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The Euro-Bond Market in 1970

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The Euro-Bond Market in 1970

Rodney H. Mills, Jr.

The Euro-bond market is only a few years old, and as is usually the case with new markets, each recent year has seen many and sometimes radical changes in one or another aspect of the market's operations. Last year saw, inter alia, further large-scale changes in the composition of borrowers, the currency denomination and maturities of bonds, and the prevalence of convertibility provisions, as well as innovations in interest rate practices and further changes in the choice of domicile for borrowing subsidiaries of U.S. companies. This memorandum describes the principal developments in the Euro-bond market in 1970.

I. Overall volume of borrowing

A preliminary estimate by the Morgan Guaranty Trust Co. places gross new issues of Euro-bonds in 1970 at \$2,951 million.^{1/} This was 6.5 per cent below the 1969 level, which in turn had been 11.7 per cent under the 1968 figure. (See Table 1.) But by historical standards the 1970 new issue volume was certainly large, because it exceeded the 1967 level by nearly 50 per cent and earlier years by still wider margins. (See Table 2.) The decrease shown by the 1970 yearly total also disguises a year-to-year increase in the second half of the year. A highlight of last year's Euro-bond market activities was a further increase -- for at least the fifth consecutive year -- in borrowing by non-U.S. companies, whose flotations in 1970 exceeded those of U.S. companies by more than 40 per cent.

^{1/} Morgan Guaranty Trust Co., World Financial Markets, December 17, 1970.

Table 1. Euro-Bond Issues by Category of Borrower, 1969-70^{1/}
(in millions of dollars)

<u>U.S. companies</u>	<u>First Half</u>	<u>Second Half</u>	<u>Year</u>
1969	552	453	1,005
1970	403	338	741
<u>Non-U.S. companies</u>			
1969	440	378	817
1970	350	712	1,062
<u>State enterprises</u>			
1969	329	354	682
1970	395	187	582
<u>Governments^{2/}</u>			
1969	394	198	584
1970	122	229	351
<u>International organizations</u>			
1969	0	68	68
1970	26	189	215
<u>Total</u>			
1969	1,715	1,450	3,156
1970	1,296	1,655	2,951

1/ 1970 figures are preliminary. The breakdown of the 1969 figures by half-years was estimated by the writer from Morgan Guaranty data on individual issues, and from other market reports.

2/ Including regional and local.

Source: Morgan Guaranty Trust Co., World Financial Markets, numbers for December 1969 (with supplement listing 1969 individual issues) and January-December 1970, and other market reports.

Table 2. Classifications of Euro-Bond Issues, 1965-70
(in millions of dollars)

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u> ^{1/}
<u>Total</u>	1,041	1,142	2,002	3,573	3,156	2,951
<u>By category of borrower</u>						
U.S. companies	358	439	562	2,096	1,005	741
Non-U.S. companies	319	376	575	603	817	1,062
State enterprises	110	118	442	349	682	582
Governments	189	108	303	500	584	351
International organizations	65	101	120	25	68	215
<u>By currency of denomination</u>						
U.S. dollar	726	921	1,780	2,554	1,723	1,761
German mark	203	147	171	914	1,338	688
Dutch guilder					17 ^{2/}	358 ^{2/}
Other	} 112	} 74	} 51	} 105	78	144
<u>By type of security</u>						
Medium-term straight debt	95	225	260	480	173	733
Certificates of deposit	--	--	55	75	--	--
Convertible	110	242	260	1,910	1,131	238
Long-term straight debt	836	675	1,427	1,108	1,852	1,980

^{1/} Preliminary.

^{2/} Estimated by writer from listings of individual issues.

Source: Morgan Guaranty Trust Co., World Financial Markets.

The most general cause of the decrease shown by last year's annual figures was the reduced supply, during the first half of the year, of new funds coming on the market for investment in Euro-bonds. This resulted in rising yields as well as a drop in the amount of funds taken up. New issue volume in the first half was down about 25 per cent from a year earlier. Conditions in the Euro-bond market could not fail to be influenced by those in national bond markets, and in most national markets -- including the United States, Germany, the United Kingdom, France, Switzerland, and the Netherlands -- the initial half of 1970 was one of climbing yields. Investor attitudes toward Euro-bonds were also directly influenced by the same factors that were at work in the national markets, such as growing skepticism over the prospects of reducing inflation, falling stock prices virtually everywhere, and -- as regards the United States -- fears of a tightening squeeze on corporate liquidity as profit margins were reduced (or losses were deepened). Specific adverse events of direct interest to the Euro-bond market in this period were the mounting difficulties of two U.S. companies that had borrowed on the market in 1969. In June one of these, Four Seasons Nursing Centers of America, Inc., declared itself bankrupt; the other, Commonwealth United Corp., was forced to default for the time being on its debt servicing obligations.

The second half of 1970 saw a volume of new Euro-bond issues about 14 per cent above a year earlier (and 28 per cent above the first half). Investors became more receptive to Euro-bond issues, and from

July on composite yields on most categories of Euro-bonds declined almost without interruption. These developments were roughly in line with those in the U.S. and other national bond markets and reflected declining short-term interest rates (notably in the Euro-dollar market), expectations of further declines in response to an easing of demand pressures in most industrial countries, and the end of fears of a liquidity crisis in the United States.

In addition to these very broad forces, a surge in borrowers' use of medium-term Euro-dollar bank loans also made for a lower 1970 total of Euro-bond issues. Morgan Guaranty estimates that "at least \$4.5 billion of such facilities were arranged and publicly announced" in 1970, and adds that "credits of this type not publicly disclosed may have aggregated at least \$2 billion more."^{2/} (Unfortunately, comparable 1969 figures were not, and cannot now be, compiled.) The increase in medium-term Euro-dollar bank loans last year occurred simultaneously with a mushrooming of medium-term Euro-bond issues. Although some special factors were involved in the increase in medium-term bond issues, the two increases probably had one cause in common. Conditions in the Euro-bond market in 1970 as a whole were tighter than in 1969, and borrowers' reluctance to incur liabilities at a time of very high interest rates was understandably greater for long-term than for medium-term obligations.

A possible third cause of the lower level of flotations last year was earlier borrowing by U.S. companies in excess of their immediate

^{2/} Morgan Guaranty Trust Co., op. cit., p. 6.

needs. Morgan Guaranty reports that at the start of 1970 U.S. companies had "\$1.7 billion of temporarily invested proceeds from issues of past years."^{3/} Euro-bond flotations by subsidiaries of U.S. companies dropped by \$250 million last year. However, U.S. companies increased their recourse to medium-term Euro-dollar bank loans, raising more than \$2 billion in this way, according to Morgan Guaranty. Although the actual amount of the increase over 1969 is not known, it suggests that companies may not have felt their liquid funds were excessive, and that no such a consideration was involved in the decline of their bond issues.

II. Borrowing by category of borrower

That most important change in 1970 in the volume of borrowing by a particular category of borrower was the drop in issues by subsidiaries of U.S. companies, from \$1,005 million in 1969 to an estimated \$741 million last year, as shown in Table 1. The reason why this decline was so much steeper than that in the overall volume of borrowing on the Euro-bond market is not easily identified at this time. U.S. companies and their operating subsidiaries abroad increased, rather than cut back on, their investment outside the United States. They may have substituted other forms of financing (e.g., medium-term Euro-dollar bank loans) for Euro-bond issues on a particularly large scale, or (as mentioned above) may have drawn to some extent on liquid balances in lieu of raising new funds through Euro-bond issues.

^{3/} Idem, p. 7.

Governmental bodies and state enterprises also raised less on the Euro-bond market last year, but non-U.S. companies and international organizations increased their takings. From the standpoint of residence of the borrower, one of the more marked changes in 1970 in the volume of borrowing was the rise in issues by Italian borrowers from \$155 million in 1969 to \$340 million in 1970. (See Table 3.) All of the 1969 borrowings, and all but \$15 million (one issue, by Olivetti) in 1970 were by Italian state enterprises or state-controlled companies in the competitive sector. Late in 1969 the Italian government began to redirect a large part of the required borrowings of state enterprises and other state-controlled companies from the domestic market to the international market in order to offset the drain on Italy's reserves occasioned by a heavy outflow of private Italian capital. This was forced and costly borrowing as regards 1969 and the first two months of 1970, because Euro-bond issues of Italian borrowers had to be floated at yields higher than would have had to be offered to raise the funds on the Italian bond market. But the borrowings from March on were in harmony with market forces because the extremely rapid rise in Italian bond yields begun in mid-1969 eventually carried Italian yields above Euro-bond yields on comparable securities. Issues by Italian borrowers were of interest mainly to Italian investors; but because of the strength of this Italian investor demand, the bonds could be floated at yields

Table 3. Euro-Bond Issues
By Selected Country of Borrower, 1969-70^{1/}
(in millions of dollars)

<u>Italy</u>		<u>United Kingdom</u>	
<u>1969</u>		<u>1969</u>	
State enterprises (4)	155	State enterprises (3)	125
		Private companies (2)	<u>50</u>
		Total	175
<u>1970</u>		<u>1970</u>	
State enterprises (5)	280	Private companies (11)	217
State-controlled companies (2)	45		
Private companies (1)	<u>15</u>		
Total	340		
		<u>Scandinavian countries</u>	
		<u>1969</u>	
		Governments (5)	108
		State enterprises (2)	37
		State-controlled companies (1)	<u>16</u>
		Total	161
		<u>1970</u>	
		Governments (8)	146
		State enterprises (4)	58
		Private companies (2)	<u>36</u>
		Total	240
<u>Netherlands</u>			
<u>1969</u>			
Private companies (6)	127		
<u>1970</u>			
State-controlled companies (4)	74		
Private companies (6)	<u>94</u>		
Total	168		
<u>France</u>			
<u>1969</u>			
Governments (1)	13		
State enterprises (3)	116		
Private companies (1)	<u>54</u>		
Total	183		
<u>1970</u>			
State enterprises (6)	140		
Private companies (5)	<u>107</u>		
Total	247		
		<u>Germany</u>	
		<u>1969</u>	
		Private companies (3)	190
		<u>1970</u>	
		Private companies (5)	121

^{1/} Numbers in parentheses refer to the number of separate issues, which sometimes exceeds the number of individual borrowers. "Governments" includes regional and local governments.

Table 3 (continued)^{1/}

<u>Canada</u>		<u>Japan</u>	
<u>1969</u>		<u>1969</u>	
Governments (7)	147	Governments (2)	50
State enterprises (4)	120	State enterprises (1)	41
Private companies (2)	<u>20</u>	Private companies (7)	<u>150</u>
Total	<u>287</u>	Total	<u>241</u>
<u>1970</u>		<u>1970</u>	
Governments (5)	67	Private companies (6)	108
State enterprises (1)	15		
Private companies (3)	<u>60</u>		
Total	<u>142</u>		

^{1/} Numbers in parentheses refer to the number of separate issues, which sometimes exceeds the number of individual borrowers. "Governments" includes regional and local governments.
Sources: Morgan Guaranty Trust Co., World Financial Markets, and other market reports.

considered unattractive by other investors.^{4/} Italian dollar Euro-bond issues were dubbed "Ital-dollar" loans, because of the nature of the market for them.

Individually-reported issues by Dutch borrowers increased from \$127 million in 1969 to \$168 million in 1970.^{5/} The green light which the Netherlands Bank gave in late 1969 to a limited amount of guilder-denominated Euro-issues by Dutch and non-Dutch companies was probably a factor in the increase. All individually-reported Dutch issues last year were placed by private companies or state-run companies in the competitive sector. Individually-reported issues by French borrowers increased from \$183 million to \$247 million. Borrowings by state enterprises again made up over half of the French borrowings (by value) in 1970, but private companies increased their share to over 40 per cent and the number of issues by private French borrowers rose from one to five. Individually-reported borrowings by British borrowers rose only moderately, from \$175 million to \$217 million, but issues by private U.K. firms rose from 2 to 11 and accounted for all the British borrowings

^{4/} Euromoney, May 1970, p. 24.

^{5/} The totals for borrowings by country of borrower cited in this discussion have been derived from listings of individual issues reported by the Morgan Guaranty Trust Co. in World Financial Markets, and by other market reports.

in 1970, compared with only \$50 million the year before. Scandinavian borrowers -- almost all of them governmental bodies or public utilities -- were again active, raising their takings to \$239 million last year from \$161 million the year before.

The largest decline in borrowings by nationality of issuer in 1970 was the fall in Canadian issues from \$287 million to \$142 million. Movements in relative borrowing costs worked to produce this result. Canada was the only industrial country where the average levels of bond yields in 1970 as a whole were only moderately higher than in 1969 and where the rise in yields in the domestic bond market was consequently much less than in the Euro-bond market. Canadian government bond yields were up about 30 basis points for 1970 as a whole, as against a 95 point rise in the Morgan Guaranty Trust Co.'s composite yield on Euro-bonds issued by government bodies. Canadian borrowers in 1969 were mainly provincial and local governments and public utilities. There were also declines in new issues by borrowers in Germany (from \$190 million to \$121 million) and Japan (from \$241 million to \$108 million). Three of the five German issues last year were 5-year guilder bonds.

III. Currency denomination of bonds

The volume of newly-issued Euro-bonds denominated in U.S. dollars increased slightly in absolute amount in 1970 (see Table 2), and rose as a percentage of total new issues from 55 per cent to 60 per cent. New issues of bonds denominated in DM (German marks), which had increased very rapidly in both of preceding two years, fell sharply from 42 per cent to 24 per cent of total new issues. One very likely reason for the drop was the DM revaluation in the autumn of 1969, which diminished the attractiveness of DM-denominated bonds to investors by eliminating any reasonable chance of gain from appreciation of the German currency during 1970. In addition, the Bundesbank wished to curtail the volume of DM-denominated Euro-bond issues in order to hold down the outflow of long-term capital from Germany, the primary purpose being to insure that the borrowing needs of the German public could be met at tolerable interest rate levels. In the early months of the year the Bundesbank also had some balance of payments worries. Flotations of DM-denominated Euro-bonds are of particular relevance to German domestic financial conditions and the German balance of payments because German residents constitute a much larger proportion of the market for those bonds than for bonds denominated in dollars or other currencies.

Borrowers planning DM issues in the Euro-bond market are careful to obtain the prior approval of the Bundesbank. Disregard by issuers of objections to Euro-bond issues raised by the monetary

authorities of the country of the currency involved could have unfortunate consequences, one of which might even be measures by the particular authorities preventing the issuer from servicing the debt. In this connection, in 1970 the Swiss National Bank continued to disapprove of the issuance of Euro-bonds denominated in Swiss francs, because of fear that the attractiveness of such issues to Swiss investors might tighten credit conditions in Switzerland more than desired. Only one Swiss franc-denominated Euro-bond issue was put on the market last year, and that was a small issue (for \$7.7 million equivalent) that was privately placed.

Last year saw the emergence of a large volume of borrowing through the issuance of bonds denominated in Dutch guilders. On the basis of preliminary data, guilder-denominated bonds made up about 13 per cent of total Euro-bond issues. The revaluation of the German mark generated expectations of a possible revaluation of the guilder and a flow of foreign funds into Dutch securities, on which inflow the Netherlands Bank looked with displeasure because it ran counter to the Bank's anti-inflationary monetary policy. Late in 1969 the Netherlands Bank began to authorize guilder-denominated Euro-bonds to divert investor demand for guilder instruments away from the Dutch securities market.

Permission for guilder Euro-bond issues was given on condition that they be privately placed with investors not resident

in the Netherlands.^{6/} This condition shielded the balance of payments from an outflow of residents' capital into such securities, an eventuality the Netherlands Bank ostensibly wished to prevent even though it would have reinforced the Bank's anti-inflationary policies. Dutch as well as non-Dutch borrowers took advantage of the opportunity to float guilder Euro-bonds, but an additional proviso attached to such flotations insulated the domestic economy by requiring that the proceeds be spent outside the Netherlands. All guilder-denominated issues have been for a maximum of five years maturity, presumably in reflection of a further Netherlands Bank condition the purpose of which is not readily apparent. These guilder bonds are frequently called notes in reflection of their relatively short maturity.

An innovation in the currency denomination of Euro-bonds was the appearance in December 1970 of an issue by the European Coal and Steel Community denominated in "European currency units," an accounting unit of the European Community. A writer in the publication Euromoney reports "it was possible to subscribe for the new loan in any of the five currencies of the Six and the holder can require interest and redemption payments in any of those currencies."^{7/} The same author points out that "the new ECSC loan is the first, and so

^{6/} Private placement presumably reduced or even eliminated the possibility the securities would be purchased by Dutch residents on the secondary market.

^{7/} Barry Phelps, "Euro-ecstasy," Euromoney, January, 1971, p. 41.

far the only, loan to give holders both the benefit of a revaluation of any one of the currencies of the Six and a guarantee against loss in the event of one of them, or even four out of five of them, devaluing." Because of this unique feature, the loan was floated at a yield probably about 1 per cent below what would otherwise have been required.

The currency denomination of bonds showed a definite relationship to the identity of the borrower. Borrowing subsidiaries of U.S. companies generally issued dollar bonds; of 33 reported issues for U.S. companies in the first 11 months of the year, three were denominated in guilders, one in DM, one in Swiss francs, and the rest in dollars. In the same 11 months, non-U.S. companies (other than state enterprises) floated 22 reported issues in dollars, 11 in DM, and 14 in guilders, but all but two of the guilder loans were raised by Dutch or German companies. Issues by state enterprises and governments were predominantly in dollars and to a lesser extent in DM, but none were denominated in guilders, at least in part because the maturities all exceeded five years. There were apparently four issues in European units of account: one by the South African government, one by a South African state enterprise, one by the Province of Manitoba, and one by a state-run French regional development corporation.

IV. Maturities, conversion feature, and interest rate innovations

Preliminary figures show a rise in issues of medium-term (three to seven years maturity) straight debt from \$173 million in

1969 to \$733 million in 1970 (from 5 per cent to 25 per cent of total issues), and while the 1969 figure may have been low for special reasons the 1970 estimate also widely exceeded the 1968 volume (\$480 million) of medium-term straight debt. (See Table 2.) The Netherlands Bank's authorization of guilder-denominated notes, which had to be limited to five-years maturity, was a principal factor here: issues of guilder notes rose from \$17 million in 1969 to an estimated \$258 million last year. But, as mentioned earlier, the higher level of interest rates in 1970 was an incentive to reduce the maturity of new Euro-bond issues.

Another major change in 1970 was the very sharp shrinkage in issues of convertible bonds because of the bearish attitudes toward shares prevailing in most countries most or all of the year. Convertible issues declined from \$1,131 million to an estimated \$238 million. The 1969 total was already much less than the previous year's \$1,910 million, because of the disappearance of the generally bullish stock market sentiment of 1968. Convertible issues of U.S. companies dropped from \$628 million in 1969 to \$80 million in 1970, and convertible issues of non-U.S. companies shrank from \$503 million to \$158 million.

A new practice in determining the interest rate on bonds was the provision for a variable or floating interest rate on the 10-year dollar bond issue by ENEL (National Electricity Agency) of Italy for \$125 million in May, the largest Euro-bond loan ever raised. A

variable interest rate was carried on subsequent 10-year dollar bond issues by foreign borrowing subsidiaries of two U.S. companies (Insilco. Corp., the former International Silver Corp., for \$25 million in July, and General Cable Corp. for \$25 million in September), and on a 7-year dollar issue by the Argentine Republic for \$50 million in October. On all these issues, semi-annual interest payments are to be at a rate equal to a prescribed margin above the 6-months London Euro-dollar deposit rate prevailing six months earlier, but not less than a prescribed minimum. The margin above the 6-months Euro-dollar rate is $3/4$ per cent for ENEL, 1 per cent for Insilco and General Cable, and $1-1/2$ per cent for the Argentine Republic; the minima are $7-1/2$ per cent for the first three issues and $8-1/4$ per cent on the Argentine issue.

The first semi-annual interest payments on these loans were (or will be) at a $10-1/8$ per cent annual rate for ENEL, 10 per cent for Insilco, $9-1/2$ per cent for General Cable, and $9-5/8$ per cent for the Argentine Republic. It would appear that ENEL could have issued bonds in May to raise a loan of a size more usual in the Euro-bond market -- say, of \$50 million at the most -- at a fixed interest rate and price yielding not over 9 per cent. Some observers have indicated that ENEL's use of the variable interest provision was made necessary by the very large size of the loan and the expectation that, because of the unusual interest rate provision, the loan would have wide appeal not only to individual investors but to commercial banks as well. On

the other hand, the first interest rate payments by the two U.S. companies -- particularly that by Insilco -- also appear to have been higher than the yields they would have had to offer on fixed-interest bonds. But only the course of Euro-dollar rates over the next nine years and more will reveal whether the terms on these variable-interest loans were more advantageous to borrower or lender than conventional terms would have been.

V. Secondary market yields and other developments

The Morgan Guaranty Trust Co. has calculated end-of-month composite yields for various categories of Euro-bonds on the basis of prices in the secondary market. The composite yield on long-term, straight-debt issues of U.S. companies (calculated from 10 issues offered in 1967-68) averaged 8.52 per cent in the first 11 months of 1970, exactly 1 percentage point more than on the 12 end-of-month dates in 1969. (See Table 4.) For long-term, straight-debt issues of non-U.S. companies (likewise with reference to 10 issues offered in 1967-68), the composite yield averaged 7.66 per cent in 1969 and 8.68 per cent in January-November 1970. For both series, the yields changed little in the first four months of last year, rose very steeply in May and June, and fell almost uninterruptedly in July-November. But after June, yields on U.S. corporation Euro-bonds declined appreciably more rapidly than those on foreign corporation bonds; for the former, the composite yield in November was only 11

Table 4. Composite Yields on Euro-Bonds^{1/}
(secondary market yields in per cent per annum)

	<u>Dollar Euro-Bonds</u>		<u>DM Euro-Bonds</u>	
	<u>U.S. companies^{2/}</u>	<u>Non-U.S. companies^{2/}</u>	<u>U.S. companies^{3/}</u>	<u>Non-U.S. companies^{4/}</u>
<u>Averages</u>				
1969--Year	7.52	7.66	6.74	6.73
1970--Jan.-Nov.	8.52	8.68	7.95	7.72
<u>Months</u>				
1969--December	8.13	8.20	7.55	7.46
1970--January	8.14	8.19	7.85	7.48
February	8.20	8.24	7.73	7.65
March	8.10	8.31	8.02	7.96
April	8.05	8.28	7.78	7.66
May	8.75	8.91	8.36	8.27
June	9.38	9.59	8.27	7.93
July	8.83	9.31	7.79	7.51
August	8.89	9.18	8.01	7.55
September	8.60	8.81	7.85	7.61
October	8.56	8.84	7.93	7.74
November	8.24	8.77	7.83	7.60

1/ End-of-month yields on long-term, straight-debt issues.

2/ 10 issues.

3/ 7 issues.

5/ 5 issues.

Source: Morgan Guaranty Trust, Co., World Financial Markets.

basis points higher than in December 1969, while for the latter the November yield was still 57 basis points above the December 1969 level. As is implied by the fact that the previously-cited annual averages for the two groups were higher in 1970 by nearly identical numbers of basis points, over the past two years the spread between the two series has alternately widened and narrowed.

Morgan Guaranty has calculated composite yields on long-term, straight-debt Euro-bonds denominated in DM, issued by both U.S. and non-U.S. companies. As shown in Table 4, in 1970 yields on these bonds were still well below those on dollar Euro-bonds despite the DM revaluation in October 1969.

The volume of trading in the secondary Euro-bond market is large. An authority on this market, Stanislas M. Yassukovich, of White, Weld and Co., declares that "certainly, no other national market after New York and London can match the Euro-bond market today in terms of daily turnover, so that it represents the third largest market for debt securities in the world."^{8/} In this secondary market, activity "has continued to grow in line with new issue volume since the introduction of the IET in 1963."^{9/} Growth in secondary market trading volume has occurred partly because larger and more diversified investor portfolios have meant more switching between issues, and

^{8/} Stanislas M. Yassukovich, "The Secondary Market in Eurobonds," Euromoney, June 1970, p. 9.

^{9/} Idem, p. 8.

partly because an ever-increasing amount of Euro-bonds must be purchased on the market each year by sinking funds. According to the Kredietbank, \$1,127 million of outstanding Euro-bonds were to be redeemed in 1970 via the sinking fund system, a sum which that bank said was equal to nearly 10 per cent of the nominal amount of all Euro-bonds issued in 1963-69.^{10/}

All Euro-bond issues except private placements are listed on a stock exchange, partly because the exchange control or institutional regulations of many countries make it more difficult (or legally impossible) for residents to purchase foreign securities not listed on an exchange. In 1970, all the dollar issues by U.S. companies, and most other dollar issues, were listed on the Luxembourg stock exchange, while DM issues of all borrowers were listed on a German exchange (reportedly at the insistence of German issuing houses). But most of the secondary market activity is on an over-the-counter, dealer-to-dealer basis, owing to the "wide geographic dispersal of the interested investors and the fact that most stock exchanges are specifically organized to cater for domestic investors and their own members, making access to their services difficult and expensive for foreign investors and non-members."^{11/} The wide dispersion of the secondary market greatly impedes the task of obtaining meaningful statistics on turnover.

^{10/} "The Primary and Secondary Eurobond Markets," Kredietbank, Weekly Bulletin, August 28, 1970.

^{11/} Yassukovich, op. cit., p. 8.

To facilitate payments for and deliveries of Euro-bonds, the Morgan Guaranty Trust Co. organized Euro-clear, a network of banks in New York and the main European financial centers. Each member bank keeps a securities account and a dollar account with Morgan Guaranty, which pools the securities of the system's members and acts as a system clearing house. In 1970 a second clearing system, CEDEL (Centre de Livraison des Euro-Obligations) was established at the initiative of a group of Luxembourg banks under the leadership of the Banque Internationale à Luxembourg and the Kredietbank S.A. Luxembourgeoise.^{12/}

VI. Domicile of U.S. borrowing subsidiaries

The Euro-bond market has been aptly described as "a market in net yields," meaning in this case net of any withholding taxes. In practice, because of competition for funds, all Euro-bond issues exempt the interest payments from withholding taxes. To avoid the usual U.S. requirement that a 30 per cent withholding tax be applied on interest paid by U.S. companies to foreign residents, U.S. companies have raised funds in the Euro-bond market either through subsidiaries domiciled abroad (in a country which does not itself impose a withholding tax), or through U.S. subsidiaries whose interest payments to bondholders are exempt from withholding tax provided 80 per cent or more of the subsidiary's income is derived from foreign operations. Such subsidiaries, which have been incorporated in Delaware and are

^{12/} For a description of CEDEL, cf. Kredietbank, op. cit.

commonly referred to as Delaware corporations, can meet the 80 per cent rule if they relend at interest most of the funds raised in the Euro-bond market to the parent company's operating subsidiaries outside the United States.

In 1969, approximately one-half of U.S. companies' Euro-bond market borrowing, in terms of both number of issues and amount of funds raised, was through Delaware corporations, and the remainder through subsidiaries domiciled in the Netherlands Antilles, where no withholding tax is imposed on interest payments. And while such is also the case in certain other foreign countries, other tax considerations currently make the Netherland Antilles the most desirable foreign location for the activities in question.

This pattern was radically altered in 1970, when all Euro-bond market borrowing by U.S. companies was done through subsidiaries domiciled in the Netherlands Antilles. This would seem to indicate the parent companies expected that a considerable part of the loan proceeds would be passed on to themselves (or some U.S. domestic subsidiary), enough so that it would jeopardize a Delaware corporation's status as a foreign corporation exempt from paying withholding tax. The Marriott Corporation (a Euro-bond issuer in both 1969 and 1970) states that that was in fact their reason for choosing a Netherlands Antilles domicile for their financing subsidiary.^{13/} In other words, it would appear that in 1970 U.S. companies turned to the Euro-bond market to raise funds for domestic use to a greater extent than in previous years.

^{13/} Information obtained orally from company officials.