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CONSIDERATIONS FOR CHANGING THE INTEREST RATE POLICY

by

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CONSIDERATIONS FOR CHANGING THE INTEREST RATE POLICY

There is an on-going deliberation led by representatives from the monetary and planning agencies to change the interest rate policy. This paper tries to enumerate the issues on the interest rate policy followed in the Philippines especially in the light of the inflationary situation and the developments in the financial system and to analyze the possible impact of changing such policy. It may not be redundant to restate what the Philippine interest rate policy is, so that section 1 will provide a brief description of the interest rate policy. Ultimately arguments for changing the interest rate policy will be made consisting essentially of an analysis of the effects of changing the policy to one that relies more on market forces in the capital market.

The writer begs the indulgence of the reader for having to rehash many points that have been discussed in earlier papers. But it is felt that the effects of changing the interest rate policy in the Philippines have to be analyzed within the context of the ^{ing}existence system.

1. Interest Rate Policy in the Philippines

The Philippine government might be said to be following a low interest rate policy in general and preferential rates for some sectors. The major control instruments used to achieve this policy

are as follows:

- 1). Adherence to the anti-usury law of 1906 which limits nominal loan rates to 12% per year for secured loans and 14% per year for unsecured loans. These interest ceilings have prevailed during periods of stable prices and high rates of inflation.
- 2). Specifying a ceiling on interest rates for bank deposits that are found to be lower than the market rate for competing instruments.
- 3). Financing rates of interest on long and intermediate government securities at rates way below rates on equivalent commercial instruments.
- 4). Grants of favorable discount rates to rural banks with the notion that their credit would be channelled to favored borrowers - small rural producers.
- 5). Control of the level and cost of credit through government and government-assisted banking institutions. Lending rates in these institutions have been set lower than rates in most private institutions.

This set of instruments results in a structure of interest rates in the capital market which could probably be considered as highly distorting to the supply and demand for funds and their allocation to spending units.

✓ A ceiling on time and saving deposit rates is set at what might be considered unreasonably low rates, currently 7% for time deposits and 6% for saving deposit. In contrast the rates on what the Central Bank calls deposit substitutes have been fluctuating within 6 - 12 per cent over the past three years. The rates on other substitutes of which we have information are given in Table 1.

From this table we notice two things. First, there is a wide difference between the rates on time and savings deposit and

①

Table 1

RATES ON 30-DAY COMMERCIAL PAPER,
1972-74

Year: 1972

Month Date Rates
(in % interest)

June 23 14.625
26 16.625
27 18.5
28 19.0
29 17.5
30 17.0

Monthly average* 17.21

July 4 16.0
7 13.0
11 12.75
13 12.3
14 12.0
18 16.0
19 18.0
21 18.0
25 19.0
26 20.0
27 21.0
28 21.0
29 21.0

Monthly average 18.65

August 10 20.0
11 22.0
16 22.0
17 22.0
18 22.0
22 18.0
23 18.0
24 15.25
25 14.0
30 13.0

Monthly average 18.83

Sept. 1 13.0
2 14.0
5 13.5
6 14.0
7 12.0
8 12.0
12 10.5
13 10.5
14 11.5
18 14.0
19 14.25
20 14.75

Month Date Rates
(in % interest)

Sept. 21 12.5
22 14.5
Monthly average 12.93

Oct. 9 14.5
10 14.95
11 14.75
12 14.25
13 14.5
16 14.75
18 14.75
19 14.75
23 14.75
25 15.75
26 15.5
30 15.75
Monthly average 14.91

Nov. 3 16.0
7 16.0
15 16.0
16 16.0
17 16.25
20 16.5
23 16.25
24 15.5
27 15.0
28 15.0
29 15.0
30 15.0
Monthly average 15.69

Dec. 4 14.0
5 13.5
6 13.5
7 13.75
8 13.25
11 13.25
12 13.5
13 13.25
14 12.75
15 12.75
18 12.75
19 12.5
20 12.75
21 12.25
26 11.5
27 11.5
28 12.0
Monthly average 12.87

*Arithmetic average

Con't. Table 1

Year: 1973

Month	Date	Rate (in %)	Month	Date	Rate (in %)
February	26	9.5	May	2	11.0
	27	10.5		4	12.75
	28	11.0		7	12.5
March	1	11.0		8	17.0
	2	12.0		9	11.5
	5	11.75		10	11.25
	6	12.0		11	11.5
	7	11.25		15	11.25
	8	11.0		17	10.25
	9	9.5		21	10.25
	12	9.5		22	11.0
	13	8.5		25	11.0
	14	8.5		28	10.5
	15	9.0		29	10.9
	16	8.5		30	10.0
	19	9.25		31	10.0
	20	8.75	Monthly average		11.05
	21	8.0			
	23	8.0	June	1	10.0
	26	9.0		4	10.0
	27	9.0		6	9.5
	28	8.75		11	6.25
	29	9.25		13	6.75
	30	9.25		14	7.5
Monthly average		9.7		15	8.25
				18	8.25
April	2	10.0		19	8.75
	3	10.5		21	9.5
	4	10.0		22	9.75
	5	9.5		25	8.25
	6	9.5		26	8.25
	10	10.0		27	8.25
	11	12.0		29	8.5
	12	13.0	Monthly average		8.5
	13	14.75			
	16	14.75	July	3	8.5
	17	14.0		5	7.75
	23	12.0		6	8.25
	24	11.5		9	8.25
	25	10.5		10	7.5
	26	10.0		11	7.5
	27	10.0		12	7.5
	30	10.5		13	7.5
Monthly average		11.32		16	7.5

Con't. Table 1

Month	Date	Rate (in %)	Month	Date	Rate (in %)
July	16	7.5	October	9	5.75
	17	7.5		10	5.75
	18	7.5		11	6.0
	19	7.75		12	5.75
	23	8.5		15	6.0
	25	7.5		16	5.95
	26	7.0		17	6.0
	30	7.0		19	7.25
	31	7.0		22	6.5
Monthly average		7.65		23	7.25
August	1	7.0		25	7.25
	2	6.625		26	6.75
	6	6.375		29	6.75
	7	6.375		30	6.75
	8	6.625		31	7.25
	9	6.5	Monthly average		6.86
	14	6.5	November	6	7.5
	15	7.0		7	7.25
	16	7.0		8	6.75
	17	6.5		9	6.5
	20	6.5		13	9.0
	22	6.5		14	9.5
	23	4.0		15	11.5
	24	6.5		16	10.5
	28	7.0		19	10.25
	31	7.25		20	10.25
Monthly average		6.51		21	10.25
September	3	7.25		22	10.25
	4	7.25		23	8.5
	6	6.25		26	9.0
	7	6.25		28	9.25
	10	6.25		29	9.0
	11	6.25	Monthly average		9.08
	12	6.25	December	3	10.25
	14	6.75		4	11.25
	17	6.75		5	10.25
	18	6.5		6	11.0
	19	5.5		7	11.25
	20	5.5		10	11.5
	24	5.5		11	13.0
	25	5.75		12	13.75
	26	5.75		13	13.75
Monthly average		6.25		14	13.25
October	2	6.25		17	14.25
	3	6.25		18	14.5
	4	6.25		19	14.5
	5	5.75		20	14.5
	8	5.75		21	15.25
				26	15.25
				27	15.25
				28	15.25
			Monthly average		13.21

Year: 1974

Month	Date	Rate (in %)	
January	2	14.0	
	3	11.5	
	7	8.75	
	8	10.0	
	9	10.0	
	10	10.0	
	11	10.0	
	14	10.0	
	15	11.0	
	16	12.0	
	17	14.5	
	18	15.25	
	21	14.5	
	22	14.0	
	23	13.5	
	24	13.5	
	25	13.5	
	29	12.5	
	30	13.5	
Monthly average			12.24
February	1	13.75	
	4	13.5	
	5	14.0	
	6	14.5	
	7	14.5	
	8	13.75	
	11	14.0	
	12	14.0	
	13	13.0	
	14	13.0	
	15	11.0	
	18	13.0	
	20	13.0	
	21	8.0	
	25	8.0	
	26	8.0	
	27	8.0	
	28	8.0	
Monthly average			11.94
March	1	8.0	
	4	10.0	
	5	8.5	
	6	9.5	
	7	10.0	
	8	8.0	

Month	Date	Rate (in %)	
March	20	13.5	
	21	13.0	
	22	13.5	
	25	12.5	
	27	14.5	
	28	13.5	
	29	13.5	
Monthly average			11.65
April	1	13.0	
	2	12.5	
	3	12.0	
	4	12.0	
	5	12.0	
	8	12.0	
	15	12.5	
	16	12.5	
	17	13.5	
	18	13.5	
	19	13.5	
	22	13.5	
	24	13.5	
	25	-	
Mont	26	13.5	
	29	13.5	
Monthly average			12.87
May	2	14.5	
	7	14.25	
	9	14.0	
	10	14.0	
	14	14.0	
	15	14.0	
	16	14.0	
	17	14.0	
	20	14.0	
	21	13.5	
	22	13.0	
	23	14.0	
	24	14.0	
	28	14.5	
Monthly average	29	14.5	
	30	14.5	
			14.05
June	3	14.5	
	4	14.5	
	5	14.5	

those on other papers. Second, we also notice that the lowest rates reached by the other papers were always above the deposit ceiling set by the Central Bank. [This wide difference may be taken as an evidence of the unreasonableness of the ceiling rates placed on bank deposits.] It is true that the deposit substitutes are in larger denominations and some savers may not be able or may not want to place so much in deposit. On the other hand, savings and time deposits entail small risk. There is no risk of default up to P10,000 since each depositor is insured up to this amount. Also deposit rates do not fluctuate as widely as those of other instruments. Normally, the rate differential should not be as wide as has been observed.

Banks and other financial institutions have responded to the interest control in the expected direction. In order that banks and other institution could attract funds, they would have to offer non-deposit instruments that could pay higher rates. Evidence for such a tendency could be found in the growing volume and variety of substitutes to saving and time deposits, including placements of large denominations under varied terms observed over recent years. Such a response is very similar to that experienced in Brazil, which unfortunately adopted the same interest policy. There the bills market dominated the market for short-term supply of funds.

Equity considerations were put forward as a criticism of this policy because small savers who cannot buy assets of bigger denominations are discriminated against. In the writer's opinion, this is not as important consideration as the distortions resulting from

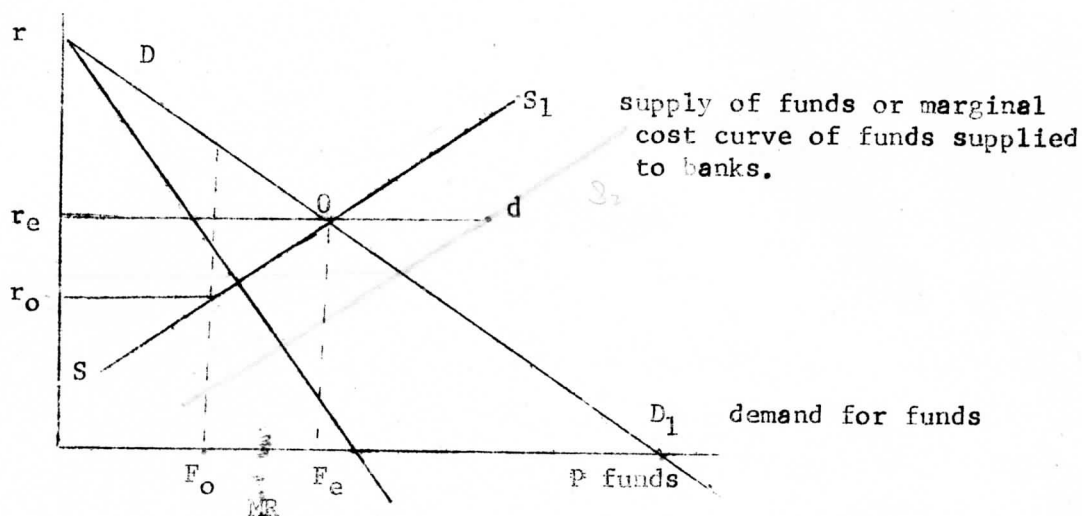
the policy. Time and savings deposits can be of any amount whereas bills are in P100 denominations at least, and placements in banks require minimum amounts that may run to thousands. There is a lot of truth to this contention but as was pointed out, the discrimination is not against families in the lowest income brackets but against small savers probably in the middle income brackets.

Mc Kinnon [1] points to an important impact of such interest policy in developing economies which are still characterized by duality. A modern financial market exists, but only in the major centers of the country. In the rest of the economy only banks exist. This fact means that mainly bank time and savings deposits are accessible to savers in rural areas and towns. When the rate of interest on these assets are set too low, rural savings will tend to be drawn to other available alternatives. These could be physical assets including inventory of crops, jewelry and consumer durables, or cash hoarding. Moreover, big rural savers may find it worthwhile to bring their savings to the city if provincial banks do not offer attractive deposit substitutes. Most provincial banks are public or publicly-supported banks which are not known for entrepreneurship. As public banks ^{they} tend to take their role as dictated by policy and follow regulations more strictly. They will therefore tend to offer deposits as the major issue and pay the regulated rates. Hence we could expect some direction of funds from provincial to city financial market.

What we have discussed were the negative effects of the

ceiling on time and saving deposits. To be fair we should state the positive aspects. It would seem, however, that these are limited to advantages accruing to banks as a result of the interest rate policy.

Chart 1 helps illustrate this statement.



It is not unreasonable to assume that the existing interest rate ceiling on deposits, r_o is below the equilibrium rate, r_e . We may visualize the demand curve to be either DD_1 or $r_e d$ and the supply curve SS_1 . At r_o , forthcoming deposits is F_o . Whichever it may be, banks are given monopoly profits. The average rate of profits approximates the margin between the loan rate and the deposit ceiling rate. The ceiling rate in effect provides a barrier to reaching the optimal point where marginal cost is equal to the marginal return to the fund, that is point O.

2. Policy on Lending Rates

① Financial intermediaries provide credit in various ways. They may lend directly to spending units or they may buy commercial bills, bonds, or equities for their own portfolios and for the portfolios of their customers. Bills and bonds are issued at any rate of interest, but direct loans are covered by the Anti-Usury Law ceiling. Though loans fall under the interest regulation there are ways of concealing high interest charges. The effective loan rate in private banks is known to be 15 or 16 per cent per year in recent years. A common practice of concealing high rates is to impose service charges. Another strategy is to reduce the effective principal from the principal stated in the loan agreement. It is said that this is done in the Philippines by deducting the interest charges when the loan is given instead of at maturity, or that part of the loan is not immediately released but is redeposited in the creditor bank.

These strategies would be a normal offshoot of a low interest ceiling. However, there are public and publicly-supported financial institutions that have to adhere to the letters of the law. Hence we obtain an institutionally determined rate structure - the rate of interest of freely-marketed forms of credit such as bills and bonds, the loan rate in private banks and investment houses, and the loan rate in public financial institutions.

In this market borrowers would tend to go first to public institutions where the rate is lower. Naturally not all loan applicants could be accommodated. Such excess number of applicants raises the processing cost per loan granted. It may as well invite corruption.

Another effect of the loan rate ceiling is to bar small and provincial borrowers from the credit services of the organized sector. ✓
Small credit is too costly to obtain through issues of either equities, bills or bonds. As in the case of small savers, small borrowery could be most efficiently serviced by banks. Yet banks may refuse them credit at the current ceiling rates. It is known that the per peso intermediation cost of small loans is higher than of big loans. Small loans have greater degree of uncertainty because small borrowers are less known to the creditor. And since the fixed cost of processing each applicant will be spread over a smaller loan, the per peso cost of obtaining information is consequently higher. Thus when we impose a loan rate ceiling, there is no way but to bar the small borrowers from bank credit. Unfortunately, bank credit is the main if not the only organized credit available to small borrowers especially in the provincial areas. Other financial intermediaries which could charge higher rates are accessible to big borrowers only and are usually geographically distant from small borrowers.

In this discussion, we have shown the effect on the supply and allocation of credit of the low interest rate policy and the credit incentives given through public financial intermediaries. If we are to free the system by removing all interest rate controls on deposit rate and on loan rate, what would be the short and long-run effects? Would the average rate of interest increase as an immediate consequence? What would be the impact on inflation?

✓ The first effect would be to make banks more competitive with ✓

each other, with other financial institutions and with the unorganized capital market. In the provinces, ⁽²⁾ banks could be expected to attract more funds from money hoarded, from a reduction of inventories, from more economical use of cash, and from investments in some non-productive investments such as jewelry. As rates on loans are freed, ⁽³⁾ banks will be able to lend at higher rates and thereby accommodate loan applications that are more risky and more costly to process. This would ⁽⁴⁾ increase institutionalized credit and decrease the volume of activity in the unorganized sector. As banks increase in size, ⁽⁵⁾ intermediation cost diminishes partly due to the reduction in risk as they are able to diversify their portfolio and partly due to economies in bank operation. The flow of credit from rural to urban sectors will no longer be encouraged by artificially imposed interest differential. Loan rate may not necessarily rise.

The effect of freeing the rate of interest will not be as clear in the advanced sector of the economy. We could expect greater competition between banks and non-bank financial intermediaries. Banks may have to raise the deposit rates to make deposits attractive alternatives to commercial and other short-term bills. In fact banks could raise their deposit rate by the equivalent sales ~~tax~~ they currently pay to the Central Bank without diminishing their profitability. At higher deposit rates, they will be able to attract more funds from households.

As we know there is no direct control over non-bank intermediaries. They can borrow and lend funds at the market rate in the form of bills, bonds, direct placement, etc.. How would the over all market be affected

by bank competitiveness? The interest rate differential between instruments issued by banks and non-bank intermediaries will be narrowed down. Supply and demand for each particular type of financial asset will determine its market rate. The rates on close substitutes will tend to equalize. With a more integrated market the wide fluctuations in short-run rates might be avoided as there would be a larger volume of funds to meet special liquidity needs in the market.

What would be the effect on loan rates and in over-all lending rates? The immediate effect is not predictable. As banks are able to offer higher deposit rates, its loanable funds are likely to increase. While loan rates fall under the Anti-Usury regulation of 12-14 per cent ceilings, it is known that the effective nominal loan rates in some private banks is about 16 per cent. This rate is obtained by taking the 12 per cent ceiling rate on an effective principal, which is smaller than the principal stated in the agreement, plus service charges. An increase in the supply of funds to private banks, assuming everything else equal, would tend to reduce the loan rate. The supply of funds will shift to the right in public banks. If the ceiling on deposit rates are freed. Given the same demand curve, the new rate can remain as low as the present level of 12 per cent; it could be higher or lower. With funds flowing more freely between public and private banks, the new equilibrium rate could be anywhere around the present ceiling of 12 per cent. It cannot be higher than the going rate in private banks since this is the equilibrium rate with a smaller supply of funds. It could very well happen that the lending

rate of banks be closer to 12 per cent than to 16 per cent. Here it is shown that the lending rate need not necessarily rise as interest rate controls are removed, provided that they are removed as a whole.

To summarize, removing the existing set of controls on the interest rate would tend to result in the following:

- 1). It would improve the efficiency of the allocation of funds to spending units, be they small or large, or whether they be in the provinces or in the cities.
- 2). High-risk and small borrowers could be accommodated by the organized financial houses, banks in particular. The cost of lending to these borrowers is necessarily higher per peso loans. Naturally, these borrowers will not be accommodated by banks if the rate of interest allowable will not cover the cost of lending.
- 3). The organized financial sector will tend to expand as controls are removed. They can offer more attractive rates to suppliers of funds. Provincial banks will be especially favored since they dominate the financial market in the provinces. They will be in stronger competitive position for assets held in non-financial alternatives of households. The flow of savings to urban centers will be diminished as provincial banks are able to offer higher rates.
- 4). As the financial system develops, the cost of intermediation is likely to go down. Risk is reduced with portfolio diversification that is made possible by a more developed organized market. Operational cost may also go down with larger scale of operation, and processing cost in public banks will diminish as loan application are redirected to other institutions.
- 5). It is not clear how the overall lending rate of interest will behave. It is as likely that there will be no immediate rise in interest rate as that it will go up.

3. Inflation and the Rate of Interest

Freeing the rate of interest would most likely result in higher deposit rates which would be in line with rates on other short-term

financial assets. It may or may not raise the loan rate beyond the Anti-Usury rate ceilings. Assuming that both deposit rate and lending rate to investors increase, what would be the effect on inflation?

It has been argued earlier that a higher deposit rate would tend to attract more funds into the banking system. In the developed financial assets to deposits, Households would tend to economize the use of cash, decrease their holding of inventory and other physical assets, place more of their assets into deposits. Consequently, demand for commodities decreases, thus tempering inflationary pressure. In Table 2 we find evidence of "flight" from money and saving and time deposit during the past years of inflation as shown by the substantial decline in $\frac{M_2}{GNP}$ ratio. If deposit rates were higher, such a decline might have been prevented, or at least diminished.

An increase in the loan rate is also likely to dampen inflationary pressure. Assuming investment demand to be interest-elastic, an increase in the rate of interest would decrease the level of investment and therefore decrease demand. This same tendency would be true as far as consumer credit is concerned. The reduction in the level of investment might also involve the adoption of more labor intensive techniques in production. As we know the movement of wage rates in the Philippines has lagged very much behind that of prices including prices of capital goods. There would, therefore, be less cost-push pressure from using a labor-intensive technique than from using a capital-intensive technique.

We have given some arguments for departing from the interest rate policy that the country has followed for the past two or more decades. We

have shown the discriminatory effect of the interest rate control against small and provincial savers and borrowers. High risk - small loans which are necessarily more costly to provide tended to be excluded from bank portfolios. Such equity considerations are important but it is felt that the major ones are the distortions in the supply and allocation of funds in the whole financial market arising from the interest policy.

(The cost to the economy is not easy to estimate. What we could say is that there was a tendency to have larger investment in physical capital including larger inventories by business and households, as well as a tendency to hoard and to direct the flow of saving from rural to urban centers where non-deposit financial assets were paid higher rates.)

Interest rate incentives provided by the government through its banks could not guarantee the rationing of their funds to the most productive activities. Excess demand for loans in public institutions meant more application forms to process and therefore higher processing cost per lent. (The other major consideration is the negative effect of the interest ceiling on banking development. At the same time that existing banks are given monopoly power and the power to exercise price discrimination, banking activity as a whole was probably prevented from expanding. Less funds could be attracted to banks and competition was discouraged.)

✓ We could only speculate on the effect of the measures on other financial intermediaries. (Savers in a developing financial market cannot be expected to go immediately into a diversified portfolio of financial assets. They have to be educated as to new alternatives. In the beginning stages, therefore, we would expect savers to place their savings mainly in

bank deposits. In a developing situation, therefore, the role of bank deposits is predominant. They have thus to be made an attractive alternative to physical assets and cash hoardings. As banking habit develops, savers can be gradually introduced to substitutes to bank issues.) Still we should not expect households to move out of bank deposits as the financial market develops. Bank deposits have been observed to remain the dominant financial holdings of households even in advanced countries. This was true in spite of the relatively faster growth of non-bank assets.

✓ The policy to develop the banking system is in the right direction. But the tools used for trying to pursue this objective may be self-defeating in the long-run. We can encourage the first banks to be established through capital assistance, but we cannot encourage the expansion of their activities with our other set of policy controls.

Table 2

Secular Movement of M_1 , M_2 , CPI, GNP, and the Ratios of M_1 /GNP, M_2 /GNP, 1951-1974
(in millions of current pesos)

Year	(1) Currency	(2) Demand Deposits	(3) Savings Deposits	(4) Time Deposits	(5) M_1	(6) M_2	(7) CPI	(8) WPI	(9) GNP	(10) M_1 /GNP	(11) M_2 /GNP	(12) Growth Rate of SD + TD
1951	644.8	515.9	241.5	39.4	1160.7	1441.6		44.8	7071	.164	.203	6.6
1952	629.9	568.5	259.0	40.7	1198.4	1498.1		41.0	7434	.161	.201	25.0
1953	666.5	558.1	304.7	70.0	1224.6	1599.3		40.6	7867	.155	.203	(10.1)
1954	677.0	550.0	266.6	70.2	1227.0	1563.8		38.5	8176	.150	.191	34.0
1955	671.5	665.0	371.0	90.5	1337.3	1788.8		37.5	8801	.151	.203	1.1
1956	720.2	773.0	428.1	97.0	1550.6	2075.7		38.7	9607	.160	.214	(35.4)
1957	783.1	816.9	498.2	115.5	1600.0	2213.7	37.1	40.3	10556	.151	.209	14.9
1958	820.7	919.5	564.3	141.3	1740.1	2445.7	38.0	41.7	11211	.155	.218	16.4
1959	897.3	948.0	638.3	183.4	1845.3	2667.0	37.4	42.3	12188	.151	.218	17.2
1960	952.9	942.9	720.6	242.8	1895.8	2859.2	39.2	44.0	13008	.145	.219	44.1
1961	1049.0	1169.7	907.7	481.9	2219.3	3607.9	40.9	46.2	14209	.156	.253	34.6
1962	1172.9	1331.8	1007.3	863.1	2504.7	4374.1	42.2	48.5	15721	.159	.278	23.6
1963	1363.4	1590.0	1186.9	1125.4	2954.3	5266.6	45.5	53.3	18135	.162	.290	2.9
1964	1324.4	1549.1	1345.0	1035.1	2873.8	5253.9	49.6	55.7	19459	.147	.269	4.5
1965	1483.2	1583.7	1437.4	1051.6	3066.9	5555.9	51.1	57.0	21070	.145	.263	27.3
1966	1543.4	1827.9	1967.8	1202.1	3371.3	6541.2	53.7	59.4	23246	.145	.281	23.7
1967	1755.7	2626.8	2505.9	1416.1	3782.5	7704.5	56.8	61.0	27322	.138	.281	4.5
1968	1777.5	2204.4	2820.9	1280.9	3981.9	8083.7	57.2	62.6	30432	.130	.265	8.6
1969	2119.1	2347.7	3193.6	1261.5	4753.8	9208.9	61.6	63.5	34089	.139	.270	14.1
1970	2410.0	2637.4	3776.6	1309.5	5047.4	10133.5	74.3	78.5	41179	.122	.246	11.7
1971	2650.0	2917.4	4302.8	1381.8	5567.4	11252.0	89.8	90.8	50089	.111	.225	0.4
1972	3434.6	3362.0	4391.3	1316.1	6796.6	12504.0	100.0	100.0	56869	.120	.220	0.36
1973	3452.4	4700.1	6509.1	1257.2	8152.5	15618.8	115.4	133.1	71314	.114	.219	(0.04)
1974	3303.4	4221.4	6237.3	1240.6	7524.8	15002.7	126.3	164.6				

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Chart I. Circular Movement of Prices and Velocity

1.2

1.1

1.0

.90

.80

.70

.60

.50

