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Structure and Organization of Coffee Value Chains in Ethiopia

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Abstract

Motivation

The high level of regulation has a strong influence on the development of Ethiopia's export- and domestic-oriented coffee value chains, as well as on their ability to participate in Global Value Chains and in domestic value chain development. The fact that Ethiopia's coffee value chains are further differentiated along various dimensions is widely overlooked in the scientific literature.

Approach and methods

Drawing on expert interviews and other data sources, we identify, describe, and discuss the structure and organisation of the Ethiopian coffee value chains, taking into account institutional conditions and policy frameworks. We also identify relevant institutions and policies involved in these value chains across primary, secondary, and tertiary markets, along with their respective interventions.

Findings

Our analysis identified four major coffee value chains: formal, informal, domestic, and international chains. Stakeholders' competing goals and conflicts have created a complex structure, as exemplified by the strict market regulations in place. Reforms, such as Ethiopia's monetary policy, have caused foreign exchange and FDI deficits, impacting the coffee sector, which remains the primary source of foreign currency but limits domestic coffee development. This also spurred informal trade for local and cross-border markets. An overvalued currency and cheap imports attract informal traders, as exporters seek foreign currency through coffee, thereby hindering the sector's development. Poor quality control further restricts the competitiveness of domestic chains, favouring small, inefficient, and informal traders. Institutions failed to regulate reforms, such as the 2018 coffee reform, which reduced transparency and undermined trust. Furthermore, the failure of institutions to monitor and regulate policy reform meant that farmers, primary cooperatives, and traders working on quality considered it a less rewarding activity. The Ethiopian coffee market does not function effectively in terms of differentiating and remunerating different product and process qualities.

Policy implications

The results highlight the need to implement quality control measures at farm level, particularly within the farmer—supplier—exporter chain, in order to utilize the country's potential to produce high-quality coffee for export and develop the domestic value chain. This also calls for designing a system that rewards quality production at all stages of the value chain. Acknowledging the distinct coffee value chains in the country and creating a strategy that considers their variations is crucial.

Keywords: Coffee, value chain analysis, coffee market, institutional environment, Ethiopia

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List of abbreviations

AMS: Alternative Marketing System

Birr: Official Currency of Ethiopia

ECTA: Ethiopian Coffee and Tea Authority

ECX: Ethiopian Commodity Exchange

FT: Fairtrade certificate

HI: Horizontal integration

O: Organic certificate

OS: Out-grower scheme

VI: Vertical integration

VSS: Voluntary sustainability standards

1 Introduction

In recent decades, there has been a significant transformation in the global economic environment, which is characterized by an increasing integration with, and dependence on, world markets (Gereffi & Memedovic, 2003; Kaplinsky & Morris, 2001 cited from Vrolijk, 2021). In the process, transnational corporations (TNCs) are becoming increasingly powerful partners for countries seeking to benefit from participation in Global Value Chains (GVCs) (AfDB et al., 2014 cited from Vrolijk, 2021). Low- and middle-income countries, whose economies are heavily dependent on producing and exporting primary commodities, particularly benefit from effective participation in GVCs. Participation in GVCs is often seen as a pathway to economic and technological development, offering improved access to international markets, higher-quality inputs, and opportunities for specialisation in core activities (Ndubuisi und Owusu, 2021). However, in the long run, GVC participation alone is insufficient; improving the quality of export products is also crucial (Ndubuisi & Owusu, 2021) to avoid the so-called 'middle-income trap', which could otherwise slow down the productivity growth initiated by GVC participation (Nadeem et al., 2021). Ghodsi und Stehrer (2020) found that high quality and 'niche' market strategies could help commodity-dependent low-income countries to improve their terms of trade. This is all consistent with the idea of "value chain upgrading" (Gereffi, 2019), whereby countries are "moving into higher value-added stages" or activities, generating positive spillovers in technology and productivity (Marcato und Baltar, 2020).

Coffee is one of the most important cash crops for the Ethiopian economy. The nation derives approximately 30 percent of its foreign exchange earnings exclusively from coffee exports. More significantly, 25 percent of the population relies economically on the coffee industry. Over the years, the government has consistently adopted and implemented numerous policies. These efforts aim to optimize benefits to smallholder farmers, the economy, and all stakeholders involved in the sector. One such policy measure, and probably the most popular, is the introduction of the Ethiopian Commodity Exchange (ECX), which has served as a trading platform for coffee and other agricultural products since 2008. Another recent policy measure is the alternative marketing system (AMS), introduced in 2018, which allows direct transactions between coffee suppliers and exporters. The high degree of structural and regulatory complexity strongly influences the development of Ethiopia's domestic and export-oriented coffee value chains, affecting both their ability to participate in global value chains (GVCs) and their capacity for upgrading. These value chains encompass numerous stages of processing, which are further differentiated along various dimensions, such as the initial value-adding process, which can be wet or dry processing (Tamru und Minten, 2023). The sector also has the capacity to penetrate specialty and voluntary sustainability standards markets. At the same time, it remains dominated by the international commodity trade, which operates under stringent regulations alongside a sizable informal economy, and navigates conflicting stakeholder priorities—factors that have driven a series of policy reforms.

Scientific literature often overlooks the distinct nature and types of coffee value chains. These value chains are often considered single entities, with studies typically concentrating on production systems, processing methods, or governance. The focus on small farmers and cooperatives, as well as the macroeconomic conditions of the coffee sector, has overlooked the distinct nature and types of coffee value chains. Consequently, the recommendations are less effective because the chains vary in certifications, upgrading possibilities, and traceability requirements.

To mention a few pieces of scientific literature and their focus: The study on Ghana's cocoa value chain focuses on local actors rather than lead firms to analyse governance factors that enable economic upgrading and connect it with the social aspect of upgrading (Kissi und Herzig, 2024). Another study focuses on processing methods and actors involved in the value chain during their investigation of the hidden costs of coffee production in Ethiopia, Uganda, and Tanzania (Adong, 2024). Tamru und Minten, 2023 in their research on value addition and farmers, examined different dimensions, such as specialised production voluntary sustainability standards (VSS), organic practices, and roasting. When discussing the value-added process, emphasis is placed on whether the coffee is

wet- or dry-processed. The study by Minten et al., 2019 also concentrates on coffee production practices, processing activities, and technologies at farm level. This work shows how scientific focus often overlooks the unique features of these distinct but related value chains. Therefore, in this working paper, we use Ethiopia to demonstrate how coffee value chains vary in their organisation and structure.

The working paper provides a detailed description of the structure and organization of coffee value chains currently existing in Ethiopia. Additionally, we examine the contradictions and tensions among stakeholder groups and interests, taking into account the institutional environment at various market levels. Our aim is to determine how these diverse, sometimes conflicting, strategies interact with one another and with their policy environment at the coordinating nodes of coffee networks.

To address this topic, we discuss the following research questions at primary, secondary and territory market levels of each value chain based on expert and stakeholder interviews, as well as on secondary data, and other data sources:

(1) What are the relevant formal and informal value chains of the Ethiopian coffee sector, and how do they compare to each other?

(2) What are the characteristics of the markets that these value chains serve, and how are they organized?

(3) What contradictions and tensions exist among stakeholders in these value chains, and how are these linked to the policy environment?

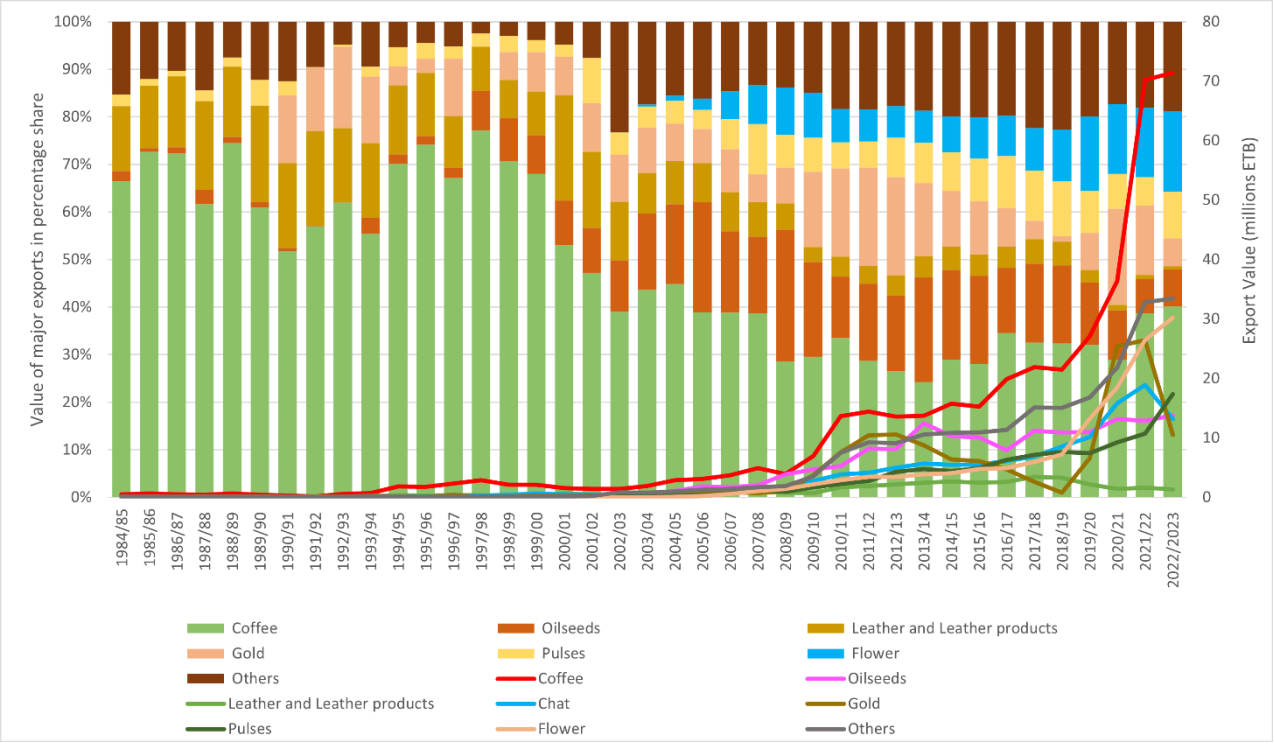
This working paper is structured as follows: Section one presents the introduction. Section two covers the background of the Ethiopian coffee sector and its institutional environment. Section three describes each of the Ethiopian coffee value chains and methods. The final section ends with a concluding discussion.

2 The Ethiopian coffee sector and economic development

Ethiopia is the largest coffee producer and exporter in Africa and the fifth-largest producer of Arabica coffee in the world (Fikre, 2020; Minten et al., 2019). Ethiopia's annual coffee production for Marketing Year (MY) 2025/26 is projected to reach approximately 11.6 million 60-kilogram bags, equivalent to 694,000 metric tons (MT) (FAS Staff, 2025b). Coffee production on average accounts for about 4 percent of the country's gross domestic product (GDP), 10 percent of agricultural production, and about 37 percent of total export earnings (MOA, 2016). Thus, coffee remains the main commodity contributing to Ethiopia's export revenue. During the fiscal year 2021/22, Ethiopia generated over USD 65 million from coffee exports (Adong, 2024).

Figure 1 illustrates the value of major export commodities in percentage share and export value. It shows that the share of coffee in all commodity exports has fluctuated and has overall halved over the period from 1984 to 2023. From 1984/85 to 1989/90, the average share was 67 percent, whereas it is 31 percent on average from 2017/18 to 22/23. Nevertheless, coffee remained the major export crop in 2022/23 followed by flowers (16 percent), pulses (9 percent), oilseeds (7 percent), chat (7 percent), and gold (5 percent). The change in commodity exports also shows diversification of commodities in the economy, which is shown in Figure 1 through the growth of other commodities. The major commodities that resulted in the growth of other commodities include live animals, fruit and vegetables, petroleum products, and textile products.

Figure 1: Value of major exports



Source: Own computation based on data from the National Bank of Ethiopia (1984-2023)

In the context of coffee, the rise in the production and export of chat is of interest since chat is a cash crop competing with coffee for land. It is a leafy plant widely grown and chewed for its mild stimulant effects. Ethiopia is the leading producer in Eastern Africa (Tefera, 2022b). In recent decades, farmers in some parts of the country moved from growing coffee to growing chat. The transition has led to increased farmer incomes, but also to declines in food security, biodiversity, soil health, and women's empowerment. The Government of Ethiopia

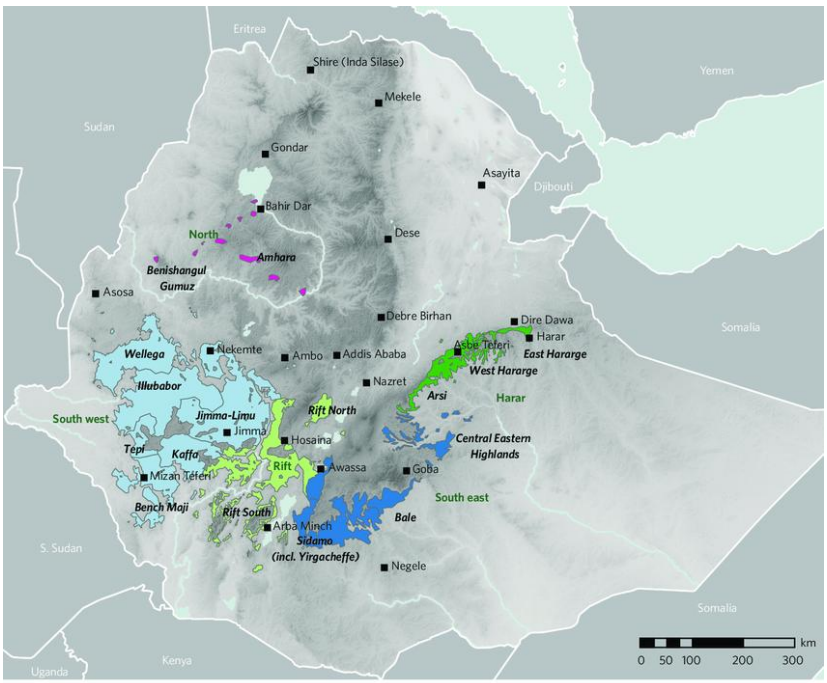
(GOE) neither encourages the cultivation of chat in any form nor takes any action against its cultivation, trade, and use (Tefera, 2022b). Chat significantly contributes to government revenue through both export revenue and local taxation. The increasing production and export of chat in Ethiopia highlights the tension between the economic benefit and its effect on society's well-being and the environment, which is something that the government should consider critically.

Overall, coffee has always been, and still is, of economic importance to Ethiopia (Schäfer, 2017). Like many other developing countries, its economy relies heavily on the production and export of primary commodities. Green coffee exports are primarily promoted to generate foreign currency, which is scarce in the country and necessary for importing raw and semi-finished goods, as well as essential consumables (Tasew et al., 2024) such as fuel and fertilizers. Thus, coffee export has become a lucrative economic activity, enabling traders to earn foreign currency and exert their monopoly power in markets for imported goods afterward (Tamru et al., 2021; PETIT, 2007).

2.1 Coffee production and processing

Coffee grows in highland areas of Ethiopia on around 2.5 million hectares, under various production systems, growing conditions, and cultivation practices. It grows in high altitudes ranging from 1500-2200 meters above sea level, as shown in Figure 2 . The majority of the production comes from southwest , rift valley , and southeast zones, and minor output from the Benishangul-Gumuz Region (Davis, 2017). A recent study shows that the Amhara region (Zege and Ataye Coffee) is joining in as a coffee-growing area (Meaza und Emagne, 2018).

Figure 2: The main coffee growing zones and areas of Ethiopia



Source: (Moat et al., 2017)

Note: The coffee zones represented by colored polygons: red/pink, North Zone (coffee areas: Amhara and Benishangul Gumuz); light blue, South West Zone (coffee areas: Wellega, Illubabor, Jimma-Limu, Kaffa, Tepi and Bench Maji); light green, Rift Zone (coffee areas: Rift North and Rift South); dark blue, South East Zone (coffee areas: Sidamo, Yirgacheffe, Bale and Central Eastern Highlands); dark green, Harar Zone (coffee areas: Arsi, West Hararge and East Hararge) (Moat et al., 2017).

Smallholder farmers are estimated to contribute 70 percent of the world's coffee supply (Eakin, Winkels, & Sendzimir, 2009). The smallholder coffee farmers own less than two hectares of land, although they contribute 95 percent of the total coffee production, and, on average, own less than two hectares of land (Canwat, 2023). The Central Statistical Agency (CSA) estimated that there were 5.3 million coffee farmers in Ethiopia in 2017

(Tamru et al., 2021). In the country, coffee is the primary source of income for these smallholder coffee producers. Including family members, more than 15 million Ethiopian citizens (12.6 percent of the population) rely on the coffee business for their livelihoods (Fikre, 2020; Minten et al., 2019; Tefera; FAS Staff, 2025a). This figure share is higher in some regions of the country, for instance in the region Jimma where 45 percent of the population depends on coffee (Mojo et al., 2017).

Four types of production systems can be found in Ethiopia: (1) forest coffee (8-10 percent); (2) semi-forest coffee (30-35 percent); (3) cottage or garden coffee (50-57 percent); and (4) modern coffee plantation (5- 8 percent) (Meaza und Emagne, 2018). Forest coffee is grown in the wild under natural forest cover and is gathered by farmers from trees with minimal tree maintenance. Semi-forest coffee is also grown in forest conditions, but with limited maintenance by farmers, primarily involving annual weeding. This type of coffee has clearly delineated boundaries of ownership, although the trees usually are located away from agricultural plots. Cottage or garden coffee is defined as coffee from trees planted by farmers near their residences. It is often intercropped with other crops or trees.

Modern plantation coffee is grown on large commercial farms, including both private and state-owned farms. Modern production practices, such as irrigation, modern input use, mulching, stumping, and pruning, are often applied in this case (Minten et al., 2014). Thus, most coffee trees are intercropped with other crops and trees, or grow in semi-forest systems. After harvesting the green beans/cherries, coffee is primarily processed either wet (washed) or dry (unwashed). The wet processing involves removing the skin, pulp, and sugary mucilage layers using water before drying. That means that the cherries are pulped immediately after harvesting, then fermented in tanks and washed in clean water to remove the mucilage. The wet parchment coffee is sun-dried for up to three weeks until the moisture level reaches about 11percent (PETIT, 2007). For dry processing, the farmers dry cherries on mats or concrete floors. After drying, the cherries undergo hulling in 'dry mills' to remove the outer layer. Ethiopian coffee is currently 70-80 percent unwashed or sun-dried and 20-30 percent washed. In general, unwashed coffee earns a lower price on international markets such as the U.S., where consumers prefer “cleaner” washed coffee. Some countries, like Japan, specifically require unwashed coffee for a more natural and richer taste (Tefera, 2022a). Dry processing accounts for 65 percent, while wet processing accounts for 35 percent of exports. It is estimated that there are about 80 of these processing units, mostly based in the capital Addis Ababa. The Coffee Processing and Warehouse Enterprise holds the most sophisticated processing machine. It is estimated that in their unit they process about one-quarter of all coffee exported from Ethiopia (Minten et al., 2014).

Cooperatives are essential in the Ethiopian economy as they directly represent small farmers. They play a crucial role in the lives of Ethiopia's farmers, providing economic, social, and organizational benefits. Regardless of coffee production, 36 percent of smallholder farmers in Ethiopia are members of an agricultural cooperative (Bernard et al., 2013). Among agricultural cooperatives, coffee farmer cooperatives are the most active because of opportunities related to coffee production and marketing, and its importance (Abebaw and Haile, 2013). However, cooperatives suffer from specific economic or management issues (Minten et al., 2014). Most importantly, they often lack liquidity and, therefore, are in the coffee market only for limited periods of the year (Bart et al., 2015). Although the number of cooperatives has increased in recent years, currently, only about 10 percent of coffee farmers are organized in cooperatives or unions (Hutz-Adams, 2020). Anteneh et al. (2011) also found that, among members, only 42 percent sell their coffee to cooperatives, largely because cooperatives cannot offer credit and immediate cash payments. In contrast, private traders provide loans during the off-season and pay upfront upon delivery, making them a more appealing option for many smallholder farmers. Moreover, coffee is commonly treated as a global commodity with the processing stages occurring across various countries The focus is on sustainable value chains that guarantee food safety, product quality, and sourcing reliability (Ruben und Hoebink, 2015). The focus is mainly on one actor in the value chain, primarily on SHFs and cooperatives. The coffee cooperatives are organized into cooperative unions. Oromia, Sidama, and Yirgachefe are, respectively, the three largest coffee farmers’ cooperative unions in Ethiopia. According to Table 1, the Oromia Coffee Farmers’ Cooperative Union had 407 primary cooperatives and 586,157 member farmers in 2023, see Table 1. The following is the Sidama Coffee Farmers’ Cooperative Union, which comprised 68 primary

cooperatives and 80,000 individual farmer members. The Yirgachefe coffee farmers' cooperative union had 28 primary cooperatives with 46,036 members. The Oromia Coffee Cooperative Union is the largest cooperative in coffee exports, representing 57 percent of the export transactions by cooperatives during this timeframe. Another significant cooperative not listed in Table 1 is the Kafa Forest Coffee Cooperatives (Minten et al., 2014).

Table 1: Profile of Oromia, Sidama and Yirgachefe coffee Farmers Cooperative Unions

Coffee Cooperative Union	Establishment year	Number of cooperatives in 2023	Certification status	Total members	Type of export coffee	End markets
Oromia	1999	407	O, FT, NC	586,157	Wet, Dry & Roasted	Europe and US
Sidama	2001	68	Majorly O & FT	80,000	Wet and Dry	Europe and US
Yirgachefe	2002	28	O & FT	46,036	Wet and Dry & Roasted	Europe (20 percent) and US (80 percent)

Source: Oromia, Sidama and Yirgachefe coffee farmers' cooperative unions (2023)

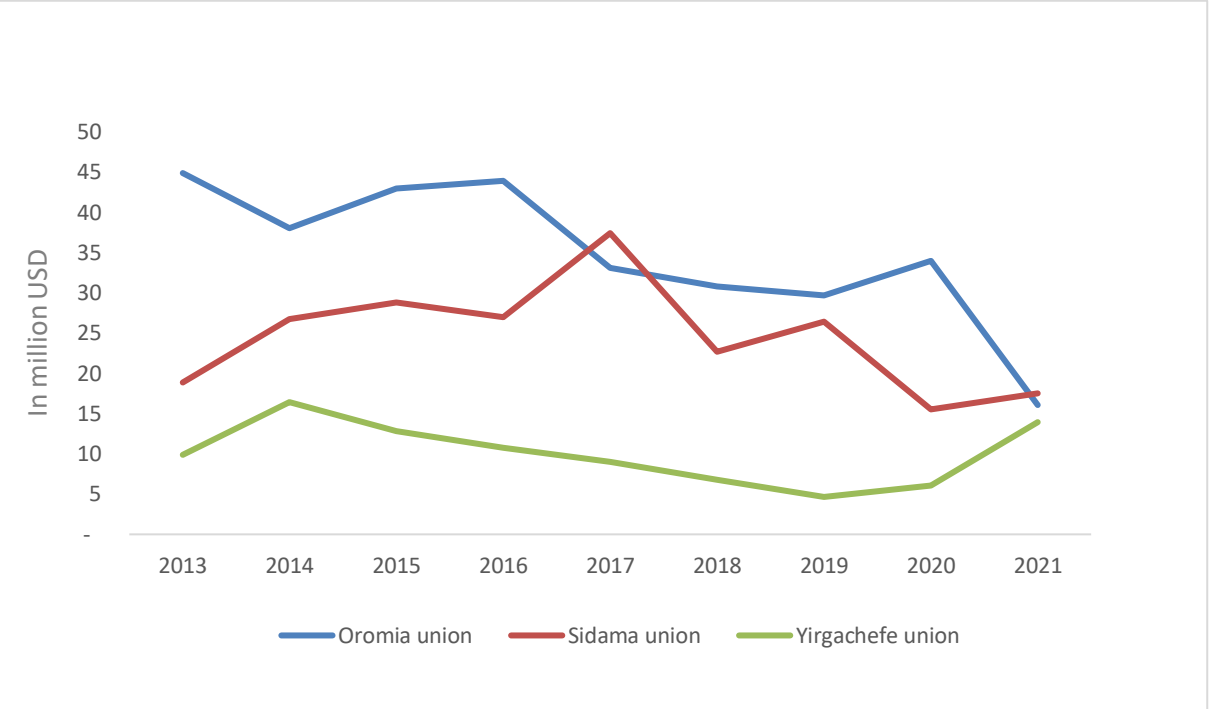
Note: O-Organic, FT- Fairtrade, NC-non certified

The coffee marketing under cooperatives channel was simple and straightforward. The primary cooperatives purchased either red cherries or dry cherries from their respective members. After processing the cherries (washing or hulling), the primary cooperatives transferred the ownership of the coffee to their cooperative unions who had the privilege of directly exporting the coffee to the international buyers (Minten et al., 2014). It was only in 2001 that cooperatives were granted permission to bypass the local traders and coffee auction centres and sell directly to international buyers.

Generally, cooperatives maintain niche markets in the international arena, enabling them to navigate current challenges through the sale of traceable coffee (e.g., organic, fair trade). After the introduction of an alternative marketing system (AMS) in 2018, which was fully implemented in 2020, there has been a change in the performance of the three largest primary cooperative unions. Consequently, starting in 2020, export values for the Sidama and Yirgachefe unions have increased slightly, whereas the Oromia union has declined. Figure indicates that 2020 was an important year for the unions in terms of export value. Part of this can be attributed to the fact that in 2020, the 2018 coffee marketing reform was fully implemented, introducing an alternative marketing system (AMS) (see section 2.3).

The expert interview analysis also confirmed this. Thus, the Yirgachefe union is involved in exporting roasted coffee, in addition to traceable coffee exports. The Sidama union aims to diversify its exports by focusing on higher-grade coffee, particularly within the specialty segment. The Oromia union exports roasted coffee and includes 407 primary cooperatives. Performance varies among them, which may partly explain the union's overall decline.

Figure 3: Export Coffee value of Oromia, Sidama and Yirgachefe farmers' cooperative unions



Source: Own computation based on data from Oromia, Sidama and Yirgachefe coffee farmers' cooperative unions (2023)

2.2 Ethiopia's coffee market and trade

The Ethiopian coffee market can be described in two dimensions: vertical and horizontal. In the vertical dimension that outlines who trades with whom across value chains, transactions can be categorized as primary, secondary, or tertiary. In the primary market, farmers engage with collectors, private processors, and primary cooperatives. The secondary market comprises national trading platforms where suppliers present semi-processed products and conduct transactions with exporters. The tertiary market involves transactions between exporters and international buyers. However, this classification only applies to officially recognized transactions.

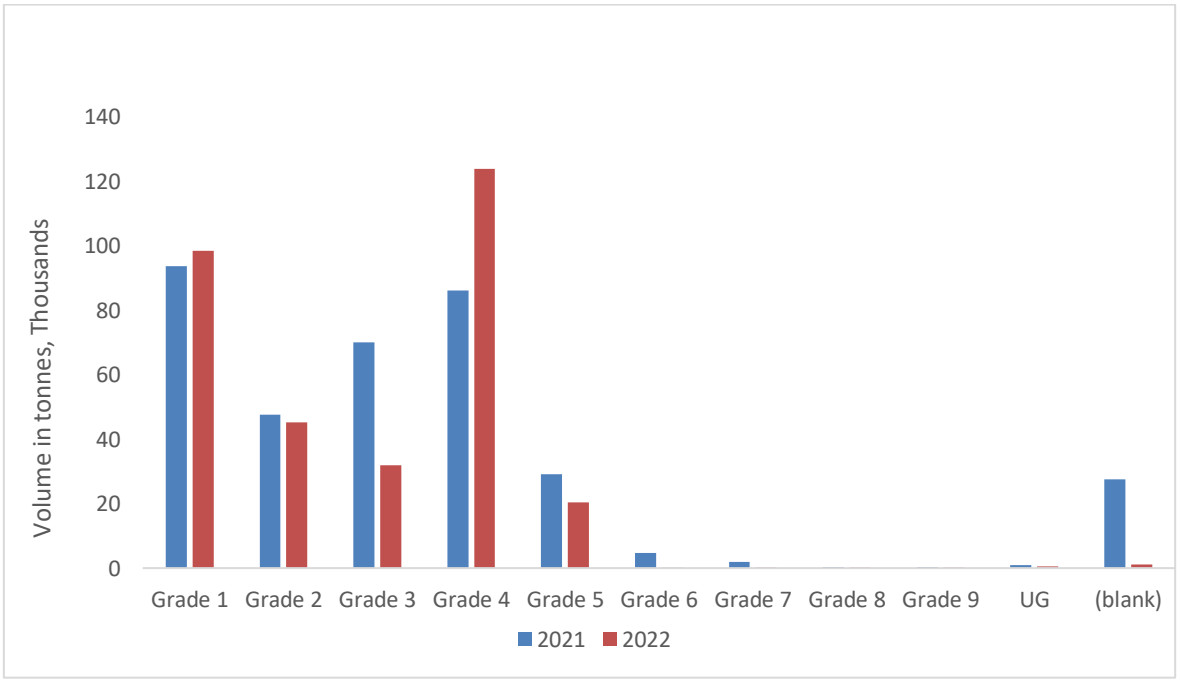
The horizontal dimension describes differentiations by origin, quality, and destiny of the coffee beans. According to that, approximately 50 percent of Ethiopia's coffee harvest is sold on global markets, and the other half is consumed domestically highighting the cultural importance of coffee (Meaza und Emagne, 2018). Based on the expert and stakeholder interviews, Ethiopian coffee was exported to 62 countries worldwide in 2023. Accordingly, 84 percent of the total share by value is attributed to the top ten destinations, namely Germany, USA, Saudi Arabia, Japan, Belgium, South Korea, China, the United Arab Emirates, Italy, and Taiwan, respectively. International trading houses import 95 percent of the green coffee, while the remaining 5 percent goes to small roasters and cafes in Europe. International trading houses dominate coffee imports, with the three largest estimated to control 50 percent of the world's green coffee trade. Roasted coffee exports account for just 1 percent of the total green coffee exports, primarily going to Germany, Saudi Arabia, China, and the United States. Most domestic coffee roasters facilitate the export of their roasted coffee by allowing international coffee companies to use their trademarks. Global coffee companies utilise their brand names, but are only expected to mention the origin and details of coffee production.

Quality is the most crucial parameter in the World coffee trade. Generally, the quality of coffee is determined by 40 percent in the field, 40 percent at post-harvest primary processing, and 20 percent at secondary processing. The degree of quality allows for market differentiation. In Ethiopia, four key factors determine export coffee

quality: geographical origin, post-harvest processing, certifications like organic or Fair-trade, and coffee grading alongside cupping tests (Tefera, 2022b).The cup quality value reflects a coffee's sensory score, evaluated from roasted samples. Moreover, traditional regional flavour profiles and bean shape attributes are considered in the evaluation process. Ultimately, a point system and designations from Ethiopian coffee regions are used to assign grades to each lot. Typically, grades 1 and 2 are classified as specialty quality, while grades 3 and lower are deemed commercial coffee (Kornman, 2023). Grades 1 to 5 signify export quality. Ethiopian coffee has significant quality potential; however, due to inadequate trading institutions and market infrastructure, even high-quality and specialty varieties are frequently sold for less than their value (Handino et al., 2019). On the other hand, premature coffee harvesting to secure immediate cash for farmers is the main issue affecting coffee quality at farm level (Tefera, 2022a).

Figure 4 illustrates the coffee traded in Ethiopia by grade type for the years 2021 and 2022. The figure shows grade four quality coffee (commercial coffee) leads in terms of the volume of traded coffee, followed by grade one (specialty quality) coffee. The bulk of coffee traded in Ethiopia is the commercial quality grades (Grades 3-5). Here, we observe an increase in the trade of top specialty grades (Grades 1 & 2) following the full implementation of AMS, indicating that the specialty segment is growing as AMS has resolved the traceability issue in the sector.

Figure 4: Annual coffee trade by grading system



Source: Authors' calculations based on data from the Ethiopian coffee and Tea authority (2023)

Note: UG=low grade coffee; (blank)=not reported

Ethiopia is the largest exporter of organic and Fairtrade-certified coffee in Africa. However, the adoption of voluntary sustainability standards (VSS) certification in the country is low, accounting for just 5 percent of exported quantities and has shown little growth in recent years (Bart et al., 2015). Certificates in Ethiopia are granted for qualified primary cooperatives after evaluation by a third party (certifying organization), and the certified cooperatives earn fair trade or other premiums that would encourage members to produce more in a healthy environment (Jena et al., 2012). This certified coffee is expected to be sold only through the coffee marketing cooperative unions and is directly exported to different countries in the world, although cooperatives

are not able to buy all of the certified coffee from individual coffee producer farmers (Hoebink, Ruben, Elbers, & Van Rijsbergen, 2014). On a global scale, it was estimated in 2013 that 40 percent of the world's coffee production was produced under VSS, but that only 15 percent was sold with a VSS-certified label (Panhuysen & Pierrot, 2014).

2.3 Coffee market regulations and their reforms

Numerous institutions, including government institutions, trading platforms, and stakeholders, are involved in the coffee sector. The major entities include the ECTA, the ECX, Coffee cooperative unions, farmers, the Ethiopian Coffee Association, private processors, research centres, logistics service providers, and exporters. Government institutions intervene in the value chains through policy design, setting the ground rules, and ensuring compliance.

The Ethiopian government has historically relied on coffee revenue for its economic stability and continues to do so (Schäfer, 2017). Over the years, the government has consistently adopted and implemented major policy reforms to extract maximum benefits from the coffee sector. These reforms aim to control the coffee sector and manage the associated resource flow. One such policy reform, and the most popular one, is the introduction of the ECX, which has been serving as a trading platform for coffee and other agricultural products since 2008 replacing the national auction system. The ECX essentially operates a similar bidding system like the national auction system, with one exception: when the coffee is sold to the ECX, it goes into a bonded exchange warehouse and loses all traceability other than the regional designation and grade. Under the national auction system, which was in place from 1988 to 2009, all the exporters had to sell their coffee to the auction house and then repurchase it after the bidding, meaning that the buyers were essentially the sellers themselves.

The ECX was in place from 2008 to 2018. However, cooperatives and commercial growers have been reserved the right, granted by the government, to bypass the ECX and export directly. The ECX is responsible for monitoring all coffee transactions. Both cooperatives and commercial growers are obliged to grade their coffee through the ECX, irrespective of where the coffee is traded.

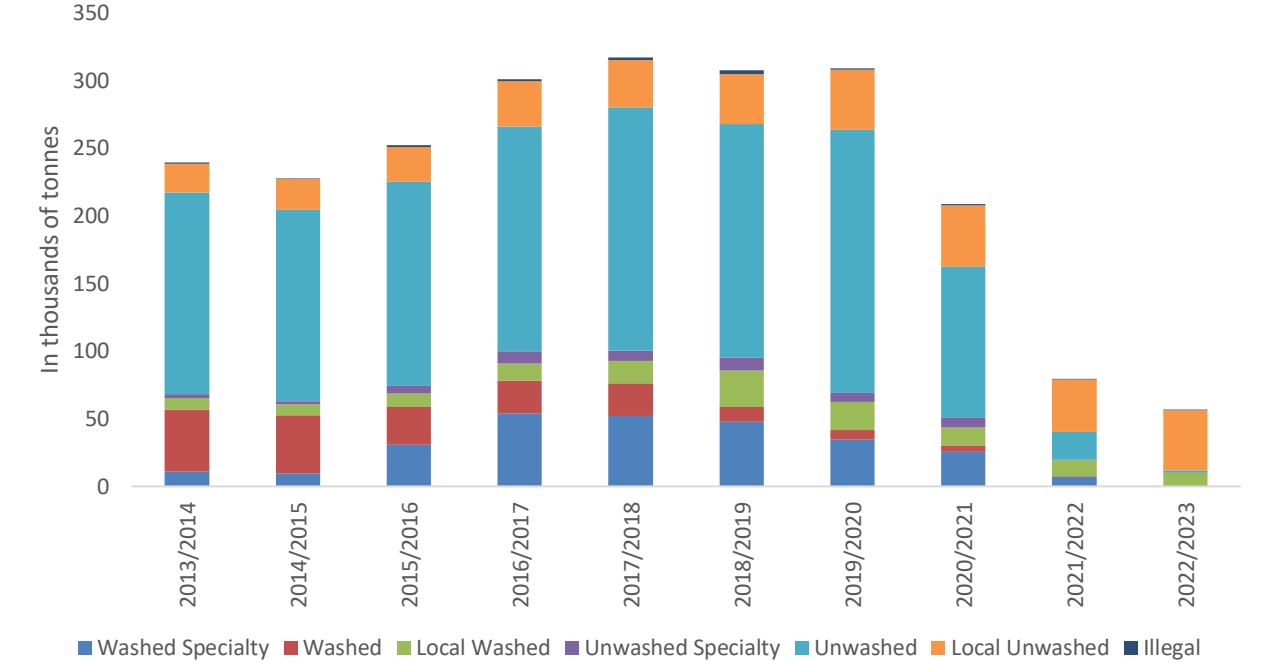
The performance and effectiveness of the ECX raised controversies and several criticisms, the major one being the lack of traceability in ECX. Following the pressure from exporters, foreign importers, and the donor community, the government initiated and implemented reforms in the sector. Temporarily, the ECX established the Direct Specialty Trade (DST) in 2010, which held monthly auctions for traceable specialty coffee. The coffee was sold by producers and local traders in individual lots with detailed, certified information on “the grower, geographic origin, and cup profile”. Pre-registered international buyers could participate in cupping or coffee tasting sessions before bidding (Handino et al., 2019: S. 501). After only fifteen auctions the platform stopped operating in 2011 (Handino et al., 2019).

Following the criticism on ECX, significant policy reforms include the introduction of coffee marketing and quality control proclamations and regulations, along with reshuffling of designated authorities. Specifically, the coffee marketing and quality control proclamation #433/2018 changed the previous strict regulation that required coffee transactions to occur only through the ECX trading platform and created a relatively flexible alternative trading option called the Alternative Marketing System (AMS). This enables vertical integration, allowing transactions between suppliers and exporters to happen directly, without involving any third parties.

After the Alternative Marketing System (AMS) reform in 2018, ECX primarily trades coffee for the domestic market, as suppliers and exporters prefer to use the newly introduced Alternative Marketing System (AMS), in which two parties transact without third-party interference. Suppliers and exporters transact through a legal contract between the two parties, approved by the Coffee and Tea Authority (CTA), which can serve for up to two years without third-party involvement. Suppliers can either supply directly to the exporter or roaster, or they can also be supplier-exporters themselves. The actors in the alternative trading platform are also obliged to follow the fixed price range determined by the ECTA, but there is no proper system to ensure that the transaction

is based on the fixed price range. The Alternative Marketing System (AMS) is favoured by suppliers and exporters for its flexibility.

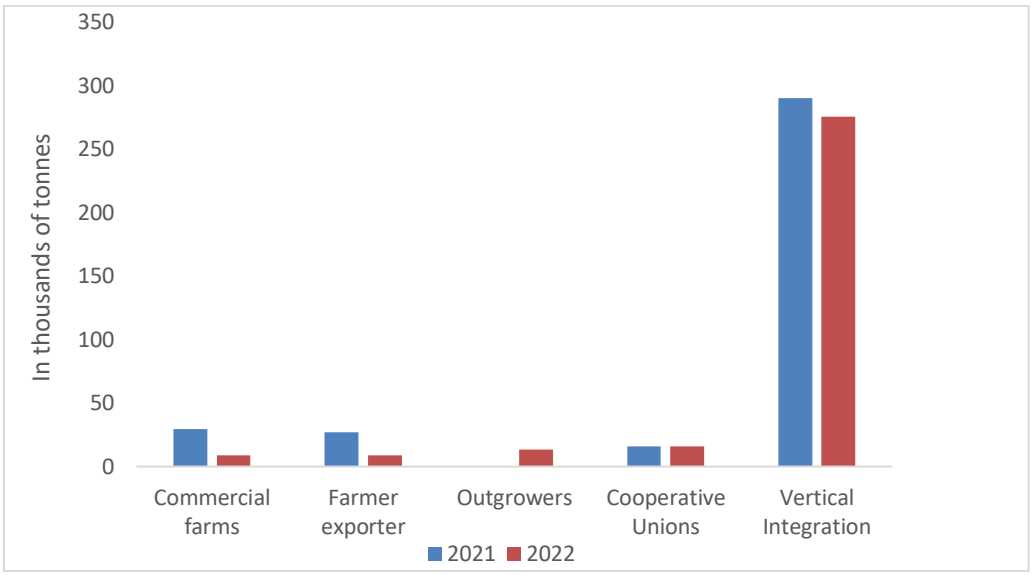
Figure 5: Volume of annual coffee traded through ECX platform by commodity type



Source: Own computation based on data from the Ethiopian Commodity Exchange (ECX) (2023)

Figure 5 shows a gradual decline in coffee traded through the ECX platform after the introduction of the Alternative Marketing System (AMS) reform in 2018. This can be mainly observed in the major export coffee types (washed and unwashed specialty, washed and unwashed). In contrast, the local coffee trade (washed and unwashed) remains relatively stable. This can be compared to Figure 6, which illustrates that in 2021 and 2022, most coffee was traded through vertical integration, i.e., in this case the AMS bypassing the ECX.

Figure 6: Volume of coffee traded through major marketing channels



Source: Authors' calculations based on data from the Ethiopian coffee and Tea authority (2023)

The coffee marketing and quality control proclamation #433/2018 (i.e. the AMS) also allows farmers with more than four hectares of land to export directly. Women coffee farmers have the special privilege of directly linking with women exporters, bypassing the suppliers —a special kind of AMS permitted under the reform. The women coffee farmers are expected to be household heads and should have a land ownership certificate.

In 2020, the government also issued a directive called the "Export Coffee Contract Administration" which fixes a minimum coffee export price based on the global weighted average price. Based on this directive, all coffee exporters must sell their coffee at or above a minimum price. It is administered by the ECTA in collaboration with the National Bank of Ethiopia. As a regulator, ECTA fixes the transaction price between suppliers and exporters. The ECX trading platform strictly follows the price as it is owned by the government and was established to create a modern marketing system in the agriculture sector. This controlling measure targets coffee traders who used to export coffee at a loss to earn more foreign currency and then use that currency to import construction materials and vehicles to sell at a considerable profit domestically (Tamru et al., 2021).

The last important and quite recent policy reform is a monetary one, which has a direct effect on the coffee sector. Prior to 2024, the country operated under a managed floating exchange rate system This was implemented due to the nation's significant reliance on coffee exports as a means of generating foreign currency and financing trade deficits. However, on July 29, 2024, the government implemented a competitive, market-based exchange rate system. Under this monetary policy, exporters can retain 50 percent of their foreign exchange (NBE, 2024). Within the managed floating exchange rate, exporters were only able to retain 40 percent of the foreign currency they gained. In a managed exchange rate system, exports are unattractive to international buyers, while imports are inexpensive for importers who have access to scarce foreign currency through coffee exports. The new monetary reform has led to a devaluation of the previously overvalued currency and, consequently, to price increases in imported goods. This, in turn, has caused considerable hardship for the population because some essential goods are also imported.

The high level of regulation had a strong influence on the development of Ethiopia's domestic and export-oriented coffee value chains. However, a recent report on Ethiopian coffee marketing reforms and smallholder coffee producers indicates no clear positive impact of trading coffee via ECX or the subsequent coffee marketing reforms on the livelihoods of smallholder coffee producers (Alban Mas Aparisi, 2021).

3 Description of Ethiopian coffee value chains

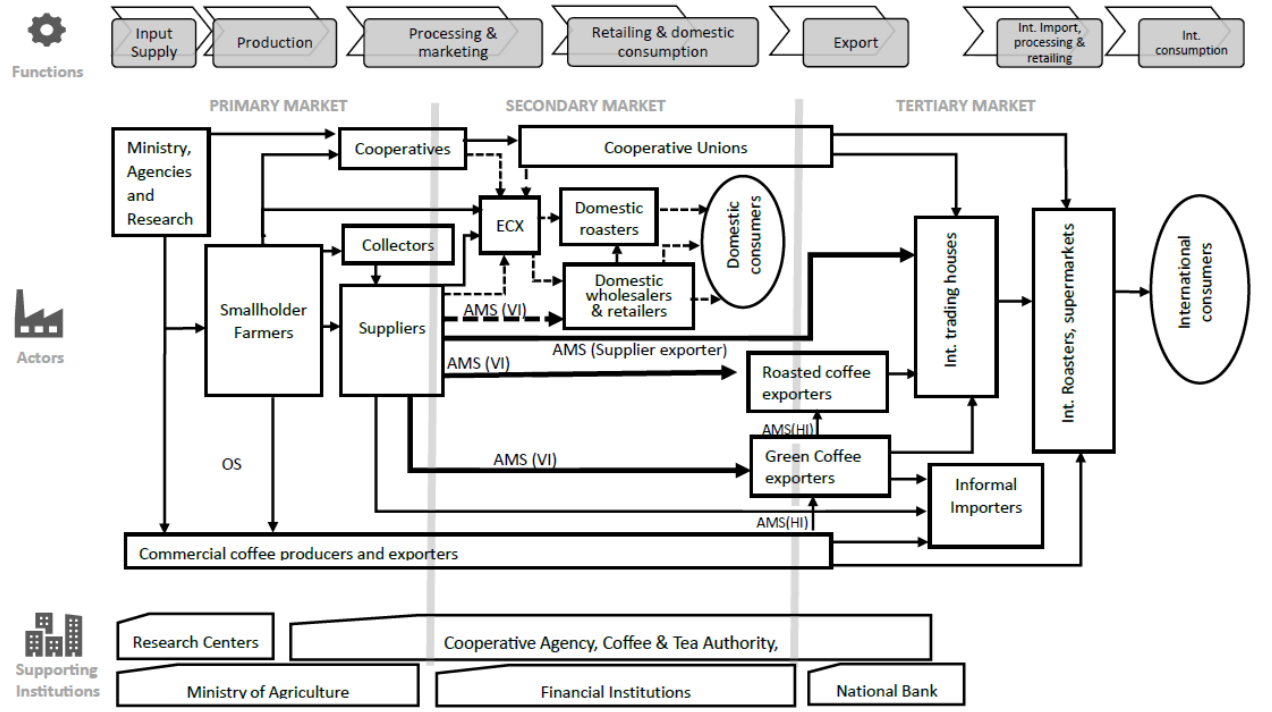
This chapter discusses the methods and data used in the study, as well as the coffee value chain types at the primary, secondary, and tertiary market levels. We differentiate chains by structure and organization rather than quality, brand, and certification. To describe the structure and organization of the various coffee value chains, we rely on expert and stakeholder interviews, official documents, and secondary data.

Figure 7 illustrates the complex network of Ethiopian coffee value chains, with arrows representing transactions among the various actors involved in the coffee industry. All, except for the informal markets, are highly regulated, requiring special licenses for coffee suppliers, domestic wholesalers, exporters, and roasters. Almost all transactions occur in both formal (in compliance with) and informal (in disregard of) rules and regulations.

The grey vertical line in Figure 7 separates the primary, secondary, and tertiary markets. It involves various actors, such as cooperatives, collectors, and suppliers, and shows their participation in both the primary and secondary markets.

Due to the prohibition on selling export-quality coffee beans in the large domestic market, the formal chain of domestic supply is a residual chain that handles leftovers and beans of below export quality. Informal chains have developed in response to this prohibition and the heavy regulation of the formal coffee export trade. Their existence further restricts the development of an efficient domestic coffee value chain, including the roasted coffee chain, as illicit coffee transactions limit the supply of beans available to roasters and cooperatives for their legal trade.

Figure 7: Mapping of Ethiopian coffee value chains



Transaction for export market ——→ Transaction for export market after 2018 marketing reform ═══→

Transaction for domestic market - - - - - - - - → Transaction for domestic market after 2018 marketing reform - - - →

AMS (alternative marketing system, VI (vertical integration), HI (horizontal integration), OS (out grower scheme/ contract linkage), ECX (Ethiopian commodity exchange)

Source: Own illustration

3.1 Methods and data

Expert interviews are designed to gather data about a specific field of interest (Döringer, 2021). According to Tomek and Kaiser (2014), experts are considered to be knowledgeable about a particular subject, and are identified by their specific knowledge, community position or status as cited in (Döringer, 2021). Therefore, semi-structured interview guidelines were developed based on the applied research questions and theoretical background. The operationalized interview questions were then selected and adapted for the different groups of respondents. The interview guides were translated into Amharic, the most widely used federal working language in Ethiopia. Representatives of major stakeholders and experts in the coffee sector were interviewed in their offices in Addis Ababa. Purposive and snowball sampling techniques were used to identify these experts and stakeholders. A total of 19 experts and stakeholders from various institutions across the chain were interviewed (Table 2). Eighteen of these were conducted in October and November 2023 with experts and stakeholders from four government organizations, three of the largest coffee farmers' cooperative unions, five green coffee and roasted coffee exporting companies, two service-providing institutions, and two coffee associations in Addis Ababa. One interview took place in September 2023 with a small German importer of roasted Ethiopian coffee in Hamburg. The primary aim of the expert interviews was to establish a contextual framework for the institutionally complex field of Ethiopian coffee value chains, enabling the organization and evaluation of the multitude of available data and information from various sources. Additionally, secondary data from the records of various organizations were analyzed, and policy documents were reviewed.

To supplement the qualitative data collected through expert and stakeholder interviews, we collected quantitative data from the ETCA, the ECX, and coffee farmers' cooperative unions (Oromia, Sidama and Yirgachefe), and have reviewed legal documents on coffee sector policies and their reforms. In addition, participatory observation of major open markets in Addis Ababa has been used. Merkato is located in the Addis Ketema district. It is the largest open-air market in Africa, specializing in locally grown agricultural products, including coffee, root vegetables, and spices. Shola Market is one of the most favored and biggest local market in Addis Ababa. It is likely the best competitor in the Merkato market of Addis Ababa. These data sources are primarily used to obtain a comprehensive and comprehensible overall picture of the Ethiopian coffee sector, its organization, and its significance for the national economy.

Table 2: Institutions considered for expert and stakeholder interviews

No.	Institution types	Institutions/stakeholders	No of interviews	Type
1	Government organizations	Ethiopian Coffee and Tea Authority (ECTA)	3	Face to face
		Ethiopian Commodity Exchange (ECX)	1	
		National Bank of Ethiopia (NBE)	1	
		Federal Cooperative Agency (FCA)	1	
2	Coffee farmers' cooperative unions	Oromia coffee farmers' cooperative union	1	Face to face
		Sidama coffee farmers' cooperative union	1	
		Yirgachefe coffee farmers' cooperative union	1	
3	Green coffee exporting company	Daye Bensa Coffee	1	Face to face
4	Green coffee supplier and exporting company	Burssa coffee PLC & Mulugeta Muntasha Eshet Coffee hulling industry	1	Face to face
	Green coffee and roasted coffee exporting companies	Dahab coffee exporter / Diamond Enterprise PLC	1	
5	Roasted coffee exporting companies	Onekoo_Roaster	1	Face to face
		Jalannera coffee export and coffee farm PLC	1	
6	Service-providing institutions	Cooperative Bank of Oromia	1	Phone call
		Fairtrade branch office	1	
7	Coffee associations	Coffee Roasters Association	1	Face to face
		Ethiopian Coffee Association (ECA)	1	
8	German roasted coffee importer	Solino coffee	1	
Total			19	

Source: Own compilation

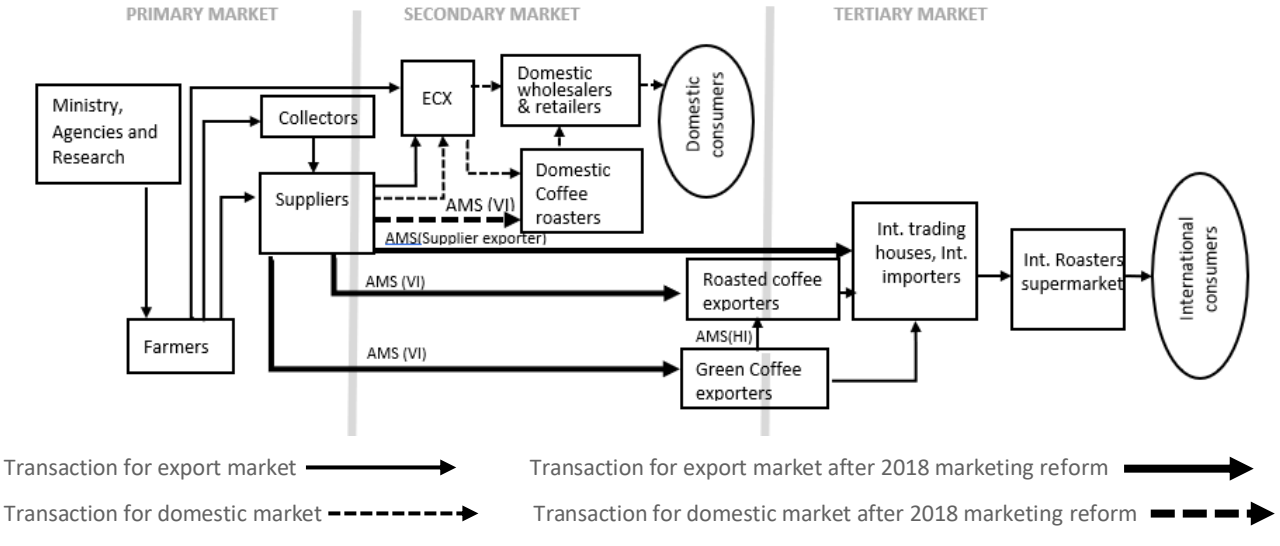
Interviews were conducted in October and November 2023 in Addis Ababa. Before each interview, interviewees signed data collection and processing consent forms. The interviews lasted, on average, one to two hours. Sixteen interviews were conducted face-to-face, while two were held via phone due to appointment changes.

After the interview, the recorded and written interviews were translated into English, coded, and analyzed. A descriptive part of the interview-based analysis provides a detailed account of the different Ethiopian coffee value chains and their institutional environment.

3.2 Farmer-supplier-exporter formal chain

The farmer-supplier-exporter chain represents the largest value chain for Ethiopian coffee, through which most coffee is exported and traded domestically (**Error! Reference source not found.**). This chain has undergone s ignificant transformations, primarily following the 2018 coffee market reform. Both informal domestic and export chains function within this framework, with the former acting as a segment of the latter.

Figure 8: Mapping Farmer-supplier-exporter Formal coffee value chain



Source: Own illustration

Primary market

In the primary market, small-scale coffee farmers sell their harvest to collectors, who then sell the coffee to licensed suppliers. Collectors are unlicensed traders, who buy coffee at the farm gate and deliver it to suppliers and wholesalers. Their service is interesting for smallholders, whose transportation options are restricted and who live far from primary processing and first level transaction centers. Without collectors, farmers in this chain sell red cherry coffee or coffee with pulp directly to suppliers. In the Oromia region, 59 per cent of coffee farmers in a survey reported in 2014 that they sold their produce to collectors (Gelaw et al., 2016). By the establishment of primary market centers, collectors were formally excluded from the farmer-supplier interaction (Aparisi, 2021). However, neither primary market centers nor the later-established first-level transaction centers are accessible to farmers, as they are sparsely distributed (Muhammed, 2020). They were always accessible for smallholders in remote areas. Collectors are also often local wealthier coffee farmers with close social relationships with smallholder farmers (Aparisi, 2021). Collectors are therefore still active in informal trade of dry coffee beans at many places (Muhammed, 2020; Aparisi, 2021). Collectors are either independent or work for suppliers. They purchase coffee from farmers at a pre-agreed-upon price or agree on the market price during the harvest. Some collectors pay farmers in advance. Collectors themselves either get cash in advance from suppliers or use their own money to collect coffee from farmers. According to self-assessments and focus-group discussions, smallholders seem to be price-takers, while traders appear to collude on prices to some extent (Korma, 2019)

Suppliers are also sometimes paid by exporters in advance. Suppliers are private traders, who own primary coffee processing facilities, including hulling and washing machines. They need a license, which only allows them to operate in a specific coffee growing zone (Belete, 2015). As suppliers are focused on volume rather than quality, they offer lower-quality premiums than cooperatives (Aparisi, 2021). On the other hand, private dealers only reduce prices in the case of severe quality defects, like the presence of black cherries, white mold fungus, or inert material like leaves and soil (Ameyu, 2014). Therefore, as trade relationships are often only short-term, farmers have reported not to care about the quality of coffee they sell to private traders, and to "even put stones or leaves in bags of coffee for traders" (Kodama, 2007: S. 8). However, suppliers often provide loans during the off-season and pay upfront upon delivery. These timely payments make the chain attractive for many smallholder farmers. Farmers' preference to sell to collectors and suppliers depends on their cash requirements and the pre-financing options offered by suppliers and collectors, as well as the price and distance to the primary markets.

Similarly, although washed coffee is highly valued on the world market, prices for red beans are under pressure as small farmers often sell them in a state of desperation for cash (Kodama, 2007). On the other side, due to an insufficient savings infrastructure, farmers often use dry beans as a means for saving and selling them throughout the year (Kodama, 2007). Due to high cost and unavailability of the recommended sisal bag, farmers in the survey reported using polypropylene bags and storing their coffee in their homes for more than three months, generally in sub-optimal storage conditions (Ameyu, 2014) .

While collectors assist smallholders in overcoming transportation challenges, a lack of market transparency enables them to blend different qualities of coffee, selling it at higher prices and margins to suppliers (Muhammed, 2020). Farmers often have less information than downstream agents, not only regarding market prices but also about the quality of their coffee beans (Aparisi, 2021). Collectors sometimes seem to cheat on weight (Korma, 2019). The implementation of regional ECX labs for first-level grading of beans aimed to minimize this information asymmetry (Mbakop et al., 2023). Additionally, the ECX informs about official prices via an information ticker, a free mobile SMS message upon request, and mass media, but most farmers "only […] wait for trader's price[s]" due to a lack of technology and skills (Ameyu, 2014: S. 25). This is primarily due to the limited knowledge and skills of most farmers, which restrict their access to services.

Since 2017, local governments have been assigned the role of establishing and managing first-level transaction centers, where small-scale coffee farmers sell their red cherry coffee or coffee with pulp to suppliers and collectors. These transaction centers are designed to act as platforms that enable small-scale producers to transparently sell freshly harvested red cherries or coffee with pulp. They are meant to offer basic marketing facilities and operate under the authorization of regional agricultural bureaus. However, based on our interviews, these transaction centres struggle to consistently deliver access to financial services and market information. This is due to financial and institutional deficiencies, meaning they do not fulfil their intended purpose.

Secondary market

In the secondary market, the suppliers sell the graded coffee either via the ECX platform, directly to exporters or to export coffee roasters. In addition, after the 2018 coffee marketing reform, suppliers can be exporters, holding both a supplier license from the regional office and an exporter license from the federal office, and are referred to as "supplier exporters". As most market centers have no or only limited coffee processing and coffee quality control facilities in place, suppliers first transport coffee beans in bulk to the coffee quality and inspection center of their woreda administration and to nearby processing centers (Muhammed, 2020). The ECX channel incurs high transaction costs for suppliers. According to a 2019 survey, payment at ECX accounted for almost 45 per cent of their total costs, primarily due to transportation costs, followed by taxes, commissions, storage, hulling, sisal sacks, handling and brokers (Korma, 2019).

Suppliers and exporters must not mix coffee from different regions while they handle it (UNIQUE, 2019). It has been reported, however, that weaknesses in the institutional system enable collectors and suppliers to transport coffee from other locations to highly valued coffee-growing locations; In order to circumvent the controls, coffee beans, for example, are smuggled hidden under other crops (Muhammed, 2020: S. 49). For example, interviewees have reported that the highly valued Harar Coffee is then adulterated with beans from other areas, which increases volume and profit margins. Consequently, Harar coffee is reported to be losing market share in international markets, or struggling with declining prices, due to concerns among international buyers about its quality.

Until 2018, the graded and origin-labeled coffee had to be auctioned through an open outcry system in the ECX (Muhammed, 2020). With ECX, trade, quality assurance, quantity, payment, and delivery are rather well monitored. Payments are secure and timely. Exporters deposit money digitally before bidding and can choose to purchase at or below their deposit. Suppliers must deposit coffee in ECX warehouses in their regions and submit receipts for warehousing before bidding in Addis Ababa.

Since 2018, suppliers have been able to receive licenses from the regional office to sell directly to exporters via the Alternative Marketing System (AMS) – also called Vertical Integration (VI). In order to do so, transaction partners need a legal contract, which specifies qualities and prices and must be approved by the ECTA and registered by the federal documents authentication and registration agency. It is then valid for two years. Grading at ECX is still obligatory and the ECX also continues to provide access to coffee washing facilities, but coffee is not blended in ECX warehouses anymore and “can now be traced all the way back to the initial washing station where it was first processed” (Mbakop et al., 2023: S. 4). The Coffee Liquoring unit (CLU) now documents where the coffee was grown, processed, and graded, and ensures traceability. However, buyers sometimes complain about deviations in quality between the coffee sold on the trading floor and that received at ECX warehouses (Mitiku, 2021).

Logistics in the secondary market, between suppliers and exporters, is challenging. One specialty coffee exporter has reported in 2021 that he paid 180 Ethiopian Birr (ETB) per quintal, i.e., more than USD3 per 100 kg, to transport processed coffee from Bensa, Sidama to their warehouses in Addis Ababa, where final selection and containerizing are carried out at significant additional cost (Endale, 2021). The cost of the final transport between Addis and Djibouti, from where the coffee is shipped free on bord (FOB), was then "much higher than from Djibouti to China" (Endale, 2021). He stated that it "takes close to two months to source from farmers, process, and dispatch the coffee from Djibouti", with queues at washing plants during peak season and shortages of containers adding to the time (Endale, 2021). Furthermore, transporting coffee poses risks due to contraband and illegal trade. These activities encourage the blending of different coffee types and the covert exchange or theft of coffee (Mitiku, 2021). This aligns with our analysis of interview data, in which suppliers and exporters expressed concerns about the lengthy bureaucratic process for coffee exports. This situation forces some exporters into the illegal market and compels them to sell export-standard coffee in the domestic market, an action prohibited by law, except in a few locations where transactions must be conducted in selected foreign currencies.

Under AMS, the coffee price agreed upon by transaction partners should be above the reference price “and the additional payment should be specified in the contract with its percentage” (Regulation No. 433/2018). The ECX has defined a leeway of five percent around the reference price, and trading parties usually add a five percent premium on the minimum price under AMS, “which is worth it considering the quality” in the opinion of one of the 418 licensed coffee exporters (Hailemichael, 2022). However, the AMS lacks an effective system for monitoring price limit compliance. Exporters often buy coffee from suppliers at “about 20 percent above” the maximum export price, effectively “using ECX’s maximum range as a benchmark for its minimum price tag”. Also “6 and 7 grade coffees have been sold on the rate of 5 or 4 grades of coffees”, so that pricing is now largely negotiated, as a coffee trading consultants reported in a newspaper article (Yewondwossen, 2021). The prices recorded on the contracts between suppliers and exporters are then lower than those paid. The practice of under-invoicing leads to a reduction in tax payments and a consequent downward bias in the determination of the export price minimum. Experts interviewed for a newspaper article explained that if “ECTA wants to know the case, it has to ask for the transaction receipt in addition to the contract agreement” between suppliers and exporters (Yewondwossen, 2021). In addition, the new system does not provide sufficient guarantees that contracts will be fulfilled. During a meeting held by the agricultural ministry in March 2024, “farmers and suppliers shared their grievances, particularly regarding individuals who disappeared without making payments, causing significant losses” (reporter, 2024).

Domestic coffee roasters regularly source raw coffee from brokers at ECX (Gelan, 2020). The German roasted coffee importer we interviewed collaborates with a coffee export roastery in Addis Ababa, which sources its coffee from a large supplier headquartered in the same city. The large supplier provides a stable supply that meets the demands of German retailers. Unreliable supply prevents the importer from offering specialty coffee. To scale the business and meet the demands of German retailers, the company creates consistent blends of beans from various locations and qualities. Quality control of green beans delivered by the supplier is the duty of the roastery. The German importer charges the roaster a small penalty for each customer complaint that

reaches the headquarters in Hamburg. The roaster must therefore balance the need to meet the selling price set by the German importer with the need to buy quality beans.

Tertiary market

Exporters store coffee and frequently enhance its value through final processing, mainly by sorting and blending, before selling it to international buyers (UNIQUE, 2019). International buyers are not permitted to export coffee but must transact with Ethiopian partners who hold an export license (UNIQUE, 2019). In 2011, a directive determined that all exported coffee should be shipped in bulk containers rather than in the common 60kg jute bags, which had the advantage of maintaining lot separation even during transport in a single container (Handino et al., 2019). As a result, beans traded on the ECX lack traceability, making it impossible for international buyers and exporters to ensure they deliver coffee from the same producers, locations, and quality in subsequent transactions. Also at the ECX, the coffee also cannot be tasted by potential buyers prior to bidding (Kornman, 2019). All this destroyed the business model of medium-sized distributors and specialty coffee roasters (Handino et al., 2019). The loss of the direct relationships with importers often also implied the loss of funding for coffee production (Kornman, 2019). Additionally, since the ECX-based system prohibited exporters from being involved at the farm or mill level, projects focusing on functional upgrading within specialty coffee export markets had to be abandoned.

Attempts by German importers of green beans to create direct business relationships with farmers before the 2018 reform have regularly failed. One of them, Café Imports Germany, began with direct transactions with the Yirgacheffe Coffee Farmers Cooperative Union (YCFCU) (Siemens, 2024). In 2012, the company asked the directors of YCFCU “if any farms could produce lots large enough to separate,” and was able to settle contracts with three farmers (Siemens, 2024). However, the project was terminated in 2015 due to high bureaucracy, tightening regulations, and shipment delays (Siemens, 2024).

Since the 2018 reforms, individual exporters can now own washing stations and bypass the ECX to sell directly to overseas buyers (Mbakop et al., 2023). After 2018, so-called supplier exporters, which hold both a supplier and an export license, have emerged. Unlike other exporters, however, they are obliged to export coffee only from their primary processing facility. Their primary processing capacity, therefore, limits their export. This new option has increased the number of exporters and heightened competition among them to secure international buyers. However, according to expert assessments, this competition is more on quality than on prices: As long as exporters deliver reliable quality and avoid significant price changes, buyers are not expected to turn to other traders, even if they offer slightly lower prices (Yusuf, 2024). At the same time, exporters, based on a survey of 140 respondents, focus on maximizing short-term profit instead of acting strategically to gain additional market shares. Moreover, Ethiopian coffee export prices primarily depend on the external market (Yusuf, 2024).

Due to new opportunities, specialty coffee exports, and, to a lesser degree, export coffee roasting, are also growing. For special qualities and origins, significant premiums are paid in international markets, and direct sourcing can be specifically "rewarding in emerging high-end markets" (Yusuf, 2024). A specialty coffee exporter reports that his competition-winning coffee realized USD 330 per kilogram in 2021 as compared to the price of USD 65 realized by top Ethiopian specialty coffee exporters, or other brands which are less well-known, who exported at maybe USD 33 or as low as USD 4. While these prices refer to specialty coffee, other specialty coffee exporters even sold grade four coffee, for instance, from Jimma coffee to the Middle East, and then realized prices as low as USD 2.80 (Endale, 2021). As Daviron und Ponte (2005: S. 160) have noted, "the most valuable [quality attribute] (taste) is usually only evaluated at the export point," i.e., the benefits of specialty coffee trade are primarily appropriated by exporters, international traders, and importers.

Coffee roasters who want to compete in international markets, generally need to achieve significant economies of scale, which may require the merger of several small or medium-sized companies, either with government support or led by global corporations (Lima und Lee, 2023). A rather resourceful Ethiopian specialty coffee exporter planned, to build new warehouses and a coffee processing plant with ETB 150 million, about USD 3

million at that time (Endale, 2021). The macroeconomic potential of upgrading the domestic coffee value chain is currently restricted by Ethiopia's lack of producers of roasting and packaging technology (Endale, 2021). While the technology intensity of competitive upgraded coffee value chains is high, with around 18 different technical systems in the downstream part, some of which require intensive control (see Mitiku, 2021). Domestic packaging suppliers can generally not cover domestic demand (Selalew, 2017).

Some roasters, therefore, engage in more direct trade internationally with large retailers or hospitality businesses. However, these international buyers often prefer to buy green beans at source to roast them in-house (Collins, 2021). Domestic coffee roasters also often facilitate the export of their roasted coffee by authorizing international coffee companies to utilize their trademarks. The German roasted coffee importer reports that minimum export selling prices for roasted coffee in Ethiopia are around 30 percent higher than the average international price. According to his assessment, this may be due to a biased price benchmark at the ECX, given the small total volume of roasted coffee exports (Mitiku, 2021). At least until 2019, only 15 licensed processed coffee exporters had significant international market experience (Mitiku, 2021).

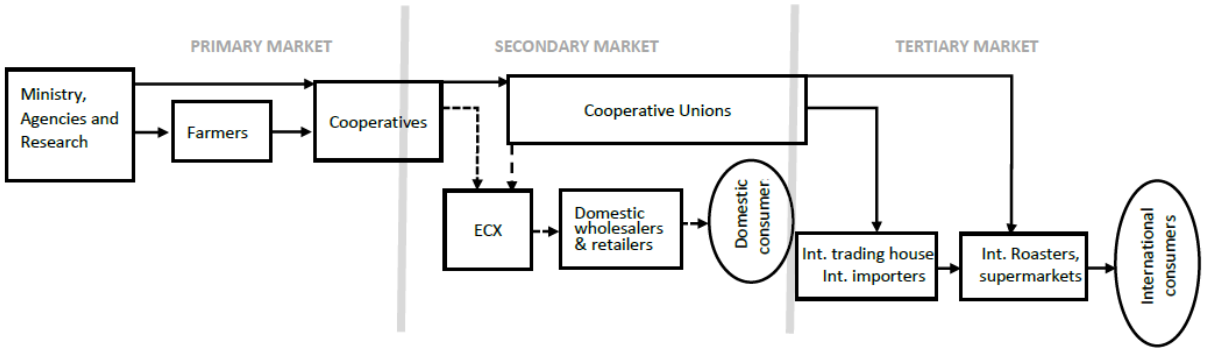
Roasted coffee also must be delivered as freshly as possible, and its export is limited due to a lack of efficient supply chains with low transaction costs and reliable transportation (Endale, 2021). Coffee roasters use trucks for the transport of green coffee and air freight for the export of roasted coffee (Mitiku, 2021). The German importer states that he must accept the high cost of air freight to ensure stable delivery of a fresh product. The average transport cost of roasted coffee to its export destination was an astonishingly high average USD 2.45 per Kilogram in 2019.This is even higher for small roasters, due to the fact that truck and container loads cannot be divided (Mitiku, 2021).

Ethiopia also lacks supplies of other key inputs, such as high-quality labels and packaging that meet European standards. The German importer experienced problems due to a lack of technology and trained personnel to design and print packages, which is now done in Germany. In fact, in Ethiopia, only domestic investors have been permitted to invest in the packaging industry, which benefits from exemptions on customs duties and other taxes on materials used for export (Mitiku, 2021). This support of functional upgrading is complemented with an exemption from export tax on coffee, which has been at a rate of 6.5 percent of the FOB Price, according to interviewed experts (Mitiku, 2021). In the same year, one in four coffee roasters stated that they source their packaging for export exclusively domestically, but 80 per cent claimed that suppliers of high-quality packaging were not available in the domestic market (Mitiku, 2021).

3.3 Farmer-cooperative-union export chain

The farmer-cooperative-union chain is the second-largest coffee export chain in Ethiopia. Cooperatives are autonomous associations with legal personality, democratically controlled by members who voluntarily unite to meet common economic, social, and cultural needs that could not be met individually, through jointly owned enterprises based on cooperative principles (FDRE, 2016). Cooperatives usually have about 200 to 500 farmer members, and also buy coffee from non-members (UNIQUE, 2019).

Figure 9: Mapping the Farmer-cooperative-union coffee value chain



Source: Own illustration

Primary market

At first glance, selling to cooperatives seems to provide numerous advantages for smallholders. The cooperatives are located close to the farmers, handle primary processing, and export directly or through unions. Through cooperatives, smallholder farmers gain access to specific processing technologies and markets, and it's estimated that cooperatives purchase about one-third of the country's red cherries. Generally, cooperative members are guaranteed a minimum base price and an additional premium or dividend based on the selling price achieved. Farmers can decide prices through cooperative leaders, have some bargaining power, and benefit from economies of scale and community development works. Coordinated marketing via cooperatives benefits farmers through higher selling prices for red cherries as compared to prices at private processors and lower transaction costs (Addisie und Tebarek, 2022). Despite these apparent advantages, only 10 per cent of coffee farmers in Ethiopia are members of agricultural cooperatives, in contrast to 36 per cent of all smallholder farmers (Bernard et al., 2013), Of all the coffee sold in Ethiopia, 11 per cent was sold to cooperatives (Alban Mas Aparisi, 2021). Anteneh et al. (2011) found that only 42 percent of members sell their coffee to cooperatives.

Many cooperatives suffer from management issues, often lack of liquidity, and are therefore only active in the coffee market for limited periods of the year (Bart et al., 2015). The financial constraints often hinders cooperatives from buying all of the certified coffee from individual coffee producers (Hoebink, Ruben, Elbers, & Van Rijsbergen, 2014). On a global scale, it was estimated that in 2013 40 percent of global coffee production was produced under VSS, but only 15 percent was sold with a VSS-certified label (Panhuysen and Pierrot 2014). Certified cooperatives earn premiums that are supposed to encourage members to produce more under higher sustainable conditions (Jena et al., 2012). Nevertheless, Minten et al. (2018) estimate for Ethiopia that VSS premiums would only lead to an increased income for coffee farmers of 22 USD per year even with a perfect transmission scenario, while in reality, only less than one-third of this premium is being passed on to the farmers. Additionally, while the base price should be paid on the spot, the dividend is paid to members about three months later (UNIQUE, 2019). All this limits the attractiveness of cooperatives as buyers of dried coffee beans for dry processing. Only financially less restricted farmers sell high-quality beans to their cooperatives, benefiting from premium prices and dividends. Kodama (2007: S. 8) reports that a farmer has "claimed that he carefully selected coffee for his cooperative" to sell only the residuals to private traders. Cooperatives in essence, experience a free-riding problem because all members and even non-members benefit from community development paid by dividends. They also benefit from investments in high-quality processing and roasting facilities. They provide all farmers with the option to selectively sell high-quality beans at good prices to the cooperative, while also benefiting from the advantages offered by private traders and informal markets.

The weak monitoring of the 2018 coffee marketing reform led to increased competition for coffee beans among farmers, to the detriment of cooperative unions. Collectors and suppliers are willing to pay more, even at the risk of incurring a loss in the coffee trade. Many of them are primarily interested in gaining access to foreign currency to exploit their privileged position in the import market.

Secondary market

Coffee cooperatives are organized in cooperative unions. They "can export coffee directly, as micro-lot or bulk through the cooperative union and the ECX" (UNIQUE, 2019: S. 17), but so far only a minority chooses the direct export option. Their attractiveness in the chain depends on their access to international buyers (UNIQUE, 2019). Unions are responsible for the final processing and buy coffee from cooperatives based on international prices. Unions keep 30 percent and return 70 percent of their net profits to cooperatives, who distribute them as dividends or use them for development activities (Muhammed, 2020). Unions strengthen cooperatives by maintaining relationships with buyers, supporting certification, distributing improved coffee seeds, and providing access to finance. They also monitor the distribution of premium prices among member farmers. The cooperatives operate under the umbrella of a federal cooperative agency. According to representatives of the cooperative agency, however, a specific cooperative policy is missing, and they operate under the general agriculture policy. Representatives of the unions therefore still demand to be treated differently from other exporters as they represent smallholder farmers.

Tertiary market

The stability of cooperatives and unions comes from their longstanding, dependable export trade connections with international trading houses, importers, and roasting companies. Many of these international buyers favor cooperatives, which their customers appreciate for representing small farmers and distributing premium prices. Moreover, the market share of cooperatives in red cherries that require wet processing is significant, and nearly all the certified coffee is sourced from this channel. Prior to the 2018 reform, cooperatives were among the very few institutions capable of establishing traceability. In the farmer-cooperative-union chain, smallholders were therefore have opportunities to obtain better prices than in other chains that adhered to legal restrictions (Handino et al., 2019). Although unions represent a multitude of smallholder farmers, foreign buyers set the prices, and the unions have little negotiating power (Muhammed, 2020).

Aparisi (2021: S. 25) explains that with Vertical Integration, "cooperatives have effectively lost their monopoly on traceable and certified smallholder coffee" and according to his interviews, they are now "forced into diversifying, for instance by increasing their presence in commercial coffee exports and roasting their coffee with government support". With the support of unions, coffee cooperatives therefore strive to increase exports of high-quality green beans and roasted coffee that meet the higher standards of high-price world market segments and domestic demand. The Yirgacheffe cooperative union, for example, is certified as both EU-organic and Rainforest Alliance, and claims to be able to trace its coffee "back to the micro-region of origin, and in some cases, farm of origin" for all of its over 43,000 coffee-producing farmers.[1] If the unions roast export-quality coffee, it is sold on the international market and at authorized domestic outlets, where transactions are conducted in foreign currency. The interviewees noted that the unions are new to the global market for roasted coffee and must first find international buyers, then roast according to the buyers' requirements. Under these conditions, coffee brokers acting as intermediaries between coffee cooperatives and international buyers in the formal export market have gained significant influence (Belay, 2024).

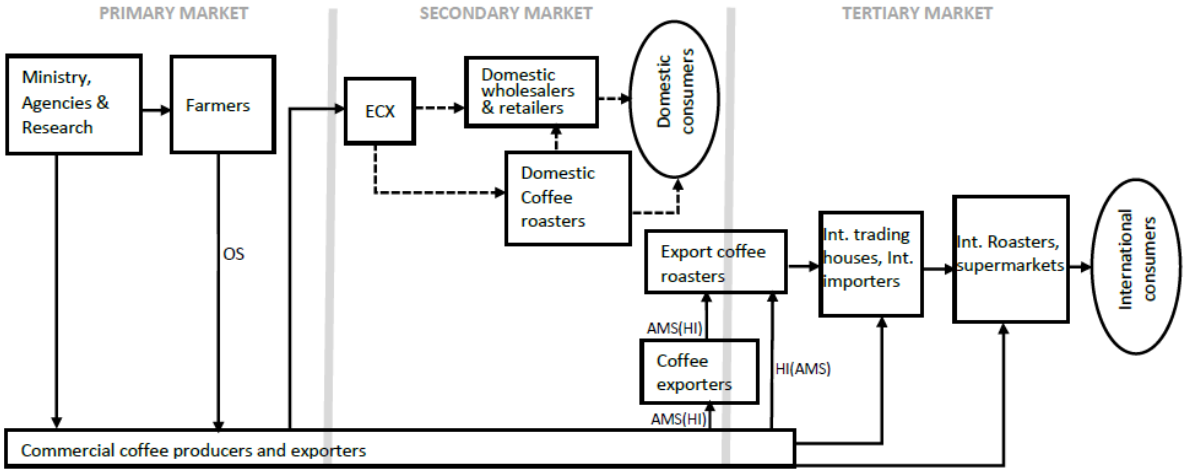
Cooperative unions sell roasted domestic-quality coffee beans to wholesalers and retailers in the domestic market. Some unions open specialty coffee shops in Addis Ababa and other regional cities. According to cooperative representatives, credit support for this functional upgrading is not a government priority.

[1] https://yirgacheffeunion.com/index.php/our-coffee/our-speciality/

3.4 Commercial farmer export chain

Prior to 2018, only state farms and plantations exceeding 30 hectares were permitted to bypass the ECX and export directly (Mbakop et al., 2023). The 2018 reform also “enabled coffee trading outside the ECX for any producer or supplier processing coffee into green beans" (Aparisi, 2021: S. 23). Farmers with an annual coffee production of more than 2 hectares and 20 quintals gained the right to hold an export license (Mbakop et al., 2023). The reform also permitted new investors with vertically integrated businesses to enter the market. However, the Ethiopian constitution determines that land is owned by the state, thereby granting it control over agricultural investors (Keeley, 2014).

Figure 10: Mapping the commercial farmer coffee value chan



Transaction for export market ⟶ Transaction for domestic market ⟶

Source: Own illustration

Primary market

In this chain, a primary “market”, or rather transaction, only exists in the case of contract farming or outgrowing schemes. Certified investors, who do not necessarily have to be farmers themselves, are permitted to build contractual relationships with coffee farmers, known as ‘outgrowers’ (UNIQUE, 2019). According to interviews conducted by Aparisi (2021: S. 25),the new right of exporters to own washing stations additionally “encourage out-growing, as exporters and washing station owners are now incentivized to acquire medium-sized farms to export valuable single origin and certified coffee”.

Contract farming is “an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices” (Eaton und Shepherd, 2001). An outgrower scheme is more specifically “a central facility surrounded by growers who produce on their own land under contract” (Holtland, 2017: S. 2). Such outgrower schemes have been recognized as potentially important institutions for the structural development of Ethiopian agriculture (Alemu und Berhanu, 2018). Through this scheme, smallholders can secure their market in advance, access extension services, and receive technological support to improve productivity and production quality. Similar to primary cooperatives, outgrower investors encourage smallholders to improve the quality of their products. They are legally required to process all coffee received from these farmers into high-quality specialty coffee and to pay prices above the local coffee rate for this specialty coffee. This is possible because they are located in major coffee-producing areas for internationally highly valued specialty coffee, they obtain good quality coffee, they possess the facilities

required to produce and process grade one and grade two specialty coffee, and they control the entire coffee production process.

According to our interviews, further expansion of the commercial farmer and outgrower model is hindered by the investors' need for substantial capital to acquire land and technology. Consequently, only relatively small amounts of land allocated to investors have consequently been developed (Keeley, 2014). Despite having privileged access as exporters, investors face challenges in accessing credit. Their institutional support also appears to be relatively ineffective (Wubie, 2024) and it has been noted "that outgrowers' schemes and contract farming collection centers are not successfully operated due to administrative hurdles" (Muhammed, 2020: S. 47). Ethiopia's experience with contract farming and outgrower schemes is generally still limited. Evaluations are ambiguous: some observers see them as having 'the potential for linking smallholder farmers to domestic and export markets', others see better performance in 'collective contractual arrangement[s] through cooperatives'. Instead others stress the governance challenges and low marketing capacity that limit the contribution of cooperatives to more efficient coordination of smallholder production (Alemu und Berhanu, 2018: S. 32).

Secondary / Tertiary market

Outgrowing schemes shall enable farmers to build sustainable relationships with the international market, develop the skills required to understand the market and increase production. Smallholders are rarely able to make use of the new options themselves due to resource limitations (Aparisi, 2021). Our interviewees confirm that small farmers lack the skills required to get access to the international market. Kornman (2019: S. 36) provides an example of the additional opportunities vertical integration offers smallholders and smaller projects under favorable conditions. Therein, a single farmer initially was able to sell its high-quality specialty coffee through her local cooperative in a "one-of-a-kind agreement" that gave her partner-company access to single-farmer lots. With the AMS in place, the coffee farmer could then establish an export business to sell their own coffee and that of a small group of farmers directly and independently (Kornman, 2019). Aside from such arrangements and contract farming, the practical relevance of this chain for smaller farmers is limited.

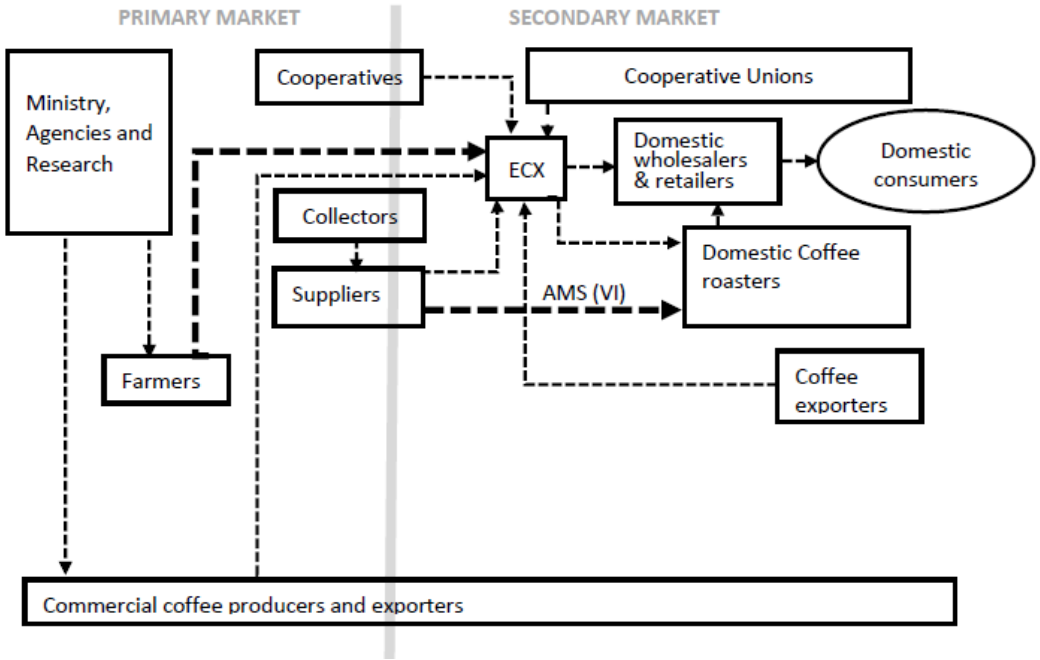
Aparisi (2021); notes that there are only a few larger farms with their washing facilities and the capacity to produce high-quality coffee, which, according to his interviews, could sell directly to exporters or international buyers, "potentially capturing a greater share of export prices". Even relatively larger farms with licenses for direct export are challenged to find buyers in the international market. These commercial farmers might then use the option to transact horizontally with other exporters. In the Gedio zone within the Yirgachefe district, for example, according to an expert, more than 2000 farmers have licenses to export directly. However, the Yirgachefe Coffee Cooperative Union expert noted that licensed farmers are exposed to "mediators" who take higher commissions to link them to international buyers. Thus, even if they have a license to export directly, they prefer to take the coffee to the cooperatives or other traders.

Instead, exporters and supplier-exporters increase their engagement in contract farming to make the commercial farmer chain work for their business. Similarly, domestic roasters do not regularly source directly from farms. However, some now source raw coffee from their own coffee plantations, and others plan to do so in an attempt to vertically integrate their business (Gelan, 2020). The 2018 reform also makes it easier for international specialty coffee traders like Café Imports Germany to source from micro-regional lots or individual farmers in Ethiopia (Siemens, 2024). Following the reform, new, vertically integrated coffee development companies were established, focusing on introducing single-farm, specialty coffees to the market. They operate washing stations in various regions and serve as agents for "export license-holding smallholders, handling the milling and shipping logistics while connecting the producers to the buyers." (Siemens, 2024).

3.5 Formal domestic chain

The formal domestic chain is a residual chain from all other formal coffee chains. Its primary market is therefore identical to what has been described in the previous sub-chapters.

Figure 11: Mapping the Formal Domestic coffee value chain



Transaction for domestic market ---------→ Transaction for domestic market after 2018 marketing reform ▬▬▬▶

Source: Own illustration

Secondary market

In the secondary market, domestic wholesalers purchase domestic-quality coffee that is below export quality from the ECX and exporters. Since 2018, they have also sourced it from suppliers, selling to retailers and then directly to consumers (UNIQUE, 2019) .

Domestic roasters purchase coffee beans via AMS and ECX. Since 2018, roasting companies have been able to purchase green coffee beans directly from exporters. For roasting, they are permitted to buy export-quality beans for export and domestic-quality beans from ECX for the local market. Private domestic coffee roasters face capital shortage like the cooperative unions, as reported by one female owner who started in 1998 with roasting 80 kg and, after a process of organic growth, now roasts up to 500 kg a day (Collins, 2021). Her business could grow much faster if she had access to affordable credits to buy green coffee processing, roasting, grinding, and packaging machines and to invest in employee training and marketing (Collins, 2021).

Tertiary market

Wholesalers and retailers are permitted to sell beans that do not meet export standards and leftover products from processing, mainly in open markets. Retailers buy coffee in larger quantities from wholesalers to sell smaller

quantities to supermarkets, shops, or in open markets directly to consumers (Ameyu, 2014). Packed green or sometimes roasted coffee is also sold in supermarkets, but consumers with more free time and lower income prefer local markets, where green beans are sold at lower prices with higher quality variability. In the country's main cities, it is common to find coffee shops along the roadside. Even those shops prefer to use green coffee beans to complete the entire, culturally significant coffee ceremony, which begins with roasting. Customers might also prefer green beans, as roasters are well-controlled and cannot process export-quality beans, which are, nevertheless, available on informal markets.

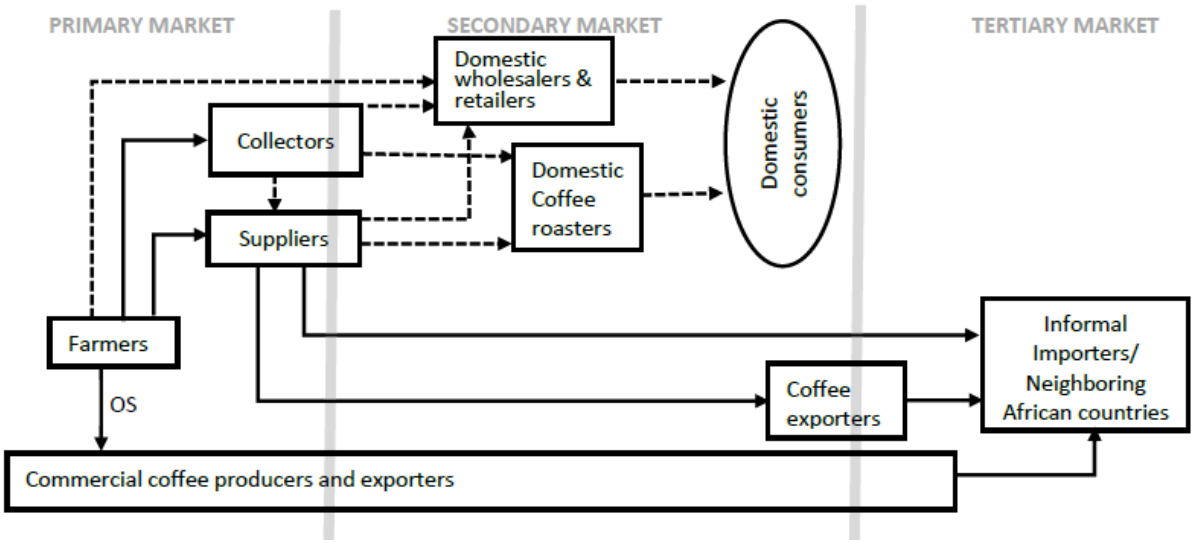
However, demand for roasted and ground coffee is slowly growing in the cities. The female roaster introduced above sells to retailers and wholesalers in major Ethiopian cities, but also exports to different countries (Collins, 2021). In general, however, at least till 2019, roasted coffee has been sold mainly domestically (Mitiku, 2021). Ameyu (2014: S. 30) indicate that exporters roast, grind, and pack about 15 percent of their coffee that falls below export quality on a small scale using basic technology. They sell this product to local retailers or institutional consumers such as universities, hotels, and other organizations. Internationally, Ethiopian coffee roasters, who are generally small-scale, can only compete in niche markets for high-quality coffee and would therefore not be allowed to sell their products on the domestic market. In 2023, directive No. 975/2023 allowed roasted coffee to be sold in foreign currency on the domestic market: “The buyers are expected to be foreign tourists or travellers, embassies, international conference participants, and others with rights to buy commodities with foreign currencies” (Bogale, 2023a). The export coffee roaster needs a certificate of competence for domestic transactions from the Authority and to be registered at the National Bank of Ethiopia. The domestic export quality coffee trade must be realized in U.S. dollars, and the coffee type, brand name, trademark, country of origin, and 'made for export' must be printed on the package. The CEO of Wild Coffee Ethiopia, one of the larger Ethiopian coffee roasters with over 70 stores offering their products in Saudi Arabia,[2] has lobbied for this option but complains about having to report transactions to the authorities on a weekly basis (Yewondwossen, 2023).

3.6 Informal export and domestic chain

According to our interviews, collectors, suppliers, and exporters are involved in the informal trade of export-standard coffee. As the transactions remain undocumented, it is difficult to quantify the phenomenon. In addition to various incentives, such as higher prices and less regulation, legal uncertainty also contributes to the continued success of the informal coffee trade. For example, there is uncertainty and dispute over the mandate of regional or federal authorities to regulate the coffee trade (Metekia, 2022). The state not only loses foreign currency but also tax revenue as a result of the informal transactions. The last major reform, introduced in 2018, has started to counteract formal market restrictions by reducing the attractiveness of illegal trade through the introduction of so-called vertical integration.

[2] https://ethiopianwildcoffee.net/buy/ , last accessed 02/24/2025

Figure 12: Mapping the Informal Domestic and Export coffee value chain



Source: Own illustration

Primary market

According to observations from the Ethiopian ENACT organized crime project, "[i]llegal traders buy export-standard coffee directly from farmers and producers to sell on the domestic market. They work with brokers, intermediaries and wholesalers in Addis Ababa, who distribute the coffee to other wholesalers and retailers countrywide" (Metekia, 2022). Other wholesalers purchase coffee from smallholders, who harvest, dry, and hull the beans before selling them in open markets (Amamo, 2014). Ameyu (2014: S. 39) reports from a survey that women or children sometimes "sold red or dried coffee on market day in small quantity without knowledge of household heads for covering minor daily household expenses". Sometimes, hulling still needs to be done by retailers or wholesalers who may, unlike smallholder farmers, have hulling machines (Amamo, 2014).

As long as there is almost unrestricted informal trade, farmers gain at the expense of consumers due to the prohibition of selling export-quality coffee domestically. This is because they receive relatively high prices, almost regardless of whether they produce high-quality coffee or not. Informal collectors or suppliers buy coffee of any quality and sell it to informal exporters, who pump money into the system to get a higher quantity of coffee. In 2024, a coffee exporter has reported in an interview "that one feresula (a unit equivalent to 17 kilograms) sells for approximately 6,000 birr on the ECX floor" and added that he purchased the same amount "of coffee in the domestic market for 10,000 or 11,000 birr" and that the "[a]uthority and ECX do not recognize this actual market price" (Endale, 2024). Farmers and suppliers in a survey from 2019 have likewise reported that the quality of coffee in their region had declined in the past five years due to an increasing activity of unlicensed traders who mix coffee from different qualities and origins (Korma, 2019).

Secondary market

According to experts, the number of informal suppliers and exporters has increased with Vertical Integration, as a lack of control over direct transactions between suppliers and exporters facilitates informal activities. Other experts have observed that "government employees in Addis Ababa are complicit in the illegal trade, altering the

coffee's documentation so that exporters can sell locally" (Metekia, 2022). Informal trade is also a precondition for adulteration. Informal traders are mixing low-quality coffees from other regions with Harar coffee. There are controls in place to suppress this illegal domestic trade, but clandestine transactions often circumvent them. According to Metekia (2022)"Transporters avoid customs inspections at checkpoints along routes from Jimma in the west and Sidamo in the south-west to Addis Ababa. Smugglers also transport coffee at night, using bribery and threats of violence to pass through customs checkpoints".

As reliable grading and quality control systems are generally absent in informal markets, quality differentiation is only possible to a limited extent, and higher qualities are generally not sufficiently rewarded. Additionally, high investments in facilities that produce undocumented products are challenging to explain to the tax authorities. Wet processing, for instance, demands immediate processing and certain processing facilities. Both conditions facilitate controls and do not align well with informal trade. Informal trade thus distorts incentives, discouraging the production of higher qualities. Additionally, it restricts the supply of coffee, hindering the development of the domestic value chain.

Tertiary market

Domestic coffee consumers buy export-quality coffee directly from small-scale farmers and coffee collectors at roadsides or open markets (Amamo, 2014). Farmers sell dried and hulled coffee beans in the local open market all year round based on their cash requirements. Informally traded coffee is also sold to neighboring countries. Coffee informally exported to neighboring countries, especially Sudan, Djibouti, Kenya, and Somalia, is often further exported to the global commodity market under a new label of origin (see also Bogale, 2023b). Informal export to neighboring countries is motivated by fewer restrictions, especially on the private use of foreign exchange, and less bureaucracy. Restrictions and bureaucracy result in higher costs for taxes, transport, packaging, and storage (Metekia, 2022).

Informal domestic trade is driven by the higher prices and margins of coffee, and specifically of export-quality coffee, in the domestic market. Exporters sell export coffee on the local market after complicit bureaucrats have altered the coffee's documentation (Metekia, 2022). Collectors and suppliers sell export coffee on the local market that they buy directly from farmers. All these traders "work with brokers, middlemen and wholesalers in Addis Ababa, who distribute the coffee to other wholesalers and retailers countrywide" (Metekia, 2022). Some brokers use their relationships with officials "to exploit gaps and avoid regulations designed to ensure transparency and fair pricing" (Belay, 2024).

According to participatory observation, export-quality coffee is also sold informally in the two most prominent open markets and supermarkets in Addis Ababa. Although wholesalers and retailers often provide information on the geographical origin and grade of coffee sold in the city's main open markets, there is no transparent documentation for export-quality coffee in these markets - for obvious reasons.

4 Concluding discussion

This section concludes with a discussion of the various value chain structures and organizations within the context of market reforms, contradictions, and frictions.

Analysing the structure and organization of Ethiopian coffee value chains has revealed their considerable complexity. This is evident at various levels and is further exemplified by the stringent regulations governing the market. The divergent objectives of stakeholders, coupled with various contradictions and points of friction, have contributed to a complex structure and organization within these chains. Consequently, numerous reforms have been implemented in the coffee market, both in the past and recently.

Reforms of monetary and exchange control policies, for example, have a far-reaching effect on almost all sectors of the economy, particularly the coffee market. As a "second best" approach, adjustments are made to coffee market institutions. These attempts to adjust and correct macroeconomic policies have directly and indirectly impacted even the most remote transactions in the coffee value chain. Consequently, this affects the development of the domestic value chain and the organization of various coffee value chains. The coffee sector remains the primary source of foreign currency, contributing 25-30 percent of total export revenue, and is used as a tool to improve the country's negative trade balance. This results in high government intervention in the coffee sector in the form of intensive regulations, primarily aimed at promoting green coffee exports through different policy reforms and adjusting coffee market institutions accordingly. However, this limits the development of domestic coffee value chains by prohibiting quality coffee from being sold in the domestic market. These interventions have also led to the growth in the informal coffee trade for both domestic consumption and cross-borders trade. The exchange rate policy also attracts informal traders, as the Ethiopian currency is overvalued and imports are cheap, giving them access to scarce foreign currency through coffee exports. These informal traders compensate for their losses through import business, which affects the development of the coffee sector and the overall economy. Thus, the incentives generated by the shortage of foreign currency for individual exporters ultimately have a negative effect on the country's potential to generate foreign currency and on the development of the coffee sector.

Another major limitation in developing value chains is poor quality control measures. Poor quality control measures at farm level hinder the development of quality in coffee value chains. Quality control measures usually target secondary and territorial markets through different policy interventions. However, coffee quality is determined by 40 percent in the field, 40 percent during primary post-harvest processing, and 20 percent during secondary processing (Hutz-Adams, 2020). Poor quality control at farm level discourages farmers from producing quality beans, as the higher cost of producing quality coffee is not rewarded. This also causes the country to miss out on the potential to produce and process high-quality coffee beans, which would fetch premium prices in the export market. Additionally, this hinders the development of the domestic coffee industry. This outcome aligns with Gereffi's concept of value chain upgrading, which indicates that participation in Global Value Chains (GVCs) alone is insufficient; enhancing the quality of export products is also essential (Ndubuisi & Owusu, 2021). Ghodsi and Stehrer (2020) also contribute to this concept by suggesting that high-quality and ‘niche’ market strategies can help low-income, commodity-dependent countries to improve their terms of trade. In short, poor quality control measures suppress the growth of competitive domestic coffee value chains by restricting the quality and quantity of coffee supplied to both the domestic and export markets. Instead, informal domestic value chains emerge, characterized by small, inefficient distribution, processing, and trading facilities. This highlights the need to implement quality control measures at farm level, particularly within the farmer—supplier—exporter chain, in order to utilize the country's potential to produce high-quality coffee for export and develop the domestic value chain.

Institutions have failed to monitor and regulate policy reforms, such as the 2018 coffee marketing reform. This reform aimed to provide farmers and traders with better access to international markets and to address traceability issues by introducing an alternative trading system. However, this has led to the collapse of ECX’s role in trading coffee exports, with most domestic coffee trade now transacted through ECX rather than ECX serving as an alternative trading option for export coffee. This was an unintended consequence of the reform.

Prior to the reform, the ECX was the main central hub for discovering prices and market trend information for all actors in the sector. Market distortion occurred after the collapse of ECX for export coffee, affecting even cooperative unions entitled to export directly. This has made it significantly more challenging to obtain transparent price information, raising concerns about the future stability and functioning of coffee value chains.

Additionally, the failure of institutions to monitor and regulate policy reform meant that farmers and other actors working on quality considered it a less rewarding activity. This is because some traders do not pay based on quality; their primary objective is to generate foreign currency through bulk coffee exports, compensating for any loss through imports. However, cooperatives and commercial farmers working with farmers appreciate quality by paying based on quality differentiation. Nevertheless, their intervention is limited by restricted access to credit for collecting coffee from members, as well as for the small number of commercial farmers involved in outgrowing schemes. These examples demonstrate that Ethiopian coffee markets are not functioning effectively in terms of how well different product and process qualities are differentiated and remunerated.

Moreover, some aspects of policy reform are impractical. For instance, allowing all farmers to engage in direct coffee trade and establishing a direct link between women farmers and exporters would not benefit the farmers. Most farmers produce small volumes of coffee plus lack the knowledge and resources to process it to high-quality standards, and have limited knowledge of the international market. This means they are unable to establish direct trade relationships with exporters or international buyers. In AMS, women coffee farmers are directly allowed to link to a women exporter, but in practice, the household head is usually a man, and during the interview, it was also confirmed that no women farmers benefit from this AMS option. Thus, in most cases, the man is responsible for coffee marketing unless the woman is a widow, divorced or separated. Therefore, this privilege does not benefit most women coffee farmers.

Finally, another major policy reform - the, introduction of a competitive, market-based exchange system in July 2024 - came too late to be considered in our analysis. However, the failure to monitor and regulate the transaction system, resulted in the expansion of informal trade in both the domestic and international markets, as well as delivery and payment delays between suppliers and exporters. This also led to under-invoicing during transactions and low tax collection. These issues demonstrate that the Ethiopian coffee market is not functioning effectively in terms of how different product and process qualities are differentiated and remunerated. This has raised concerns about the future stability and functioning of the coffee market.

In sum, the reforms have shortened the supply chain, enabling suppliers to sell directly to exporters or to act as exporters themselves, thus eliminating the need for intermediaries. This shift resolved the traceability issues that had previously challenged exporters and international buyers. However, institutions often struggle to manage and supervise these reforms effectively, resulting in unintended effects such as increased informal trade, under-invoicing, and failures in contractual enforcement.

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