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A MODEL OF THE POLITICAL ECONOMY OF AGRICULTURAL CREDIT: THE CASE OF BOLIVIA

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A MODEL OF THE POLITICAL ECONOMY OF AGRICULTURAL CREDIT: THE CASE OF BOLIVIA*

Introduction

Agricultural credit has been a cornerstone of most agricultural development programs in less-developed countries (LDCs). It is argued that farmers need additional capital in order to acquire the technologically superior inputs and to expand production. Thus domestic governments and donors of foreign aid alike have allocated significant sums for agricultural credit programs (Adams).

This paper argues that, although such programs are viewed as being fundamentally economically oriented, by their very nature they are very susceptible, indeed alluring, to LDC governments for playing an important political role. When cast in the context of this "dual"role, a political economy of agricultural credit emerges in which it is clear that resources are allocated in order to satisfy political objectives with the probable consequence of a less than optimum social allocation of resources for long-term development.

There are five major reasons why the political economy of agricultural credit has become important. First, governments typically control the formal market supply of agricultural credit.[1] Much credit flows to agriculture through government agricultural development banks. Most which comes from the private sector formal market only comes about as a result of government policies which force lending to agriculture. Therefore, governments have the ability to strongly influence the distribution and allocation of credit. Second, concessionary interest rate policy, which is almost ubiquitous in LDC agricultural credit programs, provides for an attractive concessionary income transfer to borrowers. Third, when governments permit long-term delinquency and default, a common condition in LDCs, the borrower receives a default income transfer. Fourth, when inflation is present the magnitude of each of these transfers is magnified. Fifth, the advantages of obtaining these transfers are sufficiently attractive that they can be used by governments to curry the favor of borrowers and, conversely, by borrowers to pledge support to government. Credit is particularly alluring for these purposes because of its very nature. Credit programs are easy to establish and administer. Moreover, they have a direct influence on the allocation of economic benefits in society. Since "everyone knows" more credit is necessary in the rural areas, more credit and new programs make tremendous propaganda devices to persuade the public of government's seriousness about development.

Yet, because monies are fungible and because of the hidden transfers, the true uses of such funds are difficult to identify. Thus, credit lends itself to being used for political purposes under the guise of economic development.

The extent to which economic decisions are influenced by political factors, or vice versa, is difficult to ascertain in practice. It is becoming increasingly clear, however, that not only is there the potential for political forces to impact heavily on agricultural credit programs, but also they probably play a more important role than has been previously recognized.[2] The Bolivian case is particularly useful to study. This country is an archetype of underdevelopment and, as one of the world's poorest nations, has been a recipient of large infusions of foreign assistance. Moreover, the country is small enough so the flows in financial markets are more easily identified than would be the case for many larger and more complex countries. Thus Bolivia is a good case to illustrate the political economy of credit and to help us understand the operations of these forces in other LDCs.

This paper first describes the evolution of the institutional and policy structure of credit programs in LDCs. The role of foreign aid is emphasized. Second, a model of the political economy of agricultural credit is specified. Third, the model is applied to Bolivia. Fourth, conclusions and policy implications are set forth.

The Evolution of Institutional and Policy Structures

Throughout history in developed countries (DCs) and LDCs alike commercial financial institutions have shunned lending to agriculture because of the high costs and risks embodied in these loans. Thus pressures were placed on governments to provide alternate sources of financing. The solution has been to establish government agricultural banks. Many LDC countries had established these banks prior to the postwar emphasis on development. Typically, however, with some notable exceptions such as Mexico, they were utilized to finance the already established and oftentimes wealthy farmers rather than small farmers. It can be argued that the political influence of this rural clientele pressured the governments into establishing these banks. In the case of Mexico it was political forces surrounding the beneficiary of land reform, the ejidatario, however, in most countries it was the more prosperous large farmer.

In the development decades of the 1950s and 1960s many other countries established government agricultural banks in response to economic and political pressures for development. From an economic view the passivity of the agricultural sector dictated a supply-leading financial approach.[3] From a political view agricultural development, or at least the opportunity for development in various product lines or regions, was stabilizing.

When it became obvious that government institutions could not meet the needs of financing agriculture, means were sought to force the private sector to lend to agriculture. Often there was legislation which forced commercial banks to maintain at least a minimum percentage of their loan portfolio in agricultural loans. Often the central bank provided special lines of credit to discount the agricultural paper in the banking system.

Almost without exception all of these agricultural credit programs incorporated a feature transferred from the United States Farmers Home Administration program credit model; e.g., the concessionary interest rate, because, from an economic standpoint, it provided elements deemed very appropriate to the conditions of LDCs.[4] The concessionary transfer (the income transfer due to the concession) was justified to encourage the use of the more capital-intensive inputs, and to compensate the farmer for: the inherent risks in agriculture due to varying yields and product prices, the paucity of cost-reducing infrastructure in the countryside, the past injustices done to farmers by moneylenders, and low product prices imposed by the government to protect the interests of urban wage earners.[5] Little attention has heretofore been directed, however, at the tremendous political leverage that the concessionary transfer offers. Upon reflection, however, it is not difficult to imagine that both government officials and borrowers quickly perceived the inherent power in the instrument.

The foreign influence in formulating and abetting the whole system and policy structure is apparent. First, most institutions and policies were adopted in LDCs based upon the received doctrine from the DCs, often with the advice of foreign advisors. Second, bilateral and multilateral donors of foreign aid have made considerable loans for agricultural credit programs which have been fed into this institutional structure and policy framework.

A Model of the Political Economy of Agricultural Credit

It is clear the institutional structure of agricultural credit in LDCs was created in response to both economic and political objectives. Moreover, present structures easily permit governments sway over the distribution and allocation of credit for both economic and political reasons. Now it remains to carefully specify the importance and possible consequences of concessionary transfers and other income transfers in the political economy of agricultural credit.

(Figure 1)

Figure 1 presents a countrywide demand curve, DD', for agricultural credit.[6] Assume that the prevailing annual nominal rate of interest for nonagricultural loans is r. If farmers were to borrow money at this rate they would want to utilize OC_1 credit. Suppose, however, that the government subsidized agriculture by means of a concessionary interest rate policy for agricultural loans; a concession of three to ten points is common. If the rate were r', then farmers would want to borrow an additional amount, C_1-C_2 for agricultural purposes. In the process they would receive a subsidy or income transfer (the concessionary transfer) of r'rab if nonprice credit rationing was not employed.

There is an additional effect, however, which adds to the demand for agricultural credit. Credit is fungible and, although borrowed ostensibly for agricultural purposes, it can be diverted to nonagricultural activities. The result is agricultural illusion--a situation where some agricultural loans have the appearance of going to that sector but in fact are directed to nonagricultural purposes such as consumption or investment in other sectors. This would be expected in particular among farmers who have multiple occupations and/or knowledge about other investment opportunities. The effect of agricultural illusion is to cause an additional demand for agricultural credit. The addition of this demand to DD' causes a kink in the new demand schedule at r to form a new demand for "agricultural" credit of DD". Thus, at the concessionary rate r', the concessionary transfer becomes r'rac.

When inflation is present, a situation common to LDCs, the real rate of interest may be quite low or even negative. The effect is to enlarge the income transfer by an additional inflationary transfer. For example, assume the real concessionary rate were r", borrowers would then gain an inflationary transfer of r"r'ce.

Clearly the concessionary transfer and the additional inflationary transfer are to coveted. Therefore, a government with its control over agricultural credit institutions can use it to induce certain types of economic activity and/or to reward certain behavior among borrowers. Moreover, borrowers in their competition for access to and their share of the transfer, will undoubtedly be willing to bargain with government to have access to this credit. Thus, there is an interplay between government and farmers in which political factors may take on considerable importance. In the case of authoritarian governments, typical of many LDCs, such an interplay takes on increasing importance the weaker the government since the government will find it more necessary to garner and maintain clientalistic support in the economy.

Similar motives and interplay create another possibility for an income transfer due to defaulting. This default transfer is equivalent in real terms to the real amount of the loan plus real interest charges less any real amount repaid on the loan and interest and is in addition to the concessionary and inflationary transfers. The default transfer may be temporary or permenant. It is temporary when a loan is delinquent but will be repaid in a period of months or even years. It is permanent when the loan is truly defaulted and no future repayment is expected. Even a temporary transfer is of economic value, particularly when inflation is present which substantially reduces the real value of the loan when repaid.

In fact heavy delinquency and default rates may be symptomatic of the degree that political factors have entered into the loan. When the government does not take the legally available measures to bring pressue on the borrower to repay, this indicates an unwillingness to bear the economic and/or political costs of such action. Moreover, when political rather than economic factors determine a loan it is to be expected that higher delinquency and default rates would occur.

The sheer existence of the concessionary transfer and the possibility of an easy default transfer creates a potential for corruption. Government officials could easily appropriate part of the transfer for themselves by directly or indirectly lending to themselves, or by receiving kick-backs from borrowers.

Consequences

The consequences of using credit as a political instrument will vary depending on the specific situation in any country. It is possible, however, to draw generalizations about expected consequences in four areas: resource allocation, economic development, income distribution and financial institution viability.

The concessionary interest rate policy leads to a non-optimal social allocation of credit, other resources, and the production of goods in society unless there is an effective means of nonprice rationing. Experience demonstrates, however, that nonprice rationing schemes are difficult to enforce. The schemes are even more unworkable when political factors intervene. Thus political factors contribute to a misallocation of resources not only in agriculture but also between sectors. If inflation is present, the additional inflationary transfer enhances the attractiveness of using credit for political objectives and exacerbates the resource allocation consequences; for example, it may encourage speculative investments and inventory stockpiling as well as capital flight--agricultural illusion.

There will be additional indirect impacts of credit allocation on balance of payments, government expenditures and revenues, price stability, rural-urban migration, sectoral development and economic development in general. However, it is beyond the scope of this paper to pursue these consequences. It should be noted, nevertheless, that there is increasing evidence that an agricultural development strategy based on small-farmer development provides a better approach to rural and overall economic development (Johnson and Kilby) than that which concentrates on large farmers. Where this holds, policies which direct credit to small farmers in combination with other services such as extension, new technology and improved markets, will provide more social benefits than those which favor large farmers.

Clearly access to the concessionary transfer will affect income distribution (Gonzales-Vega, 1979). Those who receive it as a result of borrowing or corruption will gain at the expense of others. In terms of Figure 1 the amount to be transferred with effective nonprice rationing is r'rad. Without effective rationing, there is an additional gain of dac with agricultural illusion. Clearly, inflationary conditions will increase the benefits of those who receive the transfer. If delinquency or default occur, the income transfer is even greater. The net result under any combination of the several transfers is that the borrower gains income at the expense of the taxpayer or saver whose money is utilized to provide credit. Moreover, the borrower will gain income relative to those who have no credit or who borrow at true market rates of interest.

Political lending will lead to lesser revenues for credit institutions due to extensive delinquency and default inherent in such loans. This, in combination with the well-recognized high costs of administering agricultural credit programs, will seriously jeopardize a credit institution's financial viability. The result is that to maintain or increase its loanable funds the institution must be subsidized by the government or obtain foreign loans or assistance. Without these supports the institution's financial resources would soon dry up. It is clear how subsidy (perhaps foreign supported) can be used to further political as well as economic objectives with all the attendant effects on resource allocation, income distribution and economic development.

The Role of Foreign Donors

Foreign economic assistance programs contribute to the use of credit as a political instrument in two ways. First, they have promulgated the policy of concessionary interest rates with the direct effect of creating concessionary transfers. Second, they have provided considerable economic assistance for agricultural credit programs. As a consequence they have been an indirect contributor to the use of credit for political purposes leading to other transfers. This is particularly true for loans have been made for general agricultural sector development, where credit typically flows to the larger and more sophisticated farmers and agricultural illusion takes on large dimensions. However, even in cases where foreign aid funds are earmarked for small farmers, the additional funds simply increase the size of the total portfolio and may permit some substitution for other funds previously directed to small farmers, thus releasing them for other purposes including political.

Can't Interest Rates be Raised and Default Reduced?

The obvious economic solution to prevent all these distortions is to raise interest rates and decrease default. There is increasing evidence that the conventional wisdom of using concessionary rates is wrong. Policymakers in foreign assistance institutions and governments are now privately advocating this change on economic grounds. The private and government banking communities have long recognized the advantages of higher rates as a means to increase revenues and render their institutions more profitable. Why, then, have policies of higher rates not been put into effect? Furthermore, why don't many lenders use their legal powers to limit default? The answer is clear: the political cost is too great. First, governments would lose attractive elements available to them to bargain for political support. Second, farmers accustomed to the concessionary and/or default transfers would stand to lose substantially. In particular, the impact would fall on the larger farmers who practice agricultural illusion with access to alternative investment-consumption activities. The fact is that most LDC governments do not see it in their political interests to either give up their options for a political weapon or to suffer the protests and resultant instability that is to be expected from raising interest rates or from more stringently controlling default--a further verification of the political importance of agricultural credit.[7]

The Case of Bolivia

The Political Setting[8]

In this section the previous model is applied to Bolivia after the 1964 overthrow of the MNR (National Revolutionary Movement Party) government. Emphasis is placed, however, on the 1971-1978 administration of General Hugo Banzer.

The 1952 populist revolution of the MNR was to extricate Bolivia from an economy based upon tin exports and large land holdings where Indians were held in peonage to work the lands and were considered second-class citizens. Early accomplishments of the MNR were the nationalization of the tin mines, land reform, liberation of the Indian and the opening up of the Oriente (the eastern tropical low lands, especially in the department of Santa Cruz) with a major highway over the mountains to this rich agricultural and petroleum based region. As is often the case with populist revolutions, the MNR reign was co-opted by middle-class elements. In 1964 after the revolution had lost its momentum and there was divisiveness among the middle-class elements, a revitalized military under the leadership of General René Barrientos came to power with a coup. Barrientos, a believer in free enterprise, encouraged the development of large-scale commercial agricultural in the Oriente but not to the exclusion of the peasants who had benefited from land reform in the traditional agricultural areas of the high plains and the mountain valleys, and who formed a vital part of his political coalition. When he was killed in a helicopter crash in 1969 there was a move to the left with a succession of two liberal military governments. The first, of General Alfredo Ovando, gave less favors to private business and attempted to reincorporate the working and peasant classes into the ruling political coalition. When he was unsuccessful, he was overthrown by the much more leftist leaning, General Juan José Torres. Predictably the conservative military, middle-class and private business interests, particularly those of the Oriente, were very disturbed with these events. They quickly coalesced around Colonel Hugo Banzer who led a coup in August, 1971 to return the country to a conservative rule. His administration lasted until July, 1978 when he was overthrown by a military coup after the country's first elections in 18 years were annulled because of fraud. As Mitchell points out Banzer's reign was marked by repression of the opposition, marginalization of the peasants and working classes, and strong support for his power base in the military and private business, especially the business and large-scale commercial farming interests in Santa Cruz, Banzer's home territory. Astute politics and fortuitous economic conditions in the external sector--favorable tin prices, agricultural export markets, OPEC, and foreign loans--in combination with reaping the benefits from the recently opened petroleum and agricultural territories in the Oriente provided Banzer the wherewithal to remain in power nearly seven years, a rare occurance in Bolivia.

An Overview of Bolivian Agriculture

Since 1964 the salient feature of Bolivian agricultural development has been the growth of the commericial agriculture of the Oriente, much to the neglect of the very large majority of the rural population living in the highlands in a state of traditional or semi-traditional agriculture. Since land reform, the highlands have received little government support. Although Barrientos, Ovando and Torres catered to the peasants under a Military-Peasant Pact, in fact only a small portion of the government's budget was devoted to agriculture. Over the 1967-1971 period 6.8 percent of the total government budget was directed to agriculture. In the Banzer years from 1972 to 1977 there was a substantial increase to 10.2 percent (Torrico, p. 29) but most went to the Oriente.

After the highway to the Oriente was opened in 1953, sugar and rice production in the region expanded to substitute for imports. Sugar was first exported in 1965 which was followed by cotton in 1967. Both were to expand considerably in the early 1970s (Wennergren and Whittaker, p. 62). By the mid-1970s limited amounts of rice were exported and soybeans were introduced as a potential export crop. Direct government subsidies were important to producers, especially for sugar and rice (Torrico). Except for rice, most production of these crops took place on large-scale farms.

Institutional and Policy Structure

In 1942 the Agricultural Bank of Bolivia (BAB) was founded in order to provide credit agriculture, to carry out commercial banking operations and to import agricultural inputs. At that time its clients were the large landholders. Undoubtedly, political motives were important factors in establishing the bank. After the 1952 revolution BAB was reorganized in 1954 in order to provide some credit to the peasants, or beneficiaries of land reform. Again political motives were important. Yet, in spite of a special U.S. assistance program to carry out this mission, the peasants received only 10 percent of the loan volume and 30 percent of the loans (Royden, p. 23). Corruption, politically based loans and administrative problems plagued the bank--problems which were to remain up to the present. Foreign donors used their leverage to try to straighten out the situation by requiring BAB to undergo successive administrative reorganizations as conditions to receiving additional assistance. Such reorganizations were undertaken in 1954, 1963, 1974 and 1976. With the 1963 reorganization BAB discontinued all banking services except credit.

(Table I)

BAB was virtually the sole source of institutional credit to agriculture in Bolivia prior to the mid-1960s. As shown in Table 1 in 1964 it accounted for 87 percent of the total annual flow. Its share of an increasing flow of credit to agriculture declined thereafter such that by 1977 BAB was responsible for only 49.5 percent (Banco Agrícola; Banco Central, 1975, 1978). The decline was due to a Central Bank (CB) policy instituted in 1967 which required commercial banks to keep a larger proportion of their loan portfolios in agricultural paper. To back up this policy a number of special lines of credit to agriculture were set up at the CB to be used to discount commercial bank agricultural loans. The more important special lines came as foreign aid. Much of the sharp increase in commercial bank lending to agriculture came from the government-owned State Bank (BDE); over the 1968-1977 period this institution accounted for 60 percent of the commercial bank agricultural loans (Banco Central, 1977). Thus, it is clear that, between BAB and BDE, government institutions directly controlled 80 percent of the institutional agricultural credit in the country.

The use of concessionary interest rates is the cornerstone of Bolivian agricultural credit policy. Between 1966 and 1978 there was a government-established spread between the effective commercial bank interest rates for commercial and agricultural loans of six to nine points. Furthermore, over the same period BAB clients received at least another six point concession.[9]

The Role of Political Factors

The combination of government control and influence over agricultural credit institutions and concessionary interest rate policy suggests that the system is vulnerable to political factors. In order to examine this possibility it is necessary to first examine data on patterns of credit distribution and repayment.

In a word regional credit distribution in Bolivia since 1971 can be described by "Oriente". Between 1964-1970, 43 percent of the value of loans from BAB's regular lines went to the Department of Santa Cruz; there were few loans from special lines (Ladman, Tinnermeier and Torrico, pp. 113, 116). Between July 1971 and December 1977 an average of 71 percent of the value of BAB loans from the combined regular and special lines went to this Department but accounted for only 31 percent of the total number of loans. Clearly the credit went to large farmers. From 1971 to 1974, the average volume of loans to Santa Cruz was 237.969 million pesos (Banco Agrícola), a figure that is about five times as large as the 1964-1971 average. Major products financed were cotton, sugarcane and rice. Loans made from CB discounts were also directed to the Oriente.

A conservative estimate is that at least two-thirds of all CB discounts to commercial banks and BAB went to Santa Cruz (Ladman, Tinnemeier and Torrico, p. 93): again, mainly to large farmers.

Loan delinquency is a major problem in Bolivian agricultural credit use. BAB's delinquency rate climbed steadily from the mid-teens in the middle 1960s to 60 percent in 1977. Particularly noteworthy were the sharp rises in 1971 and 1973 when the rates rose due to extensive delinquency in rice and cotton respectively. Most of these loans have been carried forward (Banco Agrícola). If many past delinquent loans had not been refinanced the rate would have been higher. In 1976 more than a third of BAB's portfolio had been refinanced; many loans had been refinanced several times.[10] Analysis of State Bank data showed that 76 percent of soybean loans made from 1972 to 1976 were delinquent. Comparable figures for wheat, dairy, poultry, swine, corn and rice were 44, 48, 20, 66, 31 and 17 percent, respectively (Ladman, Tinnermeier and Torrico, p.148). The bulk delinquent loans of both institutions was in Santa Cruz; for example, in 1977, 80 percent of BAB's delinquent loans were in that department.

Strong economic arguments can be made to explain the highly skewed distribution of credit towards the Oriente. First, the region was undoubtedly viewed by the government and foreign donors as the best place to gain rapid increases in output of not only many basic food products but also export products. In part this was due to the external economies created by massive foreign assistance in the development of transportation. Second, once the Santa Cruz-Cochabamba highway was opened, agricultural production could help solve Bolivia's seemingly ever-present balance of payments problem. Inputs could readily go into the region and products could be shipped to population centers to substitute for food imports and for export.

Geopolitics may also have been a factor. The government wanted to develop the region to not only lay a definitive claim to its hydrocarbon and agricultural resources but also to provide a buffer zone against possible encroachment by its eastern neighbors, particularly Brazil.

Internal politics may also, however, explain the extensive distribution of credit to the region. In accordance with the model, the coexistence of predominantly government controlled credit institutions and a policy of concessionary interest rates for agricultural credit provide a basis to facilitate the use of political motives in distributing credit.

Gigantic increases in annual flows of credit going to the Oriente were observed after 1970. This coincided with General Banzer coming into the presidency with the support of the Santa Cruz elite--most of whom had extensive commercial agricultural interests. Between 1971 and 1974 Banzer had to continually consolidate his support and marginalize the opposition in order to remain in power. It is strongly suspect that this increase in credit was used to not only make the Oriente economy more robust but also to consolidate and strengthen his power base in that region.

It was also observed that after 1970 the Oriente received an increasing larger proportion of total agricultural credit to the neglect of the rest of the country. In contrast, the masses of peasants in the Altiplano received very little. Although considerably more went to the mountain valley departments of Cochabamba and Tarija, a large portion of funds going to these areas went to medium-sized farmers or to capital-intensive livestock, orchard, poultry and vegetable farmers; persons who are not typically classified as peasants. This action corresponds closely with Banzer's decision from the outset of his regime to marginalize the peasants in his political coalition and his consequent virtual neglect of them (Mitchell). This suggests that neither political nor economic considerations of providing agricultural credit to the highlands was given high priority by his regime or at least political considerations overrode any economic advantages of lending to the highlands. Indeed, the advantages to Bolivia of a small-farmer development strategy in the highlands is emphasized in a recent major study. The study suggests that the strategy would have important benefits for Bolivian income distribution, employment, and lower investment requirements without seriously harming balance of payments or government fiscal revenues compared to the resource export strategy followed to date (Clark, p. 26). Thus it is very probable that political forces held sway over economic considerations in directing credit away from the peasants. In fact it was only after 1974 that the BAB and the CB began making special and extensive efforts to direct credit to the small farmer as a result of funding from foreign assistance donors.

It is clear that the large farmers of the Oriente received a substantial concessionary transfer. In 1972 and 1973 BAB clients had a concession of 15 percent in comparison to the rate for commercial bank loans for commercial purposes, thereafter it was 12 percent.

The inflationary transfer was also substantial. For BAB clients the real rate of interest was at least four percent less than the nominal rates for each year of the 1970-1978 period. For three years the real rate of interest was negative as shown in Table II. In the post-devaluation years of 1973 and 1974 the real rates were -16.3 percent and -30.6 percent respectively.

(Table II)

Undoubtedly the combined concessionary and inflationary transfers have led to other transfers through the practice of agricultural illusion. It is widely said in Santa Cruz that many large farmer recipients use their loan monies for nonagricultural investments and consumption expenditures both domestically and abroad. The high delinquency rates in the *Oriente* suggest this to be the case in that consumption spending does not provide any direct return to pay off the loan and that many of the nonagricultural investments are of a long-term nature, such as construction, and can't be expected to generate sufficient income to pay off the loan in a single period. The fact that the government has insisted that the banks take a very lenient position on forcing these borrowers to repay loans in the *Oriente* is strong evidence of its desire to use the loans as political favors by providing temporary or permanent default transfers. The cases of delinquent soybean and cotton loans are very illustrative.

Nearly 21,000 hectares of soybeans were financed in Santa Cruz under the discounts financed by the First Agricultural Refinancing Credit Line held by the CB. Discounts were made to BAB, the BDE and private commercial banks. The average number of hectares financed per loan was 104, hardly small farmers. Over the 1972-1976 period the BAB and the State Bank recovered only 5 and 30 percent of their soybean loans, respectively, whereas the private commercial banks recovered 65 percent (Ladman, Tinnermeier and Torrico, pp. 78, 84). This suggests that the governmental institutions either did not select their clients as carefully as private banks on economic grounds and/or did not pressure the farmers for repayment. In either case it implies that political considerations did come into play.

Nevertheless, a contributing factor to poor repayment was an excess supply which drove down bean prices.

BAB began to finance cotton heavily in Santa Cruz beginning in 1972. From the outset they experienced high delinquency for the crop which contributed to the sharp jump in BAB's delinquency beginning that year. In part this was due to inexperience with the crop and natural disasters. In 1973 BAB and commercial banks heavily financed cotton and ADEPA (The Cotton Growers Association) made forward contracts to sell their cotton on world markets. The world price continued to rise and surpassed the forward price. ADEPA refused to sell at the forward price and asked the world price. The government supported them and Banzer issued a Supreme Decree on April 8, 1973, in which the government established a minimum acceptable export price. However, the contracting cotton merchants would not pay more than the forward price. The cotton went unsold and delinquency for all lenders soared. Several private commercial banks stood to lose considerable money. Eventually, the government implicitly absorbed the debt of private banks by indirectly transferring the delinquent loans from these institutions to BAB. BAB has held these loans as well as its own loans as delinquent.

Clearly political factors were very prevalent in both the cases of soybeans and cotton. In consequence both the State Bank and BAB were holding excessive portions of their portfolios in arrears. Officials of both institutions pressed for permission to use their legal powers to collect the loans but were thwarted by the government. Finally in a Supreme Decree issued on June 28, 1977, the government's resolution of the matter was announced favoring the delinquent cotton and soybean borrowers in the Oriente by allowing them from eight to twelve more years to settle their delinquent accounts. This amounted to a very substantial income transfer, especially considering the probable additional impact of inflation. Moreover, the State Bank was favored in that it was to transfer many of its delinquent loans for the two crops to BAB. That this action occurred at a time when Banzer was developing plans to return the country to democracy by means of elections, in which he presumably would be a candidate, suggests that these moves may have been to further strengthen his position among the Santa Cruz elite who were already feeling the economic pinch of a tapering off of the agricultural boom of the 1970s and the decline in petroleum production. A predictable consequence of this politically motivated action was that with this heavy burden BAB was soon on its way to bankruptcy.

Foreign Aid

Foreign assistance to Bolivia for agricultural credit purposes has been substantial. Between 1966-1976 over

92 million U.S. Dollars were committed to Bolivia for this purpose. Of this amount 41.4, 22.8, 9.5, 19.5 and 6.8 percent came from the United States Agency for International Development, World Bank, Inter-American Development Bank, Banco do Brazil and other sources, respectively. Almost two-thirds of the loans went to BAB directly and most of the rest went to CB to establish special lines of credit to both BAB and commercial banks. A conservative estimate is that at least 42 percent of the institutional agricultural credit over the eleven-year period came from foreign assistance programs (Ladman, Tinnermeier and Torrico, pp. 62, 63). Although such loans enabled Bolivia to sharply expand agricultural credit, they also undoubtedly were used to offset the heavy defaults. The aid was used to finance general agricultural production but in particular for crop and livestock activities in the Oriente. There has been a definite regional bias in favor of that region and against the Altiplano and mountain valley areas and most credit has flowed to large and medium-sized farmers. Only since 1975 has a major donor, the United States Agency for International Development, established credit programs specifically for peasants.

Conclusions

A model of the political economy of agricultural credit was developed. Under typical conditions in LDCs of direct government control of financial institutions, concessionary interest rates, ease of default, and inflation, the model demonstrates the efficacy of agricultural credit not only as an economic instrument but also as a political means to gain support of segments of the rural population whether it be peasants or, as is most often the case, the large wealthy and influential farmers. Credit as a political instrument is very attractive to a government because it has the appearance of going for worthwhile economic objectives but in reality offers opportunities for considerable benefits to borrowers by means of income transfers and gains from fungibility. Moreover, because the true benefits are hard to identify and are well hidden they are less subject to the scrutiny of the opposition and the general public.

The Bolivian case clearly illustrates the political economy of the model, particularly in the 1970s, in the context of the "populist" 1952 MNR revolution. It's now well-established that this revolution, although it did give considerably more social and economic mobility to the peasant, basically by means of land reform, suffrage and improved education, really was a revolution that benefited the middle-class, the military and the private-business sector. Although the cooption of the revolution by the middle class became apparent in the early 1960s it was consolidated after a brief interlude of two successive leftist-oriented governments from 1969 to 1971, when Colonel Hugo Banzer came to power in a military coup of August, 1971 which was strongly supported by the burgeoning new elite--the private business sector of Santa Cruz.

Banzer came to govern in very difficult times in 1971. In order to remain in power he rapidly repressed the opposition and courted his mainline civilian support in Santa Cruz. He feared the popular classes and rapidly worked to neutralize both labor and the peasants by repression, marginalization and excluding them from his coalition.

The record of the Banzer government strongly suggests that it used agricultural credit as both an economic and political instrument. The sharp increases in both the absolute and relative amounts of credit flowing to Santa Cruz are questionable on economic grounds and indicate the use of concessionary and inflationary transfers to benefit Banzer's power base. Heavy default and the government's refusal to invoke legal measures against delinquent farmers is highly suggestive that default transfers were also used as a political stabilizing instrument. Indeed the president's several actions in support of cotton farmers was very illustrative of the government's unwillingness to jeopardize its support from this group.

That political motives were applied to lending in Santa Cruz is not out of context historically. Since its founding in 1942, BAB has continually been assaulted by critics charging political loans have seriously harmed the institution's financial viability for lack of repayment. In fact, several international donors have required a total of four reorganizations of BAB in an effort to clear up this problem and to improve administrative efficiency before they would make additional loans to the institution.

Limited data do not permit measuring the economic consequences of political lending in the Oriente. It is almost certain, however, to have worsened regional and personal income distribution since the regions of the country containing traditional agricultural areas and the large bulk of farmers have received an increasingly smaller portion of the credit.

The long-run viability of financial institutions was seriously harmed due to excessive and politically motivated defaulting. After 1976 BDE wanted to eliminate its lending to agriculture because of the high costs of its delinquent portfolio. The financial condition of BAB was even worse, and the government exacerbated this institution's problems when it forced BAB to take over many delinquent loans of BDE and some other commercial banks. In March of 1979 BAB was declared bankrupt and was only able to continue in existence by a government subsidy of 21.5 million dollars (El Diario).

Foreign aid has played an important role in financing agricultural credit in Bolivia. While well-intentioned on economic grounds, it is clear that the concessionary interest rate feature and the willingness of donors to cover bank losses due to default have contributed to the potential for credit to be used as a political weapon.

The above model provides a different interpretation of LDC agricultural credit programs. What diagnostic suggestions does the model and the Bolivian experience provide for the design, or redesign of credit programs in LDCs? The obvious means to substantially reduce the political elements in agricultural credit programs would be to reduce inflation, eliminate the concessionary interest rate policy and decrease default. The elimination of government agricultural credit institutions would also help, but that would be going too far, given the historical evidence of commercial financial institutions shunning agricultural loans, especially those to small farmers. The elimination of the concessionary rate would put the cost of agricultural credit on a par with the opportunity cost of money as measured by prevailing interest rates on the domestic market. The resultant loss of income transfer to borrowers would eliminate agricultural illusion. The attractiveness of credit as a political measure would be diminished. Moreover, by raising the price of credit it would flow to its more productive employments. In the Bolivian case, if this meant more funds flowing to the highlands and to the peasants, then both interregional and interpersonal income distribution would be improved.[11] Moreover, higher interest rates should enhance the financial viability of credit institutions.

Not only would they receive a higher return on their loans but also, as the opportunity for agricultural illusion is reduced, there should be fewer nonproductive and political loans which should lead to lower delinquency rates. In addition, higher loan rates should lead to higher rates on savings and could serve to increase the supply of loanable funds of rural credit institutions.

It is expected, however, that there would be considerable difficulty in raising interest rates. The borrowers are accustomed to receiving the concessionary transfer and would resist losing this benefit. For the large farmer it would mean reducing the opportunity to practice agricultural illusion. For the small farmer it would be a loss of the preferential treatment he believes is owed to him. Thus from both farmer classes the government would expect resistance to raising the rate were it inclined to do so. Furthermore, it is doubtful that the government would be inclined to raise the rate because it would seriously reduce its options in using agricultural credit as a political weapon in an already fragile environment.

The reduction of defaults should be easier, although still difficult for the same reasons, because when default is permitted by not bringing to bear the existing legal sanctions, the income transfer is overt. In contrast the concessionary transfer is readily obscured by the legitimate policy of concessionary rates.

In conclusion, in Bolivia and many other LDCs, while there are many merits to eliminating concessionary interest rates (Adams, Gonzales-Vega, 1976) and lowering unnecessary default for agricultural credit, it will be a difficult task to accomplish--the political consequences will be severe and will dictate against the change.

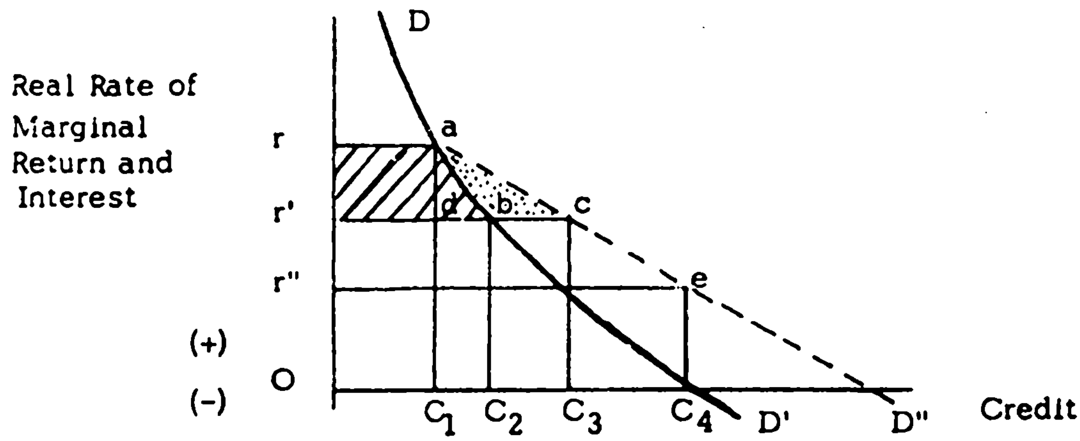

FIGURE 1. Kinked Demand for Agricultural Credit

TABLE I Annual Flows of Agricultural Credit From Banking System, 1964-1977

(millions of current pesos)

				Percent of Total	
Year	Total	Bolivian Agricultural Bank	Commercial Banks	Bolivian Agricultural Bank	Commercial Bank
1964	62.5	54.5	8.0	87.2	12.8
1965	41.4	36.0	5.4	87.0	13.0
1966	126.6	36.2	90.4	28.6	71.4
1967	46.3	41.7	4.6	90.1	9.9
1968	53.4	39.5	13.9	74.0	26.0
1969	95.5	79.1	16.4	82.8	17.2
1970	92.3	68.6	23.7	74.3	25.7
1971	158.0	69.3	88.7	43.9	56.1
1972	245.3	149.6	95.7	61.0	39.0
1973	506.9	321.5	185.4	63.4	36.6
1974	611.2	404.5	206.7	66.2	33.8
1975	610.8	350.2	260.7	57.3	42.7
1976	521.7	395.1	126.6	75.7	24.3
1977	662.5	327.8	334.7	49.5	50.5

Sources: Banco Central de Bolivia, Boletin estadístico, No. 214, Diciembre, 1975; No. 230, Junio, 1978 and private communication, Banco Agricola de Bolivia, Depto. de Planamiento.

TABLE II Inflation and Real Interest Rates for Loans from Bolivian Agricultural Bank

(percent)

	Year								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
Inflation rate[a]	3.8	3.7	6.5	31.5	62.8	7.9	4.5	8.1	15.0[b]
Nominal interest rate	12	12	10	10	13	13	13	13	13
Real interest rate	7.9	8.0	3.3	-16.3	-30.6	4.7	8.1	4.5	-1.7

Sources: Banco Central de Bolivia, Boletín estadístico, No. 230, Junio, 1978, p. 59 and private communication Banco Central de Bolivia, Departmento de Estudios Economicos.

[a] Based on consumer price index for La Paz.

[b] Annual rate for first six months of year.

FOOTNOTES

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1. It is important to distinguish between the formal market sources (those legal entities which are established for purposes of providing credit and, perhaps, other financial intermediation services) and informal market sources (those who provide credit but do not have such status as moneylenders, friends, relatives and merchants). In LDCs the size of the informal market is unknown but in most countries it is considered quite important in terms of numbers of farmers reached.

2. This has been recognized by J.D. Von Pischke in a more specialized sense than is in this paper.

3. The supply-leading approach in contrast to the demand-leading approach is set forth in Hugh T. Patrick.

4. The Farm Security Administration, later renamed the Farmers Home Administration (FHA), was established in the U.S. in the Great Depression to provide subsidized and supervised credit to low-income farmers who offered strong potential for economic advancement but did not have access to credit from normal formal market sources. Because of the apparent similarity of conditions in LDCs it was natural that the FHA model should have been transferred to those countries. This tendency was reinforced by the fact that many FHA officials were used as advisors to LDCs in establishing credit programs. Subsequent experience in LDCs has shown that the supervision function was so expensive or ineffective that most institutions have considerably diminished this aspect of the model, but the concessionary interest rate subsidy has remained for reasons set forth in this paper.

5. For a good discussion of the reasons, see Donald.

6. The pioneering work on the concepts formalized in this model was done by Adams and Gonzalez-Vega (1976).

7. Also where corruption occurs, government officials would lose their access to these sources of income transfers.

8. For a good discussion of the political developments in Bolivia over this period see Mitchell as well as Malloy and Borzutzky.

9. Private communication from Banco Central de Bolivia.

10. Private communication from Banco Agrícola de Bolivia.

11. Other factors may also be important such as more efficient credit delivery systems, institutional changes and development of rural infrastructure.

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