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Costs of Issue of Fixed Interest Securities
in Major European Markets

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Costs of Issue of Fixed Interest Securities in Major European Markets

The liberalization and development of the major Western capital markets is an important prerequisite for the effective utilization of the world's capital resources in the face of the growing needs for these resources.

An important barrier to more extensive use of the European markets by both resident and non-resident borrowers of long-term funds has been the relatively high costs of raising these funds through publicly offered security issues. This difference between costs in New York and Europe was perhaps the main reason for the recently enacted Interest Equalization Tax.

The purpose of this paper is three-fold. First, it is designed to assemble and compare existing estimates of domestic borrower costs for fixed interest securities in Europe. Second, these data are adjusted on the basis of information from a variety of sources to provide tentative, comparable estimates of the costs of long-term funds to foreign borrowers on these markets. And, third, these costs are compared with those incurred by selected foreign borrowers in New York in 1963.

Technical considerations

In order to present comparable estimates of borrower costs among these markets, it has been assumed that the bonds under consideration carry maturities of 15 years in all markets. This figure, although not an average maturity in the strict sense, is fairly common, and for comparability between markets it is a good choice for a representative maturity.

Foreign as well as domestic issues in these markets typically contain arrangements for periodic redemption of the issue over its life. For a simple, uncomplicated first approximation of comparative domestic borrower costs, however, the bonds have been assumed to have an average maturity of 15 years.

Interest costs incurred by the borrower in these markets have been distinguished from other costs in the text. Such an arrangement more clearly distinguishes cost elements which arise primarily from market forces e.g. coupons and issue price discounts from those resulting from institutional or official strictures on the market mechanism. For purposes of estimating annual borrower costs of the funds received, however, all costs in the Appendix tables have been treated as either one-time costs or

continuing costs. All one-time costs have been assumed to be incurred at the time of issue, although in some instances, for example, redemption premia, they are actually paid at a later point in the bond's life; and, hence, they are treated the same as discounts from par at time of issue. Since the estimated annual cost of funds to the borrower is computed herein as a fixed per cent per annum, not as a variable amount, no difficulties arise from this assumption. Continuing costs have been treated as additions to the coupon rate.

Costs incurred on domestic issues in European markets

In recent months three major studies of European capital markets have appeared. The first of these was prepared by the U.S. Treasury in response to Congressional requests for more complete information about these markets in the light of the Interest Equalization Tax proposal. The other two studies were both European in origin, the first, "Credit: Cost and Yield," having been produced by the Organization for Economic Cooperation and Development and the second, "Capital Markets," by the Bank for International Settlements.

By and large, the discussions of costs of issue contained in these studies deal with costs for domestic borrowers; and, taken separately, their estimates seem to be soundly based. Unfortunately, as Table 1 and the detailed tables in the Appendix show, the estimates of costs of borrowing made by these sources often differ widely.

Two possible explanations for the divergencies may be offered. First, differences in the time periods covered may have resulted in some variation in cost estimates. For the most part, however, it is likely that this would affect interest charges more than other costs. Second, and more important, details of borrowing costs in these markets are generally not publicly available, and it is likely that they were largely constructed on the basis of interviews with underwriters and other market participants. Variation in the views of underwriters and, perhaps, a reluctance to disclose too much about their operations may explain a good deal of the vagueness and generality as well as the variance in the cost estimates produced by the studies.

There are, however, a number of points of difference for which there appears to be little satisfactory explanation. These will be apparent below, but it should be made clear at the outset that problems in constructing definitive issue cost estimates do exist and can only be resolved by a more comprehensive study of these markets than has heretofore

been made. This paper is not proposed as such a study, and this section is concerned instead with developing comparable estimates for capital costs for domestic borrowers among these markets from the three major existing studies in order to have a basis for discussion of foreign borrowers' costs and, in turn, to draw tentative conclusions about future international capital movements.

The data from the recent major studies of domestic issue conditions in European markets are outlined in detail in Table A-1 through A-6 in the Appendix with the tables organized on the basis of fixed or continuing costs for the borrowers. Table 1, however, summarizes these estimates on the basis of interest costs--including coupon rates, price discounts and redemption premia--and other costs such as taxes and underwriting fees.

It is clear that, with the exception of the Swiss market and to some extent the Dutch market, interest costs on domestic bonds do not vary greatly among the major European centers. Moreover, if coupon rates prevailing at the end of the second quarter of 1964 are used for the Swiss and Dutch markets--long-term rates in other markets having remained about unchanged--raising their interest costs to 4.50 and 5.50 per cent per annum respectively, the similarity of interest charges among the European markets is even greater.

The substantial variations in the domestic industrial borrower's costs on new security issues in these markets come, therefore, not so much from total interest charges on the issues as from institutional costs arising from tax liabilities, underwriting fees and miscellaneous costs. Furthermore in France and Italy, even the borrower's interest obligations include sizeable costs other than coupon payments, which in large part reflect institutional problems, as distinct from market conditions, in the two countries.

In France, interest costs of the new security issuer are substantially increased by the prospect of large redemption premia on the issue. According to the O.E.C.D. these costs, the largest of the domestic borrower's fixed costs (see Table A-1), may amount to as much as 20 per cent of par value. The same study suggests, however, that a figure of this size--resulting in an annual increase in costs of about 2 per cent--is rare, and that an average figure of about 90 basis points per annum is more realistic.^{1/}

^{1/} O.E.C.D., "Credit: Cost and Yield," p. 30.

The Italian market also imposes interest costs in the form of large issue price discounts on the new issue that add considerably to the borrower's obligations. These may be as high as 10 per cent of par at times but, as indicated in Table A-3, average about 4-1/2 to 5 per cent of par. Even these smaller average discounts account for about one-half of the borrower's fixed costs and add approximately 50 basis points to his interest costs.

While technically classifiable as interest costs and therefore supposedly largely dependent on monetary conditions in the markets, both the French redemption premia and the Italian issue discounts are more reflections of more fundamental problems in the two markets. For example, in both countries, the long history of political difficulties, after accompanied by the erosion of security values, has had the result that individual investors--particularly small investors--are not attracted by long-term private bonds. Moreover, discriminatory taxes on interest and restrictions on institutional investment alternatives in both centers, all in favor of government issues, make security issues by the private borrower even more difficult.

The substantial variation between major markets in non-interest costs which is shown by Table 1 does not appear to arise from large differences in banking or underwriting commissions. There is some disagreement about the size of these costs among the three major studies and the relative importance of such costs in total costs does vary considerably; however, a one-time commission cost of 2-1/2 per cent of the issue's par value is cited in most markets.

Only in the French market does the banking commission for underwriting a new issue assume major importance in the cost calculation. The 5 per cent "average and maximum" underwriting commission cited by the O.E.C.D. arises primarily out of the archaic French method of personal solicitation of prospective investors when selling a new issue. At this rate, this commission accounts for approximately 50 basis points, on a per annum basis, or more than 35 per cent of the borrower's non-interest costs in France.

In contrast to the apparent similarity of banking or underwriting commissions in these markets for the domestic borrower, the tax liabilities which he must incur in the various markets differ widely. These obligations generally arise in two forms, an issue tax levied at the time of the security's initial placing and a tax on the coupon payments made over the life of the bond. In addition to these two major categories, there are of course others, such as the annual Italian tax on the value of the outstanding amount of the issue; but these do not account for a major portion of the borrowers' non-interest costs in these markets.

The Appendix tables provide data on the extent of these taxes in the various markets; however, two of them--one in France and one in Italy--merit special mention because of the size of their effect on the non-interest costs which the domestic borrower must incur in those markets. In the instance of France the tax is the income tax withheld at the source on interest income. This tax is ostensibly levied on the income recipient; in practice, however, the incidence falls on the borrower who must undertake the obligation to pay the tax while, at the same time, crediting the lender with the entire amount of the coupon payment.^{2/} This tax, levied at 12 per cent of the coupon, adds approximately 60 basis points to the borrower's pro-rated annual non-interest costs over the life of the bond.

The situation in Italy is somewhat similar but the annual cost is considerably higher. State taxes on the coupon, together with possible local levies, add nearly 1-3/4 per cent per annum to the borrower's other non-interest costs.^{3/}

To summarize, domestic issue costs in most European markets are high because of high prevailing interest costs, with the Dutch and the Swiss markets as the exceptions to this generalization. The German market with a long-term interest rate of 6 per cent is perhaps the most extreme example of the dominance of these interest costs.

Over and above interest costs, however, institutional and fiscal considerations play an important role in the borrower's cost calculation in a number of European markets. This is particularly true in France and Italy where non-interest charges form a substantial portion of the borrower's total obligations.

Costs for foreign borrowers in Europe

The first section of this paper examined the costs which it is estimated the potential European borrower would have to pay in his own market in order to raise funds through publicly issued, fixed interest securities. This section is concerned with those costs which the non-resident issuer of such securities might expect in the major European markets.

^{2/} See, U.S. Treasury, "A description and analysis of certain European capital markets," Economic Policies and Practices, Paper No 3, p. 113f., for a fuller account of these taxes in France.

^{3/} See Appendix Table A-3.

Table 1: Long-term Borrowing Costs for Domestic Borrowers,
Major European Capital Markets
(per cent per annum)

Country	Source of Basic Cost Data a/		
	U.S. Treasury	O.E.C.D.	B.I.S.
France			
Interest Costs b/	n.a.	5.87	n.a.
Non-interest Costs	n.a.	0.89 - 1.41	n.a.
Total	7.60	6.76 - 7.28	7.60
Germany			
Interest Costs	6.00	6.00	n.a.
Non-interest Costs	0.66 - 0.68	0.78	n.a.
Total	6.66 - 6.68	6.78	7.20 - 7.40
Italy			
Interest Costs	6.01	5.96	6.01
Non-interest Costs	1.01	2.44 - 2.54	2.67
Total	7.02	8.40 - 8.50	8.68
Netherlands			
Interest Costs	--	--	5.00
Non-interest Costs	--	--	0.32
Total	--	--	5.32
Switzerland			
Interest Costs	3.50	4.00	n.a.
Non-interest Costs	0.59	0.35 - 0.37	n.a.
Total	4.09	4.35 - 4.37	4.25
U.K.			
Interest Costs	5.50	--	5.50
Non-interest Costs	0.29	--	0.22 - 0.57
Total	5.79	--	5.72 - 6.07

a/ For details see Appendix Tables A-1 through A-6

b/ Interest costs include issue price discounts and redemption premia where applicable.

France -- Only two foreign issues have been publicly placed on the French market in recent years, by the European Investment Bank in late 1963, and by the European Coal and Steel Community in June, 1964, both with 5 per cent coupons. It is difficult, therefore, to estimate accurately the costs which any future non-resident borrowers might incur in France. There are, however, several factors about these issues which may be helpful in forming a tentative estimate of prospective costs.

A major expense for the E.I.B. bond was, apparently, the initial price discount from par of 5.50 per cent. With other costs unchanged from those given by the O.E.C.D., "Cost and Yield," this would increase interest costs alone by slightly more than 50 points and the total annual cost of funds to the borrower by approximately 65 basis points. It is unlikely that the E.I.B. added costs of this magnitude to those incurred by other borrowers, and three possible compensating cost reductions may have been secured for the flotation of these bonds.

First, since flotations at less than par are not common in France, it is reasonable to suppose that the lower price on this offering was designed to attract investor interest in lieu of the usual redemption premia.

A reduction in the banking, or underwriting, commissions on the issue is a second way by which the E.I.B. may have been able to bring the fixed costs of their offering within reasonable limits. Typically banking and underwriting commissions for new issues in the French market are reduced if an issue has been especially tailored for investment by institutional investors; since the E.I.B. issue was taken up primarily by insurance companies, it is likely that it enjoyed such a reduction.

On the basis of the costs estimated by the O.E.C.D. and on the assumption that a reduction in the offering price of the bonds was substituted for large redemption premia, the annual cost of the proceeds of the E.I.B. issue totalled about 6.4 per cent of which a little more than 5-1/2 per cent may be attributed to interest costs. For each 1/2 percentage point reduction in banking commissions which may have also taken place the total annual cost of the funds to the borrower would have been further decreased by about 5 basis points. For example, if these commissions totalled 2-1/2 per cent, in line with such charges in a number of other European markets, the annual total costs of funds would have been approximately 6-1/8 per cent.

A third course by which borrower costs, for international institutions at least, are lessened in France is through the exemption of the bonds from the French withholding tax on interest income--a tax levied

on the investor but customarily paid by the borrower--which increases the borrower's costs by about 1.2 per cent per year at current tax and coupon rates. With such a tax exemption and only modest reductions in other costs, i.e., banking commissions and redemption premia, the annual cost of such an international issue at current rates would not be much in excess of 6 per cent.

Two qualifications to this relatively optimistic picture should be made. First, the estimates for foreign borrowing in France that have been presented refer exclusively to borrowing by international institutions; private issues would probably incur considerably larger costs, both from substantial underwriting costs and from greater withholding tax obligations. Second, foreign access to the French market must always take into account the authorization requirements of the market officials. In view of recent policy which reserves the market almost exclusively to domestic needs, particularly those of the central government, it is not likely that substantial non-resident borrowing will be permitted.^{4/}

Germany -- The long-term coupon rates are the most important cost of funds on the German capital market for both the domestic and foreign long-term borrower. As might be expected from the pattern of other markets, these rates tend to be slightly higher for the non-resident borrower. Recently issued foreign bonds in Germany indicate that, depending on their credit standing and the coupon rate, non-resident borrowers must also expect to place their issues at prices averaging about 99-1/4 per cent of par. However, on the basis of an average bond life of 15 years this represents only a 7 basis point increase in interest costs. With an average coupon of 6 per cent, total interest costs for these borrowers are, therefore, about 6.07 per cent per annum.

Non-interest costs for foreign and domestic industrial borrowers in Germany do not appear to differ substantially. Largest among these are the bank, or underwriting, commissions of 2-1/2 per cent of par and the securities tax levied by the Länder on these borrowers, also 2-1/2 per cent.

This spring the German government recommended the elimination of the securities tax in a move to expand the activity on their long-term capital market. If successful, this proposal could result in approximately a 20 basis point reduction in the borrower's annual non-interest costs. Nevertheless, as matters stand, this tax is subject to negotiation between

^{4/} An important factor in the admittance of both the E.I.B. and E.C.S.C. issues was the intention of the borrowers to disburse most of the funds in France.

the Länder and the foreign borrower, and it is likely that 2-1/2 per cent represents a maximum, rather than an average, tax liability on such issues. Unfortunately, the natural unwillingness of the Länder to advertise any such reductions makes it difficult to establish the actual cost of the tax.

On the basis of the above considerations together with average prices and coupons on recent issues, a range of 6.8 to 7.5 per cent per annum would be a reasonable estimate of foreign borrowing costs in Germany. The lower figure is based on O.E.C.D. data and the higher on the less favorable B.I.S. cost estimate for domestic borrowers, details of which are not available.

Italy -- In view of the thinness of the Italian capital market, it seems academic to raise the question of non-resident security issues in Italy at this time. In recent years only a limited number of foreign issues have been placed in Italy; moreover, these all represented loans to international organizations, in contrast to issues by foreign governments or foreign private interests. Only a tentative estimate of foreign issue costs in Italy is possible, therefore; but this is still useful in order to place the Italian market in perspective with the over-all European picture.

From such data as are available about the terms of the international issues which have been placed in Italy in the last few years, it appears that interest cost for these borrowers may have been somewhat more favorable than for large domestic borrowers. For example, the last of the international issues in Italy, by the E.C.S.C. in 1963, carried a coupon of 5-1/2 per cent, but the issue was sold at 97-1/2, in contrast to an average price of 95-1/2 for Italian issues.^{5/} Therefore, total interest costs for the E.C.S.C. bonds, assuming an average life of 15 years, came to about 5-3/4 per cent per annum against almost 6 per cent for domestic bonds.

The international issues on the Italian market have been accorded a small reduction in their non-interest costs through exemption from the 0.12 per cent stamp tax on the issues. And it is also likely that underwriting commissions may have been lower for these borrowers, but unfortunately no information on such discounts is available.

^{5/} Cited by the O.E.C.D. (see Appendix Table A-3).

Therefore, on the basis of the O.E.C.D. estimates for domestic industrial flotation costs in Italy and the above considerations, it is reasonable to assume a total annual cost of funds to the foreign, international borrower on the Italian market of about 7.25 per cent. It must be cautioned, however, that this estimate refers only to the experience of a single international issue and one in which the Italian government and economy has a strong interest. It cannot be assumed that a flotation by a foreign government or foreign industrial enterprise would enjoy the same cost benefits. In fact, comparative foreign and domestic costs on other markets suggest that costs for a foreign issue in the Italian market by other than an international institution would probably exceed those incurred on domestic issues.

To this qualification must be added the further consideration, stated at the outset, that with the thinness and instability of the Italian capital market, such foreign issues are unlikely to take place in Italy in the near future.

Netherlands -- As is true for nearly all European markets, access to the Dutch capital market by either foreign or domestic borrowers is carefully controlled by the market authorities. For the most part, the degree of liquidity in the Dutch economy and the state of the balance of payments are the determining considerations in allowing such new issues on the Netherlands' market. For example, after the heavy foreign demands on the Dutch capital market in 1961, access to the market was greatly curtailed in 1962, and no foreign issues in the Netherlands in 1963 and in the first seven months of 1964.

Both interest and non-interest costs for non-resident issues on the Dutch market have been substantially higher than for domestic placements. Issue prices on foreign bonds have been generally about 98 per cent of par, in contrast to an average price for domestic issues of 99-1/2 per cent; coupon rates on non-resident bonds in 1961 and 1962 were 5-3/4 to 6 per cent, while domestic securities generally carried 5 per cent coupons. Total interest costs for foreign borrowers were therefore about 6 to 6.2 per cent per annum, or around one per cent greater than for domestic borrowers.

In addition to heavier interest charges, the non-resident borrower in the Netherlands pays a 2 per cent stamp tax on the new issue; whereas the levy on a domestic issue is only 0.75 per cent. This increase in non-interest costs results in the addition of about 15 basis points to the foreign borrower's per annum costs; and, if other costs are assumed to be unchanged from those incurred by a domestic placement, the increases in interest and non-interest costs yield an estimated total per annum cost of funds of from 6.3 to 6.5 per cent for the foreign borrower in the Netherlands.

Switzerland -- In addition to maintaining strict control over access to their market by foreign borrowers, Swiss authorities also impose discriminatory costs on those non-resident borrowers who do gain admittance to the market. Despite this, however, Switzerland has remained extremely attractive for foreign issues because of the low interest costs which have been characteristic of the market.

Costs incurred on foreign issued fixed interest securities in the Swiss market are approximately $3/4$ to 1 per cent per annum greater than for domestic bonds. The difference is about equally distributed between increased interest costs and other charges, the latter arising both from higher taxes on the issue and from larger underwriting costs. In all these increases imply a total cost of funds for the foreign borrower amounting to about 5.10 per cent per annum.

United Kingdom -- In 1963, foreign borrowing in London assumed significant proportions, and the London market now may be considered a major source of long-term capital for the foreign borrower. These loans have, for the most part, been denominated in dollars; and, as a consequence, London has acted largely as an entrepot market, lending non-British funds to non-British borrowers.

The details of a number of the foreign issues which have been placed in London in recent months have been published in the British financial press. These costs are summarized in Table 2 and Appendix Table A-7. As a result, a firmer basis can be given to an estimate of foreign borrowing costs in the London market than has been possible for the Continental markets.

By and large, coupon charges have been about $5-1/2$ to $5-3/4$ per cent per annum for non-Japanese bonds; on Japanese issues, coupon rates have been 6 to $6-1/4$ per cent. As might be expected, these rates also have varied with the borrower's credit standing--lower for governmental issues and higher for industrial bonds. Total interest costs have averaged about 6 per cent, again with higher costs for the Japanese.

Underwriting commissions in London have shown a good deal of variation on the issues which have been reported. A pattern has emerged, however, whereby issues by central governments and municipalities appear to have carried commission charges of about $2-1/2$ per cent; industrial, or quasi-industrial, bonds guaranteed by an official institution, 3 per cent; and other loans, largely by private Japanese interests, as high as $4-2/3$ per cent. When considered together with the price discounts on the issues allowed the underwriting consortia, the total of these costs shows significantly less variation, totalling for the most between $3-1/2$ and 4

per cent. Insofar as they are affected by tax, legal, and other considerations in both the issuer's country and the U.K., other fixed costs show wide differences for those issues about which some information on these charges is available. The Japanese appear to have been most heavily affected by non-interest costs.

For those issues about which relatively complete cost information has been reported, therefore, an average cost of funds to the foreign borrower in London has been about 6.7 per cent per annum, mainly reflecting the weight of the Japanese issues in the total. Costs to Japanese borrowers have tended to be slightly more than 6.8 per cent per annum, while most other foreign issuers appear to have incurred costs of only about 6.2 per cent.

Table 2: Borrower Costs for Selected
Long-term Foreign Issues in London ^{a/}

Issue	Interest Costs	Non-interest Costs	Total Costs
I.R.I. (Italy)	5.75	0.44	6.19
Midkraft Electric Co. (Denmark)	5.85	0.32	6.17
Norges Kommunalbank (Norway)	5.80	0.36	6.16
Tyssefaldene (Norway)	6.05	1.00	7.05
Itch (Japan)	6.25	0.62	6.87
Takeda Chemical Co. (Japan)	6.00	0.67	6.67
Teijin (Japan)	6.25	0.55	6.80
Toyo Rayon (Japan)	6.25	0.55	6.80

^{a/} Computed on basis of 15-year bond life.

Source: See Appendix Table A-7.

Foreign borrowing costs in New York

This section presents some cost estimates for issues placed by selected foreign borrowers on the New York market in 1963. The issues chosen--entirely of Scandinavian or Japanese origin--accounted for most of the publicly issued foreign securities in the New York market last year after exclusion of those by Canadians and others exempted from the Interest Equalization Tax. Borrowers of these same origins have been responsible for almost all of this year's foreign flotations on European markets.

Interest costs of the funds received by these borrowers averaged slightly less than 5-3/4 per cent per annum. Elimination of the only non-governmental issue, the Mitsui placing, would reduce these interest costs to about 5.6 per cent; average non-interest costs would not be significantly changed by this omission.

As Appendix Table A-8 shows, there were only slight variations in underwriting commissions on these flotations. "Other" (miscellaneous) expenses, however, showed considerable variation, possibly as a result of taxes or fees imposed on the issuers by their own countries. On average, these non-interest costs accounted for about 43 basis points in annual costs for the foreign borrower.

Under the provisions of the Interest Equalization Tax approximately one per cent per annum is added to the cost of long-term foreign issues if purchased by U.S. residents.^{6/} In total, therefore, including the new tax and assuming no other changes in costs, foreign borrower costs in New York would average about 6.8 per cent.

Summary and Conclusions

The above discussion has brought out several important facts about borrower costs on long-term securities in the major Western capital markets.

First, the two most efficient capital markets in Continental Europe, the Netherlands and Switzerland, are at once the least expensive of any European markets for either domestic or foreign borrowers and two of the most heavily restricted European markets. In contrast, both domestic and foreign issuers in other European markets have to incur varying degrees of restriction but relatively high issue costs, amounting to 7 per cent or more on the Continent and from 6 to 7 per cent per annum in London (see Table 4).

^{6/} The tax is levied on the purchaser; however, in practice it is the borrower who must pay the tax by offering more favorable terms to the purchaser.

Table 3: Borrower Costs for Selected
Long-term Foreign Issues in New York in 1963 a/

Issue	Interest Costs	Non-interest Costs	Total Costs
Kingdom of Denmark	5.37	0.29	5.66
Copenhagen Telephone and Telegraph	5.58	0.47	6.05
City of Copenhagen	5.55	0.40	5.95
Government of Finland	6.12	0.53	6.65
Kingdom of Norway	5.42	0.38	5.70
City of Oslo	5.47	0.35	5.82
Government of Japan	5.72	0.28	6.00
Mitsui	6.38	0.56	6.94
Nippon Telephone and Telegraph	5.87	0.56	6.43

a/ Computed on basis of 15-year bond life.

Source: See Appendix Table A-8.

Second, a significant portion of the borrowers' costs in the French and Italian markets arises from non-interest costs; for the non-resident issuer this is particularly true. Consequently, a great deal of the high cost of borrowing in those countries appears to be the result of institutional forces and regulations rather than of the interaction of the market forces of supply and demand.

Third, the Interest Equalization Tax has apparently resulted in foreign borrowing costs in the United States from U.S. residents that are as high as, or higher than, those in other major Western markets. Without the tax, a number of markets--especially the London market for dollar issues--would be closely competitive with the U.S. on a cost basis.

These facts suggest that many of the difficulties which the non-resident borrower must face in seeking long-term funds on major Western capital markets do not arise directly from the free market forces of supply and demand. Instead, they appear to be largely the result of intervention or rigidities in the market in the form of institutional practices, taxes, or outright restriction. At least three developments favorable to progress in the international economy would be likely to arise from a reduction of these elements.

(1) Market forces in the form of interest costs in the major markets would be able to play a more central role in determining the ebb and flow of long-term capital between countries.

(2) The major European markets would be able to develop more fully as significant, competitive alternatives to the United States as sources of long-term capital.

(3) Such developments would increase the ability of European markets to finance Europe's needs for long-term capital and, even more important in the future, to finance the growing investment needs of non-European, and especially less developed, economies.

Table 4: Summary of Domestic and Foreign Long-term Borrowing Costs and Market Accessibility to Foreign Borrowers for Major Western Capital Markets

Market	Cost of Borrowing		U.S. over Foreign Cost Differential for Foreign Borrowers (after IET in U.S.)	Market Access to Foreigners
	Domestic Borrowers	Foreign Borrowers		
France	6.8 - 7.6	6.2 - 7.5	0.2 - 0.1	Authorization required; major barrier is capital market situation and lack of investor demand.
Germany	6.7 - 7.4	6.8 - 7.5	-0.4 - +0.1	Access free; substantial deterrent from interest and tax costs.
Italy	7.0 - 8.7	7.4	1.0 - 0.2	Authorization required, but basically a formality; major barrier is lack of investor demand.
Netherlands	5.3	6.3 - 6.5	0.1 - 1.1	Heavily restricted, with total determined by situation in Dutch economy and by Dutch international capital account. Closed late-1962--mid-1964.
Switzerland	4.0 - 4.4	5.0 - 6.0	1.4 - 1.6	Heavily restricted, with total determined by situation in Swiss economy and Swiss demands on the capital market.
U.K. (sterling)	5.7 - 6.1	5.8 - 7.1	0.6 - 0.5	Access only to Commonwealth and Sterling-Area borrowers.
U.K. (entrepot)	*	6.2 - 7.0	0.2 - 0.6	Apparently free access; U.K. investors must pay dollar premium to invest in dollar issues.
U.S.		6.4 - 7.6	*	Access free; about 70 basis points of cost due to I.E.T.

* Not applicable.

APPENDIX

The tables in this Appendix present the details of the cost data which form the basis for the foregoing estimates of domestic and foreign borrower costs on the major Western capital markets. Several over-all comments about these tables seem advisable.

Sources -- The sources for Tables A1 through A6 are three studies of European capital markets which have been prepared in the past two years. They are as follows:

U.S. Treasury, "A description and analysis of certain European capital markets," Economic Policies and Practices, Paper No. 3. (Materials prepared for the Joint Economic Committee, Congress of the United States), 1964;

O.E.C.D., "Credit: Cost and Yield," CPE/WP3(63)22;

B.I.S., Capital Markets.

In the tables these three studies are referred to as U.S. Treasury, O.E.C.D., and B.I.S., respectively.

Issue advertisements and news items from The Times (London) and The Financial Times provide the basis for the figures in Table A7. Where it is thought that other costs were incurred by these issuers, but such data are not available, the total annual cost of the issue has not been calculated.

The data in Table A8 are derived from information submitted in prospectuses by the issuers to the Securities and Exchange Commission.

Cost classification -- Borrower costs in these Appendix tables have been divided into one-time costs and continuing costs.

The former are stated as a per cent of the nominal value of the bond, i.e. par, and the latter as a per cent per annum. This classification is different from that used in the text of the paper; but it corresponds closely to that employed in the data sources and is also useful in giving a clear picture of the magnitude of the different costs. The text classification of interest and non-interest charges, in contrast, stresses the more important considerations of market versus institutional forces in cost determination. For purposes of cross references, interest charges are the sum of coupon payments and the issue price discount, with the latter pro-rated over the average life of the bond--assumed herein to be 15-years. Non-interest costs include all other costs, one-time or continuing, incurred by the borrower.

In all cases the total annual cost of funds represents the total of one-time and continuing costs, with the former pro-rated over the 15-year assumed life of the bond, expressed as a per cent of the proceeds of the issue. Comprehensive bond tables were used for the calculations.

Table A1: Estimated Domestic Borrower
Costs in France for Bonds of
15-year Maturity

U.S. Treasury

One-time costs	n.a.	
Continuing costs	n.a.	
Total annual cost of funds		7.60 ^{a/}

O.E.C.D.

One-time costs		
Bank commissions	0.50 - 5.00 ^{b/}	
Printing, etc.	0.65	
Redemption fee	0.50	
Premium at maturity	8.60 ^{c/}	
Total		10.25 - 14.75

Continuing costs

Coupon	5.00	
Commission for coupon payment	0.07	
Coupon tax (12% x 5.00)	0.60 ^{d/}	
Total		5.67

Total annual cost of funds 6.76 - 7.28

B.I.S.

One-time costs	n.a.	
Continuing costs	n.a.	
Total annual cost of funds		7.60 ^{a/}

- a/ No maturity is given by the study; therefore, this total must be used with caution in comparisons with other costs.
- b/ 5.00 per cent is stated to be an average and a maximum figure; the smaller figure applies to issues taken up by institutions for which the issue is especially tailored.
- c/ Premiums paid at maturity may be as high as 20 per cent according to the O.E.C.D.; this figure is computed from the pro-rated average estimated by the O.E.C.D.
- d/ The 12 per cent tax on the coupon is supposedly levied on the lender; in practice it is paid by the borrower. On foreign bonds, the rate is 24 per cent.

Source: See discussion at beginning of Appendix.

Table A2: Estimated Domestic Borrower
Costs in Germany for Bonds of
15-year Maturity

U.S. Treasury

One-time costs

Bank commissions	2.50
Securities tax	2.50
Exchange fee (.015% x 8)	0.12 ^{a/}
Printing, etc.	0.18
Total	<u>5.30</u> - 5.50 ^{b/}

Continuing costs

Bank commission for redemption	0.03 ^{c/}
Commission for coupon payment	0.02
Trustee fee for collateral	0.05
Coupon	6.00 ^{d/}
Total	<u>6.10</u>

Total annual cost of funds. 6.66 - 6.68

O.E.C.D.

One-time costs

Bank commissions	2.50
Securities tax	2.50
Printing, etc.	0.50 ^{e/}
Listing fee	0.50
Commission for redemption	0.125
Total	<u>6.125</u>

Continuing costs

Coupon	6.00
Commission for payment of the coupon (0.25% x 6.00)	0.015
Trustee fee for collateral	0.10
Total	<u>6.115</u>

Total annual cost of funds. 6.78

B.I.S.

One-time costs	n.a.
Continuing costs	n.a.
Total annual cost of funds	7.20 - 7.40 ^{e/}

-
- a/ It is assumed the bond is listed on all eight German exchanges.
 - b/ Treasury gives the "approximate total" as 5.50 per cent.
 - c/ This fee would seem more appropriate as a one-time cost, but Treasury has considered it as a continuing cost.
 - d/ Assumed; not given in the study.
 - e/ No maturity for these bonds is given by the B.I.S. study.
 - f/ Given as a "reasonable average."

Table A-3: Estimated Domestic Borrower
Costs in Italy for Bonds of 15-year Maturity

U.S. Treasury

One-time costs

Bank commissions	1.50 - 4.50
Stamp tax	0.12
Discount from par	5.00
"Other"	0.50 <u>a/</u>
Total	<u>7.12 - 10.12</u>

Continuing costs

Coupon	5.50
Exchange fees	0.01
Bond tax	0.50 <u>b/</u>
Redemption fees	0.25 <u>c/</u>
Total	<u>6.26</u>

Total annual cost of funds 7.02 - 7.37

O.E.C.D.

One-time costs

Bank commissions	1.50 - 2.50 <u>f/</u>
Taxes on issue	0.12
Printing, etc.	0.30
Discount from par	4.50
Commission for redemption	0.25
Total	<u>6.67 - 7.67</u>

Continuing costs

Coupon	5.50
Commission for coupon payment by banks	
(0.50% x 5.50)	0.03 <u>d/</u>
Taxes on coupon (29% x 5.50)	1.60 <u>g/</u>
Bond tax	0.50 <u>b/</u>
Total	<u>7.63</u>

Total annual cost of funds c. 8.40 - c. 8.

B.I.S.

One-time costs

Bank commissions	2.50
Printing, etc.	0.50
Stamp tax	0.12
Discount from par	5.00
Total	<u>8.12</u>

Continuing costs

Coupon	5.50	
Bank coupon service (0.5% x 5.50)	0.03	d/
Taxes on interest (31.0% x 5.50)	1.71	e/
Bond tax	0.50	f/
Total	7.74	

Total annual cost of funds. c. 8.68

a/ Estimated from figure in B.I.S. study since no exact figure given in Treasury study.

b/ Tax on bonds in circulation.

c/ Estimated on O.E.C.D., "Cost and Yield" data, since Treasury mentions the fee but does not give an amount.

d/ Charge is 0.50% of the coupon.

e/ State taxes amount to 26% on the coupon, local taxes make up the remaining 5%.

f/ This includes a 1% fee for guaranteeing sale of the issue. O.E.C.D. says 2.50 is a maximum for these commissions.

g/ State taxes of 26% on the coupon and local taxes estimated at 3%.

Table A-4: Estimated Domestic Borrower
Costs in the Netherlands for Bonds of 15-year Maturity

U.S. Treasury	n.a.
O.E.C.D.	n.a.
B.I.S.	
One-time costs	
Discount for underwriters (Avg.)	1.50 - 2.00
Brokers commission.	0.52
Stamp tax	2.00
Miscellaneous costs	0.48
Total	<u>4.50</u> - 5.00
Continuing costs	
Coupon.	5.00
Total	<u>5.00</u>
Total annual cost of funds	5.44 - 5.50

Table A-5: Estimated Domestic Borrower
Costs in Switzerland for Bonds of 15-year Maturity

U.S. Treasury a/

One-time costs	
Underwriting and other commissions	3.50
"Other" (approx.)	3.00
Total	<u>6.50</u>
Continuing costs	
Coupon	3.50 b/
Total	<u>3.50</u>
Total annual cost of funds.	4.09

O.E.C.D.

One-time costs	
Bank commissions	2.25 - 2.50
Taxes	0.64
Printing, etc.	0.40
Redemption fee	0.25
Total	<u>3.54 - 3.79</u>
Continuing costs	
Coupon	4.00
Commission to banks for payment of coupon	
(.5% x 4.00%)	0.02
Total	<u>4.02</u>
Total annual cost of funds.	4.35 - 4.37

B.I.S.

One-time costs	n.a.
Continuing costs	n.a.
Total annual cost of funds.	4.25 c/

a/ All, except coupon, based on discussion of foreign issues; therefore these may be too high as cost estimates for domestic bonds.

b/ Foreign coupons are about 4.50 per cent.

c/ No maturity is given for this figure; nor is it clear if it is as a per cent of the issue's proceeds.

Table A-6: Estimated Domestic Borrower Costs
in the United Kingdom for Bonds of 15-year Maturity

U.S. Treasury a/

One-time costs b/

Underwriter's commission	1.25
Broker's commission	0.75
Stamp tax	0.125
Printing, etc.	<u>0.375</u>
Total	2.50

Continuing costs c/

Coupon	5.50
Registry fee	0.03
Trustee fee	<u>0.01</u>
Total	5.54

Total annual cost of funds 5.79

O.E.C.D. n.a.

B.I.S.

One-time costs

Taxes	0.00 - 2.00
Other	<u>2.25 - 2.50</u>
Total	2.25 - 4.50

Continuing costs

Coupon	5.50 <u>d/</u>
Total	5.50

Total annual cost of funds 5.72 - 5.95

a/ Figures apply to registered bonds.

b/ Bearer bonds would carry a 2% tax, but no stamp tax.

c/ Bearer bonds would have only a coupon fee as far as is known.

d/ The Treasury figure is used.

Table A-7: Borrower Costs for Selected Foreign Bond Issues in London

Issue	One-time Costs			Containing Costs			Total Annual Cost of Funds
	Price Discount	Underwriter Commission	Other	Total	Coupon	Other	
Autostrada (Italy)	1.00	3.00	--	4.00	5.50	--	5.50
I.R.I. (Italy)	0.00	3.50	0.74	4.24	5.75	--	5.75
Government of Austria	1.00	2.50	n.a.	n.a.	6.00	--	6.00
Kingdom of Denmark	1.50	2.50	n.a.	n.a.	5.50	--	5.50
City of Copenhagen	1.00	2.50	n.a.	n.a.	5.75	--	5.75
Copenhagen Telephone and Telegraph	0.50	3.50	1.35	5.35	5.75	--	5.75
Jutland Telephone (Denmark)	1.25	3.00	n.a.	n.a.	5.75	--	5.75
Mikraft Electricity (Denmark)	1.00	2.50	0.56	4.06	5.75	--	5.75
Mortgage Bank of Denmark	1.00	3.00	n.a.	n.a.	5.63	--	5.63
Kingdom of Norway	1.50	2.50	n.a.	n.a.	5.50	--	5.50
Norges Kommunalbank (Norway)	0.50	3.00	0.50	4.00	5.75	--	5.75
Tyssefeldene (Norway)	0.50	3.00	1.70	5.20	6.00	0.50	6.50
Ittoh (Japan)	0.00	4.50	2.38	6.88	6.25	--	6.87
Takeda Chemical (Japan)	0.00	4.60	1.70	6.30	6.00	--	6.67
Teijin (Japan)	0.00	4.00	2.50	6.50	6.25	--	6.80
Toyo Rayon (Japan)	0.00	3.50	1.80	5.30	6.25	--	6.80

Source: The Times (London) and The Financial Times, various dates.

Table A-8: Borrower Costs for Selected Foreign Bond Issues in New York

Issue	One-time Costs		Continuing Costs			Total Annual Cost of Funds		
	Price Discount	Underwriter Commission	Other	Total	Coupon		Other	Total
Kingdom of Denmark	1.25	2.625	0.25	4.125	5.25	--	5.25	5.66
City of Copenhagen	1.77	2.875	0.96	5.605	5.375	--	5.375	5.95
Copenhagen Telephone and Telegraph	2.00	2.875	1.74	6.615	5.375	--	5.375	6.05
Kingdom of Norway	1.75	2.553	0.19	4.493	5.25	--	5.25	5.70
City of Oslo	2.25	2.875	0.62	5.745	5.25	--	5.25	5.82
Government of Finland	1.25	2.875	0.50	4.625	6.00	--	6.00	6.65
Government of Japan	2.25	2.70	0.33	5.28	5.50	--	5.50	6.00
Mitsui	0.00	4.25	1.00	5.25	6.375	--	6.375	6.94
Nippon Telephone and Telegraph	3.25	2.70	0.47	6.42	5.75	--	5.75	6.43

Source: Prospectuses submitted to the S.E.C.