# A Revisit to Interest Rates Outside the Organized Money Markets of Underdeveloped Countries\*

#### 1. Introduction

In the November 1957 issue of *Staff Papers*, a study was made of interest rates outside the organized money markets of underdeveloped countries.<sup>1</sup> The purpose of the present study is to bring up to date the information contained in that study and to re-examine the earlier conclusions.

# II. Size of the Unorganized Money Markets

Table 1 provides indicators of the relative size of unorganized money markets in developing countries.<sup>2</sup> Unorganized money markets consist of the informal credit supplied by moneylenders and credit supplied by institutions. It can be equated with rural credit markets.

The ratio of total agricultural or rural indebtedness to the claims of the banking system on the private sector is the best indicator of the relative size of unorganized money markets vis-à-vis organized markets. In a number of Asian countries (India, Nepal, and Pakistan) the unorganized money market is still more important than the organized money market, while in others it is now less important than before and is even smaller than the organized market.

<sup>\*</sup> The views expressed here do not necessarily reflect the views of the International Monetary Fund. The author wishes to thank Ms. Dominique Babelon, Ms. Althea MacDonald (who also assisted in the original study), and Ms. Simone Delavigne for help in gathering materials and compiling tables.

<sup>1</sup> WAI, U TUN, "Interest Rates Outside the Organized Money Markets of Underdeveloped Countries," Staff Papers, Vol. IV (1957-58).

<sup>&</sup>lt;sup>2</sup> Information on methods and sources as well as bibliographical references for other data regarding particular countries can be obtained from the author.

TABLE 1
SUMMARY OF INDICATORS OF THE RELATIVE SIZE
OF THE UNORGANIZED MONEY MARKET

		Agricultural or Rural Indebtedness as Per Cent of						
Region and Country	Latest year	Claims of banking system on private sector	Currency in circulation	Income originating in agricultural sector	National income			
Asia			,					
India	1969-70	108	131		13			
Korea	1964	87	195	15	8			
Nepal	1970	175	85	7	5			
Pakistan	1971	126	197		33			
was the T	1969	78	276	60 .	21			
South Viet-Nam	1967-68	82	35	24	7			
Sri Lanka	1969	84	112	30	12			
Taiwan	1970	29	136	62	11			
Thailand	1970	30	71	17	7			
Inghand	1270	·		<b></b>				
mean		89	138	31	13			
median		84	131	24	11			
Latin America								
Brazil	1968	39	187	55	10			
Chile	1969	37	95	49	4			
Costa Rica	1964-65	86	338	82	25			
Ecuador	1966	31	81		6			
Mexico	1966	66	109		6			
111033300			1/2	62	10			
mean		52 39	162 109	55	6			
median			107					
Middle East								
Afghanistan	1971-72	12	6					
Iran	1970-71	63	301	63	16			
Turkey	1967	55	168	46	17			
		43	158	54	16			
mean		55	168					
median		1 ,	100	'''				
All countries								
mean		70	148	42	12			
median		66	131	) 48	10			

In the Latin American countries for which data are available, the unorganized money market is generally much smaller than that of the organized money market. In a few Middle Eastern countries (Afghanistan, Iran, and Turkey) the situation appears similar to that in Latin America but these countries may not be representative of the area.

In almost all developing countries credit is more important than currency in the unorganized money markets, suggesting that the credit system though unorganized is large and important. The comparison with income originating in the agricultural sector and with national income is some indication of the development of credit markets in relation to the level of economic activity on the one hand and of the ability to repay on the other hand.

The nominal value of total loans outstanding in unorganized money markets in most developing countries has tripled or quadrupled over the two decades of the fifties and sixties. Since prices did not increase so rapidly, there was a significant development in the size of unorganized money markets. The ratio of total loans in the unorganized money market to income originating in the agricultural sector also rose in a large number of countries; for example, Pakistan, the Philippines, Sri Lanka, Taiwan, and Thailand in Asia; Brazil and Chile in Latin America; and Iran and Turkey in the Middle East. Nevertheless, the size of the unorganized money markets appears to have lost ground in relation to organized money markets where deficit financing by governments as well as central bank credit to commercial banks have been growing rapidly.

The optimum size of the unorganized money market in relation to the organized money market should depend in part on the credit needs of each sector of the economy in relation to its income. Since the ratio of agricultural income to total national income is about 40 per cent in most developing countries, this would imply that the ratio of the unorganized money markets to organized markets should be much smaller than the two thirds shown in Table 1. However, this approach ignores the need for credit by farmers and others in rural areas.

Another approach is to use the ratio of agricultural credit to income from agriculture. If the ratio of agricultural debt to agricultural income rises much above 50 per cent, there may be a cause for concern, especially if no more than half of the total debt is supplied from institutional sources, and if no more than two thirds are used

for productive purposes. The correct ratio would depend on the productivity of capital and the term structure of the loans. The median value of the ratio of the unorganized money market to agricultural income in Table 1 is 48 per cent, but there are five countries (Brazil, Costa Rica, the Philippines, Iran, and Taiwan) with a ratio above 50 per cent.

#### III. Sources of Credit

For the majority of developing countries, noninstitutional sources of rural credit are still more important than institutional sources. Noninstitutional sources of credit in Africa and Asia amount to about 72 per cent of total rural credit in each region, followed by the Middle East (63 per cent). In five Latin American countries, however, noninstitutional sources provide about only 15 per cent of the total supply of rural credit.<sup>3</sup>

Although precise data are not available for Nigeria and Sierra Leone, it appears that traders, middlemen, produce buyers, and moneylenders supply between 40 to 50 per cent of total credit used by farmers. To this one must add loans from friends, relatives, neighbors, and landlords to get the total supply of noninstitutional credit, which in these two countries probably approximates 72 per cent, the same figure as in Table 2, for Africa.

The supply of institutional credit in developing countries has expanded more rapidly than that of noninstitutional credit. The progress was more rapid in Asia than in Latin America and the Middle East, partly because the institutional base of rural credit was smaller in Asia than in the other regions in the early postwar years.

For example, between 1950 and 1970 the share of institutional credit in total credit rose from 7 per cent to 25 per cent in India, from 16 per cent to 20 per cent in Pakistan (Punjab), 8 per cent to 19 per cent in Sri Lanka, and 18 per cent to 73 per cent in Taiwan.

Since the supply of noninstitutional credit can expand only slowly and, at best, *pari passu* with the growth of the economy, an expansion of credit from institutions far in excess of the growth of the economy

would be *prima facie* evidence of the increasing importance of financial institutions. According to a study by Dale W. Adams <sup>4</sup> the supply of institutional credit for the period 1960 to 1968, in real terms, expanded more rapidly than the real growth of the economy in most Latin American countries.

## 1. Supply of institutional credit

## a. Commercial banks

With few exceptions, e.g., the Palay farm region in the Philippines and the São Paulo area in Brazil, commercial banks are not important in rural areas. Table 2 provides data on the ratio of commercial bank credit to agriculture to total bank credit granted to the private sector in 70 developing countries. Among regions, the mean values are highest in Africa (15 per cent), and lowest in Asia (8 per cent), in part because in the French-speaking countries of Africa, the specialized banks also perform commercial banking operations.

Central banks have encouraged commercial banks to lend to agriculture through preferential rates on rediscounts of promissory notes related to the production and marketing of agricultural crops. In the early postwar years, this practice was limited mainly to Latin American countries, but it has spread to Africa (especially in French-speaking countries) and also to Asia (Bangladesh, Nepal, Pakistan, Sri Lanka, and Thailand), where central banks have requested banks to lend to agriculture. In Middle Eastern countries (Afghanistan, Morocco, Sudan and Tunisia) also, commercial banks have begun to provide loans to agriculture.

# b. Government or government-owned agencies

Government or government-owned agencies were generally not an important source of institutional credit in the early postwar years. Agricultural Development Banks now exist in almost all developing countries financed in part by international and bilateral foreign aid. Between 1960 and 1968 over one billion dollars of external assistance funds were used to provide agricultural credit in rural areas in Latin America, of which the Inter-American Development Bank provided

<sup>3</sup> There might be a problem of incomplete coverage for noninstitutional sources of credit in Latin America since the data for that region are not based on surveys as in Asia.

<sup>&</sup>lt;sup>4</sup> Adams, Dale W., "Agricultural Credit in Latin America: A Critical Review of External Funding Policy," American Journal of Agricultural Economics, Vol. 53, May 1971, quoting Comité Interamericano de Desarrollo Agrícola, El Crédito Agricola en Costa Rica (Pan American Union, Washington, D.C., 1966).

TABLE 2 COMMERCIAL BANK CREDIT TO AGRICULTURE AS PER CENT OF TOTAL BANK CREDIT TO THE PRIVATE SECTOR

	Region										Per Cent
Africa (29 cou	ıntrie	s) ²									
mean .			٠,٠								14.7
median										,	9.4
Asia (12 coun	tries)	, 3									
mean .										.	8.0
median	·					,				,	7.2
Latin America	(20	coı	ıntr	ies)	4						
mean .										.	13.9
median											10.9
Middle East (	9 co	unti	ries)	, 5							
mean .											10.0
median	Ċ										8.9
All countries	(70)										
mean .											12.7
andian	Ċ					·					9.2

Latest available date during the period 1971-73.
 Algeria, Cameroon, Central African Republic, People's Republic of Congo, Dahomey, Gabon, Ghana, Ivoty Coast, Kenya, Lesotho, Liberia, Malagasy Republic, Malawi, Mali, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, Tanzania, Togo, Tunisia, Uganda, Upper Volta, Zarbie, and Zarbie.

Taiwan, and Zambia.

3 Burma, Fiji, India, Korea, Malaysia, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Taiwan, and Thailand.

4 Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Surinam, and Trinidad and Tobago.

S Cyprus, Egypt, Ethiopia, Iran, Iraq, Jordan, Libya, Syria, and Turkey.

\$439 million, the International Bank for Reconstruction and Development \$255 million, and U.S. AID \$221 million, and the balance from PL 480 and other sources. Another accounting of U.S. AID's agricultural credit to all regions during a 20-year period ended 1972 indicated a total expenditure of \$705 million including local currency counterparts and 870 technical man-years.

Information on the effectiveness of U.S. AID credit programs is contained in the various reports of the U.S. AID, Spring Review of Small Farmer Credit, June 1973.5 In many countries the use of

credit has yielded positive results although there was some diversion of U.S. AID funds from intended purposes in several countries such as in Morocco in Africa, in Bangladesh, Sri Lanka, and Thailand in Asia, and in Colombia and Nicaragua in Latin America. Output increased in many countries especially in Mexico, El Salvador, and Honduras in Latin America; and also in Morocco and Uganda in Africa; in Indonesia and Malaysia in Asia; and in Iran and Turkey in the Middle East.

Besides encouraging commercial banks, central banks also help to improve the supply of agricultural credit through participation in the share capital, by special credit, or by supervising the operations of specialized banks (India, Ivory Coast, Korea, and the Philippines).

## c. Cooperatives

Cooperatives continue to play a useful role in providing institutional credit mainly in Bangladesh, India, Korea, Nepal, Pakistan, Sri Lanka and Thailand in Asia, and in Egypt, Syrian Arab Republic, Iran and Turkey in the Middle East. In Korea, about 50 per cent of funds loaned by cooperatives is generated from within the movement, i.e., member deposits and share capital, and the balance from the Government and the Central Bank. The Nepal cooperative movement was only begun in 1954, but is making good progress. Since 1972-73, activities of the cooperatives have been supervised by the Agricultural Development Bank of Nepal, established in 1968. Some of the funds of the Agricultural Development Bank originate from the Asian Development Bank, including a credit for constructing crop storage facilities for the cooperatives. In Sri Lanka, a comprehensive credit scheme was launched by the Government in 1972 with the Cooperative Rural Banks as the main institutional mechanism to implement it. One innovative feature is the possibility for these banks to lend for both production and consumption purposes. Cooperatives have not been successful in either the Philippines or South Viet-Nam.

In Latin America, the cooperative movement is still not important. In Africa, the cooperative movement has not been effective partly because of the attempt to transpose the kind of organization and mechanism that proved successful in industrial countries. According to Roberto Ruozi, the cooperative agricultural banks in Africa were expected to assume functions too broad and too difficult. In addition, the cooperative spirit, which was supposed to be the

<sup>5</sup> An overall assessment has been made by Gordon Donald whose study became available after this article was already drafted (Credit for Small Farmers in Developing Countries, Boulder, Colorado, 1976).

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working principle, was either simply not there or, at best, there was very little of it.<sup>6</sup> Credit unions exist mainly in urban areas, especially in Libya, Nigeria, and Sierra Leone.

Uganda, however, appears to have had some success in its cooperative movement under the Cooperative Credit Scheme. During the ten-year period 1962-71 about 300,000 loans were granted to farmers, mainly coffee and tobacco growers, amounting to U. Shs. 83.5 million. Repayments have been prompt and at the end of 1972 arrears were less than 10 per cent of all the loans granted.

# d. Pawnbroking and other institutions

Another institution which operates in the unorganized money markets is that of pawnbrokers. These are prevalent in all developing countries, but more so in Southeast Asia where the Chinese have had a strong foothold. The usual, "legal," rate of interest has been between 24 and 36 per cent per annum according to the size of the loan and the nature of the commodity pledged. In 1958, it was reported that the interest rate was 24 per cent per annum on all pawnshop loans in Singapore. It appears that the pawnshops in Singapore and Malaysia play an important role in the unorganized money market, at least in the urban areas. There are also important links between unorganized and organized money markets through these pawnshops which are heavily backed by some of the Chinese commercial banks.

Post Office Savings Banks exist in most Asian countries and in many African countries. However, they provide funds only to the government and do not lend to agriculture.

## 2. Supply of noninstitutional credit

The sources of noninstitutional credit in rural areas are dominated by the professional moneylender in some countries, for example, India. But in the majority of developing countries the moneylender, though important, is only one of the many sources of noninstitutional credit. Credit is often provided by traders and shopkeepers, landlords, relatives, friends, and others. The latter categories, similar to the professional moneylenders, also lend money, but the distinction is that money lending is neither their sole nor major occupation.

a. Informal malpractices of moneylenders

The informal malpractices of moneylenders were noted in the earlier article. These practices often contravene existing laws. For example, moneylenders may charge higher effective rates of interest than the nominal ones recorded in the loan transactions within the ceilings regulated by law, by making (1) actual cash disbursements much below face value of the promissory note signed by the borrower, (2) loan disbursements in cash but repayment in kind at an agreed price much below the market price of the commodity, (3) special charges for other services not connected with the loan transaction or exorbitant charges for services connected with the loan transactions, (4) appropriation of the collateral when repayments are not made and whose value is much in excess of the amount of the indebtedness, and (5) trader-moneylender conceals interest rate by charging more for the goods he is selling the borrower and less for goods purchased from him.

Shail practice in *Africa* is a kind of credit disguised in the marketing process. The price offered by the shail merchant is usually equivalent to 50 per cent of the price of the crop at harvest time. It is claimed that in Gambia, the Sudan, and Sierra Leone, traders get between 50 and 300 per cent interest on a loan this way. Traders buy up crops in advance of harvest and resell them to their advantage.

In Nigeria, interest rates are disguised when advances are made in kind. Moneylenders (or traders) deliver commodities to people who desire money, i.e., a piece of cloth at a price much above the market and the amount to be repaid is thus increased.

In Asia, the malpractices are widespread. For example, in India, the trader-moneylender conceals the interest rate by charging more for what he sells to the borrower and paying less than the market price for goods he purchases from the borrower.

In Malaysia, borrowing systems against delivery of the paddy crop are called the "Padi Kuncha" and "Jual Janji" with implicit interest rates of between 50 and 60 per cent per annum. Interest rates of 100 and 200 per cent per annum have been reported on the overvaluation of promissory notes by Chettiars and of 240 per cent per annum by Chinese stall holders.

In Bangladesh, "because of debt, most farmers are compelled to sell their crop as soon as it is harvested, when it brings little more

<sup>&</sup>lt;sup>6</sup> Ruozi, Roberto, "Savings Banks and Agricultural Credit," Conference on the Mobilization of Savings in African Countries (held in Milan, September 20-23, 1971).

than half the price it commands later." In Sri Lanka, a smaller sum is advanced than shown on the pawnbrokers receipt.

There is less evidence of malpractices in the *Middle East* and *Latin America* though they must exist in many countries. In Iran, when traders are the lenders, the crop is often sold forward at disadvantageous prices to the farmer. In Mexico, a farmer may shift away from the moneylender in order to finance his production and find that the moneylender either will cut off his credit for personal needs or will increase the already burdensome rate of interest as a form of castigation. In Ecuador, private moneylenders levy higher interest by decreasing the price of the product under which the farmer/borrower was obligated to sell to the lender.

# b. Money-lending associations

Money-lending associations, often referred to as revolving credit associations, are formed by potential borrowers and lenders on a cooperative basis. They exist in practically all countries in Africa and Asia. The basic form of these money-lending associations is an agreement between a group of people, for example, 12 persons, who promise to provide a fixed sum of money each month to a common pool which will be available to the member making the highest bid in terms of interest for the use of the money. At the beginning of each month, the 12 members meet to make bids for the use of the monthly pool. The highest bidder in terms of interest payments obtains the cash, and interest is paid to the other members. When the round is completed, a new pool has to be formed.

Interest rates on funds borrowed from these money associations are usually higher than those obtainable from organized financial institutions operating in the unorganized money markets, but tend to be below those which borrowers would have to pay from loan sharks. They are probably higher than the rate a borrower in good standing would have to pay from a reputable moneylender against suitable collateral. In Malaysia, interest rates on funds obtained from such money associations vary between 30 and 36 per cent per annum, but rates as high as 60 per cent per annum have been reported. The interest rates charged by the nidhis in India on loans with collateral, however, are comparable to those charged by financial institutions and in 1968-69 ranged from 7.5 to 10.5 per cent per annum on house property and 12 per cent per annum on special loans.

Indigenous credit associations, similar to money-lending associations, have recently become widespread in a large number of African countries under a variety of names, and with different types of organizational and operating procedures. A number of articles and books on Asian and African countries provide details on how these associations are organized in Eastern Nigeria, Hong Kong, India, Korea, Liberia, Mauritius, Morocco, and Viet-Nam.

The money-lending associations are widespread in most developing countries, and they play a useful role in supplementing other noninstitutional sources of credit, especially the moneylender. However, their informal characteristics and short-lived character, while giving the much needed flexibility in meeting the demands of the borrowers, are themselves limiting factors to their rapid growth. Thus, the kes in Korea (one of the two types of loan associations) supplied only 3 per cent of total credit requirements in rural areas in 1974.

### IV. Demand for Funds

The data in Table 3 for 15 countries on the demand for funds are based mainly on credit surveys in rural areas. It appears that about one third of the demand for rural credit originates for non-productive ends and about 55 to 60 per cent for purely productive purposes. Nonproductive uses of credit were highest in India in 1961-62 (52 per cent of total) and lowest in Ecuador for 1965-66 (3 per cent of total borrowings).

Borrowings for productive purposes include borrowings for such current expenditures as purchases of seeds and payment for labor and taxes. The latter, however, is small in relation to total borrowings (0.5 to 2 per cent in Nigeria and 2.5 per cent in the Punjab, Pakistan). Capital expenditures include purchases of agricultural and other equipment and the purchase of land, cattle, etc. Except in Brazil and Korea, borrowings for capital expenditures generally exceed productive current expenditures.

The trend in the uses of credit in countries where data are available for more than one date (Ecuador, India, Nigeria, Sri Lanka, and Thailand), indicates that, except in Thailand, the percentage of funds devoted to nonproductive use has declined. This is to be welcomed even though total credit to the farmer must allow some

TABLE 3

funds for financing consumption before the crop is harvested. In fact, some institutional credit programs, as for example in the Philippines, India, Taiwan, and Thailand, have permitted loans to cover consumption expenses of the farmer.

#### V. Noninstitutional Rates of Interest

#### LEVEL OF RATES

Table 4 has been compiled on the same basis as the table in the earlier study entitled "Moneylenders' Rates of Interest." The data cover 33 countries, mostly for one date during the 1968-71 period, whereas the earlier study covered 22 countries also for one date mainly during the 1948-51 period. However, only 13 countries are common in both samples.

The mean and median values of interest rates in 1948-51 for the 22 countries in the earlier study, are 44 per cent and 33 per cent, respectively (Table 5). Between 1948-51 and 1968-71, the mean nominal interest rate of noninstitutional credit in the unorganized money markets in developing countries fell from 44 per cent to 40 per cent, and the median value from 33 per cent to 30 per cent. For the 13 countries common to both sample periods, there is a greater reduction in the mean values of interest rate from 40 per cent in 1948-51 to 30 per cent in 1968-71, and the median interest rate fell from 34 per cent to 28 per cent between the same two periods. Among regions, the rates are highest in Africa and lowest in the Middle East and Asia. There have been dramatic reductions in rural interest rates in many Asian countries. In the Philippines, for example, the average interest rate paid by the Nueva Ecija Rice Farmers is reported to have declined from 52 per cent per annum in 1957-58 to 22 per cent in 1969-70. The reduction was due in part to the expansion of institutional credit from 9 per cent to about 27 per cent of total loans between the two periods.

In the previous article, it was estimated that the weighted average of both institutional and noninstitutional nominal interest rates in the unorganized money markets of the majority of developing countries must lie between 24 per cent and 36 per cent per annum. The data in this study indicate that about 57 per cent of total credit

# SUMMARY OF DEMAND FOR RURAL CREDIT BY PURPOSE OF BORROWING

(In per cent)

Region and Country	Latest year	Nonpro- ductive Usc	Productive Use	Mixed Use <sup>1</sup>	Debt Repay- ment <sup>2</sup>
				· · · · · · · · · · · · · · · · · · ·	
Africa	1				
Ethiopia	1969	46	54		
Nigeria	1961	36	64		1
Zambia	1969	20	76		4
Asia					
India	1961-62	52	42		6
Korea	1963-64	48	42		10
Nepal	1970	44	51		5
Pakistan	1951	51	47		1
Philippines	1967-68	31	69		ļ
South Viet-Nam	1966-67	12	60	28	-
Sri Lanka	1969	33	64		3
Thailand	1972	28	72		
Latin America					
Brazil	1971	23	77		
Chile	1964-65	50	26	24	
Ecuador	1965-66	3	97		
Middle East					
Iran	1971	35	37	28	
mean		34	58	27	5
median		35	60	28	4

1 Use cannot be differentiated.

was supplied from noninstitutional sources and 43 per cent from institutional sources during 1968-71, while the average rate of interest on noninstitutional credit in 29 countries is 40 per cent and that on institutional credit is 11 per cent per annum. Therefore, the weighted average rate in 1968-71 was about 27.5 per cent which is slightly less than the midpoint between 24 and 36 per cent in 1948-51. But if one were to take the same 13 country sample, then the decline was greater, from 30 per cent in 1948-51 to 22 per cent in 1968-71.

<sup>&</sup>lt;sup>2</sup> This cannot be classified between nonproductive and productive because some of the original borrowing may have been for nonproductive purposes.

NONINSTITUTIONAL RATES OF INTEREST, 1968-71

TABLE 4

Region and Country	Date	Lower Exceptional	Usual	Occasional	Higher Exceptional
Africa  Burundi  Ethiopia  Ethiopia (Chilalo) Ghana  Ivory Coast  Madagascar  Senegal  Sudan	1967 1970 1971 1975 1972 1962 1971 1958 1961 1960s 1972	less than 10	40-60 70 50 150 30 20-50 10-50 60	90 70 200 100 50-70 70 80 130	300 120 100 300-400 100-500 200
Asia  Hong Kong India Indonesia Korea Malaysia Nepal Pakistan Philippines South Viet-Nam  Sri Lanka Thailand	early 1960s 1962 1950-57 1969 1968 1969-71 1962 1954-55 1966-67 1972 1969 1962-63	8-12 36 10 10-20 12 6 11	30-40 18-37 40 42-54 24-36 25 20-32 25-30 36 30-36 26 <sup>4</sup> 22-35	60 33 1/3-50 72 40-60 50 46 100 60 60-72 35 40-50	120 100-150 80-100 100 <sup>2</sup> 133-200 100 200 above 100 80-150
Bolivia Brazil Brazil Chile Colombia Costa Rica Ecuador El Salvador Honduras Mexico Paraguay	1961 1969 1964-65 1963 1969 1965-66 1970 1971 1968 1972	15 27 12 2	48 29-40 85 24 18-24 20-27 25 40 36-72 24-30	96 60 105 60 35 50	120 155 95 over 100 80 300 60
Middle East Afghanistan 5  Iran  Jordan 1 Lebanon	1963 1971 1971 1971 1972	18 7 10	33 35 18-24 20 16-20	50 30 25-36	48

1 No range of data available

1967-68

3 About 45 per cent of loans have no interest.

Weighted average.

5 Most loans are free of interest and obtained form family members.

### 2. Structure and pattern of rates

The basic structure and pattern of rates have not changed during the past two decades even though there appears to have been a secular decline in the level of rates. The seasonality in the demand for funds noted in certain countries in the previous article, e.g., Burma and Sri Lanka, appears to exist in other countries as well. Cyclical fluctuations in interest rates, as noted in the previous article, continue to occur in a different fashion and move in a different direction from those of organized money markets.

Rates vary between regions and also between sources of supply. Examples were given previously for India, Sri Lanka, and Thailand. A good example is Thailand for which country data are now available for two dates 1952-53 and 1962-63 by regions and by sources.

In the previous article, it was pointed out that, contrary to the interest structure in developed countries, the long-term rate of interest was below that of the short-term rate of interest. This seems to be confirmed by more recent data. For example, in Mexico, the "Fondo de Garantía y Fomento para la Agricultura, Ganadería y Avicultura," in 1970-71 charged a maximum rate of 10 per cent per annum to producers for long-term credit, and a higher rate of 12 per cent per annum for short-term credits. Another example is that of Tunisia where the Banque Nationale de Tunisie, in 1971, charged 3 to 5 per cent per annum on medium- and long-term loans but charged 6 per cent per annum on short-term loans. An exception is Colombia where the Caja de Crédito Agrario Industrial y Minero, in 1971, charged 10-13 per cent per annum for short-term loans, 11-14 per cent for medium-term loans, and 12-15 per cent for long-term loans.

Details of some of the more recent laws to control or to place maximum limits on rates which moneylenders charge in rural areas or in the agricultural sector can be found for Bolivia, Chile, Ecuador, India, Iran, Korea, Nigeria, Pakistan, the Philippines, and Sri Lanka.

A U.S. AID report states that securing low rates by a legal rather than an economic approach could only make worse the farmer's credit position. The IBRD also supports this view by concluding that limits on interest charges, which impede the flow of funds into agriculture by institutions and are unenforceable as regards the money-lender, do little good.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT, Agricultural Credit, Rural Development Series (Washington, D.C., August 1974).

TABLE 5

# COMPARISON OF USUAL NONINSTITUTIONAL RATES OF INTEREST BETWEEN 1948-51 AND 1968-71

(In per cent per annum)

Region	Nun of Co	nber untries		Data in Previous Article	Data in Present Article
	1948-51	1968-71		Mostly 1948-51	
Africa	1	7	mean median	45 45	65 60
Asia	10	11	mean median	41 31	32 30
Latin America	5	10	mean median	48 30	38 30
Middle East	6	4	mean median	44 43	24 20
All Regions	22	32	mean median	44 33	40 30
13 countries common in both periods 1			mean median	40 34	30 28

<sup>1</sup> These consist of Nigeria in Africa; India, Indonesia, Pakistan, Philippines, South Viet-Nam, Sri Lanka, and Thailand in Asia; Colombia, Honduras, and Mexico in Latin America; and Jordan and Lybanon in the Middle East.

While laws to control and reduce interest rates have generally not been successful, the increase in the supply of institutional credit, from both the private sector and government, has helped to lower rates of interest charged by moneylenders. This has been noted above under the subsection Level of Rates, and it will be referred to again in the next section on Links Between the Unorganized and Organized Money Markets.

## VI. Links Between Unorganized and Organized Money Markets

To improve the link, the supply of institutional credit in the unorganized markets should be increased relative to noninstitutional credit. This has occurred in about ten countries. In view of the large amounts of foreign aid funds (e.g., World Bank, IADB, the United States, and France) that are channeled to finance agriculture, this

TABLE 6
DIFFERENCES BETWEEN USUAL NONINSTITUTIONAL
AND INSTITUTIONAL RATES OF INTEREST IN UNORGANIZED MARKETS

Region and Country	Early Period (1948-51)	Recent Period (1968-71)	
Africa	•		
Nigeria	41.50	23.50	
Asia			
India	25.00	18.75	
Indonesia	38,00	25.00	
Pakistan	24.75	18,50	
Philippines	52.50	19.20	
South Viet-Nam	67,00	15,00	
Sri Lanka	11.75	8.00	
Thailand ,	27.50	16.00	
Latin America			
Colombia	14.00	11.50	
Honduras	25.00	31.00	
Mexico	49.00	43.00	
Middle East			
Jordan	38.00	11.60	
Lebanon	18.20	6.00	
Average	33.24	19.00	

trend may have occurred in other countries as well, indicating that the links are improving.

The links between the two markets may also be judged by whether the spread between the interest rates in the two markets has narrowed between 1948-51 and 1968-71. If the links are improving, one would expect the rate of interest in the unorganized markets to fall and the rate of interest in the organized markets to rise.

During 1948-51, the mean value of interest rates charged by noninstitutional lenders in 18 developing countries was 39 per cent, while the average institutional rate was 6 per cent giving a gap of about 33 percentage points. In 1968-71, the average of the noninstitutional rate in 29 countries was 40 per cent, about the same as the 18 country average in 1948-51, while the institutional rate

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increased to 11 per cent causing a smaller gap of 29 percentage points. These figures, however, are not strictly comparable because of the different composition of the countries in the two periods. In Table 6, data for 13 countries common to both periods have been compiled. It indicates that the average differences in the interest rate from the two sources of credit has fallen from 33 percentage points in 1948-51 to 19 percentage points in 1968-71, indicating that the links between the two markets are closer than before.

Despite these developments, it is apparent that the links between the unorganized and organized money markets are not as close as those between the organized money markets in developing countries and international money markets, especially as the interest rate differentials between the former two markets are much greater than the interest rate differentials between the latter two markets.

## VII. Causes of High Interest Rates

Anthony Bottomley <sup>8</sup> has recently stated that there are four determinants of interest rates charged by lenders, namely: (1) opportunity cost of funds, (2) premium for administering the loan, (3) premium for risk, and (4) monopoly profit, while Millard Long stresses the scarcity of capital, high administrative costs, high default rate, and the seasonal character of the demand for agricultural credit.<sup>9</sup>

As stated in the author's earlier article, both demand and supply factors operate to keep interest rates in the unorganized money markets above those prevailing in the organized money markets. On the supply side, the shortage of capital, monopoly profit, inadequate collateral, and riskiness of loans leading to defaults are important factors. Administrative costs are important for the supply of institutional credit. For credit supplied by moneylenders, these costs would tend to be of minor importance. On the demand side, the low level of agricultural incomes and savings, the borrowing of funds

not only for working capital but also for minimum basic necessities such as food, shelter, and clothing, the seasonal character of the need for funds, and the low level of education and literacy permit the moneylender to exploit the farmer.

The strength of these variables can be determined only by detailed econometric studies based on reliable data. In the absence of data, two statistical tables were presented in the earlier article, using certain hypotheses; one table for the supply side (Table 5 of the earlier article), showing the interest rates that lenders would have to charge to compensate for defaults, and another table for the demand side (Table 6 of earlier article), showing the maximum rates that borrowers may be willing to pay by relating the percentage of borrowed money to the productivity of capital.

Information on overdue loans owed to agricultural credit institutions, published in U.S. AID, Spring Review of Small Farmer Credit, 1973 and IBRD, Agricultural Credit, 1974, are summarized in Table 7. It appears that, on average, overdue loans represent about one quarter of total loans outstanding with institutions in 35 developing countries. The ratio is lowest in Latin America and highest in the Middle East. Between 1960 and 1970 the ratio appears to have risen in a large number of countries including Afghanistan, Chile, Colombia, Ghana, Nicaragua, Peru, Thailand, and Turkey, according to time series data in the U.S. AID source but not included in Table 7.

Moneylenders usually exercise greatest pressure to repay and government and government agencies the least pressure.

Delinquency arises when part of the loans is not used for intended purposes as in Morocco and Nicaragua. Crop failure was cited as one of the reasons in Bolivia, and political pressure by larger farmers on the institutions not to take action to recover loans was given as another reason in Bangladesh and Bolivia.

Defaults would be less than the overdue loans. For example, in Colombia, the Caja de Crédito Agrario in 1971 had 18.7 per cent of loans overdue but oly 5.9 per cent were regarded as in default. If this relationship is applied to all countries, the default rate is about 8 per cent for the average of developing countries. The default rate on loans from the moneylender is likely to be lower than that to institutions, perhaps about 5 per cent. Since the institutional rate of interest averaged about 11 per cent and the noninstitutional rate about 40 per cent during 1968-71, about one sixth of the 29 per-

<sup>8 &</sup>quot;Interest Rate Determinations in Underdeveloped Rural Areas", in American Journal of Agricultural Economics, Vol. 57, 1975; "Monopoly Profit as a Determinant of Interest Rates in Underdeveloped Rural Areas", in Oxford Economic Papers, Vol. 16, 1964; "The Premium for Risk as a Determinant of Interest Rates in Underdeveloped Rural Areas", in Quarterly Journal of Economics, Vol. LXXVII, 1963.

9 Long, Millard F., "Credit for Small Farmers: Indonesia, Malaysia, Thailand", U.S. AID, Spring Review of Small Farmer Credit, Vol. XV, February 1973.

REPAYMENT PERFORMANCE ON INSTITUTIONAL CREDIT TAKEN BY FARMERS, 1969-71

Table 7

										Overdue Loans as Per Cent of Total Loans Outstanding
		•								
Africa (10 o	coun	itries	s) <sup>2</sup>							
mean				,						25
median										26
Asia (9 cou	intri	es)³								
mean								,	.	25
median		Ċ							.	23
Latin Ame	ica	(12	cou	ntrie	es) 4					
mean		,							.	17
median							,			16
Middle Eas	t (4	cot	ıntri	es) 5						
mean						,				34
median	,	i				,				34
All countri	es (	35)								
mean									.	23
median				,		_			. [	25

centage point difference between institutional and noninstitutional rates of interest could be due to defaults.10

Since about one third of the demand for credit is for nonproductive purposes, it could be assumed that one third of the interest rate differential between moneylenders' rates and institutional rates is due to urgency of the demand conditions which makes the farmer willing to pay high rates of interest. This leaves about half to be allocated between the opportunity cost of capital, monopoly profits, inadequate collateral, and administrative costs, and other factors.

About one sixth of the difference is probably accounted for by monopoly profits and the remaining one third is perhaps due to other factors, especially inadequate collateral and the opportunity cost of using the funds in other ways by the moneylender. Little emphasis would be placed on administrative costs for the moneylender.

#### VIII. Conclusions

The nature and workings of unorganized money markets have remained basically unchanged, especially concerning the malpractices of moneylenders. However, it is still more convenient for the farmer to obtain credit from noninstitutional sources than from institutions though the latter have made progress in streamlining their lending procedures. The higher interest rate paid to noninstitutional sources is apparently considered by the farmer to be worth the conveniences.

In the majority of developing countries, about one third of total loans is for nonproductive purposes, about 60 per cent is for productive purposes, and the balance cannot be identified. An encouraging sign in the few countries for which data are available is that the share of funds borrowed for nonproductive purposes has declined during the past two decades.

The weighted average rate of interest on institutional and noninstitutional credit for all those countries with data, taking into account the changing importance of the two sources of credit, has declined only slightly from about 30 per cent per annum to about 28 per cent per annum. For the same 13 countries common to both periods, the decline in the weighted average rate of interest was greater, from 30 per cent per annum to about 22 per cent per annum. In real terms, the rates have declined more sharply, as the rate of inflation during the period 1968-71 was generally higher than 20 years ago.

The links between the two money markets - organized and unorganized - appear to be closer than they were two or three decades ago judging by the degree to which lenders (e.g., institutions) and borrowers (farmers) are able to operate in or have access to both markets, and by the smaller differential in interest rates between institutional and noninstitutional sources of credit. Nevertheless, these links are still imperfect, and less close than those between the

<sup>&</sup>lt;sup>1</sup> The data are for one year or the average of more years during the period 1969-71 with the following exceptions: Bangladesh 1972-73, Bolivia 1964-71, Brazil 1963, Colombia 1966-71, Costa Rica 1968 and 1972, Pakistan 1967-68, Peru 1967, Sudan 1972, and Turkey 1967.

<sup>2</sup> Ghana, Ivory Coast, Kenya, Morocco, Niger, Nigeria, Sudan, Tanzania, Tunisia, Uganda.

<sup>3</sup> Bangladesh, India, Indonesia, Kotea, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand.

<sup>4</sup> Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Jamaica, Mexico, Nigeraeue, Peru Nicaragua, Peru.

<sup>5</sup> Afghanistan, Iran, Jordan, Turkey.

<sup>10</sup> This is based on the assumption that the default rate on institutional credit does not influence the rates charged by institutions.

organized money markets in developing countries and the world money centers.

Interest rates in unorganized money markets are higher than those in organized money markets for various reasons. It is believed that risk factors and monopoly profits each account for one sixth of the difference between the two rates, that urgency of demand for about one third, and the remainder is due to shortages of capital, inadequate collateral, and other factors. Since interest rates are high, many governments are subsidizing interest rates on agricultural credit. It is felt here that it is better to subsidize prices of agricultural inputs rather than interest rates, since lower rates are likely to increase consumption and not investment.

Washington, D.C.

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