

INTERNATIONAL FINANCE DISCUSSION PAPERS

THE USE OF INTEREST RATE POLICIES
AS A STIMULUS TO ECONOMIC GROWTH

by

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The Use of Interest Rate Policies as a Stimulus to Economic Growth

One of the prime concerns of the less developed countries since the end of the Second World War has been to stimulate the rate of economic growth. This objective was the primary goal of the United Nation's First Development Decade (1960-69) and it continues to be the goal of the Second Development Decade. But in spite of all the attention given to this problem, the government and business leaders in most of the less developed countries have overlooked the important contribution which a realistic interest rate policy could make in accelerating the rate of economic growth.

This paper is an attempt to consider the various benefits which would recommend a more realistic interest rate policy for an LDC. In addition, the effects of the introduction of realistic interest rate policies in three LDCs--Taiwan, Korea and Indonesia--are then reviewed.

A. The Benefits from Realistic Interest Rates

It is axiomatic that in a free market economy, changes in demand and supply cause commodity prices to increase or decrease and thereby promote an efficient allocation of economic resources. Thus, demand for a commodity raises its price and encourages an increased supply of the commodity, which thereby meets the needs of the potential purchasers.

What is often overlooked in the less developed countries is that the interest rate is also a price. In effect, it is the price paid for money or capital. Just as the wage rate is the price paid for labor--one of the basic factors of production--the interest rate is the price paid for capital, another of the basic factors of production. In the case of commercial banks, it is the "price" paid depositors for their savings and time deposits, and it is the "price" charged those who borrow from the bank. The former can be referred to as the deposit rate (i.e. the interest rate paid on time and savings deposits), and the latter, the loan rate (i.e., the interest rate charged on the bank's credits).

When the government or some other entity interferes with the free market price mechanism, the result frequently is a misallocation or underutilization of resources. If the government, for example, establishes an artificially low price for rice, producers lack incentives to maintain or expand rice production, and may even feed their rice to livestock in view of the low prices.

The same principles apply to interest rates. When existing interest rates are at non-market levels and hence unrealistic, there is a malfunctioning of the market. In the case of artificially low deposit rates, there is a disincentive to save and existing funds are not effectively mobilized. This problem is particularly acute when the real deposit rates are negative, i.e., when the rate of inflation exceeds the nominal rate of interest paid on the deposit.

There is a strong tendency for the less developed countries to maintain unrealistic interest rates. One reason is that many of them suffer from a relatively rapid rate of inflation, and governments frequently do not permit rates to adjust to allow for expectations of price rises. Another reason is that the interest rate level, when established under truly free market conditions, is generally higher than in the industrialized countries because the less developed countries are relatively short of capital. Nonetheless, governments often have the idea that interest rate levels should be held close to the level of rates in more advanced countries where conditions are quite different.

The basic remedy in such situations is to have the appropriate authorities implement policies that will both promote and facilitate the establishment of realistic interest rates by the organized financial institutions. Although reform of both the loan and deposit rates is desirable, the focus of this paper is primarily on deposit rates, especially the establishment of a positive rate of interest on deposits, i.e., a rate of interest higher than the rate of inflation. As to how the interest rate reforms can best be implemented, specific guidelines for effective reform will be suggested later in the paper.

Some of the benefits that should result from the introduction of positive interest rates for deposits include: (1) a more effective mobilization of savings; (2) an inducement to efficiency and hence a higher productivity; and (3) an anti-inflationary impact.

More effective mobilization of savings.--Both theory and experience indicate that savings can be more effectively mobilized by offering savers an attractive incentive in the form of a reasonably positive rate of interest. When efforts are made to keep interest rates paid by financial institutions artificially low, many distortions and leakages interfere with the effective mobilization and allocation of savings. The public always has many alternative outlets for its funds. Individuals can reduce their savings rate to zero

or to a negative figure if there is no financial reward for savings. They may buy goods as a hedge against inflation, including such items as precious metals and jewelry. They may channel their savings into the hands of small-scale moneylenders who provide financing only for small and often high-risk activities and who lack the ability to finance large-scale productive enterprises. Finally, the more sophisticated residents may simply send their funds abroad in search of higher yields and greater security. By providing attractive rates of return on savings through large financial institutions, these leakages can be reduced and larger amounts of funds can be mobilized for employment in the most productive sectors of the economy.

Promotes higher productivity.--The more effective mobilization of savings will tend to promote higher productivity by enabling investment funds to be diverted from non-productive or relatively inefficient uses to activities which utilize resources more efficiently. More funds can be made available to efficient entrepreneurs and larger-scale activities can be financed.

No less important is the impact that realistic interest rates have on investment and managerial decisions and the determination of the mix of resources to be utilized. Artificially low interest rates tend to encourage the wasteful use of capital goods. Interest is an important factor in the cost of capital goods, and when interest rates are kept artificially low, these goods are priced below their true value. This frequently results in an excessive use of capital-intensive production methods in countries where labor is cheap and underemployed. In addition, the capital goods may be underemployed themselves, being worked only a fraction of the time that is possible and that would be necessary if the entrepreneur had to pay the true cost of the plant and equipment. Realistic interest rates will tend to rectify these conditions. When capital is properly priced, countries with large supplies of cheap labor will find that entrepreneurs have a greater inducement to maximize the use of labor. They will also find that the capital that is employed will be used more fully, more efficiently and will be better-maintained. This will be an important stimulus to economic growth.

Anti-inflationary impact.--One of the most important contributions a realistic interest rate policy can make to economic growth is through its impact on curbing inflation. There is considerable agreement now that inflation, while not always incompatible with economic

growth, can be a serious obstacle to a sound and sustained advance. Realistic interest rate policies can help a country mobilize the real savings, both domestic and foreign, needed to finance investment by strictly voluntary means. This can reduce or eliminate the inflationary gap between savings and investment.

On the consumption side, an attractive interest rate for savers will reduce consumption expenditures and raise the savings rate. In countries where fiscal policy tends to be inflationary, this can be an important factor in maintaining a non-inflationary balance between supply and consumer demand. Other ways of putting it would be to say that excess liquidity can be mopped up or the velocity of money can be reduced as more funds are channeled into time and savings accounts or securities. The elimination of the distortions that tend to accompany inflation makes for a better resource allocation and greater emphasis on productivity in economic activities.

Despite these very substantial benefits, many countries still maintain a structure of relatively low and unrealistic interest rates. To understand why this is the case, it is helpful to examine the main factors which tend to perpetuate an unrealistic structure of rates.

B. Factors Tending to Perpetuate an Unrealistic Structure of Interest Rates

In many of the less developed countries, there is a tendency on the part of the financial leaders to believe that the relatively low rates of interest are normal, and consequently that any deviations from these "normal" rates would be undesirable. Mr. Anand Chandavarkar, in discussing this problem, has suggested that the organized financial institutions may view interest rates ranging from 3 to 5 per cent per annum as the historical norm.^{1/} To some extent, this attitude may reflect a desire of the financial leaders to have an interest rate structure similar to that prevailing in the industrialized Western countries. However, this attitude is quite unrealistic, given the relative scarcity of funds and the strong demand for capital in many of the less developed countries.

^{1/} Anand C. Chandavarkar, "Interest Rate Policies in Developing Countries," Finance and Development, International Monetary Fund and the World Bank Group, Washington, D.C., March, 1970, p. 23.

Another factor perpetuating unrealistic rates is the frequently held notion that it is necessary to have low and stable interest rates in order to promote a country's economic development. But this viewpoint fails to take into consideration several important aspects. With low deposit rates, a country will find it harder to mobilize the funds it needs to finance rapid economic growth in a non-inflationary manner. In addition, artificially low loan rates are an invitation to economic inefficiency and a misallocation of economic resources. By providing borrowers with a concealed subsidy, the low loan rates distort the performance criteria that are needed to assess the relative efficiency of alternative investments. Also, if high, but realistic, loan rates are introduced, they will not reduce the level of investment so long as the lending rates do not exceed the expected rate of return on additional new investment.

A third factor is the widely-held belief that savers are not sensitive to changes in interest rates. Hence, any increase in deposit rates will not really cause any changes in the level or rate of savings. But this concept has been disproven by the actual experience of such countries as Taiwan, Korea, and Indonesia that have introduced sharply higher deposit rates with a substantial real rate of return for savers.

A fourth factor perpetuating unrealistic interest rates is the system of laws and agreements that establish interest rate ceilings at levels below those that would prevail under free market conditions. Particularly prominent in this connection are national usury laws that have not been changed for decades, central bank laws or regulations establishing interest rate ceilings, and schedules of maximum loan and deposit rates agreed to by bankers' associations. In the Philippines, for example, the 1916 Usury Law limits the contractual interest rate to no more than 12 per cent for secured loans and 14 per cent for unsecured loans. However, market rates have at times been well above these ceilings. In May of 1970, for example, the short-term rate on commercial paper (Bancorn bills) was 15.8 per cent, while in August of 1970 the yield on short-term Treasury bills was 16 per cent. In addition, the rate charged by private moneylenders has generally been 24 per cent or higher.

Fifth and finally, there are strong vested interests in the maintenance of artificially low lending rates. The commercial banks, in effect, ration their credits to various customers, who derive large

windfall profits from loans obtained at a "below equilibrium" price. Those who benefit from this are generally highly influential. The savers who subsidize them and who are unjustly deprived of their rightful reward, lack this kind of influence. Hence, it is not politically easy to effect an interest rate reform. Paradoxically, the small savers themselves may be deluded into thinking that realistic interest rates are evil. According to a line of thinking sometimes advanced in LDCs, banks ought not to charge any interest at all; after all, it is argued, all wealth is created by the workers and the banks are not the legitimate creators of the funds at their disposal.

C. Arguments Used by Opponents of Interest Rate Reform

Opponents of reform of both loan and deposit rates naturally utilize a variety of arguments to oppose any substantial changes in the structure of rates. It is not feasible to discuss all of these arguments, but three of the arguments frequently put forth may be examined briefly.

In the first place, it is suggested that any major increase in the level of interest rates would cause those institutions holding fixed-yield assets to suffer substantial capital losses. For example, commercial banks holding relatively large amounts of government securities would be confronted with a large capital loss in the value of these assets.

In response to this argument, it can be pointed out that the losses, if any, on short-term securities would be relatively small because of the short period until maturity. With regard to the medium-and long-term assets, there would not be any capital loss if the security were held until maturity. Although this admittedly causes a "locked-in effect," the yield on the asset would not be different from what the institution originally expected. There are, of course, problems in making an adjustment to a more realistic structure of interest rates, but if the government's stabilization program is successful and the level of real interest rates declines, investors can look forward to partial compensation by way of the capital gains on their investments. In the final analysis, the overall benefits to the economy in the long-run should substantially outweigh any temporary losses of liquidity, or even of capital value.

A second argument is related to the point made earlier that in many countries political and financial leaders have firmly fixed ideas about what the "normal" rate of interest should be. It is argued that rates need not be allowed to diverge from long-standing normal patterns.

This fails to take account of the need to adjust interest rates to meet changing conditions. If 4 per cent is considered to be a satisfactory or desirable rate of interest when prices are stable, it can hardly be said that the "normal" rate of 4 per cent is realistic when the rate of price increase rises to 10 per cent or 20 per cent a year. Similarly, the "normal" rate of interest may be rendered completely unrealistic by changes in interest rates in the world's major money and capital markets. The test of the validity of an interest rate should never be some preconceived notion of what is "normal" or proper in absolute terms, but rather what is required to equilibrate the supply and demand for funds in the light of price changes, past and expected, and interest rates in money markets linked to the country in question. When interest rates are not permitted to adjust to changing conditions as a result of the imposition of controls or ceilings, uneconomic distortions in resource allocation inevitably result.

A third argument is that an increase in interest rates to realistic levels would lead to a maldistribution of income. Higher rates, it is argued, would merely reward the rentier class and further skew the income distribution.

What is important here is not so much whether the income distribution should be changed so as to move the economy toward equal incomes, but whether the economic policies being pursued will result in a larger aggregate real output and hence provide an opportunity for most income groups to experience a higher real level of living. If the main goal of economic policy were to insure equality of incomes, without regard to increasing the level of incomes, there would be some force to this third argument. But consider what this would mean.

In a society where incomes were, at the beginning, absolutely equal, those who refrained from spending all of their income on consumption and who loaned the saved portion at interest, would end up with a higher money income than those who consumed all that they earned. If their savings were channeled into the hands of those who

could invest them in ways that would raise productivity, thus earning enough to pay the interest on the loans as well as some reward for the investor, incomes in general would tend to rise. The original pattern of absolute equality of income would be destroyed, because the savers would have higher money incomes than those who saved nothing, and the investors might have higher incomes than those who were passive. A society that put equality of income above increasing the level of income would want to avoid this chain of events. The best way to do it would be to provide no incentive, or a totally inadequate incentive, to saving and investment. This would help insure the maintenance of equality of income at poverty levels.

People are badly misled when they accept the notion that inequality of income is an injustice. It has been demonstrated time and again that this does not accord with the sense of justice of most of mankind. The productive man wants to be rewarded in accord with his productivity. The man who does not spend all of his income on consumption wants to be rewarded for the act of saving. If the government and business leaders of the LDCs want to encourage productivity and saving, they had best accept the realities of human nature and provide the rewards that will bring forth these qualities. It is especially important that the countries that now want to encourage rapid economic growth remove any intellectual or other barriers that might prevent them from perceiving the importance of giving adequate incentives to encourage the mobilization and efficient use of capital.

* * * * *

In view of the foregoing discussion, it may be helpful at this point to examine the experience of four different countries that have actually implemented substantial changes in the structure of their interest rates. These are Nationalist China (1950), Korea (1965), Indonesia (1968), and Vietnam (1970).

D. Nationalist China's Experience with a High Interest Rate Policy

The Government of Nationalist China, whose authority and operating capabilities had been seriously damaged by the rampant wartime and postwar inflation in mainland China, was determined to

bring inflation under control in Taiwan after the transfer of the Government there in 1949. During 1949 and early 1950 the rate of inflation in Taiwan was extremely high. During the last half of 1949 the stock of money more than quadrupled and wholesale prices increased at an annual rate of about 200 per cent. The Government was reluctant to increase taxes sharply since the amount of revenue needed to halt the inflation would have been so oppressive that it would likely have alienated the local Taiwanese population. What was needed therefore was a new program that would absorb a large part of the liquidity provided by the rapidly expanding money supply. They decided to undertake a bold experiment with realistic interest rates. This turned out to be a great success.^{1/}

The authorities decided to experiment with a special time deposit which yielded such a high rate of interest that it would still compensate savers despite the decline in the purchasing power of their money. It was also decided that deposits with very short maturities should be offered rather than deposits with one- or two-year maturities since the latter would not be attractive to savers due to the uncertainties involved over a period of time that long.

Accordingly, in March 1950, the authorities introduced new preferential interest deposits carrying maturities of one, two, and three months, and yielding 7 per cent, 8 per cent, and 9 per cent per month, respectively. The simple yield on the three-month deposit on an annual basis was 108 per cent. Although this was a very high rate, commercial bank loan rates were also relatively high at this time, and between October 1949 and June 1950 ranged from 101 per cent per annum for secured time loans to 137 per cent for unsecured overdrafts. Actually, the new three-month deposit rate was still moderately below the 132 per cent annual rate of increase in wholesale prices between December 1949 and February 1950. Presumably the authorities anticipated a substantial slowing in the rate of inflation--an expectation which proved to be well-founded.

Since there was a possibility that some commercial banks might receive more preferential deposits than they could profitably lend or invest, the authorities gave the banks the option of placing the excess

^{1/} For a more detailed account, see Reed J. Irvine and Robert F. Emery, "Interest Rates as an Anti-Inflationary Instrument in Taiwan," The National Banking Review, U. S. Comptroller of the Currency, Washington, D.C., September 1966, pp. 29-39.

in the Bank of Taiwan^{1/} at interest rates equal to, or above, those paid by the commercial banks. The redeposit features helped to make the new program successful since, in effect, it guaranteed the commercial banks against any loss on the preferential deposits. Although the Bank of Taiwan reportedly paid out more in interest on these redeposits than it earned in lending or investing them, the difference was largely offset by various earnings including those from U. S. counterpart funds deposited with the Bank of Taiwan. In retrospect, the net cost to the Bank appears to have been low considering the success of the new program in combating inflation.

Following the introduction of the new preferential deposits in March 1950, there was a substantial increase in deposits. As indicated in Chart 1, preferential, lottery and ordinary time deposits^{2/} increased from NT\$2 million in February of 1950 to NT\$37 million in August of 1950. The increase in wholesale prices was temporarily halted, with the index actually declining between May and July 1950. Encouraged by this success, the Government reduced the rate on one-month deposits from 7.0 per cent to 3.5 per cent per month in July 1950, and to 3.0 per cent per month in October. Commercial bank loan rates were also reduced in July 1950, and ranged from 45 per cent per annum for secured time loans to 63 per cent for unsecured overdrafts. As indicated in Chart 1, the deposits tended to decline and by January 1951 were down to NT\$21 million. Concerned at this decline, the authorities increased the rate again in March 1951 to 4.2 per cent (64 per cent per year when compounded annually), and held it at that level for 13 months. With this new attractive rate and a substantial slowing in inflation, the deposits began to increase sharply again, and by September 1953 were NT\$671 million. Stated as a proportion of money stock, the deposits had thus increased very substantially from 0.5 per cent in February 1950 to 47 per cent in September 1953.^{3/}

As indicated in Chart 1, the wholesale price index began to decline after April 1952 and continued to decline through November

1/ The Bank of Taiwan is a provincial bank which, during the 1950's, performed various central bank functions for the Nationalist Government.

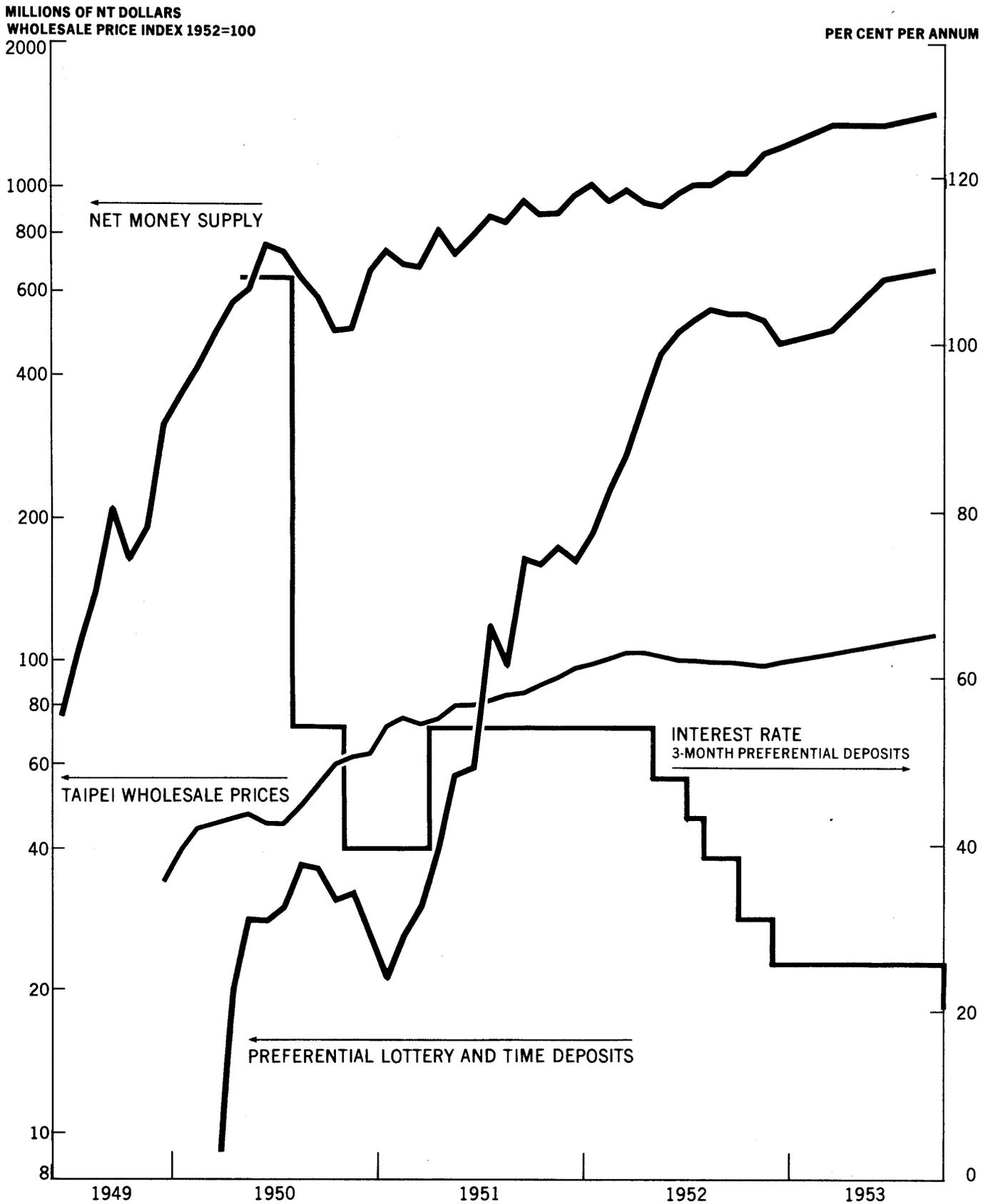
2/ Separate data are not available for the preferential deposits, but the amount of lottery and ordinary time deposits are relatively small.

3/ The preferential deposits were eventually discontinued at the end of 1958.

CHART 1

TAIWAN

SELECTED ECONOMIC DATA



1952. During 1953 the wholesale index for the year as a whole was 9 per cent higher than in 1952, and by 1954 the pace of inflation had slowed to the remarkably low rate of 2.4 per cent.

Although Taiwan's high interest rate policy was a major factor in slowing the rate of inflation in the early 1950's, other factors also played a role. The size of the government's budget deficits, for example, was reduced substantially. In 1951, the deficit was equal to 21 per cent of total government expenditures, but in both 1952 and 1953 the proportion declined to about 6 per cent. In addition, there was a reduction in the net foreign exchange surplus from \$15 million in 1951 to \$4 million in 1952.

U. S. economic assistance also played an important role in helping the Nationalist Government stabilize its position without depressing consumption. This assistance averaged \$91.5 million a year during the crucial 1952-55 period. The aid amounted to about \$11 per capita per annum and financed 46.5 per cent of Taiwan's merchandise imports during those years.

The statistical evidence clearly indicates that the interest rate reform in Taiwan was highly successful in absorbing excess liquidity, and hence in slowing sharply the rate of inflation. In effect, the high interest rates encouraged the public to purchase financial claims rather than goods. The reform also gave the authorities time to reduce the size of the government's budget deficits which had been a major factor contributing to the rapid inflation.

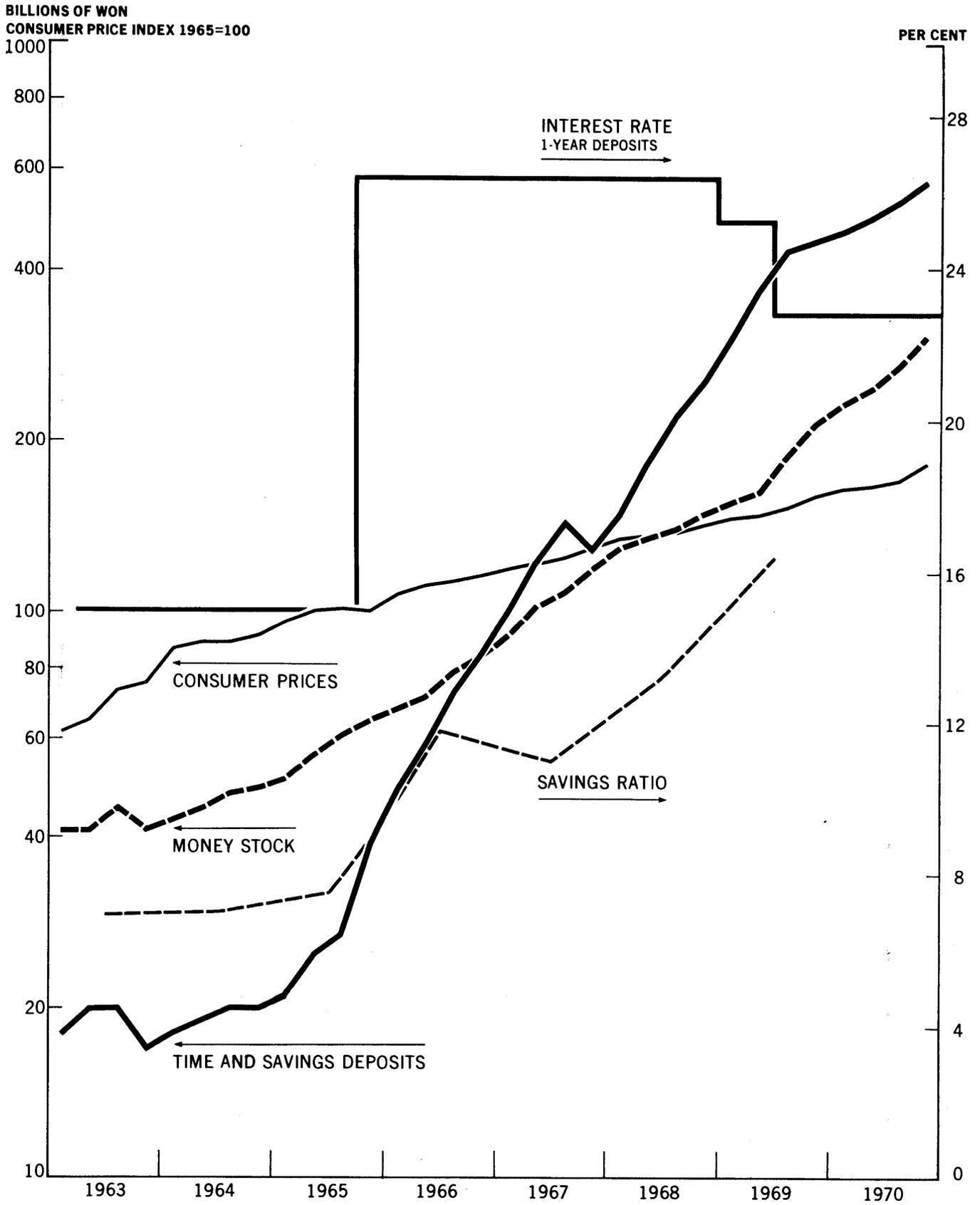
E. The Korean Interest Rate Reform of September 1965

Korea provides one of the best examples in the postwar period of the substantial benefits that can accrue from the introduction of a positive interest rate policy. The Korean case is particularly interesting because the shift in policy was both abrupt and dramatically successful. In addition, fairly reliable data are available to demonstrate the favorable impact on the national savings ratio during the five years following the reform.

Several factors prompted the Korean Government to introduce a sharp change in the structure of interest rates in September of 1965. The authorities had recognized for some time that the loan and deposit rates of the various financial institutions were substantially below

KOREA

SELECTED ECONOMIC DATA



the rates that prevailed in the unorganized money markets and, hence, an upward adjustment was necessary if they were to be placed at more realistic levels. It was also felt that an upward adjustment in the rates to levels more in line with market conditions would improve the allocation of funds and increase the volume of savings. The Korean authorities were also influenced by Taiwan's successful use of a policy of high interest rates and they sent several experts to Taiwan to study the methods used there and the results.

Convinced that an interest rate reform would bring substantial benefits, the Korean National Assembly amended the Interest Restriction Law on September 14, 1965, and thereby authorized a substantial increase in the maximum interest rates allowed on bank deposits, loans and discounts. On September 30, 1965, the effective interest rates paid on time and installment savings deposits were sharply increased. (See Table 1). The effective rate on one-year time deposits, for example, was increased from 15 per cent per annum to 29.8 per cent (actually 2.2 per cent per month compounded monthly). The interest rate reform was made effective for most of Korea's financial institutions and thus applied to commercial banks, the Medium Industry Bank, the Citizens National Bank, the Korean Reconstruction Bank, the National Agricultural Cooperative Federation, money trusts, postal savings and government funds.

At the same time that deposit rates were increased, bank lending rates were also increased substantially. (See Table 1.) For example, the rate for discounts on bills was increased from 14 per cent to 24 per cent, while the rate for loans against "other bills" was raised from 16 per cent to 26 per cent. A presidential decree on September 24, 1965, fixed the ceiling on loan interest rates at 36.5 per cent, and on September 30, 1965, the commercial banks increased their rate on overdue loans from 20 per cent to the maximum amount allowed of 36.5 per cent. The Bank of Korea (i.e. the central bank) utilized this opportunity to abolish on September 30, 1965, the previous system of direct credit controls involving loan ceilings.

Table 1. Korea: Maximum and Effective Interest Rates on
Deposits and Loans of Banking Institutions
 (Effective from 30 September, 1965
 in per cent per annum)

<u>Items</u>	<u>Maximum rates</u>		<u>Effective rates</u>
	<u>Previous rates</u>	<u>Revised rates</u>	
<u>Deposits</u>			
Time deposits) 1-1/2 yr.	15.0	34.5 ^{1/}	34.5 ^{1/}
Special contract deposits) 1 yr.	15.0	34.5 ^{1/}	29.8 ^{2/}
Deferred deposits) 6 months	12.0	34.5 ^{1/}	26.8 ^{3/}
	3 months	34.5 ^{1/}	19.6 ^{4/}
Notice deposits	3.65	5.0	5.0
Savings deposits	3.6	12.0	7.2
Deposits of Nat'l Savings Association	16.8	30.0	30.0
Installment savings deposits	10.0	30.0	30.0
Passbook deposits	1.3	1.3	1.3
Extra deposits ^{5/}	1.0	1.0	1.0
<u>Loans and Discounts</u>			
Loans for export trade	6.5	6.5	6.5
Loans for suppliers of U.S. offshore procurement			
(Goods)	6.5	6.5	6.5 ^{6/}
(Services)	---	---	16.0 ^{6/}
Rice lien loans	11.0	11.0	11.0
Discounts on bills	14.0	24.0	24.0
Other bills	16.0	26.0	26.0
Overdrafts	18.5	26.0	26.0
Loans selected to installment savings	16.0	26.0	26.0
Loans secured by installment savings	16.0	26.0	20.0 ^{7/}
Loans overdue	20.0	36.5	36.5 ^{7/}
Call loans	12.0	22.0	22.0
Acceptance and guarantee fees	7.5	3.65	3.65
Securities lending	7.5	3.65	3.65
Export promotion funds)			
Loans for military supply goods pro-)			
duction)	14.0	(included in other bills)	
Loans for purchase of aid goods)			

^{1/} As based on a rate of 2.5 per cent per month compounded monthly.

^{2/} 2.2 per cent per month compounded monthly.

^{3/} 2.0 per cent per month compounded monthly.

^{4/} 1.5 per cent per month compounded monthly.

^{5/} Non-interest-bearing, in principle.

^{6/} Effective from 22 October, 1965

^{7/} Effective from 1 November, 1965.

Because of the substantial changes made in commercial bank deposit and loan rates, the Korean authorities took two further steps on September 30 to help relieve any possible financial burden placed on the earning positions of the commercial banks. First, they decided that the Bank of Korea would pay interest of 3.5 per cent per annum for the six-month period ending March 31, 1966, on that portion of a commercial bank's reserves at the Bank of Korea equal to the individual bank's outstanding volume of private time deposits. Second, the Bank of Korea agreed to provide up to 5 billion won in emergency loans to the commercial banks upon their request. This step was taken to alleviate any possible financial difficulties faced by business enterprises which might arise because of a possible shift by individuals of their deposits with these business firms to commercial banks^{1/} and because of possible large collections of overdue loans by the commercial banks. The authorization for emergency loans was terminated on December 30, 1965.

As shown in Chart 2, the impact of the interest rate reform on the volume of time and savings deposits was very sharp and dramatic. After hovering at a level of about W.20 billion during 1963-64 and the first part of 1965, time and savings deposits rose sharply and by December 1970 had reached the level of W.573 billion, or an increase of 2,022 per cent! (See Table 2). Stated as a proportion of the stock of money, time and savings deposits increased from 44 per cent in September of 1965 to 187 per cent in December of 1970. In the relatively short period of 15 months, time and savings deposits rose from being less than half the money stock to being equal to the money stock.

Furthermore, time and savings deposits continued to rise at the very rapid annual rate of about 100 per cent from September 1965 to September 1969, and it was only after the deposit rates were lowered in October 1968 and June 1969 that the rate of increase began to slow substantially.

^{1/} In Korea, a substantial amount of funds are placed directly with business firms, the depositors earning interest on these funds.

Table 2. Korea: Selected Economic Data

<u>End of Period</u>	<u>Rate on One-Year Time Dpts. (Per Cent)</u>	<u>Time & Savings Deposits (Bill. Won)</u>	<u>Money Stock (Bill. Won)</u>	<u>Consumer Price Index (1965=100)</u>	<u>Savings Ratio^{1/} National Savings (Per Cent)</u>
<u>1963</u> March	15.0	18	41	62.0	
June	15.0	20	41	65.1	6.9
Sept.	15.0	20	45	73.4	
Dec.	15.0	17	41	75.6	
<u>1964</u> March	15.0	18	43	87.1	
June	15.0	19	45	88.8	7.0
Sept.	15.0	20	48	88.8	
Dec.	15.0	20	49	91.4	
<u>1965</u> March	15.0	21	51	97.1	
June	15.0	25	56	101.2	7.5
Sept.	26.4	27	61	102.9	
Dec.	26.4	30	65	100.8	
<u>1966</u> March	26.4	49	68	108.2	
June	26.4	59	71	112.9	11.8
Sept.	26.4	73	79	114.9	
Dec.	26.4	85	84	117.4	
<u>1967</u> March	26.4	101	92	120.1	
June	26.4	123	102	122.3	11.0
Sept.	26.4	145	109	127.0	
Dec.	26.4	129	120	130.5	
<u>1968</u> March	26.4	149	130	136.2	
June	26.4	186	136	137.1	13.2
Sept.	26.4	224	141	138.2	
Dec.	25.2	256	150	143.4	
<u>1969</u> March	25.2	308	158	148.0	
June	22.8	373	165	149.9	17.2
Sept.	22.8	435	192	154.8	
Dec.	22.8	452	210	162.4	
<u>1970</u> March	22.8	471	237	167.2	
June	22.8	496	251	168.5	16.5
Sept.	22.8	530	275	172.8	
Dec.	22.8	573	307	185.0	
<u>1971</u> March	22.8	626	297	190.0	
June	20.4	n.a.	n.a.	192.7	n.a.

^{1/} National savings to GNP.

Source: Monthly Economic Statistics, Bank of Korea, Seoul, July 1971, and earlier issues.

National income data also indicate that there has been a substantial increase in Korea's rate of saving. As shown in Chart 2, the ratio of national savings to GNP increased from 7 per cent in 1963 and 1964, to 16.5 per cent in 1970. More than doubling of the rate of savings is an important achievement and has special significance for those less developed countries that are trying to mobilize more domestic savings in order to finance a higher rate of capital formation.

Some idea of the increased attractiveness of the time and savings deposits after the interest rate reform is indicated by the data in Table 3 which present rough approximations of the real rate of return on one-year time deposits.

Table 3. Korea: Real Rate of Return on Time Deposits
(In per cent per annum)

	(1) Rate on <u>One-Year Time Deposits</u>	(2) Increase in Seoul ^{4/} <u>Consumer Price Index</u>	(3) <u>(1) Minus (2)</u> ^{5/}
1963	15.0	20.6	- 5.6
1964	15.0	29.6	-14.6
1965	26.4 ^{1/}	13.5	+12.9
1966	26.4	12.1	+14.3
1967	26.4	10.8	+15.6
1968	25.2 ^{2/}	11.1	+14.1
1969	22.8 ^{3/}	10.1	+12.7
1970	22.8	12.7	+10.1

^{1/} Effective September 30, 1965.

^{2/} Effective October 1, 1968.

^{3/} Effective June 1, 1969.

^{4/} As based on annual averages.

^{5/} It should be noted that the rates provided in column 3 are only approximations since an adjustment of both interest and principal for price changes would produce slightly lower real rates of return.

These data show that in 1963 and 1964 savers were confronted with negative rates of return of approximately 6 and 15 per cent, respectively. After the September 1965 change in deposit rates, savers received positive rates of return ranging between 10 and 15 per cent. These relatively high real rates of return, averaging about 15 per cent in 1966-68, provided a strong incentive for those with money to place it in time and savings deposits in the various financial institutions.

The interest rate reform had only a brief moderate impact on the growth of demand deposits. During the first two months following the September 30 actions, demand deposits declined from W.37 billion to about W.33 billion, but by the end of 1965, they had increased to W.40 billion and they continued to generally increase thereafter. In addition, the ratio of demand deposits to the money stock declined only moderately to 56 per cent in 1966-70 compared to 59 per cent in the previous five years. Hence, the increase in time and savings deposits since 1965 has not been principally at the "expense" of a large relative decline in the volume of demand deposits.

As might be expected, the largest gains in time and savings deposits occurred in those types of deposits where high interest rates were paid. The two main types have been time, and installment savings,^{1/} deposits with rates of at least 26 per cent per year being paid since September of 1965. Of the total increase in time and savings deposits of W.503 billion between September 30, 1965 and September 30, 1970, time and installment savings deposits accounted for 88 per cent of the increase. On the other hand, notice,^{2/} new household^{3/} and other deposits—paying interest rates of 12 per cent or less—did not increase as rapidly after the interest rate reform.

As a result of the reform, there was a very substantial increase in the number of depositors. Prior to the reform, the number of time and savings accounts was 338,000, but by the end of 1968 the number had increased to 2.97 million.

^{1/} Deposits made on a monthly basis in a specified amount over an agreed contractual period.

^{2/} Deposits that after 30 days can only be withdrawn after three days advance notice.

^{3/} Deposits that can be withdrawn only after the lapse of 30 days from the date of deposit.

An examination of the factors affecting the money supply during the 1960's indicates that some basic changes occurred after the mid-1960's and that one of the changes was substantially influenced by the 1965 interest rate reform. Broadly speaking, the main elements contributing to the expansion of the money stock in 1961-64 were bank credit expansion to the private sector, and to a lesser extent, bank credit extended to the government sector. Since 1965 the main expansionary element has been the foreign sector, and the government sector has been contractionary. Although the volume of net bank credit extended to the private sector since 1965 has been relatively low-to-moderate, there has been a very large increase in the volume of gross bank credit, which in turn has been offset by the sharp rise in time and savings deposits. For example, the annual average increase in bank loans to the private sector during 1966-69^{1/} was W.103.3 billion compared to W.5.5 billion in 1961-64, while the average annual increase in bank time and savings deposits in 1966-69 was W.105.4 billion compared to W.2.9 billion in 1961-64. Without the deposit interest rate reform of 1965, the banking system simply could not have expanded loans so rapidly without disastrous inflationary consequences. Excluding the expansionary impact from the foreign sector, the interest rate reform has certainly helped the banking system to finance a large loan demand from the private sector in a non-inflationary manner. This large loan expansion has in turn been an important factor contributing to the higher rate of growth in real GNP since 1965.

Conclusions--In view of the developments and data cited above, it is possible to draw four conclusions regarding Korea's experience with a positive interest rate policy. First, the relatively high and positive interest rates offered on time and savings deposits since September 1965 have been a major factor contributing to the dramatic increase in time and savings deposits since the interest rate reform. In the absence of the reform, there is little doubt that the rate of increase in these deposits would have been much lower. It should also be noted that after the two reductions in the deposit rates in 1968-69, the rate of increase in the deposits has slackened substantially.

^{1/} Excluding loans from government funds.

Second, the interest rate reform has also resulted in a significant increase in the national savings rate. Between 1965 and 1970, the rate more than doubled, increasing from 7.5 per cent to 16.5 per cent.

Third, the large growth in time and savings deposits made it possible for the banking system to sharply expand its loan volume and thus to finance a substantial increase in economic activity. This in turn helped to increase significantly the level of real GNP. Without the sharp rise in time and savings deposits, such an increase in bank credit could not have occurred without creating strong inflationary pressures. As it turned out, the annual rate of increase in consumer prices was held to the 10-13 per cent range during 1966-70 compared to a 20-30 per cent range in 1963-64. It is also likely that the higher interest rates spurred a faster completion of investment projects and promoted a more economic use of resources.

Fourth, Korea's high interest rates did not prove detrimental to investment spending, since investment expenditures-- both absolutely and as a proportion of GNP--increased during 1966-69. This is the reverse of the often-stated view that an increase in interest rates is detrimental to economic growth because "high" interest rates discourage investment. The relevant question is whether the marginal efficiency of capital is higher than the cost of funds. In Korea, loan expansion was held down prior to September 1965 by the authorities' quantitative ceilings on bank credits and by the low availability of loanable funds due to the negative interest rates paid on time and savings deposits. With a move to realistic interest rates, the authorities were able to abolish the loan ceilings, and the sharp increase in time and savings deposits made possible the noninflationary expansion of commercial bank credit.

F. The Indonesian Experience with Positive Interest Rates

There is substantial evidence to indicate that the Chinese and Korean experiences with a positive interest rate policy played an important role in influencing Indonesia to adopt a similar policy. The Korean experiment was especially important because it began in September of 1965 and by the fall

of 1967 had proved to be clearly successful, which was about the same time that the Bank Indonesia began to give serious consideration to adopting a similar policy. As it turned out, a sharp rise in consumer prices in Indonesia between August of 1967 and March of 1968 temporarily discouraged the authorities from introducing a positive interest rate policy.^{1/} (See Chart 3).

During the second and third quarter of 1968, however, various factors contributed to a slowing in the rate of inflation. The Government's budget deficit was gradually reduced through a combination of expenditure restraint and measures designed to increase budget revenue. During most of 1968, the government's budget was virtually in balance including receipts from aid counterpart funds. The balance of payments position also improved substantially in 1968, mainly because of a better trade performance and the receipt of substantial amounts of foreign aid. With the slowing in the rate of inflation, the authorities undertook a drastic change in deposit interest rates in the autumn of 1968.^{2/}

During the 14 months prior to October of 1968, the state banks paid a rate of 2 per cent per month on time deposits with a maturity of three months or more. Effective October 1, 1968, however, that rate was increased to 4 per cent per month. In addition, the state banks also began to pay rates of 5 and 6 per cent per month on 6-month and 12-month deposits. (For a complete list of deposit interest rates during 1964-70, see Table 3.) At the same time, the authorities also took the following steps to improve the attractiveness of time deposits: (1) the central bank agreed to guarantee payment of the deposits to the depositors upon maturity; (2) all interest earned on the deposits was made tax exempt; (3) the government agreed not to ask the depositors any questions about the source of the funds that were deposited; and (4) the central bank agreed to subsidize the banks for part of the interest they paid on 6- and 12-month deposits.

^{1/} It should be noted, however, that it is not necessary to have a slackening in the rate of increase in prices before introducing a positive interest rate policy. The policy can be successful so long as deposit rates are adjusted in relation to the rate of inflation, so as to be positive by a significant amount.

^{2/} Other actions taken by the central bank to attract deposits, such as the February 1969 passbook lottery accounts and the April 1970 central bank 90-day certificates of indebtedness, are not discussed here because of the relatively small volume involved.

INDONESIA

SELECTED ECONOMIC DATA

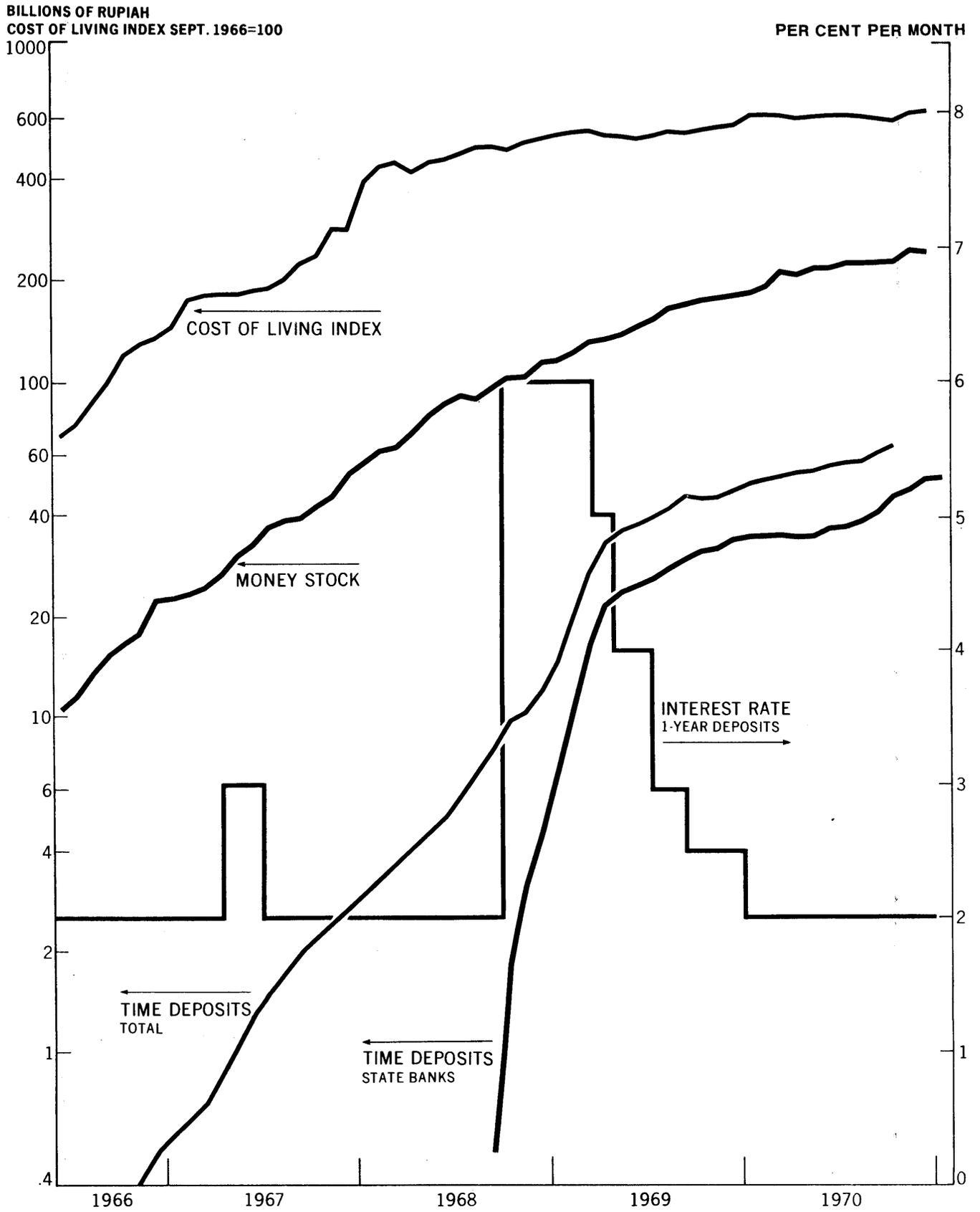


Table 3. Indonesia: Selected Economic Data

	Money Stock (Bill. of Rp.)	Total Time Deposits (Bill. of Rp.)	Time Deposits of State Banks (Bill. of Rp.)	Cost of Living: Djakarta Sept. '66=100	Interest Rate on One- Year Time Deposits	Date on which Change Effective
<u>1965</u>						
December	2.6			18	2%/mo	Apr. 1, 1964
<u>1966</u>						
January	3.3			28		
February	4.5			34		
March	5.6	0.1	n.a.	44		
April	6.9			48		
May	9.2			51		
June	10.5	0.2	n.a.	69		
July	11.3			74		
August	13.4			87		
September	15.1	0.3	n.a.	100		
October	16.3			119		
November	17.8			129		
December	22.2	0.5	n.a.	133		
<u>1967</u>						
January	22.6			145		
February	23.2			174		
March	24.2	0.7	n.a.	180		
April	26.6			191	3%/mo	April 16
May	30.3			191		
June	32.4	1.3	n.a.	187		
July	36.3			190	2%/mo	July 1
August	38.5			201		
September	39.0	2.0	n.a.	222		
October	42.8			237		
November	45.3			287		
December	51.5	2.7	n.a.	283		
<u>1968</u>						
January	57.0			395		
February	61.8			432		
March	62.8	3.7	n.a.	445		

Table 3 (continued)

	Money Stock (Bill. of Rp.)	Total Time Deposits (Bill. of Rp.)	Time Deposits of State Banks (Bill. of Rp.)	Cost of Living: Djakarta Sept. '66=100	Interest Rate on One- Year Time Deposits	Date on which Change Effective
<u>1969</u>						
April	70.1			419		
May	79.2			449		
June	85.9	5.0	n.a.	455		
July	90.7			475		
August	89.7			492		
September	94.8	8.0	0.5	493		
October	102.4	9.7	1.3	487	6%/mo	October 1
November	103.4	10.2	3.1	505		
December	113.9	12.1	4.5	523		
<u>1970</u>						
January	114.9	14.6	6.8	535		
February	120.7	20.1	10.4	543		
March	130.9	27.0	16.4	555	5%/mo	March 17
April	133.9	33.0	21.6	532		
May	137.7	36.0	23.8	529	4%/mo	May 1
June	146.4	37.6	24.5	521		
July	153.6	39.2	25.9	531	3%/mo	July 10
August	166.4	42.3	27.8	547		
September	169.5	45.6	29.8	545	2.5%/mo	Sept. 15
October	173.0	44.9	31.1	558		
November	177.3	45.2	31.7	564		
December	180.0	47.1	33.6	575		
<u>1970</u>						
January	183.7	49.8	34.2	617	2%/mo	Jan. 1
February	191.4	50.8	34.6	617		
March	210.7	51.5	34.8	614		
April	209.2	53.0	34.3	605		
May	214.9	53.8	34.6	606		
June	216.4	55.5	36.5	611		
July	221.9	57.0	36.6	613		
August	222.7	57.7	38.2	611		
September	224.2	60.5	40.6	600		
October	227.7	64.4	45.8	599		
November	244.6	68.6	47.8	622		
December	240.2	69.7	50.4	626		

Table 3 (continued)

	Money Stock (Bill. of Rp.)	Total Time Deposits (Bill. of Rp.)	Time Deposits of State Banks (Bill. of Rp.)	Cost of Living: Jakarta Sept. '66=100	Interest Rate on One- Year Time Deposits	Date on which Change Effective
<u>1971</u>						
January	249.6	74.2	51.4	644		
February	252.9	77.9	55.7	661		
March	n.a.	n.a.	58.6	662		
April	n.a.	n.a.	63.4	653		
May	n.a.	n.a.	69.3	638		

Source: Monthly Statistical Bulletin, Central Bureau of Statistics, Govt. of Indonesia, Jakarta, May 1971 and earlier issues.

With regard to the last provision, the central bank paid a cash subsidy amounting to one-third of the interest payments due on the 6- and 12-month deposits from October 1, 1968, to March 16, 1969. Between March 17 and April 30, 1969, the subsidy paid was reduced to 20 per cent of the interest paid on 12-month deposits. Effective May 1, 1969, the subsidy was discontinued for any new time deposits. During this seven-month period, the Bank Indonesia (i.e. the central bank) reportedly paid out about Rp. 2 billion in subsidies.

The new deposit rates were quite attractive to savers, particularly since the lower rate of increase in consumer prices during March-September of 1968 created expectations of a highly remunerative rate of return on time deposits. This stability came after a 53 per cent increase in the cost of living index between December 1967 and February of 1968. Calculated at a simple annual rate, the 12-month time deposits in October of 1968 yielded 72 per cent and the 6-month time deposits 60 per cent. The cost of living index, on the other hand, increased at an annual rate of only 24 per cent (seasonally unadjusted) during March-September of 1968.

As a result of the new policy of higher interest rates, there was an immediate and sharp increase in the outstanding level of time deposits of the state banks.^{1/} From a level of about Rp. 0.5 billion at the end of September 1968, they more than tripled in October, and continued to rise rapidly through April of 1969 when they reached Rp. 21.6 billion. (See Table 3 for additional details.) Some idea of the increasing relative importance of these deposits is indicated by the fact that between September 1968 and April 1969 the proportion of the state banks' time deposits to total money stock increased from 0.5 per cent to 16 per cent. Chart 3 also indicates that state bank time deposits rose sharply after the October 1968 interest rate reform.

The percentage gain in the time deposits of the other banks (i.e. the non-state banks) after the October reform was substantially below that of the state banks. Their deposits, in absolute terms, remained stable through the end of 1968 and then began to increase. At the end of May 1969, the deposits of the non-state banks were 63 per cent higher than at the end of September 1968.

^{1/} Not all financial institutions introduced the new higher deposit rates in October of 1968. Those that did included mainly the six state banks.

There are several reasons why these banks did not experience more of a gain in deposits. For one thing, the foreign branch banks were prohibited from accepting savings deposits. In addition, there was not a uniform change in the interest rate paid by the private indigenous banks on time deposits. Some increased their rates while others delayed. Furthermore, depositors in the private banks did not have the central bank guarantee of payment on maturity, and the private banks did not receive an interest rate subsidy from the central bank.

Mainly for these reasons, the acceleration in the rate of increase in total time deposits after the October reform was less than in the case of the state banks' time deposits. However, the change was not insignificant. In the year ending in September 1968, total time deposits increased 300 per cent, but in the eight months^{1/} following the reform, the seasonally unadjusted annual rate of increase was 450 per cent.

Although state bank loan rates were also adjusted upward in October 1968, the change was much less dramatic than the change for the deposit rates. On October 1, 1968, the range of state bank lending rates was increased from 3 to 5 per cent a month, to 3 to 7 per cent a month. As a result of this change, a substantial amount of lending was shifted from a rate of 3 per cent a month to 4 per cent a month.

As the rate of inflation abated during 1969, the authorities concluded that the state banks' time deposit rates could safely be lowered since the rate of return on deposits would still be substantially in excess of the rate of inflation. Between March 17, 1969, and January 1, 1970, the central bank lowered the maximum rates paid on time deposits five times. (See Table 3 for details.) By January 1, 1970, the rate for 12-month time deposits had been lowered to 2 per cent a month, the same level that prevailed prior to the October 1968 reform in the deposit rates.

^{1/} The eight-month period has been selected because after the March and May reductions in the time deposit rate there was a substantial deceleration in the rate of growth of time deposits.

As indicated in Chart 3, the rate of increase in the time deposits of the state banks began to slow substantially as the deposit rates were lowered. During the February-May period of 1970 there was no net gain in the outstanding level of the state banks' time deposits. Beginning in June, however, time deposits began to increase again moderately, and then to rise more sharply after August 1970. This upward movement during the latter half of 1970 was undoubtedly influenced by the fact that through October the cost of living index continued to remain at levels moderately below those in January-February of 1970, thus ensuring a real rate of return on time deposits of at least 24 per cent a year exclusive of compounded interest.

It is interesting to note that while a large part of the increase in the state banks' deposits in the fourth quarter of 1968 resulted from a shift of demand deposits into time deposits, most of the rise in time deposits in 1969-70 reflected the deposit of currency, rather than a shift out of demand deposits or the deposit of interest earned on time deposits. In addition, about 60 per cent of the new time deposits were made by individuals. Non-bank businesses accounted for about 15 per cent of the deposits, banks for 10 per cent, non-profit entities for 8 per cent, and insurance companies and others for the remaining 7 per cent.

Conclusions--On the basis of Indonesia's experience with a positive interest rate policy since October 1968, it would appear that at least three conclusions can be drawn: (1) the new, higher deposit rates were successful in mobilizing a substantial volume of savings; (2) the increase in time deposits helped to slow the rate of increase in the stock of money and hence to reduce inflationary pressures; and (3) as deposit rates were reduced, there was a significant slowing in the rate of increase of time deposits.

With regard to the first conclusion, it is quite clear from the data cited earlier that the October 1968 change in deposit rates was highly successful in rapidly expanding the volume of time deposits in the state banks. Whereas the authorities had originally expected a Rp. 15 billion gain in time deposits by December of 1969, a Rp. 21 billion gain had already been achieved by April 1969. Since the state banks were the ones that primarily offered the new high deposit rates, they were also the ones that experienced the largest gains in their time deposits.

Indonesia's experience has helped to show again that in a less developed country, savers are quite sensitive to changes in deposit rates.^{1/}

The deposit reform also helped to slow the rate of monetary expansion. In the 12 months ending in September of 1968, the stock of money rose 143 per cent (from Rp. 39.0 billion to Rp. 94.8 billion), but in the 12 months ending in September of 1969, money stock increased at roughly half that rate or 79 per cent. As indicated in Chart 3, there has generally been a slowing in the rate of expansion of the money stock since the October 1968 interest rate reforms. In February of 1971, money stock was up 32 per cent over the level a year earlier. This slowing in the rate of monetary expansion has helped to reduce inflationary pressures since proportionately less money has been created in relation to the output of goods and services. The mobilization of a substantial volume of time deposits has also helped to reduce the state banks' dependence on the central bank as a source of funds--such financing, of course, being highly inflationary. It must be recognized, however, that other factors besides the interest rate reform, such as the reduced budget deficit and a heavy volume of foreign aid, also played an important role in reducing inflationary pressures in Indonesia.

A third conclusion is that changes in time deposit rates in 1968-70 had a significant impact on the rate of accumulation of time deposits. Chart 3 shows the sharp rise in time deposits of the state banks during the period of the new high interest rates after October of 1968. With the fairly steady and frequent reduction in the deposit rates five times between March 1969 and January 1970, Chart 3 also shows a marked slowing in the rate of increase of the state banks' time deposits. These reductions, of course, decreased the real rate of return on the deposits, despite the slowing in the rate of inflation. The upturn in time deposits in the last half of 1970 appears to have resulted from two main factors: (1) the decline in the cost of living index during March-October of 1970; and (2) the continued maintenance

^{1/} A similar conclusion was reached by David Cole, a foreign economic adviser of the Indonesian Government. "Perhaps the most important effect of the introduction of high deposit rates is that it has demonstrated that the banks can attract funds if they pay a high enough price..." David Cole, "New Directions for the Banking System," Bulletin of Indonesian Economic Studies, Australian National Un. Press, Canberra, July 1969, p. 63.

of the 2 per cent per month rate on 12-month time deposits. Both of the factors, of course, had the effect of increasing the attractiveness of the time deposits.

G. Vietnam's Interest Rate Reform

Brief mention should also be made of the series of interest rate reforms in Vietnam. Over a period of 13 months in 1969-70, the interest rates paid by commercial banks on time deposits were increased three times. The rate on one-year time deposits, for example, was increased from 4 per cent^{1/} to 3 per cent on August 1, 1969, and then to 12 per cent on March 1, 1970, and then to 20 per cent on September 14, 1970. Although there was a 69 per cent increase in the level of outstanding time deposits between the end of August 1970 and the end of April 1971, it is doubtful whether the Vietnamese reform will be very successful. This is primarily because the rate of inflation--at least through early 1971--was still higher than the 20 per cent rate of return on one-year deposits. In addition, part of the increase since August reflects the impact of new higher advance import deposit requirements, as well as a seasonal upswing in time deposits in the latter part of the year.

H. Suggested Guidelines for an Effective Reform

As indicated earlier, the basic problem in improving savings mobilization in many LDCs is that holders of financial assets receive low or negative rates of return on their assets, especially time and savings deposits. One of the major reasons for this undesirable state of affairs is that the level of loan rates is fixed by regulation or mutual agreement at unrealistically low levels. This means that there is very little upward flexibility of deposit rates to insure that they provide a real rate of return, i.e. a nominal rate of return higher than the rate of inflation. A second major reason is that deposit rates often become negative as a result of a high rate of inflation caused by a very expansionary fiscal and/or monetary policy, especially when there is little or no upward adjustment of deposit rates.

^{1/} The 4 per cent rate was actually for six-month time deposits. Nine-month and one-year time deposits were not introduced until August 1, 1969.

In order to undertake an effective reform to remedy this situation, several basic changes must be implemented. The prime objective of the reform, of course, is to establish an interest rate on time and savings deposits that is substantially positive.

In principle, the best approach for an effective interest rate reform would be to remove all restraints or ceilings on interest rates and to allow the level of the loan rates to be determined by free market forces. Since it is primarily the loan rate which determines how much can safely be paid on deposits without threatening a financial institution's solvency, the loan rate should be the independent variable and the deposit rate the dependent variable, rather than vice-versa.

In the real world, however, this "best approach" is rarely feasible or practical. This is primarily because while higher deposit rates are popular (especially with the more numerous depositors), higher loan rates are unpopular. Consequently, a first step, from a practical point of view, would be to adjust upward the deposit rates. Ideally, this upward adjustment should be made by all bank and non-bank financial institutions since a narrowly-based reform is less likely to be successful in mobilizing savings. Then, as conditions permit, the loan rates should also be adjusted to realistic levels. Eventually, the differential between the loan and deposit rates--which will be influenced strongly by competitive conditions--should be large enough to cover adequately the cost of operations including the risk factor, and to provide a reasonable surplus for increasing the institution's capital as the institution grows.

The third step relates to the maturity of the time and savings deposits of the institutions. Where a country is confronted with a high rate of inflation, the institution should stress short-term maturities, but offer somewhat higher interest rates on the longer maturities than the shorter maturities. As the rate of inflation is reduced to a more moderate pace, the institution should move from one-month, three-month or six-month maturities to stressing longer maturities--such as for one year, or even up to as long as five years. In short, the institution should offer a fairly wide and attractive range of maturities so as to attract a maximum of savings.

It cannot be too heavily stressed that the degree of inflation does not prevent or hinder the implementation of an effective reform of the interest rate structure--so long as the rates on time

and savings deposits are substantially positive. The effectiveness of the reform would, of course, tend to be strengthened if it is accompanied by appropriate monetary and fiscal measures to reduce inflationary pressures. As the rate of inflation abates, market conditions will foster a reduction in the level of both loan and deposit rates, and a stretch-out in the length of deposit maturities.

Some countries have had their central banks reimburse the various financial institutions for all or part of the interest paid on deposits which the institutions could not readily utilize in their lending and investing activities. This was done in the case of Taiwan and Indonesia.

I. Conclusion

There are now signs that a few LDC governments are beginning to view interest rate policy as one of their major discretionary policy variables--along with monetary and fiscal policy--in their efforts to stimulate economic growth and--when appropriate--to reduce inflationary pressures. This change in attitude has been caused in part by the experience of Taiwan, Korea, and Indonesia following the introduction of a substantial change in the interest rate structure, particularly for time and savings deposits. The experience of these three countries has shown quite clearly that if depositors are offered interest rates that are substantially positive, they will respond, with the result that there will be a sharp increase in the volume of time and savings deposits.

In many less developed countries, unfortunately there is still a strong skepticism regarding the efficacy of positive interest rates in mobilizing savings. Much of this skepticism would likely vanish if the government and financial leaders of these countries would study carefully the experience of Taiwan, Korea, and Indonesia. Since one of the key problems of the coming decades is likely to be that of mobilizing an adequate amount of savings to finance non-inflationary economic development, a realistic interest rate policy is likely to be of prime importance in helping to solve this problem.

Government and financial leaders are not justified in expecting significant results from an interest rate reform if the deposit rates continue to remain negative after the reform. The efficacy of the reform is predicated on the introduction of positive rates of interest on deposits at more than a token level. Even after the 1970 interest rate adjustments in Vietnam, depositors still tended to receive negative rates of interest for five or six months and this factor partly explains why the results of the reform are likely to be less impressive than in Taiwan, Korea, and Indonesia.

One final point is that even if a less developed country does not have a serious inflationary problem, the introduction of a realistic interest rate policy should be very helpful both in increasing the rate of saving and in channeling a larger proportion of savings to the organized financial institutions where the funds will be put to more productive and efficient use.