

THE PHILIPPINE TREASURY BILL MARKET

By
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INTRODUCTION

This paper aims to examine Treasury Bills – the core of the Philippine money market – both as regards the amount outstanding and the trading activity.

The study was prompted by the fact that very few investigations have focused specifically on the changing role of the Treasury Bill market as a component of the money market. Moreover, there is lack of empirical study on the impact of monetary policy on the Treasury Bill rate, considering that interest rates are important variables in a developing economy, and since the level and structure of interest rates are influenced by the rate on Treasury Bills.

Throughout the investigation, considerable reliance had to be placed primarily on secondary data.

DEFINITION OF THE MONEY MARKET

The *money market* is defined as an organized market for short-term promissory notes of borrowers of high credit rating. The money market in the Philippines is an over-the-wire, negotiated one, where funds are traded by a dealer between borrowers and lenders through telephoned transactions. Personal relations between borrowers and lenders are of negligible importance.

Trading consists of more or less standardized types of credit; for example, call loans and credit instruments, such as commercial papers, acceptances and Treasury Bills, as shown in exhibit I.

DEVELOPMENT OF THE PHILIPPINE MARKET FOR TREASURY BILLS

In 1965, Bancom planned a financial program recommending the launching of a Treasury Bill tender. After this was accepted, Bancom invited specialist expertise from New York to assist in the initiation program. At the same time, Central Bank authorities also solicited the aid of the experts from the Federal Reserve Bank of New York.¹

The Treasury Bill program was launched on 9 May 1966 with the initial offering

¹Wilson, J. G., "The Money Market in the Philippines."

of the 91-day bills. Aside from the 91-day bills, several other series of Treasury Bills were introduced in the succeeding offerings.

At present, auctions are held every Monday of the week. The Secretary of Finance, through the Central Bank, invites public competitive bids for a stated amount of Treasury Bills. The outcome of the offers are published the following day in the newspapers and the Central Bank notifies the bidders of acceptance or rejection of their submitted price bids.

Although the Treasury Bill had its first appearance as early as the start of Central Banking operations in 1949, its present character has been much altered in the sense that the volume, rates and market interplay are now given much emphasis.

Table I on the following page shows that since 1949, the original issues of Treasury Bills never exceeded P30 million from an initial amount of P1 million.

The rate of return on Treasury Bill investments ranged between 1.50 and 2.25% to as high as 5% in 1964.² Likewise, there was no organized dealership network to maintain a continuing market for Treasury Bills.

To provide a secondary market for Treasury Bills and to support the development of the bill market, the NAGSD was formed. It is presently composed of 8 members – 3 of which are investment banks while 5 are commercial banks (please refer to exhibit II). However, only five are really active dealers – Bancor Development Corporation, Far East Bank and Trust Company, Bank of Asia, Consolidated Bank and Trust Company and CCP Securities. The other dealers merely sit on their portfolios and just prefer to take the running yield, mainly because they lack technically skilled bill traders.³

FINANCING DEALERS IN GOVERNMENT SECURITIES

Dealers in government securities borrow from the PNB. However, only members of the NAGSD are extended overdraft lines for a limited period, and up to a margin of P1.5 million for every dealer member. In rendering these credit accommodations, the PNB requires 105% of the amount of the loan as collateral in the form of Treasury Bills. The Trust Department of the PNB also acts as custodian, clearing house, and redemption agent of the dealers.

²Securities Market Department, Central Bank of the Philippines.

³The information was provided by Mr. Fred Colmenar, Chief of the Market Development and Trading Division of the Central Bank. The same information was gathered from Mr. Atilano Piong, Assistant Trust Officer of the Trust Department of the Philippine National Bank (PNB).

TABLE 1
ORIGINAL ISSUES OF TREASURY BILLS
(IN MILLION PESOS)

YEAR	AMOUNT
1949	---
1950	1.0
1951	15.0
1952	16.8
1953	15.0
1954	15.0
1955	15.0
1956	15.0
1957	---
1958	---
1959	---
1960	---
1961	---
1962	---
1963	---
1964	30.0
1965	---

Source: Central Bank of the Philippines.

TABLE 2
CENTRAL BANK AND PNB RATES

CB REDISCOUNT RATE		PNB INTEREST RATE	
DATE	RATE	RATE	DATE
1-10-66	4.75	--	
1-23-67	6.00	6.00	5-23-66
2-27-68	7.50	--	
4-16-69	8.00	8.00	11-19-69
2-21-70 to present	10.00	10.00	9-1-70 to present

Sources: 1) Department of Economic Research, CBP.
2) Trust Department, PNB.

In addition to the assistance given by the PNB, the Central Bank also lends against Treasury Bills only to the members of the NAGSD on the basis of repurchase agreements. This is the cost of borrowing of the commercial banks at the discount window of the Central Bank.

Table 2 indicates that the PNB rate does not necessarily follow the basic rediscount rate of the Central Bank. Even if the PNB rate is lower in some periods, the dealers can only avail of the PNB credit for a limited period, and up to a certain margin.

It has been necessary for the Central Bank to offer repurchase agreements, because Treasury Bill rates have generally been below those being offered by competing instruments. This explains the widespread demand for Treasury Bills as instruments of liquidity. On the basis of repurchase agreements with the Central Bank, a substantial positive carry is possible and the dealers buy the majority of the issues and carry them.

As shown in Figure 1, the rate on the 91-day Treasury Bills has generally been higher than the fixed rediscount rate of the Central Bank. This has enabled the dealers to take up the bill and carry them on repurchase terms.

Aside from directly financing dealers, there are also broad advantages from the use of repurchase agreements. The increased mobility of reserve money removes slack, and, thereby, contributes to responsiveness of the financial system to changes in monetary policies. In addition, by marshalling pockets of surplus liquidity in the economy, repurchase agreements assist in developing a truly national financial market with narrower rate differentials.

The data in table 3 indicates that the dealers have been receiving the bigger proportion of the awards. In 1966, P155 million worth of Treasury Bills was awarded. Of the total, 62.7% went to dealers and 36.6% to other private banks. Insurance companies, private companies and individuals all of which are classified as "others" had 0.7%. In 1969, the dealers accounted for 74.8% of the P639.5 million worth of awards, and the remaining 10.5 and 14.7% went to other private banks and to "others," respectively. It may be pertinent to note that in the same year the insurance companies, private companies and individuals registered a bigger proportion than the other private banks. However, by mid-1970 other private banks had 21.8% and the "others" accounted for only 10.7%. Nevertheless, these figures suggest that potential investors had recently been participating more actively in the biddings.

Despite this improvement in the relative share of the insurance companies, private companies and individuals, the dealers' share had been more than 60% since 1966. This fact may be explained by the temporary financing schemes afforded to the dealers. This pattern of distribution indicates that a small proportion of every

TABLE 3
SUMMARY OF AWARDS BY TYPE OF BIDDERS
(IN THOUSAND PESOS)

YEAR		AMOUNT	PERCENTAGE
1966	16 May to December		
	Commercial Banks and Investment Banks (Dealers)	94,460	62.7
	Other Private Banks	56,809	36.6
	Others	1,178	0.7
	TOTAL	155,047	100.0
1967	January to December		
	Commercial Banks and Investment Banks (Dealers)	255,258	59.4
	Other Private Banks	174,252	40.5
	Others	523	0.1
	TOTAL	430,033	100.0
1968	January to December		
	Commercial Banks and Investment Banks (Dealers)	382,324	63.3
	Other Private Banks	114,523	19.0
	Others	106,684	17.7
	TOTAL	603,531	100.0
1969	January to December		
	Commercial Banks and Investment Banks (Dealers)	478,335	74.8
	Other Private Banks	66,948	10.5
	Others	94,221	14.7
	TOTAL	639,504	100.0
1970	January to June		
	Commercial Banks and Investment Banks (Dealers)	414,940	67.5
	Other Private Banks	133,913	21.8
	Others	65,794	10.7
	TOTAL	614,647	100.0

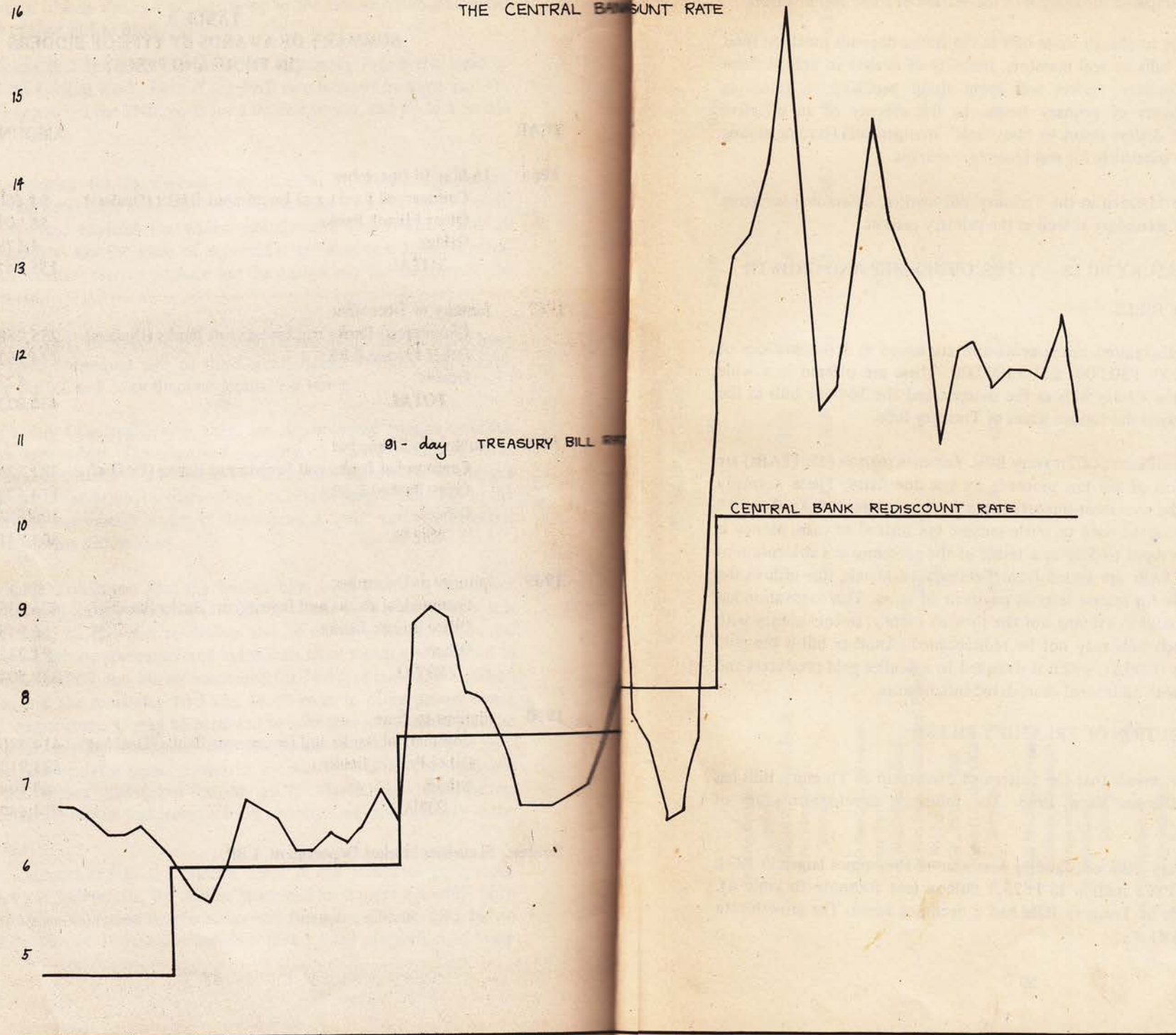
Source: Securities Market Department, CBP.

FIGURE

91 day TREASURY BILL RATE and
THE CENTRAL BANK DISCOUNT RATE

INTEREST RATE

16
15
14
13
12
11
10
9
8
7
6
5



J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
67 68 69 70 71

SOURCE CENTRAL BANK of the PHILIPPINES

issue had been going to real investors – the other private banks, insurance companies, private companies and individuals. The financing schemes afforded to dealers have in a way, hampered the entry into the market of some real investors.

The ability of dealers to absorb more bills in the future depends much on their ability to unload these bills to real investors. Inability of dealers to unload these inventories in the secondary market will bring about problems in financing increasingly larger amounts of primary issues. In the absence of an effective secondary market, some dealers resort to “buyback” arrangements (trading among themselves), which is no substitute for real secondary market.

All these can be foreseen in the Treasury Bill market, unless real investors are aided in entering the secondary as well as the primary market.

THE PHILIPPINE TREASURY BILLS – TYPES, OWNERSHIP AND GROWTH

TYPES OF TREASURY BILLS

Treasury Bills are discounted instruments and are issued in denominations of P1,000; P5,000; P10,000; P50,000; and P100,000. These are offered in a wide range of maturities – the 49-day bills as the shortest and the 364-day bills as the longest. Exhibit III presents the various issues of Treasury Bills.

There are other special issues of Treasury Bills. *Tax anticipation bills* (TABs) are bills sold in anticipation of the tax proceeds on tax due dates. These normally matures shortly after the two most important tax payment dates (15 April and 15 July), but these bills may be used to settle income tax instead of cash. Money is customarily short from April to July as a result of the government’s absorption of the money supply. If TABs are issued from February to March, this utilizes the pool of money available for release later in payment of taxes. This innovation has been moderately successful in evening out the flow of money. In consistency with the TABs’ purpose, such bills may not be rediscounted. Another bill is the *gold mining assistance series* (GMIA), which is designed to subsidize gold producers and to provide the market with additional short-dated instruments.

OWNERSHIP DISTRIBUTION OF TREASURY BILLS

The data in table 4 reveals that the pattern of ownership of Treasury Bills has not shown marked changes since 1968. The following developments are of importance:

1. The total Treasury Bills outstanding was almost four times larger in 1971 than in 1967 – from P165 million to P623.3 million (see footnote to table 4). After 1969, the growth of Treasury Bills had a declining trend. The growth rate from 1967 to 1971 was 41.8%.

END OF THE YEAR HOLDINGS OF TREASURY BILLS
BY INVESTOR GROUPS
(IN MILLION PESOS)

	1968	%	1969	%	1970	%	1971	%
A. Banking System								
1. CB portfolio	-		-		2.7		-	
2. Philippine National Bank	8.7		16.8		2.0		2.1	
3. Private banks	-		-		-		-	
Subtotal	8.7	4.1	16.8	4.4	4.7	0.8	2.1	0.3
B. Public Nonbank Investors								
1. Trust Funds								
a) Bond sinking fund	-		-		-		-	
b) Securities Stabilization Fund ^a	50.1		7.6		82.1		82.1	
c) IGLF	4.8		4.8		3.4		3.4	
2. GSIS, SSS and DBP	-		-		-		-	
3. Others (LG and OGE)	-		-		-		-	
Subtotal	54.9	25.5	12.4	3.3	85.5	14.7	85.5	13.7
C. Private Nonbank Investors								
1. Insurance companies	-		-		-		-	
2. Private entities	-		-		-		-	
3. Individuals	-		-		-		-	
Subtotal	-		-		-		-	
D. Undistributed	-		-		-		-	
E. Foreign holders	-		-		-		-	
F. Various	151.2	70.4	344.9	94.3	491.1	84.5	535.7	86.0
TOTAL	214.8	100.0	379.1	100.0	581.3 ^c	100.0	623.3 ^c	100.0
Annual Percentage Growth								
			30.18 ^d		76.48		533.33	7.22

^a Inclusive of transactions under Repurchase Agreements.

^b Substantially held by private commercial banks and dealers in government securities.

^c Inclusive of GMIA Series worth P11.9M and TABs worth P90M.

^d Outstanding Treasury Bills in 1967 was P165M.

Source: Annual Report of the Securities Market Department, CBF, 1967-71.

2. The distribution of Treasury Bill holdings shows that the majority of the financial sector – the potential investors and the public – have been unaware of the Treasury Bill market, and have, therefore, been unable to participate in it. It may be pertinent to mention that some of these investors, especially the private companies, have been participating in the weekly auctions but the Central Bank authorities believe that their holdings have been very small – relative to the holdings of the major investor groups. For such reason, they have not been included.

3. The Treasury Bills held by the public nonbank investors decreased in 1969, but increased in 1970. Under this investor group, the Securities Stabilization Fund is practically the only participant in the bill market. This is explained by the fact that it is specially created by the Central Bank to serve as a stabilizer of prices, and as a synchronizer to facilitate the establishment of the market for government securities.

4. Notable increases took place in the holdings of commercial banks and dealers in government securities classified under “various” investors group. Their holdings grew materially between 1968 and 1971 – from P151.2 to P535.7 million – or by 254%. Two reasons may account for this behavior. First, these investors, which are mostly banks, have increasingly been developing the practice of using Treasury Bills as first-class secondary reserve investments, with liquidity and marketability features. Secondly, banks have continuously been using interest-bearing Treasury Bills for special time deposit reserves for import letters of credit.

5. The ownership of Treasury Bills by the “banking system” had been contracting and amounted to only P2.1 million in 1971. The amount was solely under the account of the PNB. The Central Bank portfolio has always been the biggest holder of government securities. However, Treasury Bills have not been included in the portfolio. It was only during the tight credit and liquidity situation in 1970 that the Central Bank engaged in open-market purchases for its own account. It had P2.1 million Treasury Bills left on its account by the end of 1970.

6. The percentage distribution of Treasury Bill holdings in 1971 is of interest. The “various” investors had 86%. The remaining were held by the public nonbank investors and the “banks” with 13.7 and 0.3%, respectively. This pattern of distribution, which is very unequal, is generally reflective of the distribution in the past years.

GROWTH OF THE TREASURY BILL MARKET

The rise in government securities started in 1966 when Treasury Bills were introduced. As table 5 shows, total securities issued more than doubled from

TABLE 5
SECURITIES ISSUED BY THE NATIONAL GOVERNMENT/CORPORATIONS AND THE CENTRAL BANK
BY TYPE OF SECURITY
(IN MILLION PESOS)

	1966	%	1967	%	1968	%	1969	%	1970
Short-term (Treasury Bills)	147.5	18.02	466.0	56.36	690.7	64.29	809.8	47.50	1,337.0
Medium-term	584.2	71.37	180.0	21.77	56.8	5.29	745.9	43.76	177.3
Long-term	86.8	10.61	180.8	21.87	326.8	30.42	148.9	8.74	101.9
TOTAL	815.5	100.00	826.8	100.00	1,074.3	100.00	1,704.6	100.00	1,656.2
Annual Percentage Growth	---		1.0		29.9		58.7		-2.9

Source: Annual Reports of the Securities Market Department, CBP, 1966-70.

TABLE 6
TRANSACTIONS VOLUME OF THE DEALERS, HOLDINGS OF THE DEALERS AND
EXCESS RESERVES OF THE COMMERCIAL BANKING SYSTEM, 1968-71
(IN MILLION PESOS)

YEAR	Transactions Volume of the Dealers	Annual Percentage Change	Holdings of the Dealers	Annual Percentage Change	Excess Reserves of the Banking System
1968	NA	---	151.2	---	23.0
1969	801.8	---	344.9	128.11	186.0
1970	3,175.5	296.04	491.1	42.31	125.0
1971	1,578.5	-101.17	535.7	1.11	-211.0

Sources:
1) Annual Reports of the Securities Market Department, CBP, 1968-71.
2) *Central Bank Statistical Bulletin*, 1970.
3) Department of Economic Research, CBP.

P818.5 million in 1966 to P1,656.2 million in 1970. Likewise, the share of Treasury Bills to total securities issued remarkably rose from 18.02% in 1966 to 83.14% in 1970. The proportion of medium-term issues fluctuated in a declining trend from 71.37% in 1966 to 10.71% in 1970. The share of long-term issues increased from 10.61 to 30.42% between 1966 and 1968. However, it declined the following years and accounted for only 6.15% in 1970.

It may be gleaned from the registered figures that there was a shift in investor preference from long- and medium-term to short-term securities. The institutional preference for short-dated instruments was largely dictated by the limited or total withdrawal of Central Bank support for longer-term notes and bonds and the increased offerings of short-dated instruments. The higher liquidity of short-dated instruments was, of course, another important reason for the shift in investor preference. Finally, in June 1968 the Monetary Board authorized the use of Treasury Bills, among other government securities, for special time deposit reserves for import letters of credit.

The data shown in table 6 are the volume of transactions and holdings of Treasury Bills of the dealers, along with the excess reserves of the commercial banking system. It was only in 1969 that the first transactions volume of Treasury Bills was made available to the Central Bank by the dealers.

The holdings of the dealers were more than 3½ times larger in 1971 than in 1967 — from P151.2 to P535.7 million. However, its growth was at a declining rate. The dealers' holdings in 1969 exceeded that of 1968 by P193.7 million, or by 128.11%. In 1971, the increase over the preceding year was only 1.11%.

On the other hand, the increase in the transactions volume of the dealers from P801.8 to P3,175.5 million between 1969 and 1970 was impressive. There was an increase of P2,373.7 million, or by 296.04%. However, it decreased in the following year to a still considerable amount of P1,578.5 million, or by 101.17%.

The recorded volume of transactions of the dealers shows that the Treasury Bill market is growing, and is able to attract large amounts of short-term funds. However, the fairly close parallel between the volume of transactions and the level of excess reserves suggests that this growth may be largely speculative; that is, an excessive money supply results in the build-up of large speculative balances.⁴

The volume of transactions along with the turnover ratio are presented in table 7. The latter is derived by dividing the volume of transactions by the average holdings. The turnover ratio is then restated as an index with 1969 = 100.

⁴R. Hooley, *Savings in the Philippines*, pp. 66-8.

TABLE 7
 DEALER'S TRADING VOLUME, TURNOVER RATIO, TURNOVER INDEX
 AND EXCESS RESERVES OF THE BANKING SYSTEM, 1969-71

YEAR	Transactions Volume of the Dealers (in Million Pesos)	Turnover Ratio (in Percen- tage)	Turnover Index	Excess Reserves of the Banking System (in Million Pesos)
1969	801.8	3.23	100	186.0
1970	3,175.5	7.37	228	125.0
1971	1,578.5	3.08	105	-211.0

Source: CBP

As the table shows, the fairly close similarity in the changes in excess reserves and the changes in the turnover index imply that the growth in activity in the bill market has been the result of speculations. However, the merits of this observation may be weakened by the limited data available.

YIELDS, PRICES AND MATURITIES OF TREASURY BILLS

Figure 2 on the following page presents three recent yield curves in the Treasury Bill market. The three yield curves reveal that the Treasury Bill yield curves have in the past assumed upward sloping curves; that is, as the maturity goes farther, the yield rises. There are underlying reasons that may account for this phenomenon.

The yield curve of 31 May 1971 is of interest. The rate of the 182-day bill was even lower than that of the 91-day bill. It is in instances like this that the bill trader must be extra careful to avoid attributing to maturity what in fact are yield differences arising from other factors.

The data reveals the following:

1. That the investors in the Treasury Bill market are speculative-minded, and that they wish to avoid the price decline that the longer-maturing bills will undergo if interest rate rises, as they expect them to behave in the near future. These investors therefore prefer to receive temporarily lower yields on short-maturing bills which will suffer little or no loss in value. They will then be in a position to purchase longer-maturing bills during the expected periods of increasing rates. Thus, the anticipations of investors that bill rates will rise lead them to bid up prices of shorter-maturing bills relative to prices of longer-maturing ones.

2. Most of the investors in Treasury Bills are banking institutions that have real liquidity needs which they largely fulfill by holding short-term obligations. These investors look primarily to the liquidity characteristics of shorter-maturing Treasury Bills and only secondarily to yields.

3. The dealers prefer to hold shorter-maturing Treasury Bills rather than longer-maturing ones to enable them to carry inventories.

THE TREASURY BILL RATE IN RELATION TO OTHER RATES IN THE MONEY MARKET

The graph in Figure 3 on the next page compares the rate on Treasury Bills with those of the commercial papers and the inter-bank call loans. These instruments are generally considered to be the most heavily traded in the money market. As shown, some relationships are evident, such as:

Figure 2

Yields of Treasury Bills on Selected Dates
Source: Securities Market Department,
Central Bank

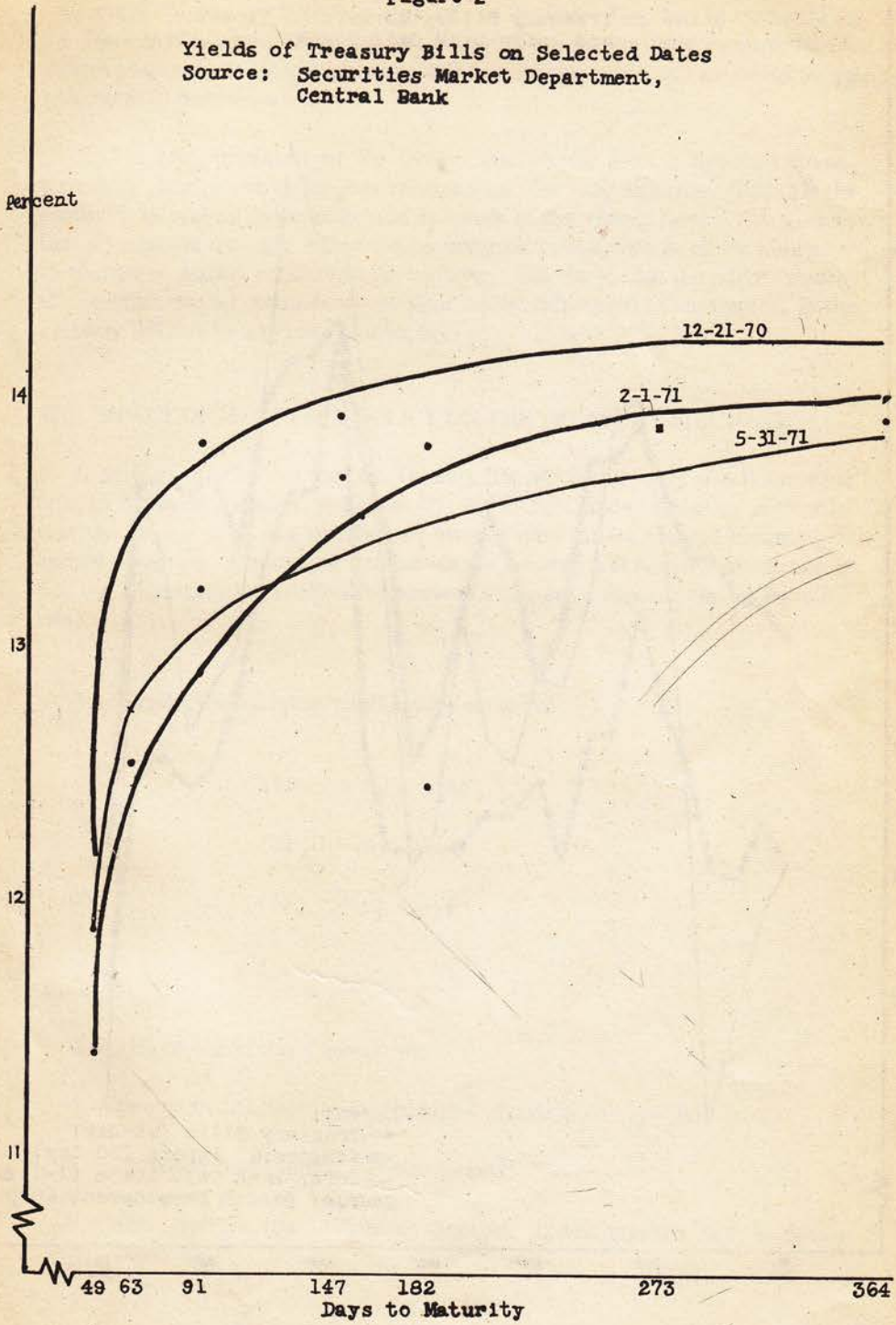


Figure 3

Rates on Treasury Bills, Commercial Papers
and Inter-bank Call Loans

Percent

17

16

15

14

13

12

11

10

9

31
JUN

AUG

SEPT

OCT

NOV

DEC

12
JAN

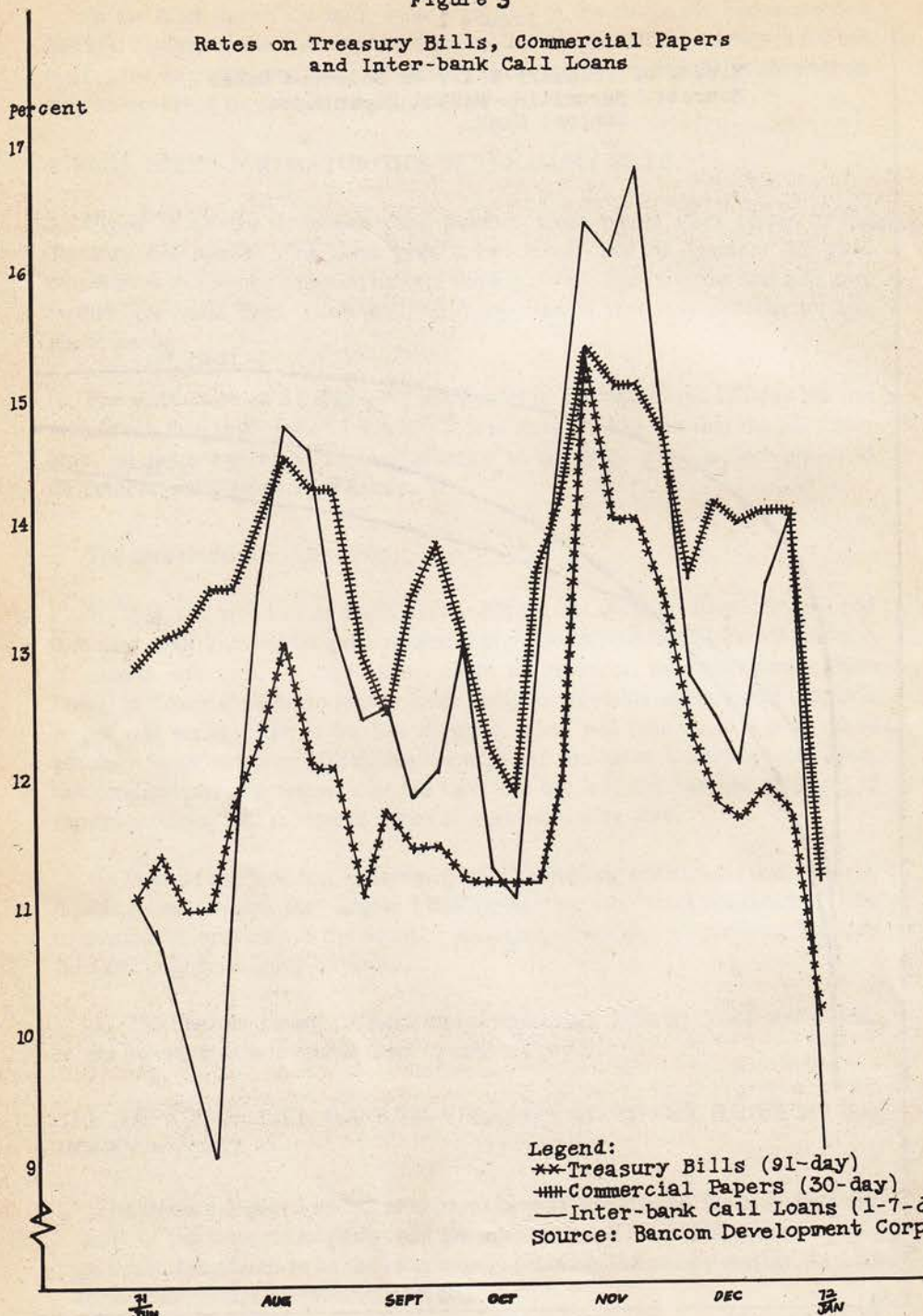
Legend:

** Treasury Bills (91-day)

+++ Commercial Papers (30-day)

— Inter-bank Call Loans (1-7-day)

Source: Bancom Development Corp.



1. The Treasury Bill rate is lowest on the average as a consequence of widespread demand for bills as instruments of liquidity. This may be explained by the facts that Treasury Bills are free from credit risk, are legal investments for various purposes, are more readily available to many investors, and are available in a wide range of maturities.

2. The rate movement of the market instruments form a structure characterized by close, yet changing, interrelationships. The most significant feature is the similarity in cyclical movements, and in trends of the various rates. This indicates that all rates are basically influenced by common causes, that is, all are responsive to changes in market conditions. Alternatively, this shows that the rate movement of the other market instruments are significantly influenced by movements in the Treasury Bill rate by a process of arbitrage.

THE IMPACT OF MONETARY POLICY ON THE TREASURY BILL RATE

In view of the findings that the Treasury Bill rate significantly affects the other rates in the money market, and since it is widely held among monetary authorities that the general level and structure of interest rates can be changed according to desired objectives of monetary policies via the Treasury Bill rate, it is interesting to find out empirically the relationship between monetary policy and the Treasury Bill rate.

Specifically, the following relationships are tested:

$$(1) \quad i = a_1 + a_2M$$

$$(2) \quad i = b_1 + b_2B$$

$$(3) \quad i = c_1 + c_2F$$

where

i = rate on the 91-day Treasury Bill

M = money stock (currency in circulation plus demand deposits)

B = monetary base (currency in circulation)

F = free reserves (the difference between excess reserves and borrowed reserves)

Money stock, monetary base and free reserves are frequently used by monetary economists to indicate the direction of monetary policy. The contemporary debate on the choice of the ideal monetary indicator has not yet been resolved in economic literature. To avoid this problem, all the three—money stock, monetary base and free reserves — are used, hoping that in the process of investigation similar results will be obtained.

The data used in this study are monthly figures (end of the month figures for money stock and monetary base and monthly average rates for the 91-day Treasury Bill), from July 1966 to November 1971, all of which were taken from the Central Bank. The statistical method used is the ordinary least-square (OLS). The regressions were run at the Computer Center of the University of the Philippines.

The following results were obtained (numbers underneath the regression are their t-values):

$$(1) \quad i = 8.81661 + 0.00000M \\ (0.19246)$$

$$\bar{R}^2 = 0.01552, \quad s = 27852.75391, \quad D.W. = 0.12917$$

$$(2) \quad i = 9.57437 - 0.00001B \\ (-1.17542)$$

$$\bar{R}^2 = 0.00602, \quad s = 29968.00000, \quad D.W. = 0.16576$$

$$(3) \quad i = 8.99961 + 0.00097F \\ (0.75996)$$

$$\bar{R}^2 = 0.00675, \quad s = 277.79297, \quad D.W. = 0.14795$$

The above results indicate that the relationship between monetary policy and the Treasury Bill rate is very weak as evident from the very low \bar{R}^2 and the impact is negligible and insignificant as measured by the regression coefficients with their indicated t-values. Thus, these results show that monetary policy is ineffective in influencing the Treasury Bill rate.

What account for these results? One explanation may be the relationship that is non-linear. Other possible explanations are as follows:

1. The Philippine Treasury Bill market is still undeveloped. A broad Treasury Bill market does not exist which prevents the Central Bank from engaging in large-scale open-market operations. One of the phases of open-market operations is partly responsible for the imperfect nature of the Treasury Bill market. The

extension of special credit accommodations to dealers in government securities has hampered the entry into the market of some potential investors who are not extended the same credit privileges.

2. Banks in the country are not adopted to the practice of maintaining stable cash reserve ratios, and, therefore, the Central Bank cannot be assured that the banks would experience a manifold reinforcement of its expansive or restrictive operations.

3. Banks usually resort to borrowing from the Central Bank to replenish their cash reserve balances whenever such balances are reduced by Central Bank actions. This practice thereby makes open-market policy by itself futile.

4. The effect on the Treasury Bill market of changing the reserve requirement has been very ineffective since investment banks, which are among the most active dealers, have not been covered by the legal reserve requirement. Furthermore, credit expansion or contraction tends to be relatively small for any given reserve requirement, since demand deposits constitute a relatively small proportion of the money supply and the cash drain leakage is correspondingly large.⁶

5. The rate at which the Central Bank charges on repurchase agreements is the rediscount rate at the discount window, so that it makes little difference in the Treasury Bill market whether banks obtain money by borrowing or from open-market purchases by the Central Bank.

CONCLUSION

This study has presented how the Treasury Bill market can be improved to provide more efficient facilities for the adjustment of liquidity positions of commercial banks, nonbank financial institutions, private companies and other investors; and how it can be made a better mechanism by which current savings are transmitted to those industries, areas and companies which offer the highest promise of profitable investment.

This study has also shown that while it is true that the Treasury Bill rate influences to a great extent the level and structure of the other rates in the money market, unfortunately, monetary policy has proven to be very ineffective in influencing the Treasury Bill rate.

This brings up the question: Why has monetary policy been ineffective? As some reasons have been suggested, the author feels that a more intensive research in this area will be highly relevant and fruitful.

⁶Edita Tan and Sue Van Atta, *The Role and Structure of the Central Bank of the Philippines*, p. 19.

FIG 4
 RATES ON TRURY BILLS OF
 DIFFERENT MATURITIES

PERCENT

17
 16
 15
 14
 13
 12
 11
 10
 9
 8
 7
 6

JAN FEB MARCH APRIL MAY JUNE JULY AUG SEPT NOV DEC JAN FEB MARCH APRIL MAY

1970

1971

LEGEND:

- 91 - day
- 63 - day
- x-x-x 273 - day
- - - 364 - day
- - - 49 - day
- 147 - day
- ++++ 182 - day

SOURCE SECURITIES DEPT.,
 CENTRAL BANK

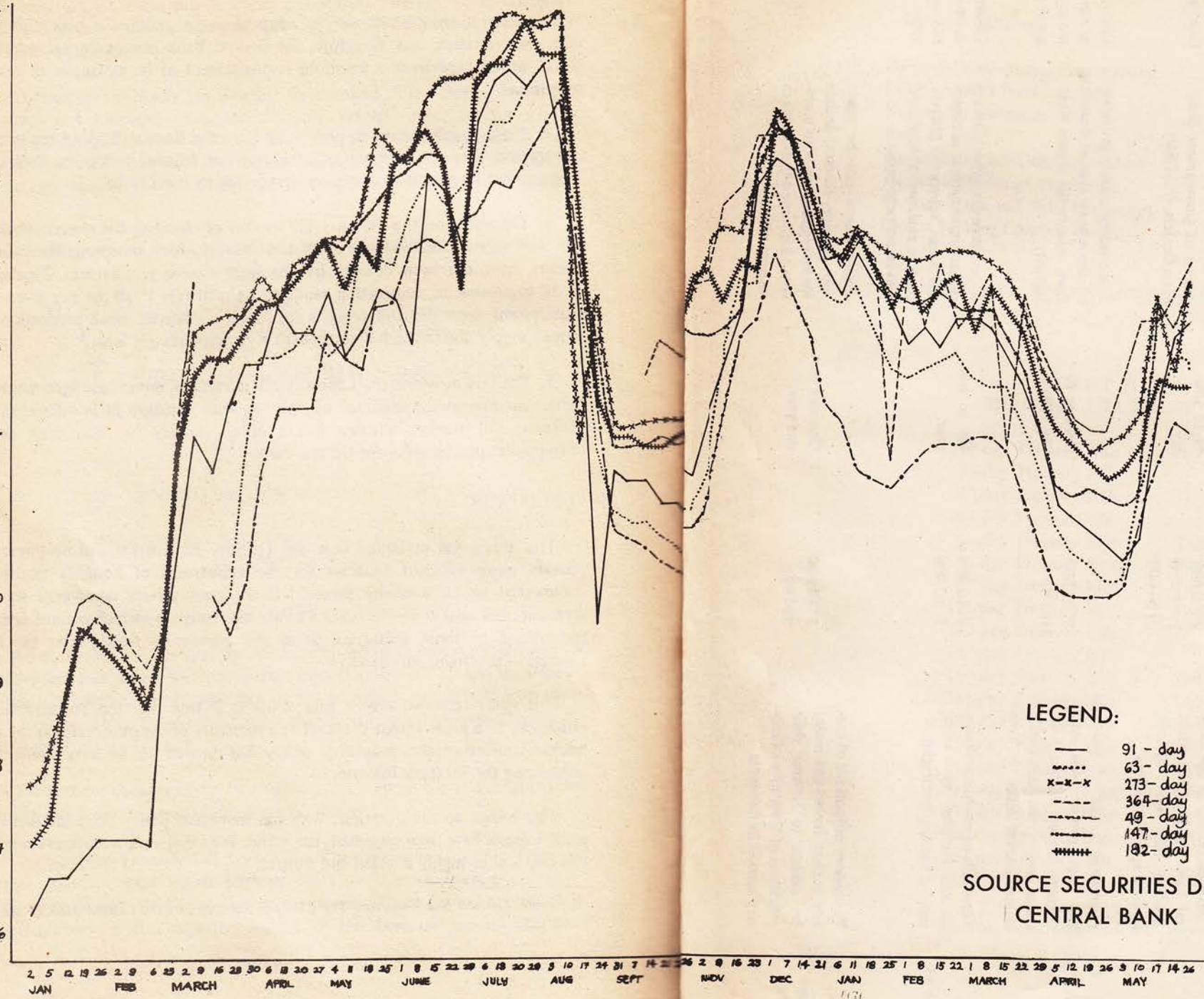


EXHIBIT I
COMPARATIVE MONEY MARKET INSTRUMENTS

	Instruments	Denominations	Maturities	Marketability	Other Features
Inter-bank Call Loans	On demand promissory notes of commercial banks issued to other commercial banks to adjust their daily reserve positions.	P 500,000	Demand or one day.	Only between commercial banks.	
Treasury Bills	Philippine government obligations. Auctioned by the Central Bank weekly. Tax Anticipation Bills also offered through special auctions.	P 1,000 P 5,000 P 10,000 P100,000	49- to 364- day	A secondary market supported by the National Association of Government Securities Dealers. (NAGSD).	Discounted and redeemable at par or face value of the bill.
Commercial Papers	Promissory notes of prime and large corporations sold through money market dealers or commercial banks with money market desks.	P 20,000 and up.	One day to one year.	A secondary market provided by the money market dealers from whom the issues were bought.	Discounted and redeemable through money market dealers at par.
Bankers' Acceptances	Time bills of exchange drawn on and accepted by a commercial banking institution.	P 10,000 to P 50,000	Up to one year.	A secondary market for acceptances of prime commercial banks, supported actively by one commercial bank and two investment banks.	Discounted and redeemable on maturity at par or face value.
Repurchase Agreements	Promissory obligations of money market dealers and issued by dealers to finance their purchases of inventory of money market instruments.	P 10,000 and up	One day to one year.	Arrangements can be made with money market dealers for redemption prior to maturity with some adjustments in interest rates.	

**EXHIBIT II
NATIONAL ASSOCIATION FOR GOVERNMENT
SECURITIES DEALERS**

Dealers	Officers
Bancom Development Corporation	Mr. O. V. Espiritu
CCP Securities Incorporated	Mr. Jaime Yulo
House of Investments	Mr. Vicente Muro
Bank of Asia	Mr. Leonardo Perez
Consolidated Banking Corporation	Mr. Gil Sacramento
Equitable Banking Corporation	Mr. Severino Santos
Far East Bank and Trust Company	Mr. Ariel Batacan
Pacific Banking Corporation	Mr. Federico Bernal

Sources: Securities Market Department, CBP.

**EXHIBIT III
TREASURY BILL ISSUES**

49-day Treasury Bills	
55-day Treasury Bills	
62-day Treasury Bills	
63-day Treasury Bills	
68-day Treasury Bills	TABs
91-day Treasury Bills	TABs
97-day Treasury Bills	TABs
126-day Treasury Bills	TABs
147-day Treasury Bills	
152-day Treasury Bills	
159-day Treasury Bills	TABs
161-day Treasury Bills	TABs
182-day Treasury Bills	TABs
188-day Treasury Bills	TABs
217-day Treasury Bills	TABs
238-day Treasury Bills	TABs
273-day Treasury Bills	TABs
360-day Treasury Bills	GMIA
364-day Treasury Bills	

Source: Securities Market Department, CBP.