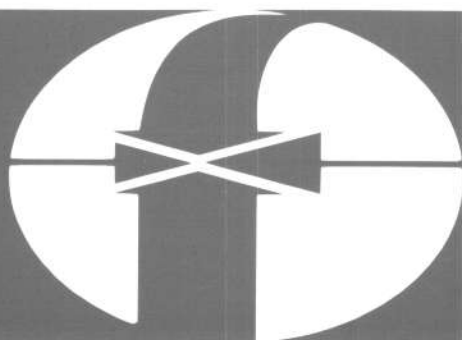


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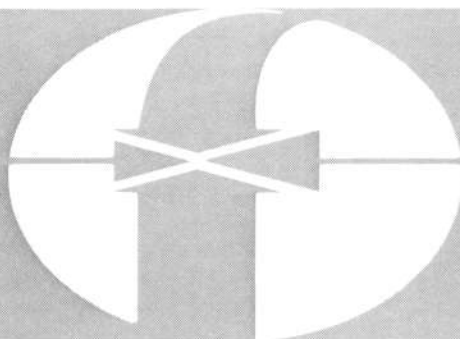
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# ROTATING SAVINGS AND CREDIT ASSOCIATIONS IN BOLIVIA \*

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## 1. Introduction

Bolivia is an economically poor nation whose per capita income is higher than only a couple of countries in the Americas. It was one of the first nations to default on its foreign debts during the 1980s, it has recently suffered hyperinflation, its major export (cocaine) is illegal, it has trouble collecting for natural gas exports, and its traditional primary export (tin) has declined to less than one-quarter of the value it was a few years ago. Despite recent progress in stabilizing the economy, these severe problems limit the ability of the government to save and to marshal capital for development. This does not mean, however, that individual Bolivians do not save.

In the following discussion we report on recent research done in Bolivia on informal rotating savings and credit associations (RoSCAS) — locally called *pasanakus*. Our results support the thesis that substantial capacities to save voluntarily exist, even in the poorest countries. We conclude that defects in policies, rather than deficiencies in human savings behavior, inhibit the mobilization of more of these savings into formal financial markets.

## 2. Background on RoSCAS

RoSCAS are an informal institution in which groups of individuals save, share risks, and also borrow. Other closely related types include non-rotating savings and credit associations (NRoSCAS), youth clubs, church groups, pilgrimage funds, burial societies, and mutual help groups<sup>1</sup>. RoSCAS do financial intermediation on a small scale in many

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\* We appreciate comments and suggestions on this paper from F.J.A. Bouman, Donald Larson, Richard Meyer, Salvador Romero, Rene Urquidí, Gustavo Vega, and Robert Vogel. We also acknowledge the support given our research by the Agency for International Development, Checchi and Company, and Abt Associates.

1 For examples see Mohammad N. E. Fatmi, «Informal Employee Credit Schemes in Bangladesh: A First Look», unpublished paper, Department of Economics, Dhaka University, Dhaka, Bangladesh, May 1987; Clarence Maloney and A. B. Sharfuddin Ahmed, «Rural Savings and Credit in Bangladesh: An Anthropological Study», unpublished study prepared for the Bangladesh Bank by Robert R. Nathan Associates and S. F. Ahmed & Co., Dhaka, Bangladesh, May 27, 1985; Marvin P. Miracle, Diane S. Miracle, and Laurie Cohen, «Informal Savings Mobilization in Africa», *Economic Development and Cultural Change*, 4 (1980): 701-724.

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countries<sup>2</sup>. Their basic elements typically include membership of six to forty individuals, a leader who handles the collection and distribution of funds, contribution of a fixed amount to a pot by members at fixed intervals, and distribution of the pot in rotation to members by drawing lots. RoSCAS intermediate among savers and borrowers, allow some to get a given amount sooner than they could through auto-saving, and allow others to save more than they might otherwise do.

RoSCAS are found in countries as diverse as Cameroon, Ethiopia, Niger, Nigeria, and Zaire in Africa; in Belize, the Dominican Republic, Jamaica, St. Kitts/Nevis, and Trinidad-Tobago in the Caribbean; in Bolivia, Mexico, and Peru in Latin America; and in India, Indonesia, Japan, Korea, the Philippines, Sri Lanka, Taiwan, Thailand, and Vietnam in Asia. They have also been reported among migrant groups in the United States<sup>3</sup>, and we have documented RoSCAS operating among employees in the International Monetary Fund in Washington and among employees of the Central Banks in Belize, Bolivia, the Dominican Republic, and the Philippines. RoSCAS appeal to a broad range of economic classes, can be found in economies at low as well as high levels of development, and appear in numerous permutations as they are adapted to local conditions.

The functions of RoSCAS range from almost entirely social to purely economic<sup>4</sup>. In some cases, RoSCAS may evolve over time as economic objectives engulf social functions<sup>5</sup>. They can play an important socializing role for both the poor and the well-

2. For an excellent review of RoSCAS see F.J.A. Bouman, «Indigenous Savings and Credit Associations In The Third World. A Message», *Savings and Development*, 1 (1977): 181-214.

3. References on this are the following: Aubrey W. Bonnett, «Rotating Credit Associations Among Black West Indian Immigrants in Brooklyn: An Exploratory Study», unpublished Ph.D dissertation, City University of New York, 1976; Ivan H. Light, *Ethnic Enterprise in America: Business and Welfare among Chinese, Japanese and Black*, Berkeley: University of California Press, 1972; and Carlos G. Velez-Ibanez, *Bonds of Mutual Trust: The Cultural Systems of Rotating Credit Associations Among Urban Mexicans and Chicanos*, New Brunswick, New Jersey: Rutgers University Press, 1983.

4. For examples see Clifford Geertz, «The Rotating Credit Associations: A Middle Rung in Development», *Economic Development and Cultural Change*, 10 (1962): 241-263; and Clifton G. Barton, «Credit and Commercial Control Strategies and Methods of Chinese Businessmen in South Vietnam», unpublished Ph.D dissertation, Cornell University, 1977.

5. Examples of this are described in Girma Begashaw, «The Role of Traditional Savings and Credit Institutions in Ethiopia», *Savings and Development*, 2 (1978): 249-262; Steve Haggblade, «Africanization from Below: The Evolution of Cameroon Savings Societies into Western-style Banks», *Rural Africana*, 2 (1979): 35-55; and C. P. S. Nayar, *Chit Finance: An Exploratory Study on the Working of Chit Funds*, Bombay, India: Vora & Co., 1973.



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to-do. Velez-Ibanez, for example, found that RoSCAS played an important social role among the relatively poor in both Mexico and in the U.S. as a way of building mutual trust (*confianza*) among members. Soen and Comarmond found the same thing occurring in Cameroon<sup>6</sup>. We also found cases in Bolivia where groups of well-to-do women formed RoSCAS as a way of buying an expensive birthday gift, in rotation, for group members.

In contrast, Barton found RoSCAS among wealthy rice merchants in Vietnam who used them to finance major investment; we found the same thing occurring among poor people in Bolivia, and Haggblade reports similar activities in Cameroon. RoSCAS are flexible enough to serve either social or economic functions in all social classes.

The importance of RoSCAS is generally underestimated because most of their activities occur informally. It appears that a significant portion of the adult population in many countries participate, at least occasionally, in RoSCAS. This raises interesting questions: Why are RoSCAS so popular? What services do they offer that are not provided by formal financial intermediaries? And, what can be learned from RoSCAS that might be useful for policy makers and formal financial intermediaries?

### 3. Description of Research

Until recently relatively little has been said in the literature about RoSCAS in Latin America as most studies of these associations focused on Africa or Asia. Studies in Mexico, Peru, and the Caribbean, however, are showing that RoSCAS are also common in the Americas<sup>7</sup>.

During the summer of 1987 we investigated RoSCAS in Bolivia by doing structured interviews with 470 individuals located in five of the largest cities: 323 in La Paz, twenty-

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6. Dan Soen and Patrice de Comarmond, "Savings Associations among the Bamileke: Traditional and Modern Cooperatives in Southwest Cameroon", *American Anthropologist*, 74 (1972): 1170-1179.

7. A few examples of these studies are the following: Margaret F. Katzin, "Partners: An Informal Savings Institution in Jamaica", *Social and Economic Studies*, 8 (1959): 436-440; Donald F. Kurtz, "The Tanda: A Rotating Credit Association in Mexico", *Ethnology*, 17 (1978): 65-71; and Douglass G. Norvell and James S. Wehrly, "A Rotating Credit Association in the Dominican Republic", *Caribbean Studies*, 9 (1969): 45-52.

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eight in Santa Cruz, twenty-eight in Cochabamba, twenty-four in Oruro, and sixty-seven in Sucre and in several communities around La Paz (Viacha, El Alto, and El Lago). These individuals provided information on 453 separate pasanakus. In addition, we briefly interviewed an additional 450 people in lines waiting for buses and customers in central markets about their participation in, or knowledge of pasanakus. We did not do extensive interviewing in rural areas, but our impressions are that RoSCAS are much less common among campesinos in Bolivia. They are frequently found, however, among merchants and professionals living in rural communities.

The term pasanaku appears to be a contraction of a Spanish word pasar and an Aymara word naka. The u ending may have its roots in the other major native language spoken in Bolivia — Quechua. Pasar indicates a game while naka connotes a fixed time and place for the game.

The genesis of pasanakus is unclear. It is traditional for farmers in Bolivia to exchange labor through «mingas» and to participate in cooperative land tenure relationships. Other traditional forms of lending or bartering in Bolivia include trueque, ayne, and chuk'u. It is unclear if Bolivia's pasanakus evolved out of these ancient systems of rural cooperation, were imported, or emerged spontaneously. Some social scientists in Bolivia argue that the playing of pasanakus arose with the introduction of money by the Spanish and gradually expanded as the use of money became more common.

The fact that RoSCAS are common in some places in the Americas where large numbers of Indians exist, including Bolivia, suggests that pasanakus may have evolved out of traditional systems of cooperation — pooling of labor may have logically lead to pooling of money. In countries such as the Dominican Republic, Jamaica, and Trinidad-Tobago, where most of the indigenous population was killed by colonists, RoSCAS were likely imported by migrants from Africa or Asia.

Our structured interviewing was not done on a random basis as we tried to uncover as many pasanakus as possible, collect information on the characteristics of pasanakus, assemble reasons for members participating, and also collect information on the motivation and characteristics of organizers. We conducted interviews in most of the major urban occupational groups, in many of the important urban businesses, and we interviewed employees in about 20 formal financial institutions. In addition, we also asked for estimates, from the persons interviewed, on the proportion of all employees in their offices (organizations) who were currently participating in pasanakus.

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#### 4. RoSCAS in Bolivia

We found *pasanakus* are common in urban areas. They appear to be approximately equally popular in the largest cities (La Paz, Cochabamba, and Santa Cruz) along with the smaller cities such as Oruro, Sucre, and towns and communities around La Paz. As can be seen in Table 1, in the organizations where we did interviews, eight to twenty-four percent of the employees were known by the person interviewed to participate in at least one RoSCA within the office or place of business. These percentages are conservative estimates since some of those who were listed as nonparticipants may have been members of other *pasanakus* outside the office, or members of other RoSCAS within the organization, but unknown by the person we interviewed. Also, the percentages in Table 1 do not capture all of the employees in an office who occasionally participate in RoSCAS, but who were not members at the time of our interview. In addition, about ten percent of those interviewed reported they or their spouse were also concurrent members of other *pasanakus*.

In addition to the 470 structured interviews with *pasanaku* members, we also did brief random interviews with approximately 450 adults waiting in line for buses and shopping in the central markets in all of the urban centers where we did research. These individuals were asked two questions: Are you currently a member of a *pasanaku*, and are you familiar with how a *pasanaku* operates? As can be noted in Table 2, the responses showed that thirty to forty percent of those interviewed, depending on city, currently played in a *pasanaku*, and an additional eighteen to twenty-five percent were very familiar with the operations of RoSCAS. Only thirty-eight to fifty percent of the people interviewed claimed not to be very familiar with *pasanakus*.

This information suggests that a sizable portion of urban-adults in Bolivians are, or have been, *pasanaku* members-one-third or more. An even higher percentage of urban households likely have at least one member participating in a RoSCA-perhaps up to one-half. In a few urban locations most adults are members of RoSCAS. In one hotel in La Paz virtually all of forty employees were regular members of at least one *pasanaku*. In several of the central markets where we did interviewing, almost all of the permanent workers in these markets regularly participated in at least one *pasanaku*.

Surprisingly, we also found that *pasanakus* were common among employees of most formal financial intermediaries: commercial banks, development banks, the Central Bank, and the apex organization of the credit unions. This raises interesting questions about the benefits employees realize from participating in *pasanakus* that they cannot realize from the financial institution in which they work.

**Table 1:**

PERCENTAGE OF EMPLOYEES PARTICIPATING IN INTRA-OFFICE PASANAKUS IN SELECTED ORGANIZATIONS IN BOLIVIA, 1987

Type of Organization	Percent
Financial Institutions	16
Central Markets	22
Sales	8
Business Offices	15
Government Offices	17
Private Businesses	10
Labor Groups	10
Hotels	10
Laboratories	22
Public Administration	10
Private Clubs	10
Industrial Plants	24
Transportation	16
University	10
Communication Businesses	9
Miscellaneous	10

Source: Field surveys in Bolivia, 1987.

**Table 2:**

PERCENTAGE OF PEOPLE INFORMALLY INTERVIEWED WHO PARTICIPATED IN PASANAKUS \*

City	Playing	Knew but Not Playing	Little Knowledge
La Paz	35	25	40
Santa Cruz	39	23	38
Cochabamba	32	18	50
Oruro	40	22	38
Sucre and Other**	30	25	45

Source: Field surveys in Bolivia, 1987.

\* Results of brief unstructured interviews with about 450 people who were standing in line waiting for buses or making purchases in central markets in mid-1987.

\*\* Includes informal interviews done in towns around La Paz: Viacha, El Alto, and El Lago.

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## 5. General Characteristics of RoSCAS

As can be noted in Table 3, the average size of membership in the pasanakus surveyed was ten with a range from five to 110. On average, sixty percent of the total membership of the pasanakus surveyed were women and nearly ninety percent of the groups were composed largely of friends or fellow workers. Only three percent of the groups surveyed were made up largely of family members and only five percent were composed of neighbors. In some countries it is common for several people to split a single share in a RoSCA, or for one individual to make contributions through several shares. This appeared not to be common in Bolivia as the number of shares, on average, was about equal to the number of members of the groups. Eighty-three percent of all the RoSCAS surveyed collected and distributed only cash. Many of the remaining RoSCAS collected cash and distributed some commodity. Nearly six in ten of all the pasanakus surveyed allowed the organizer to take the first pot. One of the most surprising findings of the study was the relatively large amounts of money people were putting into pasanakus. In terms of U.S. dollars, the average person contributed \$17.80 to the pasanakus surveyed at each collection period. For those paying a full share every two weeks this amounted to about \$35.00 per month. The largest share payments tended to be made in RoSCAS in offices whose members were professionals, while the smallest share payments occurred in pasanakus whose members were mostly market ladies paying daily shares.

The range in the length of time between payment of shares was one to fifty days, with a median of fifteen. Shares were collected daily in fifteen percent of the pasanakus surveyed, five percent assembled shares every week, fourteen percent every ten days, twenty-two percent every two weeks, and thirty-eight percent each month. We were surprised to find that about two-thirds of the pasanakus surveyed were conducted in U.S. dollars. People interviewed reported that prior to 1985, when the inflation in the country reached its peak, only twenty percent of the pasanakus in which they participated used dollars. It appears that the number of pasanakus using dollars, however, declined during 1987 as inflation expectations of Bolivians receded.

The most popular method of determining the rotation of the pots was through the drawing of lots at the time the pasanaku was organized with nearly seventy percent of the groups choosing this method. Another fifteen percent drew lots each time the pots were distributed, about ten percent assigned the rotation following the order of members

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**Table 3**  
**CHARACTERISTICS OF 453 PASANAKUS IN BOLIVIA**

Item	Mean	Median	St. Dev.	Range
No. of Members	10.8	10	6.6	5-110
No. of Women	6.4	6	4.2	0-40
No. of Shares	10.2	10	3.7	10-40
Share Value (\$US)	17.8	10	21.9	5-250
% Income to RoSCA	16.6	15	9.8	1-80

Source: Field surveys in Bolivia, 1987.

joining the group, and a small number of groups did the rotation informally on the basis of need. It is interesting to note that none of the RoSCAS surveyed used a bid system to determine rotation that is common in Asia and also found occasionally in Africa<sup>8</sup>.

Bolivians enjoy many forms of gambling, including lotteries. This propensity may partly explain the popularity of pasanakus; some individuals have fun being members of RoSCAS. The perceived benefits of being lucky and drawing an early lot exceeds the costs of being unlucky and getting a late position. Some people, nevertheless, may prefer to get their distribution late because of timing with targeted purchases. While informal techniques of determining rotation position have the advantages of flexibility — someone who badly needs the money early can negotiate with the organizer or other members for such a position — they also raise the possibilities for hurt feelings and group discord. The bid system includes the luck and fun feature, lessens the interpersonal conflict that may arise from allocating positions on the basis of subjective criteria, allows those who badly need the funds early to bid a high discount and get the funds when they most need them, and also allows those members of the group who are most interested in saving to consistently bid very small, or no discounts, and receive their distribution late along with a high rate of return on their savings.

One possible disadvantage of the bid system is that an unscrupulous person might bid a high discount, get the pot, and then skip town. This problem is largely avoided in some of the RoSCAS in Cameroon where the leader of the group assigns the ration.

8. In publications mentioned earlier, Barton, Hagglade, and Nayar describe bid systems in Vietnam, Cameroon, and India.

Members who have proved their reliability by successfully participating in previous rounds of the RoSCA receive early positions in the rotation, while new members, young people, and those who do not have an excellent reputation get positions late in the rotation<sup>9</sup>. In our study, we did not find cases where members must prove their credit-worthiness before they moved up in the rotation.

## 6. Types of Pasanakus In Bolivia

We found three types of pasanakus: simple office groups; more complex groups, often found in central markets, that included an organizer who received a commission; and pasanakus that were used by merchants and banks to promote the sale of goods such as clothing, furniture, food, appliances, automobiles, and mortgages. We label these three types *office*, *commission*, and *promotional* pasanakus. Bouman found in Indonesia and Sri Lanka some non-rotating associations (NRoSCAS) that assembled funds for some participants to visit holy places<sup>10</sup>. NRoSCAS are also very popular in some Middle Eastern and African countries. We ran across no NRoSCAS in Bolivia, however.

The most popular form of RoSCA in Bolivia is the *office pasanaku*; about three-quarters of the groups we surveyed were of this type. Most offices and businesses in the major cities have at least one pasanaku among its employees. Typically the office pasanaku has ten members, the majority women, who each contribute the same amount of cash to a pot every fifteen or thirty days. The organizer of these groups is often informally selected, but may be someone who needs a relatively large amount of cash and solicits co-workers to join a pasanaku. It is more typical for the organizer to be a senior employee who can be trusted to handle the collection and distribution of funds. Sometimes the group organizers are allowed to take the first distribution as compensation for their troubles, but, more typically, the organizer of an office pasanaku receives no special consideration. As an aside, the average number of people in a RoSCA in Bolivia was smaller than averages reported by researchers in other countries. This may have been due to the recent hyperinflation that caused Bolivians to want to turn their funds around relatively quickly by having small groups and keeping the time between distributions of the pots relatively short.

9. This process is described by Soen and Comarmond in their earlier mentioned article.

10. See F.J.A. Bouman, "Informal Savings and Credit Arrangements in Developing Countries: Observations from Sri Lanka", in *Undermining Rural Development With Cheap Credit*, edited by Dale W Adams, Douglas H. Graham, and J.D. Von Pischke, Boulder: Westview Press, 1984, pp. 232-276.



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The rotation of the pot is usually decided by lot at the time of the organization of the *pasanaku*, or by lot among the «non-winners» at the time each pot is collected. In some cases the organizer of the group has an implied obligation to make up for any defaults by members they invite to participate, especially if the organizer receives special consideration in the allocation of the pots. It is more typical, however, for all members to share equally in any losses experienced by the office group.

A few of these office *pasanakus* have a social function and give the members a feeling of togetherness through participation. This includes getting together for lunch or drinks each time a pot is collected and distributed. It is much more common, however, for the organizer to collect money and then pass the pot to the «winner» without interaction among other members of the group. Typically, the group does not meet for organizational purposes as individuals simply sign up for participation with the organizer. We were surprised by how few social functions these office *pasanakus* provided. Less than 10 percent of the office RoSCAS surveyed appeared to have a significant social function.

The next most important form of RoSCA was the *commission pasanaku* found in many of the urban markets where the organizers usually receive payment for their services. About fifteen percent of the RoSCAS we surveyed were of this type. In some cases, the organizer may manage several *pasanakus* at one time and in other cases they may manage a *pasanaku* as part of other marketing activities. We found women organizers who were managing up to six *pasanakus* and who had organized in excess of 100 RoSCAS in their lifetime. These organizers may or may not be people who regularly work in central markets.

The most common commission form is for the organizer to receive a payment out of each pot collected that ranges from two to thirty percent, the average being ten percent. The professional organizer may also have the option of taking the first pot and in some cases not having to pay shares. It is also common for professional organizers to have the use of money collected until it is distributed to a winner. In some cases, money is collected daily but distributions are only made every week or even up to every fifty days. Organizers who take a percentage, get the first pot, are not required to contribute a share to subsequent pots, and who are also allowed to use the money contributed to pots between distributions, receive a substantial reward for their efforts. In a few cases the organizer, typically a woman, may live almost exclusively on her earnings from managing *pasanakus*. It is more typical for the organizer's *pasanaku* earnings to be only part of their total income.

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As with the office *pasanakus*, the most common membership size for the commission *pasanakus* is ten, but we found commission groups that had over 100 members. Many of the collections were made daily, but some of the groups contributed money to a pot every five or ten days. The short time between collections may have given organizers more control than if long periods of time were involved. Also, daily collections may have been an accommodation to inflation. If shares are collected daily and pots are distributed daily, the complete cycle for a 100 members *pasanaku* would be less than four months. In most cases the allocations of the pot were made on the same frequency as funds were collected-e.g. daily collection, daily pots. It was not uncommon, however, for funds to be collected more frequently than pots were distributed-e.g. collecting funds daily, but only giving out a pot every five days. The organizer of the commission RoSCA often has a strong moral obligation to make good any defaults in payment to the *pasanaku* by individuals she had recruited.

There was even less social interaction among members of commission *pasanakus* than was found in the office form. In many cases the organizer is the only common connection among members of the group.

The third type of RoSCA, the *promotional pasanaku*, is organized by merchants and even bankers who are attempting to increase their sale of goods or services. Five to ten percent of the RoSCAS surveyed in Bolivia were of this type. It appears that this method of boosting sales became prominent with inflation between 1982 and 1986. In Oruro, for example, many merchants started promotional RoSCAS during this period to sell almost any relatively expensive item. The recent economic stress among miners in Oruro may have been a factor that forced merchants to offer *pasanakus* as a way of sustaining sales. Some merchants were forced to use *pasanakus* as a way of meeting competition. The promotional *pasanaku* was less prominent in the other cities where we did interviewing, but we did run across interesting cases in all of the cities.

The Banco de la Union in La Paz, for example, asked the Central Bank for permission to organize *pasanakus* whose members would assemble funds necessary to make down-payments on apartments or houses. Three RoSCA sizes, tailored to various sizes of properties, were proposed by the Bank: pots of five, ten, and fifteen thousand (U.S.\$). Each *pasanaku* would have twenty members and each winner of the pot would have enough money to make the twenty-five percent down-payment required by the Bank. The Bank, in turn, would accept this down-payment and then extend a loan for the remaining seventy-five percent based on a mortgage. *Pasanaku* payments would be made at the end of each pay period.

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Car dealers, furniture stores, appliance stores, merchants selling food items, and even tailors organize pasanakus as a substitute for installment payments to increase sales. We found a number of merchants in the central markets of La Paz, for example, who used pasanakus to promote sales of cans of edible oil, sacks of flour or sugar, and almost any other relatively large food staple. Typically, the members of these food-promotional pasanakus were other individuals working in the markets, collections were made daily, and distributions made each week. The number of participants, the amount of money contributed for each share, and the period between distributions of the pot varied, depending on the total value of the item distributed by the merchant. A common contribution was one bolivian peso (U.S. fifty cents) each day.

A hypothetical tailor pasanaku illustrates the benefits realized by the participants in this system. Twelve individuals may agree to purchase a suit from a tailor through a six-month pasanaku. Each member agrees to pay a pasanaku share of one-twelfth of the value of a suit to the tailor every two weeks. A drawing of the non-winners is held every two weeks to establish who will get their suit next.

There are obvious advantages for both the tailor and his customers in using pasanakus. The advantages for the twelve suit buyers are that all of them, except one, can acquire a suit sooner than if they were forced to auto-save for six months before they had enough money to purchase the suit. Further, if the buyer wanted to buy the suit on credit and then make the installment payment, this would, in most cases, involve paying an interest charge, a payment that the buyer avoids through the pasanaku. This interest charge would almost certainly be larger than the rate of interest he would receive through depositing his money in a bank regularly for six months and then buying the suit. Thus, on average, a participant in a pasanaku receives his suit earlier than he would otherwise and incurs smaller implicit and explicit financial charges.

Merchants are interested in pasanakus because they promote sales. Compared to normal installment payments, the pasanaku cuts down the default risk for the tailor. To illustrate this point, assume that the tailor has the option of selling twelve suits immediately and then collecting bi-weekly payments from the twelve buyers through installments paid over six months. Or, the tailor can make the same number of sales under a pasanaku, hand out one suit every two weeks, and collect an amount equal to the value of a suit twice a month. Under the installment arrangement any of the twelve suit buyers can default on payments during the six months, to the disadvantage of the tailor. Under the pasanaku, on average, only half of the members can default and hurt the tailor; if a pasanaku member defaults on his payments, and he has not received a suit, the

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tailor simply refuses to give him a suit. The loan recovery risks for the tailor are less under the *pasanaku* than for installment payments, and, furthermore, *pasanakus* are a cheap way for the seller to expand sales, given that the seller is forced to make sales on credit.

We have heard of promotional RoSCAS in other countries experiencing high rates of inflation: Brazil, Chile, and Mexico. Making sales through RoSCAS is a way for both the seller and the buyer to manage and reduce the risks of inflation. It appears that the interest in promotional *pasanakus* waned in Bolivia during 1986-87 as the rate of inflation sharply declined.

## 7. Members' Responses

It can also be noted in Table 3 that, for the average person interviewed, their *pasanaku* share payment averaged almost one-sixth of total salary (seventeen percent). Since about ten percent of those interviewed, or their spouses, were members of several *pasanakus* concurrently, the total portion of salaries going into RoSCAS was somewhat higher than our reported figures.

Approximately three-quarters of those individuals providing information through the structured interviews had participated in one to five *pasanakus*, nearly one-quarter had participated in six-to-ten RoSCAS, and three percent had participated in more than ten *pasanakus*.

One of our most important findings was the reason members gave for participating in a *pasanaku*. Ninety-one percent of the 470 members interviewed said their main reason for joining was to save! Only six of the people interviewed said that getting a loan was their main reason for joining. This is in sharp contrast to the basic assumption behind most government — and donor — sponsored credit projects: i.e., that the primary motivation for most people wanting to deal with a financial system is to borrow. We found little evidence that business people used *pasanakus* to finance substantial investments, a practice common in several Asian and African countries.

It was also interesting to find that only eight percent of the members remembered ever having problems in a *pasanaku*. This response, combined with the fact that *pasanakus* continue to be extremely popular in the country, strongly suggests that there is little default in *pasanakus* and that members feel they are benefiting by participating in them. The loan recovery performance in Bolivian RoSCAS is in contrast to the loan default problems suffered by government banks.

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Few of the members of RoSCAS interviewed had accounts in formal financial institutions; only sixteen percent of those interviewed, or their spouse, had a checking or a savings account in a bank or a credit union. More than three-quarters of those interviewed felt that RoSCAS provided them with more benefits than banks. About one-third of those interviewed felt that participation in *pasanakus* had increased with inflation, suggesting that use of formal financial institutions had declined.

### 8. Organizers of *Pasanakus*

We interviewed forty-six individuals, mostly women, who were currently organizers or managers of *pasanakus*. Two-thirds of them received no compensations for their efforts, the remaining one-third received a commission or percentage of the funds they collected for their efforts. Most of them, three-in-four organized the *pasanaku* for economic rather than social reasons. Those who organized *pasanakus* for social reasons were all involved in office RoSCAS. In contrast, the organizers of the commission and promotional *pasanakus* almost always realized material gains for their efforts. The *comisionista* gains directly from the commissions collected and from the use of interest-free money between the time money is collected and when pots are distributed. The gains for the promotional *pasanaku* organizer were the net increases in income realized by additional sales made possible through offering customers the possibilities of making purchases through *pasanakus*.

A large majority of the office and commission *pasanaku* organizers are women, in sharp contrast to the very limited number of women found in high-level positions in Bolivia banks. The extensive participation of women, both as organizers and members of *pasanakus*, may show that women have more difficulties in gaining access to formal financial services than do men and that their opportunity costs of organizing *pasanakus* is also lower.

### 9. Conclusions

We were surprised to find that *pasanaku* membership was so widespread, that they handled such a large amount of money, and that people were putting such large percentages of their income into them. While the shrinkage of the formal financial system from 1982 to 1986 forced some financial transactions into the informal arena, it appears that

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pasanakus were common prior to the recent dose of inflation and that they are far from being transitory. This extensive participation leads us to the same conclusion that Adam Smith arrived at over 200 years ago when he said «...the principle which prompts us to save... comes with us from the womb, and never leaves us till we go to the grave»<sup>11</sup>.

Widespread pasanaku participation shows that the majority of Bolivians living in urban areas are eager and willing to save in financial forms, even when inflation is nearly overwhelming. While we did not spend much time probing rural savings behavior it is likely that, while many Bolivian campesinos are poor, they still want and need to save. The immense investments made by small coca (cocaine) producers in the Chapare region over the past ten years are vivid reminders that poor farmers in Bolivia will save and invest, given attractive opportunities.

There are at least six reasons for the popularity of pasanakus in Bolivia. First, borrowers' *transactions costs* in pasanakus are almost nil. In contrast, these costs can be relatively large if RoSCA participants attempt to deal with formal financial intermediaries. Second, pasanakus are *flexible* and easily adjusted to the needs of the members. In contrast, the terms on most formal deposits and loans are quite inflexible. Third, saving in a pasanaku is *tied to* — the mirror image of — building a credit rating and borrowing. Most savers are also interested in getting a loan and others want to build relationships that allow them to borrow in case of emergency. This is often not possible through formal intermediaries that only extend targeted loans.

Fourth, for many people the *value* of these joined financial services exceeds the value of separate borrowing and deposit services. This helps explain the lack of failures among pasanakus in Bolivia, while the results of targeted formal credit programs have been disappointing. Fifth, transactions costs in pasanakus are low because of numerous *innovations*. In contrast, innovations in formal financial markets are often warped by regulations and this generally results in increases, rather than decreases, in the total costs of financial intermediation. Sixth, Bolivians enjoy playing pasanakus because of the gambling aspect and because it is an attractive form of «forced savings», features not generally offered by formal financial intermediaries.

In short, pasanakus are popular because they are providing the financial services most often demanded by individuals in Bolivia, while the formal financial intermediaries often do not.

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11. Adam Smith, *Wealth of Nations*, New York: Modern Library, 1937 edition, p. 324.

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Returning to the theme we advanced in the introduction, we conclude that the failure to mobilize more savings via deposits in the formal financial system is due to faulty policy rather than defective individual savings propensities. The results of this study suggest that major changes are needed in the way government and donors help Bolivia dig out of its financial hole. Clearly, previous attempts by the Bolivian Government — in concert with donors — to borrow its way out of poverty have failed. Bolivia's problems do not result from citizens who are unwilling or too poor to save. Bolivia continues to be a poor country, but many of its citizens are substantial and aggressive savers via *pasanakus*. The main development problem faced by the government is how to provide opportunities and incentives for people in Bolivia to hold more of their savings in formal financial market deposits.

The implications of this for donors are several. First, they must be careful not to undercut government incentives to mobilize intra-country savings through offering substantial external capital assistance. Instead, donors should encourage more autarky in savings. It is often much easier for a government to negotiate a loan for millions of dollars from an international donor than it is to do the grubby work of mobilizing small amounts of deposits from its own citizens that may sum to an even larger total. Donors must be careful not to discourage this difficult, yet important activity.

Second, donors must be careful not to create or reinforce policies in financial markets that may discourage internal mobilization of funds. Concessionary rediscount facilities in central banks (vehicles for handling donor funds), high reserve requirements, and extensive use of targeted credit programs all discourage deposit mobilization. Donors can easily beget a highly patronal formal financial system that has little incentive to mobilize deposits.

A final word. In contrast to the formal financial system in Bolivia which is severely stressed, withered, and lacking in innovations, the informal financial system — as seen through the *pasanakus* — is alive and well. The recent expansion in the informal financial system has allowed a large number of people and firms in the country to survive tremendous economic turmoil. Much can be learned from studying this informal system about the types of financial services that people prefer, as well as learning how to reconstruct the formal financial system on more efficient and equitable lines.



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**Abstract**

*Rotating savings and credit associations (RoSCAS) have been studied in many low income countries, but relatively little published information is available about them in Latin America. RoSCAS are informal arrangements through which groups of individuals save, share risks, and also borrow. Their functions appear to range from entirely social in some cases to purely economic in other instances.*

*In mid-1987, we studied RoSCAS in five of the largest cities in Bolivia through interviews with participants as well as with organizers. We found that a sizable portion of the urban-adults in Bolivia are, or have been, members of RoSCAS — one-third or more. We also found that a surprisingly high proportion of the employees in formal financial institutions regularly participated in RoSCAS. The average membership size was ten with a range from five to 110. The predominant reason given for membership in RoSCAS was to save more. On average, participants saved the equivalent of about \$18 (U.S.) every two weeks in RoSCAS with the rotation of the distribution of the collections being largely determined by lots. Three types of RoSCAS were found: simple office types, groups that were managed by professional organizers who received a commission, and promotional RoSCAS that were used to sell merchandise.*

*Extensive participation in RoSCAS suggests that Bolivians are eager and willing to save in financial forms, even when inflation is nearly overwhelming. RoSCAS appear to offer some major advantages to members that are not offered by formal financial institutions.*

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## LES INSTITUTIONS INFORMELLES DE CRÉDIT EN BOLIVIE (RoSCAS)

### RESUME

*Les institutions informelles de crédit (Roscas) ont été étudiées dans le contexte de beaucoup de pays en voie de développement mais en ce qui concerne l'Amérique Latine les analyses ne sont pas suffisantes. Les Roscas sont des institutions informelles de crédit qui permettent à des groupements de personnes de confier leur épargne, de répartir les risques et aussi d'emprunter. Leurs fonctions sont multifonctionnelles: dans certains cas ces institutions apparaissent de nature typiquement économique, dans d'autres cas leur activité s'approche davantage à une finalité sociale.*

*Vers la moitié de 1987, on a analysé l'activité des Roscas dans 5 des plus importantes villes de la Bolivie par des enquêtes auprès des participants et des organisateurs de ces institutions. Un pourcentage élevé (1/3 ou plus) des adultes habitant des villes sont, ou ont été, membres des Roscas. Aussi on a pu constater que, contrairement à ce qu'on pouvait penser, un pourcentage élevé des employés dans les institutions formelles de crédit participent de façon régulière aux Roscas. Le nombre moyen des participants est de 5 unités mais le chiffre peut varier de 5 à 110. La raison la plus importante qui favorise la participation aux Roscas doit être recherchée dans le désir d'épargner davantage. En moyenne, les participants épargnent l'équivalent d'à peu près 10 dollars (Etats-Unis) toutes les deux semaines; la distribution des fonds est déterminée en large partie par tirage au sort.*

*On a pu classer les Roscas en trois catégories: les groupements les plus simples, les groupements organisés par des fonctionnaires qui perçoivent une commission et enfin les groupements qu'on peut définir de promotion finalisés pour l'écoulement des marchandises.*

*Le degré élevé de participation aux Roscas suggère qu'en Bolivie les agents désirent épargner en forme financière même si le taux d'inflation est très élevé. Il semble bien que les institutions informelles de crédit présentent des avantages importants aux membres que les organismes financiers de nature plus moderne ne réussissent pas à offrir.*