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# A socio-cultural analysis of smallholder borrowing and debt in southern Ethiopia

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ABSTRACT

This paper combines qualitative and quantitative research methods in an exploratory study of borrowing and debt in rural southern Ethiopia in order to understand the complexities of the rural finance system and frequency of borrowing and debt in rural, smallholder settings. By comparing geospatial location in relation to access to infrastructure, markets and services within a single agroecological setting, we explore the ways in which these factors influence the frequency of borrowing, sources, amounts and interest rates involved, as well as the duration and extent of borrowing and debt. We find great variation amongst the communities studied, highlighting the importance of the localized nature of borrowing and debt and identify barriers and opportunities that will support the (re)adjusting of policies and programs that would enable smallholder households to overcome cycles of borrowing and debt, and build assets.


## 1. Introduction

In rural Africa, financial savings beyond the short-term is seldom practiced among smallholder farming households (Cull et al., 2013). In rural communities, this is due, in part, to limited access and availability of formal banking options, which constrains their opportunities for savings and capacity to cope with shocks (Salami et al., 2010). Similarly, smallholder farmers in rural Ethiopia have little to no financial savings and very limited access to financial services (Amha, 2011). According to governments (GoE, 2010), international bodies (World Bank, 2013), non-governmental organizations (Chiche and Kelemu, 2012; Chemonics International, 2006) and researchers (Gecho, 2014; Handino, 2014; Tesfamariam, 2012) the lack of financial savings is attributed to a poor saving culture, and therefore programs focus on behavior change communication and education. This research contributes to studies of rural debt, by demonstrating that a primary barrier to income savings, or asset building broadly, is chronic debt. Krishna (2010), for example, identified that debt can be a primary cause for a family becoming poor within the five countries he studied, and Scott (1985) has shown that rural debt can result in the loss of land and can create a situation of (semi-) permanent indebtedness, for which households struggle only to repay interest for entire lifetimes. Some analyses of debt, savings and lending have contributed to an improved understanding of socio-cultural contexts and their impacts on individuals, households and communities (Case et al., 2013; Gray and Dowd-Uribe, 2013; Guerin et al., 2013; Mohanty, 2005). Yet, debt has received only limited attention by governments, development organizations and researchers and is a key knowledge gap within the existing literature generally, and specifically within Ethiopia. This exploratory study aims to contribute to wider understandings of smallholder borrowing and debt, while shedding light on the dynamics of smallholder debt in rural southern Ethiopia.

In the following sections, we contextualize smallholder debt from relevant literature that explores these issues from a socio-cultural perspective. The second and third sections provide background on the study site and methodology. The fourth analyzes the findings of smallholder debt in rural southern Ethiopia. This data provides new knowledge on the extent, type and frequency of smallholder debt for Ethiopia. Renowned Ethiopian sociologist and agrarian reform expert Dessalegn Rahmato has commented that smallholder debt in Ethiopia has received almost no attention (Rahmato, personal communication, 25 June 2015). To date, there are only anecdotal reports referencing the challenges of debt, and studies about informal loaning and saving from the perspective of loaning networks (Aredo, 1993; Caudell et al., 2015). As a key objective, this paper analyzes the complexities of the rural finance

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system and frequency of borrowing and debt in rural, smallholder settings. Our review of the literature on smallholder debt indicates that studies of this kind are under-represented in the Ethiopian context, particularly regarding the extent, reasons and sources of debt, as well as the interest rates and frequency of loans. This research seeks to contribute new insights into these notable gaps. This paper does not propose to capture all of the complexities of rural financial systems, the frequency of borrowing and the impact of debt in rural, smallholder settings, rather it offers an assessment of the extent, frequency and sources of borrowing. We hope that this research will provide useful groundwork and encourage further research on related subject areas.

## 2. Context

Pro-poor lending schemes, such as microfinance, have been largely viewed in the literature as a mechanism enabling individuals and families to overcome poverty. However, there has been limited attention given to the role of borrowing and debt. Continued attention and research focus on the unmet credit demand, suggested to be in the billions of dollars, for smallholder farmer financing (ISF, 2013). Embedded within the reports advocating for the financial inclusion of smallholders there is a recognition that farmers are borrowing money and that interest rates can be extremely high, which may result in long term debt. Yet, there is limited understanding of its extent. Research findings are influenced by what is measured, who participates in the measurement, the location of the study and the time of year when data is collected (Chambers, 1995). Negative or unintended outcomes may result with the selection, and exclusion of some metrics over others (Cochrane and Thornton, 2016). In many cases, policymakers seemingly neglect to account for the impact of debt as part of poverty alleviation, and it is rarely included in assessments and household surveys.

Wilson (2009: 84) argues that policies and programs designed to support farmers "must be understood in the context of long-term indebtedness". However, there is insufficient information available about smallholder borrowing and indebtedness to adequately do so, particularly in the Ethiopian context. Research from other countries sheds light on the processes of debt in smallholder settings. Social obligations can be significant contributors to debt, as found in diverse settings such as India (Krishna, 2010), Samoa (Thornton et al., 2010) and South Africa (Case et al., 2013). In the latter study, it was found that approximately one quarter of funerals were paid for with loaned money, a costly ceremony with socio-cultural expectations attached to it (Case et al., 2013). The failure to meet such expectations may have negative long-term social consequences. Other researchers find that debt may be taken on for other ceremonial purposes, such as weddings in India, which are used as a means to increase social status (Bloch et al., 2004). Although the work of Case et al. (2013) greatly informed the discussion on debt and ceremonial activities, other communities have socio-cultural practices that reduce indebtedness, such as gifts from guests and neighbors (Ainsworth and Over, 1997; Stover and Bollinger, 1999). While these large, one-time and costly ceremonial events have attracted attention in the academic literature, there has been much less research conducted on the everyday costs of life and livelihoods that push farmers and households into debt. The gravity of debt and indebtedness cannot be under valued; it has resulted in the loss of land and livelihood, and has contributed to smallholders taking their own lives (Mohanty, 2005).

Gray and Dowd-Uribe (2013), as well as Thornton et al. (2010), discuss debt as a differentiating factor amongst community members, along with the social, political and economic changes that have led to the need for borrowing. Both works highlight the degree to which different levels of indebtedness exist within households and contextualize the processes contributing to them. Within the farming context of Burkina Faso, it was the poor who were most indebted and more frequently borrowed, whereas the relatively wealthier avoided falling into debt largely as a result of their social capital, receiving support from wealthy members of cooperatives to which they belong (Gray and Dowd-Uribe, 2013). In contrast, farmers in Thailand with more land and resources were found to have more debt, as they required greater capital to invest in their land and because lenders found them more credit worthy (Nuansoi, 2013). Analysis of debt in Latin America showed that farmers struggle to overcome debt in the long term, yet the exact causes are debated and have not been subjected to systematic research (Bacon et al., 2014; Wilson, 2010). These diverse experiences emphasize the complex, localized nature of rural financial systems.

A detailed study conducted in rural south India identified the important role of positionality with regard to access, cost and use of debt and the implications of caste, class and location (Guerin et al., 2013). The authors argue that debt cannot be understood simply as a financial matter, but is primarily a social transaction that occurs within existing socio-cultural, political and geospatial settings. Guerin et al. (2013) suggest that policies will only be appropriate, relevant and targeted when the local circumstances of social interactions and processes shaping debt are understood. Just as debt is shaped by "unequal and contested structures and relations" at the macro-level (Fridell, 2013: 1492; Soederberg, 2013), these processes also exist at the micro-level within rural agricultural settings, about which much less is known.

Other than the important contributions from Gray and Dowd-Uribe (2013) and Guerin et al. (2013), few studies have centered around understanding the extent, size and frequency of smallholder debt in rural farming communities, the reasons for borrowing, the sources of loans and the interest rates charged. However, when debt is included, the inappropriateness of policy and programs is apparent (Guerin et al., 2013). In other words, the barriers to saving and asset building reflect the diversity and nuance required in order to make effective and targeted policy and programs (Gray and Dowd-Uribe, 2013). This paper further demonstrates the importance of including detailed analyses of smallholder debt, and offers specific insights into the manifestation of debt in rural southern Ethiopia. The findings could contribute to a more informed policy discussion in Ethiopia, particularly as the government-run micro-credit banking system expands throughout the country. As an exploratory study, this paper does not seek to offer recommendations for policy and programming, rather it seeks to provide a baseline set of data for which future research can expand and around which policy makers and program designers may draw insight to ensure their services are appropriate and effective.

## 3. Location of study

Ethiopia is an agricultural economy and over 80% of the population is rural (CIA, 2015). The nation is comprised of regional-states and administrative cities, the most populous of which are Oromia, Amhara and Southern Nations, Nationalities and Peoples (SNNP) regional-states, which together account for four-fifths of the entire population (CSA, 2007). The SNNP region is unique in the Ethiopian context, as it is home to areas of the country with the highest rural population density. All twelve of the rural districts that have population densities above 500 persons per square kilometer are located in the SNNP regional-state (CSA, 2007). Unlike the relatively rain-secure highlands and rain-insecure eastern lowlands, the central SNNP region experiences much more volatile rainfall, which poses significant challenges for smallholder farmers who rely

almost entirely on rain-fed agricultural practices (Cochrane and Gecho, 2016; CSA, 2007).

Within the SNNP regional-state, this research was conducted in Wolaita Zone and specifically from three selected communities in the Damot Gale district. The research areas share an agricultural system, largely based on the root crops of enset, taro and sweet potato, and of selected cereals, primarily maize and teff. Wolaita is almost entirely home to a single ethnic group, who share a culture and language. While the selection of three communities within this area this limits the generalizability of the study, it enables comparisons to be made, which would otherwise be complicated by differences of agroecology, agricultural practice, ethnicity, culture and language.

Within Ethiopia, Wolaita Zone is home to higher than average rates of poverty, and smaller than average plots of land (Rahmato, 2007). Wolaita is largely rural, with only 8% of the population living in urban areas, which is a much lower urban population than the national average of 16%, and one that has risen only 1% since the 1994 census (Rahmato, 2007). High population growth and longer life expectancy have contributed to the decline of farm sizes per capita in Wolaita, due to inheritance and land fragmentation, with averages that are arguably lower than what is required for a subsistence livelihood. In Damot Gale District, where the three studied communities are located, the average farm size is 0.25 ha,[1] which has declined rapidly from an average of 0.5 of a hectare in 1989 and 0.7 ha in 1976 (Rahmato, 1992, 2007). As explored in the results below, the challenge of meeting basic household needs, covering the cost of education and healthcare, as well as seeking means to enhance or diversify livelihood options has led many households to borrow money, a finding also identified in other research focusing upon the causes of borrowing and debt (Guerin et al., 2013).

The onset of financial borrowing and debt appears to have coincided with the expansion of the cash economy into rural areas, a relatively recent experience, in most cases within the last half century (McCann, 1995). Due to limitations of access as well as strong financial regulation limiting non-governmental expansion into credit provision, much of the rural lending occurs informally. While this poses challenges of regulation and high interest rates, these options offer needed services where banks do not operate. Integrating these informal networks, or creating means through which they can be semi-formalized, may benefit both lenders and borrowers (Steel et al., 1997). This form of integration would likely require significant policy reform in Ethiopia, where lending and microfinance is strictly regulated. Despite a sense of urgency on the part of the government to extend banking services throughout the rural areas of the country, there are significant barriers for international non-governmental organizations to provide any financial services (Deribie et al., 2013).

## 4. Methods

Using qualitative and quantitative methods, this research explores smallholder debt in rural Ethiopian communities—Adeaaro, Adea Ofa and Buge. These communities were purposely selected in order to compare and contrast differences within and between communities, all of which share similarities in agro-ecological, socio-cultural and political settings. This research is an extension of a previous participatory, co-produced research project, in the above-mentioned communities, where residents had identified debt as a neglected issue. Debt was also identified by these residents as a key barrier in their ability to gain assets, and that it results in significant direct (income is drained when repaying interest) and indirect (essential services are unobtainable due to a lack of available resources) challenges. Residents had proposed that a specific study on debt would be useful. For this study, household questionnaire surveys and focus group discussions were conducted, in the latter results from data analyses were provided to community members and discussions held about the validity of the conclusions and additional qualitative context was provided.

In each of the three communities, specific sub-areas were selected for the household questionnaire survey. In the case of Adeaaro and Adea Ofa, the total number of households in the selected sub-communities were 221 households, whereas in Buge 79 households were selected, based upon their access to irrigation infrastructure, not along sub-community lines.[2]

The first community, Adeaaro, is a farming community nearest to Boditi town, and has relatively better access to banks, markets, schools and healthcare services. Due to the proximity of the town, residents of Adeaaro are in a better position to sell their products on the market or seek daily or seasonal labor work. The second community, Adea Ofa, is a neighboring and more remote district, 15 kms down a dirt path. Adea Ofa, was selected to contrast the impact of geographical location and proximity to these services between the two smallholder farming communities.

The third community, Buge, is divided into halves by a major roadway. Although it is not located near a town, the road provides a degree of improved access. The inclusion of Buge in this study, or a specific section of Buge to be precise, is due to the existence of large-scale irrigation infrastructure, which was constructed more than decade before as a development aid project. This project significantly transformed the lives of households that had gained access to irrigation. The previously rain-fed agricultural system allowed for one or two annual harvests, and only those crops that tolerate a degree of irregularity of rainfall, as well as those crops that do not require a large amount of water. With irrigation, households have three or four harvests, and have diversified what they grow, in particular households are now growing a range of vegetables that were previously not viable. The inclusion of Buge in this study is to analyze to what extent this particular smallholder farmer setting compares with the other two settings, as it relates to borrowing practices, due to its relatively stronger economic and food security situation (Cochrane and Gecho, 2016).

A total of three hundred questionnaire surveys were conducted. In Buge, 79 households were surveyed, of an estimated 140 that are connected to the large-scale irrigation project (56% of households). In Adeaaro, 96 households were surveyed, which accounted for approximately half of the sub-community (~48%) and in Adea Ofa 125 households were surveyed (~63%), which is based on the estimate of 200 households per each sub-community. The three data collectors had previous experience conducting surveys, and were speakers of the local language. Due to concerns about financial privacy, the surveyors were not from the communities surveyed, as other researchers have found a lack of willingness of households to discuss financial matters with members of their own community (Sana et al., 2012). Participation by households in answering these surveys was voluntary, and verbal consent was taken from each participant. Anonymity was assured in the data collection process and no names or household numbers were recorded on the surveys. In analyzing the data, survey results were disaggregated by location in order to compare and contrast the similarities and differences in

[1] Data provided on 12 June 2015 by the Damot Gale District Agricultural Office based upon 2015 data.

[2] The sub-communities are not official administrative categories and therefore the total household figures are unavailable, however community members know where each sub-community is as there are community-based groups arranged by the local government to serve each sub-community.

order to evaluate how the variances impacted borrowing and debt. The overall and disaggregated results were explored in a post-analysis focus group discussion, held within each of the communities in order to contextualize how community members themselves understood and explain the findings.

## 5. Results from the surveys

### 5.1. Frequency of borrowing

Of the 300 households surveyed, every single household had borrowed money at least once within the last five years. The average number of years wherein households took loans was 2.75, which did not vary significantly between the three communities (2.5 in Buge, 2.8 in Adeaaro and 2.9 in Adea Ofa). This finding was unexpected because of differences that existed between the three communities with regard to service access. It was also unexpected that the amount of borrowing was similar in households with access to irrigation infrastructure as it was with those households located in remote areas. This assumption was based on potential preferences by lenders who may prioritize those with greater assets and income. Although a minority, of those households that only took one loan within the five-year period, 70% were from Buge, the community with irrigation infrastructure. This is in contrast to the research in Thailand, where households with greater financial security and/or assets had more loans than those with relatively fewer assets (Nuansoi, 2013). The borrowing patterns in Wolaita indicate that borrowing is related to instances of difficulty, often due to extreme poverty and food insecurity. Such loans are taken in the lean season when harvests have been depleted. On occasion assets are sold, but small loans tend to be taken as a means to maintain assets, such as livestock, which farmers recognize as important sources of income and labor. Of the three communities, the most remote experienced greater levels of food insecurity, higher levels of unskilled migration, and sold the least amount of their crops on the market (Cochrane and Vercillo, 2017). Yet, the average frequency of loans was similar. This could suggest that irrigation does not offer a significant advantage, but the data demonstrates otherwise, as will be explored.

Within the five-year period, the vast majority (90%) of households loaned money in 2–4 of the five years, with only 8% taking loans in only one of the five years and only 2% taking loans in all five years. The frequency of loaning is partially explained by the provision of agricultural services in Ethiopia, whereby inputs, such as fertilizer, can be acquired on a credit basis if the household cannot afford to purchase them. Farm debt as a result of the need of purchasing inputs emerged as a global challenge for farming households in the latter half of the twentieth century, and is not specific to Ethiopia (Estenson, 1987; McMichael, 2013). As farmers explained in the focus group discussions, they prefer to avoid government debt, obtained through the microfinance institutes. They claimed that a default in the short-term can result in the loss of their land, whereas debt from informal lenders can be extended and exist in a form of lifelong indebtedness. Informal debt does not result in the formal loss of land, because Ethiopian law prohibits the sale or transfer of rural agricultural land on an individual basis; however, informal exchanges occur (Holden et al., 2016). When farmers acquire inputs on credit from the government, they must hand over their land certificate. When subsidized governmental supplies are low, inputs are acquired from the market, and for the poorest members of society borrowing become necessary in either situation; in Wolaita, significant supply variation of inputs has been a common experience for decades (See Fig. 1).

Due to the grave consequences, households tend to avoid formal debt when possible, and those who frequently take loans due so because of necessity. The household survey data reinforces the explanation given in focus group discussions, as there is a strong positive relationship between higher numbers of loans taken within the five-year period and a higher number of instances when households were unable to repay their loans ($r = 0.65$), indicating that those more frequently taking loans are also more likely to be those unable to repay them. Furthermore, there is only a weak positive relationship between the amount borrowed and the inability to repay loans ($r = 0.29$), which suggests that the inability to repay is more related to the frequency of borrowing than the amount being borrowed. The household survey did not note the exact years of debt repayment failure, or seek the causes of those failures. As a result, it was not possible to further assess the nature of these linkages. While we recognize the limitations of correlations, these findings provide some insight for future research initiatives, specifically studies that are able to assess the causation of failures to repay loans. Evidence from related studies in Ethiopia suggest that the reason for borrowing (survival versus investment) differs in high potential and low potential agricultural areas, in the latter credit show no relationship with crop productivity, suggesting survival borrowing (Ali and Deininger, 2014).

### 5.2. Loan amounts

In the three communities, the amount of the loans ranged from very small loans of 100 ETB (~$US 5) up to 10,000 ETB (~$US 500). Instances of the former tend to be days when households lack food and need a small sum to acquire essential food items, while larger sums cover the cost of investments, such as a donkey-drawn cart or motorcycle, or to cover the cost of an important ceremonial event, such as a wedding. The average amount borrowed in a single year was 1717 ETB (~$US 86). For context, a 50-kg bag of fertilizer is 700 ETB, which is more than 40% of the average annual loan. Households in these communities, with small plots of land, typically share a bag of this size. With regard to income and the ability to pay for necessary goods and loan payments, women may gather firewood or grass for sale in a nearby market, with a full-days work resulting in 10–15 ETB. However, daily labor activities such as gathering firewood and grass are not engaged in for the purpose of paying off debt, these jobs are often a last resort option (Cochrane and Gecho, 2016). For further contextualization of these sums, basic healthcare commodities, such as the cost of a subsidized malaria treatment are the equivalent to two full unskilled labor working days (30 ETB). In order to repay loans, farmers rely upon their harvest, planting specific crops for sale (in this case teff and maize) and others for household consumption (enset, taro and potato varieties). In years of early, late, insufficient or too much rain, entire crops can be lost resulting in the inability to repay debts; volatile rainfall occurrences of this nature are frequent in Wolaita (Cochrane and Gecho, 2016). Consecutive years of failed harvests create a situation of (semi-) permanent indebtedness, which can result in the loss of land.

The lowest average amount loaned was in Buge (1469 ETB), the community with irrigation infrastructure, and the highest average in Adeaaro (1998 ETB), the community nearest to the town. While this might be interpreted as an inability to take larger loans, the lower average amount occurs in the same community that had more households borrowing funds in only one of the five years, and aligns with the assumption that borrowing decreases, both in frequency and in overall size, as households have relatively larger land size and gain in food and financial security. This finding aligns with that of Gray and Dowd-Uribe (2013) in Burkina Faso, who identify that the relatively wealthy remained debt-free during times of difficulty. In contrast to what would be expected from the existing literature (Gecho, 2014; Handino, 2014; Tesfamariam, 2012), the highest average of borrowing occurred in Adeaaro, the town

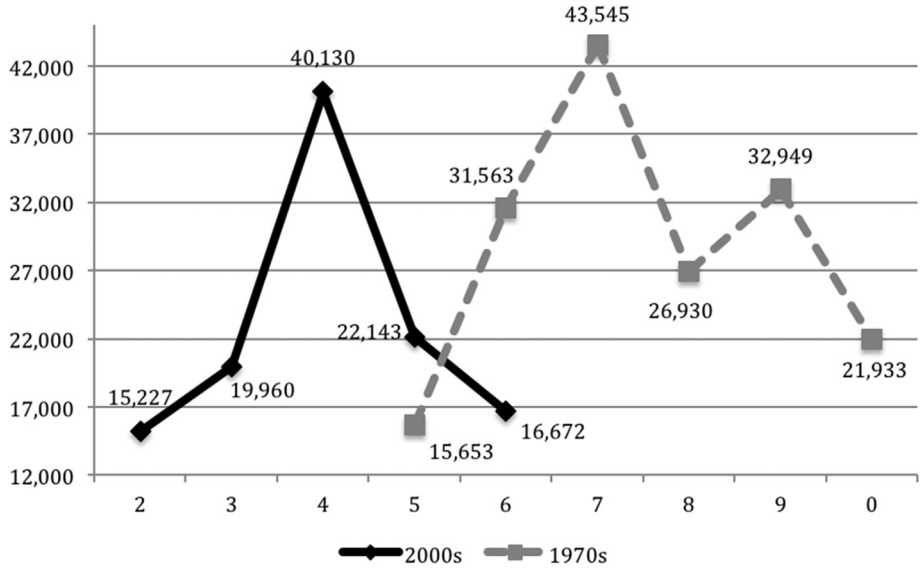


**Fig. 1.** Government distribution of fertilizer in Wolaita Zone, selected years from the 1970s and 2000s (by 50 kg bags).
Source: Rahmato, 2007.

nearest to the market. Community members offered a number of explanations for this, which included the role of market accessibility. With markets in close proximity, farmers are encouraged to make investments, resulting in increasing numbers of farmers investing in fruit trees, most commonly avocado saplings, as well as cash crops, such as coffee trees.

Another reason provided in the focus group discussion held in Adeaaro is that a greater diversity of places from whom borrowing can take place exists, enabling multiple loans to be taken in a single year. The frequency of multiple loans in a single year is partially supported by the questionnaire data: Adeaaro and Adea Ofa have a higher frequency of borrowing more than once in a single year (20%) when compared to Buge (13%). Since the average loans are larger in Adeaaro than Adea Ofa, this provides some evidence to support the multiple source explanation given by community members for the higher average debt in Adeaaro. The average amount loaned over the 5-year period was 8,820 ETB (~$US 441), with the lowest average being in Buge (7,305 ETB) and the highest in Adeaaro (10,749), which is consistent with the average annual findings.

### 5.3. Repayment

Many households experienced instances when they were unable to make required payments on their debts. On average, households failed to repay as required 2.4 times over the five-year period (2.2 in Buge and 2.5 in both Adeaaro and Adea Ofa); however, more than half of households (51%) had repayment failures two or less times during this period, and thus the inability to repay was unequally distributed. For some households, instances of an inability to repay occurred multiple times within a single year, with the highest number of instances (eight) occurring for one household within the five-year period. It ought to be noted that within the five-year period studied there was a serious food insecurity incident within the region (2011–2012), requiring widespread emergency food relief. During this year, almost all households borrowed money and struggled to repay in the short-term, as they did not obtain the expected agricultural income. This explains why only one household did not fail to repay a loan according to the terms, during the five-year period. Taking 2011 and 2012 as extremely challenging years for all residents, wherein borrowing was widespread, it is noteworthy that 49% of households failed to repay on three or more instances during that five year period. Higher rates of repayment failure may be explained in the reason for borrowing (survival versus investment), whereby relatively poorer households borrow multiple times and struggle to repay as they seek to obtain basic needs.

High rates of instances of failure to repay begs the question of why any individual or organization would loan money in the first place. This question raises an important clarification because a failure to repay does not equate with a default. A failure to repay means that the required amount, within a required time, was not paid. The resulting consequence differs based on the loan provider, but takes the form of penalties. In addition to financial penalties, informal lenders may take assets from borrows, such as livestock, until the loan is paid (during which time its benefits are taken by the loan provider). In the informal system, farmers cannot default on loans because the borrowing is unofficial. In the formal system, a default can result in the loss of assets and land, which is taken by the government.

At the time of the survey, however, there was a high degree of confidence of being able to repay all outstanding loans within the year (67%), although this figure was significantly lower in Adea Ofa (61%) than it was in Buge (73%) and Adeaaro (72%). The relatively high confidence of being able to repay loans could be related to the options available if harvests fail, such as unskilled labor, the fewest of which exist in the remote community. Additionally, households do not anticipate unexpected events that drain resources thus limiting their ability to repay loans. The high rates of households being unable to repay suggests, therefore, this could be over-confidence, and the on-going, annual borrowing supports the finding that households borrow out of necessity, rather than as a means of investment. For some households, it can take multiple years and multiple loans from diverse sources to overcome indebtedness, and some never do. Over the long-term, this research indicates that most households are able to pay off their debts, albeit in an environment that appears to perpetuate a degree of indebtedness. As Rahmato (2007) stated, households in Wolaita are unable to overcome even the smallest of shocks, creating a cycle of borrowing and indebtedness.

**Table 1**
Frequency of loan source and interest rate ranges.

| Source | Interest rate | Adeaaro (%) | Adea Ofa (%) | Buge (%) | Total (%) |
|---|---|---|---|---|---|
| Cooperative | 15 | 29 | 27 | 27 | 27 |
| Local Lender | 3–50 | 10 | 19 | 11 | 14 |
| Microfinance | 15 | 34 | 38 | 31 | 34 |
| Other | 2–15 | 23 | 9 | 25 | 18 |
| Trader | 2–8 | 5 | 7 | 5 | 6 |

### 5.4. Borrowing sources

To assess the diversity of borrowing sources, each household was asked to comment on their loan sources. Of the average 2.75 loans taken by each household in the five-year period, an average of 1.7 different sources were used. The types of loan sources were diverse, largely involving government-operated microfinance, co-operatives, local lenders, traders, family members and other alternative sources of loans via social networks. Although there were some general trends, the sources of loans differed by community (see Table 1). The absence of 'family' loans in the survey is a reflection of the conceptualization of what is considered a 'loan' and what is not. Borrowing between family members is considered a family duty, not as a 'loan' in the official sense. In addition to this being explained in the focus group discussions, it is also demonstrated by the fact that only one person mentioning a family loan in the debt survey, for which interest was paid. In typical loans between family members interest is not charged, which explains why households did not consider it a 'loan' and thus is appears to be absent in the data. Further research is required to better understand the nature of borrowing between extended family, to understand its extent and frequency.

As with the frequency of loans, the number of sources did not significantly differ between the three communities (1.7 in Buge, 1.9 in Adeaaro and 1.5 in Adea Ofa). Within focus group discussions in the remote community of Adea Ofa, respondents explained the relatively lower number of loan sources as reflective of there being fewer options for seeking loans. As explored below, significantly fewer households in Adea Ofa had access to alternative community-based sources of loans than the other two communities.

With the average number of loans and the average number of sources being relatively consistent in the three communities, the differences of loan sources is worthy of further exploration. Co-operatives were commonly used, which are government-supported organizations within the community that provide a range of services, such as collective buying and selling. The consistent and high frequency of loaning from cooperatives is also a product of their location, which occur within community, whereas other institutions, such as microfinance institutes, only have branches in towns.[3]

### 5.5. Microfinance

The data on borrowing from the microfinance institute requires some contextualization, as government sources indicate usage of these services is much lower (see Footnote 3). In addition to operating the microfinance institutes, the government provides subsidized agricultural inputs, which can be obtained on credit. The governmental agricultural extension workers, who are based within communities, promote both of these services (inputs and microcredit). It is likely that the provision of agricultural credit was interpreted as sourced from the 'microfinance institute' because they are both government operated and both promoted by the government extension workers. As a result, microfinance loaning appears to be over-represented, as a combination of (a) loans provided by microfinance institutes and (b) credit provided by the District Agricultural Office.

The widespread resistance of borrowing from the microfinance institute further suggests this figure is a combination of government-sourced credit. Community members specifically identified microfinance as the least preferred source, due to the inflexibility of repayment terms. Throughout the data collection and focus group discussions, many individuals expressed their dismay about the inflexibility of microfinance repayment terms, and shared stories of families who lost their land following a year of poor rain and an inability to repay. The high interest rates of the two most important loan sources, cooperatives and microfinance institutes, support the conclusion that farmers are underserved, and over pay, for credit services (ISF, 2013). It also highlights that not all forms of loans, particularly those with lower interest rates, are equally available to all members of the community, as found by Guerin et al. (2013).

### 5.6. Local lenders or community-based borrowing?

Borrowing from traders, often done in advance of a harvest, and in anticipation of payment with the forthcoming yields, was infrequent. Explanations for this are, first, that traders are not based within the community and lack any legal mechanism to enforce payment. Second, loans are often made between individuals, who have high degrees of trust or social connections that increase the likelihood of traders engaging in credit provision. As with co-operatives, marginalized groups and individuals are effectively excluded from the potential benefits of this form of credit access and forces them to borrow from formal sources. There is conflicting research on the extent that social connections are characteristic (Santos and Barrett, 2011), or not (Caudell et al., 2015) of informal networks in Ethiopia. These studies focused on household traits, such as wealth and family size, and did not analyze divisions significant to rural Ethiopian contexts, such as ethnicity, language, religious affiliation and political alignment. As outlined by Guerin et al. (2013), access to credit and debt exist within existing socio-cultural and political contexts, thereby privileging some and excluding others. Within these three communities, social connectivity is a fundamental determining factor for farmers in accessing credit; barriers for informal credit rely heavily on personal networks, ethnicity and religious affiliation whereas formal credit is affected by political allegiance.

The use of local lenders and other community-based borrowing mechanisms in Adea Ofa differs from Adeaaro and Buge, as households rely much more on local lenders and far less on community-based borrowing. Although a community-level disaggregation of poverty is not available, there are some indications that households in Adea Ofa are, on average, poorer than those in the other two communities: (1) compared to the other communities in the study, households in Adea Ofa have greater food insecurity, (2) have less ability to cover the costs of sending their children to school and, (3) have higher levels of unskilled migration (Cochrane and Vercillo, 2017). Another indication of relative poverty amongst the three communities is enrolment in the Productive Safety Net Program (PSNP), launched in 2005 to support food insecure households in rural areas. Graduations from the program did not begin until after 2011, therefore, this year can be

[3] According to data provided by the Wolaita Zone Finance and Economic Development Office, (provided to the authors of this study by the Zonal Administrative Office on May 14th, 2015), for the 2013 year, only 5% of households, in the district where the three communities are located, were provided credit by the microfinance institute.

**Table 2**
Frequency of reasons given for taking loans.

| Reason | Adeaaro (%) | Adea Ofa (%) | Buge (%) | Total (%) |
|---|---|---|---|---|
| Agricultural inputs | 27 | 30 | 23 | 27 |
| Basic needs | 39 | 32 | 36 | 35 |
| Healthcare costs | 23 | 22 | 36 | 25 |
| Funeral costs | 2 | 4 | 0 | 3 |
| Marriage costs | 2 | 2 | 2 | 2 |
| Education costs | 6 | 6 | 3 | 6 |
| Other | 0 | 5 | 0 | 2 |

taken as a proxy assessment of the situation within these three communities. The Safety Net Program supported only 14% (1,425 of 10,048) in Buge, 24% (1,207 of 5,047) in Adeaaro and 31% (1,184 of 3,784) in Adea Ofa.[4] Whereas enrolment in the Safety Net is based upon household level wealth rankings,[5] the existing data indicates that almost a third of the population in Adea Ofa was chronically food insecure, a level significantly higher than neighboring Adeaaro, and twice as high as Buge.

### 5.7. Reasons for borrowing

Regarding the reasons for borrowing, the findings from the three communities in Wolaita demonstrate the localized nature of borrowing trends (see Table 2), as the most commonly cited reason for taking loans was for meeting basic needs (35%). This was followed by the purchase of agricultural inputs (27%) and healthcare costs (25%). While agricultural inputs appear primary, if one considers healthcare and education as rights and basic needs, then well over half of all loans (66%) were taken to ensure these basic necessities were obtained. Although investing in agricultural inputs, such as improved seed and fertilizer, does have the potential for increased income, the impact is mediated by rainfall, which is highly variable (Cochrane and Gecho, 2016). It is, therefore, not simply a matter of assessing if these investments result in improved productivity – the potential exists, but it is not often realized due to other factors. The data for this question should be understood as being generally instructive of the trends, as many households were uncertain how to answer it. Essentially, these loans provided for a range of needs and were rarely taken for a single purpose. The cited reasons outline the most important ones provided by households, but do not include all of the reasons.

A study conducted in India (Guerin et al., 2013) suggested that the majority of loaning was taken for investment, upgrading housing or expanding livestock assets (30%), followed by household expenditures (21%) and then for ceremonial purposes (17%), health costs (13%) and education costs (10%). This appears to be infrequent in these communities. While some large loans were taken to purchase expensive items, such as motorcycles and donkey-drawn carts (both listed as 'other'), as well as for costly weddings and funerals, these reasons for taking loans were lower than might be anticipated based on other studies (such as Case et al., 2013; Guerin et al., 2013; Krishna, 2010). In the focus group discussions, the role of debt for ceremonial purposes were emphasized, but its emphasis was largely due to the size of the loan and well-known instances of loan defaults as a result. The existence of certain individuals and households falling into lifelong debt, due to a funeral or marriage, for example, were well known, but far less common than might be anticipated based only on the qualitative data. The household questionnaire survey indicates that few households actually borrow for ceremonial purposes. Most of the responses suggest that borrowing was needed to cover the everyday costs of basic needs and healthcare, which were summarized with statements in the focus group discussions including: "everyone" and "every house" borrows money, that "almost everyone is in debt" and "no one is free from debt." There are, however, indications that socio-cultural obligations were a more important reason of taking large loans in the past than in the present. One of these indications is that local governments within Wolaita have enacted by-laws that prevent such borrowing as an attempt to reduce the negative impact of large, and sometimes lifelong, debts. In Adea Ofa the local government threatens imprisonment for anyone who takes a large loan to hold a costly ceremony. Ethiopia is not alone in this case; examples from Swaziland and South Africa demonstrate a growing recognition of the drain that debts have upon households, as they seek to maintain social standing by delivering elaborate ceremonies expected of them (Case et al., 2013).

### 5.8. Summary of findings

The experience of smallholder farmers in these three communities suggests that the reasons households borrow money and become indebt are not singular, nor straightforward. Borrowing occurs for a diversity of reasons, and for the majority of households loans are taken to ensure that basic needs, such as food, education and healthcare, are met. In these instances, poverty and indebtedness are entangled, as they interact and reinforce one another: some households living in chronic poverty have no choice but to seek a loan to ensure sufficient food is available, thus furthering their impoverishment. While other households become impoverished due to borrowing for other purposes, such as investing in agricultural inputs, only to see their crop fail, or by falling into poverty due to an inability to repay, which further erodes assets and reduces opportunities. While there is a 'credit gap' for farmers to make investments and improve their yields, this financial reality must take into account the broader context of rural smallholder livelihoods. Farmers recognize that investing in livestock would offer financial gains, but the majority struggle to have their basic food, healthcare and education needs met for the household. They cannot risk the loss of assets and land when the return is dependent upon unpredictable rainfall. For the majority (i.e. the 66% borrowing to meet basic needs), investing is an impossibility as the family is going into debt to ensure basic needs are met, and experience multiple instances of being unable to repay even these small loans.

## 6. Conclusion

This qualitative and quantitative assessment of smallholder borrowing and debt suggests that advocacy and promotion of the 'culture of saving' must be contextualized within the barriers that prevent savings from occurring. As highlighted decades ago (Ferguson, 1994), advocacy of this nature must also take into account the form of savings most suitable for a particular place and time. In addition, policies and programs that focus on individual knowledge and behavior change must incorporate broader analyses of systemic barriers, particularly the extent to which smallholder households are chronically in debt. In this paper we explored the extent, frequency and sources of borrowing and debt, as an understudied barrier to saving or asset building in smallholder farming households. The findings reinforce the complex, localized nature of rural financial systems and highlight the pervasive nature of debt within smallholder agricultural settings. Whereas some

[4] Community population data was provided by the Wolaita Zone Administration while enrolment figures for the Productive Safety Net Program was provided by the Damot Gale Agricultural Office.

[5] This is how the program ought to implemented. In practice, it is far more complex, see Cochrane and Tamiru, 2016.

literature points to increased borrowing amongst the relatively wealthy (Nuansoi, 2013), our findings suggest most cases of borrowing are done as a last resort option; necessity borrowing due to vulnerabilities. In the Ethiopian context, because microfinance institutes are government-run and have inflexible payment terms, our findings suggest that formal borrowing is avoided because of the grave consequences (loss of land) if households are unable to pay. Their inability to pay is often a result of external factors, such as volatile rainfall. This also explains why, despite an unmet need, microfinance coverage remains low throughout rural areas. Although underdeveloped in the study area, much more research is needed to explore the potential for insurance options that enable smallholder to take advantage of opportunities, such as investing in improved seed and fertilizer, while mitigating the risks associated with investments that can be lost, as well as entire yields, and therefore incomes, due to forces beyond their control.

The reasons for borrowing varied within the existing literature (Case et al., 2013; Guerin et al., 2013), and our findings emphasize the diversity of reasons for smallholder borrowing, as well as clarify the relatively limited extent to which some socio-cultural and ceremonial reasons for borrowing occur. Contextualizing our findings in the wider literature there are four broad inferences that could be drawn:

1) Borrowing, lending and debt are highly localized processes that take place within existing socio-cultural settings, which affects who has access to financial resources and the terms of repayment;
2) Improved understanding of the role of debt in rural development enhances policies and programs to identify and target the barriers, rather than operate upon assumptions, or neglect to consider the role of debt entirely;
3) Policies and programs seeking to support smallholder saving enterprises must better incorporate broader systemic analyses that take into account the reasons for indebtedness and package interventions accordingly;
4) Annual and chronic debt is one of the principal reasons that smallholders remain entrenched in poverty and struggle with chronic food insecurity.

While much attention has been paid to expanding and enhancing formal financial services for rural farmers, discussions on the ways in which farmers prefer to save have been neglected. Research published by international bodies, governments, non-governmental organizations and researchers cited in this work assume that savings are primarily restricted to financial constructs; similarly, this research focused on financial borrowing and debt. However, savings can take many forms. Socio-cultural obligations, wherein collective responsibility is high, can result in a shift away from financial savings as this may be quickly accessed or demanded by others for whom they have a collective responsibility. In such contexts, 'savings' are preferred in the form of lasting, less accessible forms of wealth, such as livestock (Ferguson, 1994). In the Ethiopian context, where the majority of borrowing is done to purchase basic necessities, there appears to be a strong incentive to save in the form of assets, such as livestock, rather than in finances. Future ethnographic and qualitative research is required in order to better understand the approaches to, and priorities of, saving. Some research indicates that households in Wolaita make purposeful, non-financial investments as a means to enhance their capacity to adapt to changing situations and overcome shocks, such as investing in educating their children and diversifying the crops they grow, such as introducing fruit trees (Cochrane and Gecho, 2016). Additional research could elaborate, specifically, how non-financial forms of asset building are perceived in relation to saving.

For the communities studied here, it is clear that programs promoting a culture of saving, even community-operated savings groups, will have limited impact unless and until farmers move beyond a position of annual indebtedness as households frequently struggle to repay debts and do not have the ability to save. The minor differentiation of borrowing and indebtedness between the communities suggests, as Rahmato (2007) has argued, that smallholder households in Wolaita experience chronic poverty, which is largely because the plots of land have become too small to meet the basic needs of the household. In many instances, this poverty is structural as households do not have access to healthcare services or sufficient safety net options, causing asset depletion and borrowing to meet basic needs. As a result, households have become reliant upon annual borrowing and live in a semi-permanent situation of being in debt, and are reliant upon borrowing when even the smallest of shocks are confronted. The pervasiveness and frequency of debt, the everyday reasons for borrowing, as opposed to high-cost ceremonial events, the burden of high interest rates, challenges of repayment, as well as high expectations of repayment, are all suggestive of a level of entrenched poverty. Further, promoting behavioral change will have limited impact unless accompanied with some form of systematic change for enabling families to overcome shocks, without resorting to borrowing practices that deplete their assets and expose them to greater vulnerabilities.

## References


Ainsworth, M., Over, A.M., 1997. Confronting AIDS: Public Priorities in a Global Epidemic. World Bank, Washington.

Ali, D.A., Deininger, K., 2014. Causes and implications of credit rationing in rural Ethiopia: the importance of zonal variation. J. Afr. Econ. 23 (4), 493–527.

Amha, W., 2011. Meeting the financial needs of smallholder farmers in Ethiopia. In: Djurfeldt, G., Aryeetey, E., Isinika, A. (Eds.), African Smallholders: Food Crops, Markets and Policy. CAB International, Cambridge, pp. 156–188.

Aredo, D., 1993. The Informal and Semi-formal Financial Sectors in Ethiopia: a Study of the *Iqqub, Iddir*, and Savings and Credit Co-operatives. Research Paper 21. African Economic Research Consortium, Nairobi.

Bacon, C., Sundstrom, W., Gomez, M., Mendez, V., Santos, R., Goldoftas, B., Dougherty, I., 2014. Explaining the 'hungry farmer paradox': smallholders and fair trade cooperatives navigate seasonality and change in Nicaragua's corn and coffee markets. Glob. Environ. Change 25, 133–149.

Bloch, F., Rao, V., Desai, S., 2004. Wedding celebrations as conspicuous consumption: signaling social status in rural India. J. Hum. Resour. 39 (3), 675–695.

Case, A., Garrib, A., Menendez, A., Olgiati, A., 2013. Paying the piper: the high cost of funerals in South Africa. Econ. Dev. Cult. Change 62, 1–20.

Caudell, M., Rotolo, T., Grima, M., 2015. Informal lending networking in rural Ethiopia. Soc. Netw. 40, 34–42.

Chambers, R., 1995. Poverty and livelihoods: whose reality counts? Environ. Urban. 7, 173–204.

Chemonics International, 2006. Sustainable SACCO Development: Training Material (Report prepared for USAID).

Chiche, Y., Kelemu, K., 2012. Qualitative Gender Analysis in Gumuz, Shinasha and Berta Cultural Communities, Beninshagul Gumuz Region (Beninshangul Gumuz Food Security and Economic Growth Project report for Oxfam Canada).

CIA, 2015. Ethiopia. www.cia.gov/library/publications/the-world-factbook/geos/et.html.

Cochrane, L., Gecho, Y., 2016. The dynamics of vulnerability and adaptive capacity in southern Ethiopia. In: Companion, M., Chaiken, M. (Eds.), Responses to Disasters and Climate Change: Understanding Vulnerability and Fostering Resilience. CRC Press, Boca Raton.

Cochrane, L., Tamiru, Y., 2016. Ethiopia's productive safety net program: politics, power and practice. J. Int. Dev. 28 (5), 649–665.

Cochrane, L., Thornton, A., 2016. Charity rankings: delivering development or dehumanising aid? J. Int. Dev. 28, 57–73.

Cochrane, L., Vercillo, S., 2017. Youth perspectives on migration, poverty and the precarious future of farming in rural Ethiopia. In: Bonifacio, G. (Ed.), Gender and Youth Migration: a Global Survey (Manuscript submitted for publication).

CSA, 2007. Population and Housing Census of Ethiopia. Central Statistical Agency, Addis Ababa.

Cull, R., Demirguc-Kunt, A., Morduch, J. (Eds.), 2013. Banking the World: Empirical Foundations of Financial Inclusion. MIT Press, Cambridge.

Deribie, E., Nigussie, G., Mitiku, F., 2013. Filling the breach: microfinance. Bus. Econ. Manag. 1, 10–17.

Estenson, P.S., 1987. Farm debt and financial instability. J. Econ. Issues 21 (2), 617–627.

Ferguson, J., 1994. The Anti-politics Machine: "Development," Depoliticization and Bureaucratic Power in Lesotho. Cambridge University Press, Cambridge.
Fridell, G., 2013. Introduction – politicising debt and development: activist voices on social justice in the new millennium. Third World Q. 34 (8), 1492–1496.
Gecho, Y., 2014. Livelihood Strategies and Food Security of Rural Households in Wolaita Zone (Southern Ethiopia. Doctoral dissertation submitted to Haramaya University).
GoE (Government of Ethiopia), 2010. Growth and Transformation Plan. Ministry of Finance and Economic Development, Federal Democratic Republic of Ethiopia, Addis Ababa.
Gray, L., Dowd-Uribe, B., 2013. A political ecology of socio-economic differentiation: debt, inputs and liberalization reforms in southwestern Burkina Faso. J. Peasant Stud. 40 (4), 683–702.
Guerin, I., D'Espallier, B., Venkatasubramanian, G., 2013. Debt in rural south India: fragmentation, social regulation and discrimination. J. Dev. Stud. 49 (9), 1155–1171.
Handino, M.L., 2014. 'Green Famine' in Ethiopia: Understanding the Causes of Increasing Vulnerability to Food Insecurity and Policy Responses in the Southern Ethiopian Highlands (Doctoral dissertation submitted to the University of Sussex).
Holden, S., Bezu, S., Tilahun, M., 2016. How Pro-poor Are Land Rental Markets in Ethiopia? Norwegian University of Life Sciences (Centre for Land Tenure Studies Report).
ISF (Initiative for Smallholder Finance), 2013. Local bank financing for smallholder farmers: a $9 billion drop in the ocean. Briefing 01, 24 October 2013.
Krishna, A., 2010. One Illness Away: Why People Become Poor and How They Escape Poverty. Oxford University Press, New York.
McCann, J.C., 1995. People of the Plow: an Agricultural History of Ethiopia, 1800–1990. University of Wisconsin Press, Madison.
McMichael, P., 2013. Value-chain agriculture and debt relations: contradictory outcomes. Third World Q. 34 (4), 671–690.
Mohanty, B.B., 2005. 'We are like the living dead': farmer suicides in maharashta, western India. J. Peasant Stud. 32 (2), 243–276.
Nuansoi, W., 2013. The study on farmers' debt, loan repayment and guielines for debt settlement in the south of Thailand. Int. J. Agric. Food Sci. Technol. 4 (8), 835–840.
Rahmato, D., 1992. The Dynamics of Rural Poverty: Case Studies from a District in Southern Ethiopia. Monograph 2/92. CODESRIA, Dakar.
Rahmato, D., 2007. Development Interventions in Wollaita, 1960s–2000s: a Critical Review. Forum for Social Studies, Monograph No. 4: Addis Ababa.
Salami, A., Kamara, A., Brixiova, Z., 2010. Smallholder Agriculture in East Africa: Trends, Constraints and Opportunities. Working Paper 105. African Development Bank Group, Tunis.
Sana, M. Stecklov, G., Weinreb, A. 2012. Local or outsider interviewer? an experimental evaluation. In: Submitted to the Annual Meeting of the Population Association of America, San Francisco, 3–5 May 2012.
Santos, P., Barrett, C., 2011. Persistent poverty and informal credit. J. Dev. Econ. 96, 337–347.
Scott, J.C., 1985. Weapons of the Weak: Everyday Forms of Peasant Resistance. Yale University Press, New Haven.
Soederberg, S., 2013. The politics of debt and development in the new millennium: an introduction. Third World Q. 34 (4), 535–546.
Steel, W., Aryeetey, E., Hettige, H., Nissanke, M., 1997. Informal financial markets under liberalization in four african countries. World Dev. 25 (5), 817–830.
Stover, J., Bollinger, L., 1999. The Economic Impacts of AIDS. Future Group International, Washington.
Tesfamariam, K., 2012. Determinants of saving behaviour of cooperative members survey evidence from Tigrai region, Ethiopia. J. Res. Econ. Int. Financ. 1, 150–158.
Thornton, A., Kerslake, M.T., Binns, T., 2010. Alienation and obligation: religion and social change in Samoa. Asia Pac. Viewp. 51, 1–16.
Wilson, B., 2010. Indebted to fair trade? Coffee and crisis in Nicaragua. Geoforum 41, 84–92.
World Bank, 2013. Ethiopia Economic Update II: Laying the Foundation for Achieving Middle Income Status. World Bank, Washington.