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# Value Chain Financing Instruments in Sidama Coffee Value Chain, Ethiopia

Melssaw Gessesse
College of Business and Economics, Haramaya University, Po Box 138, Dire Dawa, Ethiopia

**Abstract**
The study assessed the type of value chain financing instruments used and their respective characteristics in Sidama coffee value chain. The study uses data collected directly from Sidama coffee value chain actors through structured interview and questionnaire. Random and purposive sampling methods were employed. The data was descriptively analyzed by using value chain analysis approach. Accordingly, there exists both direct and indirect value chain financing instruments in Sidama coffee value chain. A number of value chain financing instruments are employed in the chain, but the common instruments identified along the chain are categorized under product financing, receivables financing and financial enhancements. The instruments are characterized as informal and trusts-based and operate under mutual agreement between actors and are mostly the governance is conventional. Even though the conventional nature and poor infrastructure (both physical and financial) to reach each actor are challenges to the chain financing, the growing coffee market, existence of strong intervention, capitalization of cooperatives, the promising trend in the countries private owned financial institutions are found as the strongest side of the chain financing.
Sidama coffee, value chain analysis, Value chain financing, Value chain financing instruments

## 1. Introduction

Value chain in its general meaning refers the full range of activities undertaken to bring goods and services from conception up to consumption (Jon and Madelon, 2006). It covers actors and the sequence of value-adding activities involved in bringing a product from production to the end-consumer. In the context of agriculture, value chain, is thought as a “farm-to-fork” set of inputs, processes and flows of products (Miller and da Silva, 2007). Value chain considers the producer and product within the larger commercial context (IDB, 2010).

Value chain is one of the common approaches in understanding the agricultural and agribusiness industry, and it is called agricultural value chain. A typical agricultural value chain consists of input supplier, producer, intermediary or transporter, processor, exporter or domestic wholesaler, global retailer or national retailer (Calvin and Linda, 2010; KIT and IIRR, 2010, IDB, 2010). Agribusiness, especially in developing country, is known for input related problems, of which finance is the major one. The perceptions of serious lending risks and high costs of service delivery, among other limitations, are well known barriers to the financing of smallholder farmers in the agribusiness (Cuevas and Pagura**,** 2016).

Agriculture, with its non-uniform cash flows, rural bias, poorly capitalized and widely dispersed producers, seasonal cash flows, price and market risks differs substantially from businesses conventionally supported by traditional finance and microfinance (Fries, 2007). Thus, to overcome the financing gap smallholder farmers relay on there chain relation. According to the observation by Cuevas and Pagura **(**2016), value chain finance is arguably one of the most sustainable and effective ways of reaching smallholder farmers with the potential to benefit a significantly greater proportion of the 450 million smallholders worldwide.

Given the current globalized commodity sourcing and standardization, reduced shipping costs, rapid supply chain integration and commodity market growth has cemented the way for the informal and semiformal financing called value chain financing, wherein actors in the chain finance each other or use the preexisting contractual relationships and interconnectedness to leverage external formal finance (IDB, 2010).

According to Calvin (2012) value chain finance (VCF) refers to the flows of funds to and among the various links within a value chain. VCF is can be made border as it can relates to any or all of the financial services, products and support services flowing to and/or through a value chain to address the needs and constraints of those involved in that chain. It can be employed to obtain financing, or to secure sales, procure products, reduce risk and/or improve efficiency within the chain. Also, Miller & Jones (2010) defined VCF as ‘both internal finance that takes place within the value chain and external finance that is made possible by value chain relationships and mechanisms’.

KIT and IIRR (2010) categorize source of finance for the actors in the value chain in to three as chain liquidity; this are short-term loans from suppliers or buyers within the value chain, Agricultural finance; financial services from commercial banks, microfinance institutions and other financial institution, and the third category is value chain finance, financial services that are based on cooperation in the value chain.

On the other hand, VCF can be broadly categorized as direct and indirect value chain financing. Direct/internal value chain finance builds on established relationships between value-chain actors that facilitate credit screening, monitoring and enforcement, resulting in faster service and fewer obstacles to credit provision, such as when a supplier provides credit to a farmer or when a lead firm advances funds to a market intermediary (Obiora, 2012). Internal value chain finance is advantages as it helps to utilize the relationships and transaction mechanisms that exists in the chain, but it is also criticized for the fact that working capital along the chain is tied up in financing the chain; the absence of clear cost of financing (as it is deducted from payment for products, or hidden in price discounts); and it also shift the agribusinesses core business engagement to chain financing which potentially affect the agribusiness business undertakings(Cuevas and Pagura, 2016).

Direct value chain finance builds on established relationship between value chain players. They are known also as the informal sources of credit. Warehouse receipts, contract growing or out-grower schemes financing system are two examples of this scheme (Mangabat, 2007).

External/indirect value chain finance is financing from outside the chain made possible by value chain relationships and mechanisms (Calvin, 2012). External VCF typical example is when a bank provides a loan to a producer based on a contract with a buyer (Miller & Jones, 2010). Cuevas and Pagura (2016) mentioned the following advantages of using external/ indirect VCF sources, one it can benefit the entire chain as the producer can have finance without any direct collateral requirement, the buyer don't necessarily required to have a working capital to finance producer, because banks can do it and also minimize the risk and transaction cost for the bank as the bank do not deal with the producers, rather the agreement is with buyers who have good credit rating and good financial stand.

According to a statement by Inter-American Development Bank (2010) indirect value chain financing is more efficient than direct financing because lead firms have uses for the funds, which if invested in upgrading their firm, could further enhance the value chain's competitiveness. Therefore, value chain finance is generally most developed when there are linkages to external finance, usually from formal financial institutions.

Value chain products can be grouped into five different categories, each responding to the particular needs of the client and the value chain: they are classified based on product linkage, receivables, collateral arrangement, risk mitigation and financing structure (Calvin and Linda, 2010; KIT and IIRR, 2010; IFAD, 2012; AfDB, 2013, Cuevas and Pagura, 2016).

Product-linked financing instruments are products that directly relate to financing production as well as the aggregator and processing or marketing company for the purpose of acquiring farmer's production. In this case, the aggregator uses financing or advance payments to producers as a way to secure product. On the other hand, receivables financing products are those that are largely used as a means for providing working capital to aggregators, marketing companies, and processors. They include bill discounting, factoring, and forfeiting (the purchase of receivables from an exporter, for a margin).

The third categories are physical asset collateralization; these financial products rely on a physical asset as a guarantee or collateral. The two most common products, warehouse receipts and repurchase agreements, are used largely for working capital. Financial leasing, by contrast, involves the use of an asset over a fixed period of time, after which the client may or may not eventually take ownership. Risk mitigation products are VC financing products that are used to reduce risk by transferring it to a third party. This is achieved through the use of insurance, futures, and forward contracts. Finally the fifth category in VCF instruments are structured financing (loan Guarantees); these are specialized products that facilitate and deepen financial availability, frequently involving third parties outside the value chain.

Even if the strong advantage of value chain financing, both as a substitute and compliment of the traditional agricultural financing for stakeholders in coffee industries is inevitable, the focus and the literatures in the area are scarce. In addition, the identification and characterization of the instruments are believed to be basic to make positive intervention in the area. This shortfall in the area is yet not given the necessary attention in the field of researcher. So, the current study tried to explore types of value chain financing instruments which are functional in Sidama coffee value chain with their respective characteristics.

## 2. Objectives of the study

The general objective of the study is to identify the types and characteristics of value chain financing instruments used in Sidama coffee value chain (SCVC). The specific objectives are 1) to identify Sidama coffee value chain actors; 2) to draw the financial instrument flow of SCVC; 3) to assess the financial relationship and instruments' employed among Sidama coffee value chain actors'; 4) to assess characteristics of existing agricultural value chain financing products in SCVC; 5) to identify challenges and opportunities in SCVCF.

## 3. Methodology

Scope of the study; the study tried to uncover different stakeholders and chain actors along Sidama coffee value chain which encompasses from input dealers up to coffee exporters. The study does not cover the financial relationship between the coffee chain actors and direct coffee consumers.

Data were collected from different chain actors along the chain by using farmers of Sidama coffee as a point of entry to figure out the flow and the length of the chain. Two types of data, primary and secondary, were used in this study. The primary data was collected by using personal interview and semi structured questionnaire from sample household and key chain actor informants. On the other hand, secondary data was collected and used from zonal and district bureau of agriculture, Sidama zonal cooperatives and marketing bureau, different financial institutions, primary and union level coffee producers cooperatives, different governmental and non-governmental stakeholders' in Sidama coffee value chain and published and unpublished materials from various sources.

Multistage sampling procedure was employed in the study. First, from different districts in and around Sidama zone 160 coffee producing farmers were randomly selected. Second, based on the data and the direction obtained from Sidama coffee producers (point of entry) 48 respondent chain actors in different nodes of the chain from different location were selected by using purposive sampling.

**Table 1, population and sample size**

| Chain actors | Population | Sample size |
|---|---|---|
| Commercial banks | 10 | 4 |
| Microfinance | 2 | 2 |
| Saving and credit cooperatives | 35 | 10 |
| Primary coffee growers cooperatives | 51 | 15 |
| Traders/ collectors | 20 | 5 |
| Coffee farmers Cooperative union | 1 | 1 |
| Commodity exchange | 1 | 1 |
| Insurance company | 1 | 1 |
| Processor and exporter (private) | 11 | 4 |
| Coffee farm input suppliers (private) | 10 | 5 |
| Coffee growers' (farmers) | | 160 |

Source: Own construction, 2016.

Method of data analysis; the data was analyzed by using the value chain analysis method. Value chain analysis serves as a tool in identifying gaps in agricultural finance and the appropriate interventions (Mangabat, 2007). Value chain analysis approach is descriptive in nature and starts with selecting the point of entry. In this case coffee farmers are purposely selected as a point of entry to identify the upward and downward chain actors (Fabe et al. 2009). After selection of the point of entry the next step in value chain analyses is, to drawn the value chain maps.

There are two different kinds of approaches used for value chain mapping. The mapping is denoted as a functional and institutional analysis (FAO 2005 as cited in Fabe et al. 2009) which starts with constructing a 'preliminary map' of a particular chain to provide an overview of all chain actors (institutional analysis) and the type of interaction between them (functional analysis). The results can be presented either in a table or in a flow chart, which is called the 'preliminary map' of the chain.

limitations of value chain analysis are, the approach is not fixed or static, market dynamics matter quality and service are also important considering the environment in which a value chain operates, a simple cost analysis will not do shifting value within a value chain rather than creating more value. On the other hand, value chain analysis enables to assess different activates including bounded services along the chain both between chain actors as well as actors with the external environment. In addition, as value chain analysis helps easily to identify the chain actors and their respective function and relation with other players it makes easy to assess what type of financial as well as marketing relation exists and what type of financial instruments are employed.

Thus, to meet the objectives of this study which to assess VCF instruments used in Sidama value chain, drawing the entire map of the chain were done by basing on qualitative data collected from chain actors, the data and the map show the financial relationship instead of the general business and value addition along the chain, so the functional value chain analysis method were employed by following the following steps: identifying the point of entry, collecting data from key chain actors, mapping the chain, identifying the financial relationship among actors', identifying the financial instruments used, assessing the characteristic of the instruments employed and list for the challenges and opportunities in the chain financing.

## 4. Result and discussion

Value chain financing instruments differed based on the type of chain financing (direct or indirect). According to the data gathered from different value chain actors (input providers' up to exporters') in Sidama coffee (for this study), both direct and indirect value chain financing with different types of instruments were observed. While the indirect chain financing was informal, less strong and used at the downstream of the chain (farmers'), direct value chain financing existed and looked strong on the upstream of the chain (with exporters and processors). A typical agricultural value chain comprises of producers, traders or aggregators, processing/packaging, and marketing actors. Each value chain actor had distinct characteristics and financing requirements. A producer require finance for farm investments or purchase of inputs, while the requirement for those engaged in processing or packaging is a large long-term credit and equity for investments in plant, machinery and buildings. The requirements will vary for different actors within each category as well.

**4.1. Sidama coffee value chain actors**

The main chain actors' identified in Sidama coffee value chain during the study are:

Input providers: common input for the coffee growers is coffee seedling which is used to supplied by private coffee seedling growers, farmers' service cooperatives and district and *keble*[1] agricultural office. And other input providers' for the farmers are there, but their supplies are not directly related with coffee production (e.g. fertilizers for pulse and cereals) even if payment is agreed to be made after harvesting and sale of coffee.

Coffee growers: most of the coffee production in Sidama zone is characterized as small holding traditional farming system and dominated by garden coffee.

Primary farmers' service cooperatives societies: are *kebele* level cooperatives, who are engaged in providing multipurpose activities, mainly for member farmers. Their service ranged from providing different inputs up to basic coffee processing like washing and drying. During the study time, there were around 60 primary farmers' service cooperatives in the zone.

Sidama coffee growers' cooperatives union: this is the giant cooperatives union even at the country level, which is currently exporting the country's high quality, large volume and internationally certified and branded Sidama coffee to different parts of the world, specially to USA, Europe and Japan markets (personal communication, 2015). The Union was founded in July 2001, comprises 39 primary cooperatives representing 82,275 farmers producing around 35,000 tons of coffee (60% washed) with the cooperation of USAID. The union currently consists of 51 primary cooperatives societies around the zone of which 43 of member cooperatives own their own coffee processing plant.

Private processors: in Sidama zone, there are eight private processors with their main activity of collecting red cherry coffee from private and micro level local traders and some closely related farmers and exporting or supplying processed coffee to the domestic market.

Financial institutions: there were three types of financial institutions along the chain during the study time. These are government owned financial institutions (micro finance (Omo and Sidama MF), Commercial bank of Ethiopia, Development Bank of Ethiopia and Ethiopian Insurance Corporation), private banks (Dashen Bank S.C, Wegagen Bank S.C) and cooperatives owned financial institutions. The later were small scale and local based saving and credit financial institutions which are operating under the cooperatives law of the nation whereas the other two operate under direct control of the National Bank of Ethiopia.

Traders'/collectors': these actors are individuals or informally organized close friends who are engaged in the coffee trading business. And their main activity is bulking of coffee from farmers and sells them to private processors. Majority of the coffee collectors are not registered and they did not have specific operational area like shop or office.

Ethiopian Commodity Exchange (ECX): is the new Ethiopian commodity marketing system. Since the issue of Proclamation 702/2008 by the Council of Ministers of Ethiopia on the establishment of ECX, Ethiopia is experiencing new marketing development. The law stipulated that, all supply of coffee, with an exception of grower direct exports, are to be traded in the newly established Ethiopian Commodity Exchange (ECX) market. Thus, currently, the Ethiopian coffee market can be summarized as follows. Small farmers sell their products to local merchants, who in turn sell to distributors and collectors (or cooperatives) who export through the ECX. Cooperatives sell directly to the ECX and capture margins that would otherwise be captured by merchants and collectors (USAID, 2010).

ECX is established as a demutualized corporate entity with a clear separation of ownership, membership, and management. Thus, owners cannot have a trading stake, members cannot have any ownership stake, and the management can be neither drawn from the owners nor from the members. ECX is designed as a public-private partnership enterprise, in a unique institutional innovation for Ethiopia. The corporate governance of ECX maintains a healthy balance of owner and member interests (AfDB, 2013). Trading in the ECX can only occur on the basis of warehouse receipts and can only be conducted by registered members of the exchange, trading either for themselves or on behalf of clients. Common participants in the ECX are suppliers, cooperatives, traders and farmers. The following figure depicts how the Ethiopian Commodity Exchange market functions.

[1] lower administrative division

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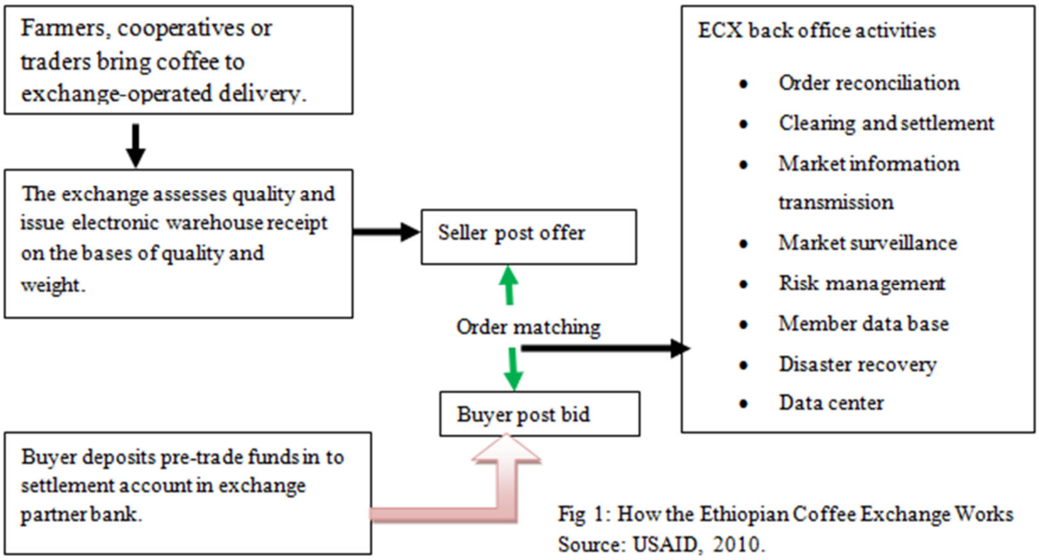


Fig 1: How the Ethiopian Coffee Exchange Works
Source: USAID, 2010.

**4.2. The flow of finance along the chain, instruments employed and actors' business relation**

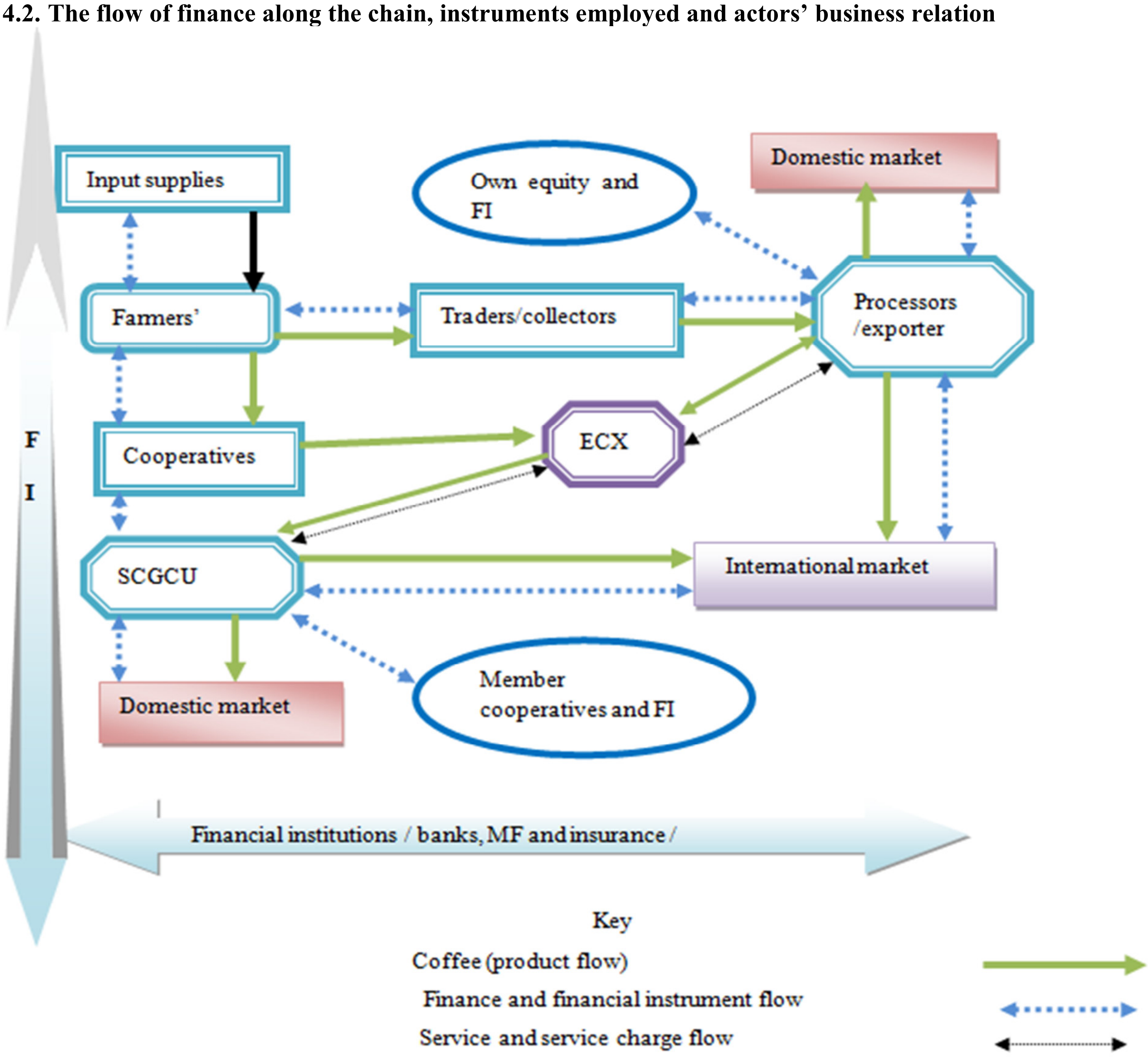


Fig 2: Financial and product flow along Sidama coffee value chain.
*Source: own construction, 2016.*

 

1. **Farmers**

Coffee farmers' were taken as an entry point of the chain finance flow analysis. Specifically coffee producing farmers are responsible only for the payment of inputs, except some larger farm land holders who are engaged in employing daily laborer in different stages of the production. According to the study, the financial relation between the farmer and different chain actor was trust based and used traditional and conventional financial instruments. Oral agreement, friendship and social capital were commonly used as collateral. During sales of coffee, there is no any type of business relation between the farmer and the chain actors which results in interest bearing agreement, even in case of delayed payment or prepayment transactions. The following paragraphs show the financial relationship, the financial instruments used and their respective characteristics between the coffee farmers' and other chain actors.

**Farmers Vs input suppliers**: this node of the chain is characterized by slightly infrequent transaction due to the nature of the product (coffee). As farmers make transaction with coffee seedling suppliers in case if they had extra land to be cultivated or old coffee tree to be replaced, otherwise they did not have strong and frequent business relation with input dealers. In Sidama zone, around 52%, 35% and 13% of the farmers use private, government and cooperatives as a source of input, respectively (present studies survey). In addition, According to survey made for this thesis, around 95% of the input transaction between farmers and input suppliers (private, cooperatives and government) is done by direct payment of ***cash***, while the other 5% use ***input supplier credit*** and this instrument was common between farmers and cooperatives input suppliers.

The input supplier credit value chain financing instrument used was characterized as easily negotiable, semi-formal and noninterest bearing and supplied as a result of membership to the supplying cooperatives society. For example 'FERO coffee farmers' service cooperatives' (in Sidama zone Wensho-district) supplied coffee seedling to member farmers expecting to collect the equivalent amount stated during the sales period when the farmer supplied their coffee to the cooperatives society. The cooperatives society deducted the input price from the total payment of cash the farmers expected to collect from the supply of coffee.

**Farmers Vs cooperatives**: in the study area, as a result of strong cooperative movement in the coffee industry by the regional as well as zonal government and different benefits' (like premium payment) gained by becoming a member and supplying coffee to the cooperatives society, almost all (98%) coffee producing households' are member to multipurpose cooperatives society. Accordingly there is formal financial relationship between the cooperatives societies and the farmers'. The business relation looked like the following; member farmers' supplied their coffee to the society and the society bulks, processes and transport the coffee to the ECX Hawassa branch in the name of the union and then the union export and sell the coffee and deposit the equivalent to member cooperatives bank account.

Finally, the cooperative society disburses the cash to member farmers according to their supplied coffee share. So, the primary farmers' cooperatives society most of a time face a delay in paying the cash immediately up on the farmers' arrival to the collection center with their coffee. During such situation the cooperatives society **issues receipt** to the farmers' to be repaid within two weeks up to one month. **Short term trade receivable** and **bank certificates** are employed as a financial instrument between primary cooperatives societies and member farmers in the study area.

**Farmers Vs traders/collectors:** farmers use these chain actors due to different reasons, their main reasons are overcoming limitations of cooperative (delayed payment) and to maintain social capital with local traders/collectors. Most of the time farmers sell dried coffee and small portion of red cherry (remain from cooperatives supply) for traders and collectors and they mostly transacted by cash and ***trader credit***. Trader credit is value chain financing instruments where trader's advance funds against the expected outputs to producers to be repaid in kind, at harvest time (AfDB, 2013). This financial instrument is characterized by its captive nature of relationship that the traders force the farmer to supply their coffee in unfair price, lower transaction cost (mostly transacted directly by the trader and farmers in informal way), mostly no direct interest payment, it is advantageous in meeting the immediate financial needs of the farmer during production and harvesting season. So, trade credit is expected to be a good instrument to finance farmers if it is managed in formal /written and win-win agreement between the two parties.

**Farmers Vs private processers**: there is weak and indirect business relation between farmers and private processors. Processors used to work through the traders/collectors' who are most of a time their agent/commission worker. Processors sometimes use their own commercial coffee farm.

**Farmers Vs financial institutions:** looking from value chain perspective, financial institutions are not playing significant role especially from the lower stream of the chain (farmers and input suppliers). The financial relation between coffee farmers and financial institution is more of bureaucratic in the eyes of the farmers; as the institutions specified their service to some large scale producing farmers than scattered small scale farmers who are believed to be exposed for larger transaction cost. The strongest participants among financial institutions in Sidama coffee are micro finance institutions (Omo and Sidama micro finance institutions).

Generally, financial services commonly provided for coffee farmers are saving, short term regular working capital loan, local money transfer and group lending. The only **direct value chain financing** that exist between farmers and financial institutions are from micro finances (especially, OMO MF) that they supply short term loan for relatively credible (in terms of repayment) farmers.

**2. Cooperatives**

**Cooperatives Vs union**: one of the strongest formal chains along Sidama coffee growers' value chain is the relation between primary farmers' cooperatives society and the coffee growers' cooperatives union. Also Sidama coffee growers' union act as a lead firm in the chain. In between these partners, there exist different types of financial relation.

The union provides a working capital for the primary cooperatives, which is usually used for procuring coffee from member farmers; and the repayment of the loan is made in kind (mostly washed coffee bean). So, according to Calvin and Linda (2010) this type of agricultural value chain financial instrument is categorized as ***marketing companycredit*** under product financing instruments, but in practice this finance is said to be prepayment for the coming coffee in the eyes of the union.

The union usually supplies different type of loans depending on the needs of the primary society and also stands as a guarantee for member societies to have finance (credit) from third party specially commercial banks and development banks. This type of financing is classified under the ***lead firm financing*** instrument; also ***Loan guarantees*** were there from the union to the cooperatives to benefit financial service from financial institutions.

In addition, the financial service provided by the union to member cooperatives society unlike other chain relation is with strong embedded service like training on accountancy, audit, management, provision of inputs (machinery), and different technical assistance on technology adoption and the like. The following figure exhibits the function of cooperative chain in Sidama coffee value chain.

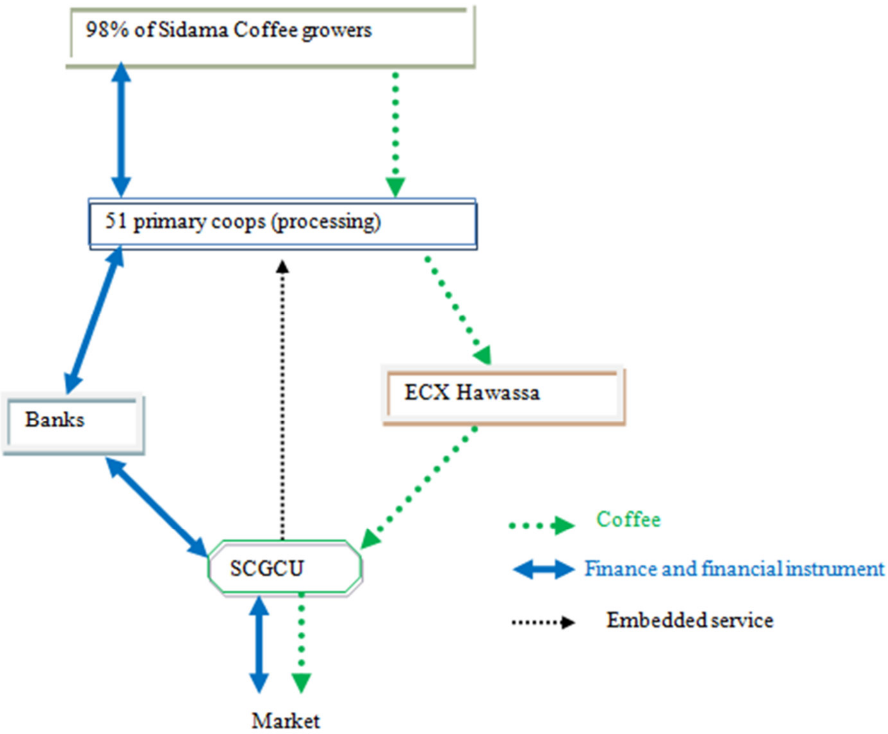


Fig 3: The 'cooperative chain' of SCVC (farmers up to union and union up to farmers)
*Source: own construction, 2016.*

**Cooperatives Vs financial institutions:** common financial institutions who are dealing with primary cooperatives are banks and insurances. Major services from banks to primary cooperatives in the study area are *saving account, current account, money transfer* (from union to the society and from society to some large scale coffee supplying member farmers), *short term loan* (by using the Union as a guarantee), act as an agent for different big transactions which the society made and different payment instruments like cheque. Banks, who are currently engaged actively with primary coffee growers' society, were commercial bank of Ethiopia, development bank of Ethiopia, *Dashen* bank S.C, Buna bank S.C and *Wegagen* bank S.C. Primary cooperatives were also users of property and inland ***insurances,*** especially to share the risk of loss during the delivery of the member farmers' coffee to the union's destination, to which Ethiopian Insurance Corporation was the major player in granting the properties of the societies.

 

**3. Union**

**Union Vs financial institutions**: throughout the formal chain in Sidama coffee, the formal and strong financial relation existed between the farmers' union and the formal financial institutions (like development bank and commercial banks and insurances). The union had close relation with development bank of Ethiopia and *Wegagen* bank S.C in terms of international business union deals, and they use financial securities in the form of a letter of credit (LC) and other common commercial financial instruments known as ***Trade receivable financing*** instruments, in case of value chain financing instruments.

In relation to financial relation with member cooperatives and domestic market customers; in addition to the above institutions, the union use Commercial bank of Ethiopia, *Dashen* bank S.C and other private banks with which member societies had bank account. The common transaction between these banks and the union was local money transfer (from the union to member cooperatives account), different saving and current account, issue of different financial instruments like cheque and the union acted as a guarantee in between the financial institution and primary member cooperatives. Due to large transaction and relatively educated management, good accountancy and legal formality of the union's institutional character, there were no such significant financial transaction problems on this node especially compared with the downstream chain relation. Ethiopian Insurance Corporation is used in the transaction between the unions in international as well as local market.

**Union Vs the Market**: the union had two market outlets in general, international and domestic coffee markets. First, the union checks the coffee supplied to ECX Hawassa branch by member primary cooperatives in the name of the union. After the due process, the coffee will be categorized as export and local market standard, then the exportable goes to international market while the other goes to domestic wholesalers and processors. The financial relation with the international market (USA, Japan and Europe) is usually by using international financial instruments like ***LC*** while in the domestic market local banks (cheque) and cash transactions are common to transact the coffee.

**Union Vs ECX: -** primary cooperatives who are member of the union supply their coffee to the ECX in the name of their union. The ECX provides different services which most of the services were mandatory. Among them, quality assurance and grading were the common ones. On the other hand, the ECX provides storage service for a length of 20 days if member auctioneers want. The ECX also provides warehouse receipt for stored coffee. For the union, the ECX was the initial stage for exporting or supplying coffee to local and international market.

**4. Private processors**

**Private Processors Vs FI**: there were eight private coffee processing plants in the zone during the study time. As these plants were built by financially strong investors with good finance and market knowledge, financial institutions especially commercial banks prefer to finance as well as make bulk transaction with them as compared to cooperatives processors. Banks provided different financial service for private processors like term loan, working capital, wholesale and retail loan and ***Trade receivable financing*** instrument.Even if they did not have the name or the know-how whether they are financing the value chain or not, there exist ***a direct value chain financing*** from banks to private processors and big traders/collectors along the chain.

**Private processors Vs traders/ collectors**: *marketing company finance* is the common instrument between these parties. The major relation among them is traders/collectors bulk coffee from different place of the zone and sell it to the processor. The processor in turn provided different financial service like working capital loan, long term and short term loan depending on their relation (especially non-financial relation among the owner of the plant and the trader).

**Financial institutions Vstraders/ collectors**: financial institutions especially commercial banks supplied different types of financial service for Sidama coffee traders. For example, according to the survey done for this research, *Wegagen*and Buna bank S.C. provides wholesale and retail credit for coffee traders along the chain. On the other hand local small scale traders used to get financed by local micro finances but unlike commercial banks the volume and terms of loan (financial service) supplied by micro finances were limited. Generally, the relations between these actors were characterized as formal and employ direct value chain financing service and instruments.

### 4.3. Challenges and opportunities in SCVCF

Of course it is difficult to precisely characterize the instruments employed; there are different challenges and opportunities' in Sidama coffee value chain financing which are responsible for the nature of the financial flow and instruments engaged. The major challenges along the chains are absence of strong vertical and horizontal linkage among actors (except in the cooperatives chain case); especially horizontal linkage among upstream chain actors were almost non-existent; informal and weak relation among the chain actors, lack of trust among chain actors, lack of infrastructures to reach scattered farmers and coffee traders, coffee growers location and the location of the market were too far away to facilitate information and financial flows (given the efforts of ECX), lack of transparency among producer organizations and other chain influencers, level of awareness and education of farmers to adapt new financial innovations, strict profit oriented nature of upstream chain actors, and lack of enough working capital within direct chain actors (not strongly liquid chain).

However, the existence of strong international and growing domestic coffee market, strong intervention from government and NGOs (e.g. USAID and SNV) in the coffee industry, continuous and satisfactory improvement of ECX services, strong capitalization of primary cooperatives and unions at government level and strong financial institutions competition (urban area and export market) were found to be strong opportunities for the chain financing development.

## 5. Conclusion

Nowadays, value chain financing instruments and financial products are key determining factors in the advancement as well as in equitable development of the financial system. In countries like Ethiopia, where scatter and marginalized farmers contribute significantly for economic development, innovative financial system is necessary. According to the study, notwithstanding the presence of numerous financial instruments along the chain the question of formality, enforcement and fairness are not answered.

Despite informal and unorganized chain character in the study area as well as in the country, there are good indicators to strengthen and develop value chain financing in the coffee industry. According to the result of this study, by using value chain analysis, the existence of both direct and indirect value chain financing at different nodes of the chain is evidenced. Financial instruments commonly used along the chain were assessed and identified. According to the findings four broad category of value chain financing instruments; product financing, receivable financing, risk mitigation product and financial enhancement instruments, exist with different intensity.

Depending on the frequency as well as the quantity (volume) of transaction, value chain financing instrument used vary from one node of the chain to the other. As the study finding shows the upstream chain actors (the union, exporters and private processors) are the ones using strong and formal financing instruments like trade receivable financing, marketing company credit, insurance, LC and others. And it is also evident that the instruments functioning in Sidama coffee value chain are characterized as informal and lack organized and procedural operation, especially in downstream of the chain (farmers').

Value chain financing instrument which are functioning on the downstream of the chain are in need of special attention as they have the power to overcome the financial service limitation of the financial institutions. Indirect value chain financing should be more developed along the chain especially at nodes where direct value chain financing is assumed to be costly. Despite their significant role along the chain, formal financial institutions (external financer) service is limited to the upper chain so the gap in accessing the farmers and primary cooperatives should be filled accordingly.

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