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EBS/76/453

CONFIDENTIAL

October 21, 1976

To: Members of the Executive Board

From: The Acting Secretary

Subject: Denmark, Federal Republic of Germany, Norway, and Sweden - Exchange Systems

The attached paper on the exchange systems of Denmark, the Federal Republic of Germany, Norway, and Sweden will be brought to the agenda for consideration on Friday, October 22, 1976.

Att: (1)

INTERNATIONAL MONETARY FUND

DENMARK, FEDERAL REPUBLIC OF GERMANY, NORWAY, AND SWEDEN--EXCHANGE SYSTEMS

Prepared by the European Department

(In consultation with the Exchange and Trade Relations, Legal, Research, and Treasurer's Departments)

Approved by A. Pfeifer

October 20, 1976

I. Introduction

The following communique was received by the Fund and circulated to the Executive Directors (EBD/76/211) on October 18, 1976.

> At the invitation of Dr. Hans Apel, Federal Minister of Finance, the Finance Ministers and Central Bank Governors of the member countries of the European exchange rate system ("snake") met in Frankfurt on October 17, 1976.
>
> They agreed to adjust, effective October 18, the exchange rates at which the central banks stand ready to purchase or sell the currencies of partner countries. This adjustment will lead to a shift, as measured by the middle rates of exchange, of 2 per cent between the D-Mark on the one hand and the Netherlands guilder and the Belgian and Luxembourg franc on the other hand, to a shift of 3 per cent between the D-Mark and the Norwegian krone and Swedish krona, and to a shift of 6 per cent between the D-Mark and the Danish krone. The precise upper and lower exchange limits between the member currencies will be communicated to the foreign exchange markets on October 18 by the respective central banks.
>
> The Ministers and Governors reaffirmed their determination to maintain the European exchange rate system on the basis of the new currency relationships, and to pursue appropriate policies conducive to domestic and external stability.

The authorities of Denmark, Germany, Norway, and Sweden have communicated new central rates to the Fund in terms of the special drawing right the equivalent of which they use as a numeraire for establishing intervention points under the European common margins agreement. These rates are reproduced in Table 1.

Since March 19, 1973 the countries participating in the European common margins agreement have maintained the rates of exchange for transactions among their currencies within margins of 2.25 per cent based on their respective central rates. 1/ The central rates of these members have been communicated from time to time to the Fund in terms of gold, either directly, or in terms of the special drawing right, or in terms of the gold value of the U.S. dollar. 2/ The central rates for these currencies communicated in terms of the special drawing right as a numeraire do not necessarily correspond to the values of these currencies in terms of special drawing rights as determined under Rule 0-3. As before, these central rates are used only to establish intervention points for currencies participating in the common margins agreement and do not imply the observance of margins for other currencies.

II. Short Description of the Common Margins Agreement

Following the turmoil in the exchange markets in early 1973, the Council of Finance Ministers of the European Community announced on March 12 that as from March 19 (1) the maximum margin between the deutsche mark, the Danish krone, the Netherlands guilder, and the Belgian, Luxembourg, and French francs would be maintained at 2.25 per cent, the undertaking applying only to the rates in the official markets of countries operating a two-tier market; and (2) the central banks concerned would no longer be obliged to intervene in the market to maintain established margins against the U.S. dollar. Subsequently, the authorities of Sweden and Norway advised the Fund that they intended also to participate in this agreement. Between January 19, 1974 and July 9, 1975, and again since March 15, 1976, participation of the French franc in the common margins agreement was suspended. Effective August 23, 1971 Belgium, Luxembourg, and the Netherlands agreed to maintain a maximum margin of 1.50 per cent between the Belgian and Luxembourg francs on the one hand and the Netherlands guilder on the other. This agreement was also suspended also suspended as of March 15, 1976.

The participants in this common margins agreement (often referred to as the European "snake") are obliged to sell or buy the currencies of partner countries on the market at agreed and published intervention rates. There are no quantitative limits to such intervention. Any intervention within the limits needs authorization by the central bank whose currency is to be sold or purchased. Intervention in third currencies, mainly in U.S. dollars, in principle is

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1/ See EBS/73/98 (3/19/73) and EBS/73/105 (3/20/73). Executive Board Decision No. 3909-(73/30), adopted March 19, 1973 and Executive Board Decision No. 3911-(73/31) adopted March 21, 1973 with respect to the communication to maintain exchange rates within common margins of 2.25 per cent.

2/ See, e.g. Executive Board Decision No. 4091-(73/107) adopted November 15, 1973 (Norway); Executive Board Decision No. 3873-(73/13) adopted February 16, 1973 (Sweden confirmed on November 26, 1973 that the central rate of SKr 4.56 per US$1 was a central rate of SKr = SDR 0.81787); Executive Board Decision No. 3996-(73/68) adopted July 2, 1973 (Germany); Executive Board Decision No. 4055-(73/94) adopted September 17, 1973 (The Netherlands); Executive Board Decision No. 3472-(71/128) adopted December 20, 1971 (Denmark confirmed on November 20, 1973 that the central rate of DKr 6.980 per US$1 was a central rate of DKr 1 = SDR 0.131955); Executive Board Decision No. 3476-(71/128) adopted December 20, 1971 (Belgium confirmed on November 20, 1973 that a central rate of BF 461.8159 per US$1 was a central rate of BF 1 = SDR 0.0205519).

subject to prior agreement between participants and serves mainly to ensure orderly market conditions for these currencies vis-a-vis the U.S. dollar. Continuous close contact between the central banks insures the coordination of intervention operations.

Since it has been agreed that holdings of partner currencies should be limited to working balances, each central bank was originally obliged to make its own currency available to its partners in unlimited amounts pending settlement at the end of the month following intervention. Except for settlement of balances involving the two nonmembers of the European Community (Norway and Sweden), which takes place in U.S. dollars, claims and liabilities resulting from interventions are cleared through the European Monetary Cooperation Fund, and such claims are converted to European monetary units of account (which are equivalent to the SDR as defined in Article XXI, Section 2). From time to time, the original settlement rules have been modified. For example, in July 1975, it was agreed that, at the request of a debtor central bank, the settlement period may be extended up to a maximum of three months, subject to certain conditions. Creditors and debtors may also agree bilaterally on the manner in which outstanding balances are to be settled. In the absence of such bilateral agreement, however, some general rules apply. A debtor's holdings of creditor currencies are to be used first. The remainder are to be settled by using (1) SDRs and reserve positions in the Fund, and (2) reserve assets denominated in dollars or any other acceptable currency, in proportion to the debtor's holdings of these two categories in its reserves. Originally, the settlement rules provided for part settlement in gold in proportion to the debtor's holdings of gold in its reserves, but in fact, gold has never been used for settlement.

III. Exchange Market Experience Since the Inception of the Common Margins Agreement

In the course of 1973 there were persisting pressures on the currencies of several participating countries. To relieve these pressures, the deutsche mark, after being revalued by 3 per cent on March 1973, was again revalued by 5.5 per cent against the SDR on June 29, 1973. This step was later followed by a revaluation of the Netherlands guilder by 5 per cent on September 17, 1973, and a revaluation of the Norwegian krone of 5 per cent on November 16, 1973 (Table 2). In January 1974 the French franc left the agreement but re-entered at the previously existing parity in July 1975.

In 1974 and the first part of 1975 there were substantial fluctuations in the rate for the currencies participating in the common margins agreement vis-a-vis the U.S. dollar (Table 3). During most of 1975 the deutsche mark was one of the weakest currencies in the "snake." However, it strengthened again at the beginning of 1976 in the wake of pressures on the Italian lira and later on the pound and the French franc. Funds shifting into deutsche mark prompted a rise in the exchange rate and led to substantial interventions by the Bundesbank in support of both the U.S. dollar and the weaker currencies within the common margins agreement. After the French franc left the agreement on March 15, 1976, the Belgian franc and the Danish kroner came under pressure followed, somewhat later, by the Netherland guilder. Since then, the deutsche mark has been almost persistently at the upper limit of the "snake" and from the latter part of July pressures toward its appreciation have intensified again. Since mid-August, the guilder has also been close to the upper limit of the "snake," while the other currencies have clustered around the lower limit. In August-September 1976, the Belgian franc and the Danish krone came under pressure within the "snake" necessitating substantial intervention by the central banks and large increases in the discount rates. During these same months, pressures on the Swedish krona and the Norwegian krone also required large-scale intervention and prompted increases in official discount rates in the countries concerned.

IV. Economic Conditions in Participating Countries

In the recent world-wide recession, the economies of the countries participating in the common margins agreement showed quite divergent developments. Germany was one of the participants most adversely affected with GNP almost stagnating in 1974 and falling by 3.2 per cent in 1975. In contrast, output in Norway--partly under the influence of strong investment in the oil sector--showed a virtually uninterrupted rate of growth. Output in Sweden in 1975 was sustained at the high level of 1974, while a decline in output occurred in Denmark, in Belgium, and in the Netherlands. During the subsequent recovery similar divergences have been observed. The upswing was most marked in Germany and Norway and more subdued in the other countries. Unemployment, which has receded from its cyclical peak in Germany and the Scandinavian countries, has continued to rise in Belgium and the Netherlands.

Despite the sharp decline in output in Germany, the balance of payments surplus on current account, which had become extremely large in 1974, declined sharply to SDR 3.2 billion, equivalent to less than 1 per cent of GNP (Table 5). The prospects for the German current account are for little change in 1976. German exporters are expected to gain market shares as investment demand strengthens abroad and in response to the improvement that has taken place in German competitiveness. The current account position of the Netherlands, which is influenced by the availability of natural gas for domestic consumption, remained strong in 1975 and has further improved in 1976. The current account position of Belgium tended to weaken; in 1976 a deficit has emerged and the traditional outflow of capital is persisting. Denmark, which for many years had a weak current account, experienced some temporary improvement in 1975 but the situation has deteriorated substantially again in 1976. The decline in demand for traditional exports and efforts to maintain full employment (as well as, in the case of Norway, the heavy investment in the oil sector) contributed to an adverse development in the current account positions of Norway and Sweden in 1975. In the first half of 1976 there was a further deterioration in Sweden and no improvement in Norway.

In the first half of 1976, Germany has continued to experience an improvement in competitiveness: hourly earnings in manufacturing were about 6 1/2 per cent higher than a year earlier, while consumer prices rose by only 5 per cent (Table 4). In contrast, the other countries have experienced increases in hourly earnings well in excess of 10 per cent, with the increases being especially large in the case of Norway and Sweden. In Norway, the integration of the oil sector into the traditional structure of the economy inevitably led to an extra push on prices and costs, which the authorities are endeavoring to counteract. Denmark, where costs had risen substantially in earlier years, has recently had more success in combating inflation, partly as a result of wage settlement imposed by law and partly reflecting the economic slack. Even so, hourly wage earnings in the first half of 1976 were almost 13 per cent higher than a year earlier and consumer prices rose by more than 7 per cent.

Intervention has led to fairly sharp changes in monetary reserves of the participating countries, especially in 1976 (Table 5). In February and March 1976 purchases of foreign exchange by the Deutsche Bundesbank, prior to the withdrawal of the French franc from the common margins agreement, are reported to have amounted to over SDR 3 billion, and in August and September intervention purchases were again very substantial. Sweden also gained reserves in January-July 1976 with the help of private and public sector borrowing abroad but in August and September reserves declined by SDR 340 million. As a result also of large scale borrowing, Norwegian reserves changed little in January-July 1976 but declined by SDR 156 million in August and September. In Denmark gross official reserves declined in January-September 1976 by SDR 220 million to SDR 530 million, the equivalent of two weeks of imports despite substantial official borrowing abroad. Losses in reserves associated with support operations were substantial in the case of Belgium. The Netherlands also experienced a large loss in the second quarter of 1976.

Exchange market disturbances have thus forced monetary authorities to deviate from the policies that they regard as appropriate to their domestic economic circumstances. In Germany, the inflow of capital was threatening to produce a rate of expansion of reserve money in excess of the 8 per cent target set by the Bundesbank for 1976. In the other countries, despite a rather sluggish recovery, the authorities have allowed interest rates to rise to historically high levels in order to curb capital outflows.

V. Staff Appraisal and Proposed Decision

In recent months there have been persistent pressures in the exchange markets of the countries participating in the common margins agreement which have been associated in part with divergent rates of price and cost inflation in the various member countries. The adjustment of intervention rates within the common margins agreement that has now taken place should help to relieve these tensions and to reduce the need for exchange market intervention by the various central banks concerned. This will make it easier for the authorities of the participating countries to attain their economic and especially their monetary policy goals. The staff believes that the new rates communicated to the Fund are not unsatisfactory.

The following decision is submitted for consideration by the Executive Directors:

1. The Governments of Denmark, Germany, Norway, and Sweden have communicated rates for their respective currencies listed in Table 1 of EBS/76/453 to take effect as central rates from October 18, 1976. They have also indicated that they will continue to maintain the common margins of 2.25 per cent.

2. The Fund notes these central rates and the margins that will be maintained.

Table 1. Central Rates

(SDR per currency unit) 1/

	Previous rate 2/	Present rate	Percentage change
Belgian franc	0.0205519	0.0205519	unchanged
Danish krone	0.131955	0.126677	-4
Deutsche mark	0.310580	0.316792	+2
Luxembourg franc	0.0205519	0.0205519	unchanged
Netherlands guilder	0.298056	0.298056	unchanged
Norwegian krone	0.145530	0.144075	-1
Swedish krona	0.181787	0.179969	-1

1/ The equivalent of the special drawing right has been used as the numeraire for establishing relationships between the currencies of member countries participating in the European common margins agreement.
2/ See footnote 2, p. 2.

Table 2. Changes in Par Values and Central Rates

	Belgium (Belgian franc)	Denmark (Danish krone)	Germany (deutsche mark)	Luxembourg (Luxembourg franc)	Netherlands (guilder)	Norway (Norwegian krone)	Sweden (Swedish krona)
Initial par value							
Established on	12/18/46	12/18/46	1/30/53	12/18/46	12/18/46	12/18/46	11/5/51
Equivalent in grams of fine gold	0.0202765	0.185178	0.211588	0.0202765	0.334987	0.179067	0.171783
Subsequent changes							
Date (of new par value)	9/22/49	9/18/49	3/6/61	9/22/49	9/21/49	9/18/49	...
Change as a percentage of previous gold equivalent	-12.3	-30.5	+5.0	-12.3	-30.2	-30.5	...
Date (of new par value)	...	11/21/67	10/26/69	...	3/7/61	...	...
Change as a percentage of previous gold equivalent	...	-7.9	+9.3	...	+5.0	...	...
Date (of central rate)	12/21/71	12/21/71	12/21/71	12/21/71	12/21/71	12/21/71	12/21/71
Change as a percentage of previous gold equivalent	+2.8	-1.0	+4.6	+2.8	+2.8	-1.0	-1.0
Date (of central rate)	...	...	3/19/73	...	...	...	2/15/73
Change as a percentage of previous gold equivalent	...	...	+3.0	...	...	...	-5.0
Date(of central rate)	...	...	6/29/73	...	9/17/73	11/16/73	...
Change as a percentage of previous gold equivalent	...	...	+5.5	...	+5.0	+5.0	...
Date (of central rate)	...	10/18/76	10/18/76	...	...	10/18/76	10/18/76
Change as a percentage of previous gold equivalent	...	-4.0	+2.0	...	...	-1.0	-1.0

Table 3. U.S. Dollar Rates and Effective Exchange Rates

(Appreciation since May 1, 1970; in per cent)

	Belgian franc	Danish krone	Deutsche mark	Netherlands guilder	Norwegian krone	Swedish krona
			(U.S. dollar rate)			
December 1, 1971	10.2	5.8	12.4	10.7	6.3	6.2
February 14, 1973	24.0	18.6	26.2	24.0	19.4	13.4
March 19, 1973	26.1	21.3	29.6	25.0	20.2	15.7
June 29, 1973	38.4	32.8	51.0	37.8	35.4	27.9
September 19, 1973	36.8	31.5	51.7	42.0	29.7	23.0
November 16, 1973	28.4	25.5	41.3	34.0	29.0	18.5
January 21, 1974	13.5	8.9	28.9	20.5	17.4	6.4
May 14, 1974	36.0	30.1	52.3	43.3	36.5	23.6
September 3, 1974	27.2	21.4	37.5	33.5	28.2	15.4
February 26, 1975	46.8	38.1	60.1	53.5	45.2	32.1
September 29, 1975	24.4	20.4	37.1	32.1	25.1	14.4
May 5, 1976	28.9	24.1	44.5	34.7	31.2	18.4
September 15, 1976	30.3	25.2	47.3	39.7	31.4	18.9
October 13, 1976	34.2	28.5	50.6	41.8	34.6	21.8
October 18, 1976	33.2	25.3	49.9	41.2	33.3	20.9
			(Effective exchange rate) 1/			
December 21, 1971	...	...	...	...	...	...
February 14, 1973	3.8	4.2	9.2	4.2	3.5	1.0
March 19, 1973	4.9	5.3	11.9	4.2	4.4	-0.8
June 29, 1973	5.5	5.2	26.3	5.4	9.0	1.1
September 19, 1973	4.4	7.4	24.0	9.1	5.9	-0.2
November 16, 1973	2.5	6.1	19.8	7.9	9.6	-0.9
January 21, 1974	1.4	1.8	19.5	7.0	9.6	-2.6
May 14, 1974	6.0	6.2	26.3	10.4	12.7	0.5
September 3, 1974	4.8	5.8	20.3	11.0	11.7	-0.8
February 26, 1975	8.7	8.8	27.9	14.2	15.4	3.5
September 29, 1975	4.3	7.9	23.6	12.4	12.8	1.6
May 5, 1976	8.7	12.8	33.3	15.0	19.3	6.2
September 15, 1976	9.4	14.1	34.7	18.6	19.7	6.9
October 13, 1976	12.6	17.0	37.6	19.6	22.3	9.4

1/ Cumulative changes in the trade-weighted effective exchange rate on the Wednesday following the date in the first column.

Table 4. Hourly Earnings and Prices

(Percentage increase over previous year)

	1974	1975	1975 1st half	1975 2nd half	1976 1st half
			(Hourly earnings in manufacturing)		
Belgium	20.8	20.1	23.3	17.2	11.9
Denmark	22.2	19.4	21.3	17.8	12.9
Germany	14.7	10.2	12.4	8.1	6.4
Netherlands	17.7	13.5	14.3	13.0	10.5
Norway	17.8	20.0	23.1	17.1	15.9
Sweden	11.8	18.5	17.7	21.2	14.0
			(Consumer prices)		
Belgium	12.7	12.7	14.4	11.2	9.9
Denmark	15.2	9.6	12.4	6.9	7.4
Germany	7.0	6.0	6.1	5.7	5.1
Netherlands	9.7	10.2	10.5	10.0	9.3
Norway	9.4	11.7	11.4	12.0	9.9
Sweden	9.0	9.8	9.2	10.7	11.1

Source: National sources.

Table 5. Interest Rates and Selected External Economic Indicators

	1973	1974	1975	1976 1st qtr.	1976 2nd qtr.	1976 3rd qtr.
(Short-term interest rates, in per cent, end-period)						
Belgium	7.7	10.5	6.1	9.0	9.0	11.5 1/
Denmark	9.0	10.0	7.5	8.5	8.5	8.5 1/
Germany	12.1	9.9	5.0	3.8	3.8	4.6 1/
Netherlands	6.4	6.7	4.9	2.6	6.0	9.7 1/
Norway	8.5	8.5	6.5	7.0	7.2	...
Sweden	8.0	10.3	9.3	8.8	9.3	...
(Long-term interest rates, in per cent, end-period)						
Belgium	7.9	9.0	8.7	9.0	8.9	9.2 1/
Denmark	12.7	14.4	12.6	13.6	14.1	...
Germany	9.5	10.6	8.7	8.1	8.0	8.3 1/
Netherlands	8.1	8.4	7.5	7.2	8.7	9.2 1/
Norway	6.2	7.1	7.3	7.3	7.3	7.2 1/
Sweden	7.3	8.1	9.1	9.2	9.3	...
(Current account balance, in millions of SDRs) 2/						
Belgium	971	759	852	-350	-26	...
Denmark	-390	-759	-440	-490	-355	...
Germany	3,608	8,065	3,172	1,132	465	...
Netherlands	1,933	1,687	1,297	707	428	...
Norway	-294	-1,025	-2,090	-756	-570	...
Sweden	1,020	-788	-1,305	-369	-409	...
(Reserves, in millions of SDRs, end-period)						
Belgium	4,228	4,366	4,952	4,615	4,543	4,074
Denmark	1,098	764	749	1,035	873	530
Germany	27,497	26,461	26,510	30,090	29,078	30,271
Netherlands	5,427	5,682	6,073	6,296	5,321	5,588
Norway	1,305	1,546	1,911	1,826	1,984	1,899
Sweden	2,096	1,418	2,628	2,813	2,877	2,510

Sources: IMF, International Financial Statistics; and national sources.

1/ August 1976.
2/ Including official transfers.

Table 6. Indicators of Competitiveness

(1973 = 100; own indices relative to other "snake" partners)

	1974	1975		1976
		1st half	2nd half	1st qtr.
Unit labor costs				
Belgium	101.9	108.1	111.7	112.6
Denmark 1/	104.0	101.1	94.7	99.8
Germany	99.1	93.6	88.8	86.0
Netherlands	98.9	101.1	102.0	104.1
Norway	99.7	111.4	108.8	109.2
Sweden	96.8	95.7	109.4	109.5
Export unit values				
Belgium	101.7	102.3	103.5	105.4
Denmark	102.8	108.2	103.9	104.7
Germany	92.8	92.8	94.4	92.7
Netherlands	105.4	102.5	99.9	101.8
Norway	107.2	116.2	115.0	111.8
Sweden	102.5	103.6	101.4	100.9
Wholesale prices				
Belgium	101.8	98.2	98.9	99.7
Denmark	99.2	98.3	99.5	100.4
Germany	96.8	97.1	96.4	94.8
Netherlands	99.8	100.3	100.4	101.5
Norway	103.9	109.7	113.7	112.6
Sweden	106.1	107.3	106.4	107.6

Source: Staff calculations.

1/ In the absence of an industrial production index in Denmark, productivity has been estimated by the staff.