

Developing Japan's domestic
bond market

by
R.F. Emery

Developing Japan's Domestic Bond Market

by

Robert F. Emery,
Economist, Asia, Africa,
and Latin America Section,
Division of International Finance,
Board of Governors of the
Federal Reserve System.

This article was prepared primarily for internal circulation, and should not be cited or quoted. The views expressed do not necessarily represent the views of the Board of Governors of the Federal Reserve System.

February 16, 1965.

Developing Japan's Domestic Bond Market

Robert F. Emery

It is ironical that Japan--a rapidly growing, industrialized, country, with strong demands for financial capital--has tolerated during the postwar period only a partially developed bond market. Since the late 1950's, bond issues have provided only a small per cent of total capital needs. Holdings of bonds by individuals are small and the country lacks an active trading market in bonds. Although the volume of bond issues compares favorably with new stock issues, the market, nevertheless, remains generally underdeveloped. 1/

The main reason for this anomaly is indirect governmental control over bond issues, including bond yields. During most of the postwar period, bond yields have been held at artificially low levels in relation to the return on other investments. The authorities have not yet made any real attempts to remove these controls. As a result, Japan's bond market has fallen far short of playing a full role in the expanding economy. Development of the market is especially important in Japan because of the high rate of investment and the rapid rate of economic growth. If the Japanese economy is to develop its full potential, it needs an active, uncontrolled bond market.

There are numerous ways in which development of the bond market would benefit Japan. Fuller development of the bond market would broaden the distribution of bond issues among the various financial sources so that corporations would not be too heavily dependent on a few financial sectors. In the long-run, this should help keep Japan's corporations on a sounder financial basis. It is also quite possible that with a wider range of financial sources, the total flow of financial capital would increase. Although the total flow of capital in Japan is relatively large, economic growth has been so fast in the postwar period that basically Japan is a capital-short country. One of the main indicators of this is the high level of domestic interest rates relative to Europe and the United States.

Although there is widespread recognition in Japan that the domestic bond market should be developed further, virtually no serious efforts have been made in this direction in the postwar period. Such efforts would involve increasing the trading activity in the bond market, as well as developing a larger volume of issues of private industrial bonds. This article attempts to examine the degree of actual underdevelopment of the bond market, to analyze the causes of underdevelopment, and to offer some possible measures for developing the market.

1/ For a discussion of the underdeveloped nature of the bond market, see: Money and Banking in Japan, Bank of Japan, 1961, p. 29; Outline of the Bond Market in Japan, Industrial Bank of Japan, 1962, p. 24; and Japan Stock Exchange Manual, Daiwa Securities Co., Ltd., Tokyo, 1963, p. 229 and p. 257.

Degree of underdevelopment of the bond market.

Japan makes less use of long-term bonds as a means of financing business and governmental activities than do most industrialized countries. As indicated in the table below; bond issues provided a relatively low proportion of business funds in Japan compared to other industrialized countries.

Table 1

Proportion of Business Funds Obtained from
Bond Issues: 1961-63

United Kingdom	13.6 per cent
United States	10.1 per cent
Italy	9.7 per cent
France	4.3 per cent
Japan	3.1 per cent
West Germany	1.9 per cent

SOURCES:

United Kingdom, Financial Statistics, Central Statistical Office, and Board of Trade Journal, Board of Trade; United States, Federal Reserve Bulletin; Italy, Report of the Year, Bank of Italy; France, Rapport sur les Comptes de la Nation, Ministere des Finances et des Affaires Economiques; West Germany Monthly Report, Deutsche Bundesbank; and Japan, Economic Statistics Monthly, Bank of Japan.

As indicated above, private corporate bond issues have provided about 3.1 per cent of the total supply of corporate business funds in Japan in recent years. In actuality, this figure was swelled by a temporarily large volume of bond issues in the first half of 1961. The figure was 1.9 per cent in both 1962 and 1963. The Japanese figure is below the percentage of funds supplied from this source in the United Kingdom, the United States, and Italy. However, it is above the percentage in West Germany, another country which has enjoyed a very high rate of industrial growth. The major sources of Japanese business funds in recent years have averaged 50.5 per cent from bank loans, 19.1 per cent from depreciation, 11.8 per cent from retained earnings, 9.1 per cent from stock issues, 4.5 per cent from government credits, 3.2 per cent from foreign funds, and 1.9 per cent from bond issues. 2/

Internal indications of underdevelopment--When measured in terms of the annual supply of private financial capital, the bond market plays a relatively minor role in Japan. In 1963, the total net volume of new bond issues of all types (excluding short-term government securities) was ¥924 billion compared with approximately ¥3,800 billion in other funds supplied to Japanese industry. The net supply of funds from issues of industrial and bank debentures only, was a relatively low

2/ Monthly Circular, Mitsubishi Economic Research Institute, Tokyo, June 1964, p. 6

¥537 billion. The outstanding volume of bonds, however, was approximately 60 per cent of the market value of the outstanding volume of stocks. Thus, at the end of 1963, bonds outstanding totaled ¥4,959 billion compared to ¥8,277 billion (market value) for stocks. 3/

There are other indications of the underdevelopment of the bond market such as the relatively low volume of bond trading and the small number of corporations that issue bonds. The total reported bond volume on the Tokyo exchange for listed bonds in 1963 was ¥14,438 million. 4/ This was equal to only .07 per cent of Japan's GNP for 1963, a very small proportion. In the United States, on the other hand, the proportion was 3.5 times higher, being .25 per cent. 5/ Actually, the bulk of the bond trading in both Japan and the U.S. takes place in the over-the-counter market, but no suitable data on these transactions are available. In Japan, it has been estimated that approximately 85 per cent of all bond sales take place in the over-the-counter market. 6/

The number of corporations issuing bonds is also relatively low. Only 32 public and private bonds were listed on the Tokyo Stock Exchange at the end of 1963. 7/ In March of 1963 there were 212 corporations that had successfully made public offerings of bonds and the bulk of these are traded in the over-the-counter market. But 212 is only a very small part of the approximately 827,000 incorporated establishments in Japan at the end of 1963. The only bond issue that is actively traded by the general public is that of the Nippon Telephone and Telegraph Public Corporation, and this is for special reasons that will be discussed more fully later.

Ownership of bonds by the non-corporate private sector, mainly individuals, is relatively small in Japan, indicating that there is scope for a wider distribution of ownership. Of total bonds outstanding, holdings by individuals at the end of 1963 totaled only 13.6 per cent compared to 24.7 per cent in the United States. The one area where individual ownership is relatively high is for bank discount debentures. These are one-year bonds that have generally yielded about 6.2 per cent. This is higher than the rate of 5.5 per cent that has been paid on one-year bank deposits since April of 1961. Since 1958, over 90 per cent of these discount bonds have been owned by individual investors. 8/ Discount bonds in mid-1964 totaled ¥535 billion, or 26 per cent of total bank debentures outstanding at that time. Table 2 below indicates the distribution of bond ownership in Japan and how it has changed since 1958. There are five main types of bond issues: bank, industrial, public corporation, central and local government. Bank debentures are issued on both a discount and regular interest-bearing basis. All Japanese bonds are issued with a maturity of seven years with two exceptions. Interest bearing bank debentures have a maturity of four years and eleven months, and bank discount debentures, as indicated above, have a maturity of only one year.

3/ Economic Statistics Monthly, Bank of Japan, Tokyo, May 1964, pp. 169-70.

4/ Annual Statistics Report: 1963, Tokyo Stock Exchange, Tokyo, 1964, p. 280

5/ New York Stock Exchange Fact Book: 1964, New York Stock Exchange, New York, April 1964, p. 41.

6/ Regular data on the volume of transactions in the over-the-counter market are not available, but one report indicates that from April 1956 through December 1958 they accounted for 85 per cent of total bond transactions. Securities Market in Japan, Japan Productivity Center, Tokyo, 1959, p. 18.

7/ Annual Statistics Report: 1963, *ibid.*, p. 280.

8/ Securities Market in Japan, *op.cit.*, p. 19.

Degree of underdevelopment of the bond market.

Japan makes less use of long-term bonds as a means of financing business and governmental activities than do most industrialized countries. As indicated in the table below, bond issues provided a relatively low proportion of business funds in Japan compared to other industrialized countries.

Table 1

Proportion of Business Funds Obtained from
Bond Issues: 1961-63

United Kingdom	13.6 per cent
United States	10.1 per cent
Italy	9.7 per cent
France	4.3 per cent
Japan	3.1 per cent
West Germany	1.9 per cent

SOURCES:

United Kingdom, Financial Statistics, Central Statistical Office, and Board of Trade Journal, Board of Trade; United States, Federal Reserve Bulletin; Italy, Report of the Year, Bank of Italy; France, Rapport sur les Comptes de la Nation, Ministere des Finances et des Affaires Economiques; West Germany Monthly Report, Deutsche Bundesbank; and Japan, Economic Statistics Monthly, Bank of Japan.

As indicated above, private corporate bond issues have provided about 3.1 per cent of the total supply of corporate business funds in Japan in recent years. In actuality, this figure was swelled by a temporarily large volume of bond issues in the first half of 1961. The figure was 1.9 per cent in both 1962 and 1963. The Japanese figure is below the percentage of funds supplied from this source in the United Kingdom, the United States, and Italy. However, it is above the percentage in West Germany, another country which has enjoyed a very high rate of industrial growth. The major sources of Japanese business funds in recent years have averaged 50.5 per cent from bank loans, 19.1 per cent from depreciation, 11.8 per cent from retained earnings, 9.1 per cent from stock issues, 4.5 per cent from government credits, 3.2 per cent from foreign funds, and 1.9 per cent from bond issues. 2/

Internal indications of underdevelopment--When measured in terms of the annual supply of private financial capital, the bond market plays a relatively minor role in Japan. In 1963, the total net volume of new bond issues of all types (excluding short-term government securities) was ¥924 billion compared with approximately ¥8,800 billion in other funds supplied to Japanese industry. The net supply of funds from issues of industrial and bank debentures only, was a relatively low

Table 2
Distribution of Bond Ownership
(in billions of yen)

	End of Year	Bank Deben.	Indus. Bonds	Public Corp. Bonds	Central Govt. Bonds	Local Govt. Bonds	Total
1. Banks	1958	← 691.8 (56.6%) →			← 131.0 (30.4%) →		822.8 (49.8%)
	1963	550.9 (28.9%)	703.3 (51.1%)	304.3 (28.0%)	43.8 (14.5%)	222.2 (77.3%)	1,824.5 (36.8%)
2. Bank of Japan	1958	← nil →			← 154.7 (35.9%) →		154.7 (9.4%)
	1963	265.8 (13.9%)	111.6 (8.1%)	128.8 (11.8%)	197.1 (65.4%)	-- (--)	703.3 (14.2%)
3. Other Fin. Insts.	1958	← 147.1 (12.0%) →			← 18.5 (4.3%) →		165.6 (10.0%)
	1963	237.2 (12.4%)	354.3 (25.8%)	74.0 (6.8%)	1.7 (0.6%)	46.6 (16.3%)	713.8 (14.4%)
4. Trust Fund Bureau	1958	← 182.6 (14.9%) →			← 51.3 (11.9%) →		233.9 (14.0%)
	1963	272.7 (14.4%)	75.8 (5.5%)	174.1 (16.0%)	16.5 (5.5%)	2.2 (0.8%)	541.3 (10.9%)
5. Securities Companies	1958	← (Included in #6) →			← (Included in #6) →		--
	1963	13.1 (0.7%)	22.7 (1.7%)	5.4 (0.5%)	-- (--)	0.6 (0.2%)	41.8 (0.8%)
6. Corporate Business (Other than Securities Companies)	1958	← 74.2 (6.1%) →			← 2.8 (0.7%) →		77.0 (4.7%)
	1963	160.9 (8.4%)	16.3 (1.2%)	279.8 (25.7%)	-- (--)	2.7 (0.9%)	459.7 (9.3%)
7. Non-corp. Private	1958	← 127.4 (10.4%) →			← 72.4 (16.8%) →		199.8 (12.1%)
	1963	406.0 (21.3%)	91.1 (6.6%)	122.2 (11.2%)	42.2 (14.0%)	13.0 (4.5%)	674.5 (13.6%)
8. Total	1958	← 1,223.1 (100.0%) →			← 430.7 (100.0%) →		1,653.8 (100.0%)
	1963	1,906.6 (100.0%)	1,375.1 (100.0%)	1,088.6 (100.0%)	301.3 (100.0%)	287.4 (100.0%)	4,959.0 (100.0%)

Sources: A Study on Flow of Funds In Japan, Bank of Japan, December 1959, pp. 69-71; and Economic Statistics Monthly, Bank of Japan, May 1964, pp. 169-70.

Japanese commercial banks are the main purchasers and holders of bonds. There are several reasons why banks are heavy purchasers of bonds. With bond yields ranging from approximately 6.5 to 7.5 per cent per annum and interest on one-year time deposits being fixed at 5.5 per cent, banks are able to make a profit on their bond investments. In addition, bonds are generally acceptable as collateral for commercial bank borrowing from the Bank of Japan, and this is another factor in improving their attractiveness. Bonds are also helpful in bolstering a bank's liquidity position for bank inspections by the Ministry of Finance since the Ministry's regulations treat bonds as "liquid assets." Banks also tend to purchase a large share of the bonds issued by companies with which the bank has had a close financial relationship in the past.

As pointed out earlier, only 0.03 per cent of the private corporations in Japan have issued bonds. This is primarily because there are only a relatively small number of large corporations that can use this type of financing. In addition, regular commercial banks do not issue bonds. There are only five debenture-issuing banks in Japan and these are governmental or semi-government institutions. 9/

Another indication of the relative underdevelopment of the bond market is the fact that there are very few private placements of industrial bonds. 10/ This contrasts with the situation in the United States where 21 per cent of the bond issues in 1963 were issued privately rather than publicly. 11/ There are several factors contributing to the low volume of direct placements in Japan. The relatively high costs involved in direct placements are a discouragement to potential issuers. In addition, bonds placed directly are not eligible for serving as collateral in commercial bank borrowing from the Bank of Japan and this discourages potential purchasers. Lastly, the Bond Issue Adjustment Council in establishing the monthly volume of bond issues, tends to favor open market issues, leaving little room in the total amount authorized for direct placements.

The decreased importance of some institutional investors in postwar Japan has also been a factor in reducing bond market activity. The total assets of insurance companies in 1963, for example, were only half the proportion of GNP that they were in 1938. In addition, the proportion of bonds in total insurance company holdings of securities fell from 54 per cent in 1937 to 8 per cent in 1963. Consequently, insurance companies have been of diminishing relative importance as holders of bonds.

There are virtually no single, large-scale corporate flotations on the Japanese bond market because of the limited supply of funds under presently prevailing market conditions. Many industrial corporations find that they have to offer bonds several times a year in order to obtain the amount of funds they need, rather than offer only one issue during the year. Most electric power companies find that they have to arrange new issues almost every month. This situation is one indication, of course, of the excess demand for funds in relation to their supply in the bond market.

9/ The five include three long-term credit banks (The Industrial Bank of Japan, Ltd., the Long-Term Credit Bank of Japan, Ltd., and the Hypothec Bank of Japan, Ltd.), and two special financial institutions (The Central Cooperative Bank of Agriculture and Forestry, and the Central Bank for Commercial and Industrial Cooperatives). Outline of the Bond Market in Japan, op. cit., p. 14

10/ Ibid., p. 27

11/ Federal Reserve Bulletin, September 1964, p. 1181.

Although the Japanese bond market is underdeveloped in certain respects as indicated above, the volume of bond issues compares favorably with new stock issues. In 1963, for example, net issues (total issues less redemptions) of industrial and bank debentures were ¥537 billion compared to ¥665 billion in new shares of stock issued. Net issues of all bonds, including those of the central government, local governments, and public corporations, totaled ¥924 billion in 1963.

On the other hand, trading activity in both the listed and over-the-counter bond markets is reported to be relatively low, even for the nature of the security involved. Japan's stock market, however, is very active and well-developed. Thus in 1963, the total volume of trading in stocks on all Japanese stock exchanges was ¥8,233 billion, which was equivalent to 38 per cent of Japan's GNP in 1963.

In general, the main flow of non-bank private financial capital by-passes the bond market. In 1963, of the total increase in assets held by the "personal" sector, 12/ the increase in time and savings deposits accounted for 47 per cent and stocks accounted for 11 per cent. The net increase in holdings of bonds and debentures accounted for only 4 per cent of the total. 13/

Causes of market underdevelopment.

The bond market remains underdeveloped in Japan for one main reason. This is because of the governmental control over the market. As a result of this control, yields on other types of investment tend to be more attractive than bonds.

Indirect government control of the market--The market for private bonds, when measured in terms of the volume of trading, has always been relatively small in Japan. In the years prior to the Second World War, however, a substantial amount of government bonds circulated, and there was a Special Bond Post on the stock exchange. 14/ During 1938, for example, the total sales volume of bond transactions on the Tokyo exchange was about ¥6,029 million, or 22 per cent of the current GNP. In 1963, the respective figures were ¥14,438 million and 0.7 per cent.

Since the early 1950's, the total amount of central government debt outstanding has been relatively small (less than 5 per cent of GNP in 1963), and there has been very little, if any, expansion since 1953 in the total amount of intermediate and long-term debt due to a policy of having approximately balanced government budgets. Consequently, the Special Bond Post has not been revived in the postwar period and the amount of trading in government bonds is relatively small.

During the first three to four years after the end of the war, there was no formal bond market. In June of 1949, however, the Bank of Japan took steps to establish a limited market by agreeing to accept specified bonds as collateral in granting loans to commercial banks. 15/ The Bank also purchased Reconversion Finance Bank debentures and government securities, provided the previous holders

12/ Includes the non-financial, non-corporate part of the private sector.

13/ Economic Statistics Monthly, Bank of Japan, May 1964, pp. 167-8.

14/ Japan Stock Exchange Manual, op. cit., p. 232, and Japanese Securities Markets, op. cit., p. 118-21.

15/ Japan Stock Exchange Manual, op. cit., p. 259-61.

of these securities agreed to buy new issues of corporate bonds. 16/ These steps were apparently successful in expanding somewhat the volume of new bond issues, but the economy was also being stimulated from mid-1950 on by the Korean War. The volume of bond trading, as distinct from new bond issues, continued to remain relatively small, being limited mainly to a few individuals, brokers and financial institutions. 17/

Because of the strong demand for capital and the limited supply available in 1949, a Bond Issues Council was established late in that year to decide not only the amount and terms of bond issues, but also who would be permitted to issue bonds. This Council (sometimes referred to as the Council for the Adjustment of Bond Issues or the Bond Flotation Council), was composed of representatives from the Bank of Japan, the Ministry of Finance, the Industrial Bank of Japan (government-owned), the underwriting companies, the trustee banks, and the issuing corporation. Meeting monthly, the Council regulated the amounts of capital that could be issued, the interest rate, and all other terms of issue. The Council had no specific legal basis for requiring adherence to its decisions, but the power and prestige of the Bank of Japan, the Ministry of Finance, and the Industrial Bank of Japan were sufficient to obtain compliance.

With a general easing in both the money and capital markets in 1955 and 1956, the governmental authorities relaxed slightly their tight control over the bond market. In August of 1955, the Bank of Japan and the Ministry of Finance withdrew from the Council, leaving the supervision largely up to the Industrial Bank of Japan. A few months later in December, the Bank of Japan discontinued its advance designation of bonds that would be eligible as loan collateral for commercial bank borrowings from the Bank of Japan. 18/ In April of 1956, the bond trading markets were formally reopened in Tokyo and Osaka, but the volume of trading has remained small relative to the volume of trading in the stock market. In mid-July of 1956, the bond issue market was "liberalized." Previously issue terms were fixed by the Bond Issues Council, but effective in mid-July, flotation terms were ostensibly left to be individually fixed by the issuing parties. 19/

This "freeing" of the bond market in 1956 turned out to be largely nominal, as relatively firm indirect controls over the market have been maintained since then. Since the spring of 1961 these controls have actually been tightened. In April of 1961, the interest rates at which various bonds can be issued (i.e., the nominal rate), were standardized. 20/ In effect, this has led to stable yields on a month-to-month basis for public corporation bonds, central and local government bonds, and discount bank debentures, and only slightly changing yields for industrial bonds and interest-bearing bank debentures, since all new issues have been placed with approximately the same terms as were first established in April 1961. 21/

16/ The Bank of Japan: Its Function and Organization, op. cit., p. 49.

17/ Securities Market in Japan, Japan Productivity Center, 1959, p. 18.

18/ Bank of Japan: Its Function and Organization, op. cit., p. 49

19/ Outline of the Bond Market in Japan, op. cit., p. 9; and The Oriental Economist, Tokyo, September 1956, p. 426.

20/ Japan Stock Exchange Manual, op. cit., pp. 251-55.

21/ Ibid., p. 253. Yields on local government bonds were not actually stabilized until later in January of 1962. Yields as of October 1964 are given below:

Central government securities	6.432 per cent
Local government securities	7.354 per cent
Public corporation bonds	7.053 per cent
Interest-bearing bank debentures	7.285 per cent
Discount bank debentures	6.224 per cent
Industrial bonds	6.473 per cent

Under present arrangements, the volume and terms of bond issues are decided by two main groups. These are the "trustees for flotation" and the large securities companies.

The "trustees for flotation" are the banks (approximately 24 in total) that oversee the distribution of the securities, and these include certain commercial banks, trust banks, and some government-owned banks, of which the Industrial Bank of Japan is the most important. In actuality, the Industrial Bank plays the main role in influencing the group that decides on the volume and terms of the bond issues.

The securities companies consist primarily of Japan's four largest companies in this field. 22/ They transact the bulk of the country's securities operations and generally serve as underwriters for the bond issues. 23/

The "trustees for flotation" and representatives from the four largest securities companies meet every month and decide on the volume and terms of each issue for the coming month. 24/ It is at these meetings that the Government is able to exercise its indirect control of the bond market through the Industrial Bank of Japan. It is able to do this even though the existing laws and regulations leave the interested parties free to establish any terms for the bond issue that they desire. 25/

Because of the indirect control of the market by the Government, a dual pricing system has arisen. In a sense, Japanese bonds have both a "theoretical" price and an "actual" price. 26/

The "theoretical" price is the one assigned under government guidance at the time of issue. This price tends to remain more or less unchanged during the term of the issue, except, of course, that the price of discount bonds increases regularly to its par value by maturity. Changes in the money market have no influence on these theoretical prices, and only when there is a basic revision in the price and terms at the time of issue, will the price change.

22/ They are (in alphabetical order) Daiwa, Nikko, Nomura, and Yamaichi.

23/ Prior to the Second World War, banks served as the major underwriters. But since the Securities Transactions Law of 1948, the underwriting of corporate bonds has been conducted exclusively by the securities companies. Banks, however, still serve as underwriters of government-guaranteed bonds and local government bonds.

Most bonds are issued by means of an indirect-offer-for-subscription system. Thus, instead of having the subscription offer made by the issuing company, it is made through a mediator, usually one of the securities companies. The direct-offer-system, however, is used for government bonds, and occasionally for municipal bonds. Banks generally place their own finance debentures directly.

24/ Outline of the Bond Market in Japan, op. cit., p. 18.

25/ Money and Banking in Japan, op. cit., p. 30.

26/ Japan Stock Exchange Manual, op. cit., pp. 264-67.

Bond prices quoted on the Tokyo and Osaka exchanges are consequently not realistic and reflect only nominal quotations. A large proportion of the trading on the exchanges consist of bai-kai (sell-buy) transactions. These are also referred to as cross trading operations. Frequently a member-dealer firm will have buying and selling orders in similar amounts for the same issue. Rather than execute separate contracts with other firms at a greater cost to the customers, these buying and selling orders are matched, with the member-dealer generally serving as a party to the order. This type of transaction, however, is only permitted at a price which is within a reasonable range of the regular, quoted market price. 27/

The "actual" price is the one determined by supply and demand conditions in the over-the-counter market, and reflects current conditions in money and capital markets. As in the United States, most of Japan's bond trading takes place in the over-the-counter market, but unfortunately, data on prices, the volume of transactions, the nature of buyers and sellers, etc., are very few and are not published. Most of the bond transactions that take place involve direct negotiations between the brokerage firms and their customers.

The net result of strong government control over the bond market in the postwar period has been a relatively low volume of issues for the private industrial sector and the absence of any sizeable or realistic trading in bonds. The volume of private bond issues is closely geared to the supply of funds available, but because the yields on bonds have been set relatively low, this supply has not been large.

There are several factors accounting for the lack of substantial or realistic trading in bonds, some of them being the same ones that have discouraged a higher volume of bond issues. One is the fact that with few exceptions, the main holders of the bonds--financial institutions and the Government--tend to hold them to maturity because they know that they would have to take a relatively large capital loss if they were to sell the bonds prior to maturity. Since the bonds can also serve as a source of funds from the Bank of Japan (either through sale to the Bank of Japan with a repurchase contract or by serving as loan collateral), banks find it attractive to hold them to maturity. The low yields and long maturities (7 years) for most bonds have also been factors tending to limit trading. Except for one-year bank debentures, individuals have been reluctant to purchase bonds because there is a danger of capital loss if the bonds have to be sold prior to maturity, and certain other investment outlets have higher yields.

There is one issue, however, where there is relatively realistic trading in the bond market. This is for the debentures issued by the Nippon Telephone and Telegraph Corporation. A person is able to have a telephone installed in Japan if he purchases at least 60,000 yen (\$167) worth of NT&T debentures. 28/ He is given a choice of either fixed-interest bearing or discount debentures. Many subscribers, for one reason or another, do not care to hold their debentures, so they sell them on the market. Because the market is relatively free, yields are attractive and produce sufficient buyers. The price of the debentures fluctuates, depending on

27/ Ibid., p. 264; Outline of the Bond Market, op. cit., p. 32; and David E. Spray (ed.), The Principal Stock Exchanges of the World, International Economic Publishers, Inc., Washington, D.C., 1964, p. 254.

28/ Nomura's Investors Beacon, Nomura Securities Co., Ltd., September 1963, p. 22.

the prevailing financial situation, and this produces yields somewhat higher than the yields fixed by indirect government control on other comparable securities. At the end of 1963, for example, the NT&T fixed-interest bearing debentures and discount debentures were selling to yield 9.01 and 9.24 per cent, respectively, compared to 7.05 per cent for various public corporations. 29/

There are two areas where bonds have proven attractive to individual investors contrary to the usual pattern of purchase mainly by financial institutions. The first area relates to the one-year bank debentures. Bank debentures are issued either as interest-bearing debentures with a maturity of 4 years and 11 months or as discount bonds with a maturity of only one year. Since the one-year maturity is relatively short, and the yield--currently at 6.22 per cent--is attractive compared to the 5.5 per cent yield on one-year bank deposits, these "discount bonds," which account for about 30 per cent of total bank debentures, have proven popular with individuals. According to one report, over 90 per cent of these "discount bonds" have been held by individuals since 1958. 30/

The second area relates to the bond investment trust funds which had a flurry of popularity in 1961. During the postwar period a variety of investment trusts have been established in Japan and sales of shares in these trusts have been substantial. Until 1961 the main types of investment trusts included: (1) unit, or semi-closed-end, trusts; and (2) open-end investment trusts. Beginning in January of 1961, however, the four main securities companies began to sell shares in new open-end bond trusts. Sales were very heavy during the first half of 1961. In retrospect, the operation was not too sound because the securities companies promised a high minimum guaranteed return of 7.7 per cent per annum on the shares, allowed purchasers to redeem the shares for cash at any time, and engaged in large advertising and promotional expenditures. The result was that when the Government inaugurated a tight money policy in July of 1961, the securities companies were forced to reduce the guaranteed yields from 7.7 to 7.3 or 7.2 per cent. This discouraged investors and prompted a very high volume of cash redemptions. These developments placed heavy financial pressure on the securities companies, and the sales volume has not yet regained the levels of early 1961.

High yields from other financial assets--In one of its basic publications on the financial system in Japan, the Bank of Japan states that "...it is undeniable that the abnormal money rates system is the biggest factor hindering the development of the debenture issue market."31/ Elsewhere in the same paragraph it is made clear that the "abnormal money rates system" refers to the relatively high rates of interest prevailing in Japan's call money market. Since 1957, call loan rates have generally been higher than the yield on private bonds.

In a broad sense, the statement quoted above is correct. Indirect government controls have kept bond prices high and bond yields relatively low, but looked at from the other side of the coin, yields on call loan money, commercial bank loans and certain other financial assets have been high relative to bond yield. While both of these factors help to explain the underdevelopment of the bond market they are actually part and parcel of the same broad phenomenon.

29/ Annual Statistics Report: 1963, op. cit., p. 281.

30/ Securities Market in Japan, op. cit., p. 19.

31/ Money and Banking in Japan, The Bank of Japan, March 1961, p. 30.

In this vein, development of the bond market has been partly hindered by competition from the relatively high yields in the call loan money market. The table below indicates the average yields in per cent per annum in recent years on some of the more important forms of investment in the two markets.

Table 3.

Average Yields on Industrial Bonds and Call Loans
(in per cent per annum)

	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Industrial Bonds	7.68	7.64	7.90	7.91	7.91	7.66	7.48	7.48	7.49 2/
Call Loans 1/	6.57	11.81	9.74	8.47	8.40	8.29	8.84	7.54	9.52 2/

1/ Average unconditional call loan rate in Tokyo, i.e., money repayable within one day after notice.

2/ January to August.

Source: Economic Statistics of Japan, Bank of Japan.

Thus, only in 1956 during the 1956-64 period did yields on industrial bonds exceed the rate for unconditional call loan money.

In the same paragraph quoted from above, the point is made that "...the call loan rate has been abnormally high recently." 32/ It is interesting to note, however, that since 1961 call loan rates have not only remained high but, in general, have increased. Since these high rates occurred even during an "easy money" period (1963) and have now been in evidence for several years, it would appear only logical to recognize that these high rates may not be temporary, but rather may continue for some time to come. Thus a program to develop the bond market could not realistically assume that there will be a substantial decline in call loan rates in the near future.

Although bond yields in Japan are relatively high by United States' standards, they do not compare too favorably with yields from other domestic assets. In general, bond yields are higher than interest rates paid on commercial bank time deposits, but lower than the rate on bank loans and discounts. 33/ The rate paid in recent years on central government bonds (6.432 per cent) has been lower than the rates on other seven-year bonds with the consequence that they are not particularly attractive to the financial community and over two-thirds of them are held by the central bank and Trust Fund Bureau. Some of the relevant rates are listed below:

32/ Ibid.

33/ Financial Conditions in Japan, Banking Study Team IV, Japan Productivity Center, Tokyo, 1963, p. 29.

Table 4.

Selected Interest Rates

	<u>Mid-1964</u>
1. Unconditional call loan money (Tokyo).....	10.59%
2. Average rate of interest on bank loans and discounts.....	7.98%
3. Yields on: 1-year bank discount bonds.....	6.22%
: 4-year and 11-month bank debentures.....	7.28%
: 7-year private industrial bonds.....	7.48%
4. Trust (shintaku) accounts: over 1 year.....	5.50%
: 2 years or more.....	6.30%
: 5 years or more.....	7.07%
5. One-year bank time deposits.....	5.50%

NOTES: The first item is derived from the mode. The second item refers to the agreed rate of interest on new and renewed bank loans. Yields on these credits are substantially higher because of the 20-30 per cent compensatory balances normally required in Japan. Shintaku, or trust accounts, normally involve long-term investment agreements where funds are left on deposit for one to five years or more, a certificate being issued for the funds deposited, and where the funds are placed in a variety of investments similar to the portfolio of an investment company. The dividend rate on loan trusts is slightly higher (.30 percentage points on two-years or more money) than for money placed in a regular i.e., money, trust.

Sources: 1., 2., and 3. Economic Statistics Monthly, Bank of Japan, September 1964, Tables 54, 51 and 58, respectively.
4. and 5. Economic Statistics of Japan, Bank of Japan, September 1964, Table 78.

Of the rates listed above, all but a few are controlled either directly or indirectly by the Government or various financial organizations. The unconditional call loan rate is supposedly subject to a maximum limit established on a voluntary basis by the National Federation of Bankers' Associations. ^{34/} In actual practice, however, this ceiling has not been a serious impediment to a general rise in call loan rates. The rate of interest on commercial bank loans and discounts is regulated in part by the Temporary Money Rates Adjustment Law of 1948. ^{35/} The dividend rates on trust or shintaku accounts are also subject

^{34/} "The Call Money Market and the Call Money Dealer in Japan," Call Money Association, Tokyo, July 1963, p. 8.

^{35/} For loan interest rates, the law applies only to loans with a maturity under one year and for an amount exceeding ¥1 million (\$2,778). Other loans remain outside the scope of the law. Financial Conditions in Japan, op. cit., p. 29.

to specified legal ceilings, but because these ceilings are relatively high, dividend rates have been voluntarily fixed by trust banks at somewhat lower levels. Bank time and savings deposits rates are tightly controlled under the Temporary Money Rates Adjustment Law.

On the whole, these voluntary or legal ceilings have probably not helped the development of the bond market. The "voluntary" call loan ceilings have frequently been breached and call loan rates have moved substantially above bond yields. Bank lending has produced higher effective yields despite interest-rate ceilings because of compensatory balance requirements. Even shintaku accounts are more attractive than bonds because of their greater liquidity.

Another factor inhibiting further development of the bond market has been the tendency of banks and other financial institutions to hold bonds to maturity. In the case of commercial banks, the bonds are attractive since they can be used for obtaining credit from the Bank of Japan. But probably even more important, since there is no ready market for bonds, quick sale usually involves a substantial capital loss. Consequently, the bonds have usually been held to maturity, which makes it difficult for potential purchasers (should there be any) to trade in existing bonds.

Another factor possibly hindering development of the bond market is the paucity of bond price information, especially for the over-the-counter market. Lack of information makes it difficult to compare alternative investments and generally acts as a drag on smooth trading operations. The lack of bond price quotations for the over-the-counter market (those for the stock exchange are fairly standardized) stems, of course, from the indirect government control of bond prices. No Japanese securities dealer is likely to quote freely prices which deviate from those established on a quasi-official basis for fear of incurring official displeasure and/or punitive action.

Lastly, Japan had a Special Bond Post on the stock exchange prior to the Second World War. 36/ There was a fair amount of trading in government bonds at this post. Today, although 32 companies issuing bonds are listed on the Tokyo stock exchange, the Special Bond Post has not yet been re-established. The presence of a Special Bond Post might help in part to promote more extensive issuing and trading in bonds.

Suggested measures to develop the market.

While it is difficult to be certain without a more intensive on-the-spot investigation that the following measures are the crucial ones really needed to develop Japan's bond market, the data and information available tend to point to their primacy. The first measure is very important, and if it could be implemented successfully, possibly as much as four-fifths of the basic goal of relatively full development of the bond market will have been achieved. Altogether there would appear to be two basic measures that can be undertaken plus a group of minor measures.

36/ Japanese Securities Markets, T.F.M. Adams, Seihei Okuyama, Tokyo, 1953, pp. 118-21.

Freeing the bond market--A sine qua non for development of the bond market is to abandon the present system of indirect government control and to let bond prices find their own level freely in the market. This would mean that the Government would have to condone price quotations and bond trading at whatever terms market conditions dictated. Thus the present "theoretical" prices would tend to fuse with the "actual" prices. New bond issues would have to be offered on terms similar to those prevailing in the market, including a wider variety of maturities, so as to be attractive to potential purchasers.

If bond prices were left free to seek their own level, there would be certain advantages in applying this move to all categories of bonds at the same time. To free the bond market for a certain category of bond, say industrial debentures, while retaining restraints on another category, say bank debentures, would run the risk of causing a sharp drop in the demand for bank debentures because of the new attractiveness of industrial debentures. In addition, freeing the market for all categories at the same time would reduce the total period of uncertainty regarding bond yields and prices, compared to a program of freeing one category at a time over a period of months, or years.

One important problem that would arise is the effect of the capital losses that bond holders would have in the event of the freeing of the bond market. Fortunately, the proportion of bond holdings to other assets for banks and other financial institutions is not terribly large, currently being only about 11 per cent. Thus, just as American financial institutions weathered a freeing of the market in U.S. government securities in 1951, so it would appear that Japanese institutions could do so likewise. In addition, it can be argued that since bond prices are somewhat artificial at present, a freeing of the market would not destroy any real values, but rather would merely recognize what the values actually are. Special credits might have to be arranged, however, to ease any financial difficulties of the bond investment trusts, which would likely be the hardest hit of any of the financial institutions. Judging from the relatively free price quotations for the Nippon Telephone and Telegraph Company, however, bond yields would likely not shift more than from one to two percentage points, i.e., from about 7.5 per cent up to around 8.5 to 9.0 per cent. If the shift was from 7.5 to 8.5 per cent for seven-year bonds, this would involve a loss of about ¥520 for each bond of ¥10,000 face value.

Improving the bond trusts--As was pointed out earlier, there was a flurry of activity in bond trusts back in 1961, but since the spring of 1962, the levels of activity have been substantially lower. In retrospect, it appears that the management of the new bond trusts ran into difficulties partly because they promised investors certain minimum yields which later turned out to be too difficult to achieve and because they permitted cash redemption at any time. In order to encourage greater interest in the bond trusts, and hence broaden the bond market, the trusts should be placed on a financially sounder basis. This latter objective would probably be aided if the bond trusts were to avoid the promise to investors of guaranteed minimum returns. The freeing of the bond market proposed earlier, if carried out, would probably more than compensate for the withdrawal of the minimum return feature because of the generally higher yields that would prevail.

Other measures--Another measure that might be taken would be to make it easier for banks and other bond holders to sell their bonds prior to maturity. By so doing, more bonds would be freed for active trading and purchase by individuals. The best way to achieve this object would be to encourage active trading in bonds at realistic prices so that banks and others would not be in danger of suffering substantial capital losses upon sale of the bonds.

Another measure that might help in developing the market would be to offer domestic bonds in a wider range of maturities. At present, all maturities are for a flat seven years with two exceptions. Interest-bearing bank debentures carry a 4-year, 11-month maturity, and discount bank debentures carry a 1-year maturity. By incorporating greater flexibility in the maturities, and thus tailoring the maturities to the investors' needs to some extent, the bonds should consequently become more attractive to potential investors.

At present, the Securities and Exchange Law of 1948 prohibits banks from serving as underwriters of bond issues except in the case of government, municipal, and government-guaranteed issues. ^{37/} There may be some merit in allowing banks to serve as underwriters for all types of bonds, as they did in the prewar period, in order to stimulate banking interest in selling bonds to the general public and thereby broadening the general ownership of bonds. This step might also discourage banks from holdings bonds to maturity if they can find better profit opportunities from underwriting or occasional sale of the bonds to the public.

Summary and conclusions.

Japan's bond market is primarily an issue market, but although the total volume of issues is high, those for the non-financial private sector constitute a relatively small part. In addition, an active trading market in bonds is virtually non-existent, and holdings of bonds by the non-corporate private sector are relatively small.

This state of underdevelopment is primarily due to indirect government control of issue terms, especially the artificially low yields assigned to almost all bond issues. Relative to other investments, bonds are generally not attractive to potential purchasers, with a few exceptions. These are the one-year bank debentures which have a good yield for the short period involved, Nippon Telegraph and Telephone Bonds which are traded freely at market-determined prices, and the bond trusts which stimulated some interest in indirect purchase of bonds.

Although the total volume of net bond issues compared to issues of stock is substantial, bond issues constitute a relatively small source of new capital funds for non-financial business corporations. This is because the funds from most bond issues accrue to public corporations, local governments, and quasi-governmental banks, and only a minor proportion is channeled to the corporate business sector.

^{37/} Japan Stock Exchange Manual, op. cit., pp. 228-30.

Lack of substantial trading in bonds is an even more serious problem and is an abnormal phenomenon for a country of Japan's development. The establishment of active trading in the bond market would likely help industrial corporations in raising additional funds from the bond market, in obtaining a better balance in their alternative sources of funds, and in lessening their dependence on direct bank lending.

The main step necessary for developing Japan's bond market is to free the market from indirect government control and thus let bond prices find their own level in response to the free play of supply and demand forces. New bond issues would be placed on terms consonant with market developments. Other supplementary measures (a by no means complete list) that could be taken include: (1) expanding the flexibility in terms and denominations for bond issues; (2) placing the bond trusts on a sounder financial basis; and (3) allowing banks to serve as underwriters for all types of bonds.

With only a relatively small amount of effort, Japan is capable of establishing a realistic and active bond market. Recently there have been reports that the Government is considering an increase of up to one percentage point in yields on public and corporate bonds. ^{38/} There do not appear to be any strong reasons why Japan should not take such action in the near future, rather than postpone any longer the inevitable.

^{38/} Nihon Keizai Shimbun (International Weekly Edition), December 1, 1964, p. 2.