FINANCING COFFEE FARMERS IN ETHIOPIA: CHALLENGES AND OPPORTUNITIES

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Abstract

Notwithstanding the severe price shocks that have been shacking its value chain, coffee remains a fundamental component of the Ethiopian economy and export. Nevertheless the prolonged price decline has substantially weakened its production basis and prospects, so that appropriate financial services are urgently needed to sustain rural communities. To gather focused evidence on the financial supply and demand of small Ethiopian coffee producers, in 2005 we carried out an original survey interviewing 120 farmers from the Jimma zone (Oromia regional state); further, the statistical analysis was complemented by "focus group" discussions and individual interviews with "key-experts" of the coffee value chain. Several important findings emerge from this study. First, there is a strong evidence of an overall gap between demand and supply of financial services across the different sources (formal and informal ones). Second, informal financial services (loans) are very costly, while those from microfinance institutions (MFI) and cooperatives often appear not tailored to the farmers' needs (in relation to timing, length and amounts). Concerning saving products, their diffusion is still very limited, because they have been recently introduced, but in the future they could become an important component for strengthening the microfinance outreach; currently, they also stand as a substitute for risk-insurance products, totally absent in the Ethiopian coffee production chain. Regarding policy recommendations, the main priorities appear those of enlarging the outreach of MFI and financialy active cooperatives. More generally, a need emerges for demand-oriented financial services and suitable "bottom-up" agricultural development and policy-making.

1. INTRODUCTION[1]

Ethiopia is well known as the country of origin of "Buna" (coffee in Amharic), but also as one of the poorest countries in the world, even when

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compared to sub-Saharan Africa (SSA): In 2004 Ethiopia has a GDP per capita of US$114 – the SSA average being US$731 – cf. UNDP (2006). Coffee has been representing a considerable share of Ethiopian economy and export. With the coffee price fall, begun in 1999, a substantial portion of the population (mostly rural) witnessed another severe decrease of income, which aggravated the poverty outcomes of previous crises, natural (droughts, crop disease), institutional (collapse of the Derg regime and of its socialist system) and political (border wars).[2] As a result, despite the public efforts to modernize agriculture and mobilize its surplus, Ethiopia is still far from getting adequate food supply.

In this context, development and public policy must acknowledge market and institutional failures and intervene accordingly. Agricultural policy stands as the main ingredient of any development strategy for Ethiopia; further, public network infrastructure and services need to be intensively and extensively upgraded. However, beside traditional instruments of intervention directed at the microlevel of production (agronomical techniques, land reforms), an original role could be played by microfinance, directed at improving the financial side of a low productivity agriculture.

In order to investigate the demand and supply of financial services for coffee producers, and to highlight the main areas of possible intervention, we carried out an original survey, complemented by qualitative analysis (focus group meetings and interviews with key informants). Thus, this work aims at contributing to the existing literature, studying microfinance in a sector fundamental for the country's wealth.

In the second section, we briefly review some background of Ethiopia's economy and coffee production. In the third section we illustrate the research methodology and the sample. Section four presents the main results of the analysis, identifying the weaknesses and the strengths of the existing financial providers in meeting the demand of rural communities. Section five concludes, presenting a few policy implications.

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[2] For an econometric assessment of the long-term impact of natural shocks on economic growth in Ethiopia, see Dercon (2004).

2. BACKGROUND OF ETHIOPIA

Country outlook

Notwithstanding its potential for agricultural development, Ethiopia remains a very poor and underdeveloped country. According to the UN Development Report, Ethiopia ranks 170th out of the 177 countries considered (see UNDP 2006);[3] since the mid-1990s, its GDP and GDP per capita have been gradually recovering[4]. On overall, Ethiopia continues to be a rather closed economy, with a low participation in world trade. Its export accounts for only 16.4 percent of GDP, while its import dependence is higher, reaching 39.1 percent of GDP. Moreover, Ethiopian export composition, as many developing countries, is highly unbalanced towards food (62 percent) and raw agriculture materials (25.9 percent) – only 11.4 percent of export are manufactured goods, see World Bank (2006b, p. 63); conversely, import is highly skewed towards manufactures (64 percent). Finally, Ethiopian export is not sufficiently diversified, and this renders the country highly vulnerable to the exogenous price shocks of the main commodities exported.

Although agriculture accounts for a large share of GDP (47.7 percent in 2005, see World Bank 2006a), Ethiopia is still far from getting adequate food supply. In fact, most of its large agricultural basis (84 percent of the population is rural) continues to present a mere subsistence character, with a low productivity level. This situation is rooted on a complex system of causes, but can be synthetically traced back to a few elements.

First comes the vicious "trap of poverty" (for a notorious classical version of it, see Myrdal, 1957). A low agricultural income cannot sustain capital investment and cultivation improvements, and this keeps down both labour and multifactor productivity.

This situation is aggravated by the infrastructural gap of the country: it affects transport, telecom, trading and storage services, in addition to personal services (health, social services). And this deficit is particularly severe

[3] We recall that the UNDP Human Development Index (HDI) is a composite index measuring three main achievements: quality of life (as measured by life expectancy at birth), knowledge (adult literacy rate and gross enrolment at schools) and standard of living (GDP per capita in purchasing power parity – PPP of US$). Despite the multidimensionality of human development and the informative limits of every quantitative indicator, the HDI stands as a better alternative to other more simplistic measures of human well-being (such as GDP per capita).

[4] Data show that the annual growth rate of GDP per capita was negative over 1985-95, being equal to –1.9 percent per year; it became positive over the most recent period (1995-2005), equal to 1.6 percent (cf. World Bank, 2006a).

in rural areas, as shown by their low index of accessibility.[5] Consequently, the infrastructural deficit also hampers the development of local agricultural markets,[6] and thereby agricultural productivity.

Further, the "poverty trap" is reinforced by the peculiar property rights regime of land. After the fall of the socialist regime, the new government has launched a large-scale agricultural modernization campaign (the Agricultural Development Led Industrialization – ADLI),[7] abolishing the planning system and liberalizing agricultural production and markets. However, land markets have not been allowed to come to existence. Now, lack of full land ownership acts as a double constraint on agricultural productivity: first, by diminishing the incentive to land improvement (irrigation, fertilization, cultivation turnover); second, by hampering the financial capacity of farmers, because they lack the most important collateral for obtaining credit. Thus, also land property rights, by limiting tenants' financing and investment, dampen down agricultural productivity.

Coffee as a cash crop has always been very important for the Ethiopian economy. More than 10 million Ethiopians (no less than 15 percent of the population) belong to the coffee value chain, directly or indirectly. Because of the price decline started in 1999 (and peaked in 2001), coffee importance has dramatically fallen. The coffee's share on total export declined from 63 percent in 1995 to 37.4 percent in 2004 (cf. World Bank, 2006a). In terms of GDP, the weight of coffee output[8] diminished from 2.5 percent in 1995 to 1.9 percent in 2005. Table 1 shows that, face to the first price fall of 1999, the quantity exported temporarily declined, but later recovered. However, the price shocks – which are far from being absorbed (the "unit value index" in 2004 remains still below its 1999 level) – have kept down the nominal value of export ("value index"), which remains below the pre-crisis level (by a half, comparing 2004 with 1998).

[5] The percentage of the rural population within 2 km of an all-season road, over the total rural population, is only equal to 17 percent (cf. World Bank 2006b; p. 68)

[6] The inefficiencies in creating and mobilizing the surplus have been empirically tested for a variety of products, including food crop. As an example, see Gabre-Madhin (2001).

[7] This policy acknowledges the initial primary role of agriculture for economic development. In fact, before having an industrial and tertiary development, agriculture needs to improve its productivity, to foster accumulation and the take-off of the other two sectors. In the medium-long run, its share is expected to diminish, and those of industry and services increase.

[8] Because of data restraints, we calculate it as production at "international US$" (cf. FAO, 2007), divided by GDP at nominal US$ (cf. World Bank, 2006c).

Table 1. Coffee export of Ethiopia over the last decade: main indicators

Export	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Export/prod.	33.3%	48.0%	52.2%	50.0%	50.2%	51.7%	35.1%	52.8%	61.2%	51.7%
Quantity index	86	125	134	130	123	134	90	135	153	152
Value index	112	113	155	154	109	103	55	65	73	79
Unit value ind	129	90	116	118	88	77	60	48	48	52

Source: our computations on FAO (2007) series of export and production of green coffee.
All indexes: 1994=100.

Consequently, the crisis of agriculture, starting from the coffee value chain,[9] has propagated across the whole economy of the country, acquiring a cross-sectoral and national character. At the microlevel, many farmers and traders (including multipurpose cooperatives) went bankrupt, or sank below the poverty line.[10]

Other coffee farmers were forced to switch to other products and activities ("chat", maize, flowers, hides and skins), in order to stabilize income and mitigate risks. Now, while in principle crop and activity diversification is beneficial (cf. also MOFED, 2002), it might prove insufficient or even damaging. For example, production diversification might further reduce the efficient division of labour and thereby size of domestic agricultural markets.

Finally, the vulnerability of Ethiopian coffee farmers is also exacerbated by the small scale of production and their location in remote areas.[11]

Financial services for coffee

As a result, the Ethiopian coffee chain remains vulnerable and potentially unstable. In principle, basic financial and risk management services can greatly help to solve these shortcomings, enabling investment in both the production and trade segments. Moreover, a series of specific improvements of the trade segments has been called for (see DTIS 2004, p. 74). These are aimed at increasing the level of market power detainable by the supply side.

[9] The price drop was not limited to coffee. In fact, in 2001 the price of many world commodities attained a minimum peak.

[10] In the region of Jimma, Oxfam International (2002) found that many farmers did not cover their basic production costs, and were operating at loss. In the peak of the crisis, after the harvest in September 2001, farmers sold "red cherry" (fresh coffee grains: 1 kg of dry coffee is equivalent to 3 kg of red cherry) at 0.5–1 Birr per kg, while average production costs were 0.53. As a result, some of the cooperatives went bankrupt, or discontinued the operations in some areas.

[11] In fact, 95 percent of the output comes from small landholders, and the representative farmer cultivates around 0.5 hectare (ha) of coffee (cf. LMC International, 2000).

There is reason to believe that the most financially underdeveloped and constrained subjects of the coffee chain remain farmers. Traditionally, formal financial institutions (commercial and sometimes also rural banks) avoid small farmers, because of their high risks, lack of collaterals and high transactions costs. Consequently, also in Ethiopia, alternative credit programs aimed at improving rural households' access to formal credit have been developed, the main example being those offered by the microfinance institutions (MFI) (cf. IFAD, 2001, Amha 2002, Admasie *et al*., 2005). Typically, MFI schemes deal better with lack of collaterals and idiosyncratic risks. In particular, their closer proximity to local communities and institutions helps to reduce information asymmetries, while their "group lending" schemes enable "peer-to-peer" monitoring and collective guarantees, yielding higher repayment rates.[12]

Moreover, MFI are not the only source of alternative finance available for rural customers. Informal sources hold an important share of the market. Previous studies found out that also in Ethiopia a large share of the population gets credit through informal channels, such as moneylenders, traders, friends or relatives, Iquib and Idir[13] (cf. Emana *et al*., 2005).

A few studies have focused on financial services available for the coffee chain (see Amha and Gabre-Medhhin, 2003; more specifically, Viganò, 2007). Our study adds to this literature, providing recent evidence from Oromia regional state, particularly useful to assess the latest trends on outreach, credit rationing and degree of product suitability for a representative sample of coffee farmers.

In the last ten years, MFI's outreach has boomed. At the beginning, a rather small amount of rural households was served by MFI, with a large geographical variance (see, for example, IFAD–World Bank, 2001). In recent years – especially after the crisis of 2002 – the MFI industry has been experiencing a high rate of growth and a rather pervasive territorial diffusion; further, its products and operations have evolved (see Amha, 2007). In the period 2001-2005 (see Table 2), the number of active clients of all the registered Ethiopian MFI increased from 461 326 to 1 211 305 (roughly 41 percent a

[12] However, group liability may encourage defaults if the borrowing group lacks internal cohesion. Moreover, group lending and collective repayment might result rather inflexible and difficult to coordinate. These features render it particularly inadequate for those members who have more dynamic investment needs, and there is a growing demand for individual lending (see Admasie *et al*. 2005; p. 56). As a result, beside "group lending", some Ethiopian MFI are gradually developing individual lending schemes.

[13] Iquib is a traditional ROSCA: Rotating Savings and Credit Association, while Idir is more like a traditional insurance scheme helping people facing the (expensive) funeral procedure.

year), the active loan portfolio from 308 587 589 to almost 1.5 billion Birr[14] (95 percent a year) and the client savings balance from 243 290 831 to 500 644 795 (26 percent a year). Moreover, the aggregate positive performance was quite widespread, characterizing most of the MFI, both old (larger) and recent (smaller) ones. Obviously, despite its positive dynamic, the aggregate increase of savings was sensibly lower than that of loans.

Table 2. Ethiopian MFI's outreach growth: clients, loans, savings

	Clients (No.)			Outstanding loan portfolio (Birr)			Client savings balance (Birr)		
MFI	**2001**	**2005**	**% Yearly var.**	**2001**	**2005**	**% Yearly var.**	**2001**	**2005**	**% Yearly var.**
ACSI	152 601	394 374	40%	93 159 799	385 274 000	78%	84 874 800	183 475 000	29%
ADCSI	6 906	58 000	185%	7 774 861	118 076 000	355%	994 620	39 703 000	973%
Aggar	-	1 590	-	-	2 554 878	-	-	1 597 236	-
Asser	311	-	-	754 484	-	-	90 070	-	-
AVFS	606	5 306	194%	654 304	3 710 772	117%	194 104	1 255 350	137%
Benishangul	1 319	10 822	180%	441 743	8 018 941	429%	162 163	2 399 462	345%
Bussa Gonofa	3 030	5 257	18%	908 912	2 927 992	56%	82 986	639 540	168%
DECSI	158 689	417 290	41%	111 169 239	657 886 106	123%	121 997 984	162 986 226	8%
Eshet	2 337	11 348	96%	748 473	9 773 762	301%	100 794	1 327 058	304%
Gasha	4 381	9 773	31%	2 446 939	10 935 686	87%	1 187 993	4 583 479	71%
Meket	2 484	2 492	0%	224 525	1 308 495	121%	116 273	174 948	13%
Meklit	1 952	3 701	22%	899 530	3 119 237	62%	293 357	1 910 780	138%
Metemamen	385	4 081	240%	78 563	1 280 900	383%	-	321 300	-
Ocssco	38 186	125 782	57%	28 225 379	138 672 524	98%	15 539 030	50 784 649	57%
Omo	58 058	87 645	13%	38 867 168	67 631 727	19%	10 287 455	29 073 204	46%
PEACE	3 367	10 605	54%	2 114 868	11 047 385	106%	436 416	2 471 215	117%
SFPI	6 526	13 013	25%	3 925 422	12 101 870	52%	1 824 221	5 352 194	48%
Shashemene	1 081	1 677	14%	823 341	1 228 920	12%	155 155	471 716	51%
Sidama	7 891	13 121	17%	5 748 224	10 938 715	23%	1 407 828	3 577 894	39%
Wassasa	1 457	11 007	164%	731 514	7 826 140	242%	189 195	1 770 396	209%
Wisdom	9 759	24 421	38%	8 890 302	23 364 479	41%	3 356 387	6 770 148	25%
Total	**461 326**	**1 211 305**	**41%**	**308 587 589**	**1 477 678 529**	**95%**	**243 290 831**	**500 644 795**	**26%**

Legend: 2001 data refer to December; 2005 data to June.
Source: Amha (2007, p. 54).

[14] Birr (ETB) is the Ethiopian currency. In August 2005, the exchange rate was US$1 = 8.65 Birr.

Face to their logistic and operational challenges, these aggregate numbers register a successful story, indeed. In particular, Ethiopian MFI managed to focus on the active rural poor. For example, the average loan size stabilized around 1 000 Birr (approximately US$116) (see Amha, 2007; p. 16). However, new challenges need to be tackled. First, although the MFI have reached a non-negligible number of Ethiopian farmers, further estimations signal a significant unmet potential demand for microfinance. In fact, the 26 active MFI should have reached only less than 20 percent of the total demand for financial services of the active poor (ibidem, p. 15). Therefore, further qualitative and disaggregated evidence is needed on MFI's (and comparable financing alternatives) supply, farmers' demand and credit rationing of the active poor.

Finally, our study also tackles the issue of the trade-off between outreach and sustainability of microfinance, investigating the saving behaviour of farmers as a basis for further funds mobilization. In fact, after years of microfinance diffusion and enthusiasms, the research agenda should now assess it with respect to its performance – in particular in its potential to become a business model viable *per se*, rather than merely donor-dependent (see Adams, 1998; Morduch, 1999; Zeller and Meyer, 2002).

In what follows, we present an empirical analysis focused on a few important coffee districts of rural Ethiopia.

3. THE SURVEY

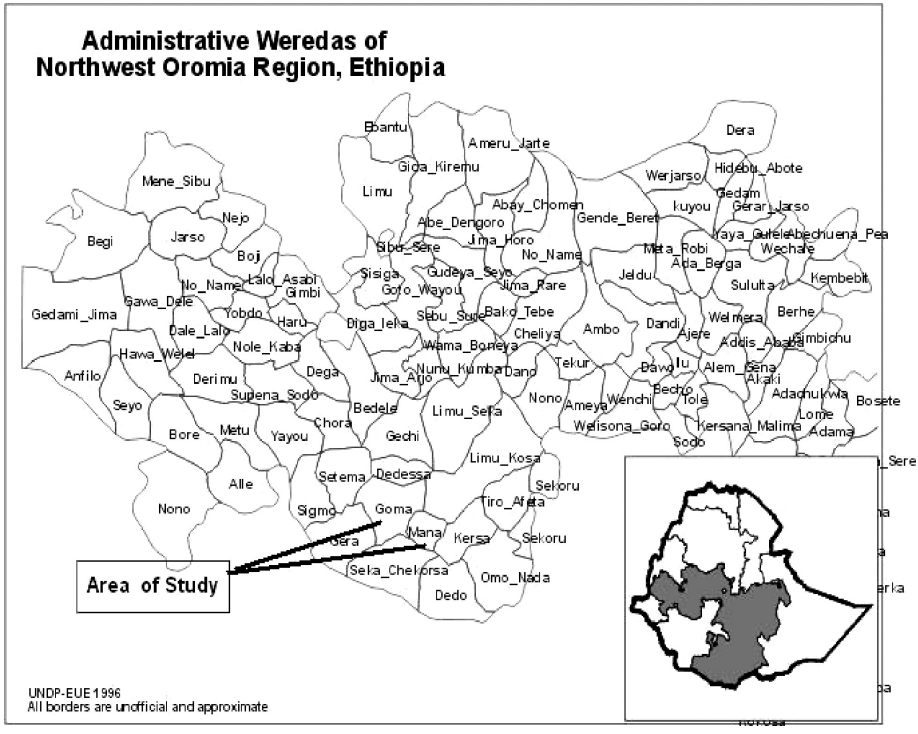
The survey was carried out in August 2005 in the Jimma zone (335 km southwest of Addis Ababa), belonging to the Oromia Regional State.[15] Oromia is the largest regional state, both in terms of territory (30 percent of the nation) and population (35 percent). Eighty-eight percent of Oromia population lives in rural areas, where the average household size is five persons. Agriculture constitutes the mainstay of the economy and is characterized by fragmented and subsistence farming. Eighty-five percent of the coffee produced in the region is marketed raw: sun dried (or unwashed) coffee.

The Jimma zone has large areas of potentially cultivable and irrigable lands. In 1999/2000, about 45 percent of the total area was arable (of which

[15] Oromia is composed of 12 administrative zones and 180 weredas (subunits). Each wereda is further divided into kebeles (peasant associations); the latter usually includes several villages. Jimma Zone has 13 weredas: out of these, Goma, Mana, Limu Seka and Limmu Chekorsa are predominantly coffee-growing areas.

30 percent was under cultivation). In Goma and Mana weredas (see Figure 1, map of the study area), where the present study was conducted, most of the cultivation is forest coffee, at middle altitude of 1600-1700 m.

Figure 1. Map of the study area



The first step of the analysis was the *ex ante* identification of actors who are playing a role in financial services and in the coffee production. Two classes of actors were identified: coffee farmers at the kebele level, and formal financial providers (banks, cooperatives[16] and MFI). Primary informa-

[16] In our sample, for "cooperatives" we mean "multipurpose cooperatives", which both comprise pure agricultural (and trade) cooperatives – which do not offer financial services – and those agricultural cooperatives that also provide some types of financial services (mainly small loans and deposits). Instead, we do not have in our sample farmers belonging to SACCOs (savings and credit cooperatives). On the difficult transition experienced by Ethiopian Saccos, see Viganò (2003).

tion was gathered by interviewing 120 farmers, using semi-structured questionnaires. Stratified random sampling was used to build a representative set. Before starting the round of interviews,[17] the experimental questionnaire was pre-tested on a small sample of farmers and consequently adjusted to fit the local situation.

Moreover, thanks to the organizational help provided by our contacts, we were also able to organize "focus group" discussions among these actors. After the survey, secondary complementary information was collected – also with formal interviews to key experts of the coffee chain – to map the financial sector and the organization of the Ethiopian coffee market.[18]

4. MAIN RESEARCH FINDINGS

Sample description

The group originally interviewed was composed of 120 farmers. However, for the specific policy purposes of the present analysis, we decided to drop the smallest ones (those having less than 0.5 ha of total land) and focus on the active poor. This choice reduces our final sample to 87 cases.

Being the size of land a fundamental individual characteristic (as the main structural feature of production), influencing the financial and risk profile of rural activities, farmers were first classified according to it: small farmers (those having between 0.5 and 1 ha of land), medium farmers (between 1 and 2 ha), and large farmers – presumably the wealthiest (between 2 and 6 ha). Our sample is mainly composed of males (88.5 percent).[19] Almost 50 percent of the sample is illiterate, and 16 percent can only read and write; only 9.2 percent of the farmers managed to attend a secondary school level of education.

[17] We would like to thank once again the NGO FCE (Facilitator for Change Ethiopia, Jimma), who provided us with enumerators and assistants for interviews and translation.

[18] The list of subjects contacted/interviewed include (see glossary): the NBE, the CBE, the DBE, the RUFIP Program, the OCSSCO, the MOA, the MoARD, the EU CIP/MoARD program, the wereda administration offices of Goma and Mana, the AEMFI, the USAID, the Federal Cooperative Commission, the OCFCU and four multipurpose cooperatives in Goma and Mana. Interesting information was also collected from Harbu MFI, Buusaa Gonofa MFI and FCE in Addis and Jimma.

[19] This does not come as a surprise, given the social structure of rural Ethiopia and the fact that we interviewed the household heads. Therefore, most of the few women interviewed were widows.

Table 3. Background statistics

	Mean	Std. dev.	Median	Min.	Max.
Age (years)	46	10.7	45	25	73
Family size (persons)	7.2	2.8	7	2.0	14
Working people (persons)	5.4	2.3	5	0	14
Children below 5 y.o.(persons)	1.2	1.2	1	0	4
House–road distance (km)	2	2.3	1	0	12
House–market distance (km)	4.7	4	5	0	15
Size of land (ha)	1.2	0.8	1	0.56	5.5
Coffee land (ha)	0.6	0.5	0.5	0.07	3.2
(Other) crop land (ha)	0.54	0.4	0.5	0	2.5
First activity income (% tot.)	70.7	13.8	70	40	100
Second activity income (% tot.)	21	9.7	20	0	50

Legend: Std. dev.= standard deviation; Min, Max: minimum and maximum values.
Source: Authors' survey.

Table 3 brings a wealth of interesting information for framing the subsequent analysis. First, age mean is 46 years, above the country's life expectancy at birth (42 for males, 45 for females), and the median is slightly below (45). Thus we have the older share of the population – and also this can be partly related to the patriarchal status of the Ethiopian rural society. Second, the average family size is 7.2 persons, and the distribution is rather concentrated around the mean (std. dev. 2.8).[20] Most of the family components work (5.4 members, and this often includes the occasional participation of children formally at school).

Our rural sample was selected to be not "too remote", i.e. reflecting a good index of rural access, for a variety of reasons (logistics of the survey, but also theoretical reasons, such as the likelihood of access to financial services). This is confirmed by the average distance from the main road (2 km, with a median of 1 km), and from a rather close average distance from the main (village) market (4.7 km). Concerning the land size, the sample has an average of 1.2 ha,[21] and this is in line with the smallholder predominance of

[20] Indirectly, we can also notice the larger family found in rural areas, since the average size for Oromia is around five persons, cf. Oromia Finance Economic Buro in Addis Ababa, August 2005.

[21] Again, with respect to the modal type of farmer in rural Ethiopia, our average land size is bigger. This sample selection makes our analysis focused on the "active poor", and more meaningful. In fact, any evidence on financial deficit can be easily generalized, together with its policy implications, to rural Ethiopia.

the Ethiopian universe. Therefore, we face a very traditional and small-scale agricultural landscape, which is not conducive to the employment of intensive and mechanized techniques. However, given the residual character of the cultivation of the other crop (maize – corn), mostly used for household consumption, coffee represents a more that proportional share (precisely, 70.7 percent) of farmers' income, in a rather generalized way (median 70, std. dev. 13.8). Obviously, this quasi-monoculture resulted to be very risky in those years when coffee prices dropped dramatically in the region.

We now proceed to the examination of the financial behaviour of the sample. First, we investigate how farmers manage the different risks faced during the year. Second, we study the basic features of the credit market, and in particular we investigate what are the existing financial instruments used in the Jimma zone.

Risk Management

Table 4. Main risks encountered by the coffee farmers

	%
Coffee price volatility	85.1
Coffee berry disease (CBD)	55.2
Lack of access to loans	47.1
Weather conditions	24.1
Illness/disease of the family	19.5
Scarcity of land	11.5
Fall in other crop income	8

Frequencies do not add up to 100 because of multiple responses.
Source: Authors' survey.

Table 4 presents the main risks encountered by coffee farmers. The most frequent one is coffee price volatility, which has been one of the systemic (id est, common) risks mostly affecting coffee producers.[22] Obviously, the living condition of coffee farmers is directly linked with the pendulum of coffee prices.[23] In particular, during the lean period (typically from June to August or September), preceding the start of the coffee harvest, small coffee farmers

[22] In particular, many mentioned the difficulties inherent in forecasting prices; moreover, others mentioned that the government should stabilize the prices.

[23] Significantly, one of the farmers observed: "Our life goes up and down with the coffee prices and there is nothing that we can do about it."

suffer from hunger and are more exposed to malaria, exacerbated by the raining season.

The second risk is the CBD disease, also called "cholera" by local farmers.[24] Even if remedies are potentially available, mainly through the Coffee Improvement Project (CIP) from the EU, a sizeable portion of farmers has not benefited from the service yet; thus there is a high demand for training on CBD. Moreover, more training is gradually needed as a growing number of farmers switch to (higher quality) organic coffee, which excludes the use of fungicides.

The third systemic risk is the perceived lack of access to loans. Although apparently inappropriate as a risk, its sizeable frequency unfolds a quite widespread difficulty in getting credit for those involved in rural activity. As it will be investigated further below, this market failure is strongly related to the lack of collaterals and the resulting credit rationing.

Further, a non-negligible part of the sample needs credit also to finance subsistence goods or services, such as in the case of illness (19.5 percent), frequently caused by malaria.

Finally, scarcity of land as a risk mainly refers to the small size of Ethiopian coffee-growing farms, which are comparatively exposed to an higher variance of the harvest; moreover, the land is not owned, but only rented from the State - and this adds further uncertainty. Its occurrence as a risk is rather small (11.5 percent), but its frequency has been reduced by our choice of excluding from the sample the smallest (marginal) farmers.

Table 5. Risk management strategies

Diversification of farm activities (other crops, animal fattening)	44.8%
Coffee quality differentiation (organic)	42.5%
Reduction of operative costs	20.7%
Secondary production activities	18.4%
Commercial credit	13.8%
Long-term contracts with buyers	12.6%
Saving	2.3%

Frequencies do not add up to 100 due to multiple responses.
Source: Authors' survey.

[24] CBD disease is causing large losses in coffee production because the grains get black before maturation and become spoiled.

Risk management strategies include income diversification and income skewing activities,[25] while risk coping mechanisms include self-protection instruments (such as saving and credit) or informal network arrangements (with friends/relatives, or traditional Ethiopian institutions, such as Iquib e Idir) (cfr. Dercon, 2002). Table 5 illustrates that in our sample there is a clear prevalence of risk management strategies over risk coping mechanisms: farm's activities diversification (44.8 percent), coffee quality differentiation (42.5 percent), reduction of operative costs (20.7 percent) and secondary production activities (18.4 percent).[26] Less frequently, a few risk coping strategies are also used, mainly commercial credit (13.8 percent) and long-term contracts with buyers (12.6 percent). Saving as a self-insurance against risk is negligible, at least according to their answers. In fact, as we will see later, their actual behaviour is different; although most farmers save, they do not perceive it as a risk coping strategy.

Investigating further, our sample shows us that the most diffused ways of risk management are those that leverage on local knowledge and production skills (i.e. production diversification and reorganization), but these activities remain conditional on credit availability. In fact, as shown later, activity diversification is only possible for entrepreneurs receiving MFI loans, because the higher cost implied by informal sources (friends, moneylenders, etc.), considering the amount necessary for the investment,[27] would be unbearable. Alternatively, there are production diversification activities, such as conversion to organic coffee, which are increasingly chosen because of the partial public subsidization of the cost. In particular, our focus group discussions showed that the OCFCU and a few multipurpose cooperatives are intensively involved in this issue, together with local farmers.

It is also interesting to analyse the main risks in relation to the size of land cultivated, as shown in Table 6. As expected, there is a certain negative relation between the frequency of risk perception and land size, whatever the risk considered. This is partly due to the sample composition effect.

[25] Income diversification involves combining different activities showing low positive covariance, while income skewing is typically obtained by undertaking low risk activities, even at the cost of unsatisfactory returns. The latter is the case of labour selling, or small-scale cultivation of self-consumption vegetables.

[26] While the diversification of farm activities is directly managed by the farmer (and its family), secondary activities have a dependent (selling of labour to other entrepreneurs) and individual character. Usually, the latter are also secondary as economic importance.

[27] For example, an ox costs around 800 Birr. Slightly cheaper is bee-keeping, which is a good source of income in the region.

Table 6. Most frequently encountered risks related to farmer size

Instruments	Small	Medium	Large	Sample incidence
	(%)	(%)	(%)	(%)
Volatility of prices	54.1	39.2	6.8	85.1
Coffee berry disease	54.2	39.6	6.3	55.2
Lack of access to loans	43.9	48.8	7.3	47.1
Weather conditions	66.7	33.3	0	24.1
Illness/disease in the family	52.9	23.5	23.5	19.5
Scarcity of land	70	20	10	11.5
Fall in other crop income	57.1	28.6	14.3	8

Multiple responses and row percentages. The last column refers to the risk incidence over the total sample (87 farmers).
Source: Authors' survey.

In particular, focusing on the most frequently perceived risks, small producers particularly fear weather conditions, volatility of prices and coffee disease. Medium farmers, instead, suffer comparatively more from lack of access to loans – probably because they have an effective demand that remains (partly) unsatisfied. Large farmers, instead, register a comparatively higher occurrence of illness risk, which is more evenly distributed across classes. After all, health care in rural communities is rather undifferentiated.

Table 7. Risk management strategies by farmer size

Instruments	Small	Medium	Large	Sample incidence
	(%)	(%)	(%)	(%)
Diversification of farm activities	48.7	38.5	12.8	44.8
Coffee quality differentiation	54.1	37.8	8.1	42.5
Reduction of operative costs	55.6	38.9	5.6	20.7
Secondary production activities	68.8	31.3	0	18.4
Commercial credit	58.3	33.3	8.3	13.8
Long-term contracts with buyers	72.7	18.2	9.1	12.6
Saving	0	50	50	2.3

Multiple responses and row percentages. The last column refers to the risk incidence over the total sample (87 farmers).
Source: Authors' survey.

Table 7 shows that, while the diversification of farm activities is more

evenly distributed across size classes, personal income diversification mainly affects (68.8 percent) smallholders: they need to sell their labour to other entrepreneurs engaging in secondary (dependent) activities. Similarly, small producers also commit to long-term contracts with merchants at a fixed price. Given their small size and negligible market power, as well as the predominantly negative expectations related to the recent price falls, this long-term instrument often results in rather asymmetrical (i.e. unequal) bargaining.

Utilization of financial services

Financial services in microfinance include loans, saving products, insurance and transfer payments. In our study, we shall focus on the first two.[28]

Among those people without access to financial services, credit is needed principally for two reasons: for agricultural production (48.4 percent) and to purchase livestock (32.3 percent). Instead, concerning people who obtained access, Table 8 shows the main utilization of loans.[29] We see that the "consumption use" is rather widespread (53.5 percent): mainly purchase of food, but occasionally also clothes, children education and house expenditures.[30] In second place is production diversification (32.1 percent), while coffee-related production activities rank third (14.3 percent). Although the period in which the survey was conducted might have somehow[31] increased the "consumption use" frequency, we believe that there is a more structural explanation for it – the prolonged crisis affecting the rural population – which explains why the majority of the financed farmers did not invest in coffee production or land improvement techniques.

This crisis, although mainly rooted in specific coffee factors (price volatility, CBD, inadequate cultivation techniques), was reinforced by the other ex-

[28] Insurance products for agriculture (for example, to protect farmers against systemic risks, such as fall in coffee prices), were not detected in the study area. The only exception is a "micro life insurance" product recently introduced by the MFI OCSSCO (see later).

[29] We acknowledge that, because of the fungibility of money, sometimes the stated use may differ from the actual one (for example, when loans are available only for production, as those from MFI). However, key experts affirmed that the group lending methodology should help minimize the likely occurrence of this type of moral hazard.

[30] Indeed, while food purchase if truly consumption, children education and house expenditures need to be considered investment activities, which in the long term make agricultural societies progress.

[31] Because coffee picking usually takes place between September and January and coincides with food crop harvesting, there is a lack of cash and food particularly from June to August (lean period, at the end of which the survey was conducted).

ogenous shocks and infrastructural gaps affecting the country, discussed in Section 2. Moreover, this crisis has shown a high persistence, which still dampens aggregate agricultural investment and accumulation.

Table 8. Use of loans granted to coffee farmers

	No.	%
Coffee inputs	8	14.3
Consumption, house expenditures, etc.	30	53.5
Other production (trading, animal fattening, other crops)	18	32.1
Total	56	100

Source: Authors' survey.

Access to financial services: loans

Almost two-thirds of the sample (64.4 percent) had access to financial services in the past, while the remaining (35.6 percent) lacked any source of credit, although most tried to obtain it (54.8 percent).[32] Moreover, for those who did not even try, the answers depict a framework of lack of supply of financial services in the local area, self-rationing and poverty-traps.

Thus, the overall picture leads to conclude that almost the entire sample did have a potential demand for financial services. The majority was served, while the remaining share (still substantial) was unsuccessful for a variety of reasons: regarding the lender (for example, its temporary inability to lend), the borrower (not meeting the income or collateral conditions to obtain credit), or both subjects (distance or other transaction costs).

To complete the analysis on this issue, we assess the degree of satisfaction from the financial services. Before that, we present the types of financial service marketed (Table 9). Farmers were asked to disclose the amount and all the sources of credit received.

Table 9 shows that the financial market is roughly tripartite: 33.8 percent of the farmers were served by an MFI (OCSSCO).[33] Second, 33.8 percent borrowed from informal financial providers: friends (16.2 percent), moneylenders (8.8 percent) and traders (8.8 percent). Finally, cooperatives, with a share of 32.3 percent.

[32] Further analysis shows that the most frequent reason (29 percent) given for failure to obtain was that also the money lender was financially constrained, and hence he could not lend.

[33] It was the only formal microfinance provider serving coffee producers present in the study area. In fact, in Ethiopia MFI diffusion in the territory does not overlap.

Table 9. Sources of financial services and amount of loans obtained

Sources	Cases		Amount of loans				
	No.	%	Mean	Std. dev.	Coeff. variat.	Min.	Max.
Friends	11	16.2	293.6	339.4	115.6	60	1250
Traders	6	8.8	145	103.5	71.4	60	300
Moneylenders	6	8.8	193	133.7	69.25	60	400
Cooperatives	22	32.3	115	34.5	30	42	200
MFI	23	33.8	905	241.9	26.7	445	1500
Total	68	100	330.3	170.6	51.6	133.4	730

Legend: Double source of finance is present in a small number of cases. Mostly, they refer to people having OCSSCO as the main source, and cooperatives as the second (marginal) one.
Std. dev.= standard deviation; Coeff. variat.: Coefficient of variation
Source: Authors' survey.

If the proportion of the clients served by the MFI and the informal sector is practically identical, the average loan from the MFI is substantially higher, being 905 Birr,[34] against the 210.5 offered by the informal sector.[35] Finally, 115 Birr is the average loan lent by our cooperatives.[36] Moreover, the dispersion around the mean of the MFI loan amount is rather small with respect to that of money lenders and traders (cf. the coefficient of variation). This indicates that the credit chances offered by MFI are higher in quantity and relatively less unequal among borrowers. Finally, friends seem to offer a good opportunity for credit (with an average loan of 294 Birr), but they appear on average a source internally differentiated[37] which may not often be available, being highly dependent on their own local context and human relations network.

Other advantages of the MFI financial offer emerge from the following Table 10, where we summarize the range of duration and cost of loans according to the different financial sources.[38] This analysis is important be-

[34] Amount sufficient to buy an ox.

[35] Mean calculated among its components (friends, traders, moneylenders).

[36] Because of the internal variety and current evolution of the Ethiopian universe of cooperatives, our sample findings on their financial services might not be representative. This caveat does not apply to MFI.

[37] As showed by the highest coefficient of variation in the loan amount. Moreover, the interest rate charged by friends widely vary, as commented *infra*.

[38] A methodological caveat applies. While for the duration we obtained reliable and non-ambiguous direct information from the questionnaires, for the estimation of the cost we had to make some assumptions, because the amount to be repaid by some borrowers (for example, many of those receiving from moneylenders and traders) was not stated in monetary terms but "in kind" (id est, kilos of coffee repaid for a given initial loan). Having made the relevant assumptions, we

cause financial service providers select differently their customers, requiring different guarantees (collateral) or conditions of eligibility from coffee producers. Thus, Table 10 should not be interpreted as providing the whole range of possibilities for a potential borrower, but rather the different characteristics of the offers designed by the lender, which most of the time acts in a context of quasi-monopoly.

Looking at the duration, we uncover relevant differences. First, it is shown that the longest period of duration is given by MFI (12 months maximum), which also possesses the highest minimum duration (6 months). Friends offer in theory the second best alternative for duration, better than traders and moneylenders. Cooperatives, instead, offer small-term loans (3–6 months only).

Table 10 - Duration and cost of loans according to the source

Sources	Duration (months)		Annual interest rate (%)	
	Min.	Max.	Min.	Max.
Friends	2	12	0	120
Traders	5	8	200	660
Moneylenders	5	7	120	171
Cooperatives	3	6	0	0
MFI	6	12	11.5	11.5

Source: Authors' survey

Things change greatly when we go to analyse the underlying cost conditions. The MFI charges a very reasonable rate of interest, equal to 11.5 percent per year. In fact, we need to consider that the Ethiopian inflation[39] rate has been recently quite high (11.6 percent in 2005, descending from 17.8 percent in 2003). While for the minimum rate their offer is surpassed by that of friends (most of the time zero) and that of cooperatives, MFI stands as the cheapest concerning the maximum rate of interest.[40] However, the eligibility

calculated the "implicit" rate of interest of the credit transaction, which resulted to be usually very high. Because of this methodological heterogeneity, we preferred not to calculate any centrality measure (which in theory is also influenced by the amount of the loan, and hence should be weighted), but rather to present the range of the rate of interest distribution paid by the borrowers (taking both those in monetary terms and "in kind"), for each specific source.

[39] As proxied by the consumer price index.

[40] Again, excluding the maximum rate of cooperatives offering financial services. In fact, their specific operative model and moderate incidence in our sample suggest not to take them as a benchmark for the other formal financial institutions, such as MFI. See more on footnote 43.

criteria for MFI loans are rather selective and cannot finance items other than agricultural production, livestock or similar (in general, loans are given for income generating activities, while consumption is excluded).[41] Moreover, there are also restricted time periods of eligibility. Usually, loans are offered during selected months (January–February in our sample). Further, loans are only given jointly to a group of borrowers: while the leader of the group acts externally as an instrument for the reduction of information asymmetries (and transaction costs), the role of the group is that of peer-to-peer monitoring and collective guarantee. Finally, the group lending methodology acts partly also as a portfolio diversification, because different farmers might use their loans for different productive uses (coffee, but also animal fattening, beekeeping and other agricultural and non-agricultural productions).[42]

Consequently, the strictness of the eligibility criteria and the monitoring mechanisms yield a negligible rate of overdue loans for MFI, which can set in return very reasonable rates of interest without compromising profitability. In fact, Table 11 shows that, despite the sustained growth of the outreach and the recent crisis of the coffee prices, the MFI has managed to maintain a high rate of loan repayment (also during 2002) and to quickly recover from losses, as signalled by the dynamic of the return on assets (ROA). Moreover, despite the fast increase in its operative structure, its efficiency and productivity indicators (respectively, the percentage incidence of the operating expenses and the number of borrowers per staff member) signal a steady progress.

Table 11. Structural and performance indicators of the MFI OCSSCO

Fiscal year	Loan portfolio annual variation (%)	Repayment rate (%)	ROA (%) Return on assets	Operating expense / loan Portfolio (%)	Borrowers/ staff members
2000	-	98.70	n.a	n.a	117
2001	18.8	97.04	0.86	11.5	115
2002	46.0	94.29	-0.63	10.6	132
2003	32.4	99.15	4.26	8.8	185
2004	54.1	99.15	3.87	7.5	194
2005	60.1	99.52	5.94	6.3	138

Source: computations on OCSSCO data (column 2) and MIXMarket (columns 1, 3–5). n.a = not available.

[41] Eligibility criteria of OCSSCO include: 1) being poor in relative terms, 2) willing to be supervised, 3) good credit history, 4) group membership and liability (see later).

[42] However, this indirect kind of portfolio diversification is rather imperfect and mostly unmanageable by the MFI. Moreover, it cannot deal with those systemic risks affecting all the agricultural productions, such as droughts and other natural catastrophes frequent in Ethiopia.

Cooperatives[43] offer rates of interest even cheaper than MFI: In our case (see Table 10) the rate was zero, while a low administration or membership fee was charged. However, credit is not their first income-generating activity (typically borrowers need to sell coffee to the cooperative to be eligible for credit, getting sometimes a lower price for coffee with respect to alternative trading channels); in any case, cooperatives give only credits of small amount. Generally their main screening practice is the past behavior of the potential borrower.

Borrowing from friends is often very cheap (9 over 11 cases show a rate of zero, see again Table 10), while in the remaining cases the cost is non-negligible (up to 120 percent). A rather flexible and accessible credit channel results to be that of moneylenders and traders (credit is obtainable for various purposes); however they charge the highest interest rates in the sample. This empirical evidence closely matches that investigated in rural underdeveloped areas by Bottomley (1975), for which the judgement remains controversial.

In synthesis, the fairness of the cost of the credit cannot be evaluated in absolute terms, but needs to be related to its risk. Now, turning to our sample, several elements highlight that these borrowers qualify as very risky (especially in idiosyncratic terms). In general, they appear affected by highly urgent personal needs (serious health problems or mere subsistence), which do not permit to wait longer to be satisfied. Thus, this credit relationship is highly risky for both parties: credit lenders select the most risky portion of the credit demand rationed by the other channels – often without collateral – and need to fix a high rate and a short repayment period to compensate for the higher rate of overdue loans. On the other side, these borrowers select the most costly and risky offer, which however is likely to dampen their prospects for future recovery.

A related important element is that, most of the time, the highest rates of interest (up to several hundreds of percent points) are found when the loan is returned "in kind". This phenomenon admits different explanations. A first one relates to simple market equilibrium dynamic, and assumes a large unbalance between demand and supply of funds, especially likely during the lean

[43] Access to funds and zero interest rates are reserved to cooperative members, who repay the cash amount in kind just after harvest at the current market price. In general, the principal function of the multipurpose cooperatives is strictly agricultural: with the support of the Union (higher level cooperative), they are mainly concerned with production and marketing issues. They have just started to provide loans to their members in 2005 to help the coffee producers to cope with the difficulties of the lean season. Their financial role is likely to remain modest, since they do not have either technical knowledge or preferential access to credit funds; in this zone, they also carry bad losses from the past.

period: a partial support comes from the fact that most of the loans borrowed from the informal lenders and the cooperatives were requested in June–July. However, we could also think that moneylenders and particularly traders (id est, big coffee merchants) ask a premium for risk on loans repaid in kind, because in this case they bear the risk of a sudden fall in prices (the quantity of coffee to be repaid is in fact stated at the beginning of the period). However, given the interest rate demanded, the risk premium rationale can justify only a small portion of the excess rate demanded. Perhaps a further explanation is to be found also on asymmetries of information and on a certain kind of "computation illusion", which affects the farmer when the repayment is in kind.[44]

In sum, when high interest rates are coupled with low agricultural productivity and income, informal credit might function as an emergency tool, but cannot help small farmers to get out of the poverty trap.

Table 12. Principal problems faced with the loans

	n.	(%)
Inappropriate loan terms (grace period, duration, collective eligibility)	21	37.5
No problem	16	28.6
Small amount	11	19.6
High interest rate	8	14.3
Total	56	100.0

Source: Authors' survey.

We also asked what was the main problem faced with the loan received. Neither the interest rate nor the small amount rank first, but the inappropriate loan terms (see Table 12). Most of the time the sample complained about the group methodology, forcing them to be organized in groups and submitted to the joint liability pressure for the repayment of the credits. However, as we saw in Table 11, this group enforcement device works pretty well, ensuring high rates of repayment, as well as the viability of the microfinance formula. Farmers also blamed that the time frame of the loans was not synchronized with the financial cycle of the coffee harvest (once a year).[45]

Concerning the relation between size of land and the amount of loan, Table 13 highlights a positive relation, both intuitive and coherent with the findings of Section 2.

[44] Again, the main inference for that comes from the fact that interest rates calculated on loans repaid in monetary terms are sensibly lower than those repaid "in kind".

[45] Farmers would like to receive at least one-year loan term, and a sufficient grace period to start repaying.

Table 13. Relation between land size and amount of loans (Birr)

Land size	No.	Mean	Std. dev.
Small	29	371.3	382.0
Medium	24	626.7	443.1
Large	3	933.3	305.5
Total	56	510.8	430.9

Source: Authors' survey.

Moreover, further evidence depicts that the vulnerability of small farmers leads them to borrow more frequently from the informal sector (friends, moneylenders and coffee traders), because for various reasons (lack of collateral, eligibility, asymmetric information), they are not served by the microfinance institution. On the contrary, 61 percent of the medium producers (and most of the large ones) get their loans from MFI, while only 35 percent of them deals with the informal sector. Instead, the cooperatives mainly serve the smallest farmers, the ones most likely to be interested in the small amounts of credit available from cooperatives.

Finally, we asked the sample with access to financial services if the amount of credit requested was obtained. Among those who got a loan during the last year, only a small minority (30.4 percent) declared itself satisfied with the amount received, while the majority judged the amount insufficient (69.6 percent).[46]

Based on this evidence, the following step of the analysis was to find a quantitative measure of credit rationing in the sample. The questionnaire asked the loan amount needed:[47] this information yields our measure of credit demand (cf. variable DEMAND in Table 14). Then, we simply calculated the difference between the amount of credit asked and the amount of loan actually received (in the last 12 months), both in absolute (see variable GAP)[48] and relative terms (see variable GAP%, calculated as the ratio of GAP to DEMAND). These two variables (GAP and GAP%) measure credit rationing in our sample.

[46] Complementary, those who did not receive any loan were asked about their financial needs, and the likelihood to ask a loan in the near future. Again, almost the entire set said that they would have asked for a loan.

[47] The questionnaire was structured in a way to ask similar information to both types of farmers, those with past access to financial services and those without. So, the variable "DEMAND" is available for both types of farmers.

[48] Obviously, for those who did not receive in the past any loan, the gap is simply equal to the present demand.

Table 14. Demand of loans and financial gap for coffee farmers

	Min.	Max.	Mean	Std. dev.	Coeff. var. (%)
DEMAND (a)	100	20 000	**2 457.8**	3 807.6	154.9
GAP (b)	0	20 000	**2 104.7**	3 886.9	184.7
GAP %	0	100	57.8	42.3	73.2

Legend: Absolute values in Birr in the first two rows; % values in the third.
GAP% is calculated as the ratio b/a, at the individual level. Consequently, the GAP% mean presented in table 14 is not weighted.
Source: Authors' survey.

Table 14 shows that the distribution of the demand for loans is rather dispersed around the mean (see Std. dev.), signaling a certain degree of heterogeneity among the financial needs of farmers. In details, the size of the average demand of farmers is 2458 Birr. However, the amount demanded results to be far higher than that actually received, so that the average credit gap (GAP) is rather high, being equal to 2105 Birr. Moreover, the relative gap (see GAP%, not weighted) shows that the average farmer receives only 42.3 percent of the amount of loan asked, while the remaining majority portion (57.8 percent) is not financed. Finally, if we calculate the aggregate (weighted) GAP%, the situation is even worse, because the credit rationing affects 86 percent of the aggregate demand.[49]

Saving products

Saving can help small farmers to face difficulties linked to life cycle events, emergency needs,[50] or to undertake investment or self-made "pension schemes". In fact, it creates a money reserve and stimulates financial planning, thereby qualifying as a risk-coping strategy (cf. Dercon, 2002). During the different meetings with qualified financial experts (banks, MFI, Union representatives), a certain consensus emerged around the fact that farmers would not possess the culture of saving. This judgement apparently contradicts the evidence in our sample (a large and unexpected share of farmers save), which is also well represented in the literature. Rutherford (1999), for example, argued that "Poor people can save and want to save, and when they do not save it is because of lack of opportunity rather than lack of capacity". More generally, other authors explored the potential for saving in Africa (see Mauri, 1983).

[49] The weighted GAP% is calculated as the ratio of the two corresponding sample means.
[50] Crop and weather insurance products do not exist in these rural communities.

Probably, practitioners' views diverge because they mainly refer to monetary savings. In fact, in our sample among the farmers who had saved in the past (85 percent of the total sample), most of them did it "in kind" (47.3 percent, mainly small farmers) and in "kind and cash" (24.3 percent), rather than only "in cash" (only 28.4 percent). Indeed, saving in kind seems to them easier and safer than keeping money in the house (chosen by 75 percent of total cash savers), given that most cash saving alternatives are still inexperienced or even inaccessible (also cognitively)[51] for the majority of the rural population. Moreover, financial saving products seem to possess a low intrinsic attractiveness.[52]

Further, it seem to us rather inevitable that in an "quasi-subsistence" agricultural regime, where self-consumption is relevant and agricultural markets are too small, also saving tends to assume a "non- monetary" nature. In fact, saving in asset (cattle) is a rather frequent and traditional option in Ethiopia, because it presents the advantage of being an (asset) saving while it can equally be utilized as a capital input to production.

As a consequence, despite the fact that saving in kind (cattle) remains intrinsically affected by indivisibilities[53] and might sometimes become very risky,[54] its persistent diffusion should direct our attention to both sides of the financial market (including supply), rather than only to demand side, as done in the "anthropological" explanation given by the financial community.

In sum, there are macroeconomic (financial instability, endemic poverty and coffee price decline) and seasonal (lean period) reasons that mainly account for the reduced saving flow.[55] In this context, a substantial part of saving follows the traditional pattern "in kind", while the low accessibility of

[51] Undoubtedly, remote location, lack of information and low levels of education of rural communities are not cognitively conducive to the use of advanced saving products.

[52] A formal saving account with the local MFI was chosen by 22.2 percent of cash savers, yielding an interest rate of 4 percent per annum. Four percent is also the floor rate set by Ethiopian regulators on saving deposits. Consequently, face to the higher inflation rate (11.6% percent in 2005), deposits do not seem highly appealing to the rural population.

[53] Obviously, livestock cannot be partially liquidated. As a consequence, saving in kind cannot be easily managed according to the present needs, thereby reducing the reserve for future needs.

[54] Such as during animal disease epidemics, or recurrent food crisis, as in 1984-85. At that time the terms of trade among cattle and food collapsed. However, people rationally kept cattle, cutting food consumption – more costly – in the attempt to recover in the future the full value of their saving (cf. Dercon, 2002).

[55] During the field survey, most of the farmers did not have any saving left because of the lean season. The low current profitability of coffee production was also mentioned by 30.8 percent of the producers as the main reason for not saving.

rural communities, the scarce information on the new saving products and their reduced attractiveness contribute to dampen their diffusion.

As a counterproof, we demanded what would have been the most useful financial products for them, if they only had the choice between loans and savings (Table 15). It is quite surprising to see that the majority of farmers indicated saving services as the first priority, rather than loans.

Table 15. Preference between savings and loans

	No.	(%)
Loans	22	25.3
Savings	56	64.4
Savings and loans	9	10.3
Total	87	100

Source: Authors' survey.

We believe that this evidence confirms the need to give policy incentives and new instruments to MFI and financially active cooperatives, to augment the outreach of their activities in rural areas by emphasizing not only the credit side (as mainly done up to now), but also by introducing and actively promoting tailored saving products. The latter in turn, once mobilized, can increasingly sustain the take off and the autonomous development of the "microfinance banking", rendering it less "donor-dependent". In this respect, currently Ethiopian authorities already provide MFI with the right incentives, at least from the regulatory side, because there is virtually no restriction on savings mobilization for loans, apart from a basic liquidity constraint.[56] What is still lacking is perhaps a systemic and private-public effort towards the promotion of the culture and good practice of monetary saving.

As a final remark, during the survey we frequently heard the local or administrative agents of the wereda complaining about the fact that farmers earning "lots of money" upon harvest do not save for emergency events. Our sample findings suggest that, if more financial providers were operating and actively promoting suitable new services in the study area, people would probably save more.

We also argue that the introduction of tailored saving products could alleviate the absence of specific insurance products, whose introduction appears

[56] Differently from banks, which face stricter reserve requirements, MFI are only obliged to maintain 20 percent of their deposits mobilized in cash and/or in bank accounts.

far more difficult,[57] because of the prevalent systemic character of the risks faced in rural developing countries (were risk diversification is less feasible). Although the two instruments are not substitutes, deposits and other simple saving products can enable farmers to better manage their financial cycle. Currently, the most typical "financial instrument" consists in preselling to merchants (sebsabies and ackrabies) the coffee harvest at a fixed price, in order to get financed; but this instrument is too costly (in terms of a lower negotiated price for coffee) and rather inappropriate.

5. CONCLUSIONS

Financing rural areas and communities, although economically and ethically necessary (and socially inclusive), is a difficult business, where traditional financial markets fail, in Ethiopia as well as in most developing countries. Often farmers result excluded (or credit-rationed) by banks (commercial and even rural), and they are bound to get access to alternative informal sources, which often aggravate their financial situation. This study focuses on the current situation of Ethiopian coffee farmers which, for a series of reasons, have been facing the negative consequences of radical institutional reforms, market liberalization and agricultural price volatility, while remaining in a condition of land fragmentation and low productivity (smallholders account for 95 percent of the country's production).

Roughly, 65 percent of the sample received financial services, while the remaining had no access at all, although needed. Among the available financial sources, the first important provider resulted to be MFI – despite its recent introduction on these rural markets. The MFI is the most suitable source in terms of conditions (low interest rates, longest duration for the loan and largest amount), but its outreach remains limited, touching only 33.8 percent of the sample. Further progress is also needed in the types of financial products offered: for example, the surveyed MFI does not provide consumption loans, mostly needed during the lean season.

Second, the informal sector brings some relief to rural people, especially during the lean period. It is very flexible and quick in access but, except for friends, the interest rates charged are very high, so that in the long term these loans might worsen the poverty trap of farmers.

[57] Recently, the MFI OCSSCO has launched a "micro life insurance", protecting both the household and the MFI in case of death of the borrower (indeed, out of 24 MFI in the country, OCSSCO is one of the first to offer this kind of product).

As far as the cooperatives are concerned, usually they are not perceived as an "official" financial institution. In fact, despite their long history as agricultural and trade partners, they have entered the microfinance business only recently. In our sample, the size of cooperative's operations (average amount and loan duration) appeared rather insufficient face to farmers' demand. We also assessed the relative gap between demand and supply of credit: it came out that on average only 42.3 percent of the original demand of the farmers was satisfied (equal to 14 percent in aggregate or weighted terms).

Regarding saving products, there was a certain evidence of a potential demand for deposit products, which could gradually replace traditional saving "in kind". In particular, saving constitutes a "de facto" risk-coping strategy for farmers, although mostly unconscious. Generally, voluntary monetary saving is still in its infancy in rural communities. Risk management products (insurance) aimed at coffee production are not marketed in Ethiopia, and the recent shocks affecting the whole chain lead to think that this market failure can hardly be solved spontaneously.

To summarize, there is a limited supply of financial services (loans and savings products) to the coffee farmers of Jimma zone. One-third of the credit is informal, and the market power enjoyed by its suppliers renders it highly costly and probably also inefficient. The main consequence is that most lending activities in this area do not contribute to achieve the financial sustainability of farmers and their productive growth, but are simply limited to ensuring current consumption and subsistence, at the most. This situation in turn affects their future financial eligibility as potential customers of "financial" cooperatives and MFI. As a consequence, based on this evidence, a further diffusion of microfinance intermediaries across the whole country is needed, and their current rapid growth comes as a good new. Moreover, targeted and non-distortional policy interventions focused on stimulating the insurance market appear extremely useful.

However, given the current poverty trends of Ethiopia, further complementary policy instruments (also through foreign aid) are equally necessary and urgent in order to build an effective demand for financial services and enhance agricultural productivity. Basically, infrastructural policy (beginning with public services, such as transport, electricity, telecom, where Ethiopia falls well behind) remains an urgent prerequisite to enable private entrepreneurship and the whole process of economic catch up of the country. Moreover, Ethiopian welfare and social standards (especially in health and education) remain highly unsatisfactory and call for stronger public intervention. In particular, the undergoing process of market and trade liberalization

should be closely monitored and carefully co-adapted to its institutions to avoid that the costs of the current structural adjustment further damage the poorest.

List of acronyms and rate of exchange

ADLI	Agricultural Development Led Industrialization
AEMFI	Association of Ethiopian Microfinance Institutions
CBE	Commercial Bank of Ethiopia
CBD	Coffee berry disease
CIP	Coffee Improvement Program (EU program)
CSA	Central Statistical Agency
CTA	Coffee and Tea Authority
DBE	Development Bank of Ethiopia
EPRDF	Ethiopian People Revolutionary Democratic Front
FCE	Facilitators for Change Ethiopia (local NGO)
MFI	Microfinance Institutions
MOA/RD	Ministry of Agriculture, Rural Development
NBE	National Bank of Ethiopia
NGO	Non-governmental organization
PA	Peasant Association (or Kebele)
OCFCU	Oromia Coffee Farmers Cooperative Union
OCSSCO	Oromia Credit and Savings Share Company (MFI)
RUFIP	Rural Financial Intermediation Programme
USAID	United States Agency for International Development
Birr	Ethiopian currency, exchange rate in August 2005: US$1 = 8.65 Birr

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Résumé

Le café demeure un produit de base de l'économie et des exportations de l'Ethiopie. Néanmoins, la chute prolongée des prix du café a fortement affaibli les conditions de la production et ses perspectives : c'est pourquoi la mise à disposition de services financiers appropriés apparaît comme la priorité pour assurer la viabilité des communautés rurales.

Afin de dresser la situation de l'offre et de la demande de services financiers des petits producteurs de café éthiopiens, une étude de cas a été réalisée en 2005 auprès de 120 caféiculteurs provenant de la région de Jimma. Cette analyse a été renforcée par des discussions « focus group » et des entretiens individuels avec des spécialistes de la filière café.

On observe qu'une part importante de la demande des services financiers demeure insatisfaite. Les services financiers informels comme le crédit sont très coûteux, tandis que ceux offerts par les Institutions de Microfinance (IMF) et les coopératives ne sont pas adaptés aux besoins des producteurs. La diffusion des produits d'épargne est encore très limitée puisque récemment introduits sur le marché mais ils pourraient devenir une composante centrale pour le renforcement du taux de couverture de la microfinance. Actuellement ces produits sont aussi utilisés comme substituts aux produits d'assurance risque, qui sont totalement absents de la chaîne de production du café éthiopien.

Au niveau des recommandations de stratégie, la priorité est d'élargir l'accès des IMF et des coopératives financièrement actives aux populations visées. De façon plus générale, un besoin apparaît pour des services financiers orientés vers la demande ainsi qu'une politique de développement agricole adaptée et proche du terrain.