Market power, monopsony, and the commodity question*

Peter Gibbon
Danish Institute for International Studies
Strandgade 56
DK-1401 Copenhagen K
E-mail: pgi@diis.dk

Adapted from “The commodity question: new thinking on old problems” prepared for the UNDP, October 2004.
# Table of Contents

1. **Introduction** ............................................................................................................................... 4  
   1.1 Declining commodity prices and their implications for economies and livelihoods  4  

2. **Macro-economic effects** ............................................................................................................ 5  

3. **Oligopoly** .................................................................................................................................... 6  
   3.1 Econometric studies  7  

4. **Present donor approaches** .......................................................................................................... 9  

5. **An alternative agenda?** ............................................................................................................... 11  
   5.1 Renewed international commodity agreements  12  
   5.2 Global regulation of oligopolistic behaviour  14  
   5.3 Elimination of subsidies to/buying out Northern producers of tropical crops  16  
   5.4 Support to public-private market coordination in producing countries and simplification of  
       smallholder compliance with new product standards  18  
   5.5 Actions on the demand side in Northern countries  20  

6. **Conclusion** .................................................................................................................................... 21  

7. **References** .................................................................................................................................... 22
1. Introduction

Classically, the ‘commodity question’ has been conceptualised as having two elements. The first was commodity price volatility. The second was decline in relative prices, an issue first raised by Prebisch and Singer in 1950, who argued that volatility and relative price decline were linked, via reference to the notion of inelasticity in demand for commodities. The Prebisch-Singer analysis still forms the basis for most common understandings of the ‘commodity question’ today.

However, the last decade has seen a widespread acceptance that the question also includes a third element, namely oligopolistic market structures on the demand side. Concentration amongst Northern-based international traders, processors and retailers is today mentioned as a critical dimension of the commodity question not merely by producing country governments and concerned NGOs, but also by the World Bank (cf. Lewin et al., 2004) and the European Commission (2004).

This paper reviews more and less mainstream policy options in relation to the ‘commodity question’ in the light both of its classical definition and of the emerging concern about oligopoly. It begins by updating the evidence concerning commodity price decline and volatility, and examining the implications of these phenomena for macro-economic performance and livelihoods in producing countries. It then turns to the issue of oligopoly, where it considers evidence on market concentration and on monopsonistic behaviour. This is followed by a discussion of the main policy options in the area which have received high levels of attention from international donors since the beginning of the 21st century. The paper then turns to what might be called an ‘alternative’ policy agenda on commodities.

Throughout, the focus is on a specific agro-commodity, namely coffee. This is because this product has been the subject of more recent documentation, analysis and policy proposals than any other. However not all agro-commodities resemble coffee, either in respect of historical forms of international market regulation, or current market structure, or relevant policy options. For this reason, a secondary focus on cotton is provided.

1.1 Declining commodity prices and their implications for economies and livelihoods

Agro-commodity prices have been declining throughout the 20th century, but for most commodities this decline has accelerated in the last twenty years. Between 1982 and 2002, international prices for both coffee and cotton declined by over 50% in real terms and in both cases have been recently at 30-year lows. Cotton, and particularly coffee, prices are also subject to high levels of volatility.

The most obvious reason for price decline is a growing imbalance between supply and demand. Dramatically increasing coffee supply-demand imbalances date back to the collapse of the International Commodity Agreement governing its trade in 1988-89. In the case of coffee, it is supply that has increased substantially, mainly on the basis of new production in Brazil and

---

1 Thanks to Stefano Ponte and Frantzeska Papadopoulou-Zavalis for comments on this draft. The usual caveats apply.
Vietnam, while aggregate demand has changed little. In the case of cotton, which was never governed by an International Commodity Agreement, supply has been fairly stable but demand has contracted, as synthetic fibres have replaced natural ones in textile production.

The phenomena of stable or increasing supply in the face of declining prices is partly related to low costs of production in certain countries. In the case of coffee, Vietnam’s production costs appear to be low enough to provide incentives to increase Robusta output even at current prices. Meanwhile Brazilian coffee producers can now cultivate Natural Arabicas at lower costs than has been the case historically, on the basis of the adoption of new farming systems. In the case of cotton, producers in Brazil have again been also able to cultivate profitably under current price conditions. Both coffee and cotton production in Brazil, as well in the important state farm coffee sub-sector in Vietnam, is organised on the basis of large estates. Here, previously unattainable economies of scale in input use, irrigation, use of farm machinery and transport/marketing can be all now realised.

By implication, precipitous price decline has impacted primarily on countries and regions dominated by smallholder production systems. Within many of these systems, and against the expectations of the architects of market reform, costs to producers have risen with the widespread liberalisation of national input markets. Inputs in many of these countries are no longer purchased and distributed in bulk and public subsidies have been removed from their local prices. Probably more significantly, the transaction costs of smallholder output marketing have risen dramatically, with the abolition or disintegration of parastatal or large-scale cooperative export marketing organisations.

2. Macro-economic effects

It is noteworthy that those countries most dependent on agro-commodities in regard to aggregate export revenue are virtually all smallholder-based agro-commodity producers. In the late 1990s there were nine developing countries for which coffee represented 23% or more of export earnings (Lewin et al., 2004), and five for which cotton represented 34% or more (Gillson et al., 2004). In all but one of these 14, smallholder production systems dominate. At the same time, most of the largest aggregate exporters of these crops – particularly coffee – have been much less macro-economically exposed to price decline. The share of coffee exports in the total export earnings of Brazil and Vietnam, for example, is only around 3% in both cases. In 1998-2002, 19 coffee-exporting countries were more macro-economically exposed to price declines than Vietnam, and 20 more exposed than Brazil (Lewin et al., 2004).

Humphrey (2004), using IMF data, makes the complementary point that – as a result of their higher levels of commodity dependence - low-income (and mostly smallholder system-based) commodity-exporting countries are more likely than developing country commodity exporters to experience both price shocks and terms of trade shocks. Over the period 1981-2001, 30 low-income countries suffered 204 price shock episodes of an average magnitude of 20%. However, while low-income countries were 13% more likely to experience a price shock than other developing countries, they were 60% more likely to experience a terms of trade shock.
Price shock effects are important since they bear directly on GDP, while terms of trade effects bear directly on balance of payments. Kruger et al. (2003) have calculated that for the five main coffee producing countries of Central America, the international coffee price decline of 1999-2001 alone led to a 1.2% drop in GDP for the countries as a group, without taking into account multiplier effects.

Given the large size of the populations directly involved in agro-commodity production in low-income countries, the large proportion of these populations falling below the poverty line, and the large multiplier effects of changes in income from these sources, it is clear that the price trends described have very substantial poverty impacts (Deininger and Okidi, 2003; Kruger et al., 2003; Minot and Daniels, 2002).

3. Oligopoly

As noted earlier, there is a widespread awareness of high and growing levels of oligopoly at the downstream end of agro-commodity chains. In some discussion this is linked, albeit rather loosely, to a related common observation. This concerns the (declining) share of final prices going to producing countries and/or producers. Certain schools of thought, notably ‘global value chain’ analysis, seek to link these observations theoretically – in this case in through the notion of ‘buyer-drivenness’ (e.g. Gibbon and Ponte, 2005).

Discussion of these issues is almost entirely absent in the case of cotton, however. Indeed, cotton is sometimes cited (including by Gibbon and Ponte, 2005) as an exception to the rule. In the cotton case, levels of downstream industrial concentration in cotton spinning (and beyond) are very low and even the international trader segment exhibits concentration only to a limited degree. In 1995, as many as 19 international trading companies handled 200,000 tons of lint or more, jointly accounting for 35% of the global trade. By 2000 this share had increased, but only slightly, to 39% (Larsen 2004). Other dimensions of ‘buyer-drivenness’, such as fundamental changes in the division of labour along the chain and new ‘proprietary’ definitions of quality, are also only faintly evident. No studies of shares of final prices going to producers appear to have been carried out, presumably because of the difficulty in identifying what constitutes a relevant final product.

Coffee is a different story. Although up to date information is hard to come by, in 1998 the largest five coffee roasters (Philip Morris, Nestlé, Sara Lee, Proctor & Gamble and Tchibo) controlled 69% of the world market, while the largest eight international trading companies (Neuman, Volcafé, Cargill, Esteve, Aron, Man, Dreyfus and Mitsubishi) controlled 56% (Van Dijk et al., 1998). More recent studies of western European markets suggest even higher levels of concentration in a large number of countries (Durevall 2003). Studies of shares of retail prices of roasted coffee going to producing countries and (less frequently) producers are also quite common.

2 In 2001 Philip Morris spun-off Kraft Foods, which was the vehicle for its coffee interests. Other developments include the sale of some brands between leading players.
The observations in these studies give widely dispersed values for f.o.b. and c.i.f. shares of final retail prices in Northern markets, particularly during the 1990s. However, the trend they depict is consistent and monotonic, namely that of a sharp decline between the 1990s and the present decade. If 2% is added to the f.o.b. prices reported in order to generate c.i.f. equivalents, the median value for all c.i.f. observations from 1989-1998 is 35%, while that for the period since 1999 is 19%. A much smaller number of observations for farm gate price-retail ratios also show a declining trend from the 1990s to the current decade.

While these observations give implicit support to the hypothesis of oligopoly power, all except Daviron and Ponte’s leave open the question of whether this power is located with roasters or with actors downstream of them. The latter authors’ detailed price data suggest that both roasters and coffee house chains (though not retailers) possess the power to inflate their mark-ups. Gross mark-ups by roasters over the c.i.f. price are in a range of 81-89% of the ex-roaster price, whether they are selling-on to retailers or to coffee houses. Gross mark-ups by retailers are in a range of 20-25% of the retail price, which is low in comparison with other food product lines. Gross mark-ups by coffee houses are in a range of 70-80% of the coffee house price.

The scale of coffee houses’ gross mark-ups, in relation to those of retailers, is counter-intuitive since levels of concentration in the food retail sector tend to be on a par with the roaster sector. By contrast, ownership of coffee houses is much more dispersed. Part of the answer to this puzzle may lie in the coffee house sector’s widely reported demand elasticity (in contrast to clear inelasticity of retail coffee demand), and retailers’ use of coffee as a loss leader (cf. Lewin et al., 2004).

3.1 Econometric studies

Econometric studies of market power in the agro-food sector have a longer history than that of the type of study just reviewed. In the process, the methodologies used have become complex and sophisticated. The two most common today are the so-called ‘New Empirical Industrial Organisation’ (NEIO) approach and the use of time series models. Empirically, the former focus on the relation between final prices and firm-level marginal costs as a measure of market power, while the latter measure market power in terms of ‘price transmission’ – levels of translation of input price changes into output price outcomes (taking into account elasticity of demand). In both cases, highly detailed data is used, but normally in a standardised form (e.g., standard labour costs) based upon national price and consumption series. Little or no use is made of data collected directly at firm level. At least six econometric studies of market power in the coffee sector have been published in the last twenty years (Talbot, 1997; Fitter and Kaplinsky, 2001; Strunning, 2001; EIU [reference missing], 1990; Lewin et al., 2004; Pelupessy, 1999; Daviron and Ponte, 2005).

Almost all these econometric studies reject or qualify the proposition of oligopoly power in the sense of fixing output prices without reference to input prices. However, the periods they cover are overwhelmingly pre-1999 and their substantive focus is largely confined to episodes when green coffee prices were rising. The latter bias is a result of a common, but undemonstrated, theoretical assumption that it should be easier to inflate margins when prices rise than when they fall. Koerner’s (2002) study gives support to a somewhat different proposition. This is that green coffee
price rises may lead to substitution of beans of higher quality by inferior ones, as much as or more than it leads to efforts to push up retail prices. Thereby, margins remain constant even if the spread between input and retail prices does not increase. By implication, if green coffee prices fall while revisions to blends are retained, margins can then increase in the absence of clear evidence concerning imperfect price transmission.³

A second issue is that time series model-based studies (the majority reported here) establish levels of price transmission on the basis of comparisons between roasters’ input prices and retailers’ (not roasters’) output prices. Given that the qualitative evidence suggests that the main objective of retailers’ coffee pricing behaviour is to dilute the impact on consumers of roasters’ pricing behaviour, a major challenge to econometricians is to conduct time series studies isolating the roaster sector in the same way that earlier NEIO studies claim to have done. The econometric literature nonetheless does give some pause to the common conviction that oligopolistic market structures alone can be held responsible for producers’ falling shares of final income. Market concentration in the retail sector seems to be associated with strong competition, meaning that if oligopoly rents are being commanded, this is only by roasters.

A final problem of the econometric literature is that it does not address the ‘why’ questions underlying its findings. Even if oligopolistic power could be demonstrated, it tells us little about whether it emanates from market concentration alone or some other source. At the same time however, there is a more detailed empirical literature covering developments in the international coffee sector over the last decade that helps us identify some of the probable sources - other than industry concentration - for the trends in shares of final income going to different groups of participants levels described above. Pending time-series studies that succeed in focusing on roasters’ output as well as input prices, firm conclusions about oligopoly power cannot be drawn. If and when they can, it is this industry-focused literature that should form the basis for new hypotheses in the area.

Lewin et al. (2004) disaggregate changes in roasters’ consumption of specific varieties of coffee in more detail, and over a longer period, than Koerner (2002). They show a steep decline of the highest premium variety, Columbia Milds in global consumption between 1993 and 2002. Consumption of the other variety historically commanding a premium, Other Milds, also fell. By contrast, consumption of Robustas and Natural (unwashed) Arabicas increased. These changes reflect a high level of substitution of inferior for superior varieties in roasters’ blends, made possible by the adoption of simple technologies such as steam cleaning.⁴

This trend can be understood as a capturing by roasters of some of the quality-based rent traditionally extracted by producers through exploiting agro-ecological advantages and following specific prescriptions on husbandry and post-harvest treatment. At the same time, as Daviron and Ponte (2005) show, roasters and coffee houses have succeeded in adding new, largely immaterial, ⁵

---

³ This argument was suggested to me by Stefano Ponte.
⁴ Steam cleaning (subjecting the unroasted coffee bean to high pressure steam) generates not only less harshness in Robustas, but can also eliminate some acidity from Natural Arabicas, to produce a much milder taste. As often noted in the literature, the immediate stimulus to adopt steam cleaning arose from the short-lived green coffee price increases of the early 1990s.
dimensions of quality to the final product (e.g., gourmet-ship, social and environmental welfare content and - in the case of coffee houses – new service dimensions including ‘ambience’), thereby adding new rents for themselves in the process. The first process depended to some extent on the collapse of the International Coffee Agreement, under which producing countries could control which varieties appeared in what volumes on the world market. This second process builds on this, since it involves a suppression of traditional (variety-related) conventions of quality in the sector.

The processes implied in this account do not depend upon either active horizontal collusion or on imposition of explicit vertical restraints. Nevertheless, a real vertical constraint is introduced, since the market shrinks for coffees judged of premium quality according to traditional conventions. Furthermore, this rests on a new power balance, following the end of market regulation.

4. Present donor approaches

The most frequently encountered current policy approaches to the ‘commodity problem’ amongst OECD countries are compensatory financing mechanisms, assistance for diversification, price risk management instruments, and private or public-private commodity-specific initiatives directed at promoting ‘fairer’, more responsible or simply more remunerative trade.

While compensatory finance can clearly play a positive role in mitigating the effects of falling commodity prices, the levels envisaged will have to be increased sharply if they are to have any impact.

Problems and difficulties associated with agro-export diversification, particularly for the many of the most commonly recommended products, are often underestimated. Smallholders’ ability to diversify is often constrained by adverse agro-ecological conditions; leguminous vegetables and flowers, for example, require more or less constant water availability. High transactions costs are another important difficulty arising partly from the relatively high costs involved in storing and processing such goods, and from the relatively specialised inputs that they require. A final issue, at least potentially, is that of ‘adding up’, i.e., the terms of trade implications for (e.g.) higher-value agro-exports when several countries increase exports simultaneously. This may lead to a combination of increasing demand but stagnant prices, or to falling prices if demand becomes stagnant.

Price Risk Management is only likely to be much use to very large-scale, volume-secure, credit-worthy and globally-oriented producers, in the absence of subsidies, technical assistance, donor-brokered financial intermediation or all three.

That leaves initiatives aimed at ‘fair’, more responsible and more remunerative trade.

Interventions by private actors to promote more responsible and sometimes more remunerative trade have increased notably for agro-commodities in recent years. They are found particularly in relation to coffee. These interventions are divided more or less evenly between those initiated by
private actors alone, and those backed also by public agencies. The German bilateral technical assistance organisation GTZ has been at the forefront of the latter.

The broad background to these interventions is the rise over the last decade in the importance of new ‘immaterial’ conventions of coffee quality, already referred to. Amongst these is a sub-convention for socio-economically ‘sustainable’ coffee. Definitions of the latter vary according to their emphasis on the environmental or the social, and according to the nature of their conceptualisation of social and/or environmental dimensions of sustainability.

On the environment side, the two main dimensions stressed by the first generation of conventions in this area were the ‘organic’ and ‘shade-growth’. In both cases these were defined by branches of the international environmental movement. On the social side, the dimension initially stressed was ‘Fair Trade’, as defined by international movements for social justice. ‘Fair Trade’ coffee was defined in explicitly anti-market terms, in terms of obligations on producers to be members of cooperative organisations and on buyers to supply credit and pay fixed minimum producer prices largely independent of the international price.

Against this background, roasters, roaster/retailers and roaster/coffee house chains have devised alternative sustainability standards, aimed more or less explicitly at deflecting these initiatives. Amongst the best known of these is Starbucks’s proprietary ‘Coffee and Farmer Equity Programme’ (CAFEP). This grants certain suppliers ‘strategic’ status if they achieve a given level of performance, within a points system that rewards social responsibility, environmentally responsible coffee growing and processing systems that conserve water and energy and recycle waste. This status entails enjoying purchasing priority over other offers at the same price, as well as (for those achieving especially high point scores) commanding a premium over the market price for a maximum period of two years. Other procurement-related schemes include that of Nestlé, in collaboration with the ‘Sustainable Agriculture Initiative Platform’ (SAI), an organisation backed by a number of large agro-processing companies including Danone and Unilever. SAI has issued a statement calling for an internalisation of environmental, social and infrastructural costs into the coffee commodity price, but only gradually and via an unelaborated market-based approach.

A somewhat different variety of such proprietary schemes is ‘Utz Kapeh’. This was devised by the Dutch roaster/retailer Ahold and focuses upon ‘appropriate’ use of pesticides, protection of labour rights and community access to education and health. Utz Kapeh is recognised as Eurepgap equivalent and is subscribed to by certain large European retailers other than Ahold, including Casino (France) and Safeway (UK). Like the Starbucks scheme it has a schedule of price premiums

---

5 In a pilot scheme this premium was US$ 0.10/lb, but in later versions of CAFEP this was lowered to US$0.01/lb. For more details see Ponte (2004).

6 At a later stage, Ahold began describing the scheme as a product of Guatemalan farmer organizations as well as itself. The ‘enrollment’ of farmer organizations is a common feature of the latest generation of proprietary initiatives (Daviron and Ponte 2005).
to reward conformity, although these refer to premiums over prevailing market prices, are only advisory and seem to be applied only in designated projects.

The widest of all such private initiatives to date is the ‘Common Code for the Coffee Community’ (CCCC), supported by Nestlé, Sara Lee, Tchibo, Kraft Foods, a number of NGOs and the IUF. Preparations for this Code began in 2002 and were finalised in October 2004. It covers minimum wages, child labour, trade union rights and environmental standards on pesticides and water. Like the other schemes described, it will be implemented using third-party certifiers. The signatories are not committed to buying certified coffee, although they have signed up to ‘intensifying business relations with producers of good quality’ and ‘providing a price differential for high quality coffee’ (International Herald Tribune, 11 September 2004).

CCCC is sponsored also by the German public development assistance agency GTZ, which in the last few years has also supported a series of public-private partnerships in the Nicaraguan cocoa and the Vietnamese and Peruvian coffee sectors (GTZ 2003a,b; Ackermann 2001). Both coffee cases involve global private companies, namely Jacobs Coffee (Kraft Foods), Douwe Egberts (Sara Lee). In two instances a specific locality was chosen where production quality was upgraded through specialised extension provision and development of new quality control procedures. The Peruvian project involves developing (though not implementing) new quality standards and instruments for the coffee sector as a whole.

As noted above, proprietary schemes such as these took off only after – and arguably in reaction to – initiatives like Fair Trade labelling, which threatened non-subscribers with the reputation of unfair trade. The extent of global players’ commitment to their formal principles is questionable. In addition, where they entail real actions, most of them fall as obligations on producers, who in return get little more back than somewhat greater security in the status that they have already. In most cases, they also have to bear new certification costs. Secondly, these initiatives are skewed heavily toward estate production, with little attention to smallholders. And thirdly, they involve an extension of the general trend toward standards proliferation, which leaves producers facing escalating conformity costs and leaves consumers increasingly confused. CCCC has a somewhat more ambiguous relation to proliferation, since it aims at becoming a hegemon amongst sustainability standards.

5. An alternative agenda?

Renewed international commodity agreements, global regulation of oligopolistic behaviour through competition law, elimination of subsidies to Northern producers of tropical crops, support to market coordination in producing countries and action on the demand side in the North are five

---

7 US$0.07/lb for washed Arabicas, but only when the average Arabica price falls below US$0.70/lb. The recommended Robusta premium is US$60/ton unwashed and US$100/ton washed, but again only when the market falls below US$650/ton.

8 See for example Ackermann’s (2003) discussion of Jacobs’ Peruvian project in the GTZ house journal Akzente Focus, where the author asks ‘...is it only a coincidence that, at Jacobs …PPP concepts are developed in the PR department? Other departments are far less concerned with them…’
of the main proposals for dealing with the commodity question that have circulated in recent years on the fringes of the donor community, amongst NGOs and amongst more heterodox policy researchers. Given the rather unpromising nature of much of the mainstream donor agenda, and of the funding levels for its more promising components, it is important to provide an evaluation of these alternative proposals.

5.1 Renewed international commodity agreements

A proposal to revive the International Commodity Agreements (ICAs) that governed trade in coffee, cocoa, sugar, tin and natural rubber between the 1960s and the end of the 1980s has been made by, amongst others, Oxfam (e.g., 2002). The original generation of these Agreements arose against the background of a broad (though not general) consensus that action was necessary in relation to the already-evident long-term decline in the barter terms of trade of primary commodities relative to manufactures. GATT waivers for such agreements were obtained already in the mid-1950s and their establishment was UNCTAD’s cause célèbre for the first two decades of its existence.\(^9\)

Producing country export monopolies were one set of parties to the agreements, while consuming country governments were the other. Under the agreements, recommended or support prices were established and defended, either on the basis of setting producing country export quotas or via the financing of centrally-held buffer stocks. Price levels above the recommended price were achieved for a substantial majority of the lives of the coffee and rubber agreements, and for around half the life of the cocoa and sugar ones. According to Hermann et al. (1993), at least one of the agreements (that for coffee) persistently raised prices by 24-30% over what otherwise would have been market-clearing levels. In any event, over the six years following the collapse of the ICAs for coffee and cocoa, international prices for these products fell between 60 and 65% (Gibbon and Ponte 2005).

The apparent success of the ICAs in pushing commodity prices higher became a growing source of tension between the two main sets of parties to the Agreements. Consuming countries never wholly accepted that they should be used to defend specific long-term floor prices, let alone push prices higher. In addition there were fundamental problems in securing agreement between, or even the participation of, all major supplying countries. Critical issues here were how to deal with new players who had entered the world market in order to exploit the price improvements attained as a result of the Agreements, and side-selling outside them by producing countries that were signatories (Payer 1975, Gilbert 1996, Bates 1997). According to Maizels (2000) total volumes of world commodity exports increased by 40% during the 1980s, despite a series of functioning export quota and buffer stock schemes. None of the agreements in question, apart from that for rubber, was able to survive the end of the 1980s.

\(^9\) The IMF never accepted that there were grounds for their existence, even though it created a finance facility to assist member governments pay their subscriptions.

\(^10\) In 1976 agreement was finally reached in UNCTAD on creating a Common Fund for Commodities, whose main task was envisaged as acting as a central financing facility for further ICAs (although it never acted as this).
The two most obvious questions raised by the proposal to revive ICAs are whether consuming countries would sign up to them, and whether producing countries still could operate export quotas. A third question concerns the relationship today between export quota schemes and the coffee price.

Certainly, consuming countries have evinced little interest in this proposal. This reflects the fact that the grounds have largely disappeared on which they accepted the desirability of the original generation of Agreements. These were to a high degree geo-political. They rested in the short-term on widespread fears concerning the vulnerability of the ‘West’ to economic blackmail by ‘strategic commodity producers’, against the background of concerns about the finite nature of global commodity supplies. In the longer term, they reflected fears of a link between this possibility and that of a general political re-alignment of developing countries behind the USSR and its allies (Krasner 1973; Payer op. cit.). Today, only hydro-carbons amongst commodities are considered of strategic significance or subject to pressing concerns about finite supply. Opportunities for other commodities to be used strategically by producing countries in relation to developed ones have been undermined by widespread substitution and by the shift of a wide range of commodity processing industries to developing countries themselves. At the same time, with the end of the Cold War, no systematic political re-alignment of developing countries is considered likely.

As for producing countries, a widespread revolution has occurred in national market organisation in the wake of the widespread adoption of structural adjustment policies. The national marketing boards and export monopolies that previously, for good and bad, coordinated input credit and distribution, quality control and export sales, have been liquidated or privatised. Most national supply markets are relatively competitive and some are extremely competitive in character. Except in a handful of cases, little or no coordination exists or – in the absence of a strong policy initiative in this direction – even seems possible. If there is no national market coordination, then there can be no meaningful national commitments to action in the context of new ICAs.

These problems are clearly visible in relation to the succession of recent attempts in the coffee sector to re-launch looser or more indirect forms of international agreement. The ‘Association of Coffee Producing Countries’, formed in 1990, introduced a voluntary quota-based programme. This had some apparent initial success but in 1999 had to be renegotiated as Brazil radically exceeded its quota. Later the programme was abandoned. In 2001-02 the International Coffee Organisation (ICO) – the intergovernmental organisation which administered the former international agreement on coffee – introduced a global programme (the Coffee Quality-Improvement Programme or CQP) aimed at taking very low quality coffee out of the international market, mainly through export restraints on the producing country side but also on the basis of efforts to eliminate such coffees from consuming country markets. According to the ICO, the CQP has been hampered by a lack of agreement on target quality standards, and by the partly related absence of some key consuming countries from membership of ICO. The lack of agreement amongst producing countries is reflected in the fact that only a small minority have introduced national regulations backing the measure. Some consuming countries, notably the US (which is not an ICO member) have objected in principle to the mandatory nature of the CQP, and apparently consider the announced quality targets too stringent. In 2004, in order persuade the US to rejoin ICO, the organisation made implementation of the CQP voluntary for member countries and issued a statement ‘clarifying the
central role of the ICO as a forum for discussions and exchange of information that may affect trade in coffee, without prejudice to the role of other institutions such as the WTO (ICO, 2004).

In any event, the question arises of whether export restraints would any longer have much impact on the market price for coffee. In the absence of state marketing boards who can undertake or support finance of producer country stocks, large private producers in supplying countries have taken to hedging their own stocks in futures and options markets. This means that the effect of the existence of this coffee will be transferred to the market in price terms, even if the stocks themselves are physically withheld. This reinforces the argument that, in order for any kind of international action by producers to be possible, national market coordination mechanisms must be re-established first.

5.2 Global regulation of oligopolistic behaviour

Over the last few years both development NGOs and policy researchers have raised the possibility of using competition/antitrust regulation at a multilateral level (principally through WTO) to address certain trade problems facing developing countries. The larger part of this discussion has focussed on using multilateral antitrust regulation to attack developed country export monopolies or to substitute for anti-dumping actions (see Hoekman 1997 for a summary of proposals made in the early 1990s). But more recently it has also encompassed claims that multilateral competition regulation could and should be used to tackle ‘the exercise of monopsony power by multinational buyers’ of agricultural commodities such as coffee and cocoa (Hoekman and Mavroidis 2002).

Hoekman and Mavroidis’s contribution to this debate is broadly typical, in that insofar as the modalities of such a use of competition regulation are specified at all, this is in terms of their institutional and political prerequisites rather than economic and legal ones. That is, these authors focus on what changes it would be necessary to secure within the WTO in order to advance an international antitrust agenda, rather than on developing economic criteria for identifying the exercise of monopsony power or on exploring what types of legal reasoning could serve as a basis for action in relation to it. Until this occurs it is likely that the proposal, while extremely attractive in important respects, will remain a non-starter.

As noted earlier, certain economic criteria (and related measurement methodologies) are available for identifying the exercise of monopoly/monopsony power, including relation of final prices to marginal costs and degrees and directions of price transmission. Currently, the use of these in relation to agro-commodity monopsonies is hampered by the absence of distinct data series for processors’ output prices. As certain researchers, notably Ponte, have succeeded in collecting a restricted set of firm-level data of this kind, there are no grounds for believing that this is an insuperable obstacle. There is a need for a very high degree of data disaggregation even at this level however, if the proposition of roaster’s rent capture via varietal substitution is to be properly tested.

---

11 Other measures used by econometricians include levels of entry and exit within a given sector, and degree of own-label market penetration.
A wider question is the relation between demonstration of anti-competitive behaviour in an econometric sense and legal judgements concerning anti-competitive behaviour. This may be less of an issue in a scenario in which WTO administers global antitrust regulation, since WTO has recently taken to using econometric evidence within the dispute settlement mechanism. But such evidence is used only very infrequently in the implementation of national antitrust laws, which in any event appear to incorporate criteria of anti-competitiveness based mainly on observed evidence about (a limited range of) types of actions by individual firms, rather than on the structural characteristics of given markets. This is particularly the case in EU regulation, where the chief focus is on actions affecting competitors’ welfare (US law is somewhat wider, with competition generally and consumer welfare being taken as priorities, although - as will be seen - this is potentially double-edged). Widening asymmetry of power between product suppliers and product processors, based on behaviour by processors that is best described as incremental and mimetic opportunism rather than collusion, is difficult to frame as an antitrust issue within these (especially the EU) legal traditions.

Papadopoulou-Zavalis (2004) summarises the main provisions of EU competition law in terms of prohibitions against a menu of actions undertaken on the basis of collusion between firms, against a similar range of actions taken by a single firm enjoying a ‘dominant market position’, and against mergers likely to lead to the creation of a dominant market position by a single firm. In the first two cases, the main actions prohibited in relation to suppliers are fixing purchasing prices, fixing physical quotas for specific suppliers, fixing price disparities between different supply markets and fixing trading conditions including payment and credit terms. Currently, the framework of reference for these prohibitions is always specific national consumption markets – or regional in the case of the EU. To be relevant to the problems of global agro-commodity trade, this would have to be widened to the global market (raising the issue of how this might occur). Once this is done, there remains the issue of identifying hard evidence of abuse. While there is widespread anecdotal evidence of the presence of at least some of these actions in global agro-commodity markets, legally-relevant evidence of them is hard to come by. Even if it is produced, it also has to be demonstrated that the action in question was exceptional in relation to existing market norms. As for actions undertaken by firms acting alone in situations of dominant market position, these can only be considered if there is clear evidence that a dominant market position is occupied. In EU law this is deemed a reasonable ‘presumption’ only where the firm’s relevant market share is 75% or higher. A share of 40-50% is ‘strong evidence’, but needs complementing by other data. If a firm has a share of 25% or below, it is presumed unlikely to hold a dominant market position.

Under the so-called ‘rule of reason’ doctrine, US law can also consider levels of competition in relation to issues of consumer interest and wider welfare outcomes. However, this doctrine appears to be employed most frequently to permit certain types of action that might otherwise be considered anti-competitive, rather than to widen the range of actions that could be considered illegal.

A final problem of existing bodies of competition law concerns the remedies that are available under them. The most usual of these are fines collected by national authorities from companies found to have acted abusively. In the case of proposed mergers that can lead to a dominant market
position, the most usual remedy is prohibition of the merger or (more frequently) actions ordered to dilute its effects. While there are possibilities to make orders for restitution/compensation in relation to collusion between firms and abuse of dominant market position, these have been employed only rarely. The question is therefore how developing country producers could benefit from these remedies, other than through their deterrent effects.

Given this range of difficulties, it is worth asking whether some of the desired outcomes of (creating and) using global competition law might be achieved more expeditiously by other means. If the problem’s kernel is not market concentration as such, but opportunistic behaviour that becomes rapidly generalised in situations of market concentration, then another option may be to seek to directly regulate opportunism. One way of doing so would be to introduce requirements for greater corporate transparency in consuming countries. In the case of coffee, where opportunism takes the form of substitution by roasters of higher by lower quality varieties coffees and disguising this process through steam cleaning, obligations could be introduced on roasters to label the final blended product with its precise varietal composition, and with a declaration divulging whether any of the coffee entering the blend has been steam cleaned. Legally, these requirements would have a similar status to those in the EU requiring labelling of GMO products/products with GM ingredients.

Of course, this is unlikely to have the same implications for processors as requirements for GM labelling, at least in the short-term. This is a result a very low levels of public awareness of differences between types of coffee – an awareness that has increased only slightly with the rise of ‘coffee house’ culture. Product differentiation in the coffee house segment has been largely on the basis of different types of coffee drink (espresso, latte, macchiato, etc) rather than on the basis of bean variety.\(^\text{12}\) For transparency requirements to have any impact, they must be linked to actions on the demand side (see below).

5.3 **Elimination of subsidies to/buying out Northern producers of tropical crops**

In April 2004 Brazil won a landmark case on cotton subsidies against the US in the WTO dispute settlement mechanism. This will hopefully open the door for a case against the EU, the other major Northern subsidiser of cotton production. EU subsidies on a unit value basis are around three times higher than those of the US, although the US’s aggregate level of subsidy was US$2.3 bn in 2001/02 as opposed to US$0.7 bn in the EU (ICAC 2000). Gillson et al. (2004) review six studies carried out between 2001 and 2003, estimating the effects of the removal of all cotton subsidies on world prices. These use different estimation levels and have slightly different assumptions, but all predict increases in world prices, at a median level of around 13%. Gillson et al’s own estimation, assuming world market demand fragmentation along varietal lines and differential supply elasticities on the producing country side, is an increase of 28%. Even when an undifferentiated world market and uniform supply elasticity are assumed, an increase of 18% is estimated. This range of estimates is equivalent to an increase of income for all developing country suppliers between US$ 0.6 bn and US$3.3 bn, and for West and Central African countries alone between

\(^{12}\) As Daviron & Ponte (op. cit.) point out, this range of drinks all use commodity Robusta as a common base. On the other hand, they come with a large service component.
US$0.09 bn and US$ 0.4 bn. This represents an increase in income from cotton of between 9.8% and 37.4% of their 2002 export earnings. The removal of US and EU subsidies alone is estimated to generate an increase in their earnings in the range of 8%-29%.

Cotton represents a unique case, both because of the high aggregate level of world subsidies and because (unlike in the case of sugar) there are no developing countries that benefit indirectly from the subsidies paid in Northern countries. Since it is significant for the livelihoods of such large numbers of developing country producers, particularly in Africa, it is nevertheless important to stress the significance of elimination of subsidies for this crop as part of any new policy agenda in relation to agro-commodities. This point is reinforced by the fact that, in their 2003 proposal to the WTO Trade Negotiation Committee for a new initiative on cotton, 16 West and Central African countries described the elimination of subsidies for cotton production and export as their ‘only specific interest’ in the Doha Round.

Because the removal of subsidies is likely to make virtually all EU cotton production and a very considerable proportion of US cotton production economically unviable, it is clear that there will be a political temptation to re-introduce support in new guises requiring new and probably protracted WTO challenges. Arguably therefore, assurance of long-term conformity to WTO rulings in this area is best secured by the accompaniment of the implementation of dispute settlement findings with other, more radical measures.

In the context of the EU CAP, the case has been made repeatedly since the mid-1960s that only buying out EU farm operators offers the possibility of permanently de-coupling subsidies from production. This idea acquired its currently most popular form, in Tangermann’s (1991) [reference missing] proposal for a bond scheme. A scheme of this kind, he argued, could allow thoroughgoing reform to be fully embraced, on the basis of compensating farm businesses for policies that led them to invest unwisely, and preventing a rash of bankruptcies in the wake of liberalisation. The proposal was taken up briefly by the EU Commission but dropped in 1992 in the wider context of the rejection of the MacSharry reforms. It began to be raised again by academic commentators following the dilution of the Agenda 2000 reform proposal in 1999. The most detailed bond scheme proposal in recent years (including full costings) is that by Beard and Swinbank (2001) [reference missing]. They propose a scheme involving unconditional payments over a ten year period, in the form of transferable bonds, guaranteed by the EU alongside other government debt, and tradable on EU stock markets. This would replace all existing compensation payment systems, support programmes and export subsidies. The consequences are described as likely to include lower land prices, lower entry barriers to farming and greater freedom of restructuring.

In the case of the EU, the main justification made for a bond-based buy-out was that it could be represented as a payment by consumers to producers against the probability of lower prices, thus leaving no-one worse off. Given that such a scheme will raise cotton prices rather cause them to drop, its natural justification in this case is as compensation to developing country producers for damage to their export earnings caused by Northern subsidies. If the principle of compensation of developing country cotton producers is accepted as part of an eventual Doha Round agreement
(this was the second component of the West and Central African cotton initiative of 2003) then a scheme of this kind could represent the compensation modality most easily saleable in the North.

In the longer-term, it is also important that the issue of subsidies to Southern producers is addressed. The great bulk of these subsidies are paid out in better-off developing countries and also result in loss of export earnings by low income country producers. As noted above, China is a major user of cotton subsidies and Mexico a significant one. Direct support to producers, though at a lower rate, is also provided by at least Brazil and Egypt (Valderrama 1999). A similar picture applies in the case of coffee. According to Lewin et al., (2005), the Brazilian government granted soft loans to coffee operators worth Real 0.8 bn (ca. US$0.26 bn) in 2002/03 and 2003/04 alone, to finance stock retention, farm maintenance and crop husbandry. These loans have been rolled over in the wake of falling international prices, despite the fact that much Brazilian production is profitable even at these levels. In addition, the Brazilian government absorbed the losses from a put option scheme it had offered to large operators, when international prices fell below the value of the options. In both the cases of Brazil and Vietnam, governments further subsidised the opening up the new production zones which today form the backbones of the national industries.

5.4 Support to public-private market coordination in producing countries and simplification of smallholder compliance with new product standards

Three public goods are particularly significant for smallholder production of coffee and cotton in tropical countries: input credit systems, quality control systems and producer payment systems reflecting quality. Prior to market liberalisation in the 1980s, most public marketing institutions supplied at least the first two of these goods – although usually in costly, inefficient and often corrupt ways. Where the third was not provided, typically another public good (e.g., inter-seasonal price stabilisation) was provided instead. Input credit systems are critical because smallholders typically lack the means to purchase the inputs necessary to grow crop of good quality, at the stage of the crop production cycle when they most need to be applied. Quality control systems were (and usually remain) critical because crop is marketed accorded to varietal or national reputation. Producer payment systems reflecting quality are critical because they provide producers with incentives to internalise quality considerations in their own production processes.

There are good reasons why such public goods often cease to be supplied in context of market liberalisation. Input credit is not supplied because smallholders have the freedom to sell to whom they please, regardless of who they received credit from. Quality control systems break down because private operators believe that, if they reject crop on quality grounds, smallholders will instead sell to those operators making no such demands. Payment systems reflecting quality break down in consequence.

While the over-riding importance of national and varietal reputations is waning in the bulk coffee market, what are perceived as ‘basic’ quality attributes (specific defect count and moisture levels) remain important and constitute a dividing line between the anonymous and non-anonymous bulk trade. At the same time, the global market has segmented between these ‘bulk’ markets and those for a heterogeneous group of so-called ‘specialty’ coffees. The latter include a large majority of Columbia Milds but also coffees of other varieties, to which immaterial attributes (and additional
service provisions) can be attached. Amongst these is Fair Trade, but also organic, shade-grown, region or estate of origin or simply ‘gourmet’ coffees – all of which command substantial premiums. A novel feature of the quality conventions attached to these designations is that they are process-based rather than referring to the physical characteristics of the crop. As a result they require new and generally expensive methods of verification.

Cotton entails a very different story. The international cotton trade is still organised in a single non-anonymous market, bifurcated between ‘coarse’ and finer cottons. These are differentiated in relation to each other and internally according to globally recognised national origins and quality descriptions. ‘National origins’ are a summary of varietal characteristics, typical forms of harvesting and types of ginning, while quality still refers in large part to those physical properties of the crop that reflect husbandry practices, such as contamination levels. Global reference prices exist for finer upland cottons and for coarser non-upland ones (the A and B indexes). Besides being dependent on supply/demand balances, the spread of premiums between different national origins and grades is subject to change on the basis of shifts in the reputation of national origins. In short, traditional product-based quality conventions still prevail, with relatively cheap forms of verification.

In reaction to the breakdown of quality conformity systems in producing countries, international traders have often turned to tighter forms of vertical integration. In the case of coffee this typically takes the form of buying from estates, which can be considered insulated from the generally prevailing market chaos and enjoy major economies of scale in meeting new quality conventions. In the case of cotton, where potentially large producers are often absent, this typically takes the form of outgrower schemes. These twin trends both pose the issue of keeping smallholders ‘in the system’, but in different ways. In the case of cotton, where economies of scale in meeting the prevailing quality requirements are low, smallholders will be kept in the system provided that outgrowers and other buyers can find ways of competing that do not lead to side-selling by producers - and which at the same time provide the latter with incentives to increase acreages and improve yields and quality. The alternative here is decline of national reputation and national marginalisation in the global market. In the case of coffee, smallholders will only get back into the system if ways can be found that reduce their costs of quality conformity.

Larsen (2004) and Poulton et al. (2004) argue that cotton systems with the characteristics described emerge most clearly after liberalisation where the market is dominated by a handful of relatively large players who agree to compete on the basis of a near-formal set of rules, and who have an institutional mechanism for identifying and acting on instances of opportunistic horizontal competition. They identify such systems as present in Zimbabwe (prior to 2002) and Zambia, but absent in four other southern and eastern African countries. In Zimbabwe and Zambia such systems emerged on the basis of liberalisation being managed in hands-on ways, but – although this may be harder – they do not exclude market coordination emerging through other initiatives. There is a role for donors in providing technical assistance to assist such initiatives, although a central problem here is identify and develop institutional mechanisms which are likely to have

---

13 The growing importance of ‘High Volume Instrument’-measured qualities of cotton fibre complicates this story somewhat, but does not invalidate it. See Larsen (2004).
credibility amongst private stakeholders. This has not been the case with a number of the initiatives sponsored by the multilateral Common Fund for Commodities, which appear to be mainly dedicated to reviving state-led sector coordination.

In the coffee sector the most notable initiatives to simplify smallholder conformity with new product standards are found in relation to organic certification. Here a handful of international organic certifying agencies (e.g., ECOCERT, IMO) have designed certification processes specifically tailored to smallholder organisations. These involve the training and use of smallholder organisation internal auditors and inspection of smallholder organisation members by international certifiers on a sample basis. Recognition of the equivalence of such certification processes is still patchy amongst Northern country import authorities, however and – more importantly – their implementation assumes the existence of well-functioning and well-resourced smallholder organisations. This suggests that assisting smallholder organisations to attain these properties is a pre-condition of other actions. It goes without saying that another pre-condition will be securing access to credit and inputs (whether conventional or certified ‘sustainable’ in one form or another). The central issue that this raises is whether such organisations, credit systems, etc. can come into existence or remain viable without donor support. Meanwhile, outside of the organic sub-sector there are few or no generic systems providing alternative mechanisms for attaining conformity, only a myriad of disconnected projects. This reflects the often proprietary nature of the quality conventions they refer to and may result in ‘competency traps’ for beneficiaries.

5.5 Actions on the demand side in Northern countries

The importance of action on the demand side in North has been emphasised strongly by Daviron and Ponte (2005) in the case of coffee. As already noted, it is a pre-condition for the effectiveness of action to take advantage of measures to enhance the transparency of roasters’ descriptions of the final product. According to these authors

‘...the most problematic aspect (of the current situation) is that consumers do not know how to assess coffee quality. They simply do not have the knowledge and language to discern the many characteristics of coffee...(whereas) a consumer who knows how to discern the intrinsic qualities of coffee will look for particular kinds of coffee and be willing to pay more for them...’ (Ch. 7)

On the other hand, this resembles the situation in the wine sector in most Anglophone countries as recently as 20 years ago. Here, a ‘wine bar culture’ (that has now vanished in favour of a coffee house one) provided the foundation for a generalisation of knowledge concerning regional appellations and their special properties, varieties of grape, the different components of wine appearance and taste and which wines are best to drink with different foods - or without food. With support from ICO, international NGOs and governments of producing countries, initiatives to ‘deepen’ coffee consumption appear both useful and promising.

On the other hand, initiatives to broaden coffee consumption appear to be also necessary. Overall consumption is declining in mature markets, especially amongst the young and in favour of soft drinks that require no preparation. Alcoholic drinks have become more popular amongst this age-

20 Market Power, Monopsony, and the Commodity Question
group on the basis of a cross-over with soft drinks (‘alco-pops’) and there may be some mileage for the coffee industry exploring similar directions.

6. Conclusion

The conceptual formulation of the commodity question has changed somewhat in recent years, as have the policy instruments proposed to deal with it. The issue of oligopoly, once seen as a problem of producing countries (and their marketing boards), is now seen increasingly as a problem for them. The new elements of the mainstream policy agenda (PRM [is this partner relationship management?] and public-private partnerships) simply do not address this issue, though.

Nor, it must be said, do they address another element of the contemporary commodity question which is becoming increasingly evident. The question is becoming more and more one about smallholders. Large-estate commodity production has fared much better than smallholder production since the advent of structural adjustment, partly because estates alone now enjoy economies of scale. Also, many of the sources of competitive advantage that smallholders once enjoyed – such as conventions of quality that rewarded land husbandry based on hand-cultivation and mixed cropping, as well as ability to exercise detailed control over labour -- have evaporated. At the same time, countries with smallholder-based systems, because they are poorer and less economically diversified, have been much more exposed to the commodity crisis than ones where large estates play the leading role. These two facts have substantial implications for the breadth of associated economic problems and the depth of their impacts on livelihoods.

Those elements of the current mainstream agenda carried over from earlier periods, namely compensatory finance and support for diversification, remain relevant although there is room for improvement in their funding levels and in their precise focus and design.

At the same time, there are some elements of the ‘alternative’ agenda which are impractical and unrealistic. New ICAs and a global competition law which could make a difference in relation to buyer oligopoly fall into this category. New ways of regulating and balancing market power must be found. But better places to look for them are interventions that scale-up the competitiveness and bargaining power of smallholders at national level in producing countries, target the market distortions which bolster the position of large-scale (including Northern) producers, and impose new obligations of transparency on global oligopolists in order to expose them to greater consumer scrutiny.
7. References


EIU [reference missing]


GTZ (2003a) Ecological cocoa growing in Nicaragua Project description at www.gtz.de/ppp/english/praxisreport/

GTZ (2003b) Improvement of coffee quality and sustainability of coffee production in Vietnam Project description, at www.gtz.de/vietnam/ppp/ppp_coffee_eng.htm


International Cotton Advisory Committee (ICAC) (2000) Review of the world situation, 54 (1) (September-October)


Swinbank (2001) [reference missing]

Tangermann (1991) [reference missing]

Talbot, J (1997) ‘Where does your coffee dollar go? The division of income and surplus along the coffee commodity chain. Studies in Comparative International Development 32 (1) 56-91
