

Structure and performance of Ethiopia's coffee export sector

Summary of ESSP Working Paper 66, "Structure and performance of Ethiopia's coffee export sector"

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We study the structure and performance of the coffee export sector in Ethiopia, Africa's most important coffee producer, over the period 2003 to 2013. We find an evolving policy environment that leads to structural changes in the export sector, including an elimination of vertical integration for most exporters. Ethiopia's coffee export earnings increased four-fold in real terms over this period. This increase has mostly been due to changes in international market prices. The quality of coffee improved only slightly over this time, but the quantity exported increased by 50 percent, explained by both higher domestic supplies and reduced local consumption. To further progress coffee export performance, investments to increase the quantities produced and to improve quality are needed, including an increase in washing, certification, and traceability, as these characteristics are shown to be associated with significant quality premiums in international markets.

Ethiopia's coffee market

Ethiopia's coffee export sector over the period 2003-2013 has undergone important changes, driven by both local and international factors. As a valued and critical commodity to the livelihood of small farmers and to Ethiopia's economy as a whole, coffee exports have been strongly influenced by changes in government policy and their consequent impacts on the coffee sector.

Given the importance of coffee, this study documents the characteristics of the sector, the policy shifts affecting the sector, and the important structural changes that have occurred in Ethiopia's coffee export market during this study period. The study considers how price, quantity, and quality variation are associated with export performance, and, moreover, how local policy changes in Ethiopia, primarily those related to the start of the Ethiopian Commodity Exchange (ECX) at the end of 2008 and to export license suspensions, have contributed to structural shifts in the sector.

Structural changes in coffee exports

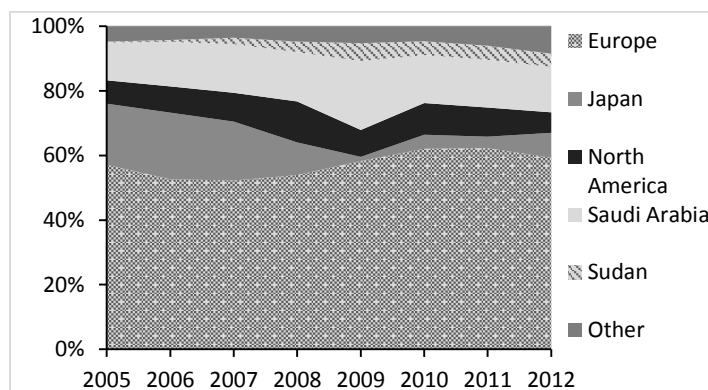
We note important structural changes in the coffee export sector in Ethiopia. We see a larger number of exporters and increasing diversification in the types of exporters, such as cooperatives and commercial farms, with lower concentration ratios in the export sector overall. In contrast, the share of the incumbents in the local coffee market is large. This is driven possibly by the importance of reputation in these international markets, the complexity of coffee markets, and a lack of access to credit for emerging exporters. There has been relatively little change in the countries that Ethiopia exports to during this period, except for a small increase of exports to Sudan (Figure 1). We also note a small but increasing share of parastatals and cooperatives in the coffee export sector and an increasing emphasis on certification of coffee, although certified coffee exports from Ethiopia are still very small compared to the share exported from other producing countries.

Coffee export destination markets

Figure 1 shows how the share of the different destination markets has evolved over the period 2005 to 2012. Europe is Ethiopia's most important export destination. While the share of Japan was almost 20 percent in 2005, this declined considerably in 2009, as Japan halted deliveries of coffee from Ethiopia in May 2008 after finding abnormally high pesticide residues in a shipment of coffee

beans. This problem has since been addressed and the share of coffee exports to Japan is slowly increasing. We also see some increase in diversification of destinations.

Figure 1—Share of different destination markets for Ethiopia's coffee exports

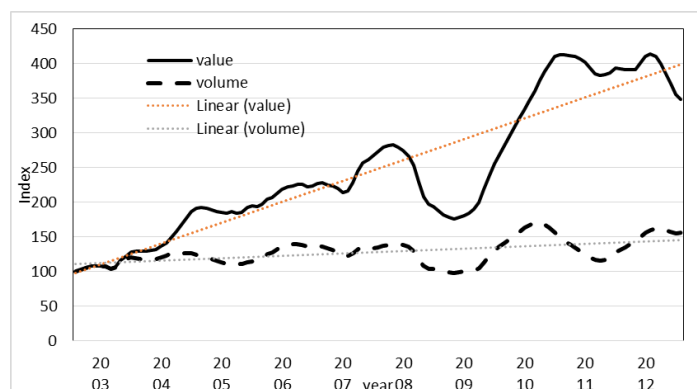


Source: Authors' calculations based on data from the Ministry of Trade

Increasing quantity and quality of coffee

Ethiopia's coffee export sector has performed well over the last decade, with the real value of coffee exports rising four-fold between 2003 and 2012 (Figure 2).

Figure 2 – Real value and quantities of coffee exports from Ethiopia, 2003 to 2012 (Jan, 2003=100; 12-month moving average and linear trends)



Source: Authors' calculations based on data from the Ministry of Trade

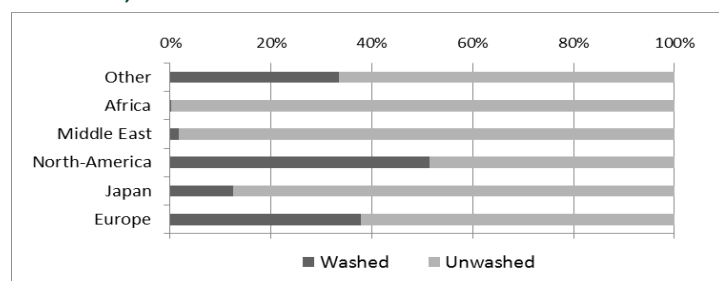
The increases in export values have been largely driven by rising international coffee prices between 2003 and 2012. The quantities

of coffee exported have simultaneously increased. In 2012, compared to 10 years earlier, the quantity of coffee exported was 50 percent higher. As increased quantity exported plays a role in the changes seen in coffee export values, this may partly be at the expense of local consumption, with coffee in local markets becoming increasingly rationed over time, as shown in relatively important domestic retail coffee price increases.

A small increase was observed in the quality of exported coffee, reflected in the share of certified coffee and in the better quality of unwashed coffee. The share of higher-valued washed coffee in total exports, however, has not changed over time.

We find that the coffee export market is highly differentiated in Ethiopia, with quality premiums being offered for washing, quality grades, certification, and specific geographical indications. Approximately 30 percent of the coffee is washed, resulting in high but variable (due to international price variation) premiums compared to unwashed coffee. Japan and the Middle East are more likely to import unwashed coffee than are other countries for a presumed better and richer natural taste. The impression of washed coffee being cleaner is strong in the US and Europe. Figure 3 illustrates these preferences for washed and unwashed coffee

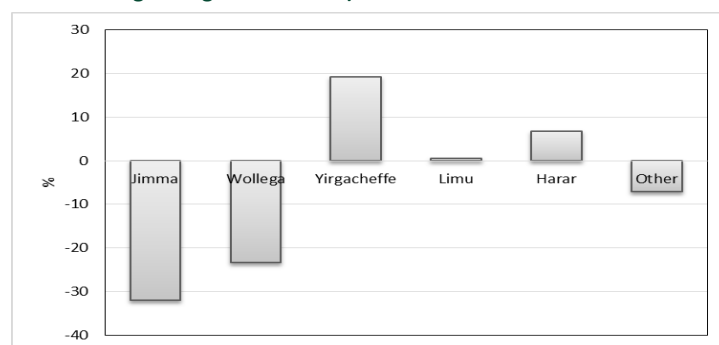
Figure 3— Share of exports of washed and unwashed coffee by export destination, 2005 to 2013



Source: Authors' calculations based on data from the Ministry of Trade

Geographic indications of origin have significant impact on premiums, with Yirgacheffe and Harar coffee commanding large premiums over coffees originating from elsewhere in Ethiopia (Figure 4). Certified coffee and coffee marketed by cooperatives are sold at higher prices than coffee sold by the private sector. We find that all exporters that are vertically integrated obtain significantly higher prices over time than those that are not. This vertical integration is valued especially in the differentiated high-end market.

Figure 4 – Quality premiums for geographic origins of coffee (compared to coffee originating from Sidama)



Source: Authors' calculations based on data from the Ministry of Trade

Implications and future challenges

The research results highlight several important considerations to developing the coffee market in Ethiopia.

An emphasis on stimulating increased washing of coffee by creating the right investment incentives is important, as it leads to significantly higher export prices and, thus, higher foreign exchange earnings for the country. With only a small proportion of the coffee exported sold as washed coffee, there is still room for growth in this area. However, profitability for the setting up of wet mills needs to be carefully assessed, along with the environmental implications of more widespread washing. Improved processing methods, such as ecological pulpers which reduce water demand significantly, should be more widely adopted. The growth of washing coffee in Ethiopia may have been impeded because of regulations and difficulties of access to the foreign exchange needed to import wet milling machines. Due to climatic and quality constraints, coffee cherries produced in some areas of Ethiopia are also not suitable for washing, thus limiting the opportunities for spatial growth in wet milling services to coffee producers.

Another aspect to consider is specialty coffee. It has been estimated that between 20 and 30 percent of Ethiopian coffee could qualify as specialty coffee. Therefore, making efforts to increase access by Ethiopian producers to global specialty coffee markets could open export opportunities. Ethiopia could also benefit from increasing its branding of coffee, extending participation in certification schemes, and emphasizing trade in traceable coffee products. This is especially important given the growing emphasis in international markets on certification of sustainable coffee production practices. However, as certification is often a costly process that might also limit benefits for producers, setting up cheaper and internationally credible local certification schemes that are advantageous to local producers should be considered. Furthermore, as many of these international certification schemes require collaboration with farmer cooperatives, further capacity building of these cooperatives will be required.

Finally, coffee yields are very low in Ethiopia compared to other countries, and this study highlights some significant opportunities for productivity growth. By increasing support at farm level and training coffee farmers towards higher adoption of improved technologies, such as mulching, pruning, rejuvenation of trees, planting of improved varieties, and modern input use, higher productivity can be achieved. These practices could lead to higher local supply and, therefore, to increased quantities of coffee exported. In addition, efforts should be made with the agricultural research and agricultural extension services to address widespread concerns related to coffee diseases and to support adaptation to and mitigation of climate change as it affects coffee production. These efforts are likely to have major impacts on the coffee sector in Ethiopia.

The full ESSP working paper on the structure and performance of Ethiopia's coffee export sector can be downloaded at
<http://www.ifpri.org/sites/default/files/publications/esswp66.pdf>.

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