June 7, 1963

H. 13 No. 109

LIBRARY

JUN 14 1963
FEDDRAL PEDDRAVE SANK
OF THE CHOOMS

CAPITAL MARKET DEVELOPMENTS ABROAD

I. Germany

II. Nine Charts on Financial Markets Abroad

I. Germany: Money and Capital Markets, March to May 1963

A further tightening of commercial bank liquidity, a marked improvement in business sentiment and a continuing inflow of capital from abroad were the dominant developments affecting German financial markets during the three months under review. With a substantial private capital inflow into German securities markets, the balance of payments shifted into surplus during the first quarter and remained in surplus during April. At the same time, the spot D-mark rose from 2h.999 U.S. cents on March 1 to 25.112 cents on June 6. The combined foreign-exchange reserves of the Bundesbank and the commercial banks were appreciably higher during February and March. They were unchanged during April but probably rose in May.

During the period under review, three factors seem to have stimulated the continuing private capital inflow. In the first place, some German bank borrowing abroad may have occurred (though probably only in limited amount) because of conditions in domestic credit markets. The short-term credit stringency which pushed money-market rates to a peak in mid-March during the seasonal tax inflow and which caused the commercial banks to borrow substantial sums from the Bundesbank during March was only slightly eased during April and May. In fact, further temporary commercial bank borrowings may have taken place in May.

However, the fact that the German banks continued to maintain money-market assets abroad (because Euro-dollar deposit rates remained attractive) underscores the limited character of present liquidity pressures. Conditions in German financial markets reflect the slow but continuing tightening of domestic credit availabilities that the monetary authorities allowed to take effect during 1962 in preference to an active policy of restraint. The Bundesbank's reluctance to take active measures in 1962, according to the bank's Annual Report for 1962, was based on balance-of-payments considerations: the Bundesbank feared that any sudden tightening might produce a large influx of funds from abroad, such as was experienced in 1960.

OFFICIAL USE ONLY

(DECONTROLLED AFTER SIX MONTHS)

Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis

In the second place, German bond issues attracted substantial foreign participation, especially during March and April when two attractive flotations were available:

- A DM 100 million Osaka (Japan) offering on March 21 with a 6.5 per cent coupon at 98.5 price, to be amortized in 5 to 15 years, guaranteed by the Government of Japan, with interest tax free for non-Japanese buyers; and
- A DM 500 million Federal Government loan at 6 per cent par offered on April 2-5

despite attempts by the German authorities to restrict acquisition of these two offerings by non-residents. For the early months of 1963, the Bundesbank has estimated that about one-third of public security offerings have been purchased by non-residents.

Despite active demand, however, bond yields are holding firm. In late April, the Capital Market Committee apparently decided to maintain the 6 per cent coupon on two prospective Federal Government issues: an additional DM 500 million Federal Loan which was to be offered in mid-May; and a DM 265 million Federal Railways issues to be offered at the end of May. In addition, a further DM 500 million tranche of the Federal Loan was to be scheduled in July. In fact, only the Railway issue was actually placed on the market in late May; there are no reports about the Federal loan in the press at this time.

The principal factors which seem to be helping to support the present structure of yields in the bond market appear to be:

- a. The continuing financing needs of the public sector;
- b. The desire on the part of the savings banks to hold the 6 per cent line, particularly because they want to increase the rate on long-term savings deposits; and
- c. The gradual tightening apparent in German financial markets over the past 12 months reflected in part by reduced bank purchases of securities.

At the end of May, when the Federal Railway issue was offered at a 6 per cent coupon, Siemens placed Sw Fr 60 million (11 million) of new securities in Switzerland at 11-1/2 per cent.

The third area in which private funds have been coming into Germany has been in purchases of equities. During March and April, German stock prices moved up only gradually: the F.A.Z. index rose from a 1963 low of 151.5 on

February 26 to 159.23 on March 29 and to 163.65 on April 30. However, the index reached 188.8 on May 13, rising about 15 per cent during the first two weeks of May. This sudden surge in stock values was produced in part by favorable economic and political developments within the country. The terms of the settlement of the strike in the metal industry, the pick-up in domestic business activity and in new orders for export and the Erhard nomination contributed to the improved business sentiment. There was also an actual increase in seasonally-adjusted exports and in the export surplus for April. In addition, political uncertainties in Italy and in the United Kingdom probably contributed to an interest in German securities on the part of non-residents.

The private capital inflow seems to account for a sharp increase in the foreign exchange reserves of the Bundesbank during May. Preliminary estimates based on the weekly balance sheets of the Bundesbank seem to indicate that the Bank's foreign exchange reserves rose more than \$200 million during the month. (See Table 7.)

Tightening of commercial bank liquidity. As a result of the tightening trend in financial markets the German commercial banks made increasing use of their rediscount facilities at the central bank during the first quarter. (See Table 1.) Preliminary estimates suggest that they did not continue to borrow in April and early May, (see Table 1) although borrowing of substantial amounts was resumed in the second half of the month.

During the first quarter, borrowings amounted to DM 0.8 billion. The drain of reserves from the banks was chiefly due to the additions made to the accounts of public authorities at the Bundesbank. The reflow of tax monies to the economy has been relatively slow. Furthermore, a substantial amount of Federal Government D-mark cash payments was not returned to domestic financial markets at all but was used to make payments abroad for military equipment and for indemnification payments.

The money market. Even after the major tax date in mid-March, the Frankfurt money market continued generally tight on balance during most of April and May. Day-to-day money at Frankfurt was quoted at a high of 1 per cent and a low of 3 per cent in March, and the quotes were mostly at 2-3/4 per cent or above throughout most of April. (See Table 2.) The three-month loan rate reached a 3-1/2 per cent minimum in mid-March and had not fallen below this figure by the end of April.

Table 1. Germany: Factors increasing (+) or reducing (-)

Commercial bank reserves, 1961-first quarter 1963

(in billions of D-marks, quarters and months)

	1961	1962	196	2			1963	
Market factors:		CALLES TO SERVICE STATE OF THE PERSON SERVICE STATE STATE OF THE PERSON SERVICE STATE STAT	I II	III IV	Ī	Mar.	Apr.	May c/
Notes in circulation Public authority	-2.5	-1.8	+ .76	-0.5 -1.5	+1.0	-0.5	-0.2	+0.6
deposits Bundesbank foreign	-6.7	-3.3	-1.66	-1.2 + .2	-3.5	-2.0	<u>a</u> /	+0.5
exchange operations	+5.6	+3.3	8 +1.2	+1.6 +1.3	+1.0	+0.7		
Other	+1.2	+1.1	+0.4 +0.2	+0.1 +0.4	+0.3	-0.1		
Overall effect on bank liquidity	-2.4	7	-1.3 + .2	a/ +0.4	-1. 2	-1.9		
Policy factors:								
Open market operations Borrowings at	<u>a</u> /	+1.1	+ .7 <u>a</u> /	+0.2 +0.3	-0.3	+0.6	<u>a</u> /	+0.1
Bundesbank			$\underline{a}/+.1$					-0.3
Total	5	+1.6	+ .7 + .1	+0.4 +0.6	+0.5	+2.0	-0.1	-0.2
Compare:					,			
Change in required reserves b	/-3.4	+ .8	<u>b</u> / + .4	+ .2 + .3	+0.2	<u>a</u> /		

a/ Less than DM 50 million.

c/ May 1-22 only.

b/ Reserve requirements were substantially reduced in 1961.

Source: Deutsche Bundesbank Monthly Report except for April and May which are preliminary figures based on an average of Bundesbank's weekly statements.

Table 2. Germany: Money Market Rates in Frankfurt, February-April 1963 a/
(in per cent per annum)

	Day-to-day money	Three-month loans
1963-Feb. 1- 7	3 - 3-1/h	3-1/4 - 3-3/8
8-15	2-1/2 - 2-7/8	3-1/4
16-23	2-3/h - 3-1/8	3-3/8
24-28	2-7/8 - 3-3/8	3-1/4 - 3-3/8
Mar. 1- 7	3-1/8 - 3-3/8	3-3/8 - 3-1/2
8-15	3 - 3-3/8	3-3/8 - 3-5/8
16-23	3-1/4 - 4	3-1/2 - 3-5/8
24-31	3-1/8 - 3-3/4	3-1/2 - 3-3/4
Apr. 1- 7	3-1/2 - 3-3/4	3-1/2 - 3-5/8
8-15	2-7/8 - 3-5/8	3-1/2 - 3-3/4
16-23	2-3/4 - 3	3-1/2 - 3-5/8
24-30	2-3/8 - 3-3/8	3-1/2

a/ Highest and lowest rate quoted each week.
Source: Burdesbank Monthly Report, Table IV, 2f.

Seasonal and technical factors contributed to the continuing tightness in the money market. After easing slightly in the second half of April, call money rates started to climb again and apparently remained above 3 per cent until the latter part of May. For May 30, the financial press reported call money rates down to 2 per cent.

The bond market. The tone in the bond market continued firm. Yields remained at about 6 per cent (see Table 10 and Chart 6) and the F.A.Z. bond index fluctuated only slightly from a low of 105.84 toward the end of March to a high of 106.10 at the beginning of May. It remained around 105.95-106.00 for most of the period. Although interest in stocks revived markedly during this period, there apparently was no or only little switching out of bonds. New issues were placed readily; public issues were quickly oversubscribed, but some more time was needed to place industrial issues. Most issues were offered with a 6 per cent coupon and at an issue price fluctuating between 99.75 and 100 per cent.

During the first quarter, public authorities were the heaviest borrowers, accounting for DM 1,468 million out of a total of DM 4,727, or for 31 per cent of the total. (See Table 3.) Foreign participation was heavy and non-resident demand greatly exceeded allotments. During the first quarter, foreigners bought DM 521 million worth of bonds, which was substantially more than in the preceding year. A Federal Bond issue of DM 500 million placed early in April and a Federal Railways issue of DM 265 million were heavily oversubscribed with lists

closing early. Again, foreign participation was heavy despite Bundesbank requests that domestic investors be given preference. On the whole about one-third of recent public issues are reported to have been taken up by foreigners. The Capital Market Committee is reported to have decided to maintain the 6 per cent interest rate in anticipation of further heavy public demand for loanable funds.

Table 3. Germany: Gross Placements in Security Markets 1/
(millions of DM, month or monthly average)

		196	52			1963	
"Occasional" borrowers bonds: Industrial Public authorities Foreign issuers Other bonds 2/	I 112 314 32 89	11 72 136 132	111 113 358 154	1V 60 187 57	I Jan. 143 116 489 763 32 259 489	Feb. 162 636 102	Mar. 149 69 98 187
Total	547	340	625	304	923 1,368	900	503
Mortgage and communal bonds	665	<u>453</u>	532	480	<u>652</u> <u>851</u>	476	629
Total gross bond placements 3	/1,212	<u>793</u>	1 ₀ 157	784	1,575 2,219	1,376	1,132
Gross share placements	185	205	172	170	155 110	97	258
Total security placements at issue value	1,397	998	1,329	954	1,730 2,329	1,473	1,390

^{1/} Market value.

Stock market. The stock market started to recover somewhat in early March particularly after a successful DM 250 million issue by a public utility and the F.A.Z. index rose h per cent during the first week of March. (See Table h.) After that interest slackened, however, and economic uncertainties (both the general economic outlook and the impending metal workers strike) may have dissuaded potential buyers and kept the index fluctuating within a narrow 3 per cent range through the end of April. (See Chart 7.)

The settlement of the strike appears to have given the sign for a resumption of general confidence in the future performance of the German economy. Professor Erhard's part in the settlement, which came almost immediately after his selection as Chancellor-designate, also appears to have contributed to general confidence in Germany's political future. In addition, the economic indicators available at that time pointed clearly to a resumption of an upward trend after the disruption by the severe winter. A large rise in export orders was considered especially encouraging.

^{2/} Mostly bonds of specialized credit institutions.
3/ Includes medium-term notes (Kassenobligationen).

Source: Bundesbank Monthly Report, Table V, 6.

Table 4. Germany: F.A.Z. Stock Index (Dec. 31, 1958 = 100)

All time high: 1962 high: 1962 low:	Aug. 31, 1960 Jan. 2, 1962 Oct. 10, 1962	264.60 222.81 132.88	1963 high: 1963 low:	May 13, 1963 Feb. 26, 1963	188.8 151.5
1963 Mar. 15 29 Apr. 16	157.63 159.23 164.67		1963 May 2 10 13	163.68 181.44 188.83	
30	163.65		17 24 31	183.50 181.91 184.63	

All these factors combined to bring about a great upsurge in the stock market, which caused the F.A.Z. index to rise 15 per cent during the first two weeks of May. Although share prices declined from the May 13th peak, they started to rise again, though more slowly, at the end of May and on May 31 they were still 13 per cent above the end of April level. Much of the buying interest was reported to have come from foreign sources, both American and European.

Share placements (see Table 3) were slightly less in the first quarter than they were in either the fourth quarter or the first quarter of 1962.

Budget for 1963. The Bundestag passed the budget bill, including the new division of income taxes between the Laender and the Federal Government, as proposed by the Federal Government. As passed, the bill raises the Federal Governments share in income tax collections from 35 per cent to 40.5 per cent in 1963 and to 41.5 per cent in 1964. Total budgetary outlays are to amount to DM 57.76 billion (as compared with DM 55.05 billion proposed in the budget estimate published October 1962): DM 55.54 billion constitute ordinary and DM 2.2 billion extra-ordinary expenditures.

However, the Bundesrat, which represents the Laender, rejected the budget bill, which will now be further debated in the Conciliation Committee (Vermittlungsausschuss). This was the first time in the history of the Federal Republic that the Laender have not passed the budget bill. The arguments for rejection were essentially the same as those voiced by the Social-Democratic representatives in the Bundestag (who had voted against the bill): that the Federal Government has consistently made its financial position appear to be worse at budget time than it actually turned out to be at the end of the year. In addition, it was argued that the Federal Government should increase its borrowing rather than increase its share in income taxes to the proposed 40.5 per cent.

Minister Dahlgruen replied to these arguments with the statement that the Bundesbank believed it would be difficult to raise in the capital market the DM 2.2 billion required for the extra-ordinary expenditures. He also ruled out possible German government borrowing in foreign markets, partly because of a general reluctance to incur foreign liabilities and partly because borrowing in the U.S. market would increase the U.S. balance of payments

difficulties; the other possibilities, the Dutch and Swiss markets, he thought too narrow for the large requirements, which (if the Federal Railways and the postal system are included) total DM 5.1 billion. Karl Blessing, the President of the Bundesbank, has in the meantime, in a recent speech, voiced his full agreement with the Finance Minister's views in this respect.

Foreign trade. On a seasonally adjusted basis, the German trade surplus started rising again in April, after declining in February and March. Exports rose 1.8 per cent over March, while imports declined by 3.2 per cent. On a year-to-year basis, exports were up 9.9 per cent and imports 19.3 per cent (after adjustment for a change in customs procedures in early 1962). The Statisches Barlesamt reported that, after adjustment for military imports by the Federal Government, the year-to-year change in total imports amounted to only 10 per cent.

Table 5. Germany: Foreign Trade, 1962 - April 1963 (seasonally adjusted monthly averages, million U.S. dollars)

	1961		19	962		1963			
	Year	T	II	III	IV	Ī	March	April.	
Exports Imports	1,061 912	1,083 <u>a</u> / 999	1 ₉ 105 1 ₉ 024	1 ₉ 123 1 ₉ 032	1,115 1,050	.1,098 1,050	1,191 1,160	1,213 1,123	
Balance	149	a/ 84	81	91	65	49	31	90	

a/ A change in customs procedure raised the level of imports in the first quarter. The import figure after adjustment for this change was \$936 million and the trade balance was \$147 million.

The competitive position of imports on the German market became more difficult as of June 1, 1963. On that date, an increase in the turnover equalization tax levied on imports became effective. All imports, with the exception of some important raw materials, are subject to the tax. The normal rate, before June 1, had been 4 per cent; a higher rate of 6 per cent applied to a large number of finished manufactures and lower rates of 1.5 per cent and 3 per cent applied to some agricultural products. As of June 1, many products in the 1 per cent class were raised to 6 per cent and others in the 6 per cent group to the new maximum of 8 per cent. On the other hand, there were some reductions in the agricultural group.

Balance of payments. The German balance of payments again swung into substantial surplus during the first quarter of 1963, after three consecutive quarterly deficits. (See Table 6.) Resumption of substantial private capital inflows was the main factor in this shift. Private capital inflows amounted to over DM 1 billion, about three quarters of which was long-term capital. The heavy foreign participation in new bond issues on the German capital market probably played a major role in this inflow.

Table 6. Germany: Balance of Payments, 1961-March 1963
(in millions of D-marks)

į.		1961	1962 a/		19	62			1963
ě				I	II	III	IV	I	April
1.	GOODS & SERVICES Trade balance Services	- 10	b/3,477 <u>-1,117</u>	618 153	938 - 154	969 <u>-763</u>	952 - 353	575 	<u>- 40</u>
	Total	6,481	b/2,360	771	784	206	<u>599</u>	616	+347
2.	OFFICIAL PAYMENTS Donations Long-term capital Short-term capita	-3,483 1,201	-3,763 -1,306 152	- 945 - 483 - 140	-1,009 - 69 - 226	-721 -431 220	-1,088 - 323 298	- 931 - 89 211	
	Total	<u>-3,548</u>	-4,917	<u>-1,568</u>	<u>-1,304</u>	<u>-932</u>	<u>-1,113</u>	_ 809	-645
3.	PRIVATE CAPITAL Securities trans actions	-						•	•
	Foreign purchases German purchase	s	1,620	524	198	358	540	700	264
	(increase-) 2/ Other long-term Short-term 3/		- 860 330 20	- 340 98 - 559	- 168 - 141 - 74	- 24 27 459	- 328 164 194	- 161 205 78	
	Errors and omissions	234	b/ 316	1,139	371	<u>-336</u>	- 858	192	153
	Total	2,923	1,426	862	368	484	288	1,014	429
	SURPLUS OR DEFICIT (-)	5,856	_1,131	65	- 152	-242	802	821	131

A/ Preliminary.

During April, a payments surplus was again recorded. An increased surplus on goods and services account and a heavy private capital inflow (both long-term and on errors and omissions account) were responsible for the overall surplus.

b/ A change in import accounting procedure has resulted in approximately DM 400 million of goods in bonded warehouses being included in the first quarter imports. This is offset in errors and omissions.

^{1/} Foreign purchases of German securities.

German purchases of foreign securities.

^{3/} Includes commercial bank capital other than foreign exchange assets.

Source: Basic data from Bundesbank and International Financial Statistics rearranged by author

Table 7. Germany: Foreign Exchange Reserves (in millions of U.S. dollars, end of period figures)

	19	62			196	3	
	April	Dec.	Jan.	Feb.	. March	April	May a/
A. Bundesbank gold & foreign excha	inge						
Foreign exchange	2,367	2,768	2,598	2,587	2,698	2,699	2,938
Gold	3,666	3,679	3,694	3,727	3,748	3,748	3,749
Total	6,033	6,447	6,292	6,314	6,446	6,447	6,687
B. Drawing rights in IMF	1,315	1,305	1,294	1,307	1,307	1,312	
C. Commercial banks							
foreign exchange	1,260	632	811	868	854	847	
D. Total reserves (A+B+C)	8,608	8,384	8,397	8,489	8,607	8,606	
E. Change in total reserves		- 224	+ 13	+ 92	+ 118	- 1	
F. Gold as percentage of							
Bundesbank reserves	60.8%	57.1%	58.7%	59.0%	58.1%	58.1%	

a/ Preliminary.

Source: Deutsche Bundesbank Monthly Report; International Financial Statistics.

Foreign exchange reserves. German foreign exchange reserves rose substantially in both February and March but were unchanged in April. (See Table 7.) At the end of April, they were identical with combined holdings in April 1962. During this period, virtually the entire increase was in the Bundesbank's holdings of foreign currencies; despite money-market tightness in Germany, the commercial banks reported only a modest decline in their money-market assets in March and April.

Preliminary estimates based on the weekly balance sheets of the Bundesbank seem to indicate that the Bank's foreign exchange reserves rose more than \$200 million during the month of May. (See Table 7.)

Foreign exchange market. The spot rate for the D-mark climbed throughout the period under review. (See Table 8.) From 24.999~U.S. cents on March 1, it was quoted at 25.017 cents in mid-April and at 25.102 cents in mid-May. On June 6, it was quoted at 25.112 cents.

25 000

Table 8. Germany: Exchange Rate in U.S. Cents Per DM (noon buying rates)

Par value

		Upper limit Lower limit	25.125 24.875	
1963	February 1 15 March 1 15 29		April 5 19 May 3 17 31	25.048 25.047 25.065 25.102 25.105

Europe and British Commonwealth Section.

Digitized for FRASER http://fraser.stlouisfed.org/

Table 9. Germany: Selected Money Market Yields and Exchange Rates (per cent per annum)

	3-mo. Euro- dollar de-	3-mo. inter-			U.S. \$ Marks	3-mo.	Treas.	bills
	posits London	bank loans Frankfurt	in favor London	Bundes bank 2		U.K.	Ger.	U.S.
1962-Aug. 31 Sep. 28 Oct. 26 Nov. 30 Dec. 28	3.81 3.81 4.13 3.94 4.13	3.19 3.19 4.50 4.25 4.44	+0.62 +0.62 -0.37 -0.31	+0.75 +0.50 +0.50 +0.50 +0.50	+0.7 +0.5 +0.8 +0.2 +0.5	3.69 3.56 3.78 3.63 3.66	2.50 2.50 2.63 2.63 2.63	2.80 2.76 2.74 2.86 2.98
1963-Feb. 15 22 Mar. 1 8 15 22 29	3.53 3.44 3.53 3.63 3.72 3.69	3.25 3.38 3.13 3.44 3.50 3.56 3.63	+0.28 +0.06 +0.40 +0.19 +0.22 +0.13 +0.06	+0.75 +0.75 +0.75 +0.75 +0.75 +0.75 +0.75	+0.2 0.0 0.0 0.0 -0.1 -0.2 +0.1	3.34 3.34 3.31 3.31 3.72 3.66	2.63 2.63 2.63 2.63 2.63 2.63	2.92 2.87 2.90 2.88 2.88 2.90 2.92
Apr. 5 12 19 26 May 3	3.69 3.69 3.66 3.72 3.74	3.56 3.63 3.56 3.50 n.a.	+0.13 +0.06 +0.10 +0.22 n.a.	+0.75 +0.75 +0.75 +0.75 +0.75	0.0 0.0 0.0 0.0	3.66 3.59 3.59 3.76 3.66	2.63 2.63 2.63 2.63 2.63	2.91 2.90 2.89 2.89 2.90
10 17	3.81 3.84	n.a.	n.a.	+0.75	0.0 -0.5	3.63 3.56	2.63	2.91

 $[\]frac{a}{2}$ Special swap rate provided by Bundesbank to domestic commercial banks for 2-6 months period.

Table 10. Germany: Selected Loan, Deposit and Security Rates (per cent per annum)

						Bond y	rields		
			Comm. bank	6-12 mo.	deposits	5-1/2% Railway	Public author-	Share	Yield
			loans .	a/ Savings	Time	1958-83	ities	Yields	gap
1962 -	Jan.		7.50	3.50	2, 75	5.8	5.9	2.57	3.3
	Feb.		7.50	3.50	2.75	5.7	5.7	2.61	3.1
	March		7.50	3.50	2.75	5.6	5.6	2.65	3.0
	Apri1		7.50	3.50	2.75	6.6	5.6	2.77	2.8
	May		7.50	3.50	2.75	5.7	5.8	3.23	2.6
	June		7.50	3.50	2.75	5.8	5.9	3.49	2.3
-	July		7.50	3.50	2.75	5.8	5.9	3.71	2.1
	Aug.		7.50	3.50	2.75	5.8	6.0	3.58	2.2
	Sept.		7.50	3.50	2.75	5.9	6.0	3.79	2.1
	Oct.		7.50	3.50	2.75	6.0	6.2	3.89	2.1
	Nov.		7.50	3.50	2.75	6.1	6.2	3.34	2.8
	Dec.		7.50	3.50	2.75	6.1	6.1	3.44	. 2.7
1963 -	Jan.		7.50	3.50	2.75	5.8	6.0	3.58	2.4
	Feb.		7.50	3.50	2.75	6.0	6.0	3.75	2,2
	March		7.50	3.50	2.75	6.0	6.0	3.63	2.4
	April	4	7.50	3.50	2.75	6.0	n.a.	n.a.	n.a.

a/ Approved credits on current account.

Digitized for FRASER

http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

Chart I

INTEREST ARBITRAGE, UNITED STATES/CANADA

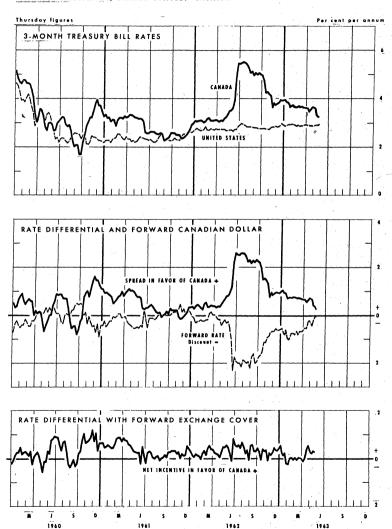


Chart 2
INTEREST ARBITRAGE, NEW YORK/LONDON

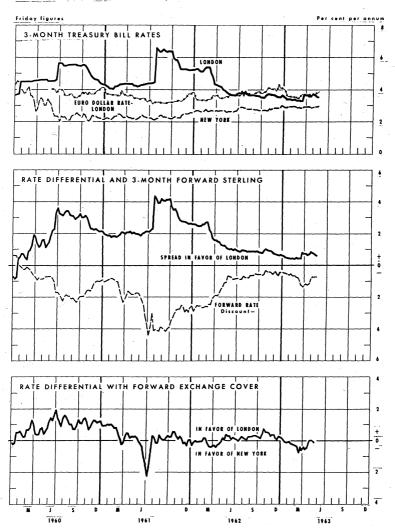
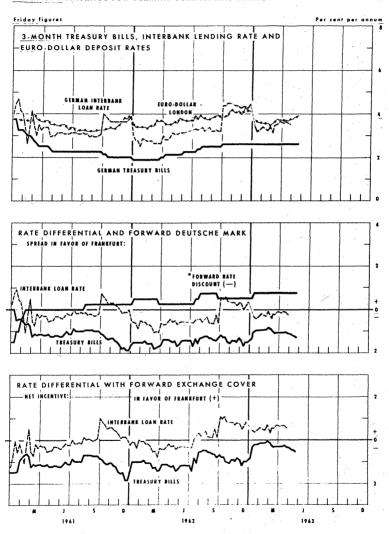


Chart 3
INTEREST ARBITRAGE FOR GERMAN COMMERCIAL BANKS



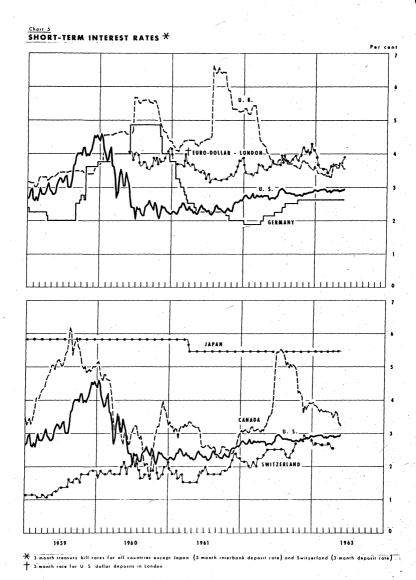
^{*}Note: Special forward rate available to German commercial banks

INTEREST ARBITRAGE, FRANKFURT / LONDON 3-MONTH TREASURY BILLS AND INTERBANK LENDING RATES RATE DIFFERENTIAL AND 3-MONTH FORWARD STERLING SPREAD IN FAVOR OF UNITED KINGDOM BILLS OVER: RATE DIFFERENTIAL WITH FORWARD EXCHANGE COVER

1962

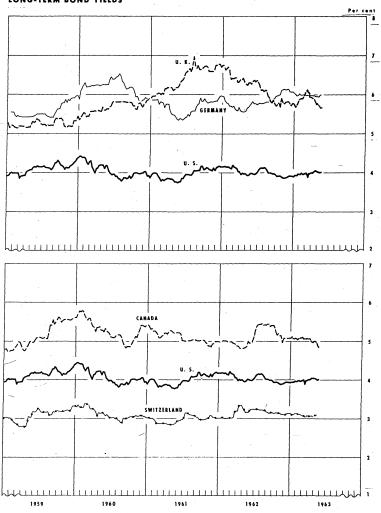
1963

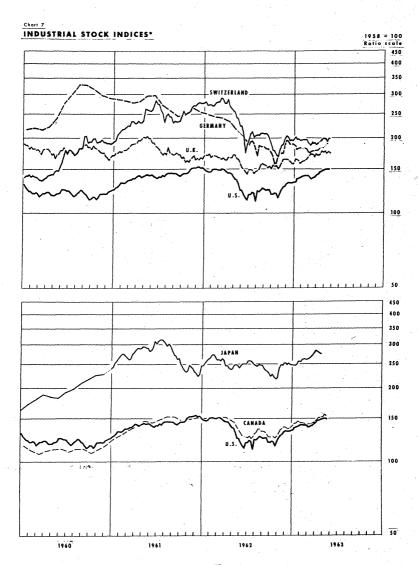
1961



Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

Chart 6
LONG-TERM BOND YIELDS

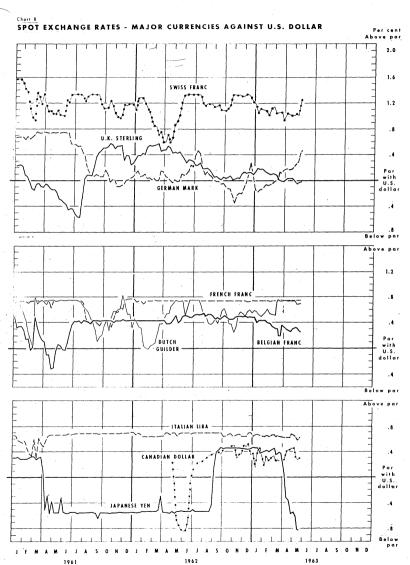




Note: Japan: index of 225 industrial and other stocks traded on the Tokyo exchange.

Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis





Digitized for FRASER http://fraser.stlouisfed.org/ Federal Reserve Bank of St. Louis

Chart 9 3-MONTH FORWARD EXCHANGE RATE Friday figures AGAINST U. S. DOLLARS Per cent per annum POUND STERLING AGAINST POUND STERLING - LONDON PREMIUM + AGAINST POUND STERLING - LONDON PREMIUM + DUTCH GUILDER DISCOUNT -

1962

1963

1961