Coffee Markets in East Africa: Local Responses to Global Challenges or Global Responses to Local Challenges?*

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Abstract

To what extent is global economic change mediated by national-level policies? Are global corporations adopting the same strategies in different countries or do they address varying local circumstances in different ways? Do governments in developing countries have any meaningful regulatory powers left? How can they use them to the advantage of their citizens? This paper seeks to address some of these issues by studying the dynamics of coffee market reforms in three East African countries against the background of the recent restructuring of the global coffee marketing chain. The paper focuses on two relatively neglected areas of inquiry: (1) changes in the identity, market share and organization of actors involved in commodity markets and their contractual/power relationships in the marketing chain; and (2) changes in the assessment, monitoring, and valuation of quality parameters in commodity trade. The author highlights the consequences of different trajectories of domestic market reforms and assesses the strategic choices available to producing country governments vis à vis corporate power and donor pressure towards liberalization and deregulation.

1. Introduction

This paper examines the relationship between forms of regulation, quality and the organization of commodity markets in producing countries through a Global Commodity Chain (GCC) approach. It focuses on the coffee marketing chains originating in three East African countries (Kenya, Tanzania and Uganda). Three major changes that took place in global markets for agricultural commodities in the last two decades are relevant for the discussion of GCC restructuring. First, the trade regime characterized by International Commodity Agreements ended in the late 1980s, and was followed by the demise of preferential trade agreements (Lomé Conventions) and the emergence of the WTO trade regime. Second, market liberalization and deregulation of trading, processing and quality control practices in producing countries has occurred, leading to the demise of countries as 'producer units' and to an institutional system where producers do not have an established 'voice'. Third, corporate strategies and consumption patterns have changed markedly in the last decade. The adoption of supplier-managed inventory, corporate consolidation, the increased importance of branding, and the fragmentation and increased diversification of consumption have transformed power relations in commodity markets to the advantage of buyers rather than producers. These shifts have had major consequences on the organizational structure of commodity chains, on their mode of governance, on the nature of enterprise ownership at various 'nodes', and on the distribution of value added between actors involved in the chain.

Why a Global Commodity Chain (GCC) approach?

In the literature on GCCs, the international structure of production, trade, and consumption of commodities is disaggregated into stages that are embedded in a network of activities controlled by firms and enterprises. The systematic study of commodity chains seeks to explain the spatial organization of production, trade and consumption of the globalized world

economy (Gereffi *et al.* 1994, 2). A commodity chain in this context is seen as 'a network of labour and production processes whose result is a finished commodity' (Hopkins and Wallerstein 1986, 159). Specific processes within a commodity chain are represented as 'nodes' linked together in networks. Therefore, we can see a commodity chain as 'a set of inter-organizational networks clustered around one commodity or product' (Gereffi *et al.* 1994, 3), in which networks are situationally specific, socially constructed, and locally integrated (Ibid.).

Gereffi identifies four dimensions of GCCs: their input-output structure, the territory they cover, their governance structures (Gereffi *et al.* 1994, 97), and the institutional framework (Gereffi 1995). The input-output structure and the geographical coverage of GCCs are mainly used to outline the configuration of specific chains and the distribution of value added. The governance structure specifies the power relationships along the chain and is where the distinction between *producer-driven* and *buyer-driven* GCC governance structures is introduced. The institutional framework specifies the local, national and international conditions that shape each activity within the chain.

Although GCC theory originally centred on analyses of the manufacturing and service sectors, it has recently started to be applied to agro-food systems as well.[1] Agricultural commodities tend to fall into what Gereffi (1994, 97-100) has defined *buyer-driven* commodity chains,[2] in which large retailers in industrialized countries, brand-name merchandisers, and trading companies are the key actors in setting up decentralized networks of producers in developing countries. Because of the changes that have taken place in distribution and retailing in industrialized countries since the 1980s, agricultural production has become more flexible, involving a heterogeneous combination of firms, types of ownership, size, and relative access to markets. As a result of increased flexibility, a commodity-based analysis can provide better insights on the organizational structures and strategies of agriculture than a sectoral approach (Raynolds 1994, 143-4; Raikes, Jensen and Ponte 2000).

Why a focus on market organization and quality?

Experiences of commodity market reform and outcomes in terms of supply response have varied enormously in developing countries, depending on the specific commodity in question, the country examined, and the initial nature of domestic markets before reform implementation. Yet, a couple of common traits emerge in the literature. Market reforms usually lead to prompt cash payments and a higher proportion of the export price being paid to farmers, although price volatility increases because of the end of price stabilization mechanisms. Peripheral farmers are particularly affected by the elimination of pan-territorial pricing and market failures in input distribution. Access to credit for local traders and farmers becomes more difficult. The private sector becomes substantially involved in producer-country processing. Finally, cooperatives and former parastatals lose substantial proportions

[1] See, among others, Fold (1999; 2001) on cocoa, Gibbon (1999; 2001a) and Larsen (2001) on cotton, Calvin and Barrios (2000), Dolan *et al.* (1999) and Raynolds (1994) on fresh fruit and/or vegetables, and Fitter and Kaplinsky (2001) and Talbot (1997a; 1997b) on coffee.

[2] For exceptions to this rule, see Gibbon (2001b) and Raikes and Gibbon (2000).

of their market share to the advantage of private traders – especially those owned/financed by multi-national corporations (MNCs).[3]

While these are now recognized traits of commodity market reform, two other key areas of inquiry have been relatively neglected: (1) the identity, market share and organization of actors involved in commodity markets and their contractual relationships upstream (towards producers), downstream (towards consumers) and sideways (with providers of inputs and services); and (2) changes in the assessment, monitoring, and valuation of quality parameters of the traded commodity. Market organization and types of contractual relationships need to be understood because they identify the dynamics of power relations among actors involved in the production, trade, processing and consumption of a commodity. Liberalization of agricultural commodity markets in Africa has led to substantial involvement of MNCs in domestic trade and processing, sidelining 'independent' traders who find it more difficult (and more expensive) to access working capital domestically. One of the concerns raised by critical analysts of liberalization is the possibility that market domination by a few large scale actors will result in non-competitive behaviour at the expense of producers. The forms of coordination among actors (if any) and the type of contracts they formulate to organize their operations are also key points in understanding whether institutions arising from liberalization simply minimize transaction costs (if they do this at all), or whether they also embed forms of asymmetrical power relations.

Analyzing quality aspects of commodities is also germane to understanding the dynamics of liberalized markets because reforms affect the form, timing and pricing mechanisms of commodity trade, therefore affect farmers' welfare through possible changes in reputation and price premia. Changes in quality also affect the role of a national or sub-national crop in a global commodity market and the organization of marketing operations. Just focusing on the fact that farmers have been paid a higher share of the export price after liberalization does not tell us anything about the changes in the overall price paid for a commodity, which is a function not only of demand-supply-stocks relations, but also of quality and reputation.

One of the results of market liberalization that is eagerly underlined by promoters of reforms is increased buyer competition. Yet, when resulting in early buying rather than in price competition or the search for higher quality crops, buyer competition has led to purchasing of crop that is not ready to be marketed – i.e. unripe cotton and wet coffee. An aggravating factor is that price volatility (which has increased since liberalization) tends to hit low-grade produce more than high quality produce. Also, where the private sector has not set up a system of buying in grades, there has been no direct incentive for producers to improve crop quality. Quality control functions in the single-channel marketing system took place both at the cooperative level and at the marketing board level for export. In the post-liberalization regime, the first level of quality control has been often lost, and the second one has been retained by the public sector in some cases (coffee and cotton in Tanzania, coffee in Uganda), or contracted to the private sector in others (coffee and cocoa in Côte d'Ivoire). Liberalization of commodity trade and processing has often led to deteriorating export crop

[3] See Akiyama *et al.* (2001), Ponte (2001a; 2001c), Raikes and Gibbon (2000), Shepherd and Farolfi (2000), and Townsend (1999).

quality in several countries and, in some cases, to price discounting in international markets and loss of reputation for a 'national' crop. This may explain part of the observed relative decrease of unit export values for African 'traditional' export crops (Raikes and Gibbon 2000).[4]

Why coffee?

The examination of the coffee marketing chain is particularly important in the context of GCC analysis. First, over 90 per cent of global coffee production takes place in the South, while consumption takes place mainly in the North.[5] Therefore, from a political economy perspective, the production-consumption pattern provides insights on North-South economic relations. Second, for most of the post-World War II period coffee has been the second most valuable traded commodity after oil.[6] Third, attempts to control the international coffee trade have been taking place since the beginning of the 20th century, making coffee one of the first 'regulated' commodities. Fourth, a number of African countries, even those with a low share of the global export market, rely on coffee for a high proportion of their export earnings (see Table 1). Fifth, producing country governments have historically treated coffee as a 'strategic' commodity; they have either directly controlled domestic marketing and quality control operations or have strictly regulated them – at least until market liberalization took place in the 1980s and 1990s. Therefore, the analysis of the coffee marketing chain provides key insights for the understanding of the changing shape of African economies in relation to changes in the global economy and the liberalization of domestic-level commodity trade. The focus in this paper is on the segment of the coffee chain from the producer to the point of export. Some processes of global restructuring of the coffee chain are described below, but those looking for a detailed account should turn elsewhere (Fitter and Kaplinsky 2001; Ponte 2001b; Talbot 1997b).

Why Kenya, Tanzania and Uganda?

The rationale behind the choice of the three countries is to compare the dynamics of restructuring of the coffee marketing chain in locations with different degrees and trajectories of liberalization. Kenya has not substantially liberalized its domestic market (except for processing), and runs an export auction system. Tanzania liberalized its domestic coffee market in the mid-1990s, but has retained strong regulatory powers through its coffee board, which still runs an auction system similar to Kenya's. Uganda swiftly liberalized its domestic coffee market in the early 1990s, and the coffee regulatory body has a relatively 'light hand' on the market. These differences have to some extent mediated the impact of global changes on the functioning and organization of domestic markets, coffee quality control procedures, competition, pricing systems, incentive structures, and contractual relations among actors.

[4] This has been the case at least for coffee and cotton in Tanzania, coffee and cocoa in Côte d'Ivoire, and cocoa in Nigeria and Cameroon.

[5] The major exception is Brazil, which is the top producer and also one of the main consuming countries in the world. In Africa, the only country with substantial coffee consumption is Ethiopia.

[6] This has changed recently. In 1996/97, coffee ranked only fifth among internationally traded commodities after oil, aluminium, wheat and coal.

Methodology

The material presented here is based on six months of fieldwork carried out in East Africa in the second half of 2000. In Kenya and Uganda, the author collected secondary documents and data, and interviewed officers of the coffee regulatory bodies, cooperative unions, farmer organizations, trade federations, and a small sample of traders/exporters and processors. In Tanzania, the whole domestic marketing chain was researched in detail. This involved, at the production level, a survey of 250 smallholder coffee producers in Hai District (Kilimanjaro), 32 focus groups with coffee farmers, covering all districts with an estimated coffee production of 2,000 tons (except for the Hard Arabica area of Tarime), and interviews with owners or managers of 15 large scale estates. Interviews were also carried out with all types of actors in the domestic marketing chain downstream from producers. These included actors handling coffee (agents, traders, cooperatives, curing/hulling plants, exporters, local roasters, transporters) and providers of services to the industry (finance, inputs, extension, research, brokerage, quality control, auditing, information, logistics). Specifically, the author interviewed 22 out of 30 registered export companies (including all the top ten by market share), 18 out of 19 licensed coffee curing/hulling plants, and 21 out of 30 licensed domestic traders (including all the top ten). Work at the Tanzania Coffee Board (TCB) included interviews, data collection, and attendance at the weekly auction for five months. All information included in this paper comes from primary fieldwork material – unless otherwise stated.

Organization of the paper

The next section of the paper draws attention to a series of key changes that have taken place in the governance structure and institutional framework of the global coffee marketing chain. Against this background, the third section presents a brief analysis of the changing role of East African coffees in the world coffee market. The fourth section examines the salient traits of coffee market liberalization and deregulation in Kenya, Tanzania and Uganda and discusses how reforms affected market organization, the make-up of actors involved in the chain, relationships among actors and quality control and performance. A detailed examination of the three case studies can be found in the Appendix. The final section highlights the consequences of different trajectories of domestic coffee market reforms and assesses the strategic choices available to producing country governments *vis à vis* the restructuring of the global marketing chain.

2. The international setting: The restructuring of the global coffee chain

The evolution of coffee marketing in East Africa does not depend exclusively on the process of domestic-level liberalization, but also on key transformations that are taking place in the global coffee chain. The essential characteristics of the global coffee chain in the last 40 years are best grasped in terms of a distinction between two broad historical periods: the International Coffee Agreement (ICA) regime (1962-89) and the post-ICA regime (1989-present). The first International Coffee Agreement (ICA) was signed 1962 and included most producing and consuming countries as signatories. Under the ICA regime, a target price (or a

price band) for coffee was set, and export quotas were allocated to each producer country. When the indicator price calculated by the International Coffee Organization (ICO) rose over the set price, quotas were relaxed; when it fell below the set price, quotas were tightened. If an extremely large rise in coffee prices took place (as in 1975-77), quotas were abandoned until prices fell back within the band. Although there were problems with this system, most analysts agree that it was successful in raising *and* stabilizing coffee prices (Akiyama and Varangis 1990; Bates 1997; Daviron 1996; Gilbert 1996; Palm and Vogelvang 1991).

The relative success of the ICA regime is attributed to various factors: (1) the participation of consuming countries in the workings of the quota system; (2) the existence of producing countries as 'market units', where governments were in control of decisions concerning exports; (3) Brazil's acceptance of its shrinking market share that resulted from successive ICAs; and (4) an initial common strategy of import substitution in producing countries, which required maximum mobilization of export earnings (and therefore high commodity prices) (Daviron 1996, 86-9). However, the ICA system was eventually undermined by free-riding and squabbling over quotas. Other problems were the increasing volume of coffee traded with (or through) non-member importing countries at lower prices, the growing fragmentation of the market, and the increasing heterogeneity of development models (as Brazil and Indonesia moved towards a more export-oriented industrial strategy) (Daviron 1993; 1996).

During the ICA regime, the global coffee chain was not particularly 'driven' by any actor, nor was it possible to clearly state that producing or consuming countries controlled it. Entry barriers in farming and in domestic trade were often mediated by governments. The international coffee trade was regulated by the commodity agreement. The establishment of quotas and their periodic negotiation entailed that entry barriers for countries (as producer units) were also politically negotiated within the ICA mechanisms. The inherent stabilizing force of the ICA, coupled with regulated markets in producing countries, created a relatively stable institutional environment where rules were relatively clear, change politically negotiated, and proportions of generated value added fairly distributed between consuming and producing countries. The relatively homogeneous form of trade limited the possibilities of product upgrading, but producing countries ensured product valorization through higher prices generated by the ICA (Ponte 2001b).

On the contrary, the post-ICA regime exhibits many of the characteristics of what Gereffi (1994) calls a 'buyer-driven' chain. More specifically, it can be labelled a 'roaster-driven' chain. Strategic choices made by roasters in the last ten years have shaped barriers of entry not only in the roaster segment of the chain, but also in other segments upstream. The adoption of supplier-managed inventory (SMI) has added new requirements that international traders must fulfil to be part of the game. The need to guarantee the constant supply of a variety of origins and coffee types has prompted international traders to get even more involved in producing countries than they would have done simply as a result of market liberalization. Out-sourcing supply management is also an instance of the upstream externalization of non-core functions that is peculiar to many 'buyer-driven' chains. Likewise, new requirements set by roasters on the minimum quantities needed from any particular origin to be included in a major blend may also be interpreted as setting entry

barriers to producing countries. These barriers used to be set by governments on the basis of political negotiation under the ICA regime. Now, private firms set them on the basis of market requirements (ibid.).

The institutional framework within which the coffee chain operates has changed dramatically as well. Market relations have replaced political negotiation over quotas. Producing countries have disappeared as actors in these interactions, with the exception of not-so-successful retention attempts under the umbrella of the Association of Coffee Producing Countries (ACPC). The ICO has become a relatively empty institutional shell. Domestic regulation of coffee markets plays an increasingly weaker role. All of this indicates that the institutional framework is moving away from a formal and relatively stable system where producers had an established 'voice' towards one that is more informal, inherently unstable and buyer-dominated. In the process, a substantial proportion of total value added generated in the coffee chain has been transferred from farmers to consuming country operators (see Pelupessy 1999; Talbot 1997a).

3. East Africa in the global coffee market

Coffee used to be the most important export crop produced in Africa. In 1984-86, it represented a staggering 24 per cent of the total value of African agricultural exports (Raikes and Gibbon 2000, 61). By 1996-98, this proportion had decreased to 11.5 per cent and cocoa had become the top export crop with 13.5 per cent of total agricultural exports in the continent (source: FAO trade yearbook 1998). Yet, a number of African countries – even those with a low share of the global export market – still rely on coffee for a high proportion of their export earnings. In Africa, coffee exports in 1996-98 represented more than 50 per cent of agricultural export earnings in five countries, and more than 20 per cent in nine countries. In three of these countries, coffee exports represented more than 50 per cent of total merchandise exports, and in eight countries more than 10 per cent (see Table 1).

Brazil and Colombia have been the undisputed top world coffee producers for most of the 20th century. This situation has recently changed with the extremely fast growth of coffee production in Vietnam (see Table 2). In 1999/00 Vietnam replaced Colombia as the world second largest producer. Africa's share of total production has decreased from 18-19 per cent in 1995 and 1996 to around 15-16 per cent in later years. The coffee trade is organized around two coffee species (Coffea Arabica – hereafter 'Arabica', and Coffea Canephora – also known as 'Robusta') and two primary processing methods ('wet' and 'dry'). With the 'wet' method, the end result is 'Mild' (or washed) coffee, normally of the Arabica type.[7] With the 'dry' method, the end result is 'Hard' coffee, either Hard Arabica or Robusta. The distinction is important as Mild Arabica, Hard Arabica, and Robusta coffees are traded

[7] Some Robusta coffee is also processed with the wet method, but its volume in the international trade is insignificant.

separately. In all three cases, the product ready for export is called 'green' coffee (Brown 1991, 3-7). Most international coffee trade consists of this coffee, packed in 60-Kg bags.[8]

Table 1: Importance of coffee exports in selected African countries (1996-98)

	1996	1997	1998	Mean 1996-98
Value of coffee exports/agricultural exports (%)				
Africa	10.6	11.5	12.3	11.5
Burundi	70.9	88.9	80.8	80.2
Cameroon	20.4	19.1	15.3	18.3
DRC	66.1	64.9	69.8	66.9
Cote d'Ivoire	9.6	11.9	19.7	13.7
Ethiopia	65.4	71.9	68.7	68.7
Guinea	31.9	47.9	34.9	38.2
Kenya	*25.1*	*24.8*	*17.6*	*22.5*
Madagascar	41.6	35.8	47.3	41.6
Rwanda	73.6	72.5	71.0	72.4
Tanzania	*27.6*	*26.7*	*27.2*	*27.2*
Togo	6.9	19.3	11.8	12.7
Uganda	*80.7*	*76.0*	*75.2*	*77.3*
Value of coffee exports/merchandise exports (%)				
Africa	1.1	1.1	1.5	1.2
Burundi	67.7	87.7	60.0	71.8
Cameroon	7.2	4.9	4.6	5.6
DRC	16.0	12.1	15.3	14.5
Cote d'Ivoire	5.5	6.3	12.1	7.9
Ethiopia	63.5	65.3	66.9	65.2
Guinea	1.8	3.2	1.8	2.2
Kenya	*13.7*	*13.6*	*12.4*	*13.3*
Madagascar	19.1	14.6	15.6	16.5
Rwanda	24.1	30.1	40.2	31.5
Tanzania	*18.1*	*16.4*	*17.0*	*17.2*
Togo	3.9	11.1	4.2	6.4
Uganda	*59.6*	*55.6*	*61.3*	*58.8*

Source: FAO Trade Yearbook 1998

[8] Other two forms of coffee trade are instant and roasted coffee. Trade between producing and consuming countries consists mostly of green coffee and bulk instant coffee. Bulk instant coffee imported from producing countries is usually blended and re-packaged in consuming countries. The roasted coffee trade takes place almost exclusively between consuming countries. This pattern of trade comes from the fact that green and instant coffees can be stored for longer periods of time, while roasted coffee loses its freshness much more quickly (Talbot 1997b).

Table 2: Total production of ICO exporting members, ranked by 1999/00 production (1995/96 to 2000/01); thousands of 60-Kg bags

	Type of coffee	1995/96	1996/997	1997/98	1998/99	1999/00	* 2000/01	Share of world production (1999/00)
TOTAL		85,647	102,495	95,969	106,508	114,218	112,901	
AFRICA		15,291	18,989	14,399	14,705	18,599	17,782	
AFRICA/TOTAL (%)		18	19	15	14	16	16	
Brazil	(A/R)	15,784	27,664	22,756	34,547	32,353	31,100	28.3
Vietnam	(R)	3,938	5,705	6,915	6,947	11,264	11,350	9.9
Colombia	(A)	12,878	10,876	12,211	11,088	9,336	12,000	8.2
Mexico	(A)	5,527	5,324	5,045	5,051	6,442	6,338	5.6
Indonesia	(R/A)	5,865	8,299	7,759	8,463	6,014	7,300	5.3
Côte d'Ivoire	(R)	2,532	4,528	3,682	2,042	5,463	4,167	4.8
India	(A/R)	3,727	3,469	4,735	4,372	5,407	4,917	4.7
Guatemala	(A/R)	4,002	4,524	4,218	4,892	5,201	4,500	4.6
Ethiopia	(A)	2,860	3,270	2,916	2,745	3,505	3,683	3.1
Uganda	*(R/A)*	*3,244*	*4,297*	*2,552*	*3,298*	*3,097*	*3,200*	*2.7*
Honduras	(A)	1,909	2,004	2,564	2,195	2,975	2,300	2.6
El Salvador	(A)	2,586	2,534	2,175	2,056	2,778	2,113	2.4
Peru	(A)	1,871	1,806	1,922	2,022	2,529	2,575	2.2
Costa Rica	(A)	2,684	2,126	2,500	2,350	2,465	2,400	2.2
Kenya	*(A)*	*1,664*	*1,246*	*882*	*1172*	*1,433*	*1,175*	*1.3*
Thailand	(R)	1,317	1,403	1,293	916	1397	1,200	1.2
Papua New Guinea	(A/R)	1,002	1,089	1,076	1,350	1,386	972	1.2
Nicaragua	(A)	985	793	1084	1,073	1,384	1,200	1.2
Ecuador	(A/R)	1,888	1,993	1,191	1,204	1,350	950	1.2
Cameroon	(R/A)	663	1432	889	1334	1,218	1,100	1.1
Tanzania	*(A/R)*	*897*	*765*	*624*	*739*	*837*	*850*	*0.7*
Congo, Democratic Rep. of	(R/A)	1,099	794	800	650	750	1,000	0.7
Philippines	(R/A)	850	890	935	685	739	775	0.6
Venezuela	(A)	1364	1,200	986	991	717	1,100	0.6
Dominican Republic	(A)	886	519	941	422	694	680	0.6
Burundi	(A/R)	434	401	297	356	434	333	0.4
Madagascar	(R/A)	785	849	623	992	427	750	0.4
Haiti	(A)	506	429	435	442	402	530	0.4
Togo	(R)	85	290	222	321	334	330	0.3
Cuba	(A)	285	366	300	280	318	300	0.3
Rwanda	(A)	330	293	194	222	308	320	0.3
Central African Republic	(R)	108	208	115	214	210	200	0.2
Bolivia	(A)	151	133	153	150	184	195	0.2
Panama	(A)	209	211	218	192	161	170	0.1
Zimbabwe	(A)	131	174	130	147	122	180	0.1
Guinea	(R)	104	148	172	140	120	120	0.1
Malawi	(A)	91	49	61	64	59	61	0.1
Ghana	(R)	57	32	28	45	56	55	0.0
Nigeria	(R)	53	46	45	46	56	50	0.0
Angola	(R)	62	71	64	85	55	100	0.0
Zambia	(A)	27	33	40	56	55	50	0.0
Sierra Leone	(R)	44	41	50	24	50	40	0.0
Sri Lanka	(R/A)	36	37	58	35	40	45	0.0
Jamaica	(A)	43	54	46	29	39	44	0.0
Paraguay	(A)	45	40	34	34	28	50	0.0
Trinidad and Tobago	(R)	18	18	20	17	16	15	0.0
Liberia	(R)	5	5	5	5	5	5	0.0
Congo, Rep. of	(R)	12	14	3	3	3	5	0.0
Gabon	(R)	2	2	3	4	2	2	0.0
Benin	(R)	0	0	0	0	0	1	0.0
Equatorial Guinea	(R)	2	1	2	1	0	5	0.0

Note: * provisional estimates
Source: ICO A= Arabica R= Robusta

Green coffee is available to buyers either directly from its origin or via the spot markets in the US and Europe. In theory, physical coffee can also be accessed to via the futures market, but this happens only rarely. The purpose of these markets is to provide hedging against risk rather than being a supply source (McClumpha 1988, 8). Two sets of international prices are available for coffee: (1) ICO-published prices: these are indicators of the physical trade, where each contract refers to a specific quality, origin, shipment, currency and destination; and (2) prices determined by futures markets: these are short-term syntheses of market fundamentals (production, consumption and stocks) and technical factors (hedging, trend following, reactions to trigger signals). Prices in the physical trade of Arabica coffees from various origins are set as differentials in relation to the futures price of Colombian Milds 'C' contracts quoted at the New York Coffee, Sugar and Cocoa Exchange (CSCE). The reference price for Robusta coffees is set at the London International Financial Futures and Options Exchange (LIFFE).

Table 3: Exports by major ICO exporting members to all destinations (March 2000 – February 2001), 60-kilo bags

TOTAL	88,607,673
Colombian Milds	**11,539,133**
Colombia	9,499,242
Kenya	*1,214,199*
Tanzania	*825,692*
Other Milds	**28,059,771**
Guatemala	4,771,031
Mexico	4,659,096
India	4,460,021
Honduras	2,915,806
Peru	2,298,292
El Salvador	2,256,138
Costa Rica	2,026,895
Nicaragua	1,327,541
Papua New Guinea	1,055,380
Ecuador	692,076
Brazilian Naturals	**19,999,823**
Brazil	18,154,618
Ethiopia	1,834,205
Robustas	**29,008,946**
Vietnam	11,958,220
Côte d'Ivoire	5,793,381
Indonesia	5,248,067
Uganda	*2,641,651*
Cameroon	1,222,145
Thailand	843,220
Congo, Dem. Rep. of	356,429
Madagascar	324,006
Togo	279,381
Central African Republic	207,253

Source: ICO

The International Coffee Organization (ICO) categorizes exports by type of coffee. As we can see in Table 3, Mild Arabica coffees are divided into 'Colombian Milds' and 'Other Milds'. Colombian Milds comprise coffees produced in Colombia, Kenya and Tanzania. The main players in the Other Milds category are Guatemala, Mexico and India. 'Brazilian Naturals' basically consist of Hard Arabicas from Brazil and Ethiopia. The fourth ICO category comprises Robusta coffees from all origins. Here, Vietnam is by far the main producer, but Côte d'Ivoire, Indonesia and Uganda are also major players.[9] In normal supply conditions, market prices are highest for the Colombian Milds category (with selected Kenyan coffees on top), followed by Other Milds (with some Costa Rica and Guatemala coffees at the high end of the scale), by Brazilian Naturals, and finally by the wide spectrum of Robustas (McClumpha 1988, 14).

Although the total share of coffee exports from African countries is relatively marginal, some African producers play an important role in the world coffee market: Côte d'Ivoire for the volume of its Robusta production; Uganda for the volume and the special quality of its Robusta; and Kenya for its fine quality coffees. Generally, Tanzanian coffee is used as a substitute for Colombian, and Ethiopian coffee as a substitute for Brazilian. In the 1990s, East African exports represented on average 35 per cent of total African exports of green coffee and six per cent of total world exports (FAO data). Kenya and Tanzania, even with a low proportion of global coffee exports, have played an important role in the category of Colombian Milds. Uganda is currently the fourth world exporter of Robusta coffee (see Table 3). Table 4 shows that in the 1990s cumulative exports from East Africa ranged from 4 to 5.5 million bags, except for peaks over 6 million bags in 1993/94 and 1994/95. Coffee exports in Kenya have remained in the range of 1.4 to 1.6 million bags, with the exception of lower production in 1991/92 and 1992/93 and a peak of almost 1.9 million bags in 1994/95. Tanzanian coffee exports have ranged between 650,000 and 950,000 bags (except for 1992/93). Ugandan exports have ranged between 2.8 and 4.2 million bags between 1990/91 and 1996/97, but have declined substantially in later years due to the impact of wilt disease (see also Figure 1).

[9] The ICO classification does not take into consideration that some countries produce different types of coffee: Brazil, for example, produces Robusta as well as Hard Arabica. India, Papua New Guinea, Uganda, Cameroon, and Tanzania produce both Arabica and Robusta. These countries are classified in accordance to the main type of coffee they produce.

Table 4: Kenya, Tanzania and Uganda: green coffee exports by type (1990/91 - 1999/00); thousands of 60-Kg bags

	Kenya		Tanzania			Uganda			East Africa		
	Total	Mild Arabica	Total	Mild Arabica	Robusta and Hard Arabica	Total	Arabica (Mild and Hard)	Robusta	Total	Arabica	Robusta
1990/91	1421	1421	811	567	244	2917	292	2626	5150	2280	2870
1991/92	1192	1192	729	451	278	3648	356	3292	5569	2000	3569
1992/93	799	799	558	330	229	3032	341	2691	4390	1470	2920
1993/94	1389	1389	650	474	176	4237	448	3789	6276	2311	3965
1994/95	1895	1895	888	685	203	4149	386	3762	6932	2967	3965
1995/96	1325	1325	733	533	200	2792	508	2284	4850	2366	2484
1996/97	1455	1455	714	520	194	3005	401	2604	5174	2376	2798
1997/98	1412	1412	946	724	222	2089	165	1924	4446	2301	2145
1998/99	1399	1399	849	602	247	1884	169	1884	4132	2170	1962
1999/00	1649	1649	930	731	199	2085	161	1924	4664	2541	2123

Sources:

Kenya: CBK.

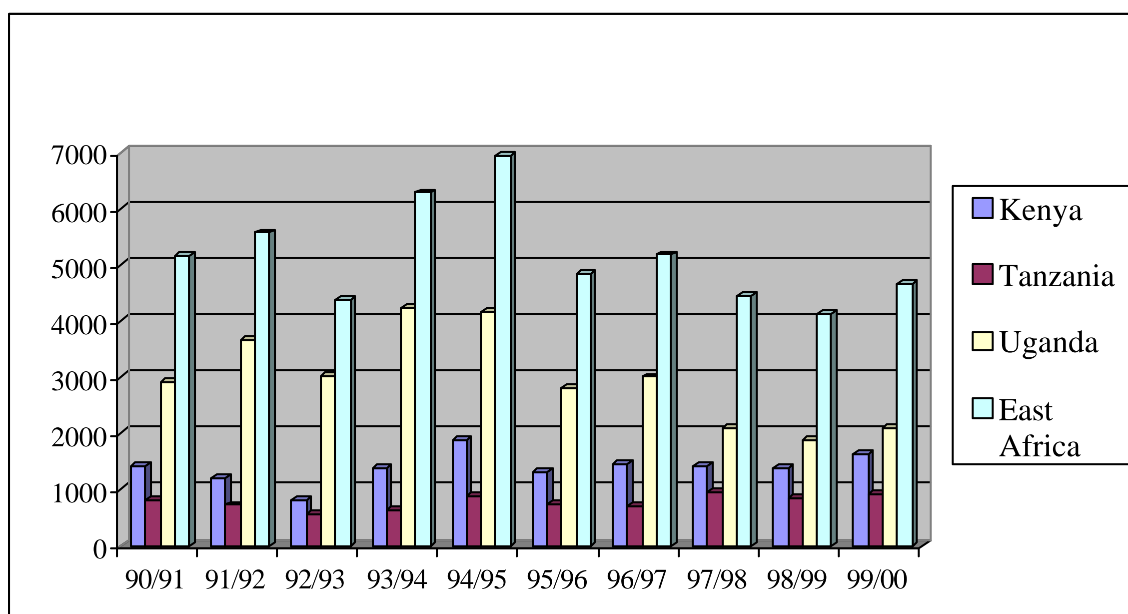
Tanzania: TCB; export figures from 1990/91 to 1996/97; auction sales figures afterwards (may differ from actual exports)

Uganda: CMB and UCDA

Notes:

- Arabica figures in Uganda include Hard Arabica
- In Uganda, the Arabica/Robusta breakdown for 1999/00 is estimated as 10% and 90% of total production respectively (average ratio of the previous 10 years)
- Because of different classification methods in the three countries, the totals for East Africa do not allow a complete separation between Arabica and Robusta. This is because totals for Robusta include Hard Arabica from Tanzania. However, the proportion of Tanzanian Hard Arabica in the overall Robusta figure is very small.

Figure 1: Kenya, Tanzania and Uganda: coffee exports (1990/91 - 1999/00); thousands of 60-Kg bags



Kenya

Kenya is world famous for its fine quality coffee. The bulk of Kenyan production is Mild Arabica, approximately 60 per cent coming from smallholders and 40 per cent from estates. Almost all coffee is processed at the primary level in central pulperies run by cooperatives or estates. Small amounts of top Kenyan coffee find their way in most coffee blends and give a specific flavour to them. Good Kenyan coffee is also sought after by the specialty industry and sold as 'single origin' coffee. According to industry actors, the premia paid in the past for select Kenyan coffees were above their analytical quality value. Particularly, in the period between December 1996 and March 1999, the premium for Kenyan AB FAQ (Fair Average Quality) exceeded 50 cents per pound over the New York reference price, with peaks of up to 225 cents over. Between June 1999 and the present, however, the premium has been revised downwards to a relatively stable level of 10 to 20 cents per pound over New York. According to some exporters active in Kenya, it is difficult to tell at what 'real' level Kenyan AB FAQ trades in relation to the New York market. There are big differences between the description of FAQ provided by exporters with 'good reputation' and by 'other exporters'. The reputation of Kenyan coffee seems to have suffered not because of a fall in the intrinsic quality of its coffee, but because the FAQ description itself has been downgraded.

The origin differential is much more unstable in Kenya than in Colombia. In Colombia there are only three coffee descriptions that are also much more transparent and constant over time than in Kenya. As a result, Kenyan exporters are reluctant to sell forward to their clients, while Colombian coffee can be traded up to two years forward. No exporter of Kenyan coffee will commit to selling for more than four months forward for top grades and perhaps six months for lower grades. This is because, while exporters can hedge overall market price instability by operating in the futures market, they cannot hedge the differential from an origin.

Generally, the quality of Kenyan coffee is uneven. According to exporters, there are very fine coffees in the country, but also a lot of poor coffee, which is usually over-fermented. The best Kenyan coffee comes from smallholders. Estates have not been able to reach high levels of quality because a lot of them cut labour costs by not separating green cherries from ripe ones at the central pulperies. According to one exporter, 'estates in Kenya are the equivalent of "coffee ranching"'. Cooperative pulperies do not have to worry too much about economizing labour because they deduct its cost from farmers' payments and have no competition from private operators. This is extremely important because what makes Kenyan coffee so special is the top-end quality coffees. As long as these coffees are available, they push up the price of all other types of coffee as well. Therefore, quality management is the key aspect of the Kenyan marketing chain.

Tanzania

Tanzania produces all three types of internationally-traded coffee: Mild Arabica, Hard Arabica and Robusta. Mild Arabica is the most important in terms of volume and value, followed by Robusta and smaller amounts of Hard Arabica. Most Tanzanian coffees (95 per cent) is produced by smallholders, although estate production is set to increase in the near future. Almost all smallholder coffee is processed at the primary level by farmers – by hand-pulpers for Mild Arabica, and by simply drying the coffee in the case of Hard Arabica and Robusta.

Tanzanian Mild Arabica coffee has a less intense flavour than Kenyan Mild Arabica. However, the quality of Tanzanian coffee is much more homogeneous than in Kenya. The top Kenyan coffee is better than the top Tanzanian coffee, but the bottom Kenyan coffee is worse than the bottom Tanzanian. In general, Northern Tanzanian coffee is a substitute for Colombian coffee. It used to trade at a premium over Colombian, but lately this premium has decreased. [10] Northern Tanzanian coffee is very neutral and is suitable as filler in a blend. The major difference in the quality profile between Kenyan and Tanzanian coffees derives from the first stage of primary processing. Most Kenyan coffee is processed in central pulperies, while Tanzanian coffee is normally hand-pulped by the farmer. Tanzanian estates in the 1960s used to produce coffees that were of comparable quality to top Kenyan coffee. After their nationalization in the early 1970s, both the quality and quantity of coffee produced by these estates dropped dramatically. As a result, the overall reputation of Tanzanian coffee suffered. Since the late 1990s, efforts have been under way to rehabilitate these estates by leasing them to private operators. For the moment, some top quality Northern Tanzanian coffee can achieve comparable quality to Kenyan ones but does not attain the same premium due to poorer reputation.

Southern Tanzanian coffee has a fruity flavour that is suited mostly for the German market. This feature arises from poor fermentation at the primary processing level due to shortages of running water. Southern Tanzanian is usually compared to Papua New Guinea Y coffee and is sold at a small discount under New York, except in cases of extreme shortage of other

[10] 'Colombian Private' has fetched between 0 and 20 cents over New York between April 1993 and the present (except for 1996/97).

Milds (as in early 1994 and in 1996/97). In recent years, Northern and Southern Tanzanian coffees have been trading at approximately the same level. Tanzanian Robusta is fairly similar to Ugandan Robusta (see below). As a matter of fact, in 2000/01 substantial amounts were smuggled into Uganda from the border region of Kagera. Hard Arabica can be used as a substitute for Brazilian Hards, but the size of the market is so small that it has limited significance.[11]

In Tanzania, forward contracts are used more than in Kenya because traders have access to the domestic market (see Section 4 and Appendix) and because the origin differential is less unstable. Therefore, supply contracts up to six months forward for smallholder coffee and 12 months for estate coffee are not uncommon. The present role of Tanzanian coffee, as a filler in blends and/or a substitute for Colombian coffee, means that it needs to remain price competitive. Because Tanzanian coffee is threatened by substitution by other producers, keeping production and marketing costs low is an essential feature of the trade in the country. An exception to this rule applies to some 'Kilimanjaro' Milds that are sold as 'single origin' coffee on the Japanese market (at high premia, at least in the past), and on the North American and European specialty markets. Another exception is 'peaberry' coffee which is particularly appreciated for its physical appearance in the US market.

Uganda

Uganda exports primarily Robusta coffee, but also some Mild Arabica and a little Hard Arabica. Ugandan Robusta is important in the global market for its volume and because of its neutral flavour. It is of higher quality than the harsher West African and most Asian Robustas. Ugandan coffee is considered one of the best Robusta coffees in the world. There are Robustas of similar quality available (Brazilian and Indian/Bangalore) but not with the volume available in Uganda (Brazilian Robusta is consumed domestically). As a result, it commands a considerable premium over LIFFE.[12]

Although there is no clear competitor on the quantity/quality dimension, Ugandan Robusta is threatened by the changing strategies of major roasters. Vietnamese Robusta is much cheaper than Ugandan, and roasters are trying to blend it with a small amount of Mild Arabica to achieve similar flavour profiles. In general, international traders argue that roasters have achieved more flexibility in their blending processes and seem to be decreasingly committed to particular origins. Some roasters are still committed to Ugandan Robusta and pay a good differential for it (Sara Lee, Dougwe Egberts). Italian roasters request it for the foam that it creates on top of espresso. On the contrary, Nestlé and many Spanish roasters have switched from Ugandan to Vietnamese Robusta.

[11] 'Brazilian Swedish' Hard Arabica traded between –20 and +5 cents per pound over New York between January 1992 and August 1998, except for higher peaks in 1995/96 and early 1998. From May 1998 to the present it has been trading at –15 to –25.

[12] For example, at the beginning of May 2001 Ugandan screen 15 was quoted at $70 to $100 per metric ton over LIFFE. Ivorian Grade 2 was exchanged at $40 over; Vietnam was traded at $ 160 to 180 under (all premia valued on fob basis).

Ugandan Robusta can normally be sold up to 12 months forward. Recently, exporters have been more reluctant to do so because of high levels of competition in domestic buying, which make domestic purchasing prices unpredictable. Also, there have been questions over its availability in the mid-term. Production in 2000/01 was expected to reach 1999/2000 levels (about three million bags). But in two-three years, exporters fear that it could fall to two million bags due to the impact of wilt disease. As quantity declines, the differential is bound to increase. Under these circumstances, more roasters are likely to exclude Ugandan Robusta from their blends.

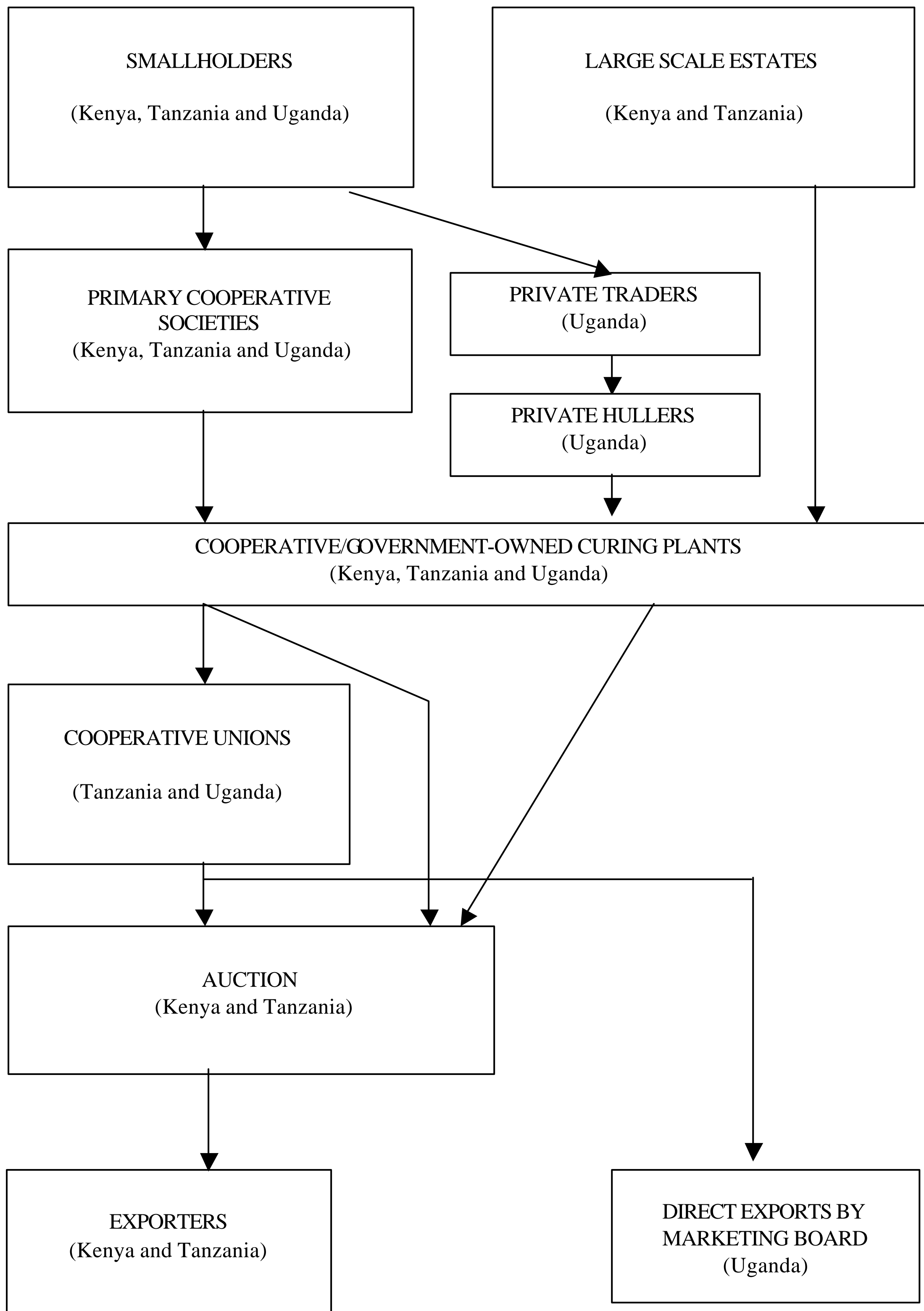
East African coffees are facing different threats in the world market. The most secure position seems to be Kenya's, as long as reputation and quality profiles for its top coffees can be maintained. Tanzania is threatened by cheaper origins and does not have the quality or quantity features that Kenya and Uganda can use to their advantage. Its relatively small crop is also divided into three different types of coffee, further fragmenting its importance in any of these markets. Uganda's falling production and changing roasters' blends may marginalize it in the future *vis à vis* cheaper origins unless coffee wilt disease is tackled. In the next section, I analyze the changes in the organization of the marketing chain and quality control procedures that have taken place in the three East African countries in the last decade. In the concluding section, I assess how the process of market liberalization has affected the possible responses of governments and coffee industries in Kenya, Tanzania and Uganda to challenges emerging in the global coffee market.

4. Liberalization, market restructuring, and quality

The organization of coffee marketing and quality control before liberalization

The organization of coffee marketing previous to market liberalization in the three East African countries is depicted in Figure 2. In Kenya and Tanzania (plus Uganda for Mild Arabica), domestic trade of parchment, dry cherry and green coffees was under the control of cooperative societies/unions and marketing boards. Formally, coffee did not change hands until it was sold to private exporters at the auction. Farmers (through the cooperatives) owned the coffee up to the export point and bore he price fluctuation risk. However, the payment system allowed a smoothing out of price variations within the marketing year. Farmers were paid the same price irrespective of when they had delivered coffee to the cooperative, and of when their particular coffee was sold. In Uganda, cooperative societies and unions competed with private buyers/hullers for the procurement of dry cherry (Robusta) from farmers. Both cooperatives and private operators operated under fixed producer prices and fixed margins (as in the *caisse* system of West Africa). All hulled coffee was sold to the Coffee Marketing Board (CMB), which was the sole exporter (Akiyama 2001, 96). The price stabilization mechanism was facilitated by the practice of forward sales arranged by CMB with importers.

Figure 2: Kenya, Tanzania and Uganda: pre-liberalization coffee marketing chain



In all three countries, farmers received payments in relation to the quality of Mild Arabica coffee they delivered (see Box 1). The handling and payment systems were fairly laborious and slowed down the flow of coffee from the farmer to the importer. Overhead costs associated with these procedures were high, meaning that farmers received a lower proportion of the export price than they would have in a more efficient system (quality considerations being equal). Payments to farmers were often late and resources were siphoned out of the system at various levels. However, price stabilization was ensured within one season. Most important, the system provided quality incentives to cooperative societies and (less directly) to farmers. Quality considerations are generally more important for Mild Arabica than for Robusta and Hard Arabica. For Robusta and Hard Arabica, it is virtually impossible to determine the quality of the bean inside the dry cherry when is delivered. Quality control at the primary level is then limited to removing foreign matter and under-dried cherries. For large consignments, a huller operator can take a sample of dry cherry, hull it and assess out-turn, humidity level, defect count, and smell. This is not feasible when collecting relatively small amounts from smallholders. Therefore, in the Robusta sector, there is a necessarily less direct link between quality and price at the farmer level. However, at least in Tanzania, there was a quality incentive on the output delivered by cooperative societies. Societies that delivered bigger beans with lower defect count were paid more. Their farmers were paid more as well.

In East Africa, the organization of exports followed two different models before liberalization. Kenya and Tanzania had auction systems for exports. In Uganda, exports were arranged by the marketing board. In Kenya, until the mid-1980s, the majority of the shares of export companies could not be formally owned by non-Kenyans. Therefore, international traders and roasters could not fully integrate vertically into the export sector, but had to resort to joint ventures or contractual relationships with local companies. In later years, because of the easing of these restrictions and increasing difficulties in getting finance from local banks, many independent exporters were taken over by international trading houses or resorted to them for financing. This process involved 'old' local companies such as C. Dorman, which entered into a long-term financial agreement with ED&F Man (a mid-size international trader) in the mid-1980s, and Taylor Winch, which was taken over by Volcafé (the No.2 international trader) in 1991.[13] Still, monopoly in domestic trade and the auction system ensured that even smaller exporters could survive as long as they could manage to obtain finance from international traders or banks. This meant that competitive bidding continued to characterize the auction, especially for top-quality coffees. A similar situation was present in Tanzania. The difference was that most exporters attending the auction in Tanzania were either based in Kenya or operated as subsidiaries of Kenyan export companies. In Uganda, before liberalization, private buyers and hullers were local companies of small size. There was no formal involvement of foreign companies even at the export level, since CMB was the sole exporter.[14]

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[13] Rankings for international traders and roasters are based on market share in 1998 as in van Dijk *et al.* (1998).

[14] However, international traders had their agents in Uganda to check consignments, monitor the crop, and facilitate export logistics.

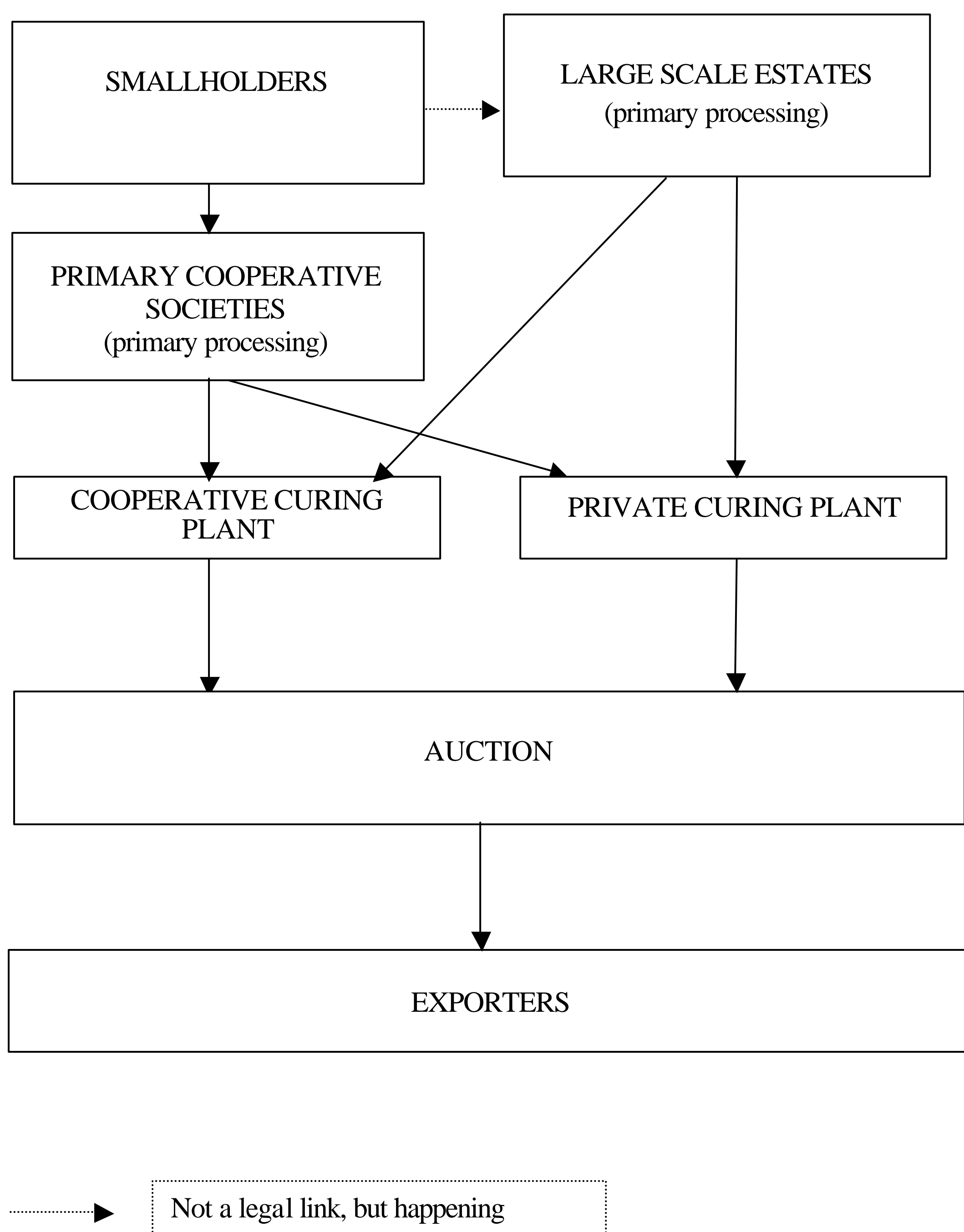
Box 1
Quality control and payment procedures in the smallholder Mild Arabica sector in Kenya, Tanzania and Uganda in the pre-liberalization period

- farmers delivered parchment coffee to the cooperative society (Tanzania and Uganda) or fresh cherry to the cooperative pulping plant (Kenya);
- Tanzania and Uganda: a first rough quality control procedure took place: parchment was eye-sorted by appearance (special, PI, PII and PIII), extraneous matter removed, and 'wet' coffee (assessed by biting the bean) sent back to the farmer for further drying;
- Kenya: some preliminary sorting was done at the cooperative pulping plant, where green cherries, over-ripe ones, dried cherries (mbuni) and foreign matter were removed. Weighing took place according to the type of cherry delivered (good cherry, mbuni). The pulping plant carried out a preliminary grading by density (lighter cherries float in the water). The parchment coming out from the pulper was already roughly divided into parchment grades.
- the cooperative society annotated the quantity delivered by the farmer by parchment grade (Tanzania and Uganda) or by type (good cherry or mbuni in Kenya); a small delivery payment was given to the farmer at a fixed rate per Kg;
- coffee was delivered to the cooperative union curing plant; at delivery, the humidity content of parchment was measured with a moisture meter; if not found within the accepted range it was rejected or sent to special areas for drying;
- after hulling, cleaning, polishing and grading, the curing plant delivered a report to the coffee marketing board and the cooperative society stating the out-turn of the consignment; this indicated the overall weight loss due to parchment removal and the proportion of green coffee realised for each 'grade';
- coffee was consigned to the marketing board warehouses; the farmer received a second instalment towards the payment for its coffee (through the cooperative society);
- before reaching the auction (Kenya and Tanzania) or being shipped to importers (Uganda), the marketing board carried out raw, roast and liquor analyses; in Kenya and Tanzania, this information was used to set reserve prices at the auction and to determine its quality 'class'; in Uganda, to ensure that the coffee conformed to the export quality standards;
- green coffee was sold at the auction or to importers after bulking similar grades and classes together;
- proceeds from the various auctions of coffee were paid into a pool account. Records were kept by the marketing board on how much revenue was received from each auction for each coffee class. Payment to cooperatives were directly proportional to the proceeds for that class for the year; the pool system cushioned farmers from price fluctuations; the price paid was averaged over the whole year.
- cooperative societies made a last payment to the farmer in proportion to the parchment grades delivered (Tanzania, Uganda) or the type of coffee (good cherry or mbuni in Kenya).

The effects of liberalization

In the following discussion, I examine the main features that emerged from different paths of liberalization of the coffee marketing chains in Kenya, Tanzania and Uganda. I focus on the changing organizational structure of the coffee chains, the types of actors involved in domestic procurement, processing and export markets, and changes in coffee quality. This is a concise summary of the main findings emerging from fieldwork material. An in-depth examination of the three case studies can be found in the Appendix.

Figure 3: Kenya: current coffee marketing chain

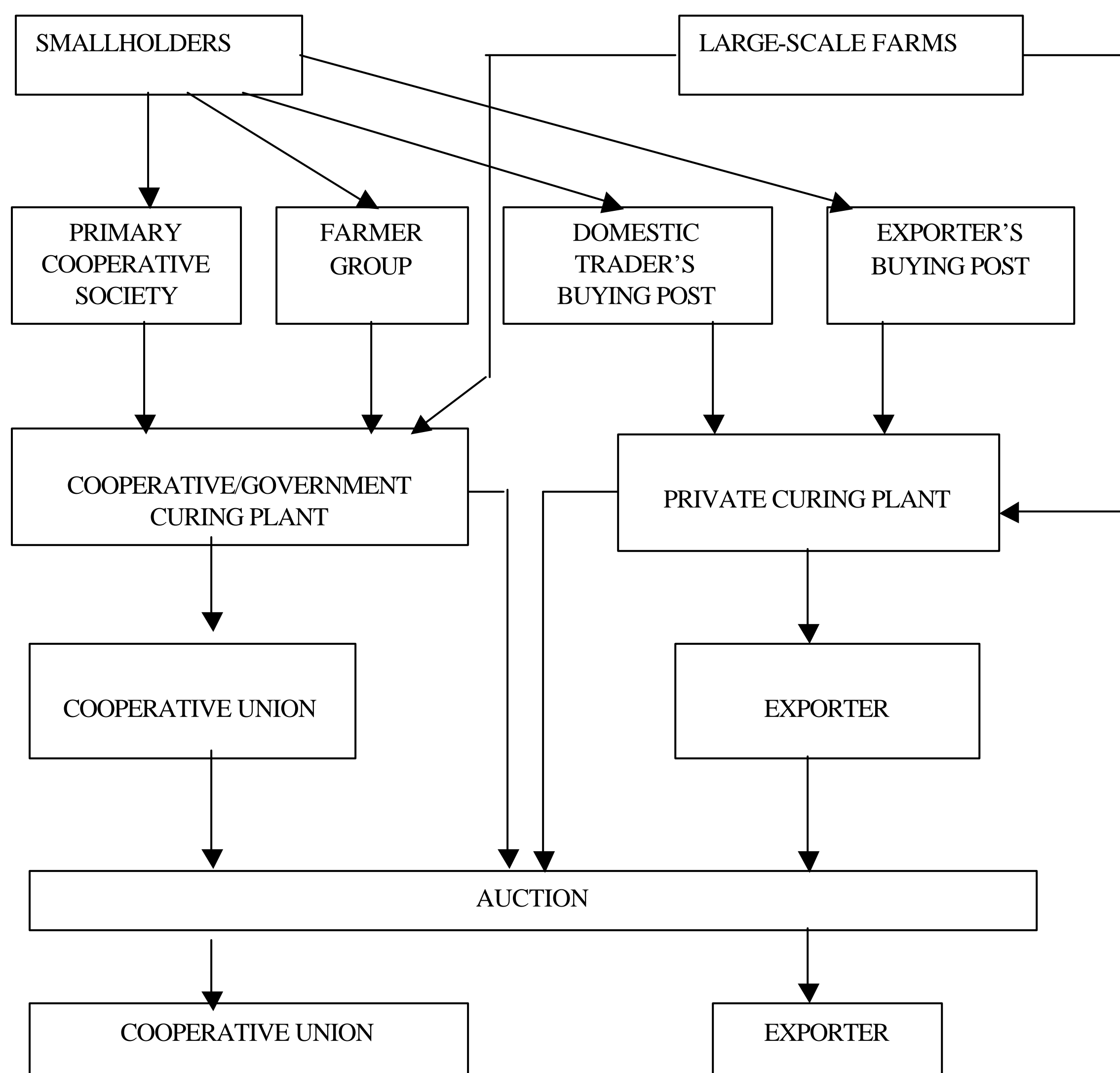


In Kenya, the liberalization process has been minimal, and the regulatory structure of the coffee trade (including quality control procedures) has been preserved almost in its entirety (see Figure 3). Exporters can only buy Kenyan coffee at the auction and domestic marketing is still channelled through cooperatives and estates. Liberalization has taken place only at the processing level. Cooperatives and estates can now also choose their own payment agent,[15] but all these services are provided on a fee-basis only. Coffee is bought and sold only at the auction. Even though the coffee market has not been liberalized, an increasing number of 'local' exporters have sought alliances with MNCs (through ownership or finance contracts). In this way, they can get easier and cheaper access to working capital (in view of the contemporary credit crunch in the domestic banking sector) and easier access to the more sophisticated risk management and marketing tools that are needed in an increasingly unstable global coffee market. Yet, the export market is still fairly fragmented because the capital requirements for buying coffee at the auction are much smaller than what would be required to buy parchment in liberalized domestic markets. MNCs control only about one third of the export market through direct subsidiaries. Because preserving high quality is critical to the marketability of Kenyan coffee in the global market, MNCs have been against the liberalization of domestic marketing and are insisting on the maintenance of the auction system. As a result, coffee quality has been maintained at high levels, the auction is still characterized by competitive buying, and Kenya has been able to live up to its international reputation (see Appendix).

Tanzania, on the contrary, has largely liberalized domestic trade and processing (see Figure 4), although regulatory requirements are still quite demanding at all levels of the marketing chain. As a result of liberalization, and in order to establish market share, MNC exporters have vertically integrated into processing, domestic trade and in some cases even estate production. Tanzania still runs a mandatory export auction, but the majority of coffee going through the auction is simply re-acquired by the same company that bought it domestically. Thus, there is little or no competitive bidding for this so-called 'captive' coffee. The market share of cooperative unions in both domestic marketing and processing has decreased substantially to the benefit of the private sector. MNCs are now dominating domestic procurement, processing and export markets in Tanzania. They control more than half of the export market through direct subsidiaries and another substantial proportion through finance agreements with local companies. As the domestic market matured in the years following liberalization, and as international prices tumbled in the late 1990s, MNCs started outsourcing some of the functions they were previously performing (transport, primary buying, input distribution).

[15] Before 'liberalization', cooperatives and estates could be paid for the coffee that had been sold at the auction only through the union operating the main curing plants on a monopoly basis (KPCU – see Appendix). Presently, cooperatives and estates can appoint alternative 'payment agents', such as banks and other financial institutions or other emerging commercial curing companies.

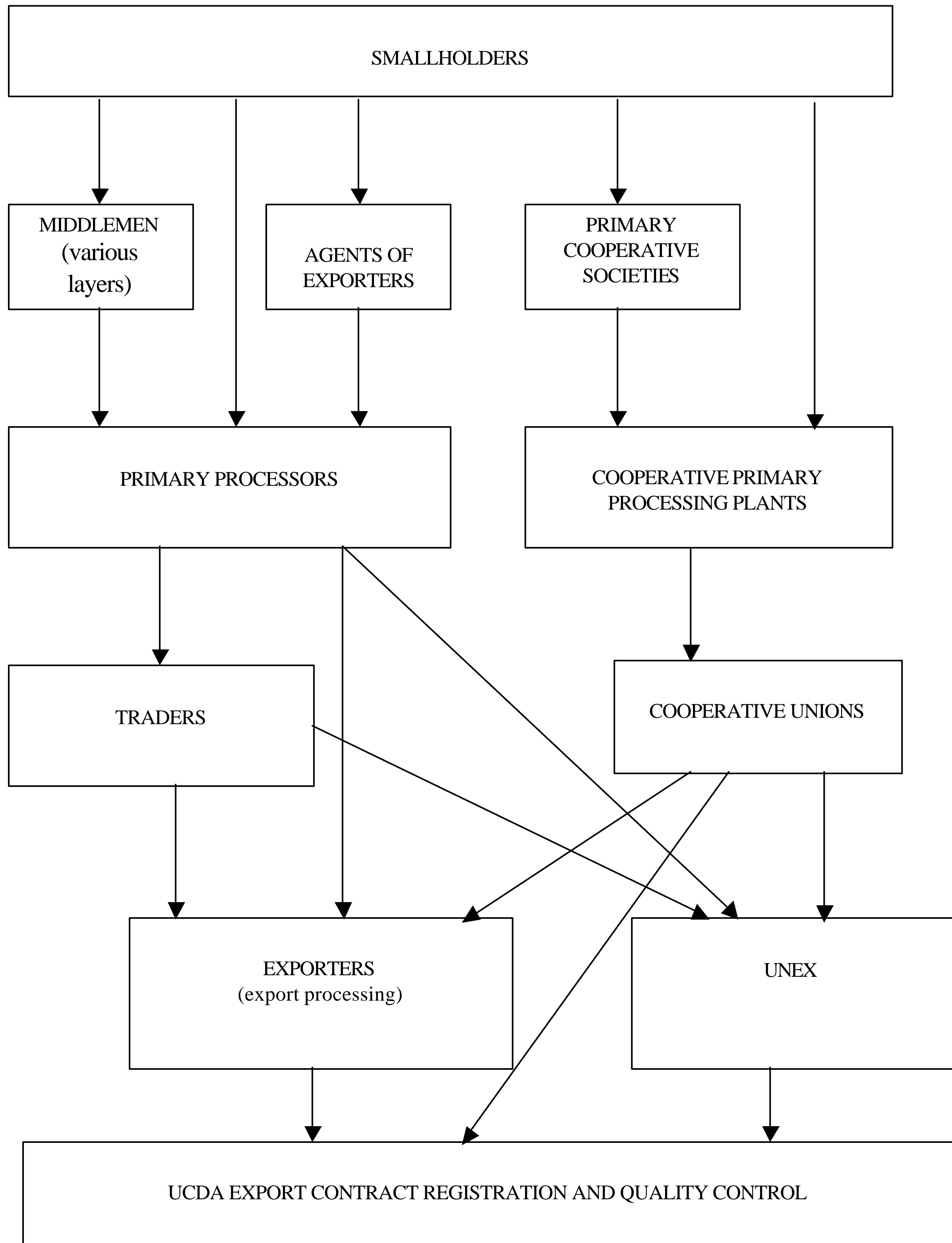
Figure 4: Tanzania: current coffee marketing chain



On paper, the old system of quality control in the marketing chain has been preserved in Tanzania, but this is true in practice only at the export level. Quality control at the primary level has broken down and buyers purchase coffee from farmers that is often too wet (especially at the beginning of the season), and at one price – irrespectively of quality. The cooperatives have to compete with private buyers on the basis of their first payment to farmers; therefore, the multi-payment system that ensured a price-quality incentive has disappeared. Even though new privately-owned processing plants have reduced quality losses at the curing level, the overall result has been a deterioration of the export quality of Tanzanian coffee. Because the reputation of Tanzania's coffee is lower than Kenya's, the same MNCs that are against liberalization in Kenya have encouraged it in Tanzania and are lobbying for the elimination of the auction system as well. Furthermore, only the few exporters that are involved in procuring specialty coffee from smallholders have been involved in trying to re-establish some quality control procedures. Those who procure specialty coffee directly from estates are not interested in improving the formal quality control system because they bypass it. Exporters who see Tanzania simply as a 'fair average quality' (FAQ) market are more interested in controlling market share and in turning around

capital quickly than they are in upgrading quality. This is likely to 'hem in' Tanzania to the FAQ market without the positive benefits of having a large crop. In turn, this will marginalize Tanzanian coffee, except for a few estates catering to the specialty coffee sector.

Figure 5: Uganda: current coffee marketing chain



Finally, in Uganda the process of liberalization and deregulation has reached the most advanced degree in East Africa, although it is still more regulated than in other coffee producing countries where there are no formal export certification procedures. Full liberalization of the marketing chain has prompted a proliferation of private export companies, primary-level buyers, hulling plants and export processing plants (see Figure 5). The cooperative sector has almost disappeared. Following liberalization, and because of favourable trade margins in the mid-1990s, the number of active exporters increased dramatically while MNCs attempted a process of vertical integration to establish market share and internalize profits. As international prices fell in the late 1990s, the number of exporters decreased substantially and MNCs consolidated their presence. However, low entry barriers in the domestic trade and hulling segments of the chain meant that MNCs eventually gave up (or chose to abandon) attempts to control them. These sectors are now mostly in the hands of a large numbers of small- to medium-scale local enterprises. In the late 1990s, MNCs were exporting at a loss from Uganda due to low international prices, high competition in the domestic market that kept producer prices relatively high, and direct buying by some roasters from local exporters. By bypassing MNC trading houses, these roasters could afford to pay local exporters higher prices. Yet, MNC trading houses still needed to be present in the country because of the strategic importance of the Ugandan crop in the global market. Also, because they could cross-subsidize losses in Uganda with gains elsewhere, MNCs were able to increase their export market share in Uganda, reaching almost a 50 per cent share in 1998/99. Interestingly, the same MNCs that favoured coffee market deregulation in Uganda are now lobbying the coffee regulatory body to raise entry barriers to alleviate price competition. First, they gained from coffee market reforms; now, they are asking for a higher degree of regulation to their advantage.

The effects of liberalization on coffee quality and reputation in Uganda have been less straightforward than in Kenya and Tanzania. In the first few years after liberalization, Ugandan coffee quality deteriorated as exporters tried to vertically integrate and establish market share domestically by ‘rushing to buy’. However, quality control in the Robusta trade is less important than in the Mild Arabica trade. Therefore, Uganda’s reputation in the global coffee market did not particularly suffer. The special characteristics of Ugandan Robusta lay in the fact that it is grown at higher altitudes than most other Robustas. Therefore, the most important quality trait is embedded in the product and is less easy to spoil than in the case of Mild Arabicas. Furthermore, as margins shrunk and some consolidation took place in the export market in the late 1990s, MNCs started to focus on ‘core competencies’ (bulk buying in a few locations, export processing, export logistics). They also started to install quality-related pricing for large purchases. This led to recent improvements in the quality profile for Ugandan coffee.

In the two countries with liberalized domestic trade (Tanzania and Uganda), MNCs followed a classic cycle of integration/out-sourcing. When margins were high, they sought vertical integration from export to farm-gate buying; when margins were low, they out-sourced functions to local actors and focused on ‘core competencies’. The liberalization process itself also contributed to the rush towards vertical integration. MNCs vertically integrated to better understand the workings and logistics of the previously monopolized market and competed

furiously to establish market share. In Tanzania, they did so by extending geographical cover and fine-tuning their logistical operations; in Uganda, also through price competition. In the latter country, price competition was facilitated by low entry barriers and the strategic importance of the crop for international traders.

The East African case studies also suggest that market power of MNCs at the export level is positively correlated to the level of entry barriers. The total market share of MNC exporters is highest in Tanzania, where establishing export market share means controlling the domestic market. In Tanzania, formal entry barriers at the export level are not demanding; however, entering the domestic trade is more difficult due to complex licensing procedures and high fees. The proportion of exports controlled by MNCs is lowest in Kenya, where an exporter just needs to have a price-competitive order from an importer, access to finance, and participate to the auction. In Uganda, low entry barriers in the domestic trade mean that MNCs find it difficult to control primary buying. Therefore, they have to compete on the producer price. Entry barriers are not quite as high as in Tanzania, but are higher than in Kenya. As a result, the share of exports controlled by MNCs in Uganda stands in between the other two countries. Finally, and not unexpectedly, the share of MNC exports generally increases over time in liberalized markets (Tanzania and Uganda), but not in more regulated ones (Kenya).

5. Conclusion

The comparative case study of coffee market reforms in three East African countries presented in this paper indicates that the effects of changes in the governance and organizational structures of the global coffee marketing chain are to some extent mediated by national-level policy. MNCs involved in the coffee chain adapted their behaviour to local market conditions and the limitations imposed (although sometimes only formally) by remaining regulatory systems. Although liberalization of domestic coffee markets has taken place in most producing countries, its dynamics have not been uniform. There has been no single liberalization/deregulation path. Different degrees and trajectories of reform (or lack thereof) have had different consequences. These consequences suggest a range of strategic choices for producing country governments and coffee industries that also depend on the role of a particular coffee in the global market.

The evolution of coffee markets in East Africa has taken place in the context of the changing downstream structure of the coffee chain. The increasing power of MNCs in producing countries was facilitated not only by market liberalization but also by the ongoing consolidation in the international trade and roasting segments of the global coffee chain (for details, see Ponte 2001b). Roasters' recent introduction of supplier-managed inventory has forced international traders to be more directly involved at the export level in producing countries as well. Supplier-managed inventory and more flexibility in developing blending formulas have made roasters less vulnerable to shortages of particular types of coffee. Shortages of Colombian Milds have been offset by increased use of Central American Milds. The new technique of steam-cleaning Robusta allows roasters to improve its quality and to

substitute some Arabicas with premium-grade Robustas (including Uganda's). More flexibility means more bargaining power over international traders and other actors upstream; therefore, roasters have been able to improve their margins – at a time when green coffee prices are at historical lows in real terms. Increasing blending flexibility also entails that origins that in the past did not compete with each other now do; therefore, minimizing costs of production, processing and trade has become more important. At the same time, roasters are experimenting with systems of first-line and second-line suppliers, where they do not accept coffee for their blends from origins that cannot guarantee a minimum amount, and offer a premium for larger quantities.

There is no one-size-fits all solution to these challenges that East African government and producers face. Kenya is perhaps the country that is least exposed to risk, as long as it lives up to its fine-quality reputation. Substitution effects are less likely to be relevant for Kenyan coffee due to its 'exotic' flavour. This means that keeping the domestic market un-liberalized is the best course of action. However, the current cooperative-led marketing system needs reform to tackle serious organizational problems, especially the low proportion of the export price paid to producers by some cooperative societies.

Uganda is in a more complex position than Kenya. The adoption of steam-cleaning techniques by roasters could raise the demand for the high-quality Ugandan Robusta. At the same time, roasters' possibility of mixing cheaper Robustas with small amounts of Arabica to achieve equivalent blends means that Ugandan Robusta needs to remain price-competitive. Furthermore, the volume premium may be lost if production keeps decreasing due to coffee wilt disease. This situation suggests a possible two-pronged strategic approach for the Ugandan government. On the one hand, liberalization should not be reversed and entry barriers should not be raised: the domestic market has become more efficient, farmers receive a much higher share of the export price than before liberalization, and coffee quality in the medium term has not suffered. On the other hand, public intervention is needed to promote the replanting of wilt-affected trees and the processing of higher-quality washed Robusta. However, because of low international coffee prices, the regulatory coffee body is cash strapped. The Ugandan government needs to find alternative ways of funding these activities.

Tanzania is perhaps in the most difficult position among the three countries. Its production volume is low and fragmented by type of coffee. Market liberalization has affected the quality and reputation of its smallholder coffee. There is no price competition in domestic procurement. Increasing smallholder production in Tanzania is neither advisable nor feasible at a time of low international prices. A blanket re-monopolization of the domestic coffee market seems unfeasible and may lead to even more detrimental results. Together with low prices, recent attempts to re-monopolize coffee marketing in Kagera region have resulted in massive smuggling of coffee into Uganda, the build up of new debt by the cooperative unions and increased farmers' disaffection with the crop. Furthermore, improving the quality of coffee would be extremely difficult given the present structure of the domestic marketing chain. In order to avoid further marginalization of Tanzanian coffee in the global market, a radical course of action is needed. One of the options, perhaps a politically difficult one, is the following: (1) integrate the Robusta market in the West of the country with the

neighbouring Ugandan market, allowing cross-border trade; (2) either encourage wet-processing of Arabica where it is dry-processed or drop/discourage the trade in Hard Arabica altogether; and (3) integrate the Mild Arabica market with Kenya's by joining the two auctions and perhaps adopting Kenya's regulatory structure at the domestic market level. This mixed system would allow Tanzanian coffee farmers to take advantage of the best regulatory system for each type of coffee. Tanzanian Robusta could be sold as Ugandan, therefore benefiting from volume premia, higher reputation, and more efficiency and competition in the marketing system. This is already happening to some extent, as Tanzanian Robusta crosses the border illegally and is sold as Ugandan with the tacit consent of the Ugandan authorities. However, the gains accrue to smugglers and middlemen, not to farmers. Tanzanian Mild Arabica could benefit from the 'push up' price factor provided by the top end Kenyan coffees at the joint auction and from improved quality control procedures. This would raise the profile of Tanzanian coffee in the specialty sector. Both countries would benefit from a volume premium effect, although the Kenyans may be reluctant to accept this system for fear of losing reputation.

The experiences of market liberalization and deregulation in African agricultural commodity trade suggest that improved market efficiency is beneficial to farmers and producer countries only when volume is more important than quality in the international profile of an origin. Uganda has been often used as the 'textbook' success story of commodity market liberalization, having witnessed improved market efficiency, increased price competition and higher producer/world price ratios. However, experiences from monopolistic markets (Kenya for coffee, some Francophone West African countries for cotton) or from markets that are characterized by highly regulated systems that favour private coordination among a few large-scale actors (Ghana for cocoa, Zimbabwe for cotton) also suggest that there are good arguments against liberalization in specific circumstances. The case studies illustrated in this paper suggest that market liberalization may be the best option for some countries, and that highly regulated markets may be the best for others – even within the framework of the same commodity.

Appendix: Country case studies of coffee market liberalization in East Africa

Kenya

The process of coffee marketing liberalization in Kenya started in the early 1990s, but has progressed very slowly. Figure 3 (see Section 4) shows that the basic structure of the marketing chain has remained almost identical to that depicted in Figure 2. At least on paper, coffee still does not change hands until sold at the auction.[16] Quality control procedures at all levels of the chain have remained substantially the same. The only changes that have taken place in the organization of the chain in the 1990s have been: (1) farmers are being paid in dollars; in this way their exchange rate risk is reduced; (2) an 'out-of-pool' payment system has been created (see below); (3) private curing plants have been allowed to provide commercial services in competition with the main Kenyan Planters Cooperative Union (KPCU) plant; (4) cooperative societies and estates can choose their 'payment agent'(the agency service was previously provided by KPCU only) and (5) more auctioneers have been allowed to operate.

The most important of these changes in relation to quality has been that estate owners and cooperatives are now able to opt whether they are paid in the 'pool system' (the old one described in Box 1) or in the 'out-of-pool' system. In the out-of-pool system, coffee is delivered to a curing plant, processed, handed to the Coffee Board of Kenya (CBK), and then sold at the auction. The coffee owner gets paid in full after the auction sale, minus deductions for services and handling. The payment is the 'realization price' fetched at the particular auction when the coffee is sold. When choosing this method of payment, one foregoes the price stabilization mechanism built into the pool system. Although both systems allow a general transmission mechanism between quality and price, the out-of-pool system provides it more directly and in relation to each consignment (payments are not averaged on the class realization throughout the year). Most cooperatives and estates have switched from the pool to the out-of-pool system. In 1996/97, only about 10 per cent of sales were done within the pool system.

The only 'real' step towards the liberalization of domestic marketing in Kenya has been allowing private operators to run curing plants. Before 1995, almost all coffee produced in the country was milled by the KPCU plant, except for a few private mills owned by large plantations which cured only their own coffee. Presently, KPCU competes with two other mills: Thika Coffee Mills and Socfinaf. The market share of KPCU is still around 70-80 per cent. Thika Mills is a locally-owned company and the major commercial competitor of KPCU; it has campaigned strongly to attract coffee from cooperatives. The Socfinaf mill is owned by a Switzerland-based MNC coffee trading firm (Socadec), and mills mostly its own estate coffee. There are also other smaller mills but their market share is minimal.

[16] In practice, there have been reports of private pulperies buying cherry coffee from smallholders instead of just providing a fee-based service. There are also reports of traders buying cherry from farmers and selling it to the central pulperies (Nyangito 2000).

As mentioned earlier in the paper, an increasing number of local export companies have sought alliances with MNCs for financial reasons, easier access to risk management and better marketing. However, the export market is still fragmented and bidding very competitive at the auction. No individual company (or group of related companies) has been able to attain more than 10-12 per cent of export market share in the 1990s. Table 5 shows that in the 1998/99 and 1999/00 seasons, 51 companies were active at the auction. Together, the top five companies controlled 44-46 per cent of exports, and the top ten around 75 per cent. These proportions are fairly high in general terms, but they are still lower than in Tanzania and Uganda. Table 6 indicates that the top ten companies included three or four directly owned by MNCs, while two others had long-term financial agreements with MNCs.[17] The top two international trading houses and the world number five roaster are present with direct subsidiaries in Kenya. However, MNCs controlled only 28-30 per cent of total exports.

Table 5: Kenya: market share of coffee exports by type of company (1998/99 and 1999/00)

	1998/99	1999/00
Total number of companies (n)*	51	51
Market share of top 5 companies (%)	46.2	44.1
of which MNCs	*17.5*	*17.9*
of which local	*28.7*	*26.2*
Market share of top 10 companies (%)	75.6	75.2
of which MNCs	*28.7*	*24.3*
of which local	*46.9*	*50.9*
Market share of companies ranked 11th to 20th (%)	19.0	19.4
Market share of other companies (%)	5.4	5.5
MNC share of total exports (%)	30.5	28.4

Note: * related companies are counted as one company
Source: elaboration from CBK data

Some exporters and government officials argue that coffee quality in Kenya has deteriorated recently because of decreasing use of inputs, low coffee prices due to low international prices, large overheads in the domestic marketing system, and delays in the payment system. These are real and serious problems in the coffee chain in Kenya. However, the introduction of payment to farmers in dollars and the out-of-pool system may have provided some compensation. The data in Table 7 does not bear out the gossip in the industry. The overall class performance of Kenyan coffee actually improved from 1994/95 to 1996/97 (no data is available for later years) and reached higher levels than in the early 1990s. In particular, performance improved substantially in the top coffee classes (the ones that 'drive' export prices), although the proportion of '*mbuni*' (non-washed coffee of the lowest quality) also increased. It is also clear from Table 7 that smallholders achieved a higher proportion of top-end coffees than estates. The impact of the lower international prices of the late 1990s on quality cannot be assessed yet, but in general we can argue that the maintenance of a mostly non-liberalized marketing systems has allowed Kenyan coffee to maintain its quality profile.

[17] For the purposes of this paper, I only distinguish between 'MNCs' and 'local' companies. By MNC I mean a company that is a direct subsidiary of international trading house or roaster. By 'local' company I mean a company that is based in one of the three East African countries; this company may be completely independent or may have a financial agreement with a MNC; it can also be partly owned by a MNC, but does its own marketing.

Table 6: Kenya: market share and characteristics of top coffee exporters (1998/99 and 1999/00)

	1998/99			1999/00		
Rank	Name of company/ sister company	Market share	Company type	Name of company/ sister company	Market share	Company type
1	Merali Dewji/Dewji Coffee	11.2	local	Rashid Moledina	9.7	local
2	C. Dorman/Gourmet Coffee	9.6	local	Taylor Winch/Hans Sickmuller	9.0	MNC
3	Taylor Winch/Hans Sickmu ller	9.0	MNC	Merali Dewji/Dewji Coffee	8.9	local
4	Cetco	8.6	MNC	Cetco	9.0	MNC
5	Diamond Coffee	8.0	local	Diamond Coffee	7.6	local
6	Raki Inv./Gold Coffee Co.	7.0	local	Raki Inv./Gold Coffee Co.	6.9	local
7	Ibero (Kenya)/Green Coffee Co.	7.0	MNC	C. Dorman/Gourmet Coffee	6.5	local
8	Rashid Moledina	6.5	local	Ibero (Kenya)/Green Coffee Co.	6.3	MNC
9	Pati	4.6	local	Jenem Coffee	5.9	local
10	Unieximp/Prodex Int.	4.2	MNC	Pati	5.5	local

Source: CBK

Name of company/sister company	Notes
C. Dorman/Go urmet Coffee	financial agreement with ED&F Man (mid-sized international trader)
Cetco	subsidiary of Tchibo (No. 5 roaster in the world)
Diamond Coffee	owned by Kenyan-Asian
Ibero (Kenya)/Green Coffee Co.	subsidiary of Neumann (No. 1 international trader)
Jenem Coffee	owned by Kenyan-Asian
Merali Dewji/Dewji Coffee	pre-financed by Taloca (trading arm of General Foods/Kraft, No. 1 roaster)
Pati	owned by Kenyan-Asian
Raki Inv./Gold Coffee Co.	owned by Kenyan-Asian
Rashid Moledina	owned by Kenyan-Asian
Taylor Winch/Hans Sickmuller	subsidiary of Volcafé (No. 2 international trader)
Unieximp/Prodex Int.	subsidiary of mid-size international trader

Source: field interviews

Table 7: Kenya: quality performance by class and sector for Mild Arabica coffee (1990/91–1996/97)

Sector	**Class**	*1990/91*	*1991/92*	*1992/93*	*1993/94*	*1994/95*	*1995/96*	*1996/97*
Cooperative	1 to 3	16.5	15.6	17.8	18.9	20.5	25.3	23.3
	4 to 6	58.1	53.8	57.3	56.3	47.8	54.5	48.2
	7 to 10	7.6	12.4	8.3	10.7	3.7	6.1	7.9
	mbuni	17.7	18.3	16.7	14.1	28.0	17.2	18.6
Estate	1 to 3	3.5	4.3	5.0	1.4	7.3	4.0	5.2
	4 to 6	80.5	74.5	78.2	77.7	68.0	78.0	75.5
	7 to 10	8.5	14.5	10.2	12.9	5.7	9.7	9.5
	mbuni	7.5	6.7	6.7	8.0	19.0	8.3	9.9
Total	1 to 3	11.1	10.8	12.1	10.1	13.9	16.5	16.5
	4 to 6	67.1	62.2	66.2	67.0	57.9	62.4	60.2
	7 to 10	8.2	13.6	9.5	11.8	4.7	7.6	8.6
	mbuni	13.6	13.4	12.3	11.0	23.5	13.5	14.7

Source: CBK

The liberalization of domestic marketing is the next step in the government agenda.[18] The revision of the Coffee Act has been a hot issue and figures frequently in the local press. In 2000, CBK was carrying out consultations with 'key stakeholders' on this topic. These meetings were highly tense and occasionally resulted in riots. One of the surprising aspects of this process is that exporters have not expressed support for liberalization, while they have been one of the driving forces of coffee market liberalization in Tanzania and Uganda. Exporters argue that liberalization would not do any good for the quality of Kenyan coffee. It would lead to more homogenous mixtures with the result that the average quality of bad coffee would improve, but also that the quality of top quality coffees would deteriorate. In Kenya, the top end coffees push up the prices of all others, not the other way around. This leads to situations where a Kenyan AB FAQ coffee sells at 30 per cent over a comparable Central American coffee for no other reason than reputation. The top export companies also fear that, with liberalization, a lot of business-minded people with limited coffee-buying experience would jump into the trade. This would lead to poorer quality control and undifferentiated trade. Smaller export companies fear that with liberalization they would have to close down because of the market power of large exporters, financed by overseas trading giants.

Tanzania

The process of coffee marketing reform in Tanzania started in 1994/95 and has been far more wide-reaching than in Kenya (see Figure 4 above). Domestic trade has been completely liberalized[19] although it is still quite regulated. The Tanzania Coffee Board (TCB) still runs a coffee auction. However, all private operators need to be licensed, and the licensing requirements are demanding. Domestic traders can buy parchment/dry cherry coffee only at authorized buying posts, where they need to display the price paid to farmers. Farm-gate buying is not allowed, although it takes place informally. Coffee from different areas (South, North, West) cannot be moved to another area and has to be sold at the auction separately. High barriers to entry have facilitated consolidation of the industry at the primary buying and export levels.

Before liberalization, some of the existing export companies had already started to seek financing from international traders and roasters. However, of the export companies with a long history in the country (Mazao, Coffee Exporters, Soochack and Bush--SB, Sheriff Dewji, ACC), only one was controlled directly by a MNC (Mazao, by the Neumann Group). By the early 1990s, other MNCs had become active, but it was with liberalization that the number and market share of MNCs increased. During the first season of liberalized marketing (1994/95), of the top five export companies, only two were MNCs (Tchibo and Mazao/Neumann) (see Table 9). Two others were 'old' local export companies (Soochack and Bush, Sherif Dewji) and another was a Nairobi-based company with financial links with a

[18] Coffee market liberalization is not an exclusively donor-pushed agenda. Estate owners would gain from liberalization because they could buy cherry from farmers and increase capacity utilization of their central pulperies. Also, people with trade and business interests are in favour of coffee liberalization in Kenya. Both categories are influential in the Kenyan Parliament and Government.

[19] There have been signs of a reversal of domestic market liberalization in 2000, when private traders were not allowed to operate in the Robusta-growing region of Kagera.

MNC (Dorman). The total share of exports by MNCs was 42 per cent (see Table 8). By 1999/00, this share had increased to 55 per cent, and four out of five of the top companies were directly owned by a MNC. The fifth was Dorman. The biggest truly 'independent' company controlled only five per cent of exports.

Table 8: Tanzania: market share of coffee auction purchases by type of company (1994/95 to 1999/00)

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
Active export companies (n)*	23	26	24	-	27	22
Market share of top 5 companies (%)	59.5	63.8	62.1	-	62.2	63.7
of which MNCs	*33.6*	*39.6*	*35.1*	-	*43.5*	*48.7*
of which local	*26.0*	*24.3*	*27.0*	-	*18.8*	*15.1*
Market share of top 10 companies (%)	83.6	87.0	87.7	-	87.3	84.7
of which MNCs	*42.0*	*39.6*	*44.8*	-	*48.2*	*52.3*
of which local	*41.6*	*47.4*	*42.9*	-	*39.0*	*32.3*
Market share of companies ranked 11th to 20th (%)	15.9	11.3	11.6	-	11.4	15.2
Market share of other companies (%)	0.5	1.7	0.8	-	1.3	0.2
MNC share of total auction purchases (%)	42.0	44.3	44.8	-	49.7	55.5

Note: * sister companies are counted as one company
Source: elaboration from TBC data

Following liberalization, exporters have also vertically integrated into curing and domestic procurement, in some cases even into estate production and primary processing (central pulperies). In 1999/00, three export companies fully or partially owned coffee estates. One was a long-established local company (Coffee Exporters) that has owned estates since the 1950s in Arusha (estates in this area were never nationalized). Another is a major roaster (Tchibo), which used to own estates in Kilimanjaro before their nationalization in the early 1970s. Their renewed interest in estate cultivation seems to be related more to an easy 'opt in' situation (leasing the estates they used to own) than to strategic reasons.[20] The third export company owning estates (ACC), instead chose this kind of vertical integration to cater for the specialty market in which it is involved. The same applies to two other major exporters, who have chosen to finance existing estates instead of managing them (Dorman and Taylor Winch).

Major exporters dominate the domestic coffee market as well. At the beginning of liberalization, a number of independent local companies and cooperative unions were operating in the market. These raised capital with local banks (at higher interest rates than with foreign banks) and did not hedge their positions in the futures market. But the amount of finance available to local companies and cooperatives could not match the resources of subsidiaries of MNCs. Local companies also paid higher interest rates. As long as international prices were stable or rising (1994/95, 1996/97, 1997/98), local companies

[20] The recent 'privatization' (through leasehold) of nationalized coffee estates in Kilimanjaro region has mostly taken place through private negotiation between the interested leasers and the cooperative societies that nominally run the estates. Former owners of the estates have taken precedence over other interested leasers in the negotiations. However, it is not clear whether this provision followed a new established rule or whether it arose informally.

managed to survive. However, at times of decreasing prices (1995/96, 1998 to present), they suffered major losses and either disappeared or started to act as agents of major exporters. Cooperative unions suffered a similar fate. Only the unions that managed to restructure their operations (Kilimanjaro Native Cooperative Union – KNCU) or benefited from government intervention (Kagera Cooperative Union – KCU, Karagwe District Cooperative Union – KDCU) survived. In other areas, cooperative unions folded. Their societies either closed, re-organized themselves into smaller unions, worked as agents for private buyers, or started to sell their coffee directly at the auction. The share of the domestic coffee market of cooperative unions fell from 83 per cent in 1994/95 (the first year of liberalization) to 26 per cent in 1999/00 (see Table 11).

Table 9: Tanzania: market share and characteristics of top coffee exporters (1994/95 and 1999/00)

	1994/95			1999/00		
Rank	Name of company/ sister company	Market share	Company type	Name of company/ sister company	Market share	Company type
1	Tchibo Estates	23.6	MNC	Dorman (T)	15.1	local
2	SB/Tropex	10.1	local	Tchibo Estates	14.6	MNC
3	Mazao/City Coffee	10.0	MNC	Taylor Winch	12.8	MNC
4	Sherif Dewji	8.4	local	Olam (T)	12.6	MNC
5	Dorman (T)	7.5	local	Mazao/City Coffee	8.6	MNC
6	ACC/Milcafé	6.6	local	SB/Tropex	5.0	local
7	Tanzania Coffee Est.	5.6	local	Coffee Exporters	4.3	local
8	Taylor Winch	4.7	MNC	ACC/Milcafé	4.1	local
9	Unieximp (T)	3.8	MNC	Sherif Dewji	3.8	local
10	Coffee Exporters	3.5	local	Unieximp (T)	3.6	MNC

Source: TCB

Name of company/ sister company	Notes
ACC/Milcafé	old company; partly owned by Schluter (small international trader) and partly by an African Tanzanian; owns estates
Coffee Exporters	old company; partly owned by Holland Holdings, mid-sized multi-commodity trading group and partly by an Kenyan-Asian; marketing done from Kenya office
Dorman (T)	financial agreement with ED&F Man (mid-sized international trader); marketing done through Kenya office; pre-finances estates
Mazao/City Coffee	subsidiary of Neumann (No. 1 international trader); marketing done in Tanzania
Olam (T)	subsidiary of mid-size multi-commodity international trader; strong in Robusta market
SB/Tropex	old company; owned by Tanzanian-Asian; operates central pulperies in the South
Sherif Dewji	old company; multi-commodity trading group; owned by Arab-Tanzanian family
Tanzania Coffee Est.	subsidiary of TCB
Taylor Winch	subsidiary of Volcafé (No. 2 international trader); marketing done through Kenya office; pre-finances estates
Tchibo Estates	subsidiary of Tchibo (No. 5 roaster); marketing done through Kenya office; owns coffee estates
Unieximp (T)	subsidiary of mid-size multi-commodity international trader

Source: field interviews

Export companies are heavily involved in domestic procurement in Tanzania either directly or by financing local traders. These exporters chose to get involved in the domestic trade in order to increase their export market share. Even though the auction system was maintained

after liberalization, it soon became evident that the only coffee changing hands at the auction was that sold by cooperative unions and a few independent traders (see Temu 1999; 2001). At the beginning, not all export companies had the desire or the organizational capacity to move into parchment and cherry buying. Eventually, they had to integrate vertically to be able to compete. Major exporters first tried to control everything in the field, managing hundreds of buying posts, local transport, bulking, storage, and even input provision. As they learned to streamline their operations, and as margins in the trade diminished, they progressively concentrated on 'core competencies': logistics, curing, bulk warehousing, preparation for export, and external marketing. They also reduced the number of buying posts and concentrated on key geographical areas. Finally, they out-sourced transport services, established a multi-layered network of agents, and even started to use sub-contractors for primary procurement. They all but stopped providing inputs directly to farmers. On the other hand, they contributed to the organization of a voucher scheme for farmers to counteract the disappearance of input credit provided by the cooperatives before liberalization. The voucher scheme was fairly successful until coffee prices began to tumble in early 1999.

Following liberalization, export companies also invested in curing plants. In 1993/94, all Mild Arabica coffee produced in Tanzania was cured at three existing cooperative or government curing plants (Moshi, Mbinga, Mbeya) and all Hard Arabica and Robusta at the cooperative plant in Bukoba. By 2000/01, in addition to these plants, there were other six plants for Mild Arabica (owned by five exporting companies, four of which are MNCs) and nine other plants for Hard Arabica and Robusta (all owned by smaller companies operating for major exporters). Although this has led to massive curing overcapacity, it has allowed faster coffee turnaround, lowered curing losses (because of newer machinery) and led to lower curing fees. The number of plants has remained the same in the last two years only because of a moratorium imposed by TCB on licensing new curing factories (apparently to save the cooperative and government ones from losing further market share).

Because of the capital requirements of operating in domestic procurement and curing, and because of the relatively high entry barriers imposed by regulation, the export industry in Tanzania is more concentrated than in Kenya. In 1998/99 and 1999/00, the top five companies in Kenya exported 44-46 per cent of all coffee (see Table 5). This proportion was around 62-64 per cent in Tanzania between 1996/97 and 1999/00 (see Table 8). The number of companies operating in Tanzania has been relatively stable since liberalization (between 22 and 27). The share of coffee exported by the top five companies has remained fairly stable as well (between 59 and 64 per cent). However, the company composition has changed and MNCs have increased their share of total exports, from 42 per cent in 1994/95 to 56 per cent in 1999/00. In Kenya, the share of exports by MNCs in 1999/00 was only 30 per cent. This means that an increasing proportion of Tanzanian exports is controlled by companies vertically integrated from roasting (Tchibo) or international trade (Taylor Winch/Volcafé, Mazao/Neumann, Olam) to primary buying. Tchibo is the company that resisted integration into primary buying longer than others. It had been the top exporter from Tanzania in 1994/95 and 1995/96, but then disappeared from the top five in the following seasons. At that time, Tchibo had to buy Tanzanian coffee from international traders because of lack of available 'free' coffee at the auction. Finally, it was forced to vertically integrate into primary

buying in 1999/00. As a result, it became the second larger exporter in that season. Preliminary data on the first half of the 2000/01 season suggest that Tchibo will be the top exporter again.

On paper, quality control procedures at the primary buying level have not changed with liberalization. Buyers are still required to buy parchment according to quality. Quality inspectors provided by the Ministry of Agriculture or TCB are supposed to monitor buying procedures and quality. However, this rarely happens and there is no primary buying by grade. A single price is paid for whatever kind of parchment bought, and there is no feedback from buyers to farmers on quality. Buyers are also supposed to refuse purchasing coffee with an amount of moisture over a certain level. This does not happen either, although in recent years buyers have become more conscious about this aspect.

Market operators and farmers give several general explanations for the breakdown of primary quality control and the establishment of a single-price-for-all policy: (1) some buyers and their agents were not familiar with quality control procedures at the beginning of the liberalization process; (2) in the first years after liberalization, there was a rush to establish market share; therefore, buyers were not very selective in their purchases for fear that farmers would go somewhere else to sell their coffee; (3) buyers cannot lose time sorting through the coffee at the buying post because they need to move it fast to maximize the velocity of capital turnaround.

As time passed, consolidation in the domestic market has led to decreasing pressures to maintain market share *per se* and to ‘buy fast’. There has also been a degree of learning in quality assessment procedures at the buying posts – at least in relation to not buying wet coffee and sorting through extraneous matter. However, the single-price-for-all policy has remained. Therefore, there is still no direct incentive for farmers to deliver better quality coffee. In addition to this, lower international prices, a worsening of the coffee-to-inputs price ratio, and the breakdown of small-scale credit schemes have added further disincentives to farmers to grow and process high quality coffee. Cooperatives, which in the past offered differentiated prices in relation to quality, had to adapt to the new market situation and operate in a similar way to private traders in terms of pricing. However, sorting of external matter and humidity content checks at cooperative societies are still much stricter than at private buying posts.

One of the countervailing trends arising in Tanzania is that the number of farmer groups selling their coffee directly at the auction is increasing. These groups enjoy a quality incentive because the higher the quality of the coffee they produce, the higher the auction price they receive. However, they provide a small proportion of total exported coffee. Another countervailing trend is the increasing amount of coffee that is being processed in central pulperies rather than by individual farmers. This is taking place especially in the South and has led to better quality coffee and higher prices – at least for the traders running the pulperies. Farmers who deliver cherry, however, have not been paid a premium. Furthermore, they have had to forego the value adding operations entailed in primary processing.

In contrast to the primary marketing level, quality control procedures at the curing and auction levels have been maintained. Liberalization of the curing sector has increased the speed of coffee turnaround. The new plants also have superior technology, which allows for better grading and lower losses. More efficient marketing and curing operations have led to lower overheads and to higher shares of the export price being paid to farmers. At the same time, absolute prices have decreased due to lower international prices, lack of price competition in domestic trade, and the decreasing premia commanded by Tanzanian coffee in the international market. The auction system could have preserved the transparency of the mechanism of price setting in relation to quality and ensured that the coffee exported fetched the highest price possible. However, due to vertical integration of exporters into domestic buying, most of the coffee sold at the auction does not actually change hands but is simply re-acquired by the same company (Temu 1999; 2001).

The general impact of the changing organization of coffee marketing on quality can be assessed in Table 10. The proportion of exports accounted for by top coffees in 1968/69 – 1972/73 (before the nationalization of the estates) was much higher than at any time after. Nationalization of coffee estates in Kilimanjaro in 1973 dealt a severe blow to the overall reputation of Tanzanian coffee, from which it still has to recover. However, quality has worsened further after liberalization. A comparison of the class realizations in the last six years before liberalization and the first six years after indicates that the proportions of both top quality coffees (classes 1 to 6) and average coffees (classes 6 to 10) have decreased substantially. Arguments made by industry actors concerning post-liberalization 'learning' are not confirmed by the data. As a matter of fact, Table 10 suggests a steadily worsening trend from the first two years after liberalization to the following ones, except for 1999/00. This trend seems to correlate with the varying weight of the cooperative sector in the domestic trade. When cooperatives buy less coffee, the overall quality profile declines (see Table 11). On the other hand, the increasing proportion of top coffees in 1999/00 can be linked to the start of production in privately-rehabilitated estates in the North. Under current conditions, smallholder coffee quality is likely to remain poor.

Efficiency gains have been achieved in the coffee market in Tanzania with liberalization. The key problem remains that there are no quality incentives that are transmitted to farmers. Finally, under the liberalized market, it has become increasing difficult to keep high quality coffee for the specialty market separated from lower quality one. Unscrupulous exporters sold coffee from other areas mixed with Kilimanjaro coffee. There have been quality claims by Japanese importers and a loss of reputation for Tanzanian coffee in general. Subsequently, the quantity of coffee exported to Japan (an important buyer of 'Kilimanjaro' specialty coffee) and the premium received for it have declined. Exporters who target the specialty markets have increasingly relied upon estates through vertical integration or long-term contracts. Therefore, smallholders, who produce 95 per cent of total coffee production in the country, are being marginalized from the high-quality end of the market. This is likely to lock Tanzania into the 'FAQ' market without the benefits of having a large crop to sell (Tanzania's Mild Arabica production is less than one tenth of Colombia's).

Table 10: Tanzania: quality performance by class for Mild Arabica coffee (1968/69 - 1999/00)

	Classes 1-5	Classes 6-10	Classes 11-13	Classes 14-17
1968/69	16.0	74.9	6.4	2.7
1969/70	16.0	74.4	5.7	4.2
1970/71	15.0	70.2	9.0	5.8
1971/72	7.1	79.5	10.1	3.2
1972/73	11.2	72.6	12.4	3.9
1979/80	3.2	73.9	17.0	5.9
1980/81	1.2	64.4	25.9	8.5
1981/82	1.7	76.9	16.6	4.8
1982/83	1.8	75.8	17.5	5.9
1983/84	1.7	75.1	18.1	5.1
1984/85	1.0	72.4	21.9	4.7
1985/86	2.2	74.6	19.5	3.7
1986/87	1.7	67.8	28.6	2.0
1987/88	1.9	58.5	32.7	6.9
1988/89	2.5	73.7	19.0	4.8
1989/90	2.5	73.2	18.9	5.4
1990/91	4.6	72.9	16.1	6.4
1991/92	0.8	80.4	11.1	7.4
1992/93	1.5	76.5	18.1	3.9
1993/94	2.0	77.0	18.0	3.0
1994/95	2.5	79.0	15.0	3.5
1995/96	3.0	79.1	16.6	2.5
1996/97	n.a.	n.a.	n.a.	n.a.
1997/98	0.6	59.5	29.9	10.0
1998/99	0.7	60.3	34.9	4.0
1999/00	1.2	67.3	25.9	5.6

	Classes 1-5	Classes 6-10	Classes 11-13	Classes 14-17
average 1968/69-72/73	13.1	74.3	8.7	4.0
average 1979/80-93/94	2.1	73.3	19.6	5.1
average 1988/89-93/94	2.3	75.6	16.9	5.2
average 1994/95-99/00	1.6	69.0	24.5	5.1

Sources: TCB and MDB

Table 11: Tanzania: domestic market share of cooperatives in relation to quality performance (1994/95 - 1999/00)

	Market share of coops	Class realisation (1-10)
1994/95	83.2	81.5
1995/96	61.4	82.1
1996/97	32.7	n.a.
1997/98	12.3	61.1
1998/99	16.5	61.0
1999/00	26.4	68.5

Source: TCB

Uganda

Uganda started to liberalize its coffee sector in 1990/91. The process was carried out quickly and efficiently and Uganda now boasts the most liberalized coffee trading environment in East Africa. Licensing requirements are minimal, coffee can be bought anywhere, in any form, and can be sold anywhere else within the country (see Figure 5). The Coffee Marketing Board Ltd. (CMBL) was allowed to operate in competition with private exporters, but went out of business soon after liberalization. The cooperative sector also disappeared, with the exception of the Bugisu Cooperative Union (BCU) in Mbale, which is still fairly strong in the Mild Arabica market.[21] Regulatory powers were transferred to the newly-created Uganda Coffee Development Authority (UCDA), which retains only monitoring, promotion and statistical functions, although it is also in charge of testing export consignments for minimum quality standards and releases export certificates. In 1991 and 1992, the Bank of Uganda stopped providing crop finance, finance arrangements and joint ventures with foreign companies were allowed, and the dual exchange rate system and the export tax were abolished. Finally, in 1995, mandatory export floor prices were also abolished.

Full liberalization has been accompanied by a proliferation of export companies, private primary buyers, hulling plants, and export processing plants. In the first few years after liberalization, all coffee was processed for export at the huge CPSU plant (owned by CMBL; capacity 120 tons/hour). Afterwards, all major exporters installed their own plants (with capacities ranging from two to 12 tons/hour). By 1998/99, there were 29 registered export processing plants. Following the folding of CMBL, the CPSU plant was put on sale but failed to find a buyer. It now lays idle. In 1993/93, 34 export companies were registered in Uganda (see Table 12). By 1994/95, there were 117. As the market became more 'mature' and international prices started to fall, this number decreased again (to 34 in 2000/01, of which just 21 were active). The top MNC companies involved in Uganda include Ugacof (a

[21] In the first liberalized season (1990/91), the Ministry of Cooperatives and Marketing granted four export licenses to cooperative unions in competition with CMBL. Because the unions did not know the logistics and the export market, they approached the Uganda Cooperative Alliance (UCA) for assistance. In response, UCA set up a directorate called Union Export Services (UNEX). Between 1990/91 and 1992/93, UNEX organized tender sales for coffee procured by cooperative unions. Later on, it acted as a broker between unions and importers. It ceased to operate under the Uganda Cooperative Alliance in 1995 (when most unions had gone out of business) and now functions as a private company with UCA and three unions as shareholders. In 1998/99, it controlled only 1.3 per cent of the export market.

subsidiary of Sucafina, a major Robusta trader), Cargill (now taken over by Outspan/ECOM), Olam, and subsidiaries of the giant trading groups Neumann and Volcafé (see Table 14). Other local companies are financed by international traders (Socadec, Drucafé) and roaster/traders (Decotrade/Douwe Egberts, Taloca/Kraft, Tchibo, Nestlé).

Table 12: Uganda: number of registered export companies (1990/91 – 2000/01)

1992/93	34
1993/94	86
1994/95	117
1995/96	94
1996/97	60
1997/98	46
1998/99	40
1999/00	38
2000/01	34

Source: UCTF and UCDA

The parabolic movement in the number of export companies was accompanied by important changes in the organization of their operations. At the time of high margins (the 1994-96 period), export companies sought vertical integration all the way to farm-gate buying. Because of the low barriers of entry, however, they had to adopt a mixed system of directly-controlled buying posts, agents, and sub-contractors. Some companies even invested in primary processing plants in order to be able to buy cherry from farmers instead of hulled coffee from small private hullers and other intermediaries.

In the following years, margins shrank and since 1996/97 MNC exporters have been buying at a loss. Because Ugandan Robusta still plays a key role in major coffee blends, international traders need to be present in Uganda even if they do not make profits, just to keep their major clients (roasters) happy. MNC exporters are also undercut by the practices of some major roasters (such as Nestlé) who often buy an origin from more than one source – including directly-financed 'local' exporters. Competition has been also maintained by the fact that companies which filed for bankruptcy have been allowed to re-open under a different name. According to exporters, this encourages 'reckless and speculative' behaviour and pushes up domestic prices for coffee.

As time passed, it also became evident to MNC exporters that it was not worthwhile controlling such a wide network of operations in the country, so long as barriers to entry were low. They withdrew from primary processing, stopped financing agents, and reduced the number of buying posts to less than five, covering just the major towns. Some exporters even retreated to buying only in Kampala at their export processing plant. They now buy most of their coffee hulled (rather than dry cherry) from whoever wants to sell it to them.

Between the 1996/97 and 1998/99 seasons, the proportion of coffee exported by the top five companies remained fairly constant at 50-53 per cent of total (see Table 13). This means that Uganda's coffee industry concentration is between that of Kenya and Tanzania. However, the

proportion of exports by MNCs has increased from 33 per cent in 1996/97 to 47 per cent in 1998/99. The market power of MNC exporters and industry consolidation are bound to increase further with ECOM's (parent company of Outspan Commodities, No. 10 exporter of Ugandan coffee in 1998/99) purchase of Cargill's coffee operations in 2000 (No.3 coffee exporter of Ugandan coffee in the same season). In 1996/97, only three MNCs figured in the top 10 exporters. By 1998/99, there were six in the top ten, of which four were in the top five (see Table 14).

Table 13: Uganda: market share of coffee exports by type of company (1996/97 to 1998/99)

	1996/97	1997/98	1998/99
Market share of top 5 companies (%)	52.2	50.3	53.0
of which MNCs	*24.0*	*23.7*	*38.4*
of which local	*28.2*	*26.6*	*14.7*
Market share of top 10 companies (%)	72.8	70.9	77.1
of which MNCs	*28.2*	*31.9*	*46.7*
of which local	*44.5*	*39.0*	*30.4*
Market share of companies ranked 11th to 20th (%)	17.8	21.5	19.7
Market share of other companies (%)	9.5	7.6	3.3
MNC share of total exports (%)	32.6	33.8	46.7

Source: elaboration from UCDA data

Table 14: Uganda: market share and characteristics of top coffee exporters (1996/97 and 1998/99)

	1996/97			1998/99		
Rank	Name of company/ sister company	Market share	Company type	Name of company/ sister company	Market share	Company type
1	Nsamba Coffee Works	15.1	local	Intertrade	14.7	local
2	Kyangalanyi	13.5	MNC	Ugacof	13.3	MNC
3	Ugacof	10.5	MNC	Cargill	10.0	MNC
4	Nile Commodities	7.8	local	Kyangalanyi	8.6	MNC
5	Zigoti Coffee Works	5.3	local	Olam	6.6	MNC
6	Quality Commodities	4.9	local	Kampala Domestic Store	5.9	local
7	Kampala Domestic Store	4.6	local	Nsamba Coffee Works	5.3	local
8	Outspan Commodities	4.3	MNC	Haji Nsamba	4.5	local
9	Zinunula Coffee Factory	4.0	local	Ibero (U)	4.2	MNC
10	FIBA	2.8	local	Outspan Commodities	4.2	MNC

Source: UCDA and UCTF

Name of company/ sister company	Notes
Ugacof	subsidiary of Sucafina (major Robusta trader)
Cargill	subsidiary of No. 3 international trader
Kyangalanyi	subsidiary of Volcafé (No. 2 international trader)
Olam	subsidiary of mid-size international trader
Ibero (U)	subsidiary of Neumann (No. 1 international trader)
Outspan Commodities	subsidiary of ECOM (mid-size international trader)

Source: field interviews

Quality considerations for Robusta and Hard Arabica coffees are much less stringent than for Mild Arabica. When buying dry cherry, an operator could in theory check moisture content, the presence of extraneous matter and out-turn parameters (proportion of hulled coffee extracted from a sample of dry cherry). However, this is seldom done for small quantities. Most exporters now buy hulled coffee in large batches. At this level, they can check four quality parameters: moisture content, smell, defect count and screen retention. The maximum level of moisture in hulled coffee suitable for trade is set by UCDA but rarely enforced. At the export level, operators assess coffee quality by grading and (more rarely) cup testing. Before export, UCDA has to certify each consignment after carrying out physical and cup testing.

In the first few years after liberalization, there was massive competition among buyers to establish market share in Uganda. As in Tanzania, this created incentives to 'buy fast' without proper quality monitoring. According to industry actors, this led to a serious decline in quality because of increased trade in cherry and hulled coffee that were not dry enough. According to UCDA data, the proportion of 'clean cup' tests on export consignments in 1992/93 and 1993/94 were only 66 and 79 per cent respectively (no comparable data is available for previous years) (see Table 15). The reasons given for the deterioration of quality control procedures and of coffee quality in the early years of liberalization are similar to the ones provided in the Tanzania case. The big difference is that the situation seems to have improved in later years. The proportion of 'clean cup' tests has increased since the early years of liberalization and has remained fairly constant at around 90-93 per cent. The proportion of coffee that was referred for re-processing during pre-shipment inspections has also decreased, although high moisture content (wetness) still remains a problem (see Table 16).

Table 15: Uganda: quality performance by proportion of 'clean cup' and distribution of defects for Robusta coffee (1992/93 - 1998/99)

	1992/93	1993/94	1995/96	1996/97	1997/98	1998/99
Proportion of clean cups (% of tests)	*66*	*79*	*91.2*	*93.5*	*92.6*	*89.2*
Defects found (% of total failed tests)						
over-fermentation			24.4	26.2	39.8	35.4
earthy			26.5	28.5	21.9	23.5
potato			10.3	7.8	13.1	8
taints			29.5	31.5	22.5	28.2
others			9.3	6	2.7	4.9

Source: UCDA

Table 16: Uganda: Quality performance by proportion of Robusta coffee referred for reprocessing and reason for referral (1996/97 - 1998/99)

	1996/97	1997/98	1998/99
Proportion of coffee referred for reprocessing (% of total exports)	34.0	11.6	5.9
Reason for referral (% of total referred coffee)			
wetness	63.4	34.3	45.4
poor retention	23.1	7.1	14.8
discolored and blacks	7.7	38.2	24.2
floats/BHP	0.9	8.8	5
pods	4.2	9.1	8
extraneous matter	1.1	2.5	2.6

Source: UCDA

Restructuring of primary buying operations by exporters seems to have generated an improvement in quality, at least at the export level. Local-level trade and hulling are now almost completely in the hands of independent local operators. There is no hard data on quality for the intermediary stages of coffee from cherry to green coffee. However, it is clear that some of the major exporters have started to apply quality-related pricing conventions in their buying posts for hulled coffee. The range of price variation can reach plus/minus 25 per cent of the advertised price. Exporters have also established minimum delivery quantities. Because buying is now more centralized, quality control is easier to carry out and its incentive effects are more likely to reach actors upstream.[22] Furthermore, most export processing plants are now equipped with dryer-silos, where coffee with higher moisture content can be properly dried.

Another parameter of coffee quality is realization by grade. The proportion of exports by grade is linked to farm practices and weather conditions, but also to proper export grading. In the early 1980s, most Ugandan Robusta was sold as undifferentiated FAQ grade (see Table 17); the coffee reaching the CPSU processing plant was simply re-bagged for export. The situation improved in the second half of the 1980s, when proper grading started to be carried out. By the start of liberalization in 1990/91, the proportion of top grade coffee had stabilized to about eight per cent, and the practice of exporting ungraded coffee had ceased. Data from the second half of the 1990s shows an improvement in the proportion of top grade coffee, confirming that, overall, the decline of coffee quality has been reversed.

[22] It is not clear whether these practices have arisen independently or whether there has been some form or coordination among MNC exporters, within or outside of the 'official' industry cooperation mechanisms of the Uganda Coffee Trade Federation (UCTF). Further fieldwork in Uganda in 2002 may provide more precise information on this aspect.

Table 17: Uganda: grade realisation for Robusta coffee (% of total exports) (1981/82 – 1998/99)

	mean 1981/82 - 1983/84	mean 1984/85 - 1986/87	1990/91	mean 1996/97 - 1998/99
Screen 18	3.0	9.4	8.4	10.7
Screen 15	20.7	61.0	62.1	61.3
Screen 12	5.3	17.8	21.4	23.7
FAQ (screens 12 to 18)	68.6	7.5	0.0	0.0
Lower grades	2.4	4.4	8.1	4.3

Source: elaborated from UCDA data

Liberalization of domestic marketing in Uganda led to a period of quality deterioration and a later recovery. This did not lead to a loss of reputation for Ugandan Robusta because export-level quality was maintained through UCDA monitoring. If coffee does not reach 'clean cup' quality or does not pass screen, humidity and defect count tests, it cannot be exported and needs to be re-sorted. The special characteristics of Ugandan Robusta lay in the fact that it is grown at higher altitudes than most other Robustas. Therefore, the most important quality trait is embedded in the product and is less easy to spoil than in the case of Mild Arabicas. From this point of view, liberalization did not affect the reputation of Ugandan Robusta and, at the same time, benefited farmers who are paid a higher share of the export price than in the pre-liberalization period. On the other hand, the stabilization mechanism embedded in the system of forward sales by the marketing board has been lost. Therefore, farmers and smaller (non-hedging) local companies are more exposed to price fluctuation risk.

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