

H. 13

No. 241

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## CAPITAL MARKET DEVELOPMENTS ABROAD

- I. Germany
- II. Ten Charts on Financial Markets Abroad
- III. Latest Figures Plotted in H.13 Chart Series, 1966

I. Germany: Money and Capital Markets Developments, September 1965-February 1966

The Bundesbank continued to maintain its restrictive credit policy, and German financial markets remained tight during the September-February period. Some easing of rates occurred after October, however, particularly in short maturities as the re-emergence of an external payments surplus and the drawing down of Treasury balances at the Bundesbank helped to ease liquidity pressures on the banks. (See Table 1.)

On the bond market, however, conditions remained basically unchanged from what they had been since July. There was some easing of yields in the first two months of 1966, but the bond market remains intrinsically weak.

During the fourth quarter, the effects of the Bundesbank's policies were noticeable for the first time in the reduced volume of bank credit below year-ago levels. Previously, the effects of tighter credit were confined chiefly to the bond market.

Table 1. Germany: Selected Financial Indicators  
(per cent per annum, monthly average except where otherwise indicated)

	1 9 6 5				1 9 6 6	
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Call-money	4.77	4.85	4.29	4.67	4.12	4.49
90-day money	5.19	6.43	6.29	6.25	4.99	5.24
90-day Treasury bill <u>1/</u>	3.88	3.88	3.88	3.88	4.00	4.00
6% Public authority bond yield	7.62	7.74	7.73	7.91	7.59	7.54

1/ End of period.

Source: Bundesbank, Monthly Report; Frankfurter Allgemeine Zeitung.

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(Decontrolled after six months)

At the beginning of January, a new form of money-market paper was introduced by one of the big German banks. The Dresdner Bank began to offer short-term notes of six and twelve month maturity to other banks at rates more attractive than those offered by the Bundesbank on open market paper of identical maturity. Since notes of the variety offered by the Dresdner Bank are not subject to minimum reserve requirements, this method of raising bank funds would appear particularly attractive.

On January 7, shortly after the new paper was introduced, the Bundesbank raised its selling and buying rates on the entire range of open market paper by 1/8 to 1/2 per cent. When the Dresdner Bank then raised its rates, the Bundesbank followed by increasing its rates on February 23 and again on March 3 by a total of 1/4 per cent but only on maturities of 6 months to 2 years.

The increases in money market rates were evidently intended to discourage the growth of the new paper and to maintain pressure on liquidity. The Bundesbank recently announced two other measures to absorb the recent additions to bank liquidity. Banks were informed that short-term loans to foreigners which involved roll-over commitments could no longer be used as an offset to foreign liabilities in the calculation of minimum reserve requirements. Furthermore, as of May 1, 1966 rediscount facilities of commercial banks are to be reduced by DM 1.3 billion, the remaining half of the 25 per cent reduction which was originally to have taken place in October 1964.

A number of the recent Bundesbank measures also appear to be aimed at encouraging banks to hold their liquid assets in Germany rather than abroad. The first step was the discontinuation in January of the special swap facility which the Bundesbank had previously made available to commercial banks for investment in U.S. Treasury bills. Higher rates on German money market paper should also encourage banks to keep their funds in Germany. It appears that, with the balance of payments deficit, the Bundesbank may now prefer banks to hold more of their funds at home.

The German balance of payments showed a deficit in the fourth quarter of 1965 as it had in the two preceding quarters, but it was substantially smaller than the deficits of either the second or third quarters. The improved payments balance reflected seasonal strength in the services account and a more basic improvement in the trade account. The private capital account, on the other hand, dwindled from a substantial surplus position to a small deficit. This shift, however, appears to have been entirely the result of special year-end movements which were largely reversed in January. Assuming that capital will continue to flow into Germany, the expected improvement in the German trade account during 1966 may well lead to an end of the recent deficits in Germany's balance of payments.

Money market remains tight

Conditions on the German money market have remained relatively tight since last September. Beginning in November, however, market conditions were generally somewhat less strained than they had been early in the fall.

The easier tone of the market reflected the aid to the banking system from large government disbursements in the fourth quarter and from the external payments surpluses in October, November and again in January. Following the easing of money market rates in November, rates for inter-bank loans rose again in December as the usual year-end pressures emerged. (See Table 2.) But the Bundesbank's reduction by 9 per cent of commercial banks' minimum reserve requirements for the month of December helped to reduce the extent of rate increases in December and declines in January below the fluctuations of earlier years. The higher normal reserve requirements which took effect again on January 1, 1966 drained away the additions to bank liquidity. As a result, money market rates eased even less than expected in January and then tightened substantially in February. (See Table 2.)

Table 2. Germany: Money Market Rates in Frankfurt,  
September 1965-February 1966 <sup>1/</sup>  
(in per cent per annum)

		<u>Call Money</u>	<u>3-month Loans</u>
1965	September	4.77	5.19
	October	4.85	6.43
	November	4.29	6.29
	December	4.67	6.25
1966	January	4.12	4.99
	February	4.49	5.24

<sup>1/</sup> Average of daily rates quoted each month by Frankfurt banks for inter-bank loans.

Source: Frankfurter Allgemeine Zeitung.

New money market instrument introduced

In January, a new form of money market paper was introduced on the German market by one of the big three German banks. The Dresdner Bank offered short-term registered notes (minimum denominations of DM 1 million, maturities of 6 and 12 months) to other German banks. These securities are not subject to minimum reserve requirements and, as registered notes, are not subject to the government licensing provision. They are sold on a discount basis. The Dresdner Bank has initiated trading in the securities by offering to repurchase its notes at 1/8 per cent above its selling rate. These notes were first offered at rates of 4-1/2 per cent on 6-month notes and 4-3/4 per cent on 12-month notes, or 1/8 and 1/4 per cent above the rates offered by the Bundesbank at that time on short-term paper of identical maturity.

To attract new bank funds in this period of liquidity squeeze, the Dresdner Bank exploited a structural inadequacy of the money market. The German money market has been marked by its limited selection of short-term paper. Thus far, there has been only Federal and Laender Treasury Bills and Treasury bonds of one month to two year maturities. These bills are traded only between the banks and the central bank, not among banks themselves, and the Bundesbank's offering rates have been below market rates for some time.

On January 7, the Bundesbank responded to the introduction of the Dresdner Bank paper by raising the rates on its entire range of open-market paper by 1/8 to 1/2 per cent. When the Dresdner Bank raised its rates on January 19, the Bundesbank increased its own rates on February 23 and again on March 3 by a total of 1/4 per cent but only on the longer maturities (6 months to 2 years). As of March 3, the Bundesbank rate for 6-month paper (5-1/8 per cent) was 1/4 per cent higher than that offered by the Dresdner Bank, but maturities of one-year were both at a 5-1/4 per cent yield. Thus far, the Dresdner Bank has sold only a limited volume of the paper, but this may be due to the non-eligibility of the paper at the Bundesbank (as security against advances or for rediscounting) rather than to the higher Bundesbank's rates.

The Bundesbank's higher open-market rates should make investment in Treasury bills more attractive and, thus, tie up some of the additional liquidity received by the banking system in recent months. The rise in longer-term rates may furthermore discourage the banks from selling longer-term notes before maturity; to this extent, it may intensify the tightening of the money market during the passage of the March tax date. The larger rise in yields on longer maturities had encouraged the banks to buy them and then sell them off before maturity with a larger profit than they would have had from buying shorter Treasury paper. The latest increase in open-market rates (which, as usual was accompanied by an increase in repurchase rates) was probably designed to encourage banks to hold the notes to maturity by reducing the chances for profit.

Bundesbank continues to pursue restrictive policy

The Bundesbank's action in raising the rates on money market paper was intended to discourage the growth of the new Dresdner Bank paper and to maintain pressure on bank liquidity. In its January Monthly Report, the Bundesbank once again emphasized the importance of continuing the restrictive credit policy until wages and prices had been stabilized and Germany's current account had regained equilibrium.

The Bundesbank also took other measures during the period under review to absorb recent additions to bank liquidity and to curb existing demand pressures. First, the Bundesbank announced that the second half of the 25 per cent reduction in bank rediscount quotas will come into effect on May 1. This measure will reduce bank rediscount facilities by a total of DM 1.3 billion. Originally, the full 25 per cent reduction was to have gone into effect last October; but when discount rate was raised in August, the Bundesbank limited the cut to only 12-1/2 per cent because of the strained atmosphere in financial markets at that time. With the liquidity situation now easier, the second 12-1/2 per cent can be absorbed. The reduction in quotas is intended not simply as a temporary tightening measure but as a long-term oriented readjustment of bank rediscount quotas.

Secondly, the Bundesbank announced at the end of February, that short-term loans to foreigners on which banks had accepted roll-over commitments could no longer be used as an offset to foreign liabilities in the calculation of minimum reserve requirements. Since a number of banks are believed to have entered into short-term loans with non-residents with commitments to prolong them, this action will at least temporarily increase these banks' minimum reserve liabilities.

Several of these recent Bundesbank measures appear to have been designed to encourage German banks to hold more of their liquid funds in domestic, rather than foreign assets. The discontinuation at the beginning of January of the special swap facility which the Bundesbank had previously made available to commercial banks for investment in U.S. Treasury bills appears to have been a first step in that direction. Given the balance of payments deficit and the current high level of interest rates abroad, the Bundesbank may very likely feel it unnecessary to promote outflows of short-term funds.

Bond market remains uneasy

Conditions in the German bond market stabilized during January and February after a shake-out in December when the average yield on public authority bonds rose as high as 8.02 per cent. However, the market outlook remains uncertain.

The consolidation of the market in January and February followed a shake-out in December. Postponements of new bond issues by public authorities during October and November and a growing impatience for funds on the part of some public authorities led to heavy demand pressures. Even though a Rheinland-Pfalz issue had not been completely placed late in November, the Federal Government and the Land Governments of Baden-Wuerttemberg and Niedersachsen announced loans totaling DM 325 million in December. Investor confidence in the determination of the public authorities to keep interest rates from rising was shaken. At the same time, the higher U.S. discount rate increased fears that interest rates in Germany would be forced upward. Bond prices fell with heavy sales. The average yield on public authority bonds rose from 7.74 per cent at the end of November to 7.81 per cent on December 6. Two of the loans were withdrawn in an attempt to steady the market, but selling pressure continued and the average yield on public authority bonds reached a peak of 8.02 per cent on December 27. At this point, the banks made large year-end support purchases of bonds in order to limit the depreciation in the current market value of their security holdings in their year-end balance sheets. With these purchases, the average yield on public authority bonds fell 44 basis points from December 27 to December 31.

Bond prices were maintained at the new levels after the turn of the year thanks to the continued limiting by the public authorities of their borrowings. Traditionally, a large volume of new issues is brought to the market in January in order to take advantage of liquid funds produced by year-end redemptions and interest payments. In January of this year, however, public authority loans were held to only DM 410 million (nominal value) compared with DM 783 million of new public authority offerings in January 1965.

Market conditions continue, however, to reflect underlying uncertainties. A number of new issues announced at the end of January threatened to upset the confidence of the market again. A loan of the Land North-Rhine Westphalia, originally scheduled for the first week of February, was consequently postponed.

#### Developments in long-term financial markets

The weakness of the bond market restrained domestic borrowers, particularly public authorities and industry. In the fourth quarter of 1965, domestic borrowers placed an average of DM 969 million per month on the bond market, compared to an average of DM 1,175 during the same period of 1964. (See Table 3.) January placements were also held considerably below those of January 1965.

The only segment of the market seemingly not affected by the over-all weakness was foreign borrowing. Foreign borrowers placed a monthly average of DM 171 million in the fourth quarter of 1965 compared to an average of only DM 20 million a year earlier. Because of the 25 per cent coupon tax, the German bond market is, in effect, sharply divided into two distinct sections: domestic and foreign borrowers. Investment funds for foreign bonds in Germany reportedly

come primarily from foreign sources; German investors buying foreign bonds reportedly do so primarily for the purpose of portfolio diversification, rather than for dividend income. There may also be some feeling in Germany that foreign bonds are currently better price risks. The result, in any case, has been that the market for foreign bonds has continued to function smoothly while the domestic market has weakened. This fact has led three major German firms to form financial subsidiaries in Luxembourg and to use them to float foreign bond issues on the German bond market.

The weakness of the bond market has reportedly led to a growing use of the *Schuldscheindarlehen*, an instrument which corresponds closely to the practice of direct placement in the United States. The cost of interest involved in borrowing in this manner is reportedly higher than that on bonds; but savings on issuing costs of bonds may help to offset the interest differential. At this time, in any case, a major advantage is the fact that *Schuldscheindarlehen* are not subject to government licensing provisions and therefore may be contracted without consultation with the Bundesbank. The necessity of awaiting a turn on the bond market--an important consideration for public authorities--is therefore eliminated. The Land Hesse took up a *Schuldscheindarlehen* of DM 70 million with the Dresdner Bank in February at an effective cost of about 8.1 per cent. Since such transactions need not be reported to the Bundesbank, there are no statistics on the volume of outstanding loans. However, one of the recommendations of the Troeger Committee Report on financial reform was that *Schuldscheindarlehen* be subject in the future to the same licensing provisions as are public authority loans.

Table 3. Germany: Gross Placements in Securities Markets 1964-1965<sup>1/</sup>  
(millions of DM, month or monthly average)

	1964	1 9 6 5				1966
	IV	I	II	III	IV	Jan.
"Occasional" borrowers bonds:						
Industrial	55	86	90	--	16	--
Public authorities	315	303	380	199	290	402
Foreign issuers	20	193	43	37	171	60
Other bonds <sup>2/</sup>	144	333	181	833	141	329
Total	<u>534</u>	<u>915</u>	<u>694</u>	<u>1069</u>	<u>618</u>	<u>791</u>
Mortgage and communal bonds	661	853	570	628	522	858
Total gross bond placements <sup>3/</sup>	<u>1195</u>	<u>1768</u>	<u>1264</u>	<u>1697</u>	<u>1140</u>	<u>1649</u>
Gross share placements	<u>133</u>	<u>239</u>	<u>349</u>	<u>472</u>	<u>260</u>	<u>399</u>
Total security placements at issue value	<u>1328</u>	<u>2007</u>	<u>1613</u>	<u>2169</u>	<u>1400</u>	<u>2048</u>

1/ Market value

2/ Mostly bonds of specialized credit institutions.

3/ Includes medium-term notes (Kassenobligationen).

Source: Deutsche Bundesbank.

Credit expansion slows

Until recently, the effects of Bundesbank policy were chiefly to be found in the bond market. However, the gradual tightening of bank liquidity appears finally to have begun to influence credit expansion. The expansion of new bank loans to non-bank customers in the fourth quarter of 1965 fell below the volume of loans extended a year earlier--the first year-to-year decline since the Bundesbank initiated its restrictive policy in March 1964. New loans in the fourth quarter of 1965 totaled only DM 8.9 billion compared with DM 9.3 billion a year earlier. (See Table 4.)

The slower expansion of credit resulted entirely from a slower growth of long-term loans, particularly those to the private sector. Loan demand, however, remained strong and shorter-term bank loans expanded more strongly than in the previous year because borrowers fell back on shorter-term loans to cover their borrowing requirements where long-term funds were not available. Medium-term credits rose strongly to both the public and private sectors. Short-term credit also expanded in the fourth quarter; the expansion took place entirely in December, however, when the private sector borrowed heavily, evidently to meet year-end payments. The pattern of credit expansion in the fourth quarter suggests that the withdrawal of liquidity from the banking system has made the banks reluctant to commit new funds for long periods but that they are still able to supply shorter-term credits in substantial volume, particularly in the shortest maturity ranges.

Table 4. Credit Expansion: Net Lending to Domestic Non-bank Customers  
Quarterly, 1964-1965  
(in DM millions)

	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u> <sup>p/</sup>
<u>Total lending to non-banks</u> <u>(excl. securities)</u>				
1965	5,943	9,106	7,822	8,896
1964	4,772	7,926	6,968	9,323
<u>Short-term</u>				
1965	1,250	3,429	334	2,017
1964	859	2,413	514	1,942
<u>Medium-term</u>				
1965	137	1,260	1,632	878
1964	48	1,121	740	602
<u>Long-term</u>				
1965	4,556	4,417	5,856	6,001
1964	3,961	4,392	5,714	6,779

p/ Preliminary

Source: Bundesbank, Monthly Report, Table III.A.1.



Stock market rallies in new year

The German stock market rallied in the first two months of 1966 after four months of continuous decline. Between the beginning of September and the end of December, the FAZ general stock index fell 8.3 per cent from a level of 180.10 to 166.34. The recovery of the market in the first two months of 1966, however, brought the index back up to 179.94 by the end of February.

The recent market strengthening probably reflects the relatively high dividends paid by German companies in 1965 which attracted investors to the market once again. The average dividend yield on listed stocks rose from 3% in 1964 to 4% in 1965, according to Bundesbank calculations.

Special factors explain the large volume of new stock issues in the fourth quarter of 1965. (See Table 3.) A number of foreign parent companies converted long-term loans to their German subsidiaries into equity capital through the purchase of shares, in some cases apparently in reaction to the U.S. voluntary credit restraint program.

Trade balance improves

Germany's trade balance improved substantially in the fourth quarter of 1965 as exports rose more rapidly than imports, reversing the pattern of the last year. (See Table 5.) Exports expanded 2.3 per cent from the third to the fourth quarter while imports grew only about 1 per cent. The growth of exports was particularly strong in December, and may have reflected an import surge in the Netherlands prior to the imposition of new excise taxes on consumer goods at the beginning of 1966. The export expansion may also reflect the recovery of demand in Italy and France. Although exports in January did not grow beyond December levels, a small trade surplus was nonetheless maintained. The growth of exports appears to be accompanied by a slowing in the rise of imports to Germany. This shift is expected to produce an improvement in Germany's trade balance for 1966.

Balance of payments deficit shrinks in fourth quarter

Germany's balance of payments deficit shrank substantially in the fourth quarter even though large outflows of private non-bank capital produced a large deficit in December. The overall deficit was only DM 704 million, or about half the third quarter figure and substantially smaller than that of the second quarter. (See Table 6.) Germany's payments accounts closed with a deficit of DM 1,830 million for the year.

Table 5. Germany: Foreign Merchandise Trade  
(seasonally adjusted month or monthly averages, in DM billions)

		Exports <u>f.o.b.</u>	Imports <u>c.i.f.</u>	Trade <u>balance</u>
1964	III	5.29	5.04	.25
	IV	5.52	5.37	.15
1965	I	5.91	5.52	.39
	II	5.76	5.72	.04
	III	5.97	6.08	-.11
	IV	6.11	6.13	-.02
	Oct.	5.78	5.97	-.18
	Nov.	6.06	6.16	-.10
	Dec.	6.49	6.25	.24
1966	Jan.	6.35	6.29	.06

Sources: Bundesbank, Monthly Report.

Both seasonal factors and more basic improvements in other factors produced the fourth-quarter gains. The better trade performance and the seasonal strength of the services account brought about the reduced deficit. The gains on Germany's goods and services account were sufficient to offset a sizeable outflow of private capital which was concentrated in December. These outflows largely comprised short-term loan repayments of German-based firms to improve their accounts at the year end. Although figures are not available at this writing, the Bundesbank reports that firms reborrowed abroad in January, causing a substantial inflow of private short-term capital to reappear.

Table 6. Germany: Balance of Payments, 1965  
(in millions of DM)

	1 9 6 5						
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u> <sup>1/</sup>
1. Goods and Services							
Trade balance	1096	- 47	- 433	605	66	-108	647
Services	<u>- 3</u>	<u>- 785</u>	<u>- 946</u>	<u>223</u>	<u>80</u>	<u>287</u>	<u>- 240</u>
Total	1093	- 832	-1379	828	146	179	407
2. Official Payments							
Donations	-1349	-1778	-1359	-1372	-405	-437	- 519
Long-term capital	- 172	- 334	- 735	- 508	- 83	-217	- 206
Short-term capital	<u>138</u>	<u>- 49</u>	<u>620</u>	<u>412</u>	<u>60</u>	<u>236</u>	<u>115</u>
Total	-1383	-2161	-1474	-1459	-428	-418	- 610
3. Private Capital							
Long-term	413	547	442	312	- 57	262	66
Short-term <sup>2/</sup>	273	- 12	303	228	126	421	- 359
Errors and omissions	<u>1041</u>	<u>1330</u>	<u>673</u>	<u>- 613</u>	<u>623</u>	<u>-205</u>	<u>- 777</u>
Total	1727	1865	1418	- 73	692	478	-1070
Surplus or Deficit (-)	<u>1437</u>	<u>-1128</u>	<u>-1435</u>	<u>- 704</u>	<u>410</u>	<u>239</u>	<u>-1273</u>

<sup>1/</sup> Preliminary.

<sup>2/</sup> Includes commercial bank capital other than net foreign exchange assets.

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

#### Larger year-end movements in reserves

The movements in Germany's balance of payments position were financed by changes in official and commercial bank foreign-exchange reserves. As is customary at year-end, reserve movements were dominated by commercial bank flows arising from window-dressing activity. But for December and January together, German reserves rose \$11 million as a result of a \$161 million improvement in the foreign-exchange position of the commercial banks and a \$150 million decline in Bundesbank reserves (related to the repositioning of commercial banks in January). Bundesbank reserves decline a further \$49 million in February, partly as a result of support operations in the foreign exchange market to ease a decline in the rate for the DM. (See Tables 7 and 8.)

Table 7. Germany: Changes in Reserve Position  
(in millions of U.S. dollars)

	1 9 6 5					1 9 6 6	
	II	III	IV	Nov.	Dec.	Jan. <sup>e/</sup>	Feb. <sup>e/</sup>
A. Bundesbank gold and foreign exchange							
Gold	135	12	20	2	4	--	- 4
Foreign exchange	<u>-602</u>	<u>-102</u>	<u>29</u>	<u>17</u>	<u>- 6</u>	<u>-162</u>	<u>-45</u>
Total	-467	- 90	49	19	- 2	-162	-49
B. Drawing rights on IMF	-179	2	15	10	--	14	---
C. Commercial banks net foreign exchange	<u>- 1</u>	<u>-260</u>	<u>-219</u>	<u>41</u>	<u>-296</u>	<u>457</u>	<u>9</u>
Total A through C	-289	-348	-155	70	-298	309	-40

<sup>e/</sup> Estimated

Source: Bundesbank and International Financial Statistics.

Table 8. Germany: Exchange Rate and Forward Rate  
(in U.S. cents per DM and per cent per annum)

		Upper limit	25.188			
		Lower limit	24.875			
		Par value	25.00			
	Spot Rate <sup>1/</sup>	Forward Rate			Spot Rate <sup>1/</sup>	Forward Rate
Sept.	24.934	+0.05%	1966	Jan. 7	24.940	+0.27%
Oct.	24.968	-0.47%		14	24.930	+0.35%
Nov.	24.997	-0.34%		21	24.921	+0.28%
Dec.	24.992	-0.19%		28	24.903	+0.20%
Dec. 17	25.004	-0.38%		Feb. 4	24.905	+0.24%
24	24.987	-0.30%		11	24.895	+0.35%
31	24.962	+0.30%		18	24.903	+0.20%
				25	24.907	+0.07%

<sup>1/</sup> Noon buying rate in New York.

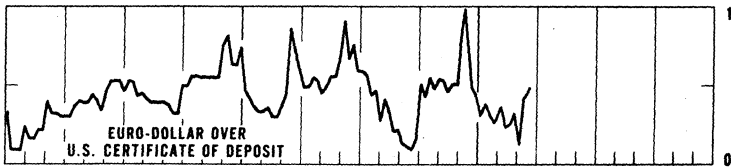
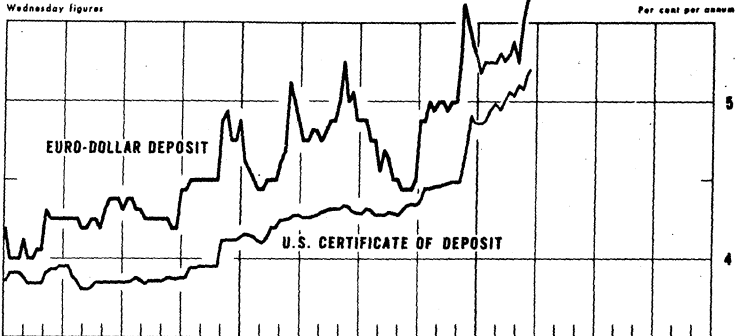
Source: Federal Reserve Board.

Prepared by:

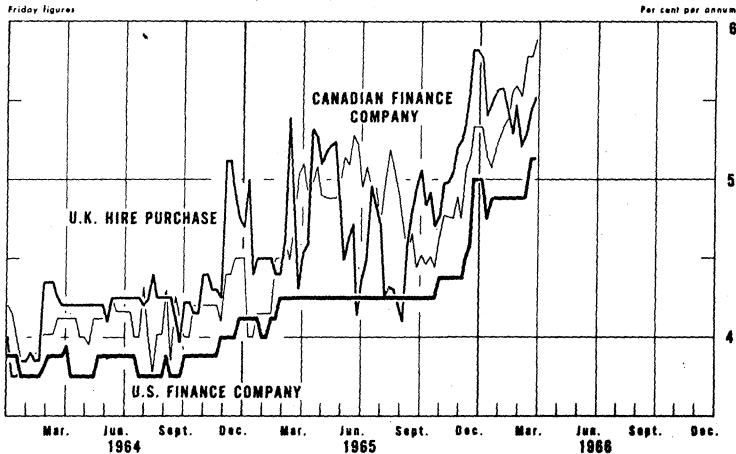
Rosemary A. Darlington, Economist,  
Europe and British Commonwealth Section.

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Chart 1  
**NEW YORK, LONDON, MONTREAL:  
YIELDS FOR U.S. DOLLAR INVESTORS ON 3-MONTH FUNDS  
DOLLAR DEPOSIT RATES: NEW YORK-LONDON**



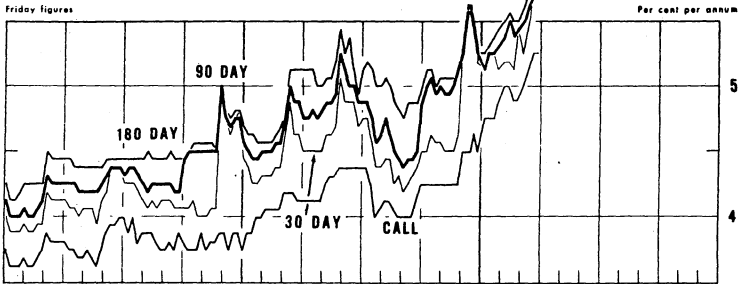
**FINANCE CO. PAPER RATES (covered): QUOTED IN NEW YORK**



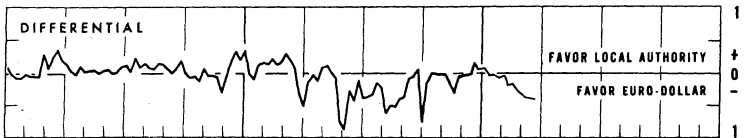
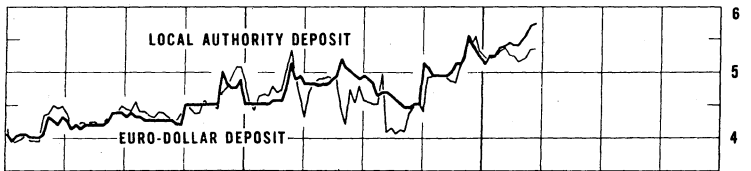
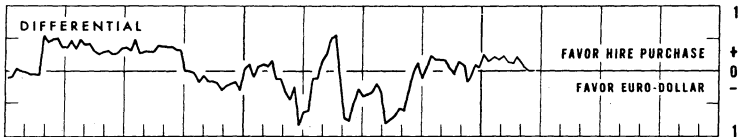
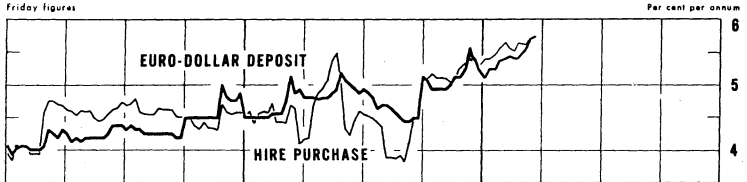
14

Chart 2

### LONDON: YIELDS FOR U.S. DOLLAR INVESTORS ON 3-MONTH FUNDS EURO-DOLLAR DEPOSIT RATES



### HIRE PURCHASE AND LOCAL AUTHORITY DEPOSIT RATES (covered)



1964

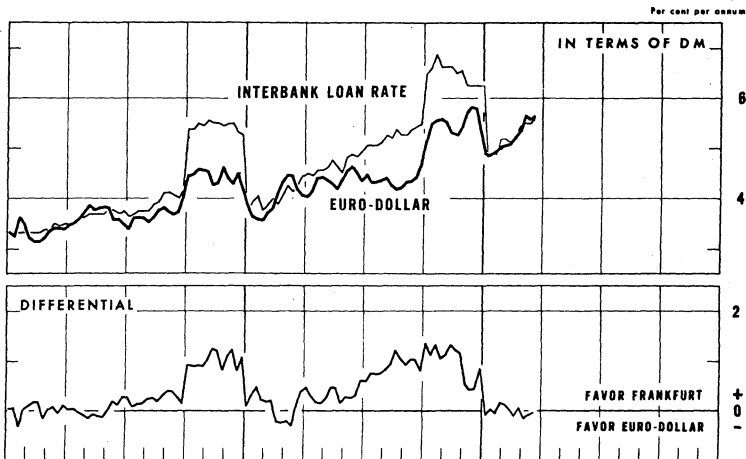
1965

1966

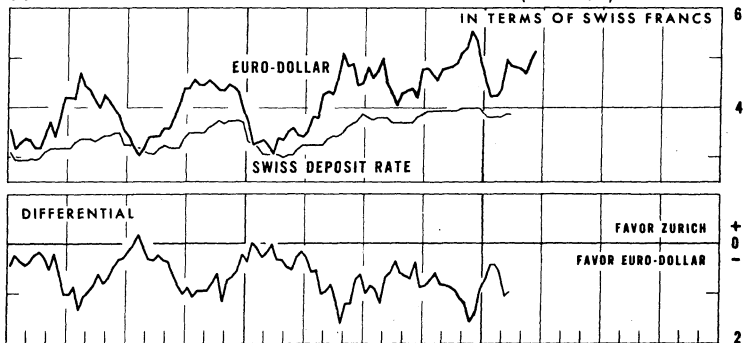
Chart 3

**INTEREST ARBITRAGE: FRANKFURT/LONDON, ZURICH/LONDON**

**FRANKFURT INTERBANK LOAN RATE VS. LONDON EURO-DOLLAR RATE (COVERED)**



**ZURICH DEPOSIT RATE VS. LONDON EURO-DOLLAR RATE (COVERED)**



**II PRICE OF GOLD IN LONDON**

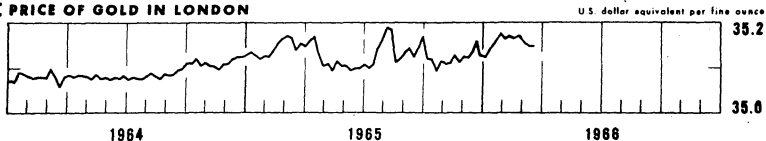


Chart 4

### INTEREST ARBITRAGE, UNITED STATES/CANADA

Friday figures

Per cent per annum

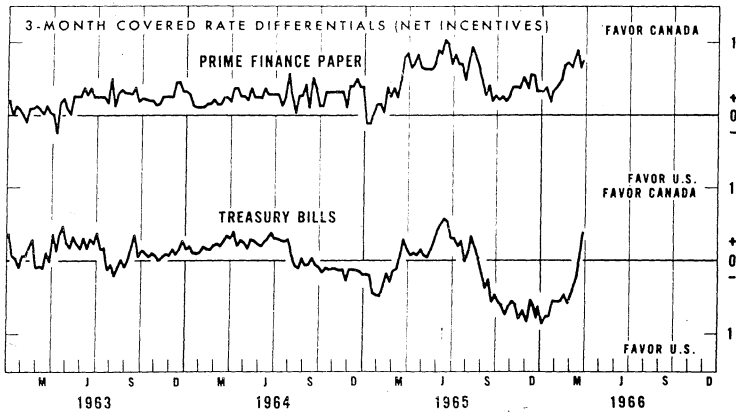
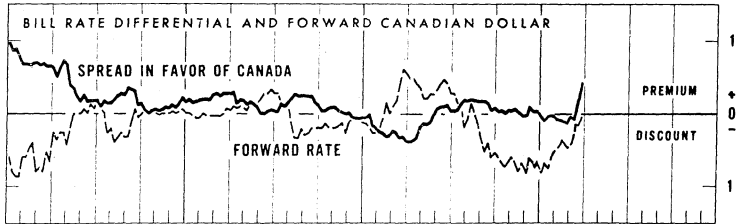
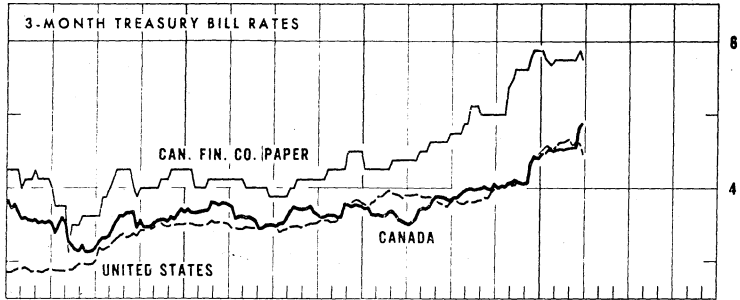




Chart 5  
**INTEREST ARBITRAGE, NEW YORK/LONDON**

Friday figures

Per cent per annum

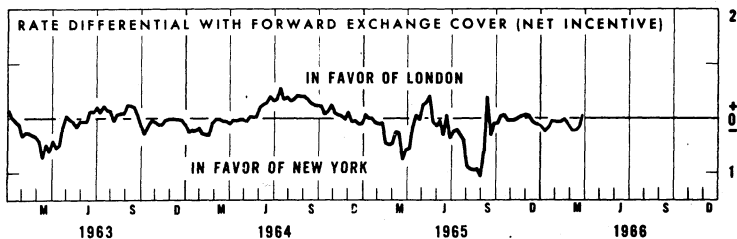
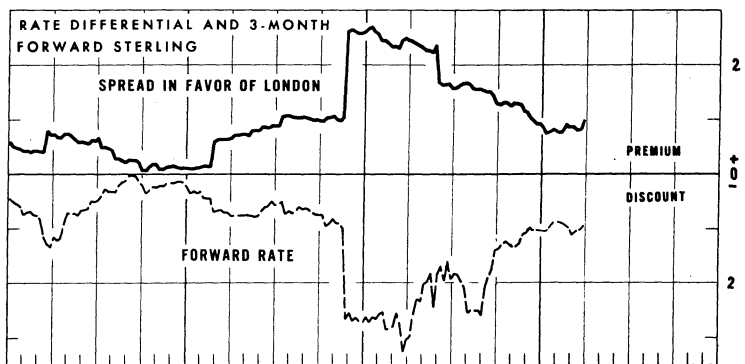
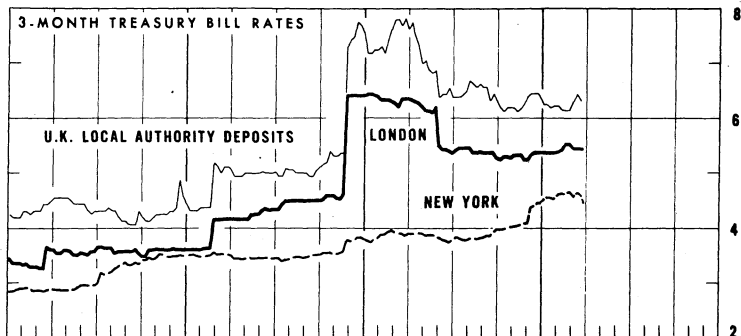
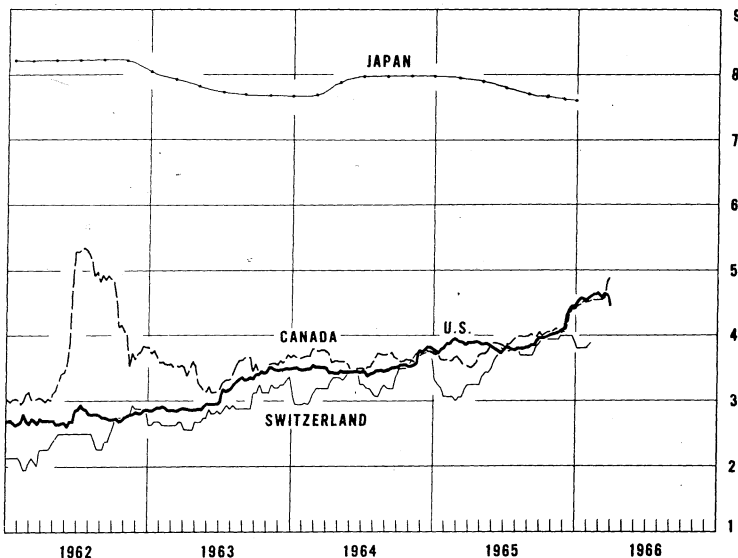
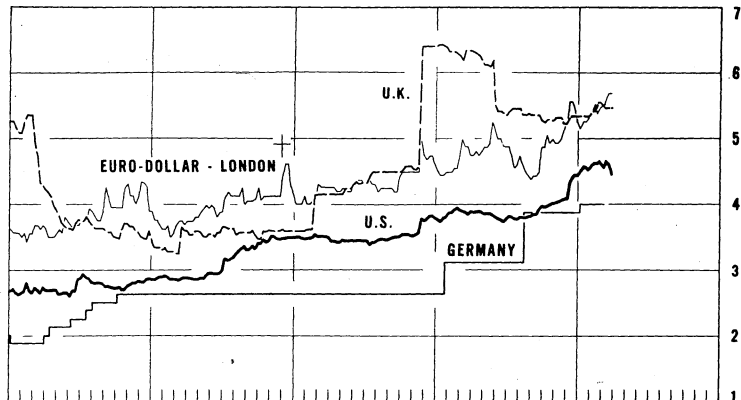


Chart 6

### SHORT-TERM INTEREST RATES \*

Per cent per annum



\* 3 month treasury bill rates for all countries except Japan (Average rate on bank loans and discounts) and Switzerland (3-month deposit rate)

+ 3-month rate for U.S. dollar deposits in London

Chart 7  
**LONG-TERM BOND YIELDS**

Weekly figures

Per cent per annum

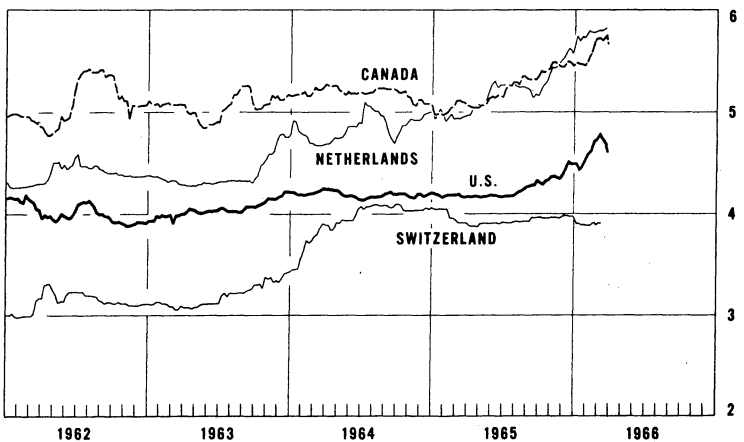
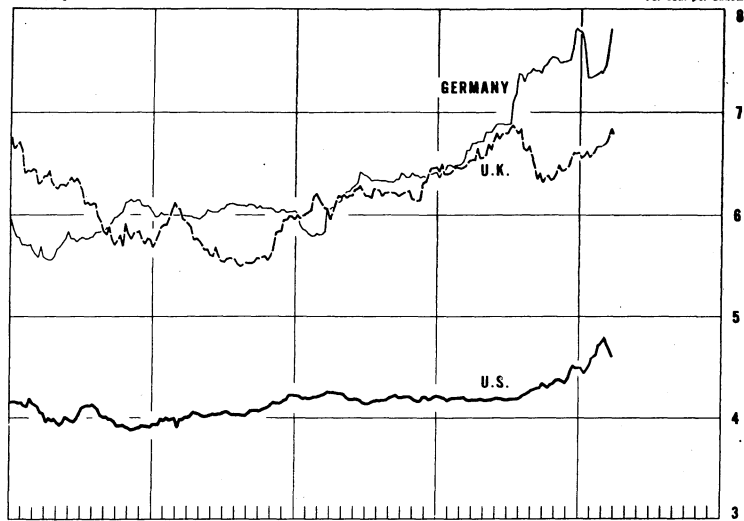


Chart 8

### SPOT EXCHANGE RATES - MAJOR CURRENCIES AGAINST U.S. DOLLAR

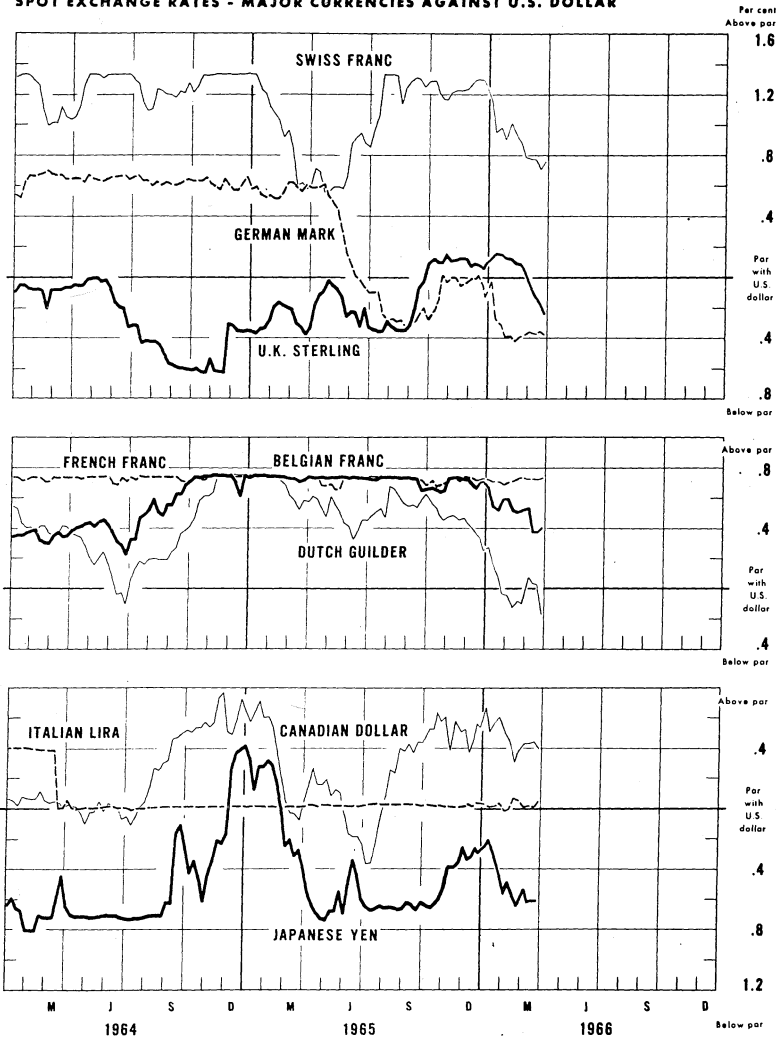


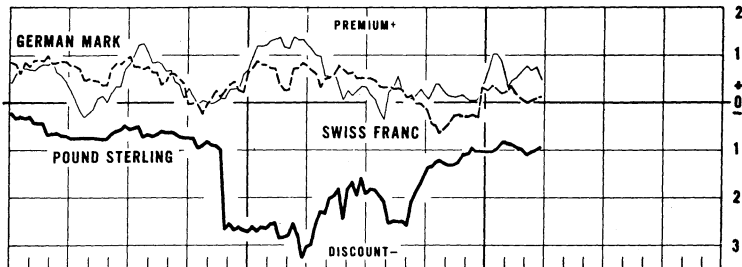
Chart 9

### 3-MONTH FORWARD EXCHANGE RATES

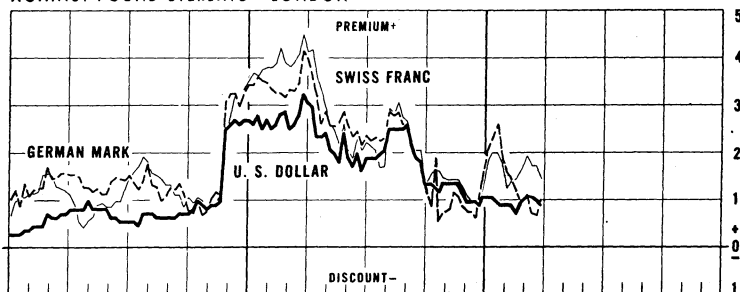
Friday figures

AGAINST U. S. DOLLARS

Per cent per annum



AGAINST POUND STERLING - LONDON



AGAINST POUND STERLING - LONDON

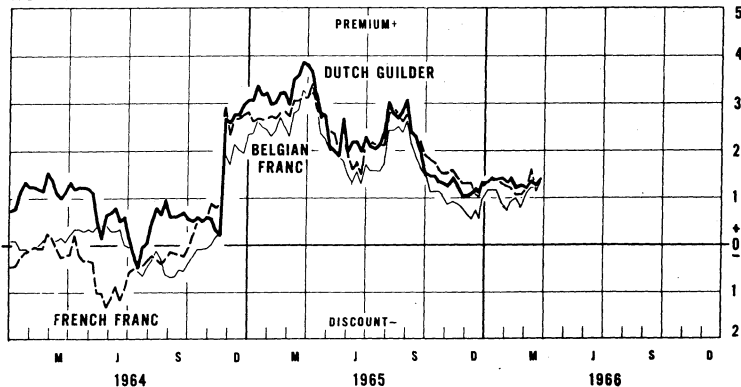
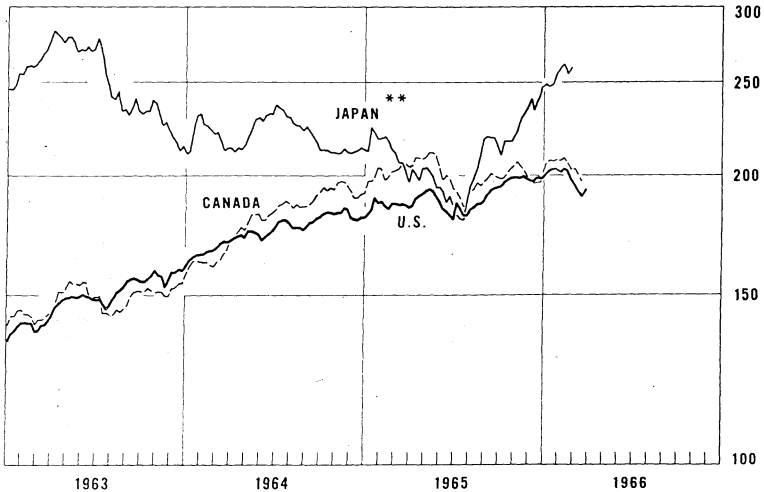
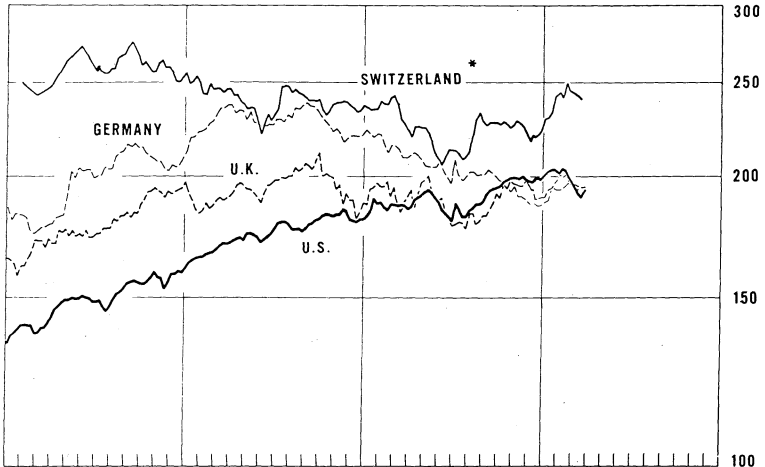


Chart 10

**INDUSTRIAL STOCK INDICES**

1958=100  
Ratio scale



\* Swiss Bank Corporation industrial stock index.

\*\* Japan index of 225 industrial and other stocks traded on the Tokyo exchange.

H. 13  
No. 241

III. Latest Figures Plotted in H. 13 Chart Series, 1966  
(all figures per cent per annum)

March 30, 1966.

Chart 1

Upper panel  
(Wednesday, March 23)

Euro-\$ deposit 5.69  
U.S. certif. of deposit 5.20

Lower panel  
(Friday, March 25)

Finance co. paper: U.S. 5.13  
Canada 5.89  
Hire-purchase paper, U.K. 5.52

Chart 2

(Friday, March 25)

Euro-\$ deposits:  
Call 5.25 90-day 5.69  
7-day 5.38 180-day 5.88  
30-day 5.69

Hire-purchase paper 5.76  
(March 18)  
Local-authority deposit 5.36  
(March 18)

Chart 3

Upper panel  
(Period: March 16-23)

Interbank loan (mid point) 5.62  
Euro-\$ deposit (average) 5.65

Lower panel  
(Date: February 15)

Zurich 3-mo. deposit 3.88

Price of gold 35.149  
(Friday, March 18)

Chart 4

(Friday, March 25)

Treasury bills: Canada 4.89  
U.S. 4.46

Spread favor Canada +0.43

Forward Canadian \$ -0.04

Net incentive (Canada +) +0.39

Canadian finance paper 5.75

Chart 5

(Friday, March 25)

Treasury bills: U.K. 5.45  
U.S. 4.46

Spread favor U.K. +0.99

Forward pound -0.92

Net incentive (U.K. +) -0.07

Chart 6

(Friday, March 25)

Treasury bills:  
U.S. 4.46 Germany 4.00 (Mar. 11)  
U.K. 5.45 Canada 4.89

Euro-\$ deposit (London) 5.69

Zurich 3-mo. deposit 3.88  
(Date: February 15)

Japan composite rate 7.607  
(Date: December 31)

Chart 7

U.S. Gov't. (Wed., Mar. 23) 4.60

U.K. War Loan (Thurs., Mar. 24) 6.79

German Fed. (Fri., March 18) 7.81

Swiss Confed. (Fri., March 18) 3.90

Canadian Gov't. (Wed., Mar. 23) 5.66

Netherlands Gov't. perpetual 3%  
(Fri., March 18) 5.83

For description and sources  
of data see special annex  
to H. 13, Number 239,  
March 16, 1966.