

Formal and Informal Credit and Savings Markets in Rural Guatemala:
Accessibility, Sustainability, Perception, and Evidence for
the Existence of Both Types of Institutions

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Abstract

Formal and informal credit markets have been the subject of much investigation recently with the modern micro credit movement. Equally important however, are formal and informal savings markets. These four systems represent the modes of capital accumulation in the rural Guatemala which has been shown to increase investment, smooth consumption, and stimulate economic development. Given the four institutions individual actors in the local economy have choices regarding the method of capital accumulation. This decision process is the focus of this study which hopes to provide evidence for the existence of both formal and informal institutions.

I. Introduction

Accumulation of capital can take many forms however its benefits are universal. Whether through credit or savings capital accumulation has been shown to smooth consumption patterns, allow for investment, and raise future income. In rural Guatemala accumulation of capital comes in four major forms: savings in the formal market, savings in the in-formal market, credit in the formal market, as well as credit in the informal market. Historically each institution has had its place, however as rural societies enter the global marketplace the question arises why traditional or informal modes of capital accumulation still exist. It shall be my intent to examine these institutions and provide an explanation for their continued existence.

Informal credit markets have existed for centuries. They are said to have gained prominence by Jewish entrepreneurs who were not restricted by Christian doctrine which prohibited the charging of interest. While formal credit markets have also existed for centuries, micro credit institutions have origins that date back to the Marshall plan following WWII. Although these programs had some resemblance of what today is considered micro credit the modern movement is credited to the creation of the Grameen Bank in Bangladesh by Muhammad Yunus. As explained by Jonathan Morduch micro credit organizations “share a commitment to serving clients that have been excluded from the formal (traditional) banking sector.” (Morduch, 1999:1580)

The formal banking sector which Morduch speaks of in “The Microfinance Promise” will be different than the formal market in my investigation. I shall consider the formal credit market to consist of banks, cooperatives, and other formal institutions that offer micro lending. The reason for this shall be that in rural Guatemala all these institutions offer small scale loans, differ greatly in practice from local moneylenders, and are perceived similarly by community members. Therefore the informal credit

market in my investigation shall consist of local moneylenders who are not associated with a formal institution.

Less studied, however just as important in the rural community, are the informal and formal savings markets. In my investigation the formal savings market shall consist of deposit accounts held at banks, cooperatives, and other formal savings institutions. While these institutions are prominent across Guatemala (rural and urban) an informal institutional also exists called *k'uchub'al*. Informal rotating savings groups, such as *k'uchub'al* are the topic of Hans Dieter Seibel's "Mainstreaming Informal Financial Institutions" where he claims "rotating savings is ancient, dating back to at least the 16th century, when Yoruba slaves carried it to the Caribbean, as part of the institutional luggage – or social capital." (Seibel, 2001:3) While these origins are possible for the *k'uchub'al* system the connection is not well documented and shall be debated below.

The remainder of the paper shall be structured as follows. The following section shall provide a description of the methods of my research including the people interview, the base on which this study is built. Section III shall be a brief description of the four institutions while discussing issues of accessibility and sustainability. In Section IV I describe perceptions of credit and saving markets as well as the decision making process involved in capital accumulation. Evidence for the coexistence of the formal and informal institutions is provided in Section IV, while concluding remarks are offered in Section V.

II. Method of Investigation

The research on which this study is based was conducted between January 8th, 2006 and March 4th, 2006 in Guatemala. It incorporated a series of presentations by various community leaders, formal and informal interviews, as well as an extensive

literature review. The majority of research for this investigation was conducted in Cantel, Guatemala and its surrounding community. As of October 2005 the population of Cantel was stated as 30888 and largely of indigenous decent (SIACE 2005: 5). The economic base consists of agricultural production however there are also strong textile, shoe, and glass industries. Additional research was conducted in Guatemala City, San Lucas Toliman, Quetzaltenango, Puertos Barrios, and Livingston.

From February 1st through March 4th interviews were conducted with Eduardo Henry (owner of 3 buses), Ramiro Colop Margos (owner of pastry shop and bakery), Miriam Beatrice de Leon Pwak (unemployed single mother), Linili Ocaña (unemployed single mother), Michelle Ocaña (student), Dilma de Sacalshot (independent maker of blouses), Secundino Sacalshot (distributor for Frito-Lay), Carlos Sacalshot (owner of local internet café), Carlos Moines de Colop (Director of Education for Presbyterian mission), Lidia de Colop (homemaker), Eva Lopez (homemaker), Jaun Valentine (loan officer at Cooperativa el Bienestar), as well as additional non-named individuals.

Although the majority of interviews were tailored to each individuals expertise and experiences common themes included: history with credit and saving markets, knowledge of the four systems of capital accumulation, perception of the four systems, views and opinions of various methods of development, and knowledge of basic economic concepts such as interest, inflation, consumption, and investment. The interviews conducted created a large qualitative knowledgebase for this study. A quantitative analysis would have assisted the investigation of the four institutions greatly however a lack of time and resources prevented such analysis.

III. The Four Systems

III. 1. Formal Credit Market

As noted above the formal credit market in rural Guatemala is represented by banks, cooperatives, and Non-governmental finance institutions (NGO's). Each of the groups vary in practice however are similar in that they offer small loans starting around 500 Quetzals. The banks in the region operate for profit while the cooperatives and NGO's operate as nonprofit organizations which in return typically cover less interest. The rate of interest at local cooperative, Cooperativa El Bienestar, is 1.85% per month while rates at local banks range from 2 – 3 % per month. The banks and cooperatives in the area have been shown to be financially sustainable while NGO organizations have had mixed results (with more institutions not financially sustainable without continued donor support).

Within the formal credit markets banks have the most requirements and in return are the most restrictive when it comes to accessibility. Typical requirements at a bank include: documentation of property ownership, collateral in excess of the size of the loan, a savings account with the bank, proof of residency, and verification of income. Although cooperatives have similar requirements they are more lenient on the requirements of collateral and income verification allowing greater accessibility especially to small business owners. The largest benefit of many NGO financial institutions is that often they do not require collateral. This is of great benefit for many of the poorest borrowers however they often limit the size of their loan or require group contracts to provide additional insurance of the loan.

III. 2. Informal Credit Market

The informal credit market, as represented by local moneylenders, is seen as being more accessible than the formal credit market because they do not have many requirements. This however has also allowed them to charge higher interest rates often multiples of the 2-3 % charged by local banks that can reach 25 % a month. Often the

only requirement for local moneylenders is collateral. In addition, as opposed to collateral in the formal credit market, collateral in the informal credit market is physically turned over to local money lenders. Although this can cause legal problems, by giving tremendous power to the lender, it can also be seen to promote sustainability in that the lender has a form of insurance in the case of default.

III. 3. Formal Savings Market

In rural Guatemala formal savings can be represented by deposit accounts at institutions such as banks and cooperatives. Although interest rates vary from institution they also depend on the size and type of account. At Cooperativa El Bienestar annual rates of interest start at 5% for accounts between 100 and 10,000 Quetzals and approach 12% for accounts over 100,000. In addition in order to open a savings account with Bienestar one needs to provide proof of residency, personal identification number, and personal and professional references.

Although these interest rates may seem high when placed in context they raise the question of sustainability. The big issue with sustainability is not from the operational standpoint for there are little costs aside from the interest being paid on the accounts. In addition you do not have the risk of default or early repayment associated with the credit market which can greatly impact an institution's sustainability. The issue with sustainability deals with functional sustainability for the account holder which takes into account among other things inflation. The annual inflation rate in Guatemala for 2005 was 9.1% placing it within the highest 25% of nations in the world. (CIA Factbook: 2005) In context this means that for an individual to break even they would have to earn 9.1 % or have an account with approximately 50,000 quetzals at Cooperativa El Bienestar.

III. 4. Informal Savings Market

Rotating savings groups, called *k'uchub'al*, represent the informal savings market in rural Guatemala. As mentioned earlier Seibel claims that rotating savings institutions such as *k'uchub'al* have Caribbean origins. Although this is possible my research has shown that this most likely is not the case. A strong piece of evidence against Caribbean origins is the name *k'uchub'al*, which is K'iche, and is the name used throughout Guatemala for the institution. Because other languages have adopted this name and the K'iche have historically had little contact with Caribbean cultures this would suggest indigenous origins in the K'iche region. In addition study of the Garifuna culture, in Livingston, Guatemala which claims to have Caribbean descent, has shown no such system in existence. Finally when asked of the systems origins the people to whom I spoke claimed social capital passed down from their ancestors. Eduardo Henry, local businessman and member of one of Cantel's largest *k'uchub'al*, claims that while the system has a long tradition while the prominence and popularity of the system began with the workers at Fabrica Cantel over 100 years ago.

The system of *k'uchub'al* has a period of one week in which each member equally contributes a specified amount between 50 and 400 quetzals. At the end of the period, typically Tuesday, one member receives the collected sum to be used as they wish. This process continues cycling through all members before returning to the member who first received the collected sum. Typically the group consists of 10 to 15 members often of close kinship such as friends or family members, however larger groups, such as that of Eduardo Henry, can approach 25 or more periods with some periods shared between multiple people. This is to mean that multiple people may share a number or period, each contributing to numbers weekly share of the sum and splitting the collected sum when it is their turn in the cycle.

A very important part of the *k'uchub'al* system is the terminology associated with the institution. The word *k'uchub'al* has many translations from *K'iche* including cooperation, mutual assistance, tribute, collection of money, and money council however is only used in reference to the rosca system described above. In addition many aspects including the group, members, individual payments and sum of payments are called *k'uchub'al*. The most striking linguistically aspect of the system is that a member of *k'uchub'al* is said to *jugar* or play *k'uchub'al*. Normally this would appear to introduce an aspect of uncertainty with the system for one that *juega* or plays with their money is seen to have a speculative nature. This however is not the case with *k'uchub'al*. The terminology is used to represent that the system is (1) an informal institution and (2) has no legal backing or validity. Regardless because trust is such an important issue with *k'uchub'al* and of the strong kinship often associated with each group, the system has the general perception as very secure and a positive force in the community.

Finally, with regards to sustainability the issue is similar to that mentioned above in the discussion in the formal savings market. The difference however is that in the informal savings market there is no interest being accrued. This would then make the problem with inflation larger however, because the lump sum is paid for over the course of the cycle yet an individual receives it during a single period, in some instances inflation works in favor of the member of *k'uchub'al*. But just like in the stock market for every winner there is a loser the same is the case with *k'uchub'al*. If an individual is towards the end of cycle inflation eats at their lump sum because in real terms their *k'uchub'al* is less than a member at the beginning of the cycle.

IV. Perceptions of Credit and Savings Markets and Decisions in Context of Capital Accumulation

The decision between credit and savings is extremely important in the process of capital accumulation. Mohieldin and Wright found that “individuals turn to loans if they have insufficient savings or other resources to meet shortfalls, an occurrence that appears to be particularly prevalent among those in the agricultural sector” in Egypt (Mohieldin and Wright, 2000: 667). This sentiment is also prevalent in rural Guatemala. The overwhelming feeling is that *prestamos* or loans are “riskier” than *ahorro* or savings. The reason for this is the requirement of collateral required to secure loans which most often takes the form of a house or property.

The idea that saving is safer than acquiring a loan is an interesting concept especially when used for investment purposes. Carlos Sacalshot, owner of a newly opened internet café (January 25th, 2006), saved for three years to open an internet café in Pasac Segundo an *aldea* of Cantel. When asked about his decision between savings and loans he responded that receiving a loan was never an option for him: it was considered too risky. This concept is interesting when examined from an investment perspective because it implies that risking another individual’s capital is riskier than your own. A rational risk neutral individual would be indifferent so long as the loan was perfectly collateralized. Because it is often the case that loans are not perfectly collateralized, meaning the value of the collateral is larger than the value of the loan, the preference of savings over loans can be rationally justified. There are also additional costs of the prospects of losing a home that would lean to a preference of savings which may or may not include emotional, social, and professional influences.

The issue of collateral is not the only influence on an individual’s decision between saving and acquiring a loan; the concept of interest is also troubling for many.

Ramiro Colop Margos is a member of an association in Pachaj called *Asociación de Hombres de Negocios* and owner of a local *pastelería* or pastry shop. *Asociación de Hombres de Negocios* is a group of local businessmen who have join together to offer loans to each other with out charging interest. He claims “the idea of interest is evil because bankers are becoming millionaires with so much poverty in [his] country. Its better to loan among ourselves without charging interest.” This opinion was held by various members of the community but when further probed a more generally consensus was not the notion of interest but rather the level of interest accrued. This was exemplified by the general perception that organizations such as local Cooperativa el Bienestar and NGO’s, that charge lower levels of interest, were a positive force in the community and process of development.

If savings is preferred one might ask why anyone chooses to use the credit market. One explanation is that the views mentioned above do not apply to all. Although this may influence some loans in the area it can not explain the vast credit market in Cantel. Cooperativa el Bienestar in Pasac Primero, one of three branch offices in Cantel, has over 600 outstanding loans. A more reasonable explanation ratified by many individuals in the community is what Mohieldin and Wright found in Egypt “that individuals turn to loans if they have insufficient savings or other resources to meet shortfalls.” (Mohieldin and Wright 2000:667)

The decision making process between savings and loans becomes even more complex when one considers the *k’uchub’al* system. Although *k’uchub’al* has been considered a *rosca* or a system of rotating savings this classification may not be appropriate. The reasoning behind this perception is due to the fact that although individuals continually pay into the system through the course of a cycle, they individually receive *k’uchub’al* at different times. Therefore for the last individual to

receive *k'uchub'al* the system can be perceived as a savings institution that exactly mirrors what would have been if they had saved the money over the course of the cycle. Contrarily, because the first individual receives *k'uchub'al* before they have paid into the system, from their point of view *k'uchub'al* is a credit institution in the form of interest free loan. This perception greatly impacts an individuals perception of the system and influences period preferences which shall be expanded upon in the following section.

V. Perceptions and Evidence for both Formal and Informal Systems

V. 1. Credit Markets

The duality of formal and informal credit and savings markets is not unique to Guatemala. In much of the developing world the two systems coexist. Traditional development economics has viewed informal markets as inefficient and backwards however more recent studies have challenged this opinion. Multiple theories exists as to why formal and informal institutions exist however as mentioned by Mohieldin and Wright two have dominated recent literature.

The first is a policy-based explanation: government interest rate ceilings and other regulations create an informal market that develops at uncontrolled interest rates. The alternative hypothesis is that differences in the cost of screening, monitoring, and contract enforcement across lenders leads to fragmentation in credit markets.

(Mohieldin and Wright 2000: 657)

While both hypotheses may be valid my research in Guatemala has given more weight to the second.

An overwhelming perception of formal lending institutions is that they have too many requirements to secure a loan. These requirements, listed above, discourage potential barrowers and lead the formation of an informal market. Because collateral is

the only requirement in the informal market, it can be considered more accessible than the formal market and serve a population inaccessible by the formal markets. In addition to secure a loan in the formal credit market generally takes one week for processing and verification (Valentine, Interview Feb 15th, 2006) In the informal market, because collateral is the only requirement, the process can be speed up to the rate of which collateral can be transferred which can in some instances be instantaneous.

In Egypt Mohieldin and Wright found that “although it might be expected that those unable to obtain formal finance for a particular purpose turn to the informal sector, it appears...informal loans [are] associated with relatively short-term consumption and working capital needs, whereas formal loans [are] predominantly for production purposes.” (Mohieldin and Wright 1996:667 & 661) The correlation between short-term consumption/working capital and long-term investment/production and the informal and formal markets was also found in Guatemala. The reason behind short-term consumption and working capital’s connection with the informal market is directly related to its ability to more quickly offer loans. Because these activities are often time sensitive and unpredictable the higher interest rates are often worth the faster service. Long-term investment on the other hand is generally not as time sensitive and therefore paying higher interest rates especially over a long period of time is not justified.

V. 2. Saving Markets

While less has been written on the coexistence of formal and informal savings institutions Besley and Levenson suggest roscas increase Pareto efficiency among other characteristics that promote their existence. To understand how roscas are Pareto efficient an example from *The Role of Informal Finance in Household Capital accumulation: Evidence from Taiwan* shall be used.

Consider ten individuals each of whom wishes to own a durable that costs \$100. Left to their own efforts they might save \$10 per week over ten weeks. After that each individual would be able to enjoy the services of the durable. This is inefficient. After only one week, it would be possible to pool the joint savings of the ten individuals to buy one durable. Thus one (lucky) individual could enjoy its services after only a week of saving rather than having to wait for the full ten weeks. The same would be true for the second week. In fact by the tenth week everyone would own a durable except the last individual who receives it then precisely when he would have received if had he saved on his own. (Besley and Levenson 1996:50)

This examples shows that roscas can serve as a Pareto improvement where and some individuals can be made better off while no individual is worse off. One issue that is not mentioned by Besley and Levenson, however noted earlier, is the role of inflation which is increasingly important in developing countries such as Guatemala. Over the course of a rosca's cycle inflation eats away at the real value of the *k'uchub'al* causing the last person to be worse off than if they had saved in the formal market which if not only partially compensates for inflation. Although this issue is not as relevant in Taiwan due to a bidding process that compensates members whose period is later in the cycle the issue is relevant in Guatemala where no such bidding process exists.

The role of inflation in an economy benefits members whose period is early in a roscas' cycle and has caused a bidding process in Taiwan in order to compensate members for being latter in the cycle. In the *k'uchub'al* system however, ones preference of position within the cycle is often based on several factors. One factor that impacts ones preference within the cycle is seasonal. Individuals will often wish to receive *k'uchub'al* in December or prior to Semana Santa when they expect additional consumption costs. Another desirable time to receive *k'uchub'al* is during the planting season when addition costs can be anticipated. Another influence on a persons decision

as to when they prefer to receive *k'uchub'al* relates to that “when ones *k'uchub'al* is first the *k'uchub'al* is often seen as a burden because one has to continue to pay.” (Colop, Interview March 4th, 2006) According to Eva Lopez this “burden” causes some people to prefer being latter in the cycle so that paying *k'uchub'al* can be seen as having a reward in the future (Lopez, Interview March 4th, 2006). The idea of *k'uchub'al* being perceived as a burden and therefore impacting ones preference in the cycle is directly linked to the idea that *k'uchub'al* can be observed as a credit system by one individual while a savings institution by another.

The burden of paying *k'uchub'al* when ones period is early leads to the importance of trust and kinship in the system. “Trust is one of the most important things with *k'uchub'al*,” claims Eduardo Henry, “...otherwise someone might runoff after receiving *k'uchub'al*.”(Henry, Interview Feb 8th, 2006). Related to trust is that although gender barriers do not exist within the *k'uchub'al* system, as evident by Henry’s membership, the system is far more prominent among women. One explanation given was that women are seen to be less likely to spend money fruitlessly on alcohol and other simple pleasures therefore reliability becomes less of an issue.

One important factor with *k'uchub'al* that speaks to reliability is an individual’s ability to consistently contribute to *k'uchub'al*. In Taiwan Besley and Levenson predicted and found that “low income individuals may have more erratic incomes than salaried workers, making them more susceptible to defaulting on their rosca contributions. Since the ability to make an uninterrupted stream of payments is a desirable characteristic for rosca participants, we should expect to see larger numbers of participants in the more stable, lower-turnover jobs.” (Besley and Levenson 1996:44) Contrary to what Besley and Levenson found, through my research small business owners dominate *k'uchub'al* membership rather than salary employees. Small business

owners have the advantage that although their income is more irregular than salaried employees, it is far more frequent (employees can be paid weekly, semi monthly, and monthly) meaning that during the course of the week on aggregate they have a better ability to contribute towards the *k'uchub'al*. Small business owners also often have a larger incentive and greater accessibility to investment activities for which to use the collected sum in their business.

VI. Conclusion

The coexistence of formal and informal financial institutions is not a coincidence. Traditional development economics considered informal financial institutions as backwards and inefficient however an increasing number of studies have found that informal institutions in some cases can be more effective than formal institutions and can serve clients excluded from the formal sector. In rural Guatemala informal credit markets, represented by local moneylenders, are quicker at processing and issuing loans than the formal institutions, while informal savings institutions have been shown to increase Pareto efficiency by reallocating group resources. While a quantitative analysis would have helped this study tremendously adding statistical validity to some of its claims, it is my opinion that through qualitative analysis various conclusions can be made, most importantly evidence for the existence of both formal and informal credit and savings markets.

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