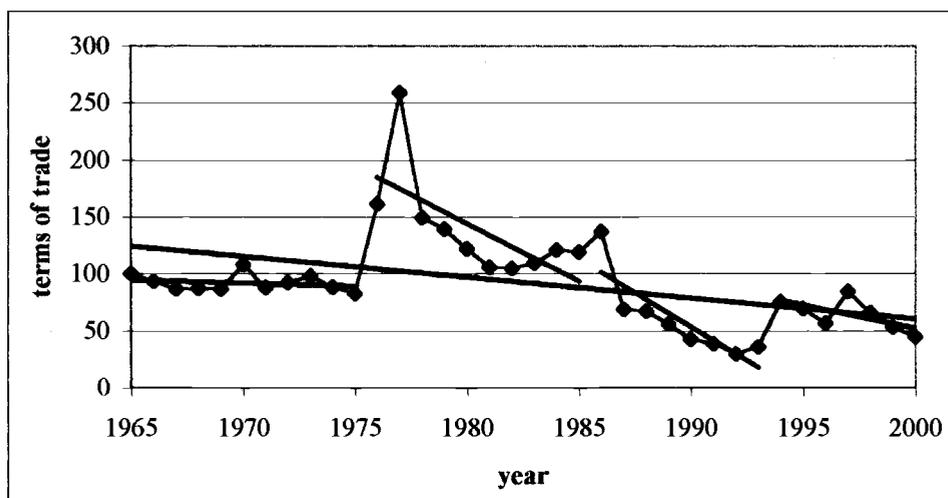
pressure on prices was not confined to quota restrictions, and nature has also played an occasional role. Most significant was the frost in Brazil in 1975.⁹ A similar, but less severe drought in Brazil in 1985 had a comparable, albeit less marked, effect on prices, as did further frosts in the mid-1990s.

But, despite these occasional price-raising events – resulting from both human-made and environmental interventions – there has been a systematic long-term decline in coffee's terms of trade (deflated against the UN DME export index). This shows up both in relation to the whole period (1965–2000) and each of the sub-periods that stem from each exogenous shock leading to a temporary hike in coffee prices (Figure 2).

3 The Emergence of Differentiation in the Coffee Market

In two of the major market segments (we exclude the third category – ready-to-drink canned coffees – which are largely a characteristic of the Japanese market), there are indicators of differentiation in final product markets. The data we give in Tables 3 and 4 is specific to the UK market, but similar trends can be found in virtually all markets in the major consuming countries. This data is essentially static – that is, it shows price spreads at a single point in time. However, we have interviewed buyers in major supermarkets, and some of the largest instant coffee producers in the world, and all

Figure 2: Terms of trade: mean coffee price index (1965=100)/UN DME export index (1965=100) and trendlines



confirm that the degree of differentiation in coffee blends and prices, in both the instant and roasted ground markets, has been growing significantly. They also anticipate that this process of differentiation will continue to expand in the future, and are indeed basing their marketing strategies on this expectation. In part this is because of the income elasticity of coffee – Table 2 – such that as incomes grow, so will the demand for differentiated and higher quality coffee.

Instant coffee shows a significant variation in final product prices, some of which reflects differences in processing costs (Table 3). (However, interviews with buyers and producers suggest that the premium prices that rule more than cover these higher processing costs, and that margins are higher

on higher-priced items). Similar price variations between different types of coffee are also to be observed in the roasted ground market (Table 4), where there are much smaller differences in processing costs.

In addition to the variation in coffee prices in the instant and roasted ground markets, specifically for coffees consumed at home, the out-of-home market is also growing and differentiating rapidly. In the US the specialty market has taken off. Out of US imports of 18m. bags of coffee in 1999, 3m. were destined for the specialty and gourmet coffee markets, retailing out of 7,500 coffee houses. A similar phenomenon is occurring in the UK (Starbucks, Seattle, Costa, etc.), and enhancing a long-established category

Table 2: Penetration hot drinks by income group in the UK (% female housewives, 2000)

Social grade	Tea bags	Leaf tea	Instant coffee	Ground coffee
AB	94	20	91	52
C1	94	15	91	37
C2	96	12	93	24
D	94	14	91	18
E	93	18	86	18

Source: Key Note Ltd 2000

Table 3: Differentiation in the instant coffee market: UK supermarket prices

Coffee	Company	Brand	Price£/100g	Market share %
Powders	Own brand Maxwell House	Value	0.35	5
		Original	1.58	
Granules	Own brand Nescafe Maxwell House Kenco	Value	.45	75
		Classic	1.28	
		Original	1.65	
		Original	1.58	
Quality	Own brand Nescafe Kenco Carte Noire	Gold	1.95	9
		Gold Blend	2.14	
		Blend 37	2.39	
		Really Rich	2.14	
Speciality	Nescafe Café Direct Gourmet Percol	Instant	2.45	9
		Alta Rica etc.	3.09	
		Medium Roast	2.59	
		Caffe Espresso	2.48	

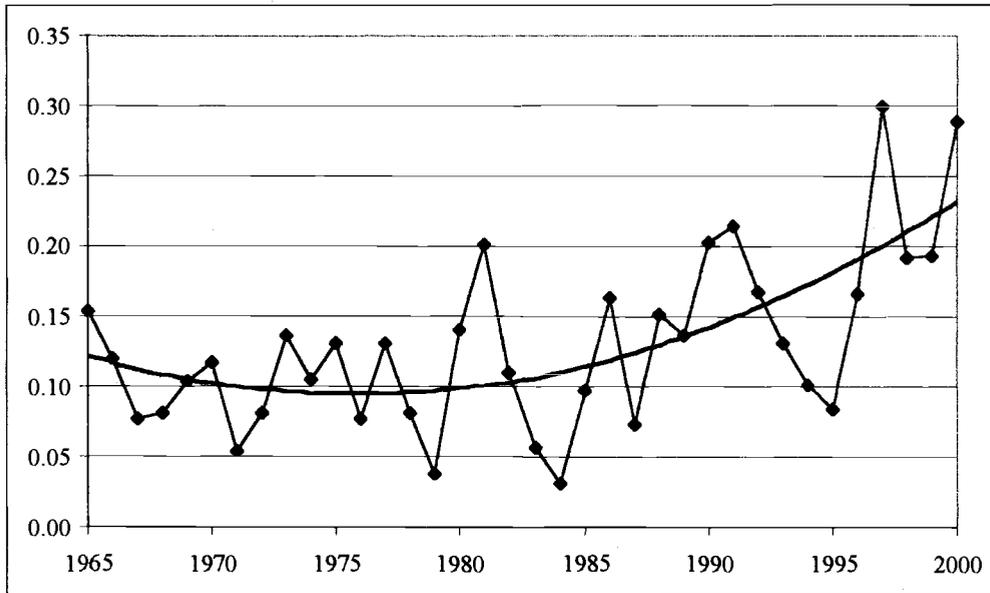
in Continental Europe. A notable feature of each of these markets is that the 'product' they are offering is not coffee. It is the ambience, the image associated with costly coffee consumption, co-products (such as snacks), relief from the bustle and traffic, and so on. In these markets, the coffee content of the cost of Cappuccino is less than 4 per cent.¹⁰

A further sign of differentiation is the growing importance of fair-trade products, where consumers are targeted who are prepared to pay a premium to ensure that producers get a 'fair' price – in this case guaranteed minimum prices paid to farmers of 126 US cts./lb for Arabicas and 106 cts./lb for Robustas (double the world price in May 2001). Fair-trade products account for around 1.6 per cent of total

Table 4: Differentiation in the roasted ground coffee market: UK supermarket prices

Coffee	Company	Brand	Price£/100g
Entry level	Own brand	Original	0.57
Quality	Own brand Taylors Douwe Egberts	Gold	0.79
		Decafinated	1.28
		Le Café	1.20
Speciality	Own brand Café Direct	Kenyan	1.01
		Medium Roast	1.01
Espresso	Lavazza Carte Noire Illy	Espresso	0.80
		Espresso	1.15
		Espresso	1.60

Figure 3: Coefficient of variance: global bean prices



coffee sales in fair-trade participating countries (excluding the US and Japan) and about 1 per cent of total global sales. In some countries it is even higher – for example, 3 per cent in Switzerland and Luxembourg, and 2.7 per cent in the Netherlands. Whilst small, the share of fair-trade coffee has grown steadily in each of these markets.

4 How Far Down the Value Chain is Coffee Decommodification Going?

As we observed, a second important feature of value-chain analysis is that it provides the capability to map distributional outcomes. There are a number of patterns that can be analysed (including the inter-country, the inter-value-chain link, and the functional distribution of income) (Kaplinsky and Morris 2001), but in this article we will confine the analysis to the inter-country distribution of income.

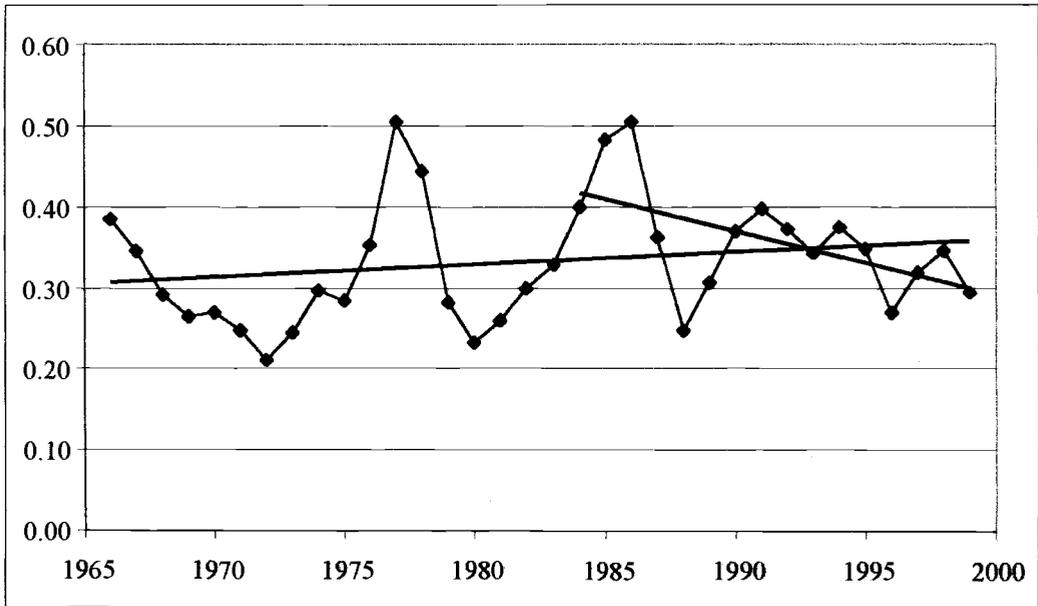
Given the observed differentiation (and growing differentiation) in final product markets, how much of this is finding its way back down the value chain? Figure 3 shows the spread of prices between the four major types of coffee traded on the New York Coffee Exchange. Three of these are Arabicas (comprising around 70 per cent of global trade),

and these comprise Colombian milds (the highest quality), other milds (medium quality) and Brazilian milds (lowest quality). The fourth major traded type of coffee is Robusta.

From this it is evident that as final product markets have begun to differentiate and to display a greater degree of price variation, so too has the price of coffee traded on global markets. Figure 3 plots the (parabolic) slope of the coefficient of variation in these coffee prices between 1965 and 2000. The slope of this line (which reflects a two-year moving average of prices to iron out year-on-year price fluctuations) has significantly increased over the past decade. In other words, whilst the price spread in global markets was essentially static between 1965 and 1985, it has grown rapidly, at an increasing pace, since then.

But is this growing differentiation of coffee prices – in final product markets and as traded in global commodity markets – also reflected in a similar process of price differentiation to farmers, reflecting the quality of different types of coffee? Figure 4 shows that the answer is ‘no’. It shows the two-year moving average (to reduce the impact of year-on-year variations) of prices paid to producers in the

Figure 4: Coefficient of variance: producer prices



ten major exporting economies. If anything, in these countries, the spread of coffee prices has actually *fallen* in the same period during which it was rising on the New York Coffee Exchange.

In the light of this contrasting experience on price spreads, the resulting inter-country distributional outcome is perhaps not surprising. This is shown in Figure 5, from which it is evident that since 1985 a growing share of total incomes in this chain has accrued to economic agents in the importing countries.

5 Power and Governance

And so to the third element of value-chain analysis that we will be considering in this article – power and governance (which are of course interconnected). Due to space constraints we will largely gloss over the governance structure in this chain. The main conclusion is that governance – understood as the power to define who does and who does not participate in the chain, the setting of rules of inclusion, assisting chain participants to achieve these standards, and monitoring their performance (Kaplinsky and Morris 2001) – is largely absent and confined to a few gourmet-

quality niches and the importing-country end of the chain. The absence of governance can be directly traced to the commodity nature of the product, but if and when the global coffee market becomes more demanding and differentiated, it is likely that there will be a growing imperative for active governance in the future.

A major reason for the inter-country distributional outcome observed in Figure 5 is the producing structure in global coffee production. Seventy per cent 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. It has also meant that one form of governance – agricultural extension – has been removed from the bottom end of the chain. These atomistic producers lack the capacity to combine (as do their governments, although the reasons for this are more problematic).

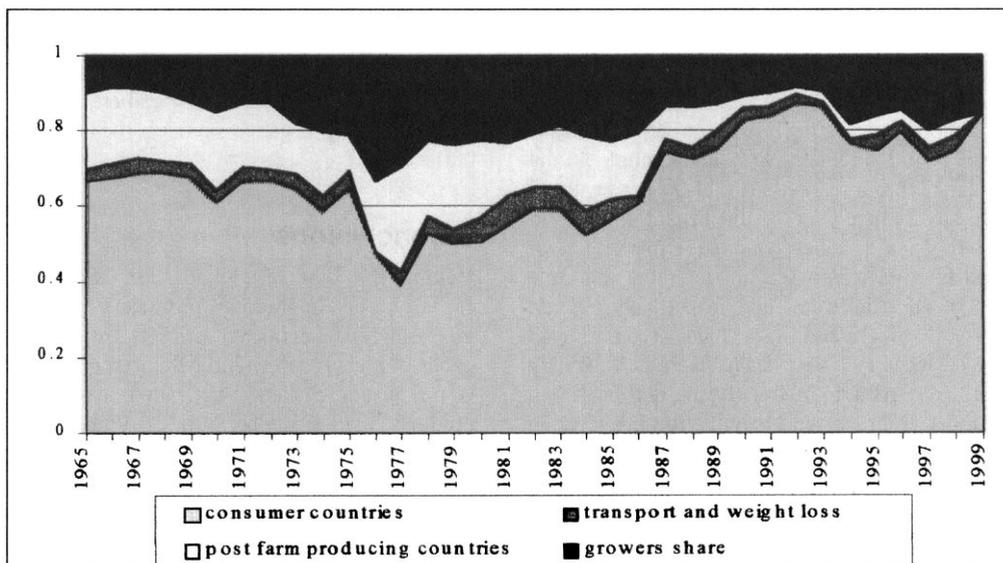
Contrast this with the market power at the importing end of the value chain. As Table 5 shows, the top five importers account for over 40 per cent

Table 5: Market concentration in global coffee bean trade

Company	Turnover in millions of bags			
	1989	1991	1993	1995
Rothfos	9.0	9.0	12.0	9.0
E.D. & F. Man	5.0	4.5	6.0	5.0
Volcafe	4.0	4.0	7.0	6.5
Cargill	4.0	4.0	5.5	3.5
Aron	4.0	4.5	3.5	3.5
World total	71.4	70.6	72.6	66.3
Total of top 5	26.0	26.0	34.0	27.5
% world total				
Top 5 firms	36.4	36.8	46.8	41.5
Top 10 firms				62.2

Source: Wheeler (personal communication)

Figure 5: Distribution of income: share of final retail price



Source: Update of data in Talbot (1997b)

Table 6: Market concentration in European roasting sector

	1995	1995	1998	1998
Company	Millions of bags	% Euro market	Millions of bags	% Euro market
Kraft General Foods Jacobs Suchard (US/Ger)	8	19.4	7.5	19.1
Nestle (Swiss)	5.2	12.6	5.5	14
Douwe Egberts (Dutch)	4.5	10.9	4.5	11.5
Tchibo (Ger.)	2	4.9	3.8	9.5
Eduscho	1.8	4.4		
Lavazza (Ital.)			1.7	4.3
Top 5 firms	21.5	52.2	23	58.4
Top 10 firms		67.8		

Source: Wheeler (personal communication)

of total global trade, and the top ten for more than 60 per cent. Moreover, there is evidence that in some producing countries, buyers collude to ensure that they do not compete with each other when purchasing at the farm/cooperative level, and hence push up prices. Even greater levels of concentration are found in the roasting link in the chain (Table 6), as well as in the retailing link. For example, in the UK, Nestle has a market share of 55 per cent and Kraft has 25 per cent of the instant market; in roasted ground coffee, one supermarket's own brand is estimated to account for more than one third of all retail sales; and in the coffee house market, Starbucks and Costa Coffee account for 43 per cent of total sales (*Daily Express*, 9 January 2001). The pattern in the rest of Europe is not dissimilar. In France and Italy the top five roasting companies account for 90 per cent and 70 per cent of their respective markets, and for Europe as a whole, the top five companies produced 52 per cent of the coffee in 1995, increasing to 58 per cent three years later (Wheeler, personal communication).

Power in this value chain is therefore asymmetrical. In the producer countries it is very weak – farming is highly fragmented and the destruction of marketing boards further reduces the capacity of farmers to raise their share of value-chain rents.¹¹ At the importing end of the chain, there are three

major residues of power – importers, roasters and retailers. They compete with each other for a share of value-chain rents,¹² but combine to ensure that few of these return to the farmer or producer-country intermediaries or governments. (In fact producer prices in 2001 mean that there are no – or more accurately, negative – rents at the bottom end of the chain.)

6 Conclusions

Making the best of globalisation requires the capacity for upgrading producers to tackle increasingly differentiated markets by producing goods of higher variety and enhanced quality. This is not just a challenge in traded manufactured products, since a number of primary markets (and indeed service sector markets) are becoming increasingly differentiated. However, the capacity to meet these requirements in global product markets does not necessarily mean that the returns to differentiation accrue to poor producers. This is the picture that emerges from recent trends in the global coffee value chain. In terms of the number of product categories, the balance between these product categories and the degree of variation within each of these categories, there are trends of increasing dynamism. This is associated in price structures, in enhanced wage incomes in roasting

firms and probably also in margins in importing countries (although at present we cannot show this). However, the evidence suggests that the fruits of the this variation in product markets are not filtering through to producers, either at the farm level or at the national level, and this is a source of serious developmental concern.

Value-chain analysis is key to these analytical insights. Its focus on the global chain of production illustrates the uneven geographical incidence of price variations. At the same time, its focus on institutions – agricultural producers, marketing boards, importing firms, retailers, value-added coffee houses – and the power asymmetries that they reflect is suggestive in explaining why these outcomes have emerged.

Notes

* We are grateful to a number of people in the coffee industry (including in the International Coffee Organisation (ICO), the retail industry, and in the coffee house and roasting sectors) for their assistance. We are particularly indebted to the statisticians and librarians at the ICO for their generous assistance in providing data, to John Talbot whose work on the coffee value chain has proved especially useful, and to Hubert Schmitz for constructive comments on an earlier draft. Finally, we would like to acknowledge financial support from the Department for International Development.

1. For details on these distributional patterns, see www.ids.ac.uk/ids/global.
2. Wood's calculation of falling terms of trade in manufactured exports is corroborated by a recent study of the barter terms of trade in manufactures between developing countries and the European Union, which estimates an annual rate of depreciation of 2.2 per cent between 1979 and 1994 (Maizels *et al.* 1998). In a further study focusing on the terms of trade in manufactures between the US and developing countries for the period 1981–1997, Maizels *et al.* (1999) conclude that '[o]ver the whole period, the relative terms of trade-trend of developing countries, compared with that of developed countries, has significantly worsened (Maizels *et al.* 1998:23). It is significant that neither of these recent studies by Maizels *et al.* reflect the fall in developing-country manufactured export prices which followed the East Asian crisis of 1997–98.
3. They will, however, be considered in more detail in subsequent publications.
4. Since roasted coffee has a short shelf-life, this value-added stage tends to be completed close to the final point of sale. Instant coffee can be processed more easily in producer countries, but there is a long history to a story in which US producers influenced US trade policy to undermine attempts by the Brazilians to

move into this form of processing (Talbot 1997a). Instant coffee, however, does not have an unlimited shelf-life.

5. Coincidentally, it is notable that a similar ratio exists in deciduous canned fruit (Kaplan and Kaplinsky 1998) and in fresh fruit and vegetables (Dolan and Humphrey 2000).
6. The distinction between Arabica and Robusta coffee is less clear than it might seem. New technologies for steam cleaning Robusta have improved quality and allowed for some substitution with Arabica in demanding markets such as Germany .
7. During the Second World War US soldiers were issued with a daily ration of 2 ounces (six strong cups) of coffee powder.
8. The 'world coffee price' is a weighted composite of four trading categories of coffee. Three of these are Arabicas (comprising around 70 per cent of global trade), and these comprise Colombian milds (the highest quality); other milds which are of medium quality, and the lowest quality Arabicas, Brazilian milds. The fourth major traded type of coffee is Robusta. See Talbot (1995).
9. Since coffee trees take three to four years to mature, this led to raised prices for the rest of the decade.
10. Although we are not discussing policy in this article, the low share of coffee-house drinks means that the price premium that customers would have to pay for gourmet coffees would be a relatively small portion of the final product.
11. A similar process can be observed in a number of sectors, especially in the food value chains, and is the subject of ongoing research at the IDS.
12. It is widely believed in the sector that the primary beneficiaries are the trading companies, but this is a subject for future investigation.

References

- 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: 147–76.
- Förster, M. and M. Pearson (2000) 'Income distribution in OECD countries', paper prepared for OECD Development Centre Workshop on Poverty and Income Inequality in Developing Countries: A Policy Dialogue on the Effects of Globalisation, Paris.
- Gibbon, P. (2001) 'Upgrading primary production: a global commodity chain approach', *World Development*, Vol. 29, No. 2: 345–64.
- 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: 1787–1802.
- Kaplinsky, R. (1993) 'Export processing zones in the Dominican Republic: transforming manufactures into commodities', *World Development*, Vol. 22, No. 3: 1851–65.
- Kaplinsky, R. and M. Morris (2001) *A Manual for Value Chain Research*, www.ids.ac.uk/global
- Maizels, A., K. Berge, T. Crowe and T. B. Palaskas (1998) 'Trends in the manufactures terms of trade of developing countries', mimeo, Oxford: Finance and Trade Policy Centre, Queen Elizabeth House.
- Maizels, A., K. Berge, T. Crowe and T. B. Palaskas (1999) 'The manufactures terms of trade of developing countries with the United States, 1981–97', mimeo, Oxford: Finance and Trade Policy Centre, Queen Elizabeth House.
- Prebisch, R. (1950) 'The economic development of Latin America and its principal problems', *Economic Bulletin for Latin America*, No. 7, New York: United Nations.
- Singer, H. W. (1950) 'The distribution of gains between investing and borrowing countries', *American Economic Review*, 15: 473–85.
- Talbot, J. M. (1995) 'The regulation of the world coffee market: tropical commodities and the limits of globalisation', in P. McMichael (ed.) *Food and Agrarian Orders in the World Economy*, London: Praeger.
- Talbot, J. M. (1997a) 'The struggle for control of a commodity chain: instant coffee from Latin America', *Latin American Research Review*, Vol. 32, No. 2: 117–35.
- 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*, Vol. 32, No. 1: 56–91.
- Wood, A. (1997), 'Openness and wage inequality in developing countries: the Latin American challenge to East Asian conventional wisdom', *World Bank Economic Review*, Vol. 11, No. 1: 33–57.