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BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Division of International Finance

REVIEW OF FOREIGN DEVELOPMENTS

January 22, 1963

New Foreign Bond Issues in the United States 16 pages

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New Foreign Bond Issues in
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Robert F. Gemmill

Capital outflow from new foreign security issues in the United States exceeded \$1 billion in 1962, a rate of outflow unmatched since the 1920's, and fragmentary data suggest that the outflow in early 1963 will continue at close to this high rate. The growth in capital outflow from security issues and the persistence of large U. S. payments deficits point up the need for a study of the major factors influencing that outflow.

The bulk of new foreign security issues has consisted of bonds, and this paper examines the major characteristics of different classes of foreign bond issues.^{1/} The data on capital outflows in the U. S. balance of payments do not distinguish between outflows on stock and those on bond issues, but for non-Canadian issues, stock outflows have been important only in the first half of 1958 and the first half of 1962. The paper considers first the general characteristics and regional distribution of the capital outflow, and then examines special factors that have influenced certain large capital outflows.

Summary and conclusions

The principal factor affecting U. S. capital outflow on new security issues has been the demands for capital from abroad. Until recently, these demands have been mainly by the International Bank and by Canadian borrowers. Bond issues of the International Bank and of some Canadian provinces, municipalities and private firms are comparable in investment characteristics with high grade U. S. corporate bonds, and the timing of such foreign issues may be influenced by some of the same factors that affect domestic U. S. bond issues. There is some evidence to suggest that, where exchange risks are not of overriding importance, Canadian issues may be affected by the relative costs of borrowing in the United States and Canada.

Bond issues by other foreign countries, mainly central governments, have exhibited a rising trend since 1957. This trend has reflected increased U. S. investor interest in foreign issues, and particularly in 1962 in European issues. Foreign (non-Canadian) bond

^{1/} Unless otherwise indicated, the term includes bonds of international institutions (the IBRD), and privately placed as well as publicly offered issues. It includes securities issued for the purpose of refunding existing debt. Capital outflow does not include that portion of issues marketed in the United States, but purchased by foreign residents.

issues have continued to offer high yields, and coupled with increased investor awareness of the growing financial strength of the leading industrial countries, have attracted a growing volume of U. S. capital, probably from a growing number of investors. Some quite tentative evidence suggests that U. S. investment in foreign bonds may tend to be greater in periods of easy capital market conditions and low interest rates in this country; however, at current levels of capital outflow, the margin which may be subject to this influence does not appear to be large.

Not only have yields on foreign bond issues (excluding Canada) remained high in the face of increased investor interest, but yields and costs of borrowing have fluctuated little in response to changing capital market conditions in the United States. Given the strong capital demands of borrowing countries, there is little likelihood that potential borrowers are discouraged to any significant degree from borrowing in the U. S. market by variations in costs of the magnitude likely to occur. So long as foreign capital markets remain subject to restriction - actual or potential - even relatively small-scale foreign borrowers will find it advantageous to maintain close relations with the U. S. capital market, and large-scale borrowers will have no practical alternative. However, some borrowers are clearly prepared to shift part of their capital requirements from the U. S. to markets in third countries, when access to such markets is permitted.

General characteristics

As shown in Table 1, much of the variation in total capital outflows from new security issues between 1956 and 1961 reflected fluctuations in borrowing by the International Bank. Capital outflow to foreign countries fluctuated between \$0.4 and \$0.6 billion annually during this six-year period, before rising sharply in 1962.

Outflows to Canada were particularly heavy from 1956 through 1959; through mid-1962 they dropped off to about half the peak rate of 1959, but they rose sharply last fall. Outflows to Israel have remained stable, while outflows to other countries as a group have shown a gradually rising trend, which becomes more apparent if one excludes the outflow on the Royal Dutch Petroleum stock issue in 1958 in order to focus attention on bond issues.

The bond issues which account for the overwhelming portion of these capital outflows in most years have a wide range of investment characteristics. Bond issues of the International Bank in the U. S. have been of substantial size (generally \$75 million or more) and have carried offering yields very close to those on the highest grade U. S. corporate bonds. The underwriting spread on IBRD bonds has been small, and the cost of borrowing to the Bank on a new issue in the U. S. market has generally exceeded the yield to the investor by less than 0.1 per cent.

Bond issues by the IBRD were especially heavy in 1957 and 1958 when the Bank was building up its investment holdings to levels in excess of its commitments for disbursements. In recent years, the Bank has been able to obtain a large share of its funds through borrowings outside the United States, both in dollars and in foreign currencies. But it has also continued to borrow in the United States occasionally, most recently in January of last year, as a means of maintaining its relation with the U. S. market.

Canadian new issues comprise a wide range of securities of different characteristics, reflecting the close relationships of the Canadian and U. S. capital markets as well as close financing relationships of firms in the two countries. Bond issues of Canadian provincial governments and large municipalities are rated Aa or A, and may range from \$25 million to \$75 million size. These issues carry yields close to those on similarly rated U. S. corporate bonds, and underwriting spreads are small. Other Canadian issues include bonds of smaller local governments and both bonds and stocks of private corporations, ranging from large established firms to newly formed companies. These issues may be much smaller than Canadian provincial bonds, and yields and underwriting spreads are considerable above those on high grade provincial and municipal issues, as is the case with U. S. issues of lesser investment standings. The Government of Canada had not been a borrower in the U. S. market for a number of years prior to a borrowing of \$250 million from several insurance companies announced in September 1962.

Bond issues by other foreign countries have consisted almost entirely of obligations of central governments or semi-official institutions, and a few large private companies in Europe and Japan. Bond issues by the Government of Israel have recently been at a rate of \$60 million annually, up from a \$50 million rate, but such issues should probably be regarded as similar to remittances; they are unlikely to be affected by many of the factors that influence other foreign bond issues, and in the balance of this paper the term foreign "non-Canadian issues" is used without a warning that this term excludes Israel.

Bond issues by governments of foreign countries other than Canada have provided investors with yields that often range from 1 to 2 percentage points above those on new issues of highest quality U. S. corporate bonds (see Table 3). Underwriting spreads on these non-Canadian issues are high, frequently 2-1/2 per cent of the amount of the issue, equivalent to a cost of 1/4 - 3/8 per cent per annum above the offering yield. Other expenses of new foreign issues apparently absorb from 0.2 per cent to more than 1 per cent of the amount of the issue.^{2/} Virtually all issues have sinking fund

^{2/} See: E. Nevin, "Reflections on the New York New Issue Market", Oxford Economic Papers, Vol. 13, No. 1, February 1961, p. 87.

Table 1

Net Outflows on New Foreign Issues in the U. S. Market
(In millions of dollars)

	<u>1962*</u>	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>	<u>1957</u>	<u>1956</u>	<u>1955</u>	<u>1954</u>
Total	610	510	573	624	955	597	453	128	309
IBRD	84	12	97	14	360	187	--	--	88
Total foreign countries	526	498	476	610	595	410	453	128	221
Canada	164	224	227	437	367	324	375	39	167
Other foreign countries	362	274	249	173	228	86	78	89	54
Israel	38	58	51	52	47	48	53	42	40
Other excluding Israel	324***	216	198	121	181**	38	25	47	14
<u>of which:</u>									
Western Eur.	189***	57	24	78	121**	25	--	29	--
Latin America	20	18	107	--	14	--	--	4	--
Sterling Area	47	76	52	21	40	13	25	14	14
Other	68	65	15	22	47	--	--	--	--

* Data for three quarters only. Total outflow for the year unofficially estimated about \$1 billion.
 ** Of this outflow, \$60-70 million reflects Royal Dutch Petroleum stock issue.
 *** Of this outflow, about \$50 million reflects Philips stock issue.

provisions designed to retire most or all of the issue by maturity, thus shortening the average maturity and providing substantial support for the market price of the issue throughout its life.^{3/}

Foreigners have purchased portions of many foreign dollar bond issues, in some instances a substantial share. The yields on foreign government issues are often higher than those on the bonds of the same governments issued in their domestic markets and denominated in national currencies. In one notable instance, a foreign government provided a special incentive to insure that an issue of dollar bonds was held by U. S. investors.^{4/}

From this survey of the general characteristics of different types of foreign bond issues, we shall now proceed to a more detailed examination of the main component elements. The pattern of borrowing by the IBRD in recent years suggests that such borrowing in the U. S. market will continue in moderate amount, barring a dramatic change in the Bank's requirements for funds. The analysis will therefore be limited to borrowing by Canada and by other foreign countries.

Canada

Reduced capital outflows to Canada beginning in 1960, as shown in Table 1, appear, according to Canadian data, to reflect a cessation of net foreign borrowing by Canadian provinces and municipalities. These Canadian data, shown in Table 2, and in the scatter diagrams in Chart 1, cover all publicly issued bonds and some private placements not publicly announced. The data may be less comprehensive than those used to compile U. S. balance of payments statistics on bond issues; on the other hand, the U. S. data also include outflows resulting from stock issues. Thus, the Canadian data supply a useful indication of the factors affecting issues of Canadian bonds in the U. S. market.

^{3/} While some IBRD issues also have sinking fund provisions, some do not; the sinking funds on IBRD issues are generally intended to retire about half the issue by maturity.

^{4/} "One interesting example of an offering being tailored to American buyers to increase their interest in foreign bonds was the direct placement of \$25 million Kingdom of Belgium 5-1/4% bonds in 1959. As long as these bonds are held by the original or other approved U. S. investors, they earn an extra 3/4 of 1%, or a total of 6% per annum. If held by non-approved investors only the regular coupon rate of 5-1/4% is paid." Andrew N. Overby, "Resurgence of Foreign Borrowing in the U.S.", Commercial and Financial Chronicle, Volume 192, No. 1006, November 24, 1960, page 26.

Table 2

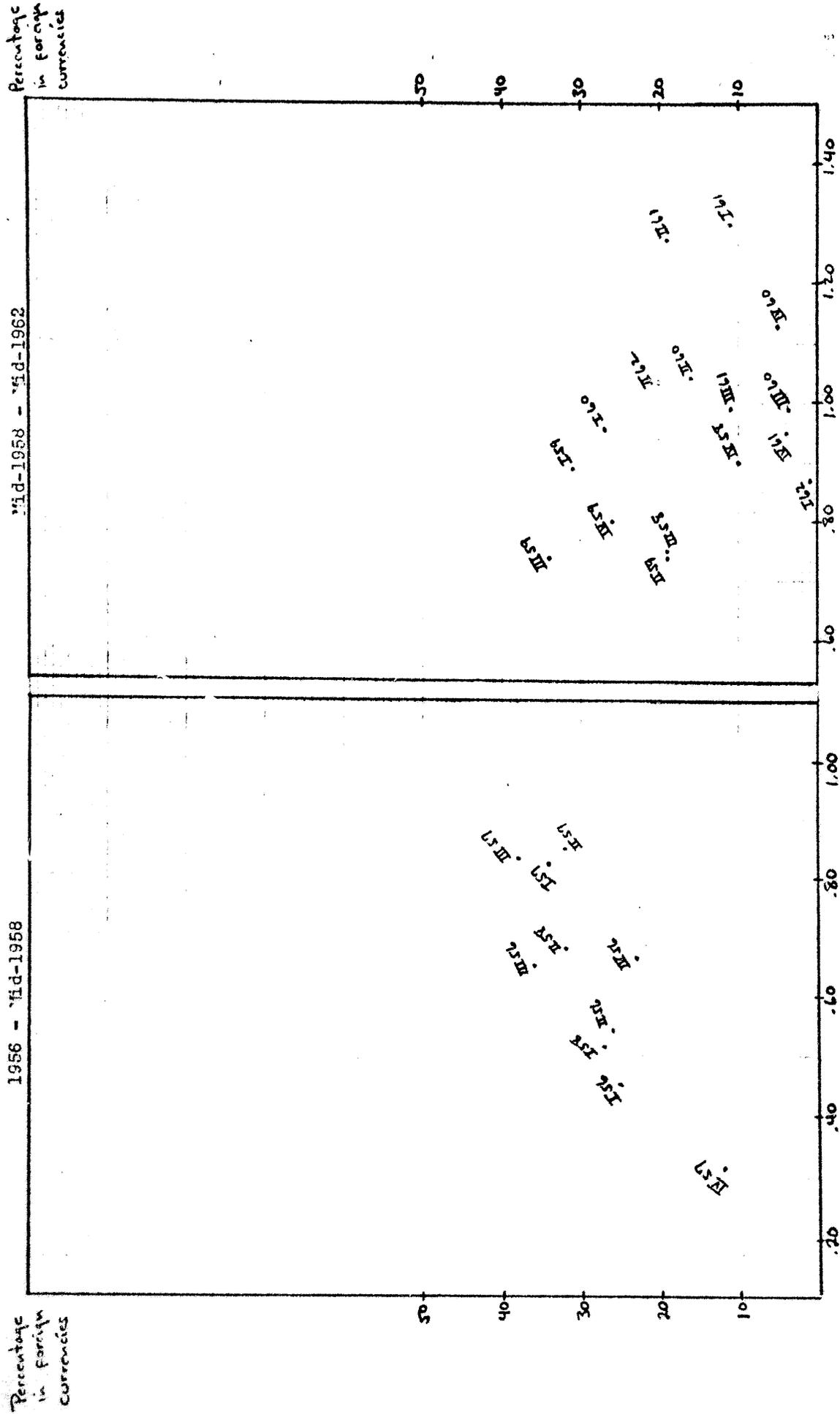
Gross Bond Issues of Canadian Provinces, Municipalities and Corporations
(In millions of Canadian dollars)

Date	Provinces & Municipalities		Corporations		Total		Spread between Canadian and U.S. long-term interest rates	
	In foreign currency	% in foreign currency	In foreign currency	% in foreign currency	In foreign currency	% in foreign currency		
1956	I	217	44	251	9	118	468	.45
	II	263	31	247	20	132	510	.54
	III	228	43	233	28	164	461	.65
	IV	284	16	303	30	136	587	.66
1957	I	293	32	364	36	225	657	.82
	II	251	22	513	37	245	764	.85
	III	213	31	131	50	131	344	.83
	IV	380	10	187	16	69	567	.31
1958	I	259	32	258	23	142	517	.51
	II	395	38	366	25	241	761	.68
	III	226	18	193	21	81	419	.75
	IV	374	11	171	8	53	545	.90
1959	I	362	37	100	9	144	462	.89
	II	234	28	139	5	72	373	.74
	III	408	36	105	26	172	513	.74
	IV	397	31	143	13	142	540	.80
1960	I	317	37	238	13	149	555	.96
	II	453	17	231	15	110	684	1.04
	III	340	4	146	6	21	486	.99
	IV	274	2	94	15	19	368	1.13
1961	I	403	5	157	27	62	560	1.30
	II	323	8	271	31	111	594	1.27
	III	432	1	192	33	66	624	.99
	IV	466	2	132	12	26	598	.95
1962	I	356	---	128	3	4	484	.87
	II	414	---	302	47	143	716	1.03
	III	256	14	126	10	49	382	1.42

Source: Bank of Canada, and International Financial Statistics.

Chart 1

Proportion of Canadian bonds issued in foreign currencies compared with differentials in long-term interest rates



Source: Table 2

The single most striking conclusion to be drawn from Table 2 is the role of exchange rate developments and expectations in the volume of foreign currency borrowing, and its share in total borrowing by Canadian provincial and local governments and companies. Following a marked depreciation of the Canadian dollar in early 1960 from its late 1959 peak, and a warning by Finance Minister Fleming in his spring budget message of the exchange risks to Canadians of borrowing in foreign currencies, gross foreign borrowings dropped substantially, and in fact were exceeded by redemptions in many individual quarters. The decline in foreign currency issues by provincial and local governments was especially marked; corporate foreign currency borrowing picked up in the first three quarters of 1961. The somewhat different borrowing behavior of Canadian corporations may reflect several considerations: the close financial ties with foreign capital markets; the substantial foreign exchange earnings of many Canadian firms, which enables them to hedge against foreign exchange risks more readily than local governments; and the greater susceptibility of Canadian provincial and local governments to "moral suasion" by the central government.

The relationship between interest-rate differentials and foreign currency borrowings by Canadian provincial and local governments and companies for two recent periods is shown in Chart 1. From 1956 to mid-1958, the proportion of total Canadian issues in foreign currencies varied directly with the differential between long-term interest rates in Canada and the United States. In this period, the relationship between proportion of borrowing in foreign currencies and interest rate differentials was much closer for corporate borrowing than for borrowing by provincial and municipal governments.

For the period from mid-1958 to mid-1962, there is no discernible relationship between relative importance of foreign currency borrowing and interest differentials. An examination of various sub-periods within this four-year span reveals an apparent resumption of the direct relationship between borrowings and rate differentials for the period from mid-1960 through the first quarter of 1962; however, these data are somewhat less convincing than those for the earlier period, both because the absolute amount of foreign currency issues is smaller (and thus more likely to be subject to the influence of a single transaction) and because the number of observations is smaller.

Scatter diagrams based on United States data^{5/} on gross dollar

^{5/} These data are reported monthly by banks, brokers, and security dealers on Treasury foreign exchange forms. They include transaction in all foreign bonds, not merely Canadian, and cover outstanding securities as well as new issues. In seven of the ten quarters in the period from 1956 to mid-1958, the absolute amount of Canadian borrowings in foreign currencies (as reported by the Bank of Canada) was within 10 per cent of total sales of foreign bonds by Canadians (as reported on U. S. Treasury forms). Thereafter, quarter-to-quarter changes in both series were in the same direction, but disparities in the magnitudes were substantially greater.

sales of foreign bonds by Canadian residents show no significant relationship between total bond sales and interest differentials for the two periods covered in Chart 1, although a very slight direct relationship again appears for the sub-period from mid-1960 through the first quarter of 1962.

On the whole, one would not expect to find as close a relationship between interest-rate differentials and sales of bonds in foreign currencies using data on absolute volume of sales as was the case with data on the relative volume of foreign currency bonds, since there are a wide range of factors that influence the total volume of bond issues. But apart from this consideration, there are several reasons why one should not expect an extremely close correlation between interest-differentials and foreign currency borrowings. Bond issues are undoubtedly characterized by some lumpiness;^{6/} once a major borrower has sold a large new issue, he is unlikely to be in a position to make another offering if the interest differential widens. Furthermore, bond issues must be scheduled well in advance of offering dates, particularly under conditions of tightening capital market conditions. And finally, yield differentials on outstanding issues are not likely to be an entirely suitable index of relative costs of new issues.

In general, the evidence seems to provide some support for the proposition that Canadian bond issues in the U. S. may be influenced by interest differentials between the two markets at times when exchange risks are not regarded as large. However, confirmation of this conclusion would require a comprehensive study of the relationships between the two capital markets. For example, some of the apparent shifting from Canadian to foreign currency borrowing could result from changes in the relative capital demands of the various individual Canadian borrowers, some of which may rely more regularly than others on the U. S. market for funds.

Other foreign countries

The growth in capital outflow on bond issues by other foreign countries since 1957, illustrated in Table 1 (adjusting for the large stock issue in 1958) reflects a growing number of foreign borrowers, who make appearances in the U. S. capital market with varying frequencies. Foreign governments have been encouraged to float issues in the U. S. market (or other accessible markets) by the policy of the IBRD under which Bank loans to some countries have been made in conjunction with public issues by the borrowing country. But foreign governments and private firms have also been encouraged to offer bonds in the U. S. by the need to develop access to continually available large-scale sources of funds. The practice of some European countries of limiting or foreclosing access to their capital markets, often on an intermittent basis, tends to reduce

^{6/} See: Gerald K. Helleiner, "Connections Between United States' and Canadian Capital Markets", Yale Economic Essays, Vol. 2, No. 2, p. 382.

the incentives for frequent large-scale borrowers to rely mainly on these markets for sources of capital.

In fact, the U. S. capital market has become a focal point for the investment of foreign capital; the managing underwriter of a foreign issue in many instances arranges a selling group comprising leading banks and dealers in the major European countries.

By taking advantage of this New York investment banking mechanism, a foreign government or foreign private company is able to raise money in the United States and in six or seven European countries simultaneously. The issuer thereby taps European markets which may not be open at the moment convenient to it, and also thereby raises larger sums than would be available to it in any one of these European markets. While only one or two million dollars, or even four or five million dollars, may be available in one country to an issuer at a given moment, New York has proved a more convenient market than any other in which the issuer could raise these sums in several countries in one operation.^{7/}

Foreign investors have found foreign dollar bond issues attractive because they are denominated in dollars, and because yields on foreign government issues are often higher than those on bonds of the same governments issued in their domestic markets and denominated in national currencies. Furthermore, interest on foreign dollar bonds is not subject to U. S. withholding tax when the bonds are held by aliens who are nonresidents.

U. S. investors as well, have been attracted by the yields on foreign bond issues. In earlier years, investor interest was stimulated in part by IBRD studies of and loans to countries making public bond issues, but more recently, and especially since convertibility, this factor has been considerably less important than the demonstrated financial strength of the industrial countries that have become the main borrowers, particularly in 1962. While U. S. investor interest in foreign dollar bond issues has been growing, this development has been gradual.

^{7/} Nathaniel Samuels, "The Investment Banking Background of Issuing and Marketing Foreign Securities in the United States", Address delivered at a conference on Legal Problems of International Financing at the Yale Law School March 1-3, 1962, p. 4.

Many major insurance companies remain well under their legal ceilings, for foreign bonds as prescribed in state laws and those that have made a real effort as yet to reach for theirs are few. Pension funds, particularly those administered by commercial banks, have perhaps been the most conservative in buying foreign securities, although this is rapidly changing.^{8/}

One notes a striking difference between the development of foreign borrowing in recent years and the findings of Ilse Mintz with respect to foreign borrowing in the 1920's.^{9/} There is no evidence in recent new issues of the deterioration in quality of foreign bond issues that was demonstrated by Mrs. Mintz for the 1920's. If one had to hazard a guess, it would be tempting to conclude that the quality of the roster of new issues may have been improved from a financial standpoint by the replacement of the issues by African countries which occurred in 1958 by European issues of 1962.

Furthermore, the volume of new dollar bond issues by foreign countries other than Canada has not shown the inverse relation to new stock issues that Mrs. Mintz found in the 1920's. On this point, however, some caution is required: the time period covered in the present study is short since the resurgence of foreign bond issues is a relatively new phenomenon, while the cycles in stock issues examined by Mrs. Mintz spanned several years.

One major question with respect to foreign bond issues is whether they show evidence of behaving in a fashion similar to, and of responding to the forces that influence, the domestic bond market. As shown in Table 3, yields on new bond issues of foreign governments and the European Coal and Steel Community have frequently exceeded those on new issues of highest grade U. S. corporate bonds by 1 to 2 percentage points. More important, yields on foreign issues have fluctuated substantially less in response to changes in capital market conditions in this country than have yields on high grade corporates. In periods of tight capital markets, the offering yields on foreign bond issues in the U. S. market rise substantially less than those on new U. S. corporate issues, and in periods of relatively easy capital market conditions, yields on foreign issues fall less. Thus, the proportionate change in offering yields on foreign bond issues in response to changing conditions is much less than is true of U. S. domestic issues.

^{8/} Samuels, op. cit., p. 9.

^{9/} Ilse Mintz, Deterioration in the Quality of Foreign Bonds Issued in the United States 1920-1930, National Bureau of Economic Research, 1951.

Table 3

Selected Foreign Bond Issues in the U. S. Market

<u>Borrower</u>	<u>Amt.</u> <u>\$mil.</u>	<u>Date</u>	<u>Av. yield on new</u> <u>corporate bond</u> <u>issues in U. S.</u> <u>(adjusted to Aaa basis)</u> <u>(1)</u>	<u>Yield on</u> <u>foreign</u> <u>issue</u> <u>(2)</u>	<u>Differ-</u> <u>ence</u> <u>per cent</u> <u>(2-1)</u>	<u>Cost to</u> <u>borrower</u> ^{a/}
Australia	25	6/56	3.56	4.64	1.08	4.89
	20	3/57	4.18	5.00	.82	5.24
	25	4/58	3.67	4.85	1.18	5.09
	25	10/58	4.48	5.20	.72	5.41
	25	9/59	5.29	5.76	.47	5.98
	25	4/60	4.78	5.46	.68	5.67
	25	9/60	4.45	5.42	.97	5.63
	25	6/61	4.65	5.75	1.10	5.98
	25	1/62	4.45	5.65	1.20	5.87
	30	6/62	4.15	5.71	1.56	5.93
	25	10/62	4.23	5.58	1.35	5.80
Belgium	30	9/57	4.68	5.75	1.07	6.03
	25	11/61	4.32	5.70	1.38	5.96
	30	3/62	4.23	5.40	1.17	5.65
Denmark	20	2/59	4.29	5.75	1.46	6.03
	20	5/62	4.09	5.47	1.36	5.74
ECSC	25	4/57	4.23	5.50	1.27	5.68
	35	6/58	3.61	5.24	1.63	5.48
	25	10/60	4.60	5.63	1.03	5.84
	25	5/62	4.09	5.33	1.24	5.54
New Zealand	10	11/58	4.35	5.62	1.27	5.91
	20	10/61	4.26	6.01	1.75	6.27
	25	5/62	4.09	5.50	1.41	5.75
Norway	18	9/58	4.56	5.45	.89	5.70
	18	5/61	4.51	5.75	1.24	6.02
	20	7/62	4.33	5.85	1.52	6.12
Oslo	8	5/58	3.66	5.75	2.09	6.06
	10	6/60	4.69	5.85	1.16	6.16
	10	4/62	4.17	5.70	1.53	6.00

Sources: Average yield on new corporate bond issues in the United States are based on new offerings rates A to Aaa, adjusted to Aaa basis for the month in question by the First National City Bank. Yields and costs for new foreign issues are from Moody's.

a/ Differs from offering yield by the amount of the underwriting spread. Does not include other costs of flotation.

The variation in cost of foreign issues is less than for domestic issues both for this reason, and because the higher underwriting spreads on foreign issues and other costs associated with such issues add a larger, essentially unchanging, element to costs and thereby and further reduce variation in relative costs.^{10/} Evidence of relative stability of foreign borrowing costs can be found in all foreign issues in Table 3, except those of Denmark. The countries included in the table are those whose governments have borrowed most frequently in recent years.

But even if the costs to foreign countries of borrowing in the U. S. market are not very responsive to changing market conditions, are changes in such costs sufficiently large to influence borrowing decisions? The answer can only be determined on a case-by-case basis, but the evidence suggests that in many instances such cost changes would not be large enough to significantly affect foreign demands for U. S. funds. The explanation lies in the fact that borrowing countries have been unable to meet their large capital demands from markets outside the United States. The governments of these countries are clearly willing to pay interest costs of 6 per cent or more for foreign capital.

For example, both Norwegian issues in the U. S. were increased in amount from originally announced totals in response to favorable investor interest. (The increases were from \$15 million to \$17.5 million in one case and to \$18 million in the other.) Norway was willing to borrow \$18 million in the U. S. market at a cost of 6 per cent in 1961, although reportedly it had borrowed Sw. fr. 50 million in Switzerland at a cost of about 5 per cent in 1960.^{11/} Similarly, the Copenhagen Telephone and Telegraph Co. (a partly government-owned company) was willing to borrow \$15 million in the U. S. in May 1962 at a cost of 6-1/4 per cent, although the previous year it had obtained 25 million Netherlands guilders through an issue bearing a 4-3/4 per cent coupon. Although these borrowers took advantage of lower (or at least apparently lower) European rates when issues in Europe were possible, they were prepared to pay high interest costs in New York when necessary.

^{10/} Parenthetically, it may be noted that the underwriting spreads are reported to be higher for foreign issues in the New York market than for foreign bond issues in London. In addition, new foreign issues in New York apparently involve additional costs to the borrower, among which are expenses incurred by the underwriter in sounding out the potential market for the bonds and the legal expenses of arranging an issue. Nevin, op. cit., p. 85.

Mr. Nevin concludes that "New York is an extremely expensive market in which to borrow." op. cit., p. 105.

^{11/} See: International Financial News Service, Nov. 11, 1960.

Australia is probably the single largest borrower in foreign security markets, aside from Canada. It has apparently borrowed at a cost of 5-1/2 per cent or less when possible, both in the U. S. and abroad, but it has also clearly shown willingness to pay 5-3/4 per cent through its recent \$100 million borrowing from the IBRD, and almost 6 per cent through its most recent issues in the U. S.

Australia has borrowed more than \$200 million in the U. S. since early 1958. It has borrowed in European markets when possible - in at least some cases probably at interest costs lower than in the United States (Sw. fr. 60 million each in 1960 and 1961, with coupons of 4-1/2 per cent, net cost unknown; Netherlands guilders 40 million in 1961 with coupon of 5 per cent, net cost unknown). It also borrowed in Canada in 1961, probably at a cost higher than in the United States (20 million Canadian, yielding 5.9 per cent, cost to the borrower unknown). The amount of Australian borrowing in particular foreign markets would appear to depend primarily on the availability of funds in those markets. Australia's demonstrated requirements for foreign capital point to the conclusion that the extent to which aggregate Australian demand for foreign capital could be choked off by small or medium-sized increases in long-term rates in the United States is probably negligible.

Data on capital outflow in Table 4 do not, at least on the surface, contradict this conclusion. Although U. S. capital outflow to Australia was lower in 1959, when U. S. long-term rates were reaching their peak, than during the period of relatively low long-term rates in 1958, the explanation appears to lie in the variation in total Australian demands for foreign capital rather than in the demand for dollar funds. Total Australian foreign borrowing through public bond issues fell from \$92 million in 1958 to \$25 million in 1959, while Australian borrowing in the U. S. market declined from \$50 million to \$25 million. Thus Australian demand for foreign capital was concentrated in the U. S. market during a period of considerable stringency in that market. Moreover, European bond issues in the U. S. market, and U. S. capital outflow on account of new bond issues, were larger in 1959 (even after deduction some private issues convertible into stock) than in 1958 (adjusted for the large stock issue in that year).

Although changes in U. S. interest rates (over the ranges of recent years) do not appear to have a significant effect on demands for U. S. capital by foreign countries (other than Canada), such changes could still affect capital outflow if they influenced the supply of U. S. capital by affecting the extent to which U. S. investors purchased foreign bond issues.

On first inspection, Table 4 seems to offer corroboration for the thesis that U. S. participation in foreign issues in the U. S. market may vary with changes in capital market conditions in this

Table 4

U. S. Participation in Foreign Bond Issues Offered
in the United States
(Data in millions of dollars)

	<u>Western Europe</u>		<u>Sterling Area</u>		<u>Offering yield on new issues of high grade corporate bonds</u>
	<u>Total new issues</u>	<u>Amount U.S. parti- cipation</u>	<u>Total new issues</u>	<u>Amount U.S. parti- cipation</u>	
1957 I	--	--	20	13	4.20
II	35	17	--	--	4.48
III	30	9	--	--	4.68
IV	--	--	--	--	4.44
1958 I	15	a/73	15	7	3.74
II	71	17	31	15	3.65
III	--	25	--	--	4.27
IV	42	6	60	18	4.42
1959 I	39	15	13	10	4.32
II	52	34	--	--	4.72
III	22	18	24	11	4.94
IV	50	11	--	--	5.11
1960 I	3	3	--	--	4.86
II	12	3	48	17	4.74
III	--	--	--	12	4.57
IV	35	18	25	23	4.66
1961 I	15	14	n.a.	12	4.31
II	32	23	25	23	4.53
III	--	--	n.a.	27	4.53
IV	37	20	24	14	4.32
1962 I	50	35	30	18	4.40
II	138	b/139	25	11	4.10
III	20	15	30	18	4.28

a/ Includes stock issue of \$60-70 million.

b/ Includes stock issue of about \$50 million.

Note: Total new issues include all public offerings and those private placements on which public information is available. U. S. participation is from balance-of-payments data published by U. S. Department of Commerce. Yields on new corporate issues are quarterly averages; for source, see Table 3.

country, rising at times when markets are relatively easy and yields on new issues of U. S. corporate bonds (and presumably on other alternative investments) are declining or relatively low, and falling at times when yields on new issues of U. S. securities are near or at peaks.

Thus, in 1957 the relative share of U. S. participation in European issues declined from the second to the third quarter, accompanying a rise in yields on domestic new issues. Similarly in 1958, the relative U. S. share of both European and Sterling Area bond issues was lower in the fourth quarter, than was the case earlier in the year. The capital outflow to Europe in the third quarter of 1958 apparently reflected an offering by the ECSC at mid-year, and the yield figure to be compared with this particular outflow would be the June-July average (3.73 per cent) rather than the third quarter average (4.27 per cent) shown in the table.

Data for 1959 again show lower relative U. S. participation in European bond issues in the fourth quarter, and in Sterling Area issues in the third quarter, than was the case earlier in the year when yields were lower. However, several major European issues in the first three quarters of 1959 had special features likely to have attracted U. S. investor interest.^{12/} Thus, the high proportion of U. S. participation in the European issues of the first three quarters - certainly a period of relatively high yields - can probably not be taken as indicative of investor interest in foreign bonds in general in such periods. Finally, relative U. S. investor participation in European issues in late 1960 and 1961 increased from the low levels of late 1959 and early 1960.

While these illustrations may seem to offer some support for the proposition that U. S. participation in foreign issues varies with capital market conditions, the data are consistent with this conclusion only if one assumes that the variation observed in U. S. participation does not reflect different U. S. investor attitudes to the bond issues of different foreign borrowers. Information available for evaluating this assumption is rather sparse and generally inconclusive, since published data permit inferences to be drawn on U. S. participation in only a few foreign issues.

^{12/} The KLM issue in the first quarter of 1959 and the Montecatini issue in the third quarter both carried rights for conversion into stock, and may have attracted investors not normally interested in foreign fixed-interest securities. Likewise, the Belgian private placement in the second quarter carried special incentives for U. S. investors (see footnote, p. 5).

Three separate issues of the ECSC are identifiable in Table 4. U. S. investors purchased about half of the issues in the second quarter of 1957 and the fourth quarter of 1960, and probably took a larger share of the issue in mid-1958 (\$25 million out of \$35 million, assuming that the capital outflow from this issue is recorded in the third quarter). Higher U. S. participation in the 1958 issue of the ECSC is consistent with the proposition that this participation changes with changes in capital market conditions.

On the other hand, U. S. investor participation in Belgian issues generally appears to represent a smaller proportion of the total than is the case for ECSC issues,^{13/} and thus the changes previously noted in U. S. participation in foreign issues during 1957 may well not reflect changes in credit market conditions.

However, even considerably more extensive information on U. S. participation in individual foreign bond issues would not yield a satisfactory estimate of the extent to which the supply of U. S. capital for foreign issues varied with changes in domestic credit market conditions. If the supply of U. S. funds for foreign issues is variable to a significant degree, underwriters of foreign issues would doubtless adjust the flow of such issues in response to the changes in market conditions; as some foreign issues were postponed, variation in U. S. investor participation in those actually offered would probably become less marked.

Thus, an estimate of changes in potential supply of U. S. capital for foreign issues (the supply schedule) may ultimately have to be inferred from actual amounts supplied in the market. As shown in Table 1, the supply of U. S. capital for foreign bond issues, other than by Canada and Israel, has risen each year since 1958 (adjusting the outflow in this year to exclude the large stock issue) except for 1959. The lack of a rising trend in 1959 may reflect changes in supply in response to the tighter capital markets in that year. If so, the variation in supply was clearly of relatively modest size.

Thus, while the available evidence may indicate that changes in U. S. capital market conditions have an influence on the supply of U. S. capital for these foreign bond issues, this conclusion is a tentative one, and on the whole the magnitudes involved do not appear large.

^{13/} U. S. investors purchased about one-third of the Belgian issue in the third quarter of 1957, and probably about the same proportion of the issue in the fourth quarter of 1961 (for which the capital outflow figures in Table 4 also include an Austrian private placement of \$12 million).