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FINANCIAL INSTITUTIONS AND RURAL DEVELOPMENT

by

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and
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* The views expressed are those of the authors and do not necessarily represent the views of Hogan & Hartson or the Federal Deposit Insurance Corporation.

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FINANCIAL INSTITUTIONS AND RURAL DEVELOPMENT

Section I: Saving, Investment and Financial Institutions.

The processes of saving and investment are among the most important in any economy. These activities, and the relationship between them, are crucial whether we are concerned with business fluctuations or the level of economic activity in a developed economy or the process of economic growth in a less developed economy. In a developed economy saving and investment activities are undertaken separately by different individuals and business firms. They are facilitated by a variety of financial institutions and financial instruments interacting in a complex set of financial systems, but saving and investment go on in all economies, including the most primitive.

While economic theory had long viewed the financial sector as playing only a minor role in the process of economic growth, contemporary economists have concluded that development of the financial sector of an economy can be an important aid to the real economic growth, and may be necessary. This paper will examine the process of saving and investment with particular emphasis on the role that financial institutions and financial markets play in facilitating this process. We will examine the financial system of the United States, which has a variety of institutions and markets unmatched in the rest of the world, to illustrate the role that such institutions can play in fostering economic development, and to show how financial institu-

tions can be developed or changed to meet specific needs in an economy. The final sections will consider how policies with respect to financial institutions and markets affect economic development and, in particular, how the financial institutions common to most countries can promote development of rural areas in less developed countries.

It is perhaps not necessary to point out that no one believes that enlightened policy toward financial institutions will solve all problems of economic development or even guarantee progress. The financial system should not be considered in isolation in formulating a development strategy for rural development. But financial policies can play some role in almost all development programs.

It may be helpful in starting this analysis to conceive of the most primitive of economies. Savings and investment take place even in a Robinson Crusoe economy. In such an economy, saving and investment take place together; that is, the act of saving and the act of investing are one. The farmer who reserves some of his harvest to use as seed for the next year is simultaneously saving and investing. On a slightly more complex level, transactions among individuals can take place on a barter basis. The possibilities of borrowing and lending expand the opportunities for both saving and investment, and can separate them in time and place. The farmer seeking to expand his production can borrow seed from someone who has a surplus, with his investment thus aided by the lender's saving. Even interest can be part of this transaction. Presumably the borrower can afford to repay more than he borrowed because the investment process is a productive one. In this situation saving and investment, borrowing and lending, take place without any financial institutions or, indeed, without

any financial instruments. We thus have a means of shifting resources - in this example, grain - from those units in the economy with a surplus to those with deficits. This is the role that in a developed economy will be played by financial institutions.

While such transactions can take place and do take place in primitive societies, such economic intercourse is facilitated by the use of money. Primitive societies very early in their development reach agreement on a particular commodity that will serve as "money" - the medium of exchange and the unit in which relative prices are expressed. Goods and services can be exchanged for money, which in turn may be exchanged for goods and services. This development of markets in which goods are exchanged for money allows the economy to benefit from the increased efficiency that results from division of labor and specialization. Even the most primitive tribes could appreciate the benefits of having some grow food, while others hunt and others make arrows. The difficulty inherent in this specialization is that no one would specialize in making arrows unless he could exchange his arrow production for food. The primary function of money is to facilitate this exchange. Exchange could take place by barter without money, but with obvious difficulties. The hunter who wants shoes must find a shoemaker who wants meat. If the shoemaker is a vegetarian, the hunter must make a preliminary trade or go barefoot. Money becomes the common medium in which transactions take place, and also becomes the standard in which all prices can be expressed. All this takes place before the development of any financial institution, though at a relatively early stage of economic development we may find "banks" - institutions whose liabilities are money.

Money also becomes an additional asset for savers and an additional means of financing expenditures for investors. Savers may acquire real assets such as grain, land, etc., or accumulate cash balances. Investors may finance expenditures from current saving or by drawing down previously accumulated money holdings. The rigid link between saving and investment is broken and, even though all expenditures are financed within the economy, some flexibility has been introduced into the saving-investment process.

More complex and sophisticated financial systems extend the alternatives available to suppliers and demanders of loanable funds. By increasing the number and variety of savings media (uses of funds) and the techniques of raising funds (sources of funds), more sophisticated financial systems facilitate transfer of real resources from lenders (surplus units) to borrowers (deficit units).

A sophisticated financial system is an essential feature of a highly industrialized economy. The mass production and distribution of goods and services, and the high degree of specialization involved, are mirrored in the financial sector of the economy by a similar degree of complex interaction: an elaborate system of markets and institutions provides the mechanisms for bringing suppliers and demanders of funds together. The saving-investment process is facilitated by numerous institutions that offer savers a wider variety of substitutes for real goods or money, thus encouraging the flow and diversification of savings, and many methods of providing borrowers with funds to meet their requirements, thus promoting investment spending.

It is appropriate to pause here and ask why we are concerned with promotion of saving and investment. "Investment" is a confusing term

because we use it in two different senses. "Financial" investment refers to the acquisition of claims to wealth - typically pieces of paper representing real assets or wealth. When I buy a corporate stock or bond there is no change in the amount of wealth in the economy. An asset formerly owned by one person is simply transferred to another's ownership. This is not a trivial matter; facilitation of such transfers is important to the economy, and we will return to it in some detail later on. At this point, however, we are interested in "real" investment. Real investment is the process of capital formation or adding to the economy's stock of "capital goods" - equipment, machinery, tools, construction material, inventories - in short, anything used in the production process.

Our capacity to produce more goods and services over time - our growth in the economic activity - results from supplying a larger, better-educated and trained labor force with more capital or from utilizing more capital per unit of labor or output. Although there are clearly many physical, social and psychological factors responsible for the differences in growth rates among countries, the ratio of capital to total national output seems empirically to be highly significant. Countries with high growth rates tend to save a high proportion of total income. An economy with capital intensive production processes (that is, processes that use a large amount of capital goods), is likely to grow faster in terms of physical output than other countries. The development of a variety of financial instruments, institutions and markets can provide encouragement to saving and facilitate investment.

In a developed economy most investment is undertaken by business firms. Businessmen order newly produced capital goods to use in producing consumer goods and other capital goods. Saving decisions, on the other hand, are made by consumers, who may spend less than their total income.

Some of these relationships are sketched in simplified form in Figure 1. Economists have developed the concept of "gross national product" to represent the total value of goods and services produced in an economy in the course of a year. This value can be represented as the total expenditures for final output in the economy for consumption purposes and investment purposes, plus expenditures for goods and services in the economy by the government and by foreigners.

Alternatively, these expenditures can be viewed as income in the form of wages, rent, interest and profits. The total expenditure for final goods and services in the economy represents income to someone in the economy. This income may be used for consumption spending or may be saved. Saving may be used for direct investment as, for example, when the sole owner of a business uses funds he has saved to add new equipment to his store; it may also be used for financial investment in the purchase of financial assets such as stock, bonds, etc., or it may simply be held in the form of additional money. Financial investment may go directly into loans and investments or may be channeled through financial intermediaries. Funds received by such institutions may be channeled into loans to business firms, purchase of government securities or loans to consumers.

In any economy at any time there will be some spending units which will be saving or accumulating surpluses. There will be other units in the economy which will be investing or otherwise spending more than their current income. If the investment process is to be facilitated, some means must be found to channel the funds from the surplus units to the deficit units. In a less developed economy, most financing takes place directly from a surplus unit to a deficit unit, but in a developed financial economy, institutions arise to serve as intermediaries in this process.

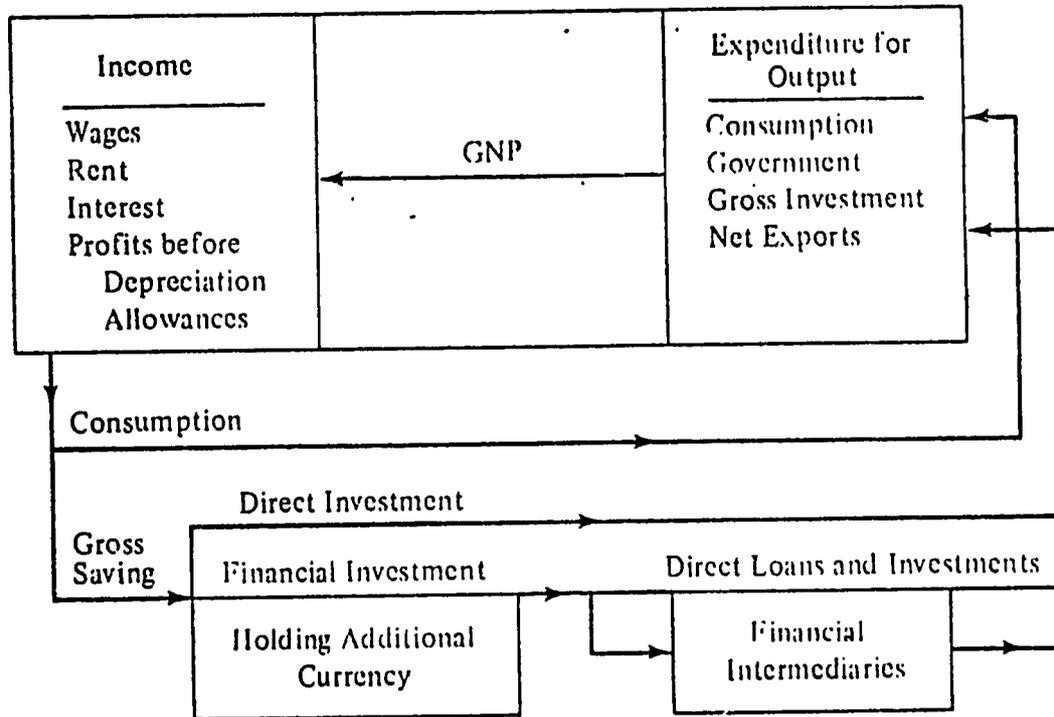


FIGURE 1. GNP, Saving, and Investment

Some direct borrowing-lending transactions take place even in the most sophisticated financial system. Such a transaction requires some fortuitous coincidences - the borrower must find a lender who is willing and able to provide the appropriate amount of funds, and who is willing to accept repayment at the time mandated by the particular investment opportunity being undertaken. The saver wishing to lend funds directly must find a borrower who represents an acceptable degree of risk and who is willing to agree to repayment at the time desired by the lender. Typically, there will be little the lender can do to convert this direct debt into money, if he should need his funds before the maturity of the contract with the borrower. In other words, this direct loan is "illiquid."

Figure 2 shows the transfer of funds from surplus units to deficit units. The diagram shows that some funds flow directly from ultimate lenders (surplus units) to ultimate borrowers (deficit units) in exchange for primary securities; that is, the obligations of the ultimate borrowers. Financial institutions serve as intermediaries to accommodate both the deficit and surplus sectors. Funds may flow from the surplus units to the financial institutions in exchange for indirect financial assets; that is, the obligations of the financial institutions. Funds flow from the financial institutions to the deficit spending units in exchange for their primary securities. Essentially, financial institutions gather the savings of individuals and re-lend those funds to business and consumers. This process is called "intermediation." The flows involving commercial banks are somewhat different since part of their liabilities are "money." While one may start out with the view that transactions involving middlemen are less efficient than direct transactions, this is not so in the case of financial

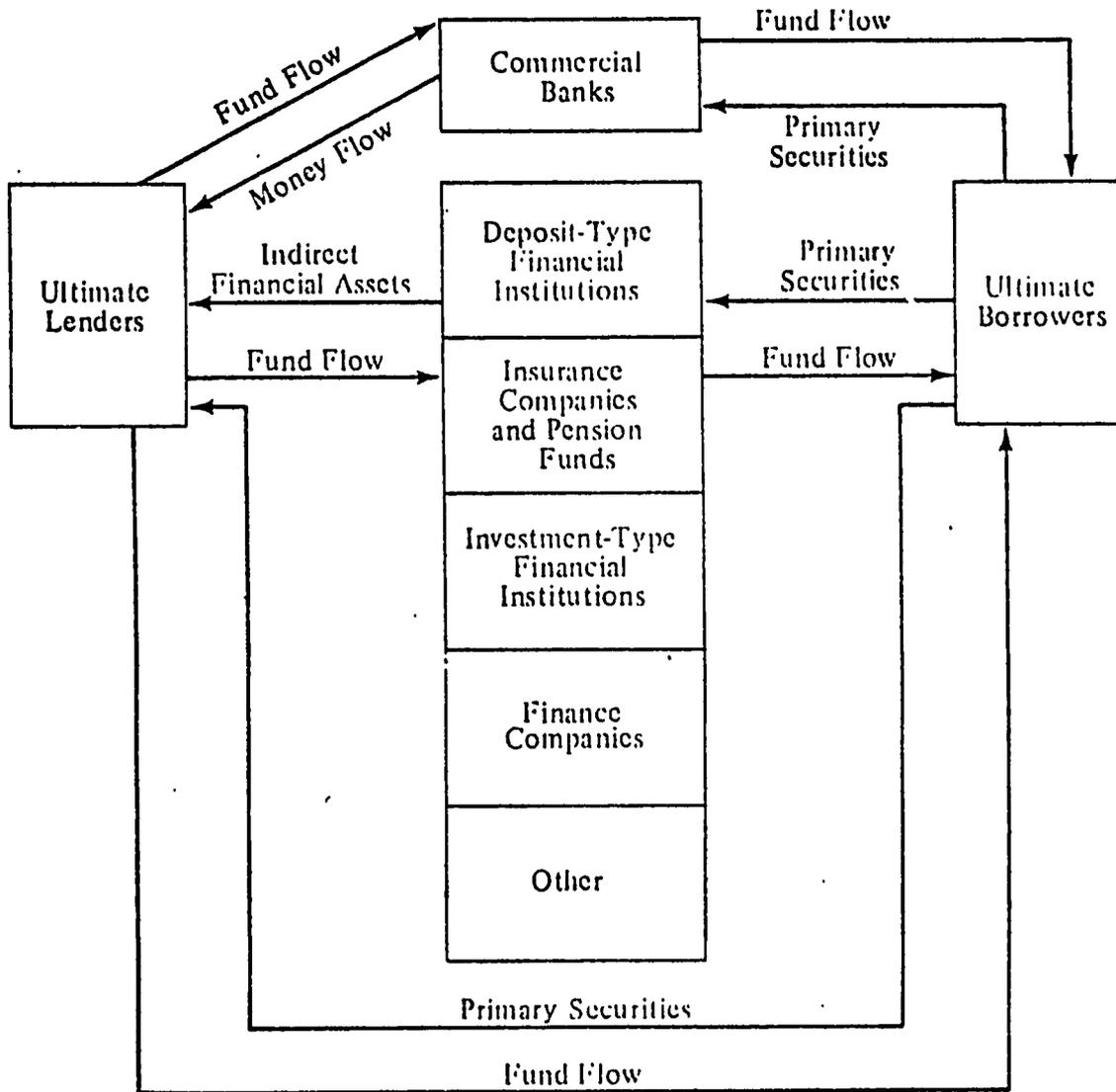


FIGURE 2. Financial Flows and Financial Institutions

transactions. The process of intermediation, in fact, provides significant benefits both to the ultimate lenders and to the ultimate borrowers.

Let us look at this from the point of view of the saver: instead of lending directly to an individual or business firm needing additional funds, the saver instead acquires an indirect financial asset issued by a financial institution. These indirect assets have different names and characteristics, such as "deposits" (in the case of banks), "shares" (in the case of some savings and loan associations or credit unions), or "insurance." One obvious advantage to the saver is that the indirect securities have a wider range of maturities than those in which primary securities are typically issued. Financial institutions accept funds for as short as a day, or for as long as many years. These indirect securities come in a wide range of denominations. In particular, the saver can put very small amounts into a transaction with a financial institution, while this would not be practical in dealing directly with a business firm or other borrower. Perhaps most important, the securities issued by financial institutions tend to have less risk of default than primary securities. Intermediaries are able to reduce risk by investing the funds received from money savers in a wide range of different primary securities. Diversification reduces risk, and the financial intermediary is much better able to obtain the desired diversification than the individual saver. Also, the financial institution is able to build up expertise as a result of specializing in this type of business, and is better able, therefore, to evaluate credit worthiness of borrowers. A related advantage, and to some customers of financial institutions the most important, is that the assets acquired by dealing with a financial institution typically have greater "liquidity"

than most primary securities; that is, the instrument acquired from a financial institution may be converted to cash, either on demand or on short notice. Financial institutions can afford to commit themselves to this because they know that not all of their many creditors will simultaneously seek to take advantage of this. While there may be some penalties or loss involved in early conversion to cash, these are much less than would typically be the case when dealing with primary securities.

The net effect of these advantages is that the individual saver can generally obtain a higher true net return by investing in the obligations of financial intermediaries than he could obtain by lending directly to an ultimate borrower. That is, after allowing for the differences in risk and liquidity, and saving on the costs of searching for an appropriate investment, his net return is generally higher. This is important because it means that the individual in an economy with a well developed financial system will have more incentive to save than the worker in an economy without these options.

There are also advantages to borrowers in the economy from this process of intermediation. Financial institutions will buy primary securities from deficit spending units in a wider range of maturities than individual buyers. Institutions make loans as short as overnight or as long as many years. They also will buy securities or make loans in larger amounts than individual lenders typically could. The net effect is that the interest cost to the borrower, after allowing for the savings on searching for funds, is lower than if he were to seek lenders willing to lend directly. Again, the existence of financial intermediaries facilitates borrowing and, hence, encourages investment.

Section II: The U.S. Financial System.

The previous section has sketched the role of the financial system and its financial institutions in an economy in rather abstract terms. In this section we will describe the functions and institutions of the U.S. financial system, the largest and most complex in the world. This discussion is not intended to suggest that every developing country should attempt to copy the financial system of the U.S., but only to show how financial institutions develop or can be developed to fill specific needs in the economy. None of these institutions is unique to the U.S. All exist, or at least have analogs, in some less developed countries, though no such country has all of these institutions operating. The financial system of the U.S. is also an evolving one. As new needs are recognized, institutions develop or change so as to accommodate those needs.

The financial system of the United States is relatively free, in the sense that most of the important institutions are privately owned and operated. Nevertheless, there is a significant degree of government regulation of institutions and direct participation by government agencies in the financial markets. Moreover, some of the important institutions in the financial markets are not profit oriented, but are cooperative or nonprofit organizations. The mix between private and governmental control and between profit oriented and nonprofit oriented institutions is a particularly important one for less developed countries. A brief review of the operations of the U.S. system can be helpful in analyzing the problems of a less developed country. We will also take a closer look at the role of government in the U.S. economy.

The United States' financial system consists of many types of institutions. Each institution differs from the others in many characteristics: the legal form of its organization; the source of its

charter; the degree and type of regulation to which it is subject; its structure; the sources of its funds; and the uses to which it puts funds.

Some financial institutions are corporations organized like other private business firms, owned by stockholders. Many institutions are "mutual," meaning that they have no stockholders, but are owned by their depositors or customers. All commercial banks and some savings and loan associations are stockholder owned. All mutual savings banks and credit unions, most savings and loan associations, and many insurance companies are mutual institutions. In a number of less developed countries, cooperatives and other nonprofit institutions play an important role. While some view such institutions as representing merely a phase in historical financial development, it is significant to note that such nonprofit institutions exist side by side with profit-oriented firms in the developed world.

There is a significant difference among financial institutions in the degree to which they specialize in certain products or services. Savings and loan associations, for example, accept only savings accounts and invest their funds almost entirely in residential mortgages, while credit unions use most of their funds to lend to members for the purchase of automobiles and other consumer goods. Commercial banks, on the other hand, raise their funds from a variety of sources: demand deposits and time deposits of governments, businesses, and individuals, as well as from the sale of a variety of types of securities. Commercial banks also use the funds in a variety of ways: to make loans to businesses or consumers, to homebuyers, as well as to purchase government and corporate securities. Some of this specialization is incorporated into the law.

Savings and loan associations cannot make automobile installment loans, for example. Some is based on tax considerations. In fact, it is through appropriate provisions in the tax laws that institutions can be given significant incentives to operate in a particular way. And some of this specialization is based, even in the advanced financial system of the U.S., mainly on tradition and long custom.

All of the institutions mentioned so far are privately owned and operated. The American financial system also has some institutions that are (in whole or in part) public or governmental institutions. The most important such institutions are the Federal Deposit Insurance Corporation, which insures the safety of deposits in commercial banks, and the Federal Reserve System, which is the central bank of the United States. The most important responsibility of the Federal Reserve System is the conduct of monetary policy in the U.S. We will discuss later on the monetary policy responsibilities of the Federal Reserve System and the way in which monetary policy actions impact on financial institutions. There are also governmental credit institutions that make certain types of loans to private financial institutions or to the public.

Let us turn now to a description of the types of financial institutions operating in the United States. It is logical to start with commercial banks for several reasons. One, of course, is simply the number and size of commercial banks. There are about 14,000 commercial banks in the United States with total assets of over \$1 trillion--more than any other type of institution. More important is the fact that the operations of commercial banks cover a wider range of activities than any other type

of institution, leading to their characterization as "department stores of finance." The most important reason for focusing on commercial banks, however, is the fact that only commercial banks can accept demand deposits or checking accounts. In all developed countries, demand deposits of commercial banks comprise the largest part of the money supply. In the U.S., demand deposits, which account for 75 percent of the money supply, facilitate over 90 percent of all transactions. The use of such bank deposits as a means of making payment is a relatively advanced step in financial development. The earlier stage, the use of government issued currency as the circulating money supply of a country, itself represents a significant advance over the use of precious metals or other commodities that have served as money in various primitive economies. Advances in development of money from commodities to currency to deposits, facilitate trade, specialization, saving and investment. Commercial banks by being the issuers of the bulk of the money supply also become the focal point for the conduct of monetary policy. Their role in this area will be discussed later on.

Commercial banks obtain their funds from a variety of sources. They accept deposits from individuals, businesses, and governments. Some of these deposits are checking accounts (demand deposits), while others are "time deposits" (savings accounts or certificates of deposits), with payment set at some specified or indefinite time in the future. Under U.S. law, banks pay interest on time deposits but are not allowed to pay interest on demand deposits.

Banks are subject to much regulation as to what they can do with their funds. The law requires banks to set aside some of their funds in the form of reserves consisting generally of cash, deposits with the Federal Reserve or other banks, or in some cases, investments in govern-

ment securities. The bulk of bank assets, however, are used to make loans. The loan distribution of American commercial banks is indicated in Table 1, which shows that banks make loans for a wide variety of purposes to a variety of borrowers.

In many countries there are specialized institutions primarily engaged in housing finance. In the United States, these institutions are mutual savings banks and savings and loan associations. While their present-day operations are rather similar, their history and original purposes differ. Savings banks were first established in the early nineteenth century in order to provide a safe place for persons of modest means to keep their savings. They were basically philanthropic in nature: groups of wealthy public-spirited citizens contributed the capital funds necessary to start the institutions, which then accepted the deposits of small savers who, at the time, had no safe means of holding their savings, since commercial banks were not interested in small accounts. The bulk of the funds accumulated by mutual savings banks are used for making loans to individuals to finance purchases of homes and to developers of multi-family projects. They were used in this way originally because this was found to be a secure investment outlet for essentially long-term funds. In more recent years their concentration on mortgage lending has been encouraged by the tax laws.

The savings and loan associations have similar operations, but their original purpose was to finance home ownership. This original purpose can be seen in the case of a group of people, each wishing to buy a house. None has cash available to buy the house himself. If they all pool their funds, however, some of them will be able to use the money to buy the house they desire. The interest they pay on the money borrowed will

Table 1

Commercial Bank Loans
December 31, 1974

(in millions of dollars)

Mortgage Loans		\$132,105
Loans on 1-4 family homes	\$74,758	
Other mortgage loans	57,347	
Loans to financial institutions		52,974
Loans to farmers		18,248
Business Loans		188,564
Loans to individuals		104,045
Automobile loans	33,055	
Credit cards	11,140	
Other instalment loans	36,784	
Single payment loans	23,066	
All other loans		<u>18,306</u>
TOTAL LOANS		\$514,242

compensate the other members of the group for waiting. As the loans are repaid, other members can borrow the funds collected. This original concept and operation of the savings and loan association has changed considerably over the years, but the basic purposes are still the same-- the facilitation of home ownership. Both mutual savings banks and savings and loan associations raise their money from the relatively small deposits of individuals, and use their money to lend on home mortgages. Savings and loan associations are limited by law to this type of investment, though savings banks generally have a broader range of investment opportunities. They are heavy purchasers, for example, of corporate bonds.

All of the mutual savings banks, and most of the savings and loan associations are mutual institutions; that is, they have no stockholders. In a sense, the depositors are owners of the institutions, and the earnings of the institutions, after payment of expenses, accrue to the depositors.

Credit unions are organizations of individuals with some common bond--belonging to the same church, living in the same neighborhood or, most commonly, working for the same firm. They are organized to promote savings among their members and to provide personal loans to members. Loans to members are generally on an installment basis to finance purchase of automobiles or other consumer goods. Credit unions typically are small, but the industry has been growing at a rapid rate.

Life insurance companies are the largest financial institutions in the U.S. next to commercial banks. It may seem somewhat strange to designate the insurance companies as savings institutions, but they hold more savings of individuals than any other. Although we tend to think

of insurance only in its protection aspects, much of the typical insurance premium represents savings and not payment for protection. With the exception of term insurance, which has no savings element, other types of insurance policies represent varying combinations of savings with insurance.

The liquidity needs of life insurance companies are not very great. The companies can estimate with a high degree of accuracy how much they will have to pay out in death benefits over the next year. As a result, life insurance companies have only a small part of their quarter of a trillion dollars of assets in the form of cash and short-term securities. Most of the assets of life insurance companies are invested in corporate bonds and mortgages.

One of the most rapidly growing types of financial institution in the U.S. is pension funds. Pension funds are accumulated out of the contributions of employers and employees, and are invested in securities to provide an income for the employees on retirement. Most of the assets of such funds are invested in corporate bonds and stock.

Investment companies raise money by selling shares to the general public, and the funds so accumulated are generally invested in corporate stocks and bonds. These institutions enable the relatively small investor to own a share of a diversified group of securities, thus gaining the benefits of diversification and professional management.

A similar management service is provided by the trust departments of commercial banks. Trust companies take possession of personal property and manage it for the benefit of the person establishing the trust or for someone he designates.

All of these institutions described above operate as described in the previous section of this paper, that is, they channel the savings and accumulated assets of individuals into productive investments. They gain for their customers the advantages of "indirect" as compared with "direct" financial investment. The individual depositing his funds in a savings and loan association need know nothing about making mortgage loans, yet his funds will be used to facilitate the purchase of a home by someone else in the economy. Because of the diversification of the savings and loan that makes many mortgage loans, should an individual borrower default on his loan, the depositor's funds are still secure. Table 2 illustrates the general size of the different financial institutions described here and shows the range of assets in which their funds are invested.

The financial system of the U.S. is more complex than this listing of institutions suggests. The institutions described above are generally those involved in obtaining savings from, or lending to, individuals. In addition, there are many specialized institutions which lend directly to businesses. Commercial finance companies and "factors," for example, make loans of various types to business firms. Most business loans, however, are made by commercial banks.

The United States also has a well-developed system of institutions to facilitate direct financial investment. There are several organized stock exchanges and several thousand broker and dealer firms to facilitate the purchase of stocks and bonds by individuals. Brokers earn a commission by bringing together buyers and sellers of securities. Dealers buy and sell securities for their own account, thereby "making a market" in the security. The fact that common stocks are traded on an organized

exchange or other active market means that the investor buying such securities is always assured of being able to sell the securities when he desires to do so. This makes the investment more liquid and makes the individual more willing to buy such securities than he otherwise would be. As a matter of historical development, direct investment developed first in the U.S., and financial institutions came later. Whether less developed countries should attempt to follow this pattern of historical development is discussed in Section V.

One other important aspect of the U.S. financial structure should be noted. Various specialized institutions have grown up to meet specialized needs, or to fill gaps that were perceived in the existing financial system. Credit unions developed when many individuals found that commercial banks were not willing to make small personal loans to individuals. Hence member-owned organizations were developed to fill this need. When the success of credit unions and small loan companies demonstrated that it was both safe and profitable to make such loans, then commercial banks also entered the field. Savings and loan associations grew rapidly at a time when there were no other institutions willing to make mortgage loans to individuals.

Not all such innovations have been uniformly successful. In order to fill a perceived gap in the availability of financing for small business, Congress enacted legislation which provided substantial tax benefits for small business investment companies (SBIC's). A variant of these institutions was established to specialize in financing small businesses owned by members of minority groups: minority enterprise small business investment companies (MESBIC's). Relatively few of these operations achieved significant success.

A more dramatic innovation was the creation of the real estate investment trust (REIT), designed to provide a vehicle, similar in concept to the mutual fund, in which the small investor could participate in real estate investment and financing. While these institutions successfully attracted billions of dollars very rapidly, poor lending practices and the severe 1974-1975 recession combined to produce financial disaster for many of these institutions.

While the United States has the widest variety of financial institutions in operation, mention should be made of one type of institution which exists in most countries of the world but not, despite several attempts, in the U.S. Development banks have been established in many developing countries to aid in financing long-term industrial capital formation. Legislation establishing similar institutions in the U.S. to aid in financing urban development, has been proposed but never enacted. In both the U.S. proposals and in practice in developing countries, development banks have focused on industrial and urban financing rather than agricultural or rural, but there is no reason why the concept of this type of institution cannot be adapted to the latter role. We return to this possibility in the final section and in the Appendix.

While the institutions described above are privately owned, the government has a large role to play in financial markets. Government affects virtually every aspect of financial activity in the United States. Government's role is important and widespread, as borrower, insurer, regulator, and ultimate source of liquidity.

The United States Government is the largest single borrower in the world. With federal budget deficits varying widely from year to year, it is difficult to say how rapidly United States debt will increase, but no doubt it will continue to rise. The coins and paper dollar bills that we carry in our pockets are promises to pay issued by the Federal Reserve System or the United States Treasury, and hence our circulating medium of exchange is a form of government debt.

State and local governments also issue large amounts of debt, and such debt seems to increase rather steadily. With continued urbanization, the role of state and local governments in the economy is bound to expand steadily in the foreseeable future, and state and local taxes are not likely to be sufficient to meet desired expenditures.

Besides the various types of government debt, there exist a large number of debt issues of federal agencies (and of agencies originally sponsored by the Federal Government) that have credit programs of various sorts. Among these are the Veterans Administration, Federal Housing Administration, Federal National Mortgage Association, Small Business Administration, and Federal Home Loan Banks. Some of these agencies insure private loans, some lend directly, and some purchase private marketable securities. To finance their loans and purchases of securities, they issue debt instruments of their own (or "participation certificates" that give the buyer "ownership" of a part of a package of mortgages, say, that the agency holds). Through such agency activities the Federal Government again has significant effects on financial markets from both the supply side and the demand side.

One major government program requires special consideration: the Social Security System. In the U.S. the Social Security System actually comprises a number of programs including life insurance, disability and medical insurance programs, as well as a retirement system. The dollar amounts are very large (the trust funds have assets of over \$40 billion), and for many taxpayers, social security contributions are larger than their income taxes. It thus is a potentially important means of redistributing funds. In fact, it is not so used in the U.S. - that is, the social security trust funds are simply invested in U.S. government securities and are not directly used to make loans to, or investments in the securities of other institutions or firms. In several less developed countries, however, where a large social insurance system exists, it is used as a means of channeling funds to desired uses. We will discuss such use of social security funds in LDC's in a later section of this paper.

Government involvement in the financial system does not stop with direct borrowing-lending-taxing policies. Besides participating directly in markets, government agencies regulate financial institutions. Commercial banks and most other financial institutions are regulated by either the Federal Government or the State Government that granted their charters. One or more government agencies control the chartering of new banks, approve branching and merging of banks, insure deposits, set maximum interest rates that banks can pay on various types of time deposits, and to some extent control rates that banks charge customers for various services offered. Mutual savings banks, savings and loan associations,

credit unions, insurance companies, and small loan companies are also regulated. The Federal Savings and Loan Insurance Corporation insures deposits in savings and loan associations in a manner similar to the insurance of deposits in commercial banks by the Federal Deposit Insurance Corporation. Through the Securities and Exchange Commission, the government also regulates the sale of new securities to the public, the trading markets in outstanding securities and the operations of brokerage firms, investment companies, and securities exchanges.

Finally, government agencies have responsibility for implementation of monetary, fiscal, and debt management policies in the interest of economic stabilization. In carrying out these policy programs, they exercise tremendous influence on the cost and availability of credit; this influence is felt throughout the entire structure of financial markets and institutions. Of special importance is the role of the Federal Reserve System as the ultimate source of liquidity for the banking system, a role we will consider later on.

This description of the U.S. financial system can be summarized briefly. There are many interrelated markets for loanable funds. The principal borrowers are business, government, and consumers; the principal lenders, consumers, government, and business. These market participants buy and sell both new and existing financial assets at prices determined in the markets. Borrowers have outstanding debt, and lenders have earning assets; debt and credit are two sides of the same coin.

Financial markets perform both an economic and financial function. Real economic resources are transferred to their most desired uses through provision of funds to borrowers and acquisition of earning assets by

lenders, and funds are provided to borrowers when needed, at the same time providing claims for lenders, to be exercised later if desired.

Financial markets are diverse, with many types of loans and securities for many different purposes. But these markets are also closely interconnected; transactors move easily into and out of various market segments.

The role of government in financial markets is pervasive because of: (1) direct government participation in the markets; (2) government regulatory activities; and, (3) government responsibility for the conduct of economic policy so as to achieve growth and stability. These policies have direct impact on financial institutions, and it is this relationship which we will now examine.

Economic Policy and Financial Institutions

While governments have a wide variety of powers to influence the economy, for our purposes the most significant is that group of actions and controls that we term "monetary policy." Monetary policy comprises those actions of the government or its central bank which affect the supply of money, or the cost or availability of credit. A simple example of a monetary policy action would be an increase in the supply of money by printing more currency. In an economy suffering a depression and beset with significant unemployment, the theoretical basis for such a policy is that the increased money in the hands of the public will lead to increased spending. The increased spending will increase the demand for a wide variety of goods and services, and hence increase the demand for labor and thereby improve the employment situation. Obviously there are

some complications to such policy actions, not the least of which is that the increased spending resulting from the increased supply of money will also bid up prices and add to problems of inflation.

If the problem facing the country were one of excessive inflation, then the appropriate policy might be to reduce the amount of the money supply, perhaps by destroying currency. While changes in the money supply are the essence of monetary policy, in the modern economy monetary policy is not carried out by printing and destroying currency. As noted earlier, the major part of the money supply in most countries consists of demand deposits at commercial banks. Monetary policy in the United States is conducted through actions of our central bank, the Federal Reserve System, which affect the volume of deposits at commercial banks. The mechanics are rather complex but the concepts can be explained rather briefly.

Let us assume that all banks maintain reserves equal to some percentage of their deposits. One type of asset which counts toward meeting these reserve requirements is claims against the Federal Reserve. These claims may be deposits which banks maintain with the Federal Reserve, or currency. In this situation (which does characterize the U.S. economy), the Federal Reserve can then influence the money supply by buying and selling government securities in the open market. When the Federal Reserve carries out "open market" purchases of government securities, it pays for the securities it buys by issuing a check. The seller of the securities deposits that check in his commercial bank, and this check, drawn on the Federal Reserve, counts toward meeting the bank's reserve requirements. If the bank originally was meeting its

reserve requirements precisely, the bank now has reserves in excess of its required amount. It can use these "excess reserves" to make new loans. The recipients of these new loans thus have money that did not exist before, and no one in the economy has less. This expansion of money and credit will tend to stimulate the economy in exactly the same way as printing additional dollar bills would do.

Sales of securities in the open market by the Federal Reserve have the opposite effect. The buyer of the securities gives the Federal Reserve a check drawn on his bank. When the Federal Reserve collects that check from the commercial bank on which it is written, that bank's reserves are thereby reduced. The reduction in reserves restricts the bank's lending ability and forces a reduction in deposits (or money).

Since the United States operates with a fractional reserve system (that is, commercial banks keep reserves equal to only a fraction of their deposit liabilities), these open market operations of the Federal Reserve have a multiple effect on the economy. In our example of the effect of Federal Reserve open market purchases, for example, the recipients of the newly created credit will spend the proceeds of their loans. The recipients of this expenditure receive funds which they deposit in their banks. These banks find themselves with increased deposits and increased reserves, but since they need to hold reserves equal to only a fraction of the new deposits, these banks also have excess reserves available for lending. The results of Federal Reserve open market purchases of securities thus percolate through the economy with an effect several times their original magnitude. It is because there is a well-developed banking system that monetary policy can be

carried on in this sophisticated but effective manner. Hence the existence of these financial institutions is essential to monetary policy.

The workings of Federal Reserve monetary policy actions can be considered from a different point of view. Rather than looking at impact on the money supply, we can look at the impact on interest rates. As we have indicated, when the Federal Reserve seeks to expand the economy it will buy securities in the open market. This additional demand for securities will bid up the price of government securities and hence reduce their yield.¹ This reduction in interest rates in the economy will stimulate additional borrowing and investment, and hence aid the economy's recovery from recession and unemployment.

In the opposite situation, the sale of government securities by the Federal Reserve will push down the price of securities and thereby raise interest rates in the market. Higher interest rates will tend to discourage borrowers and combat inflationary tendencies in the economy.

Economists have different views as to which is the more important channel of monetary policy. Those who focus on the money supply impact are generally known as "monetarists," while those focusing on interest rates are called "Keynesians." In fact, most economists are more eclectic as to their view of the way monetary policy works, and this is certainly true of officials of the Federal Reserve System.

¹Consider a long-term paying interest of \$6 per year. At a price of \$100, the bond yields 6 percent (\$6 divided by \$100). If the price is bid up to \$120, the yield drops to 5 percent (\$6 divided by \$120).

The Federal Reserve has other powers which affect the conduct of monetary policy and the banking system. The Federal Reserve can make loans directly to commercial banks. These loans (or "discount window operations") provide reserves to the banks and hence lead to increases in the money supply and credit, but there is another aspect of these loans that is more significant - the Federal Reserve discount window is a source of liquidity to the banking system, even when other sources dry up. The Federal Reserve thus plays the role of "lender of last resort" in the U.S. financial system.

This "lender of last resort" role is an important one in any financial system. The willingness of banks to make loans and thus tie-up their funds is directly dependent on how easy they feel it will be to convert these loans to cash (or to borrow money) in case they unexpectedly need cash. Remember the deposit obligations of commercial banks are largely payable on demand, and a need for cash to meet a deposit outflow can arise suddenly. The commercial banks in the U.S. can use their loans (or other assets) as collateral for borrowing from the Federal Reserve. Banks may hope to avoid borrowing from the Federal Reserve, but the knowledge that the central bank is there to lend in an emergency, makes the banks more willing to play their role in meeting the nation's credit needs.

The other major type of economic policy designed to influence the economy is fiscal policy, by which we mean government spending and taxation policy. Obviously a governmental budget involving expenditures greater than revenue involves a net stimulus to the economy. But fiscal policy involves more than a mere calculation of expenditure and revenue.

Tax policies have objectives other than simply raising revenue for the Treasury. Tax policy may be aimed at affecting the distribution of income, or in promoting or discouraging certain types of economic policy. In the U.S., for example, income received on the securities of state and local government is exempt from taxation. This makes investors willing to lend to state and local governments at lower interest rates than would otherwise be required, and hence the tax policy becomes a means of encouraging the flow of funds to state and local governments. Savings and loan associations have been given relatively favorable tax treatment as part of a policy aimed at encouraging the flow of funds into the housing market and thus stimulating the national goals of improved housing and individual home ownership.

Related to fiscal policy measures is the fact that in the U.S. a number of government agencies administer programs to lend directly to certain sectors of the economy. Generally, government lending is designed to fill what is perceived as a gap in the flow of private finance to certain favored sectors. Some of these governmental loan programs, for example, involve lending to small businesses and to farmers, sectors that, at least in the view of some, have not had as easy access to credit as social policy has deemed desirable. The relationship between fiscal policy and financial institutions is not as direct as when monetary and credit policy is under consideration, but its importance, particularly in terms of government credit programs, may be more significant in LDC's.

Section III: Financial Institutions and Economic Development.

Financial intermediation and financial institutions warrant attention because the process of financial intermediation and the operations of a nation's financial institutions are relevant to its economic growth. This is a relatively new view among economists: economic development textbooks written in the 1950s and early 1960s hardly mention financial institutions. The financial system of a less developed country was not considered to be particularly relevant to its economic growth. That view has changed in recent years for several different reasons. One reason for the change lies in the theoretical analysis and empirical evidence produced by a number of leading development economists. Another reason is that more attention is being given by economists to financial processes in both developed and less developed countries. And perhaps the most important factor is that experience of recent years has shown us some examples of countries whose development appears to have been aided by a move toward relatively free financial markets, with an increasing role played by their financial institutions. A later section of this paper will review a few of these examples.

The economic problems of less developed countries are well known to all readers of this paper. Benjamin Higgins has summarized the problem succinctly in the opening paragraph of his treatise on *Economic Development*:² "If it were possible to chart per capita income for all the countries now belonging to the United Nations, starting with the beginning of human history..., the charts would show long periods of dreary stag-

²New York: W. W. Norton & Company, 1959, p. 3.

nation, interrupted by short spurts of economic progress in a few countries. The rapid and essentially continuous rise in per capita income in Europe, North America and Australasia during the past two and a half centuries, which many of us in the Western world have come to regard as 'normal,' would appear as a phenomenon unique in history... Stagnation is the rule; economic development is the exception that requires special explanation."

Economists over these past two centuries have provided us with numerous explanations of the growth that has taken place and numerous (though often conflicting) prescriptions for stimulating growth where stagnation prevails. The immediate explanations for economic growth are easy to cite after the fact: discovery of a new resource; change in the market situation for a principal product; or an increase in the rate of saving and investment in the economy. All growth theories and growth models are based on increases in the rate of savings and of investment. What is never so clear (even after the fact), is the precise cause of an increase in the rate of savings and investment that generates a takeoff into sustained economic growth. We are all familiar with the self-perpetuating "vicious circle" of stagnation: low income generates low saving and lack of resources available for investment; incentives for investment are also lacking in an economy with low demand and low labor costs; the low investment perpetuates the low income and low wage rates. Growth produces its own virtuous circles, however: rapid growth generates greater savings, which facilitate investment. Investment results in more productive labor and hence in higher wage rates.

Investment in labor saving capital becomes more desirable because of the higher wage rates. Thus investment generates not only the incentives to additional investment but also the higher income and greater savings needed to finance the additional investment.

The process can be explained after the fact, but, as W. Arthur Lewis has put it:³ "The central problem in the theory of economic growth is to understand the process by which the community is converted from being a 5 percent to a 12 percent saver - with all the changes in attitudes in institutions and in techniques which accompany this conversion."

It is the purpose of this section to trace the relationship between financial markets and economic development as viewed by modern economic development theory, and to relate that theory to the experience of some less developed countries. We will pay particular attention to the role of financial institutions in rural development, both from the point of view of stimulating savings, and providing and allocating credit. The final section of this paper will consider the use of these somewhat abstract considerations to promote development.

Despite the increased attention given to the financial aspects of development, no one claims that stimulation of financial institutions is the only or even the most important policy that less developed countries can take to stimulate growth. Other factors such as natural resources, relative prices, availability of technology, education, and so forth, are clearly important in the overall growth picture. Improvements in the fiscal system, educational policy, land reform and other policy steps may be

³*Theory of Economic Growth*, London: G. Allen & Unwin, Ltd., 1970, p. 224.

the crucial ones in particular countries. Even with respect to the comment by Professor Lewis concerning the importance of savings, it is clear that the state of financial institutions in a country is not the only and generally not the most important factor affecting savings. The level and distribution of income, and the rate of growth of income are obviously important in affecting the saving rate. The virtuous circle plays a role here: savings are high if income growth is high, and income growth is high if savings are high. With all these caveats in mind, we can now proceed to examine the role which financial institutions have in the economic growth of less developed countries.

As we have noted, earlier treatments of economic development by economists have not given much weight to the financial system. The recent interest in this topic is due in large part to the work of such economists as Roland McKinnon,⁴ Edward Shaw,⁵ and Raymond Goldsmith.⁶

This new position is summarized on the first page of Professor Shaw's influential work *Financial Deepening in Economic Development*: "The theme of this book is that the financial sector of an economy does matter in economic development. It can assist in a breakaway from plodding repetition of repressed economic performance to accelerated growth. If it is repressed and distorted, it can intercept and destroy impulses to development.

⁴ *Money and Capital in Economic Development*, Washington, D.C.: The Brookings Institution, 1973.

⁵ *Financial Deepening in Economic Development*, New York: Oxford University Press, 1973.

⁶ *Financial Structure and Development*, New Haven, Connecticut: Yale University Press, 1969.

The financial sector is a complex of markets for financial assets and financial services. It has its own industries, the monetary system among them, utilizing inputs of productive factors according to relevant technology. There is a superstructure of regulatory authority with its pattern of policies and array of control instruments. Linkages with foreign financial sectors are inescapable. The sector is unique in the degree to which its markets, prices, institutions, and policies impinge upon all others. Money is the only good that trades against all other goods. Interest rates are the relative prices that have most pervasive relevance to economic decisions." (underscoring added.)

Shaw goes on to argue that numerous economies "with low levels of per capita income and wealth have been attracted at times to a development strategy that results in 'shallow' finance. By distortions of financial prices including interest rates and foreign-exchange rates and by other means, it has reduced the real rate of growth and the real size of the financial system relative to nonfinancial magnitudes. In all cases, this strategy has stopped or gravely retarded the development process. A new strategy that has the effect...of 'deepening' finance - a strategy of financial liberalization - has invariably renewed development.... This theme is excluded from dominant traditions of theory and practice in economic development. Some development theory seems to be designed for a barter world."

Basic to this view of the contribution of the financial sector to economic development is the view that the less developed country suffers from a "fragmented" economy. As Professor McKinnon has put it "The economy is 'fragmented' in the sense that firms and households are so isolated that they face different effective prices for land, labor,

capital, and produced commodities and do not have access to the same technologies. Authorities then cannot presume that socially profitable investment opportunities will be taken up by the private sector, because prevailing prices need not reflect true economic scarcity - at least not for large segments of the population.... One manifestation is the often-noted existence of small household enterprises and large corporate firms - all producing similar products with different factor proportions and very different levels of technological efficiency. Continuing mechanization on farms and in factories in the presence of heavy rural and urban unemployment is another.... In rural areas, tiny landholdings may be split up into small noncontiguous parcels, with inadequate incentives for agricultural land improvements."⁷

It is not uncommon in less developed countries to see farmers save by hoarding inventories of crops, part of which is eaten by rodents so that the returns on such savings are negative. At the same time, another farmer may see the opportunity for return at an annual rate of, say, 60 percent on investment in drilling a new irrigation well, but finding the local money lender wants 100 percent interest on the loan to finance the project, cannot carry it out. How much better off they both would be if a means existed to channel the savings of the first farmer to the second at an interest rate of, say, 30 percent. The operator of a small factory may find it impossible to get adequate credit to finance his inventories of raw materials and finished goods, while next door a businessman in a somewhat different line of business may have access to

⁷*Money and Capital in Economic Development, op. cit.*, pp. 5, 7.

credit at an extremely low, subsidized rate. These discrepancies or fragmentation phenomena, have long been noted by students of development. What is important for our purpose is to stress the relationship of this situation to financial institutions and financial markets. It is these institutions in the developed economy which, in effect, monitor the efficiency with which the existing capital or the country is deployed.

Some of the fragmentation results from "indivisabilities" or "discontinuities." That is, the investment associated with the adoption of significantly improved technology looms large from the point of view of a small-scale entrepreneur. McKinnon cites such examples as investment in an improved breed of dairy cattle, buying a new lathe or sewing machine, or assembling a new combination of feeds, fertilizers and pesticides. Yet much investment in the less developed countries is self-financed, in that the farmer or small businessman saves from his own income to make small, marginal investments in his business. The farmer can provide his own saving to increase the amount of fertilizer he is now using, but finds it virtually impossible to finance, from his current savings, the whole of the balanced investment needed to adopt a new technology. This development requires external finance.

It should be stressed we are not discussing a need for subsidized finance. The small farmer contemplating a discrete investment in the green revolution can significantly improve his position, even if he has to borrow at a rate above the rate of return he is obtaining on his older, self-financed investments based on traditional seeds and techniques.

An efficient, freely-functioning financial system can be a substantial help in solving this problem of fragmentation. Relatively few less developed countries have been willing to free the financial system sufficiently. Organized banks and other institutions do not penetrate the economic hinterland of most less developed countries. This is true of rural areas in general, and small borrowers in particular. Government deficits frequently preempt the limited lending resources of the banking system, and financing of the rest of the economy tends to be met from the meager resources of money lenders and pawn brokers. Government policies have, intentionally or unintentionally, discouraged financial institutions from playing their intermediary role at mutually acceptable market prices. This is the phenomenon that has been called "financial repression."

Shaw claims that the result of such deliberate policy has been that "The lagging economies have repressed real financial growth." Much of the reason for intervention in financial markets and repression of financial growth is concern about the high rates of interest that would prevail in a relatively freely-functioning financial system. Such concern about high interest rates exists even in the U.S.

Repression of a financial system has its effect on both sides of the investment process; that is, both savings and credit. Let us examine what financial institutions can do both to increase saving in the less developed countries and to increase the flow of credit. As one example, money lenders in rural Ethiopia receive interest at the rate of 100 to 200 percent per year for small loans. Poor farmers need funds even at such rates to bridge the gap between the time when

they grow their crops and when they sell them. The organized banking system makes few agricultural loans, despite the clearcut scarcity and productivity of simple rural investments. The standard nominal lending rate to preferred manufacturing activity and real estate development in Ethiopia's urban areas is 8 or 9 percent, while the legal interest rate ceiling on bank loans is 12 percent. These great interest differentials between organized banking and informal rural credit in Ethiopia are not unusually great relative to those in other less developed countries. The lack of penetration of organized bank lending into the rural economy, as well as into small-scale urban industry, has been corroborated in a massive empirical study of a large number of less developed countries by U. Tun Wai.⁸

The usury ceilings that affect financial institutions in the less developed countries may have resulted from an attempt to regulate the monopoly power of a highly concentrated banking system, and are intended to benefit the borrower by making credit cheap. This has been the motive in the U.S. But the effect in many instances has not benefited the small borrower at all. It has just made credit unavailable to him. In any case, the low official rates charged by organized and regulated financial institutions does not characterize the rates paid in rural areas. In the less developed countries, much finance takes place through the so-called "unorganized" financial markets typically characterized by very high rates of interest. Removing interest rate control may reduce the cost of finance, at least to many borrowers. This could

⁸ *Financial Intermediaries and National Savings in Developing Countries*, New York: Prager, 1972.

result if higher interest rates had the effect of integrating the rate structures of the unorganized financial markets with the official financial market in which rates are much lower. That is, if interest rates were allowed to move higher than current controls or limitations, perhaps the banks and other organized institutions would be more willing to make the kinds of loans made by unorganized lenders.

Of course, low rates in the official sector result in the attraction of inadequate deposits, which requires that the authorities ration loan funds. In these circumstances, large modern industry tends to have priority and access to finance over more traditional labor intensive industries, such as agriculture. In fact, low rates of interest in the organized sector may lead to uneconomical use of credit by individuals and firms that have easy access to credit at established rates. "Merging" of the controlled with the unorganized market, to one freer market, could provide cheaper finance of the agricultural sector. This would be aided by the other link in the process - the stimulation of saving.

The high rates of interest in rural areas are exclusively lenders' rates that are applicable only on loan transactions. Depositors do not receive commensurately high rates of return on their savings. Consequently, high rates of interest charged by lenders have little influence on the motivation to save of the rural sector. Further, if a developing country does not have adequate financial intermediation, then farmers

living in rural areas do not have much opportunity to choose between different forms of savings. They must either save in the form of currency or hoard gold or consumer goods. Direct loans of surplus funds are difficult to arrange, but the stocking of commodities by a large section of the consuming public, particularly without adequate storage facilities can be wasteful.

The supply of savings is increased when financial intermediaries can provide the holder of the financial claim with more safety, higher yield and liquidity than if the saver had directly made a loan to the borrower. Obviously, the willingness of the public to hold large cash balances in the form of deposits with banks or other intermediaries decreases with inflation. Therefore, one of the key aspects of economic policy is the maintenance of price stability. We will return to this issue later on, as well as considering other attributes of the deposit contract that are important to the saver.

The traditional view, of course, has been that there is relatively little voluntary savings capacity in rural areas; that rural residents cannot really be induced to save more and spend less, regardless of the availability of financial institutions and instruments. There have been a few studies in different countries that relate to this issue. A study of savings in Taiwan found a significant increase in rural saving when real rates of return (that is, the interest return after allowing for the effect of inflation on the value of money) were increased.⁹

⁹See, for example: Anand G. Chandovarkar, "Interest Rate Policies in Developing Countries," *Finance and Development*, Quarterly No.1, 1970, pp. 19-27.

Korea provides a clear example.¹⁰ In 1965, the government sharply increased the rates of interest paid on financial deposits. As a result of this and other financial reforms, there was a huge increase in the amount of household financial savings from 1965 onward. As Adams has pointed out with respect to India, "One might conclude that the huge amount of gold and jewelry held in rural areas is at least partially the result of financial markets which are functioning poorly."¹¹

Other authors looking at the Indian situation have concluded that a substantial amount of voluntary rural financial savings might be mobilized if secure financial services and facilities were more readily available in rural areas.

There is adequate current evidence to conclude that some of the rural development problems that characterize less developed countries can be assisted by giving greater scope to the operations of financial institutions. This means not only a liberalization of the activities and types of financial institutions operating, but also liberalization of restrictions on their ability to charge and pay high interest rates. The lifting of such restrictions can significantly assist in mobilizing funds, particularly from rural areas. And while the rates charged may be high, they may be lower than the rates rural residents are presently paying. But there is more to it than rate. As Sir John Hicks has put it, "The beginning of a process of expansion

¹⁰Delano P. Villonueva, "A Survey of the Financial System and the Saving-Investment Process in Korea and the Phillipines," *Finance and Development*, Quarterly No. 2, 1971, pp. 16-19.

¹¹Dale Adams, "Rural Development," AID, 1973.

might occur because of real factors (invention and the like) raising the real rate of profit. But it might also occur because of financial improvements, thereby permitting access to funds for improvements which could have been made earlier if the necessary funds had been forthcoming. It is not savings only that are required, but a channel of communication between potential savings and potential real investment."¹²

We can summarize and generalize the problem of rural areas in less developed countries as follows: There are numerous small farmers with low productivity who have the opportunity to make investments promising a significant rate of return. These may involve shifts to new types of seeds and fertilizer, or to a new crop, or to new technology. The farmer, his family, and friends do not have sufficient resources to be able to afford this investment. There are financial institutions or government lending agencies in the country, but their emphasis is on loans to industrialized or more developed sectors of the economy. They charge relatively low interest rates and hence find it economically impossible to lend to the small farmer. That is, the risks combined with the administrative costs of making a small loan prevent the institution from making such loans at 8 or 10 percent. There is an unorganized or curb market operating in the rural area. Small loans are available, but the rates in this market are extremely high - higher than our farmer can pay in view of his investment opportunities.

There are potential savings available in the local area that could be attracted at rates the farmer is able to pay. The saver, however, lacks information about the investment opportunities just as

¹²John R. Hicks, "Saving, Investment and Taxation: An International Comparison," *Three Banks Review*, June 1968.

the farmer lacks information about the availability and location of credit. Even if there were information, however, the saver is likely to be unwilling to risk all or most of his funds in such a loan. Even if he were willing to take the credit risk (that is, the risk that the borrower will be unable to repay the loan on schedule), he is probably unwilling to give up liquidity (that is, the ability to get cash ahead of schedule if he needs it). Hence, his potential saving will be discouraged, or he will save in the form of currency or bank deposits (usually at a controlled rate which may be less than the rate at which prices are rising), or he may save in commodity form. Again, because of inadequate facilities his return on stored crops may be negative.

A well-functioning financial institution can conceivably provide assistance on both sides of the transaction: The financial institution may provide a safe asset - a safe means of holding savings with an interest rate high enough to be attractive to the rural saver. The savings institution can afford this high rate of interest because it will be making loans to small farmers at rates higher than those charged by subsidized government lending institutions - rates that are high by comparison with the developed countries, but may nevertheless be much lower than rates currently being charged in the unorganized sector of the less developed country. Thus with a well-functioning financial institution, development of a rural area can be stimulated in this way without external investment funds. Both savers and borrowers benefit. What has been described here is an idealized model. In practice, there are many difficulties, some of which we will explore. We may now ask is there a stock of savings in rural areas worth mobilizing? Can a

financial institution mobilize them? Are there lending opportunities for an existing or new institution that are profitable at the rates that would have to be charged? Can the farmer afford to pay rates high enough to cover the financial institution's cost? Is it possible to stimulate development of financial institutions to play this role? There are no easy answers to any of these questions though there is evidence on some of them that can be cited.

The first section of this paper discussed some theoretical concepts of the role of financial institutions in the economy. Such a presentation invariably looks abstract and unrealistic to those thinking in terms of the financial structure of the U.S. or other developed countries. The considerations raised in this section, however, suggest that some of the basic functions that ought to be performed by financial institutions are, to a significant degree, missing in many less developed countries.

The emphasis in this section has been on the contribution that freely functioning financial institutions can make to economic development. The emphasis has been on reducing restraints on financial institutions because the evidence suggests that financial processes have been unduly repressed in many LDC's. This does not mean that the free market approach is the only or the best solution to the problem. That is, in many LDC's, freer financial markets will produce better results than the structure that now exists. But other government policies may direct results along the line that is most desired. Some of the steps that can be taken to maximize the contribution of the financial system to economic development, and rural development in particular, involve compulsion, such as direct credit allocations or tax penalties, while others utilize market forces,

as do tax incentives, for example. Some countries have used mandatory savings programs as a means of generating desired funds. Several of these alternatives will be discussed in the following sections.

Section IV: Financial Policies and Rural Development.

In previous sections, we have examined the theoretical role of financial institutions in the economy, described the structure of financial institutions in the United States as an example of a highly developed financial system, and examined the relationship between financial institutions and economic policy making. We then reviewed the means by which financial institutions can affect economic development. The present section attempts to put some more realistic flesh on this theoretical skeleton by examining the changes in the existing financial structure of an LDC that can realistically be promoted so as to accelerate rural development. We will focus first on the role of financial institutions in mobilizing and encouraging saving, and will examine the evidence from several countries in which appropriate financial policies have had success in increasing and mobilizing financial saving in rural areas. We will then turn to examination of the lending policies of financial institutions to see which policies are most helpful in making the most productive use of such savings in promoting growth and development of rural areas. Finally, we will examine ways in which national policies can encourage and promote the growth of institutions able to carry out the policies recommended, so as to achieve the ultimate objectives of higher and more rapidly growing levels of income, consumption and employment.

There is an unfortunate tendency of development experts to view the financial system of a country as too complex (or even too sacred) to

tamper with. Reluctance to consider change in this sector frequently can be seen even in the writings of analysts who are willing to consider recommendations for modification of the religious beliefs, family structure or traditional diet of an LDC. The discussion of the U.S. financial system was intended in part to illustrate how the rules of the game have been changed, even in the most complex financial system, to meet changes in perceived needs.

Our fundamental thesis is that appropriate changes in the financial system can mobilize savings in rural areas, thus generating funds for investment that can increase both output and incomes. The first question then becomes: Is there really a savings potential in rural areas of LDC's that can be tapped on a voluntary basis? It has been the conventional wisdom that there is no such significant body of savings. The rural poor were assumed to live close to a subsistence minimum at which the opportunity to reduce consumption is negligible. Even where it has been recognized that there is some savings potential in poor rural areas, most attempts to mobilize such surpluses have involved involuntary means. These means include price controls, taxation, mandatory "loans" and expropriation. Again, the assumption is that while reductions in near-subsistence levels of consumption are possible, such reductions will not be made voluntarily or in response to economic incentives.

Increasingly, however, the view is changing to the belief that with appropriate institutional arrangements, rural residents can be induced to save more and consume less. Several recent studies have concluded that substantial amounts of voluntary rural financial savings might

be mobilized if secure financial services and facilities are available, and appropriate rates of interest are paid. Some conclude that the large amounts of gold and jewelry held in many rural areas are at least partially the result of and symptomatic of financial markets which are functioning poorly. That is, even in areas that are poor in the aggregate, there may well be pockets of relative wealth.

While it is relatively easy to conduct complex econometric research on spending and saving proclivities in the U.S. and other developed countries in which detailed economic statistics are available, reliable data are hard to assemble in LDC's. Nevertheless, evidence from studies of several such countries do support Professor Dale Adams' view that "voluntary rural savings capacities in LDC's may be much larger than previously thought, and that rural savings behavior may be quite sensitive to various forms of economic incentives."¹³

Let us examine some of this evidence. Taiwan may present the best example, particularly since the availability of meaningful data is better than in most other examples discussed in the literature.

In LDC's like Taiwan which are or were mainly agrarian societies, mobilization of internal capital depends upon agricultural development. During the early years of this century, farmers' financing was dependent largely on private money lenders, landlords and businessmen. Taiwan relied heavily on Japan for investment funds when Taiwan's supply of funds did not meet domestic requirements for long-term funds.

¹³Dale Adams, op. cit.

After 1913, various credit cooperatives were established by landlords, cultivators and rural businessmen. These farm credit cooperatives grew rapidly. They started as a means of providing rural financing, although their purpose was altered to siphoning off capital from agriculture after 1930.

Heavy investment in irrigation was considered necessary in order to transform traditional agriculture in the paddy farming areas. Many irrigation facilities were constructed, financed, and owned by the government. The period from 1895 to 1930 was marked by a low savings rate among farmers and insignificant activity in financial institutions. Government taxation was the more important means of mobilizing funds from rural areas to finance capital investment.

After World War II, the Cooperative Bank was established to function as the financial adjuster of supply and demand for funds among the rural credit cooperatives which were associated with the farmers' associations. The large foreign-based financial institutions which had previously operated primarily to finance agriculture changed from agricultural loans to industrial loans in tune with the national needs of economic development.

In the 1940's and early 1950's, Taiwan was faced with acute inflation in the aftermath of the war. In order to protect savings against losses from inflation, the public was avoiding financial assets with long maturities. In March 1950, a high interest rates policy was established with the offer of "preferential deposits" of one-month and three-month maturities at 7 percent and 9 percent a month, respectively. Time deposits rose from NT\$2 million to NT\$37 million within one year (1950). With whatever excess developed, commercial banks were permit-

ted to deposit these preferential deposits with the Bank of Taiwan which, in turn, earned interest rates equal to or above those paid by banks to their depositors. This encouraged the Government to issue high interest rate bonds of its own in maturities of twelve months to thirty months at rates ranging from 9 percent to 18 percent per annum (tax exempt), the latter being sold exclusively to the nonbank public.

This policy improved the climate for aggregate real savings. Eventually, a new policy evolved of lowering rates progressively with gradual improvement of public confidence in the value of money. Also maturities of deposits were lengthened to six months and one year as confidence strengthened.

This high interest rate policy was not undertaken to stimulate rural savings or rural development or to promote the growth of financial institutions. It represented a strong, "old-time religion" approach to combating inflation. The great increase in savings in rural areas came as somewhat of a surprise to policy makers. It should be stressed that as distinct from many other less developed (and some developed) countries, the "real" rates of interest paid on time deposits were positive for most of these years; that is, the nominal interest rate paid on deposits exceeded the rate of inflation and such attractive rates on savings deposits did result in substantial increases, in rural areas, in voluntary savings deposits in different types of financial institutions.¹⁴

¹⁴In some countries with a relatively prosperous agricultural sector, the mobilization of rural savings is aimed at generating funds for other sectors of the economy. This was not the case in Taiwan, but the increase in deposits in the rurally-oriented Farmers' Associations swamped their lending ability, and funds did move through financial markets to other sectors.

Korea represents a comparable example. Recovery from the war was slow until the early 1960s, and was accompanied by rapid inflation. The new interest rate policy established in 1965 spurred real economic growth. The policy was designed to offer realistic interest rates to depositors, in order to induce funds to flow from the unorganized financial sector to the organized one.

To provide incentives to save and to attract private savings, a 2.5 percent monthly interest rate (30 percent annually) was paid on bank time deposits. A similar increase was made in the interest rates on commercial bank loans. In the long run, the government felt that this policy would result in lower rather than higher interest costs to most businesses because the greater supply of loans at bank interest rates would reduce their need to borrow in the private or curb market where rates to established businesses ranged to 5 percent per month.

The effect of the interest rate policy was felt immediately. The higher interest rates led to greater availability of domestic savings and credit. The public responded to the higher rates available and by the end of 1965, time and savings deposits at banking institutions rose by 50 percent. Higher rates of increase took place in subsequent years as the average rate of domestic savings rose from 4.3 percent of GNP in 1964 to 17.1 percent in 1970.¹⁵

In step with expanded economic activity and financial policy, financial institutions became increasingly important. The Korean commercial banks established new branches, and several intermediary-type institutions were established specializing in the relending of govern-

¹⁵Gilbert T. Brown, *Korean Pricing Policies and Economic Development in the 1960's*, Baltimore, Maryland: Johns Hopkins University Press, 1973.

ment fiscal funds (Korean Development Bank) or in attracting small-savings deposit accounts. Savings were also deposited at the National Agricultural Cooperative Federation. Since 1968, nominal rates of interest have declined as the rate of inflation has subsided, but the constant-price cost of commercial bank loans has remained between ten and fifteen percent. These high rates encourage borrowers to allocate significant portions of their loans toward more productive ends.

A large number of studies have been carried out in India where income, and hence, rural saving capacities, are clearly lower than Taiwan and Korea. Here, even with a financial system offering rates of returns less than the rate of inflation, results of a number of studies indicate significant savings mobilization potential may exist in rural India. It appears that despite a comparatively advanced financial system, offices of financial institutions are not readily available in rural areas, and some authorities conclude that more convenient availability of financial services could significantly increase the rate of household saving.

Kenya is the African country in which financial policy has received the most significant discussion and analysis of development strategy.¹⁶ Under British rule, Kenya had a relatively advanced financial system. Asian and European merchants and farmers were encouraged to settle in Kenya, and branches and subsidiaries of British and other foreign banks moved to service these communities. The gradual exodus of non-Africans was accompanied by their withdrawals of funds from financial institu-

¹⁶CF. Ratlan J. Bhatia and Saul L. Ruthman, "Conditions Required by Decision on New Extended Fund Facility Illustrated in Program of Kenya," *IMF Survey*, September 1975, pp. 291-2. Also, *Kenya's 1974-1978 Development Plan*, IBRD, April 1974, pp. 8-14.

tions. Kenya's banks suffered a 20 percent decline in deposits in 1960, and confidence in local banks and insurance companies suffered. Changes in the policies of financial institutions began to change even before independence and commercial bank lending to African farmers and farmers' cooperatives increased. The National Bank of Kenya, created to aid in financing development, has been reasonably successful in attracting deposits. Interest rate policies have played a role in this, but not to the same extent as in Taiwan and Korea. Exchange controls and other compulsory measures have also been involved.

A significant aspect of Kenyan policy has been the attempt to increase saving by improving the accessibility of financial institutions. The banking system has provided wide geographic coverage through a nationwide network of branches, subbranches, agencies and mobile facilities. As distinct from experience in many countries, these efforts have included rural areas.

Results of several forced savings programs in Nepal and Bangladesh suggest that substantial savings capacities exist even among the poorest and smallest tenants and land owners. However, the experience cited above suggests that much of what is achieved by coercion can be attained by voluntary means if appropriate incentives exist. More examples could be cited, and references to other studies are included in the Appendix, but we believe these are sufficient to illustrate the point.

Most of these studies suggest the importance of positive real interest rates. That is, the rural poor are willing to save in finan-

cial institutions if there is a real rate of return, either in financial terms or some other benefit (such as insurance, etc.). It should not be surprising to find that they are unwilling to save in financial assets subject to decline in real value as the result of rapid rates of inflation. If saving in financial institutions subjects the thrifty to loss through inflation, then saving in the form of gold or jewelry is not unreasonable. The importance of economic incentives is also borne out by the studies of the relationship between saving and return on agricultural investment. Many of the studies cited above also show a negative relationship between consumption and the profitability of farm investment.

Such factors as convenience and security are also important determinants of financial savings in rural areas as they are in developed countries. That is, we cannot expect the rural poor to undergo great inconvenience in order to keep their savings in a financial institution. But if such institutions are conveniently available and offer real security and safety, then the evidence indicates that these institutions will be used.

If financial institutions in rural areas can garner and mobilize a significant volume of funds, how should these funds be utilized? There are reasons to believe that an appropriate lending policy can yield a reasonable profit to the lending institution with adequate safety, and be a useful source of financing to the rural farmer or merchant. It appears that subsidized or concessional interest rates are not necessary. That is, a rate of interest high enough to cover the

risks of loss and the administrative cost of making smaller loans can still be attractive enough to the rural farmer whose alternative sources of funds may be the fantastically high rates of the unorganized market.

There are other reasons for preferring a lending policy which does not involve concessional rates. Such a policy eliminates the corruption or temptation to corruption that exists in determination of who should get access to funds at subsidized rates. The demand for funds at below market rates must exceed the supply and the determination of who gets credit at bargain rates is hard to resolve objectively and fairly. One other result of such considerations is the probability that credit will be concentrated in relatively few loans. After all, if all demands for credit cannot be met, and rates cannot be raised, the financial intermediary can at least minimize its administrative costs by dealing with a small number of loans and borrowers. Essentially this means that the large farmer rather than the small has an advantage in obtaining such concessionally priced credit.

This reinforces what would be the normal bias of a lending institution for loans secured by fixed capital investments which provide good collateral for loans. Small labor intensive industries of the sort we are concerned with tend to have large working capital requirements relative to their fixed capital equipment. We have interpreted rural development as an overall goal which is broader than that of increasing agricultural production. The latter may be facilitated by large loans to large enterprises; the former requires small loans to small entrepreneurs. Incentives must exist for the lending institution to tailor activities accordingly.

This problem is a significant one in all lending in less developed countries. It is a fact of life that the cost of administering a loan to a new rural borrower in a less developed country is higher on average than it is for well established companies. The new borrowers clearly comprise small-scale artisans and farmers and small-scale processing enterprises. In an attempt to minimize the cost of lending, financial institutions tend to shy away from such new enterprise, as they are reluctant to add the high cost of administering small loans to the interest rates that are charged.

Obviously, also, the small borrower does not have good security to offer for his loan, regardless of the expected productivity of his investment project. A recent analysis of the lending policy of financial institutions in Africa by two senior staff members of the International Monetary Fund concluded that "Credit flows to large-scale industries rather than to the small-scale ones, to expatriates and immigrants rather than to local industrialists, to urban rather than to rural industry. And even when the pool of so-called credit worthy borrowers is exhausted, the financial system, daunted as it is by the risk of default, does not turn to the less credit worthy clients but prefers to leak away resource...to cities from rural areas."¹⁷

Obviously, policy with respect to lending must be in keeping with policy on deposits. If rates high enough to encourage saving and attract funds are paid on deposits, below market rate loans will preclude

¹⁷Rathan J. Bhatia and Deena R. Khatkhate, "Financial Intermediation, Savings Mobilization, and Entrepreneurial Development: The African Experience," *International Monetary Fund Staff Papers*, March 1975, p. 137.

the possibility of the financial institution remaining a permanent part of the financial system. Low rates on deposits, however, will not attract sufficient funds to make the institution viable. Somewhat similar factors affect the types of loans made and deposits accepted. That is, maturities must be more-or-less in step, though the considerations discussed in the first section of this paper show that a financial institution in which the public has confidence can, within limits, "borrow short and lend long."

The need to provide a positive real rate of interest to savers and to avoid subsidized lending rates to borrowers suggests consideration of "indexing;" that is, tying rates to changes in the cost of living. This provides protection to the saver and, while making credit less attractive to the borrower, does put it on a realistic market basis.

Section V: Promoting Rural Development: A Guide to Policy Actions.

This paper has intended to analyze the relationship between financial policies and economic development, and particularly economic development of rural areas. While it is not possible in a background study of this type to present an operating manual for advisors to countries at various stages of development and with very dissimilar financial structures, it may be helpful to sketch some actions which might be encouraged and promoted by an advisor. In fact, it is hard to avoid such recommendations for action since the considerations discussed in the earlier sections of the paper do have implications for policy in less developed countries seeking to promote rural development.

A first step, of course, is the collection of basic information on the state of the financial system. What financial institutions operate in the country, both government and private? Which sectors of the public are served by each? Do they operate profitably or with government support? How are they distributed geographically? In most countries good data on savings and asset holdings are lacking, but are necessary for informed policy formulation. Setting up a means of obtaining such information is difficult but worth while.

Experiences from several countries have indicated that promoting savings through financial institutions requires positive real rates of interest. This is hard to achieve in an inflationary environment. Therefore, an important aspect of economic policy is control of inflation. Experience in Taiwan, Korea and the Philippines indicates that strong anti-inflationary measures had the beneficial, though generally unforeseen, side benefit of increasing savings in financial institutions.

Obviously, it is much easier to advocate, in general terms, control of inflation. Recommending specific policy measures to accomplish that at minimum social cost is much harder, and, in fact, the record of the developed countries in this regard in recent years has not been enviable. In some countries, however, policy makers have stressed the positive side of inflation, viewing it as a stimulation to development. This is still a relatively widely-held position even though a number of studies have failed to show any correlation between inflation and real growth. For our purposes, it is probably sufficient to indicate simply that to the extent that inflation can be controlled, other policies aimed at stimulating the financial system of rural areas will be enhanced.

Another important issue concerns the type of financial system development that should be encouraged in less developed countries. The economic history of developed countries show several sequential phases of financial development. In most countries that now have well-developed financial systems, "direct" finance preceded "indirect" finance. That is, at an early stage of financial development, there was a great deal of direct lending from households with surplus to business firms or others undertaking capital investment. As the economy developed, financial institutions developed to play the intermediary role between ultimate savers and ultimate investors described in the first section of this paper. In the U.S., for example, financial investment in railroads and other social overhead capital was handled through the direct sale of bonds by the railroads to the public. In later years, indirect finance, that is, reinvestment of funds collected by financial inter-

mediaries, became much more important. It has been questioned as to whether it is necessary for less developed countries to follow the same historical route as the developed countries did, or instead, to take a short cut by eliminating the stage of direct finance.

Developing countries should consider moving directly to a financial system in which they rely on financial intermediaries to finance private investment indirectly. While this seems to be a matter of rather abstract historical and financial theory, it is a part of many real world decisions. Some LDC's for example, have been encouraged to establish stock exchanges to foster direct investment. Such facilities make it more feasible for companies to sell securities to the public because, with a means of reselling securities easily (thus making the securities more liquid), individuals are more willing to invest in stocks. The considerations raised in this paper suggest that indirect finance has benefits which should be promoted, and attempts to follow the historical path of the developed countries need not be encouraged. It should be noted that in such countries as the U.S. and the U.K., at the present time direct finance plays an insignificant role in the total financial picture.

There are other important problems in promoting the role of financial intermediaries in rural areas. One, of course, is convenience. Means of transportation and communication tend to be poor in rural areas. Yet, financial institutions cannot expect to attract a significant amount of the savings of the rural population unless their facilities are reasonably convenient. This requires a number of branch offices, or, perhaps, other less traditional approaches to the operation of

financial institutions. Mobile branch facilities visiting a number of villages on a regularly scheduled basis is one such approach, or a temporary branch operating on market days in relatively isolated villages may be feasible.

Related to this is the need of financial institutions to develop and offer financial instruments consistent with savers' preferences. Savers' preferences may be different in one country than in others, and in particular, may differ from the preferences of savers in the developed countries. If savers' preferences are for short-term instruments with high liquidity, then it may be hopeless, in the short run, to operate financial institutions based on long-term instruments.

Obviously, confidence in the solvency of financial institutions is important. Savers in less developed countries, and particularly in the rural areas, are likely to be suspicious of pieces of paper as evidences of wealth or of a financial instrument. The preferences in many areas for saving in the form of gold, jewelry, rugs or cattle are well known. Bad experiences can have a long life in such an environment. That is, the failure of financial institutions with a loss to savers will make it very difficult for a new institution to gain confidence of the public in less than a generation. In some countries, a system of governmental deposit insurance may be a worthwhile approach to building confidence in the financial institution. In any case, the solvency of financial institutions is clearly a matter of direct concern to the government involved. A system of regulation and supervision of the institutions becomes mandatory, with or without governmental insurance or guarantees. This is more of a problem in the less developed countries than in the the developed because, if the financial institution is to be doing its

proper job in the rural area, it must be making loans that are, on any basis, riskier than those made by financial institutions in the developed countries.

There are ways in which government action can encourage the flow of funds to the desired sectors of the economy. Much of this paper has argued that more reliance on free market forces in the financial markets would represent an improvement over the situation in many LDC's in which financial markets are prevented from functioning efficiently or effectively. But there is no obligation to rest with the allocating of funds and resources resulting from market forces if these results are not in accord with the government's social priorities and goals.

Both developed and less developed countries have used a wide variety of devices to assure that credit is allocated in accord with desired social objectives. We have already indicated that in the U.S. and elsewhere government agencies directly lend to sectors of the economy subject to "gaps" or "discontinuities" in the availability of credit. In addition to direct government lending there are other programs, involving incentives or compulsion, to lend to the appropriate sectors. In the U.S. such sectors include farmers, small businesses and housing. In developing countries such sectors may include export industries or import competing industries. Determining which device (or even which approach - direct lending, compulsion, or incentives) is a difficult matter in a particular case, and requires expertise not only in economic and financial matters but some feel for which technique will motivate the businessman or entrepreneur in the particular country. We will return to this matter later on.

The most frequently used device is tax incentives. Financial institutions receive favorable tax treatment if they use their funds in a particular way, say lending to farmers or home buyers. In some cases, modest tax differentials can produce the desired flow of credit without need for compulsion. In other cases the financial institution can be required to use some percentage of its assets in a particular manner. In some cases a program of tax incentives or penalties is so significant as to amount to compulsion.

Another type of incentive involves government guarantees of credit. A local lending institution in a LDC is going to look more favorably on loans to individual farmers or cooperatives if the government guarantees the loan. Such programs can be effective even if a sufficient insurance premium is charged to cover any losses suffered by the government. The insurance premium may be borne by either the lender or the borrower.

In some cases even more subtle incentives may be sufficient. In some cases financial institutions are unwilling to make certain types of loans, or to commit a high proportion of their assets to loans, not out of fear of ultimate uncollectability but out of concern for liquidity needs. Consider the rural lending institution faced with requests for loans from local farmers. The occasional poor crop year is not necessarily fatal if it is followed by a good year. All it means is the need to extend the loan (and presumably increase the amount). The financial institution, however, would be under considerable liquidity pressure as it would no doubt be faced with outflows of funds and increased loan

demand. In view of the possibility of poor crops, an institution unable to achieve much diversification in its lending operation will simply adopt a cautious loan policy. This tendency can be overcome with the creation of a mechanism to assure that liquidity will be available to the institution in case of temporary problems. A government sponsored discount facility (which may well be the Central Bank) can easily play this role. In the situation hypothesized, if the lending institution can borrow from the Central Bank (with its own loans as collateral), its liquidity is assured, and hence it would be willing to lend aggressively. Providing a source of liquidity to the banking system in times of stress (and particularly agricultural crises) was a principal purpose for the establishment of the Federal Reserve System. Now general monetary policy functions are dominant, but the liquidity function of the Federal Reserve System is still a most important responsibility.

This function need not be performed by the Central Bank - other approaches are possible. We noted earlier that in many LDC's the social insurance system is the largest "financial institution" in the country. It may be possible to use the funds accumulated by the social insurance system to provide liquidity to private (or government) lending institutions.

Policies in the less developed countries cannot be precise copies of those followed by the developed countries. It may be necessary to experiment or to attempt different approaches to particular problems. Bernard Oury has suggested,¹⁸ for example, that programs of crop

¹⁸"Crop Insurance and Credit Worthiness in Development," *Finance and Development*, Quarterly No. 3, 1970.

insurance may have particular merit in less developed countries. A system of crop insurance can contribute to the credit worthiness of farmers and, hence, their ability to borrow funds and to repay borrowings. Incentives can be provided so that financial institutions can lend to farmers at lower rates with a system of crop insurance, and perhaps the same financial institutions that provide credit to farmers can finance the crop insurance system. While such programs may not fill much of a need in developed countries, it may be a worthwhile approach in an LDC.

A recent study for AID concluded that repayment rates on rural credit were improved where there were group payment responsibilities rather than programs where farmers were individually responsible for repayment.¹⁹ In particular, the use of local organizations, for example, cooperatives, which serve as intermediaries between large institutions and small farmers, and which organize the group credit liability, successfully generated meaningful commitment to the project. This commitment seems to allow the lenders, or the combined borrowers, to exert pressure on nonpayers which significantly affects the repayment rate. Again, this is the kind of tailoring of the arrangement of financial institutions to tie in with local traditions and social arrangements that is essential to successful use of financial institutions in promoting rural development. Transplanting the sophisticated financial structure of the developed countries is not necessarily the

¹⁹"Strategies for Small Farmer Development: An Empirical Study of Rural Development Projects," 1975, p. 21.

right answer for an LDC. But with a willingness to consider appropriate modifications similar to those discussed above, to suit the social and cultural environment, financial institutions can accelerate rural development.

The emphasis in this final section has been on mechanisms and devices that may prove useful in promoting rural development. There are no sure routes to success and simply copying what has been done in a country with a different culture and history is not likely to meet with success. We referred earlier to the importance of a willingness to tinker with the financial system to get it to provide the desired results. We discussed the skills needed as going beyond economic and financial expertise and encompassing what might be called a "dealmaking" ability. That is, the need is for changes in the financial markets or institutions or tax laws or operating constraints so that entrepreneurs in the local economy will be attracted to operate in the desired manner. What will it take, in the framework of the specific country, to get those with funds interested in making loans that will promote rural development? What inducements are necessary to encourage the small farmer to borrow so as to increase his use of fertilizer, or to invest in an irrigation system, or switch to a new crop? Psychology and sociological considerations are likely to be as important as economic factors in convincing key decision-makers to try out new techniques. This expertise may not be found in any particular AID mission, and probably not in any individual. It may not only be necessary to employ consultants, but also to assure that it is a team whose backgrounds are somewhat different from the academic or technical experts usually

relied on. The use of persons experienced in negotiating commercial transactions can be quite valuable when working with those knowledgeable in the culture of the particular country.

One more specific illustration may be helpful here. A few years ago there was rising concern in the U.S. not about rural development, but about the need for accelerated urban development. It was quickly recognized that a source of financing was an important part of any solution. Legislation was proposed to set up a National Domestic Development Bank and a domestic development bank system. The banks would provide an alternative source of funds for community facilities (schools, hospitals, sewer facilities, parks, etc.) and economic development in urban ghettos and labor surplus areas.

The proposed legislation included use of many of the devices discussed in this paper. These devices are easily adapted to problems of rural development. We have included in the Appendix a model statute creating a rural development financing institution. We are not proposing that all LDC's should simply enact such legislation, but it is illustrative of what might be done and it provides a shopping list of possible alternative actions.

We stress again that varying cultures and traditions preclude generalizations in proposing specific actions. What is needed is imagination and willingness to innovate and experiment, but based on a solid framework of knowledge of how the financial system works.

APPENDIX

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A BILL

TO ESTABLISH A RURAL DEVELOPMENT BANK TO PROVIDE FOR THE PURPOSE OF FINANCING RURAL AGRICULTURAL AND OTHER PROJECTS AND FACILITIES OF ALL TYPES, AND FOR OTHER PURPOSES.

BE IT ENACTED BY THE [APPROPRIATE LEGISLATIVE BODY] OF [NAME OF COUNTRY], THAT THIS ACT MAY BE CITED AS THE "NATIONAL RURAL DEVELOPMENT BANK ACT".

FINDINGS AND PURPOSE

SEC. 2. (A) THE [APPROPRIATE LEGISLATIVE BODY] HEREBY FINDS AND DECLARES THAT--

(1) POPULATION INCREASES AND RISING DEMANDS FOR A SAFE AND PROSPEROUS LIFE HAVE CREATED AN UNPRECEDENTED DEMAND FOR (A) BASIC MINIMUM NUTRITION FOR ALL PERSONS, AND (B) ECONOMIC DEVELOPMENT IN RURAL AREAS;

(2) THE EXISTING INSTITUTIONAL STRUCTURE FOR PROVIDING FUNDS CANNOT PROVIDE AT REASONABLE COST THE AMOUNTS NECESSARY TO SATISFY THESE GROWING DEMANDS. THE FINANCIAL NEEDS OF RURAL COMMUNITIES REQUIRE THE FULL MOBILIZATION OF SKILLS AND RESOURCES IN ALL LEVELS OF GOVERNMENT, AS WELL AS IN THE PRIVATE SECTOR; AND

(3) THE MOST EFFECTIVE USE OF FUNDS CAN ONLY BE

MADE WHEN INFORMATION AND TECHNICAL EXPERTISE REGARDING AGRICULTURAL AND ENGINEERING REQUIREMENTS, FINANCIAL AND ECONOMIC FACTORS, EXISTING GOVERNMENT PROGRAMS AND FUNDING LEVELS, AND COMPREHENSIVE AREA PROBLEMS AND PLANNING ARE READILY AVAILABLE FROM A SINGLE SOURCE.

(B) THE PURPOSE OF THIS ACT IS TO ESTABLISH A NATIONAL RURAL DEVELOPMENT BANK SYSTEM WHICH WILL PROVIDE A NEW SOURCE OF FUNDS FOR ECONOMIC DEVELOPMENT, WHICH WILL INVOLVE NATIONAL INVESTMENT MARKETS AND ALL GROUPS OF INVESTORS, AND WHICH WILL FURNISH INFORMATION TO COORDINATE EXISTING GOVERNMENT AND PRIVATE PROGRAMS WITH LOCAL PROBLEMS AND GOVERNMENTS.

DEFINITIONS

SEC. 3. AS USED IN THIS ACT--

(1) "BANK" MEANS THE NATIONAL RURAL DEVELOPMENT BANK ESTABLISHED BY SECTION 4;

(2) "LOCAL GOVERNMENT" MEANS ANY POLITICAL SUB-DIVISION OR ANY AGENCY OR INSTRUMENTALITY THEREOF, OR ANY SCHOOL OR OTHER SPECIAL DISTRICT CREATED BY OR PURSUANT TO GOVERNMENT LAW; AND

(3) "OBLIGATION" MEANS ANY BOND, NOTE, DEBENTURE, OR OTHER INSTRUMENT EVIDENCING DEBT.

ESTABLISHMENT OF BANK

SEC. 4. (A) THERE IS HEREBY CREATED A BODY CORPORATE

TO BE KNOWN AS THE NATIONAL RURAL DEVELOPMENT BANK, WHICH SHALL HAVE SUCCESSION UNTIL DISSOLVED BY ACT OF [APPROPRIATE LEGISLATIVE BODY]. THE BANK, WHICH SHALL NOT BE AN AGENCY OF [NAME OF COUNTRY], SHALL MAINTAIN SUCH OFFICES AS MAY BE NECESSARY OR APPROPRIATE IN THE CONDUCT OF ITS BUSINESS.

(B) NO INDIVIDUAL, ASSOCIATION, PARTNERSHIP, OR CORPORATION, EXCEPT THE BANK, SHALL HEREAFTER USE THE WORDS "NATIONAL RURAL DEVELOPMENT BANK" AS THE NAME OR A PART THEREOF UNDER WHICH HE DOES BUSINESS.

GENERAL POWERS

SEC. 5. THE BANK SHALL HAVE, IN ADDITIONAL TO THE SPECIAL AUTHORITY CONFERRED BY SECTION 8 OF THIS ACT, THE POWER--

(1) TO SUE AND BE SUED, AND COMPLAIN AND DEFEND, IN ITS CORPORATE NAME AND THROUGH ITS OWN COUNSEL;

(2) TO ADOPT, ALTER, AND USE A CORPORATE SEAL, WHICH SHALL BE JUDICIALLY NOTICED;

(3) TO ADOPT, AMEND, AND REPEAL, BY THE BOARD, SUCH BYLAWS, RULES, AND REGULATIONS AS MAY BE NECESSARY FOR THE CONDUCT OF ITS BUSINESS;

(4) TO CONDUCT ITS BUSINESS, CARRY ON ITS OPERATIONS, HAVE OFFICES, AND EXERCISE THE POWERS GRANTED BY THIS ACT IN ANY AREA OF [NAME OF COUNTRY];

(5) TO LEASE, PURCHASE, OR OTHERWISE ACQUIRE, AND OWN, HOLD, IMPROVE, USE, OR OTHERWISE DEAL IN AND WITH, ANY PROPERTY, REAL, PERSONAL, OR MIXED, OR ANY INTEREST THEREIN, WHEREVER SITUATED;

(6) TO ACCEPT GIFTS OR DONATIONS OF SERVICES, OR OF PROPERTY, REAL, PERSONAL, OR MIXED, TANGIBLE OR INTANGIBLE, IN AID OF ANY OF THE PURPOSES OF THE BANK;

(7) TO SELL, CONVEY, MORTGAGE, PLEDGE, LEASE, EXCHANGE, AND OTHERWISE DISPOSE OF ITS PROPERTY AND ASSETS;

(8) TO APPOINT SUCH OFFICERS, ATTORNEYS, EMPLOYEES, AND AGENTS AS MAY BE REQUIRED, TO DETERMINE THEIR QUALIFICATIONS, TO DEFINE THEIR DUTIES, TO FIX THEIR SALARIES, AND TO REQUIRE BONDS FOR THEM AND FIX THE PENALTY THEREOF; AND

(9) TO ENTER INTO CONTRACTS, EXECUTE INSTRUMENTS, INCUR LIABILITIES, AND DO ALL THINGS WHICH ARE NECESSARY OR INCIDENTAL TO THE PROPER MANAGEMENT OF ITS AFFAIRS AND THE PROPER CONDUCT OF ITS BUSINESS.

BOARD OF DIRECTORS; MANAGEMENT

SEC. 6. (A) THE BANK SHALL HAVE A BOARD OF DIRECTORS WHICH SHALL INITIALLY CONSIST OF NINE MEMBERS TO BE APPOINTED BY THE [CHIEF EXECUTIVE OFFICER OF THE COUNTRY] AS FOLLOWS:

(1) ONE MEMBER TO BE APPOINTED FROM THE [NAME OF CENTRAL BANK];

(2) TWO MEMBERS TO BE APPOINTED FROM AMONG THE HEADS OF DEPARTMENTS AND AGENCIES IN THE EXECUTIVE BRANCH OF THE GOVERNMENT;

(3) TWO MEMBERS TO BE APPOINTED FROM AMONG THOSE WHO REPRESENT THE PUBLIC GENERALLY, ONE OF WHOM SHALL BE APPOINTED, BY AND WITH THE ADVICE AND CONSENT OF THE [APPROPRIATE LEGISLATIVE BODY] TO SERVE AS PRESIDENT OF THE BANK AND CHAIRMAN OF THE BOARD OF DIRECTORS; AND

(4) FOUR MEMBERS WHO ARE [SELECT APPROPRIATE CATEGORIES FROM UNIVERSITIES, LOCAL GOVERNMENTS, ETC.].

(B)(1) DIRECTORS APPOINTED UNDER CLAUSES (1), (2), AND (3) OF SUBSECTION (A) OF THIS SECTION SHALL SERVE AT THE PLEASURE OF THE [CHIEF EXECUTIVE OFFICER] OR UNTIL THEIR SUCCESSORS HAVE BEEN APPOINTED.

(2) VACANCIES OCCURRING PURSUANT TO THIS PARAGRAPH AT THE TIME OF EACH SUCH ANNUAL MEETING SHALL BE FILLED BY ELECTION BY THE STOCKHOLDERS AT SUCH MEETING FROM AMONG NOMINEES AS PROVIDED IN SUBSECTION (A) OF THIS SECTION. DIRECTORS ELECTED PURSUANT TO THIS SUBSECTION SHALL SERVE FOR TERMS OF TWO YEARS. THE BOARD MAY APPOINT A MEMBER TO SERVE FOR ANY UNEXPIRED TERM OF ANY SUCH DIRECTOR.

(C) THE BOARD SHALL HOLD REGULAR BIMONTHLY MEETINGS AND SHALL HOLD OTHER MEETINGS AT THE CALL OF THE CHAIRMAN. A MAJORITY OF THE BOARD SHALL CONSTITUTE A MAJORITY FOR THE TRANSACTION OF BUSINESS. ANY VACANCY IN THE BOARD SHALL NOT AFFECT ITS POWERS OR DUTIES.

(D) THE MANAGEMENT OF THE BANK SHALL BE VESTED IN THE PRESIDENT OF THE BANK, SUBJECT TO SUCH POLICIES AS THE BOARD OF DIRECTORS SHALL PRESCRIBE FROM TIME TO TIME.

INITIAL EXPENSES

SEC. 7. IN ORDER TO FACILITATE THE FORMATION OF THE BANK, THE SECRETARY OF THE TREASURY [OR APPROPRIATE SIMILAR OFFICIAL] IS AUTHORIZED TO PAY INITIAL ORGANIZING AND OPERATING EXPENSES. THERE IS HEREBY AUTHORIZED TO BE APPROPRIATED A SUM NOT TO EXCEED \$_____ FOR THIS PURPOSE.

SPECIAL AUTHORITY

SEC. 8. (A) SUBJECT TO THE PROVISIONS OF THIS ACT, THE BANK IS AUTHORIZED--

(1) TO MAKE COMMITMENTS TO PURCHASE, AND TO PURCHASE, SERVICE, AND SELL, ON TERMS AND CONDITIONS DETERMINED BY THE BANK, ANY OBLIGATION (OR PARTICIPATION THEREIN) OF A LOCAL GOVERNMENT ISSUED WHOLLY OR PARTLY TO FINANCE THE ORGANIZATION, CONSTRUCTION, OR IMPROVEMENT OF BASIC AGRICULTURAL OR COMMUNITY

FACILITIES OR PUBLIC WORKS OF ANY TYPE;

(2) TO MAKE OR GUARANTEE LOANS TO LOCAL GOVERNMENTS TO FINANCE THE ORGANIZATION, CONSTRUCTION OR IMPROVEMENT OF BASIC AGRICULTURAL OR COMMUNITY FACILITIES AND PUBLIC WORKS OF ALL TYPES (INCLUDING LOANS TO NONPROFIT OR QUASI-GOVERNMENTAL ORGANIZATIONS AND ENTITIES TO FINANCE THE CONSTRUCTION OF BARNS, WAREHOUSES, HOUSING, MEDICAL FACILITIES, AND OTHER FACILITIES WHICH ARE SUPPORTED BY GOVERNMENT PROGRAMS AND ARE DETERMINED BY THE BANK TO HAVE THE ATTRIBUTES OF PUBLIC FACILITIES); AND

(3) TO MAKE LOANS FOR THE PURPOSE OF FACILITATING AGRICULTURAL AND ECONOMIC DEVELOPMENT IN GEOGRAPHICAL AREAS DESIGNATED BY THE BOARD OF DIRECTORS AS BEING IN NEED OF DIRECT INVESTMENT TO FURTHER THE NATIONAL PUBLIC INTEREST OR OTHER SPECIAL HELP TO STIMULATE AGRICULTURAL AND ECONOMIC ACTIVITIES WITHIN THOSE AREAS.

(B) THE BANK SHALL DEVELOP CRITERIA TO ASSURE THAT PROJECTS ASSISTED BY IT ARE NOT INCONSISTENT WITH COMPREHENSIVE PLANNING FOR THE DEVELOPMENT OF THE COMMUNITIES IN WHICH THEY WILL BE LOCATED, OR DISRUPTIVE OF GOVERNMENT PROGRAMS WHICH AUTHORIZE ASSISTANCE FOR THE DEVELOPMENT OF LIKE OR SIMILAR CATEGORIES OF PROJECTS.

(c) A LOAN MADE OR GUARANTEED UNDER THIS SECTION MAY NOT EXCEED THE TOTAL CAPITAL COST OF THE PROJECT TO BE FINANCED, AND SHALL BE MADE FOR A TERM DETERMINED BY THE BANK; EXCEPT THAT THE TERM OF A LOAN MADE UNDER PARAGRAPH (2) OF SUBSECTION (A) SHALL NOT EXCEED THE LIFE OF THE PROJECT OR FORTY YEARS, WHICHEVER IS LESS, AND THE TERM OF A LOAN MADE UNDER PARAGRAPH (3) OF SUBSECTION (A) TO A PRIVATE PERSON FOR A PROJECT CONSISTING PRIMARILY OF PROFITMAKING FACILITIES SHALL NOT EXCEED TWENTY YEARS.

(d) ALL OBLIGATIONS PURCHASED AND LOANS MADE PURSUANT TO THIS SECTION SHALL BEAR INTEREST AT A RATE DETERMINED BY THE BANK.

(e) IN ANY CASE IN WHICH THE BANK UNDERTAKES TO PROVIDE ASSISTANCE TO A LOCAL GOVERNMENT UNDER SUBSECTION (A) FOR THE CREATION, CONSTRUCTION OR IMPROVEMENT OF A PROJECT FOR WHICH A DEPARTMENT OR AGENCY OF THE GOVERNMENT (UNDER ANOTHER LAW OF [NAME OF COUNTRY]) WILL ALSO PROVIDE FUNDS--

(1) THE ASSISTANCE PROVIDED BY THE BANK UNDER SUBSECTION (A) MAY BE IN THE FULL AMOUNT NEEDED BY THE LOCAL GOVERNMENT TO FINANCE SUCH PROJECT (INCLUDING THE AMOUNT OF THE FUNDS WHICH WILL BE PROVIDED BY SUCH DEPARTMENT OR AGENCY), WITH THE FUNDS TO BE PROVIDED BY SUCH DEPARTMENT OR AGENCY BECOMING PAYABLE (NOTWITHSTANDING

ANY CONTRARY PROVISION IN THE LAW UNDER WHICH THEY ARE PAYABLE) TO THE BANK IN LIEU OF BEING PAID DIRECTLY TO SUCH GOVERNMENT, AND

(2) THE BANK MAY ACCEPT IN RETURN (A) AN OBLIGATION OR OBLIGATIONS OF SUCH LOCAL GOVERNMENT COVERING ONLY THE DIFFERENCE BETWEEN SUCH FULL AMOUNT AND THE AMOUNT OF THE FUNDS WHICH ARE PAYABLE WITH RESPECT TO SUCH PROJECT BY SUCH DEPARTMENT OR AGENCY, PLUS (B) A COMMITMENT FROM SUCH DEPARTMENT OR AGENCY TO PAY THE FUNDS WHICH ARE TO BE PROVIDED BY IT AND ARE PAYABLE TO THE BANK AS DESCRIBED IN PARAGRAPH (1),

IN ORDER TO INSURE THAT SUCH LOCAL GOVERNMENT WILL NOT HAVE TO INCLUDE WITHIN ITS DEBT LIMIT THAT PORTION OF THE INDEBTEDNESS INCURRED FOR THE FINANCING OF SUCH PROJECT WHICH IS ATTRIBUTABLE TO FUNDS PROVIDED BY THE GOVERNMENT,

(F) THE BANK IS AUTHORIZED TO ESTABLISH A FINANCIAL AND TECHNICAL ADVISORY STAFF FOR ANY AREA UPON A DETERMINATION BY THE BOARD THAT THE AMOUNT OF THE BANK'S ACTIVITY IN SUCH AREA IS SUFFICIENTLY LARGE TO SUPPORT A FULL FINANCIAL AND TECHNICAL ADVISORY STAFF. THE STAFF SHALL PROCESS APPLICATIONS AND REQUESTS FOR ASSISTANCE FROM THAT AREA AND SHALL ASSIST APPLICANTS IN OBTAINING SUCH ASSISTANCE.

(G) EXCEPT AS OTHERWISE SPECIFICALLY PROVIDED IN THIS ACT, THE BANK MAY IMPOSE CHARGES OR FEES FOR ITS SERVICES

WITH THE ULTIMATE OBJECTIVE THAT ALL COSTS AND EXPENSES OF ITS OPERATIONS SHOULD BE WITHIN ITS INCOME DERIVED FROM SUCH OPERATIONS.

REGIONAL OPERATING DIVISIONS

SEC. 9. (A) THE BANK SHALL HAVE THE AUTHORITY TO ESTABLISH REGIONAL OPERATING DIVISIONS. EACH DIVISION SHALL BE CHARGED WITH RESPONSIBILITY FOR ASSESSING BORROWER ELIGIBILITY, AND MAKING LOANS WITHIN ITS REGION OR GEOGRAPHICAL AREA. TO THE MAXIMUM EXTENT FEASIBLE, THE BOUNDARIES OF THE REGIONS OR GEOGRAPHICAL AREAS RESPECTIVELY REPRESENTED BY THE SEVERAL REGIONAL OPERATING DIVISIONS SHALL BE THE SAME AS THE BOUNDARIES OF THE AREAS RESPECTIVELY SERVED BY THE REGIONAL OFFICER OF OTHER GOVERNMENTAL DEPARTMENTS AND AGENCIES.

(B) EACH REGIONAL OPERATING DIVISION SHALL BE SUPERVISED BY A THREE MEMBER PANEL APPOINTED BY THE BOARD. IN ADDITION, AN ADVISORY COMMITTEE REPRESENTING ALL GOVERNMENTS AND ALL SOCIOECONOMIC LEVELS WITHIN THE DIVISION'S REGION SHALL BE APPOINTED BY THE BOARD TO DEVELOP POLICIES AND GUIDELINES FOR THE DIVISION'S ACTIVITIES.

TECHNICAL ASSISTANCE

SEC. 10. (A) THE BANK SHALL HAVE, IN ADDITION TO A STAFF ADEQUATELY EQUIPPED IN THE FIELD OF RURAL DEVELOPMENT BANKING, PERSONNEL QUALIFIED TO GIVE ADVICE IN THE FOLLOWING

FIELDS (AND ANY OTHER CATEGORIES OF ADVICE APPROPRIATELY RELATED TO THE BANK'S ACTIVITIES):

(1) THE GOVERNMENT, PARTICULARLY ITS ORGANIZATION AND OPERATION RELATING TO LOCAL GOVERNMENTS.

(2) ALL PHASES OF ALL GOVERNMENTAL GRANT-IN-AID PROGRAMS.

(3) METHODS OF ADMINISTERING THE DEVELOPMENT AND OPERATION OF AGRICULTURAL FACILITIES.

(4) TECHNICAL DATA AND REQUIREMENTS IN FIELDS APPROPRIATELY RELATED TO THE BANK'S ACTIVITIES.

(B) THE BANK SHALL GIVE ANY NECESSARY TECHNICAL ASSISTANCE UNDER THIS SECTION TO APPLICANTS FOR ASSISTANCE UNDER SECTION 8. NO FEES FOR PRELIMINARY ADVICE SHALL BE CHARGED; HOWEVER, AFTER AN APPLICATION HAS BEEN ACCEPTED FOR PROCESSING, THE BANK MAY CHARGE REASONABLE FEES FOR CONTINUED ASSISTANCE UNDER THIS SUBSECTION.

(C) THE BANK IS ALSO AUTHORIZED TO UNDERTAKE RESEARCH AND INFORMATION GATHERING, AND TO FACILITATE THE EXCHANGE OF ADVANCED CONCEPTS AND TECHNIQUES RELATING TO AGRICULTURAL GROWTH AND DEVELOPMENT AMONG LOCAL GOVERNMENTS.

STOCK

SEC. 11. (A) THE BANK SHALL HAVE ONE CLASS OF COMMON STOCK, WHICH SHALL HAVE VOTING RIGHTS AND HAVE A PAR VALUE OF \$100 PER SHARE. STOCK SHALL BE SOLD TO INVESTORS THROUGHOUT THE COUNTRY. [SUBJECT TO LOCAL VARIATION]

(B) ALL MONEYS RECEIVED BY THE BANK IN RETURN FOR ITS COMMON STOCK SHALL BE ACCUMULATED IN A STATED CAPITAL ACCOUNT. ALL NET EARNINGS FROM THE OPERATIONS OF THE BANK SHALL ANNUALLY BE TRANSFERRED TO ITS GENERAL SURPLUS ACCOUNT. SUCH DIVIDENDS AS MAY BE DECLARED SHALL BE PAID BY THE BANK TO THE HOLDERS OF ITS COMMON STOCK AND SHALL BE CHARGED AGAINST THE GENERAL SURPLUS ACCOUNT, BUT IN ANY ONE FISCAL YEAR DIVIDENDS SHALL NOT EXCEED 6 PER CENTUM OF THE PAR VALUE OF THE COMMON STOCK ISSUED AND OUTSTANDING AND SHALL BE PAYABLE OUT OF THE NET EARNINGS OF THE BANK FOR THAT YEAR.

CAPITALIZATION OF THE BANK

SEC. 12. THE BANK'S STATED CAPITAL SHALL BE LIMITED TO \$_____, WHICH SHALL BE RAISED, INSOFAR AS IT IS FEASIBLE, BY THE SALE OF THE BANK'S COMMON STOCK, AND THE REMAINDER SHALL BE PROVIDED AS FOLLOWS:

(1) THE SECRETARY OF THE TREASURY [OR COMPARABLE PERSON] IS AUTHORIZED TO PURCHASE OBLIGATIONS OF THE BANK IN THE AMOUNT OF \$_____ A YEAR FOR A PERIOD OF TEN YEARS. IF THE SECRETARY FINDS IT IS NECESSARY FOR THE SUCCESSFUL OPERATION OF THE BANK TO WAIVE THE PAYMENT OF INTEREST AND PRINCIPAL FOR ANY GIVEN YEAR SUCH INTEREST SHALL THEN BE ADDED TO THE PRINCIPAL OF THE OBLIGATION. THE BANK IS AUTHORIZED TO INCLUDE APPROPRIATE PROVISIONS IN THE INSTRUMENTS EVIDENCING

THE OBLIGATIONS PROVIDED FOR IN THIS PARAGRAPH. EACH PURCHASE OF OBLIGATIONS BY THE SECRETARY UNDER THIS PARAGRAPH SHALL BE UPON SUCH TERMS AND CONDITIONS AS TO YIELD A RETURN AT A RATE NOT LESS THAN A RATE DETERMINED BY THE SECRETARY, TAKING INTO CONSIDERATION THE CURRENT AVERAGE YIELD ON OUTSTANDING MARKETABLE OBLIGATIONS OF [NAME OF COUNTRY] OF COMPARABLE MATURITIES. THE SECRETARY MAY SELL, UPON SUCH TERMS AND CONDITIONS AND AT SUCH PRICE OR PRICES AS HE SHALL DETERMINE, ANY OF THE OBLIGATIONS ACQUIRED BY HIM UNDER THIS PARAGRAPH.

(2) THE SECRETARY OF THE TREASURY IS ADDITIONALLY AUTHORIZED TO PURCHASE DEBENTURES OF THE BANK IN THE AMOUNT OF \$ _____ ON EMERGENCY CALL OF THE BANK.

OBLIGATIONS OF THE BANK

SEC. 13. (A) THE BANK IS AUTHORIZED TO ISSUE AND HAVE OUTSTANDING OBLIGATIONS (INCLUDING BUT NOT LIMITED TO THE OBLIGATIONS AND DEBENTURES DESCRIBED IN SECTION 12) HAVING SUCH MATURITIES AND BEARING SUCH RATES OF INTEREST AS MAY BE DETERMINED BY THE BANK. SUCH OBLIGATIONS MAY BE REDEEMABLE AT THE OPTION OF THE BANK BEFORE MATURITY IN SUCH MANNER AS MAY BE STIPULATED THEREIN. THE AMOUNT OF THE BANK'S INDEBTEDNESS OUTSTANDING AT ANY ONE TIME SHALL BE LIMITED TO FIFTY TIMES THE BANK'S PAID-IN STATED CAPITAL.

(B) THE [CENTRAL BANK OR OTHER GOVERNMENT AGENCY] (HEREAFTER REFERRED TO AS THE "AUTHORITY") IS AUTHORIZED, UPON SUCH TERMS AND CONDITIONS AS IT MAY DEEM APPROPRIATE, TO GUARANTEE THE TIMELY PAYMENT OF PRINCIPAL OF AND INTEREST ON SUCH OBLIGATIONS (OTHER THAN OBLIGATIONS AND DEBENTURES DESCRIBED IN SECTION 12) AS SHALL BE ISSUED BY THE BANK. THE AUTHORITY SHALL COLLECT FROM THE BANK A REASONABLE FEE FOR ANY GUARANTY UNDER THIS SUBSECTION AND SHALL MAKE SUCH CHARGES AS IT MAY DETERMINE TO BE REASONABLE FOR THE ANALYSIS OF ANY OBLIGATION PROPOSED TO BE ISSUED BY THE BANK. IN THE EVENT THE BANK IS UNABLE TO MAKE ANY PAYMENT OF PRINCIPAL OF OR INTEREST ON ANY OBLIGATION GUARANTEED UNDER THIS SUBSECTION, THE AUTHORITY SHALL MAKE SUCH PAYMENT AS AND WHEN DUE IN CASH, AND THEREUPON SHALL BE SUBROGATED FULLY TO THE RIGHTS SATISFIED BY SUCH PAYMENT. THE FULL FAITH AND CREDIT OF THE GOVERNMENT IS PLEDGED TO THE PAYMENT OF ALL AMOUNTS WHICH MAY BE REQUIRED TO BE PAID UNDER ANY GUARANTY UNDER THIS SUBSECTION.

GOVERNMENT PAYMENTS TO THE BANK

SEC. 14. (A) WITH RESPECT TO SUCH AMOUNTS OF LOANS OF THE BANK AS MAY BE SPECIFIED IN APPROPRIATION ACTS, THE SECRETARY OF THE TREASURY IS AUTHORIZED TO MAKE, AND TO CONTRACT TO MAKE, ANNUAL PAYMENTS TO THE BANK IN SUCH AMOUNTS AS ARE NECESSARY TO EQUAL THE AMOUNT BY WHICH THE

DOLLAR AMOUNT OF INTEREST PAID BY THE BANK ON ACCOUNT OF ITS OUTSTANDING OBLIGATIONS EXCEEDS THE DOLLAR AMOUNT OF INTEREST RECEIVED BY THE BANK ON ACCOUNT OF OBLIGATIONS PURCHASED OR LOANS MADE BY IT PURSUANT TO SECTION 8.

(B) THERE ARE AUTHORIZED TO BE APPROPRIATED TO THE SECRETARY OF THE TREASURY SUCH SUMS AS MAY BE NECESSARY TO CARRY OUT HIS FUNCTIONS UNDER THIS ACT, INCLUDING SUCH SUMS AS MAY BE NECESSARY TO MAKE THE ANNUAL PAYMENTS REQUIRED BY CONTRACTS ENTERED INTO BY THE SECRETARY OF THE TREASURY PURSUANT TO SUBSECTION (A) OF THIS SECTION.

GOVERNMENT INSURANCE OF OBLIGATIONS TO THE BANK [OPTIONAL]

SEC. 15. (A) THE [APPROPRIATE GOVERNMENT AGENCY OR CENTRAL BANK] (HEREINAFTER IN THIS SECTION REFERRED TO AS THE "INSURER"), UPON APPLICATION BY THE BANK, IS AUTHORIZED TO INSURE ANY LOAN MADE BY THE BANK UNDER SECTION 8(A) (INCLUDING, FOR PURPOSES OF THIS SECTION, ANY OBLIGATION PURCHASED AS PROVIDED IN PARAGRAPH (1) THEREOF), AND TO ISSUE A COMMITMENT FOR THE INSURANCE OF ANY SUCH LOAN PRIOR TO THE DATE OF ITS EXECUTION OR DISBURSEMENT THEREON UPON A DETERMINATION THAT ALL OF THE APPLICABLE CRITERIA ESTABLISHED BY OR UNDER THIS ACT WILL BE MET WITH RESPECT TO SUCH LOAN.

(B) THE INSURANCE OF ANY LOAN UNDER SUBSECTION (A) AND ANY PAYMENTS PURSUANT THERETO SHALL BE MADE ON SUCH

TERMS AND CONDITIONS, AND IN SUCH MANNER AND FORM, AS THE INSURER SHALL BY REGULATIONS PRESCRIBE, AND SHALL PROVIDE FOR THE PAYMENT IN FULL TO THE BANK OF THE OUTSTANDING PRINCIPAL BALANCE OF THE LOAN TOGETHER WITH ANY UNPAID INTEREST, UPON DEFAULT BY THE BORROWER, IN ACCORDANCE WITH PROCEDURES SET FORTH IN SUCH REGULATIONS.

(c) THE INSURER IS AUTHORIZED TO CHARGE AND COLLECT PREMIUMS FOR INSURANCE UNDER THIS SECTION. SUCH PREMIUMS SHALL BE FIXED AT THE LOWEST POSSIBLE LEVELS WHICH ARE DETERMINED BY THE INSURER TO BE REASONABLE AND SUFFICIENT TO KEEP THE INSURANCE PROGRAM UNDER THIS SECTION IN A SOUND AND SECURE CONDITION AND MAINTAIN THE FUND ESTABLISHED BY SUBSECTION (D) AT A LEVEL ADEQUATE TO MEET ALL ANTICIPATED LOSSES, BUT IN ANY EVENT SHALL BE LOWER FOR LOANS MADE UNDER PARAGRAPHS (1) AND (2) OF SECTION 3 (A) THAN FOR LOANS MADE UNDER PARAGRAPH (3) OF SUCH SECTION.

(d)(1) THERE IS ESTABLISHED A REVOLVING FUND TO BE USED BY THE INSURER IN CARRYING OUT ITS FUNCTIONS UNDER THIS SECTION. ALL PREMIUMS CHARGED AS PROVIDED IN SUBSECTION (C), AND ALL OTHER RECEIPTS UNDER THE INSURANCE PROGRAM, SHALL BE DEPOSITED IN THE FUND. ALL PAYMENTS WITH RESPECT TO INSURANCE UNDER THIS SECTION SHALL BE MADE FROM THE FUND. MONEYS IN THE FUND NOT NEEDED FOR THE PAYMENT OF CURRENT OPERATING EXPENSES OR THE PAYMENT OF INSURANCE UNDER THE PROGRAM MAY BE INVESTED

IN BONDS OR OTHER OBLIGATIONS OF, OR BONDS OR OTHER OBLIGATIONS GUARANTEED AS TO PRINCIPAL AND INTEREST BY, THE GOVERNMENT.

(2) THERE IS AUTHORIZED TO BE APPROPRIATED AS INITIAL CAPITAL FOR THE REVOLVING FUND ESTABLISHED BY PARAGRAPH (1) THE SUM OF \$ _____.

AUDIT OF FINANCIAL TRANSACTIONS
[INDEPENDENT PRIVATE AUDIT COULD BE USED]

SEC. 16. (A) THE FINANCIAL TRANSACTIONS OF THE BANK SHALL BE AUDITED BY THE [GOVERNMENT ACCOUNTING OFFICE] IN ACCORDANCE WITH THE PRINCIPLES AND PROCEDURES APPLICABLE TO COMMERCIAL CORPORATE TRANSACTIONS. THE AUDIT SHALL BE CONDUCTED AT THE PLACE OR PLACES WHERE THE ACCOUNTS ARE NORMALLY KEPT. THE REPRESENTATIVES OF THE [GOVERNMENT ACCOUNTING OFFICE] SHALL HAVE ACCESS TO ALL BOOKS, ACCOUNTS, FINANCIAL RECORDS, REPORTS, FILES, AND OTHER PAPERS, THINGS, OR PROPERTY BELONGING TO OR IN USE BY THE BANK AND NECESSARY TO FACILITATE THE AUDIT, AND THEY SHALL BE AFFORDED FULL FACILITIES FOR VERIFYING TRANSACTIONS WITH THE BALANCES OR SECURITIES HELD BY DEPOSITARIES, FISCAL AGENTS, AND CUSTODIANS.

(B) THE EXPENSES OF ANY AUDIT PERFORMED UNDER THIS SECTION SHALL BE BORNE OUT OF APPROPRIATIONS TO THE [GOVERNMENT ACCOUNTING OFFICE], AND APPROPRIATIONS IN SUCH SUMS AS MAY BE NECESSARY FOR THIS PURPOSE ARE AUTHORIZED. THE BANK SHALL REIMBURSE THE [GOVERNMENT ACCOUNTING OFFICE] FOR THE FULL COST OF ANY SUCH AUDIT, AND THE [GOVERNMENT ACCOUNTING

OFFICE] SHALL DEPOSIT SUMS RECEIVED AS REIMBURSED INTO THE TREASURY [OR CENTRAL BANK] AS MISCELLANEOUS RECEIPTS.

TAX EXEMPTION

SECTION 17. (A) THE BANK, ITS PROPERTY, ITS FRANCHISE, CAPITAL, RESERVES, SURPLUS, SECURITY HOLDINGS, AND OTHER FUNDS, AND ITS INCOME SHALL BE EXEMPT FROM ALL TAXATION NOW OR HEREAFTER IMPOSED BY THE GOVERNMENT OR BY ANY LOCAL TAXING AUTHORITY: EXCEPT THAT (1) ANY AND ALL OBLIGATIONS ISSUED BY THE BANK SHALL BE SUBJECTED BOTH AS TO PRINCIPAL AND INTEREST TO GOVERNMENT AND LOCAL TAXATION TO THE SAME EXTENT AS THE OBLIGATIONS OF PRIVATE CORPORATIONS ARE TAXED. [ADDITIONAL SUBSIDY MAY BE GIVEN BY DELETING THIS CLAUSE]

ANNUAL REPORT

SEC. 18. THE BANK SHALL, AS SOON AS PRACTICABLE AFTER THE END OF EACH FISCAL YEAR, TRANSMIT TO THE [CHIEF EXECUTIVE OFFICER OF COUNTRY] AND THE [APPROPRIATE LEGISLATIVE BODY] AN ANNUAL REPORT OF ITS OPERATIONS AND ACTIVITIES.

SEPARABILITY

SEC. 19. IF ANY PROVISION OF THIS ACT OR THE APPLICATION THEREOF TO ANY PERSON OR CIRCUMSTANCE IS HELD INVALID, THE VALIDITY OF THE REMAINDER OF THE ACT, AND THE APPLICATION OF SUCH PROVISION TO OTHER PERSONS OR CIRCUMSTANCES, SHALL

NOT BE AFFECTED.

AUTHORIZATION FOR APPROPRIATIONS

SEC. 20. THERE ARE AUTHORIZED TO BE APPROPRIATED,
WITHOUT FISCAL YEAR LIMITATION, SUCH SUMS AS MAY BE NECESSARY
TO CARRY OUT THE PURPOSES OF THIS ACT.