September 1998

IMF Staff Country Report No. 98/102

Kingdom of the Netherlands—Netherlands: Selected Issues

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International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

KINGDOM OF THE NETHERLANDS—NETHERLANDS

Selected Issues

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Approved by the European I Department

August 6, 1998

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PREFATORY NOTE

Since the early 1980s, the Netherlands has engineered an impressive turnaround in economic performance, culminating in the current phase of strong growth and job creation. As is now widely recognized, this stemmed from the interaction of changes in four areas: public expenditure restraint, which was sufficient to support both fiscal consolidation and a cut in the tax burden; a reduction in real social benefits and minimum wages—particularly the youth minimum wage; a monetary policy resolutely linked to the deutsche mark; and a shift to wage moderation. Indeed, reform in these areas is continuing today, coupled with a new emphasis on the contribution of product market competition.

These policy changes set in motion a virtuous circle in the labor market and the public finances. Spending restraint and benefit reform supported tax cuts, and thus facilitated wage moderation. Together, these elements led to a stronger demand for labor, higher participation, and more active job search. In turn, buoyant employment boosted the tax base. This synergy between fiscal and labor market reform was a main focus of the 1997 Selected Issues paper.

There are, of course, a number of other important facets to the economic recovery in the Netherlands, some of which are of considerable topical interest. Three such issues—relating mainly to adjustment in a changing external setting—are explored in the present paper:

- A first theme is the ***strengthening of the external current account***. Section I of the paper reviews this issue, concluding that the change in corporate profitability in a new wage environment was a crucial element, alongside fiscal consolidation, in turning around the current account—which has now moved into strong surplus.

- A second theme is ***the performance of the financial sector***. Responding to growing competition and market integration, banks and insurance companies engaged in a forceful progress of domestic consolidation, forming major conglomerates. From this strengthened home base they engaged in a vigorous expansion into new markets at home and abroad, with varying degrees of selectivity. These trends, and a current setting of exuberant asset markets, currently pose new challenges to regulators—as discussed in Section II of this paper.

- A third theme, reviewed in Section III, is the experience of a decade and a half in a ***de facto monetary union***. One key aspect of this has been the role of fiscal and structural reforms in fostering the twin goals of stability and growth: with these reforms, corporations became more robust and wage earners began to take a longer view, leaving the economy better able to weather shocks without monetary autonomy. On the other hand, fiscal stabilizers were not allowed to operate. These issues, too, are highly topical today, as the authorities, employers, and labor unions consider how to respond to the real divergence between the Dutch and German economies—a divergence that has resulted in monetary conditions, on the threshold of EMU, no longer matching the domestic cyclical position.

It is planned to publish the 1997 and 1998 staff studies as an Occasional Paper.

I. THE CURRENT ACCOUNT OF THE NETHERLANDS[1]

A. Introduction

1. Since the early 1980s, the current account of the balance of payments has improved substantially, shifting from a deficit of ½ percent of GDP in 1980, to a surplus of about 5¾ percent in 1996 (Table 1 and Figure 1). The current account surplus is now one of the highest in the world—although statistical problems may result in an overestimation of the surplus (see Box 1). This section examines the causes of this increase from both a balance of payments and a saving-investment perspective. It first considers each perspective separately, and then discusses the consistency of the two approaches. In conclusion, it addresses the question how the *underlying* current account compares with the medium-term trend in the saving-investment balance; or, in other words, whether there is any indication of policy tensions, and how such tensions might be resolved under EMU.

B. The Current Account from a Balance of Payments Perspective

2. A breakdown of the current account into its various components reveals that the striking improvement in the current account can be attributed mainly to the improvement of the trade balance. The other components of the current account have either not shown a clear trend, or quantitatively were not very important.

3. Since the early 1980s, the **trade balance** has improved by about 5½ percent of GDP (Table 1 and Figure 1). This improvement came in two phases. First, between 1980 and 1982 the balance switched from a deficit of 0.1 percent to a surplus of 4½ percent of GDP. Having fluctuated around this level for about a decade, the trade surplus then increased further to about 5½ percent of GDP in 1993. The contribution of other components of the current account was not as important. The **income balance** has registered no clear trend, which is somewhat surprising in view of the large current account surpluses in the past decade and a half (see below). The **services balance** did not change much during the 1980s, but increased by about 1 percentage point during the 1990s. This was offset by the **balance on current transfers**, which has seen a gradual deterioration, and is now 1 percentage point lower than in the early 1980s.

Exchange rate developments and competitiveness

4. Between the mid-1970s and the mid-1980s, Dutch competitiveness improved considerably (Figure 2). Measured by the unit labor cost-based real effective exchange rate, the real effective exchange rate declined by 25 percent between 1977 and 1984. This improvement (which reversed, but not fully, a deterioration of competitiveness in the 1960s and 1970s) resulted from an impressive performance of unit labor costs; the trade-weighted

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[1]Prepared by Bas Bakker.

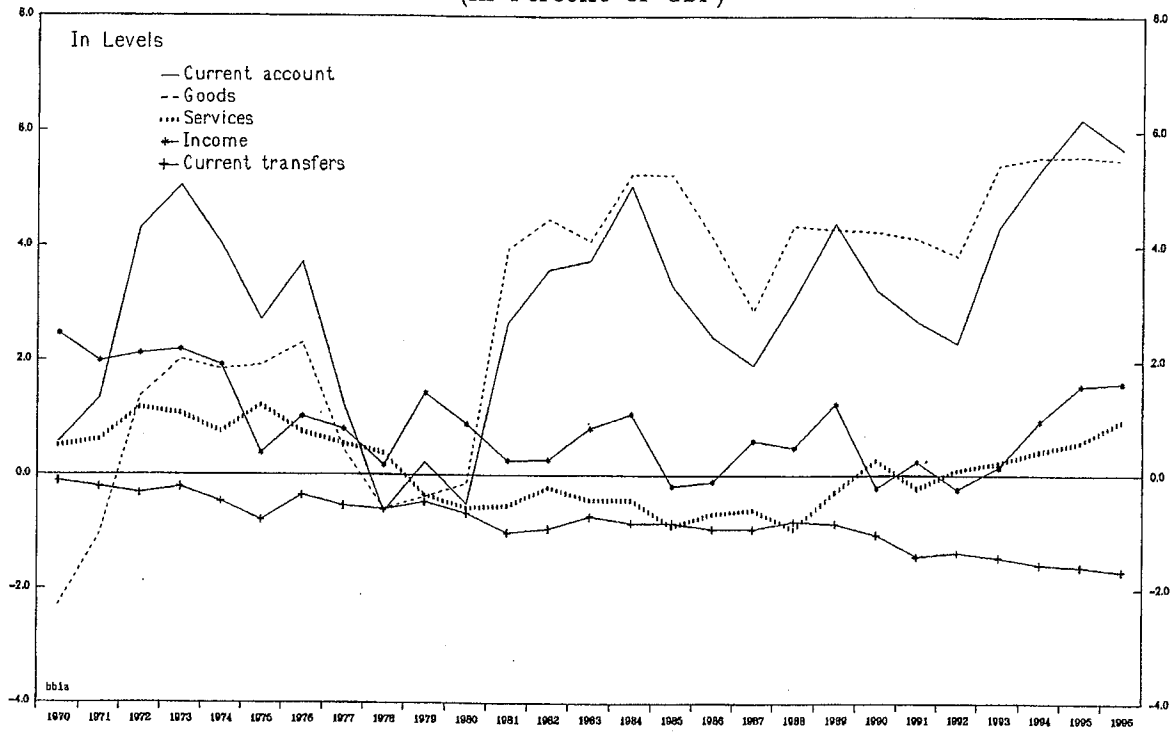
Table 1. Netherlands: Balance of Payments

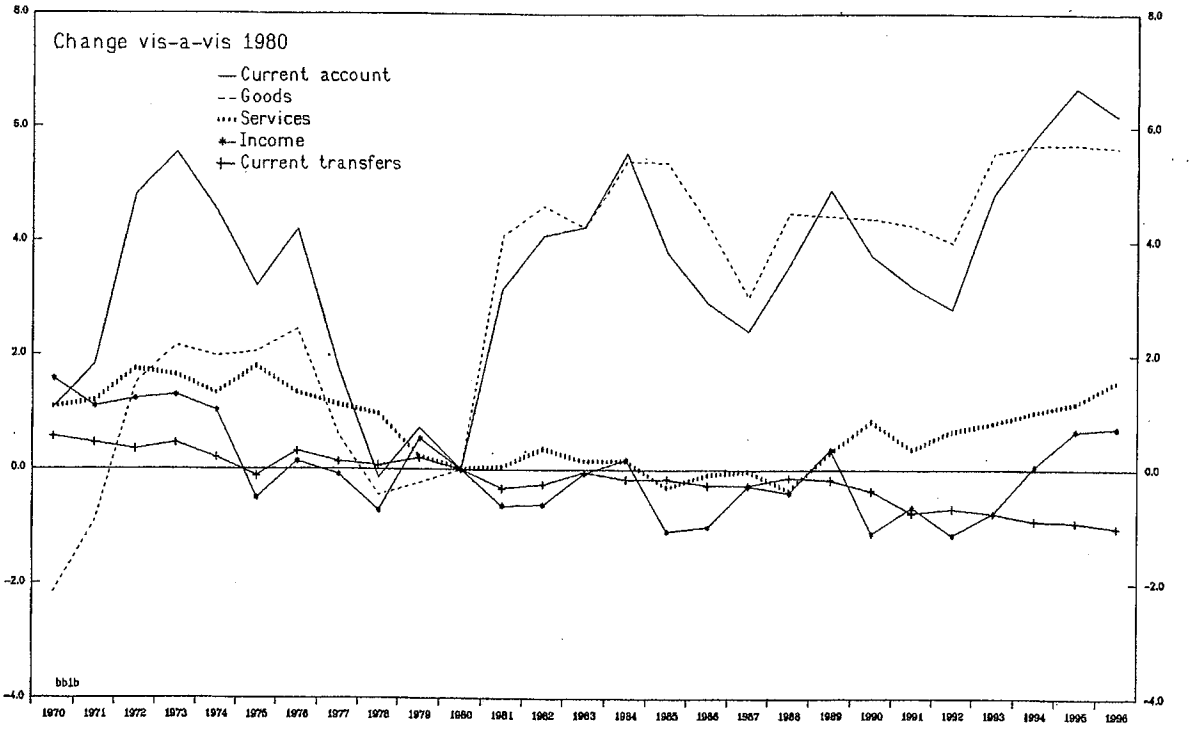
(In percent of GDP)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Current account	0.6	2.7	-0.5	2.7	3.6	3.7	5.0	3.3	2.4	1.9	3.1	4.4	3.3	2.7	2.3	4.3	5.3	6.2	5.7
Goods and services	-1.8	3.1	-0.7	3.4	4.3	3.7	4.8	4.3	3.5	2.3	3.4	4.0	4.5	3.9	3.9	5.6	5.9	6.1	6.4
Goods	-2.3	1.9	-0.1	4.0	4.5	4.1	5.3	5.2	4.1	2.9	4.3	4.3	4.3	4.1	3.8	5.4	5.5	5.6	5.5
Services	0.5	1.2	-0.6	-0.5	-0.2	-0.4	-0.4	-0.9	-0.7	-0.6	-0.9	-0.3	0.3	-0.2	0.1	0.2	0.4	0.6	1.0
Income	2.5	0.4	0.9	0.3	0.3	0.8	1.1	-0.2	-0.1	0.6	0.5	1.2	-0.2	0.2	-0.2	0.1	0.9	1.6	1.6
Compensation of employees	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Investment income	2.4	0.3	0.9	0.2	0.2	0.8	1.0	-0.2	-0.1	0.6	0.5	1.3	-0.2	0.3	-0.1	0.3	1.0	1.8	1.0
Direct investment income	2.8	0.2	1.3	0.8	0.6	1.0	1.2	-0.3	-0.1	0.2	0.4	1.3	-0.3	0.3	0.3	0.8	1.2	2.0	0.9
Portfolio investment income	-0.6	-0.5	-0.5	-0.6	-0.7	-0.8	-0.8	-0.7	-0.7	-0.5	-0.6	-0.6	-0.7	-0.8	-0.7	-1.0	-0.8	-0.8	-0.2
Other investment income	0.3	0.6	0.1	0.1	0.3	0.6	0.7	0.8	0.7	0.8	0.6	0.7	0.8	0.7	0.4	0.5	0.6	0.5	0.3
Current transfers	-0.1	-0.8	-0.7	-1.0	-0.9	-0.7	-0.8	-0.8	-0.9	-0.9	-0.8	-0.8	-1.0	-1.4	-1.4	-1.4	-1.6	-1.6	-1.7
Capital account	0.0	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.5
Financial account	-0.5	-2.7	0.6	-2.5	-3.4	-3.6	-5.0	-3.3	-2.3	-1.8	-3.0	-4.3	-3.1	-2.6	-2.1	-4.1	-5.0	-5.9	-5.2
Direct investment	-2.0	-1.5	-2.1	-1.9	-1.5	-1.8	-2.5	-0.9	-0.5	-2.6	-1.0	-2.8	-1.1	-2.5	-2.0	-1.1	-2.9	-2.1	-3.9
Portfolio investment	1.2	0.0	1.8	0.5	-0.3	-0.1	0.0	-0.1	-3.3	1.2	1.5	3.3	-1.8	-0.2	-3.0	0.6	-3.0	-2.8	-3.2
Equity	-0.6	-0.5	0.6	0.3	0.3	0.3	0.4	0.7	-1.0	-0.7	-0.3	0.0	-1.9	-1.8	-1.3	-0.2	-2.4	-2.4	0.2
Debt	1.8	0.5	1.3	0.2	-0.6	-0.5	-0.4	-0.8	-2.3	1.9	1.8	3.4	0.1	1.5	-1.7	0.8	-0.6	-0.3	-3.3
Other investment	1.1	-1.7	1.7	-1.6	-0.3	-1.7	-3.5	-0.9	2.7	0.8	-0.7	-4.0	1.2	0.7	2.7	-2.6	3.3	0.7	5.6
Net errors and omissions	1.0	0.8	0.0	-0.1	-0.1	-0.1	1.0	-0.8	-1.3	0.0	-2.0	-0.6	-1.4	-0.4	2.1	1.1	-2.3	-2.2	-5.2
Reserve assets	-1.8	-0.4	-0.7	0.6	-1.3	0.1	0.0	-0.6	0.2	-1.2	-0.7	-0.2	-0.1	-0.2	-1.9	-2.1	-0.1	0.5	1.4

Sources: IMF, Balance of Payments Statistics; and data provided by the authorities.

FIGURE 1
NETHERLANDS
Current Account and Its Components
(In Percent of GDP)





Source: IMF, Balance of Payments Statistics.

Box 1. Is the Current Account Surplus Really So High?

There are two reasons why official balance of payments statistics may overestimate the current account surplus:

- First, there is a substantial difference between the current account on a cash basis and on a transactions basis. In 1996, for instance, the current account on a transactions basis amounted to 5.7 percent of GDP, while the current account on a cash basis was only 3.1 percent of GDP. The discrepancy is mainly due to the trade balance, with goods imports on a cash basis far higher than goods imports on a transaction basis.

- Second, the current account does not capture revaluations of foreign investments. In the past decade and a half there have been substantial revaluation losses on Dutch investment abroad, and 15 years of current account surpluses have been associated with a *decline* in the net foreign investment position (see below).

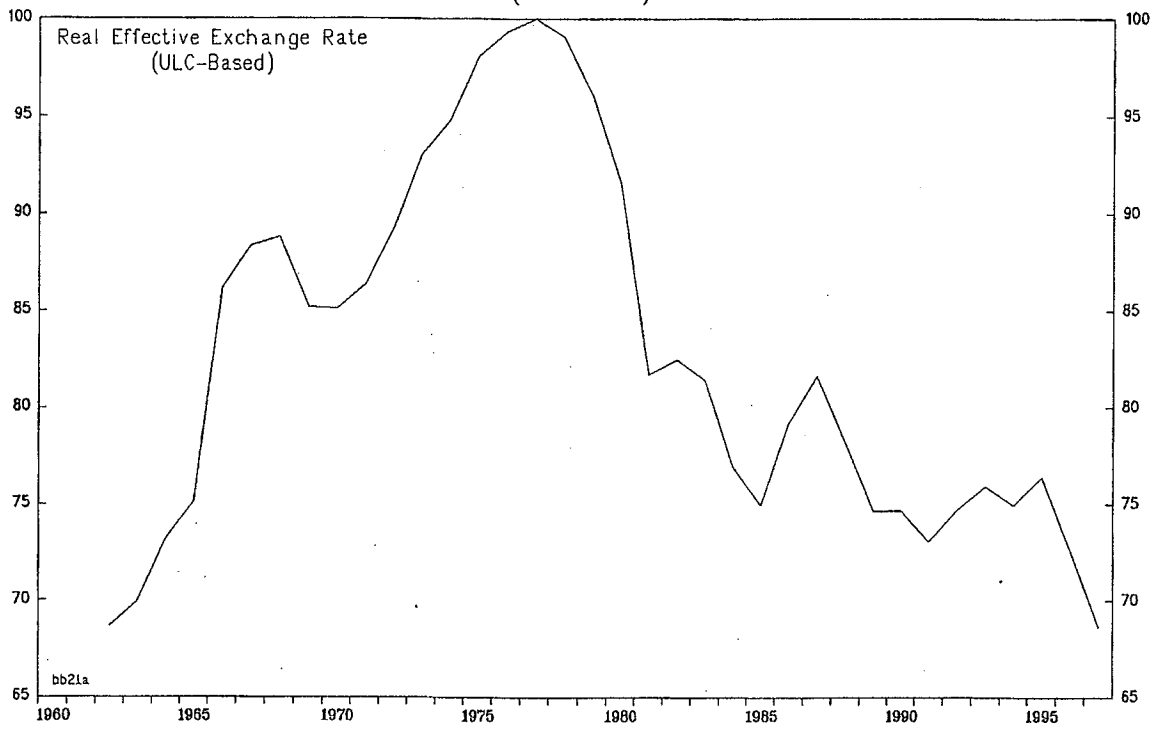
In addition, it is important to note that the current account measure captures the retained earnings of foreign subsidiaries of Dutch multinationals. These earnings are booked on the current account as investment income, and then registered on the financial account as an outflow of direct investment. Thus, while they enter the Dutch current account surplus, they are not generated in the Dutch economy. In 1995, reinvested earnings amounted to some 1.3 percent of GDP. Technically, this is internationally accepted as the correct classification of such flows, but it reflects developments outside the geographic confines of the Dutch economy.

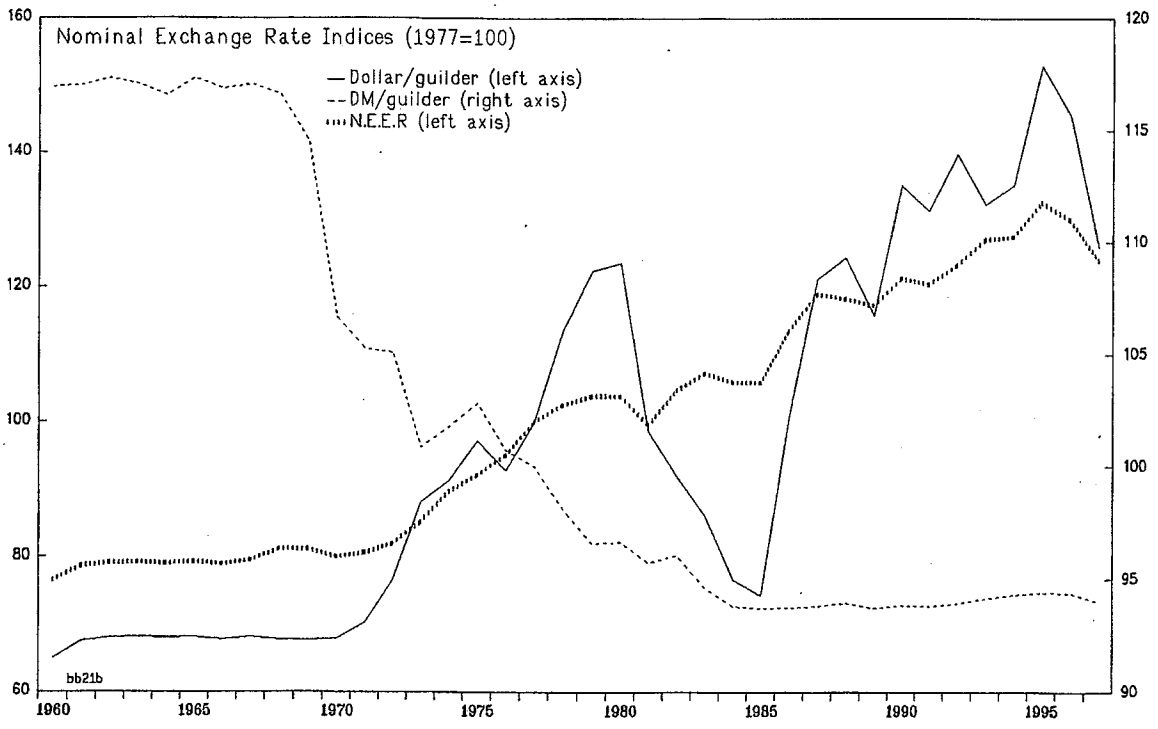
While these factors may affect the *level* of the current account surplus, they are less likely to affect *trends*—although the discrepancy between the trade balance on a cash basis and a transactions basis has been growing over time.

FIGURE 2
NETHERLANDS

Exchange Rate Indicators

(1977=100)





Source: IMF, IFS; and OECD, Analytical Database.

nominal effective exchange rate continued to appreciate—although there was some depreciation vis-à-vis the deutsche mark, and a strong depreciation vis-à-vis the U.S. dollar.

5. The real exchange rate depreciation was associated with a substantial improvement in profitability of enterprises: the share of labor income in value added declined dramatically (Figure 3). Thus, the depreciation was not only used to gain market share but also to restore profit margins (see Box 2, Appendix II, and the discussion in the next section).

6. Between 1985 and 1995, the real effective exchange rate did not change much, as a favorable performance in unit labor costs was offset by an appreciation of the nominal effective exchange rate. Since 1995, however, there has been a renewed depreciation of the real effective exchange rate. This was mainly due to a change in the *nominal* effective exchange rate—resulting from a depreciation of the guilder vis-à-vis the U.S. dollar, the pound sterling, and the lira.

Domestic demand

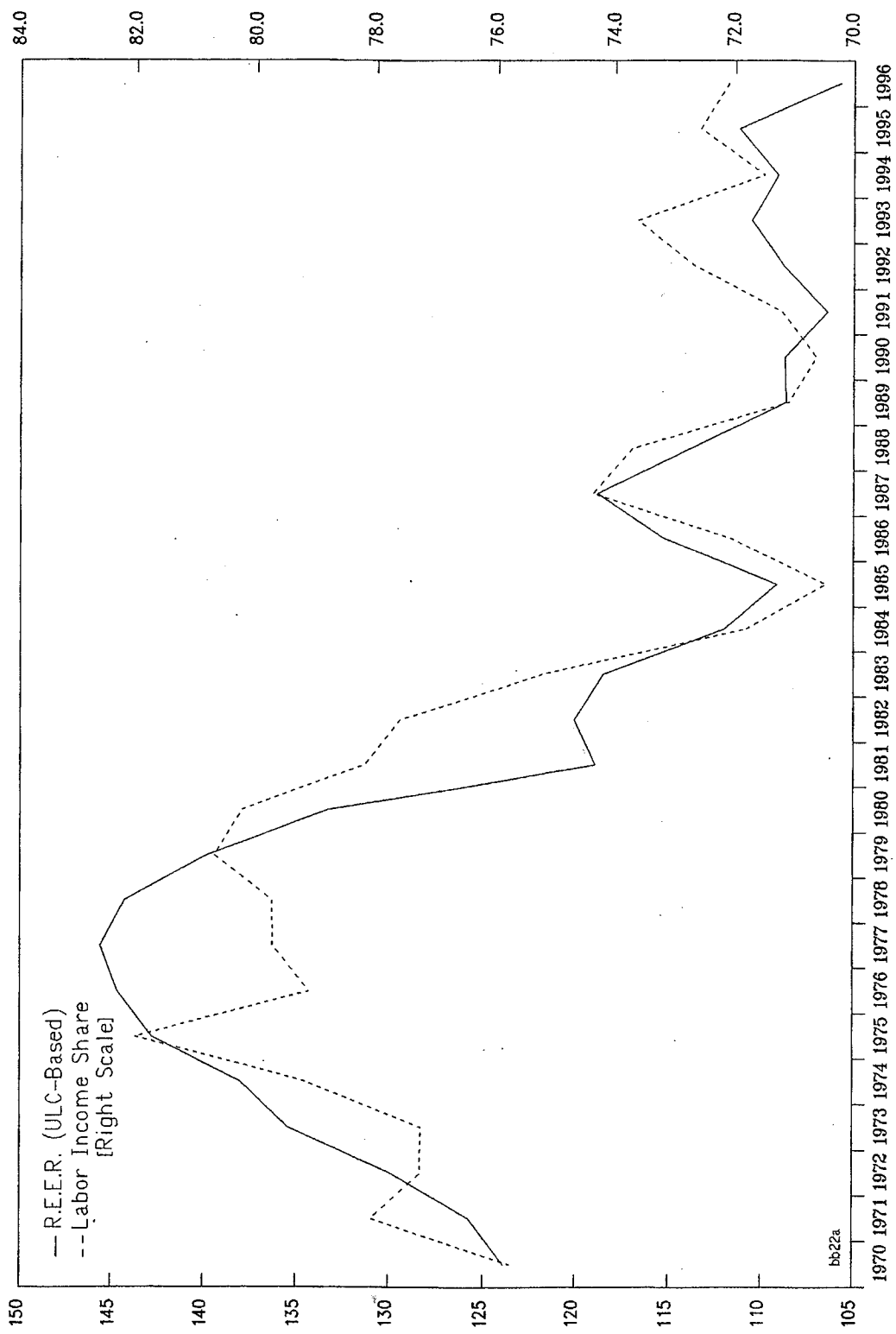
7. Developments in domestic demand have had a pronounced *cyclical* impact on the trade balance. The sharp increase in the Dutch trade balance in the 1980–82 period was associated with a decline in imports, rather than a surge in exports, and this decline in imports was associated with very weak domestic demand (Figure 4). The increase in the trade balance in 1993 also was associated with very weak domestic demand. In both periods business investment, which has a very high import component, declined strongly. As the Netherlands exports relatively few investment goods, and instead is specialized in products such as food and food products (Table 2), exports generally decline less than imports during European-wide recessions, resulting, ceteris paribus, in an improvement in the trade balance in such periods. However, an assessment of the role of domestic demand in the *structural* increase of the current account—rather than its cyclical role—is only possible from a saving-investment perspective, and this is discussed in Section C below.

The income balance and the net foreign investment position

8. With large current account surpluses since the early 1980s, the net foreign investment position of the Netherlands would have been expected to increase strongly, and to have triggered, in turn, a strong increase in the income balance. However, the net foreign investment position has actually *decreased*, from 32¾ percent of GDP in 1985, to 13½ percent in 1995 (Table 3).

9. According to research by the Central Planning Bureau, several factors account for this surprising development:

FIGURE 3
NETHERLANDS
REER and Labor Income Share



Source: IMF, World Economic Outlook.

Box 2. Pricing in Export Markets 1/

The extent to which changes in cost competitiveness are transmitted to changes in relative export prices depends on pricing behavior in international markets. If exporters fully pass on their cost changes, export prices will move in line with cost competitiveness; if they fully absorb cost changes in profit margins, cost competitiveness and export prices will be unrelated:

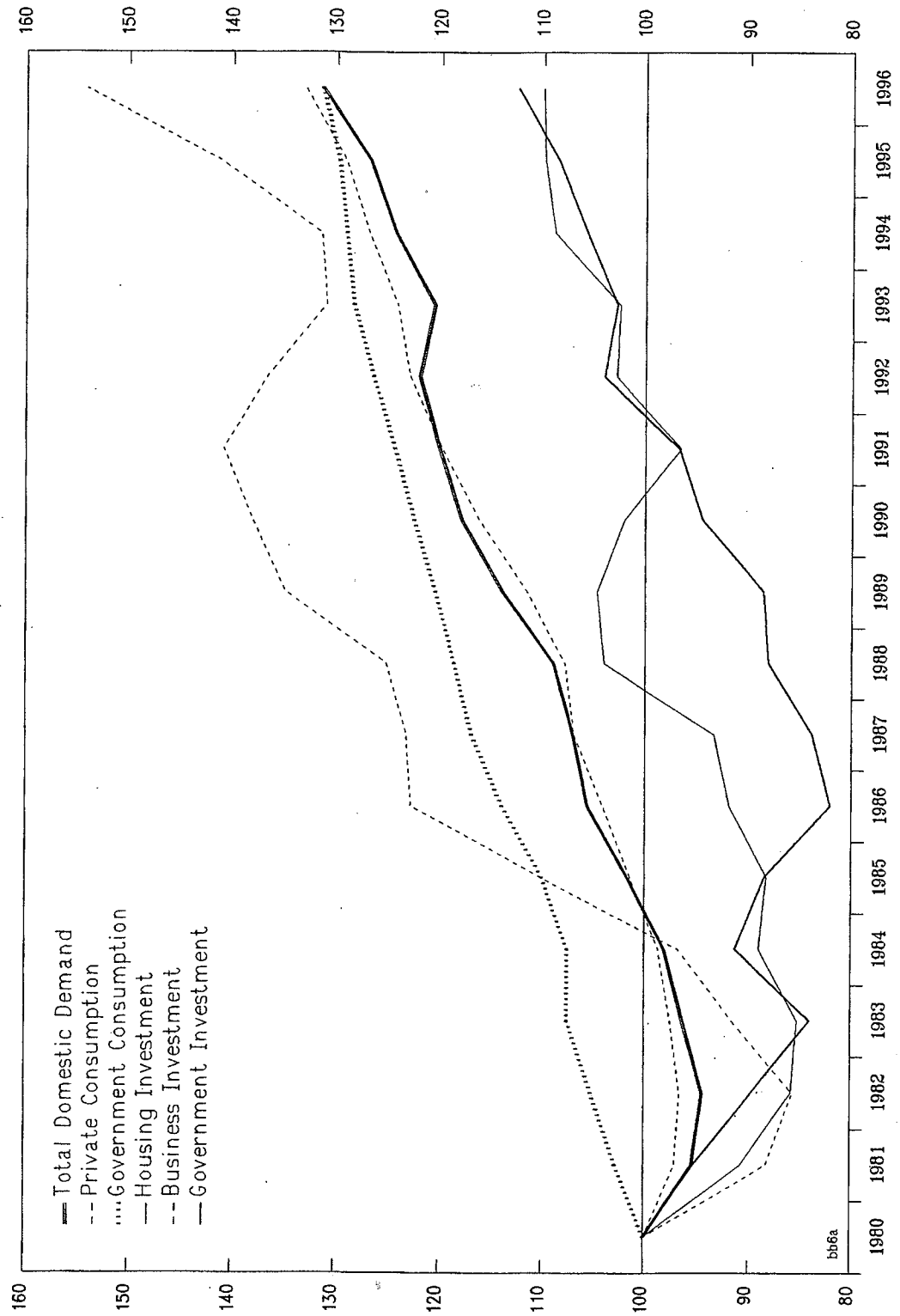
$$P_x/P_x^* = \delta + \beta C_x/C_x^* \qquad (1)$$

where P_x/P_x^* is the relative export price in domestic currency, and C_x/C_x^* is the relative cost term. If $\beta = 1$, exporters will fully reflect changes in cost competitiveness into their prices, leaving profit margins unchanged.

Estimation of equation (1) for the Dutch manufacturing sector suggests that only 40 percent of change in relative labor costs is reflected in export prices. In other words, 60 percent of relative labor costs changes are not reflected in export prices, which implies that an improvement in cost competitiveness has a substantial impact on profit margins.

1/ This box and the related Appendix I were prepared by Meral Karasulu.

FIGURE 4
NETHERLANDS
Domestic Demand and Its Components
(1980=100)



Source: OECD, Economic Outlook Database.

Table 2. Netherlands: Trade Balance and Its Components

(In percent of GDP)

	1970	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996
Food and food products	3.0	3.1	2.5	3.5	4.1	4.0	3.8	3.9	3.7	3.7	3.4
Food and live animals	3.1	3.1	2.4	3.2	3.6	3.4	3.2	3.3	3.1	3.0	2.6
Beverage and tobacco	0.0	0.0	0.1	0.2	0.5	0.5	0.5	0.5	0.6	0.6	0.7
Animal, vegetable oil, fat	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Crude materials and energy	-1.7	-0.9	-1.8	0.7	0.2	1.1	0.7	0.8	0.5	0.5	0.3
Crude materials excluding fuels	-1.1	-0.7	-0.5	-0.3	0.3	0.6	0.5	0.5	0.4	0.3	0.2
Energy	-0.6	-0.2	-1.2	1.0	-0.1	0.5	0.2	0.3	0.1	0.2	0.1
Of which:											
Petroleum	-1.0	-1.9	-3.8	-2.0	-0.7	-0.4	-0.6	-0.5	-0.4	-0.5	-0.7
Natural gas	0.5	1.9	2.8	3.5	1.0	1.2	1.0	1.0	0.8	0.9	1.0
Chemicals	1.4	2.7	2.8	3.6	2.3	2.1	1.6	1.6	1.7	2.0	2.1
Manufactures	-7.3	-4.1	-5.1	-5.3	-6.3	-6.1	-5.8	-2.8	-3.1	-2.8	-3.1
Basic manufactures	-2.3	-0.9	-1.2	-0.8	-1.4	-1.1	-1.1	-0.6	-0.6	-0.7	-0.8
Machines, transport equipment	-3.3	-1.7	-1.6	-2.8	-3.0	-3.2	-3.0	-1.2	-1.6	-1.4	-1.2
Misc. manufactured goods	-1.7	-1.5	-2.3	-1.7	-1.8	-1.9	-1.7	-1.0	-0.9	-0.7	-1.1
Goods not classified by kind	0.0	-0.1	0.0	0.0	1.6	1.6	1.4	1.4	1.7	1.6	1.5
Total	-4.5	0.6	-1.6	2.5	2.0	2.6	1.7	4.9	4.6	5.0	4.2

Source: UNCTAD.

Table 3. Netherlands: Net Foreign Investment Position

(In percent of GDP)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Direct investment	16.4	17.2	17.8	13.5	13.1	13.3	15.6	13.4	15.3	14.4	14.8	15.1	15.5
Direct investment abroad	28.8	31.6	37.3	33.2	34.5	33.1	40.3	40.0	43.0	40.3	42.0	46.7	47.1
Direct investment in the Netherlands	12.5	14.4	19.5	19.7	21.4	19.8	24.7	26.6	27.7	25.9	27.2	31.5	31.6
Portfolio investment	-9.2	-10.2	-15.8	-11.0	-10.7	-9.9	-16.9	-13.5	-14.8	-14.8	-18.6	-16.9	-18.0
Equity securities	-6.1	-7.6	-13.2	-10.7	-7.0	-7.3	-10.3	-8.0	-8.4	-6.7	-10.5	-11.3	-10.6
Debt securities	-3.1	-2.6	-2.6	-0.3	-3.7	-2.6	-6.6	-5.5	-6.4	-8.1	-8.1	-5.6	-7.4
Other investment	6.9	9.3	13.4	8.0	7.3	7.8	12.3	10.3	10.7	6.0	8.5	5.3	4.1
Reserve assets	10.6	14.4	17.3	16.1	17.4	14.9	15.1	12.4	11.6	11.5	14.3	14.2	11.9
Total	24.6	30.6	32.7	26.6	27.0	26.0	26.1	22.5	22.8	17.1	19.0	17.8	13.4

Source: IMF, Balance of Payments Statistics.

- An important factor has been the *strong increase in stock prices* since the early 1980s. An increase in stock prices in world markets leads (ceteris paribus) to a deterioration of the Dutch net foreign investment position, because foreign holdings of Dutch shares exceed Dutch holdings of foreign shares.[2] Thus, if both assets and liabilities increase by the same percentage, the *net* investment position of the Netherlands will deteriorate. The deterioration has been exacerbated by the fact that the increase in Dutch stock prices in the 1990s was stronger than that in many other countries.

- Another contributing factor has been the *appreciation of the guilder*. As a large portion of Dutch foreign assets is denominated in foreign currencies, an appreciation of the guilder will lead to a reduction of the net foreign investment position in Dutch guilders.

- A third factor is the *underestimation of Dutch direct investment abroad.* Foreign direct investment is typically valued at historical prices rather than market prices. This underestimates the value of direct investment, especially in countries with high inflation and a depreciating currency.

- Finally, the *return on foreign direct investment* in the Netherlands has been well above the return on Dutch foreign investment abroad. The difference is in large part due to the United States: the return on U.S. investment in the Netherlands has been much higher than the return on Dutch investment in the United States. While it is not entirely clear what lies behind this difference, a U.S. Department of Commerce study found that it is not unique to the Netherlands.

C. The Current Account from a Saving-Investment Perspective

10. From a saving-investment perspective, the increase in the current account since the early 1980s mainly reflects an increase in the saving surplus of enterprises (Figures 5 and 6). The saving surplus (i.e., saving minus investment) of households has not shown a clear trend, while the saving surplus of government, after having decreased strongly in the 1970s, did not show a sizable change in the 1980s and 1990s.

11. The increase in the various periods can be broken down as follows:

- Between 1980 and 1984, the saving surplus increased by 5½ percentage points, from a deficit of 1¼ percent, to a surplus of 4¼ percent. This improvement was mainly associated with an increase in the saving surplus of enterprises; the saving surplus of the government deteriorated somewhat (although the government deficit declined—see below), while the saving surplus of households increased only very little.

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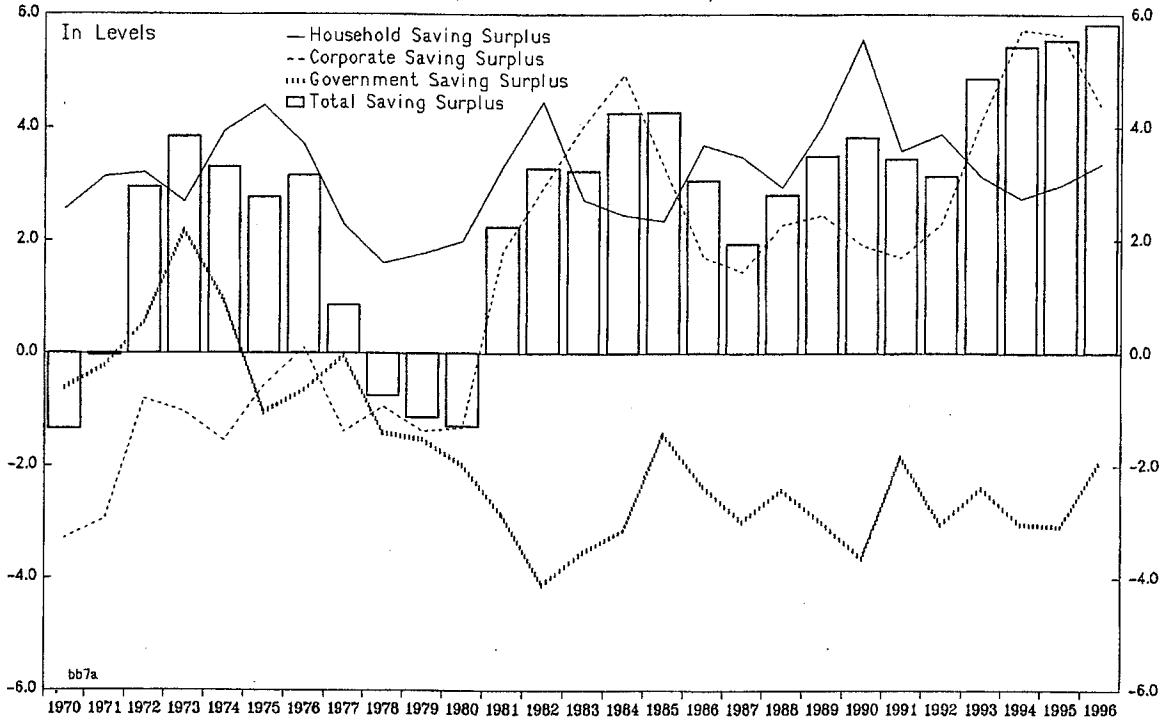
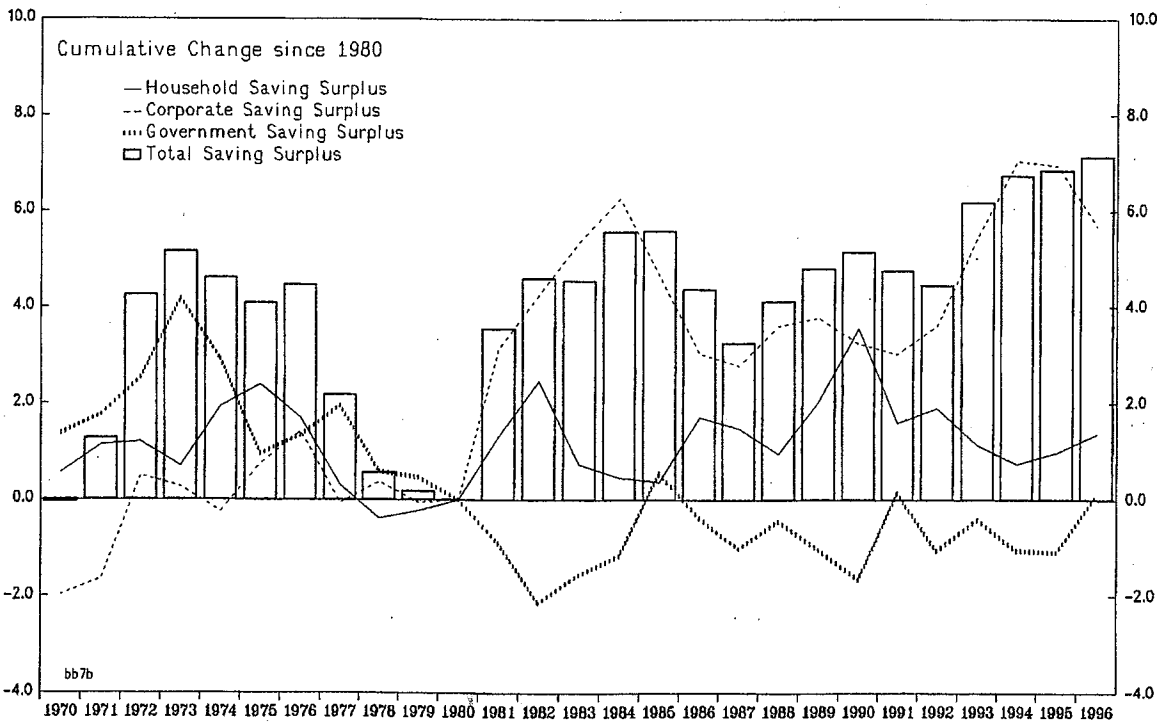
[2]Securities are usually valued at market prices; direct investment, on the other hand, is typically valued at historic prices.

FIGURE 5
NETHERLANDS

National Saving Surplus and Its Components

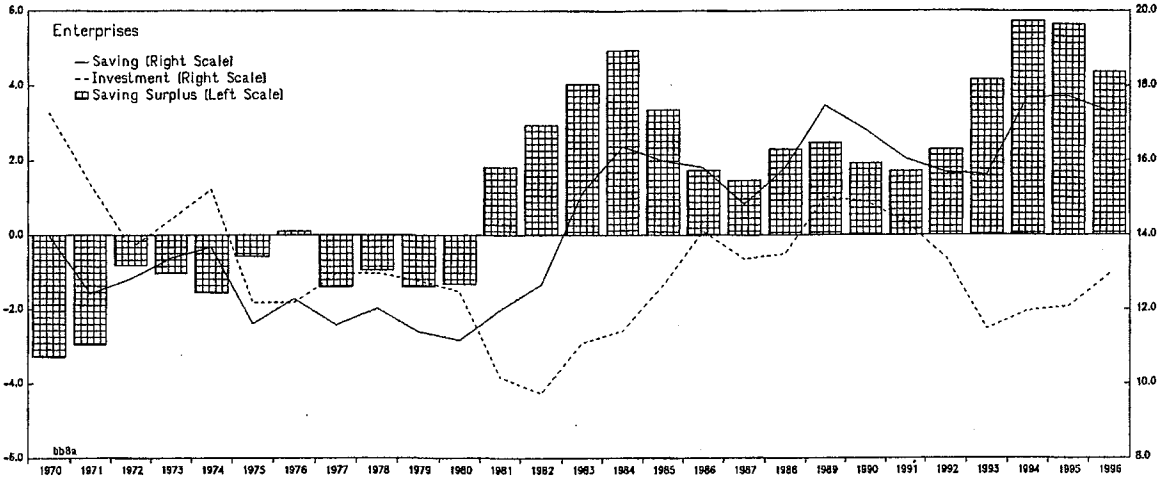
(In Percent of GDP)

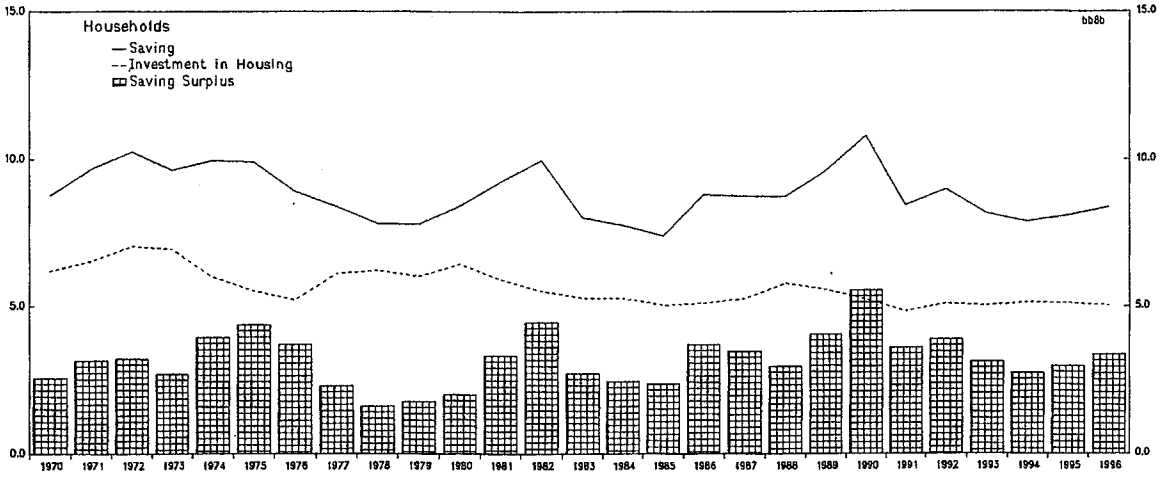


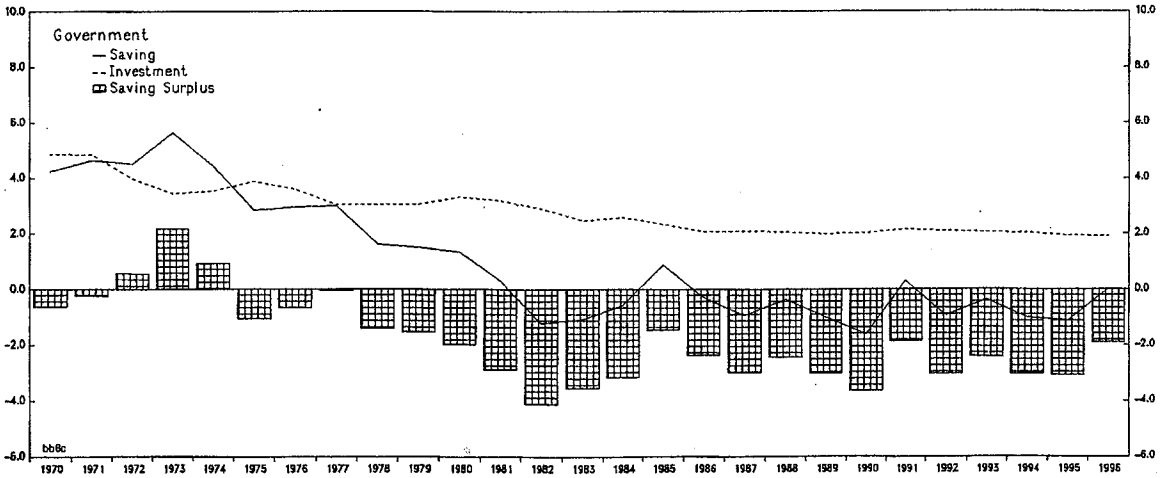


Source: IMF, World Economic Outlook.

FIGURE 6
NETHERLANDS
Saving Surpluses of the Various Sectors
(In Percent of GDP)







Source: IMF, World Economic Outlook.

- Between 1985 and 1992, the saving surplus declined by 1¼ percentage points. The saving surplus of enterprises declined by 2½ percentage points, which was only partly offset by an increase in the saving surplus of households.

- From 1992 onwards, the saving surplus increased further, from some 3 percent of GDP in 1992, to some 5 percent in 1993, and 5¾ percent in 1997. This increase was mainly the result of an increase of the saving surplus of enterprises, although toward the end of the period, the saving surplus of government increased also.

Enterprise saving surplus

12. The increase in the saving surplus of enterprises in the early 1980s was substantial. Between 1980 and 1984, the saving surplus rose by more than 6 percentage points, from a deficit of 1¼ percent of GDP to a surplus close to 5 percent. Between 1980 and 1982, this increase was mainly associated with a decline of investment; but in the following 2 years it reflected a strong recovery in saving, which outpaced the increase in investment. Since the early 1980s, the saving surplus of enterprises has displayed a cyclical pattern, but it has been at a structurally higher level than in the 1970s. Several *exogenous* factors could be behind this shift:

- Real long-term interest rates rose sharply in the late 1970s. Following their fluctuation around zero percent in the 1960s and early 1970s, they increased to over 6 percent in the early 1980s, and did not fall below 5 percent until 1996.

- Demand growth was slower during a large part of the 1980s, which reduced the need for *capacity expanding* investment. Wage growth was also much less rapid which slowed down the substitution of capital for labor by *capital deepening* investment.

- There was a large decline in the labor income share, which boosted corporate profits and hence savings. (Of course, it also stimulated investment by making it more profitable.)

13. The shift may also have reflected a *change in the risk preference of enterprises*. The large bank borrowings of the 1970s made firms very vulnerable in the recession of the early 1980s, when demand declined sharply, while interest rates rose for a protracted period. This experience may have increased firms' risk perception of bank loans and reduced their willingness to finance investment through loans—a pattern that has been observed in Belgium also. Thus, firms now finance their investments almost entirely out of retained earnings. However, empirical analysis by the staff did not detect a clear change in enterprise behavior: in the 1980s and 1990s, corporate investment and corporate saving appear to have behaved in broadly the same way as in the 1970s (see Appendix I):

- The ratio of corporate investment to GDP tracks real GDP growth, with rapid GDP growth associated with a high investment ratio (Figure 7). Thus, the slowdown of investment during the 1970s, and its collapse during the early 1980s, mirrored developments in GDP growth—which in turn reflected developments in world trade growth (Figure 8), as did the recovery of investment in the second half of the 1980s.

- The ratio of corporate saving to GDP closely follows the capital income share (Figure 9).[3] Thus, the boost in corporate saving in the first half of the 1980s was associated with a strong increase in the capital income share.

14. Thus, the most important factor behind the *structural* shift in the saving surplus would seem to be the *structural* decline in the labor income share.[4] The *cyclical* decline in investment in the early 1980s also boosted the surplus, but only on a temporary basis. Other factors, such as the increase in real interest rates, and a more cautious behavior of enterprises, may also have played a role, but their role is difficult to demonstrate empirically.

15. An important reason for the high *level* of the enterprise saving surplus may be the dominating position in the Dutch economy of multinational firms. Albeit it a small country, the Netherlands harbors quite a few very large multinational firms (Royal Dutch Shell, Unilever, Phillips, and Elsevier Reed). As these firms expand worldwide, rather than in the domestic market only, they invest a large part of their profits abroad, resulting in the combination of a large corporate saving surplus and substantial foreign direct investment outflows. Thus, in 1996, for instance, a corporate saving surplus of 4.4 percent of GDP was combined with a net foreign direct investment outflow of 3.9 percent of GDP.

Government saving surplus

16. The government saving surplus, which deteriorated sharply during the 1973–82 period, has improved by about 2 percentage points since 1982. It may seem surprising that the continuous fiscal consolidation since 1982—which resulted in a cut in the expenditure ratio of more than 13 percentage points—has not been associated with a greater increase in the saving surplus. However, about 40 percent of the expenditure cut reflected a cut in on-lending and capital transfers—both of which do not affect the saving surplus; and the remaining expenditure cuts were to a large extent offset by a reduction of the tax burden (Tables 4 and 5, and Figure 10):

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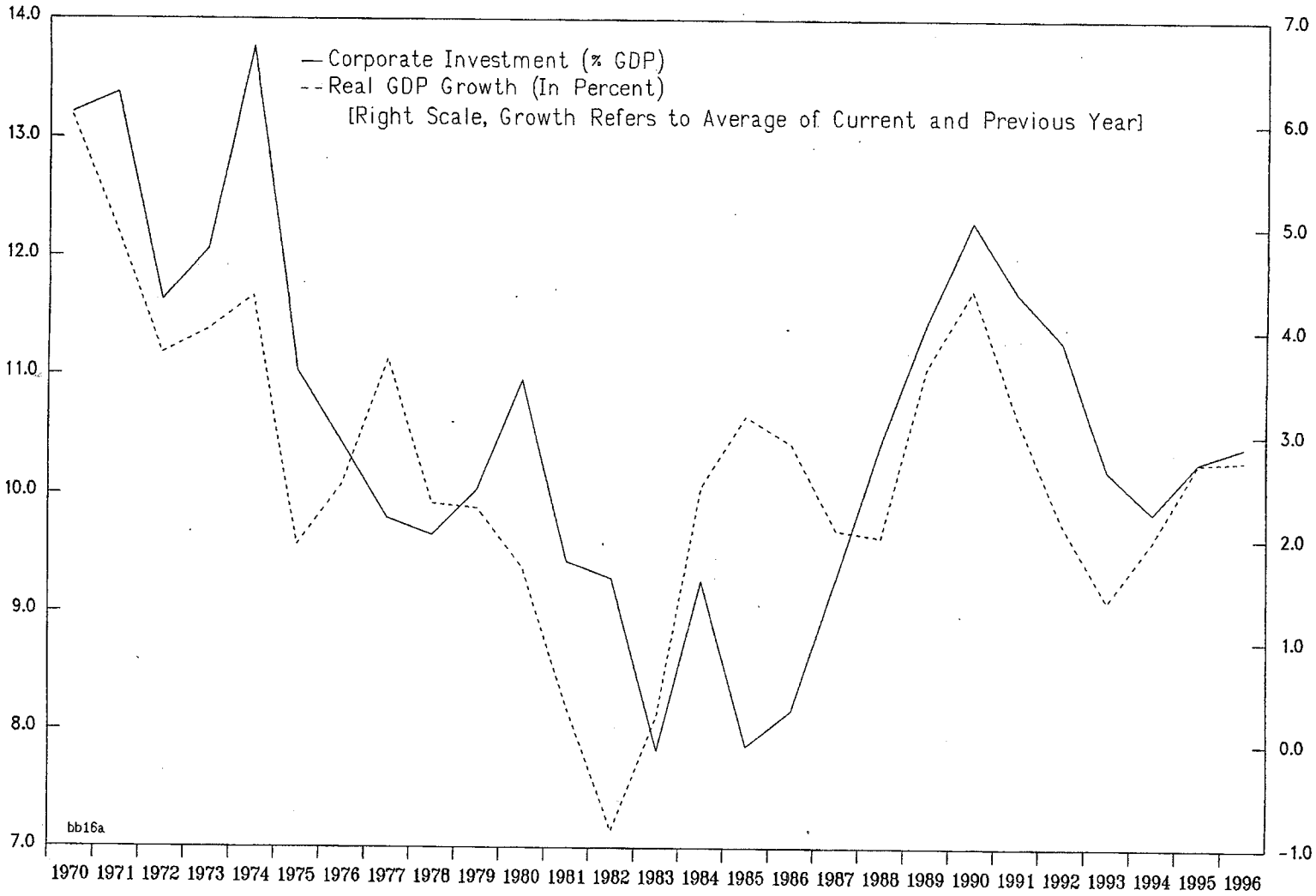
[3]The capital income share is the complement of the labor income share.

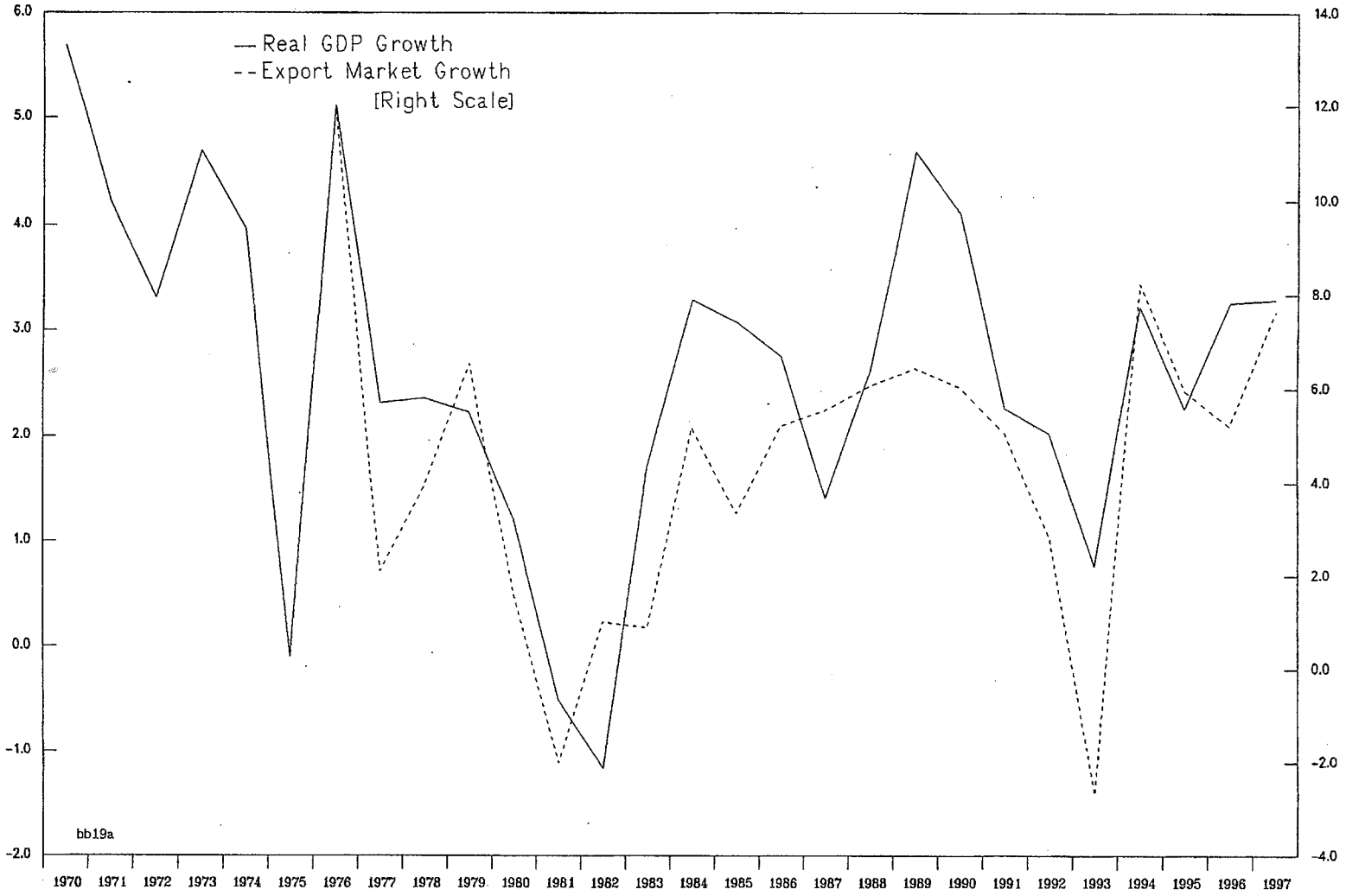
[4]This is in accordance with previous analysis of the staff, which attributed the increase in the saving-investment balance to the slowdown of real wage growth.

FIGURE 7
NETHERLANDS
Corporate Investment and Real GDP Growth



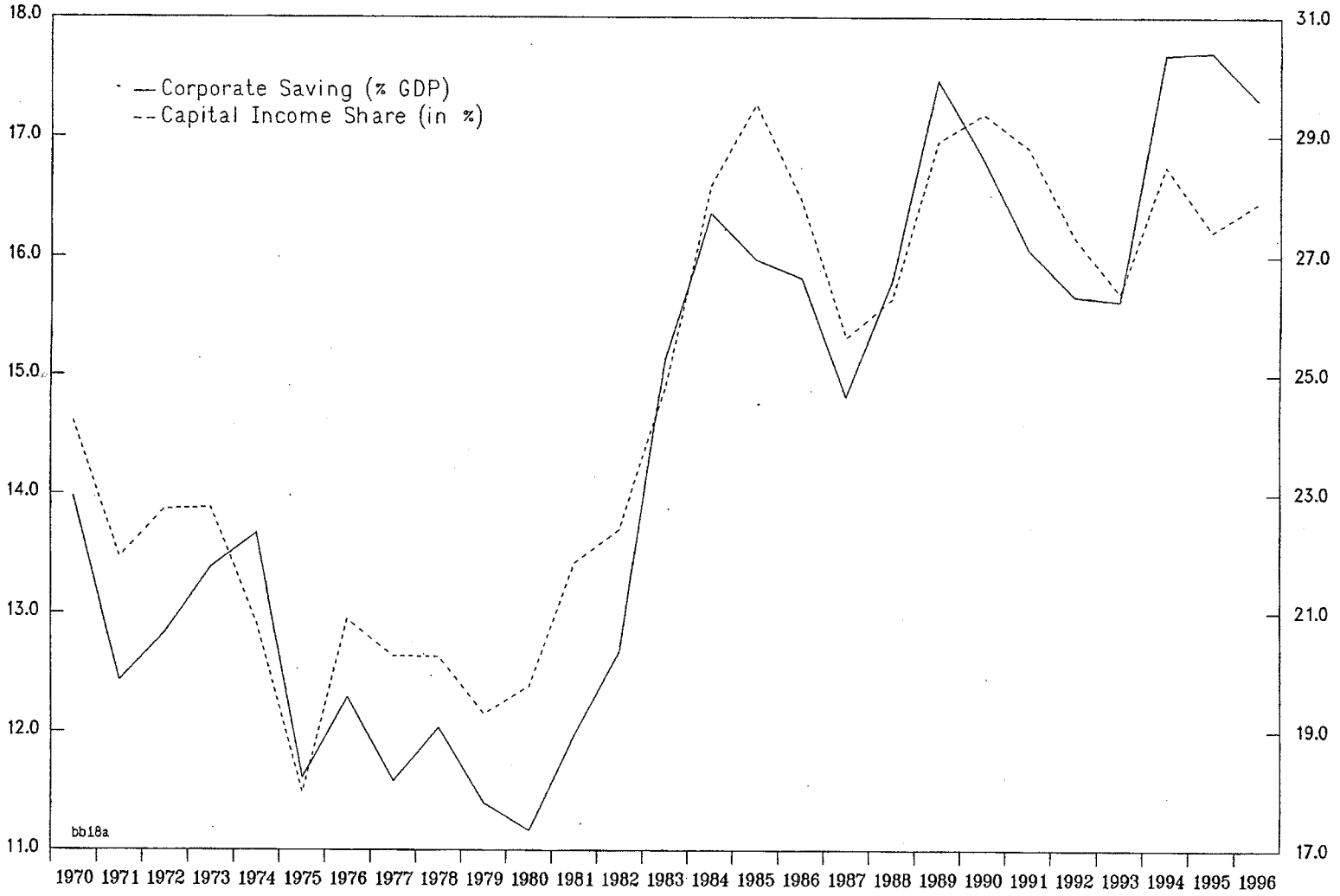
Sources: IMF, World Economic Outlook; and OECD, Economic Outlook.

FIGURE 8
NETHERLANDS
Export Market Growth and GDP Growth



Source: OECD, Analytical Database.

FIGURE 9
NETHERLANDS
Capital Income Share and Corporate Saving



Source: IMF, World Economic Outlook.

Table 4. Netherlands: General Government Finances, 1982–96

(In percent of GDP, on cash basis)

	1982	1989	1993	1996	1996–1982
Revenues	56.6	54.6	55.2	51.2	-5.4
Tax revenue	46.7	45.6	46.8	44.0	-2.7
Non-tax revenue	9.9	9.0	8.4	7.2	-2.7
Expenditure	66.2	59.4	58.3	52.9	-13.3
Primary expenditure	61.4	53.5	52.1	47.4	-14.0
Consumption	18.2	16.0	16.0	15.1	-3.1
Wages	12.6	10.0	10.0	9.3	-3.3
Other	5.6	6.0	6.0	5.8	0.2
Investment	3.1	2.7	2.8	2.7	-0.4
Income transfers	31.2	29.1	29.3	26.8	-4.4
Domestic	29.4	27.0	27.0	24.6	-4.8
Abroad	1.8	2.1	2.3	2.2	0.4
Other	8.9	5.8	4.1	2.9	-6.0
Subsidies	2.0	2.3	2.1	1.4	-0.6
Capital transfers	2.6	1.9	1.2	1.0	-1.6
Lending	4.3	1.6	0.8	0.5	-3.8
Interest	4.8	5.9	6.2	5.5	0.7
Cash deficit	9.5	4.9	3.1	1.8	-7.7
EMU-deficit	6.6	4.8	3.2	2.3	-4.3

Source: Data provided by the authorities.

Table 5. Netherlands: General Government Expenditure Reduction and Increase in Saving Surplus

(In percent of GDP)

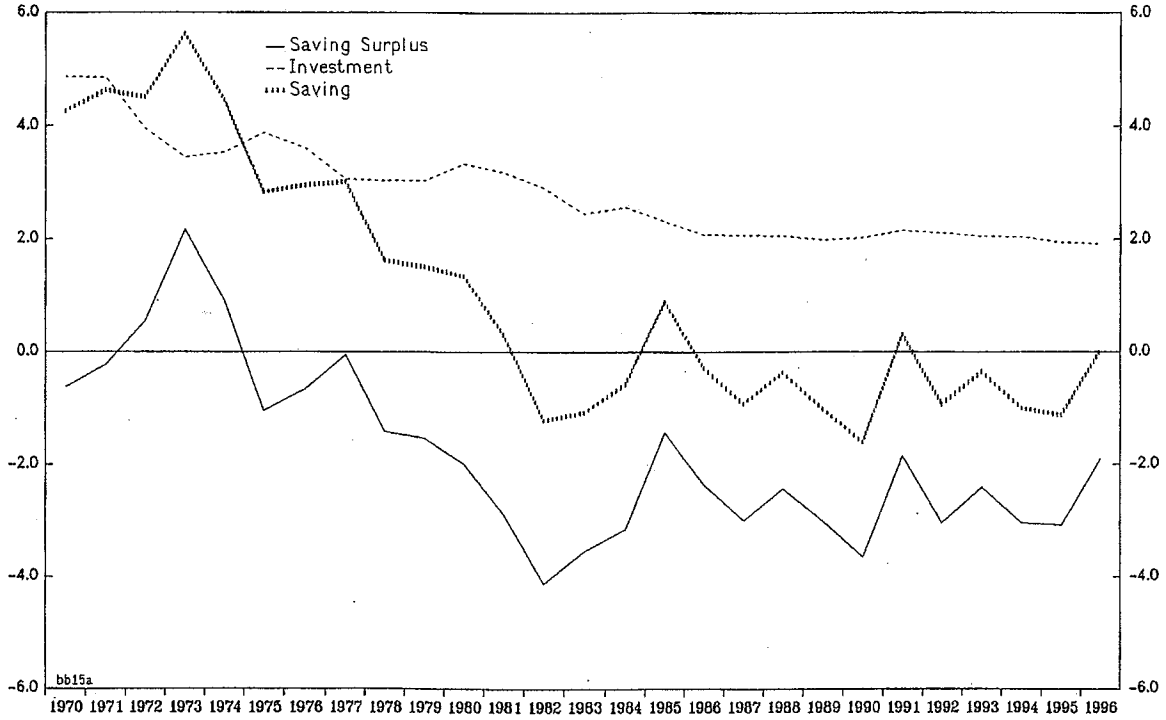
Decrease in expenditure	13.3
-Decrease in capital transfers and lending	5.4
=Decrease in expediture, excluding capital transfers and lending	7.9
-Decrease in revenue	5.4
Tax revenue	2.7
Non-tax revenue	2.7
-Statistical discrepancies	0.3
=Increase in saving surplus	2.2

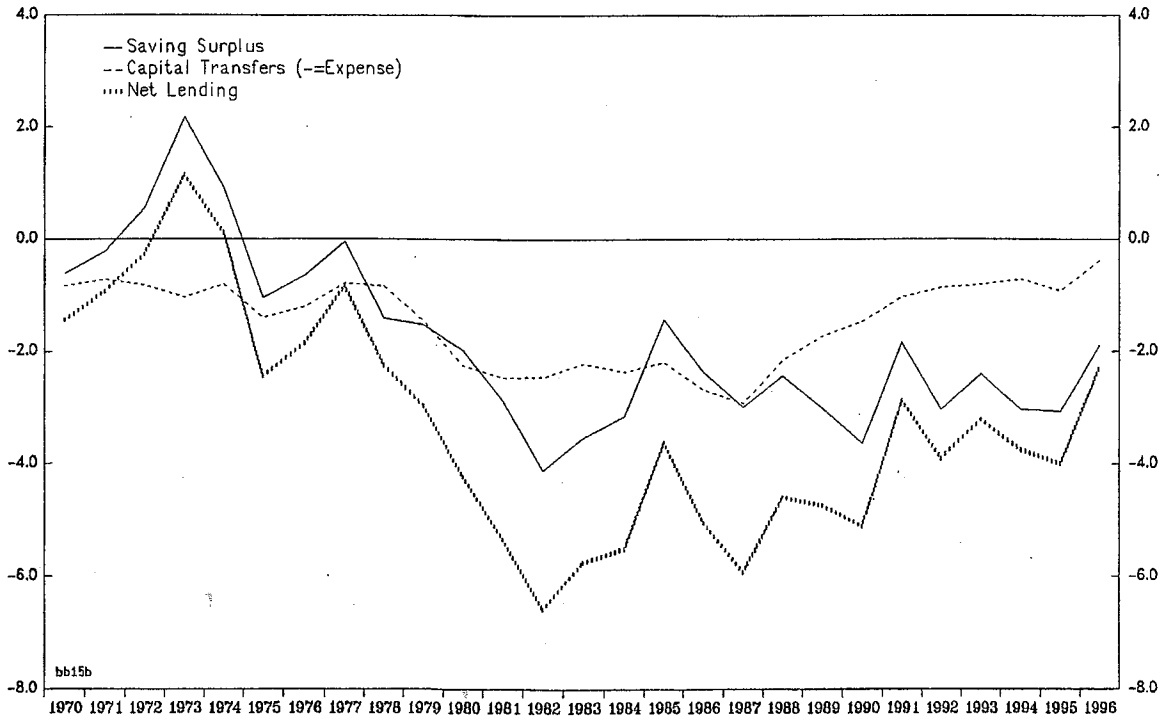
Sources: Data provided by the authorities; and Fund staff estimates.

FIGURE 10
NETHERLANDS

Government Saving Surplus and Net Lending

(In percent of GDP)





Source: IMF, World Economic Outlook.

- About 30 percent of the expenditure decline reflected a cut in **on-lending** for social purposes, especially to housing corporations. The cut in on-lending did slow the growth of *gross* debt—but it changed neither the EMU-deficit, nor the saving surplus.

- Another 10 percent of the expenditure cuts reflected a cut in **capital transfers**, especially to enterprises. A cut in capital transfers does reduce the EMU-deficit, but it does not change the saving surplus.

- A large part of the other expenditure cuts were offset by declines in revenues. The share of **tax revenue** in GDP declined by almost 3 percentage points, as taxes were cut to stimulate wage moderation, and to improve the functioning of labor markets. **Nontax revenues** declined as well, especially after the collapse of oil prices in 1986, as a result of which natural gas revenues dropped from 4¾ percent of GDP in 1986, to 1¾ percent in 1988.

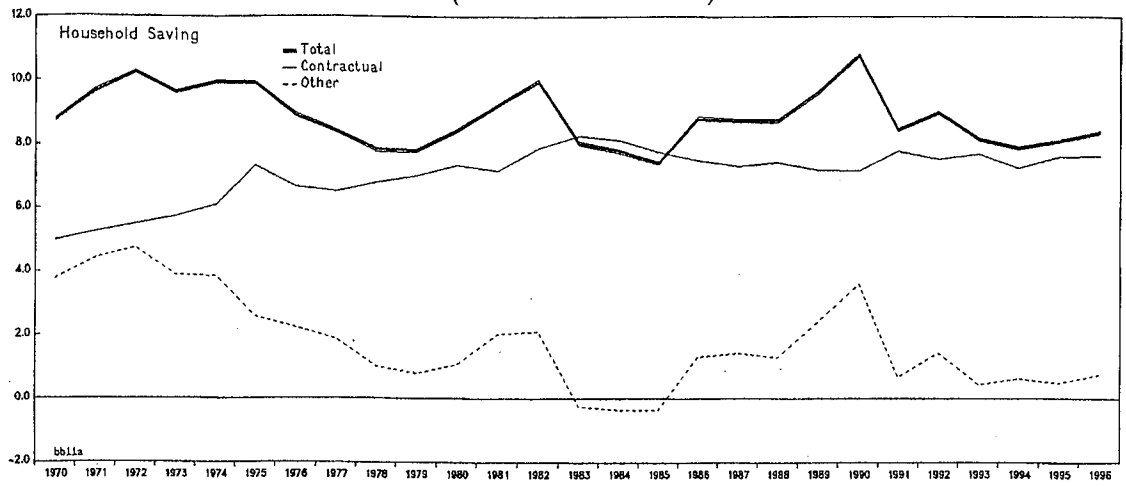
Household saving surplus

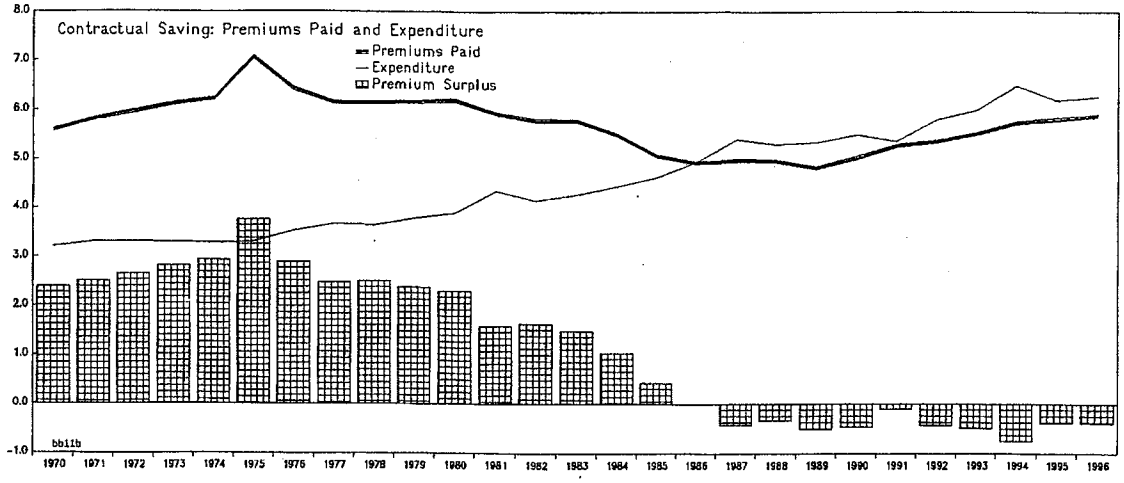
17. The household saving surplus has tended to vary over the economic cycle, but the pattern during recessions has evolved in an interesting manner. During the economic crisis of the early 1980s, the saving surplus behaved procyclically: as household confidence declined, when the economy went into recession, the saving surplus increased. During the economic slowdown in the early 1990s, by contrast, saving behaved counter-cyclically: with consumer confidence relatively strong, households reduced their saving surplus to smooth consumption when the economy slowed down.

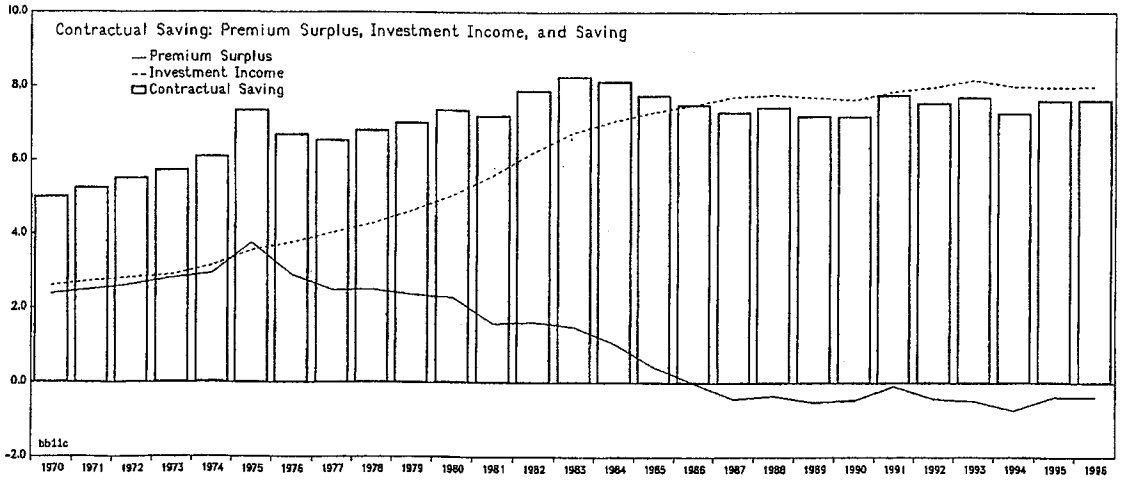
18. The household saving surplus has shown, however, no clear structural trend over the past three decades. Both saving and investment are at about the same level relative to GDP as they were in the early 1970s. However, while total household saving has not changed much, its composition has changed substantially. The share of saving that is channeled through pension funds and life insurance companies ("contractual" saving) has increased, while the part that is channeled through banks or other institutions ("free"saving) has gone down.

19. The increase in contractual saving mainly reflects a surge in investment income of pension funds, associated with a maturing of fully funded pension plans (Figure 11). Most pension plans were founded in the fifties and sixties, and as the amount of built-up capital increased, so did investment income. There has probably also been some substitution of contractual for free saving, especially life insurances and annuities. Tax treatment of contractual saving is far more favorable, and while the tax regime has not been changed much in favor of

FIGURE 11
NETHERLANDS
Components of Household Saving
(In Percent of GDP)







Source: CBS, National Accounts.

contractual saving, the awareness of consumers of the tax advantages has increased, in part due to aggressive marketing by insurance companies.[5]

20. It is likely that saving in the Netherlands is stimulated by the fact that the pension system is funded. In other words, if pensions had been wholly financed on a pay-as-you-go basis, personal saving would likely to have been somewhat lower (see Box 3). The magnitude of this effect is hard to gauge, but if the pension system had not been funded, saving might plausibly have been some 1 to 2 percentage points of GDP lower.

D. The Link Between Both Approaches and the Current Account in the Future

21. The analyses in the previous two sections are , of course, complementary. From a **balance of payments perspective**, the main factor behind the *structural* increase in the current account emerges as the exchange rate depreciation (while *cyclical* increases in the current account appear to have been triggered by weak domestic demand). From a **saving-investment perspective**, on the other hand, the dominant factor behind the structural increase appears to have been the sharp increase in the corporate saving surplus. A key element underlying the increase in both the saving-investment balance and the export-import balance was the decline in the labor income share. By shifting income to a sector with a high marginal saving rate, the decline in the labor income share strengthened the saving-investment balance; and by reducing domestic demand and hence imports, it improved the export-import balance.

22. Of course the strong *improvement* in the current account in the early 1980s was to a large extent a *reversal of developments* in the 1960s and 1970s, when competitiveness had deteriorated strongly. As noted earlier, while a real exchange depreciation of 25 percent between 1977 and 1984 is very large when seen in isolation, it essentially brought competitiveness back to the level of the mid-1960s.

23. Seen in this much longer time horizon, the high *level* of the current account seems to reflect *several underlying factors*: a relatively young population in the face of a demographic transition that will be more severe than in many other countries; a pension system that is funded; a relatively high per capita income; and the presence of a number of very large multinationals that invest a substantial part of their earnings abroad.

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[5]Tax treatment of contractual saving is typically more favorable than tax treatment of other forms of saving. While pension benefits are taxed, pension premiums are deductible, and investment income of pension fund is untaxed. Since pensions are taxed at a lower rate than at which premiums are deducted, this entails a substantial fiscal subsidy. For savings channeled through banks, no such subsidy exists: premiums are not deductible, and interest income is taxed. Tax treatment of annuities and life insurances can be even more favorable than those of pensions, and fiscal constructions abound that combine borrowing of funds with the purchase of life insurance.

Box 3. Does the Funding of the Pension System Increase Household Saving?

Does the fact that a large part of the Dutch pension system is funded augment saving? In other words, would saving have been lower if there had been a pay-as-you-go rather than a partially funded system?

Mechanically, one might expect that *for given pension benefits*, saving by workers themselves will not depend on whether pensions are financed through a fully funded system or a pay-as-you-go system. Thus, the fact that a pension fund sets aside money, while benefits remain unchanged, will not alter the amount set aside by workers themselves—and every guilder saved by pension funds will add to saving.

However, there are several reasons why a guilder set aside by pension funds will in practice not increase saving by the full amount. First, in a funded pension system it may be more credible that promised pensions will indeed be paid. Thus, precautionary saving may be lower under a funded pension system. Second, in a funded system, pension premiums of *future* workers will be lower, and their lifetime income will be higher. To the extent that current workers behave as if they have an infinite planning horizon, and take into account utility of future generations as well, they will lower their bequests—and hence their savings—under a funded pension system.

The discussion is very similar to the Ricardian debt equivalence debate that was reignited by Barro (1974). According to Barro, it does not matter whether government expenditure is financed through taxes or through bonds, as any increase in government debt will be offset by higher bequests to future generations. In other words, changes in government saving are fully offset by changes in private saving; and total saving does not depend on government saving. In the same vein, it could be argued that it does not matter whether pensions are funded or paid on a pay-as-you-go basis: any increase in saving through pension funds will be offset by a reduction in other forms of saving.

While full debt equivalence is generally not found to hold, empirically there seems to be some degree of equivalence, with, as a general proposition, each additional unit in government saving being offset by a decline in private saving of some 50 percent. The same argument could be applied to pensions.

Overall, it would thus seem plausible that saving will be higher under a funded pension system. However, as other forms of personal saving are likely to be somewhat lower under a funded pension system, the increase is not one-for-one. As an illustration, if every guilder saved by a pension fund increased saving by 30 cents, this would imply that, with saving through pension schemes amounting to some 5 percent of GDP (the remainder of contractual saving relating to life insurances), the effect on total saving would be about 1½ percent of GDP, while if it increased saving by 50 cents, the effect would be 2½ percent of GDP.

24. Against this background, the question can be considered what these two approaches to the current account suggest for developments in the near future:

- Looking at the saving-investment balance, one would not expect to see much current account improvement. Corporate profits will be boosted by the lagged effect of exchange rate depreciation; but with the economy at potential, this to a considerable extent will be offset by an increase in private investment. Fiscal consolidation can also be expected to continue, but with a deficit that is already small, the increase in the saving-investment balance is unlikely to be large.

- From a balance of payments perspective, one would expect some further increase in the surplus, as the present level is somewhat below the *underlying current account level.* Both the lagged impact of the real effective exchange rate depreciation since 1995 and the closing of the output gaps in trading partners would point to an increase in the current account balance. On the other hand, with the domestic economy close to potential currently, it is not clear whether enterprises will develop capacity over the near to medium term to meet such additional demand fully, while pressures on resources could trigger wage and price effects that would result in a deterioration in competitiveness, thus reducing the underlying current account balance. The actual improvement in the current account could thus be less than indicated by a projection based on the present real exchange rate and the closing of foreign output gaps.

25. The above analysis is indeed broadly borne out by a multilateral assessment of trends in current account balances.[6] Starting from a 1997 current account surplus of slightly less than 6 percent, this suggests that the underlying current account balance is some 8–9 percent of GDP—somewhat higher than a long-run trend in the saving investment balance of some 6–7 percent of GDP. This suggests that the economy enjoys a high degree of competitiveness, partly perhaps in reflection of a cyclical weakness of the core ERM currencies against the U.S. dollar. Over time, the tensions implied by these estimates could well be resolved by a modest degree of real appreciation (through price and wage effects, or a reversal of earlier nominal depreciation of the currencies in the core ERM/future euro). At the same time, however, it is likely that there will be somewhat higher rates of investment in the Netherlands: to the extent this higher investment responds to structural reforms, it would tend to dampen any increase in the medium-term saving-investment balance.

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[6]For a fuller description of the methodology used here, see SM/97/252.

HAS THERE BEEN A BREAK IN ENTERPRISE BEHAVIOR?

26. This appendix tries to establish whether there has been a break in enterprise behavior in the early 1980s. It will first look at corporate investment and corporate saving separately, and then at the corporate saving balance.

Corporate Investment

27. Several variables can be expected to affect the ratio of corporate investment to GDP: demand growth, profitability, and real interest rates. However, while several indicators for profitability, real interest rates, and demand growth were examined, only demand growth variables were found to have a statistically significant impact. Table 6 shows the regression results for the final specification. In this specification, the investment rate depends upon the growth rate of real GDP: the faster the growth of real GDP, the higher the investment rate.

28. The regression results in Table 6 do not indicate that there has been a break in investment behavior. Indeed, the coefficients in the equation estimated for the 1970–80 period are statistically indistinguishable of those for the 1980–96 or 1983–96 period.

29. While theoretically the link between high growth and high investment could go in both directions, it is likely that the causality has mainly run from high growth to high investment. If the investment equation is re-estimated using growth of relevant world markets rather than growth of GDP, the fit of the equation remains virtually unchanged. Indeed, as indicated in Table 6, a strong correlation between growth of world markets and GDP growth can be found.

Corporate Saving

30. With little fluctuation in corporate dividends, corporate saving can be expected to mainly depend on corporate profits.[7] The capital income share, which is defined as that part of value added that does not go to labor, serves as a proxy, although not a perfect one, of corporate profits. Thus, we would expect to find a strong relation between the capital income share and corporate savings.

31. As indicated in Table 7, such a relationship can indeed be found. Fluctuations in the capital income share explain a very large part of fluctuations in corporate saving. Further econometric tests did not reveal any break in corporate saving behavior in the 1980s.

---

[7]For empirical evidence that dividends of Dutch companies are sticky, see, for instance, Bakker (1993) and de Haan (1994).

Table 6. Netherlands: Regression Results: Corporate Investment

Dependent Variable	Period	Independent Variables			R2	DW
		Constant	grgdp	grworld		
iy	1970–1996	10.3	1.03		0.82	1.29
		(35.3)	(10.70)			
iy	1970–1980	10.0	1.11		0.89	1.49
		(20.3)	(8.39)			
iy	1980–1996	10.4	1.01		0.74	1.24
		(27.0)	(6.54)			
iy	1983–1996	10.6	0.97		0.57	1.10
		(16.1)	(3.99)			
iy	1977–1996	10.8		0.47	0.61	1.28
		(26.6)		(5.38)		
iy	1977–1996	10.5	0.96		0.70	1.20
		(28.3)	(6.59)			
grgdp	1977–1996	0.5		0.44	0.70	1.49
		(1.5)		(6.53)		

Source: Fund staff calculations.

Note:
t-values are in parentheses.

Variables are:

iy	Corporate investment as percent of GDP
sy	Corporate saving as percent of GDP
grgdp	Growth of real gdp (average of current and previous year)
grworld	Growth of export markets (average of current and previous year)

Table 7. Netherlands: Regression Results: Corporate Saving

Dependent Variable	Period	Independent Variables			R2	DW
		Constant	csh	ar(1)		
sy	1970–1996	0.45	0.57		0.89	0.86
		(0.46)	(14.45)			
sy	1970–1996	1.43	0.53	0.60	0.92	1.44
		(0.88)	(8.43)	(3.36)		

Source: Fund staff calculations.

Note:
t-values are in parentheses.

Variables are:
sy Corporate saving as percent of GDP
csh Share of capital income in value added

Corporate Saving Surplus

32. With both corporate saving and corporate investment displaying stable behavior in the past few decades, we would expect to find a stable relationship for the corporate saving balance as well. In such a relationship, we would expect the following variables to be statistically significant: the growth rate of real GDP and the share of capital income in value added. As indicated in Table 8, such a relationship can indeed be found.

Conclusion

33. There is no indication that there has been a break in corporate behavior in the early 1980s. Indeed, for investment, saving, as well the saving surplus a specification could be found that showed a stable behavior throughout the period.

Table 8. Netherlands: Regression Results: Corporate Saving Surplus

Dependent Variable	Period	Independent Variables				R2	DW
		Constant	csh	grgdp	ar(1)		
bal	1970-1996	-9.20	0.53	-0.79	0.65	0.90	1.49
		(3.98)	(5.56)	(4.10)	(4.0)		
bal	1970-1996	-9.50	0.56	-1.00		0.85	0.72
		(6.72)	(9.80)	(7.39)			

Source: Fund staff calculations.

Note:
t-values are in parentheses.

Variables are:

bal	Corporate saving surplus
grgdp	Growth of real gdp (average of current and previous year)
csh	Share of capital income in value added

AN EMPIRICAL ANALYSIS OF THE EFFECT OF EXCHANGE RATE CHANGES ON DUTCH EXPORTS AND IMPORTS[8]

34. This section will investigate the extent to which exchange rate changes affect Dutch exports and imports. To this end, Marshallian demand functions are specified for exports and imports, under the assumption of imperfect substitution between domestic and foreign goods.

Exports

35. Exports are likely to depend on both economic activity in export markets as well as relative export prices:

$$X_d(Y_w, P_x, P_x^*) = Y_w^{\mu}(P_x/P_x^*)^{\gamma} \qquad (1)$$

where X_d is the volume of exports demanded, Y_w is the economic activity in export markets and P_x/P_x^* is the relative price of exports in domestic currency. Taking logarithms and adding a constant term yields:

$$x_d = \alpha + \mu y_w + \gamma(p_x - p_x^*) \qquad (2)$$

The profit function for exporters is:

$$\Pi(p_x, x_d, ulc) = (p_x - ulc)x_d\,(y_w, p_x, p_x^*) \qquad (3)$$

where *ulc* denotes unit labor costs. Under the assumption that unit labor costs do not depend on the level of production, and that $p_x^* = ulc^*$, maximization gives the following pricing rule:

$$p_x - p_x^* = \frac{1}{2\gamma} + \frac{1}{2}(ulc - ulc^*) \qquad (4)$$

---

[8]Prepared by Meral Karasulu.

This pricing rule can be substituted into the export demand function in equation (2) to obtain an alternative specification :

$$x = \alpha^* + \mu y_w + \omega(ulc - ulc*) \text{ with } \omega = \frac{\gamma}{2}, \quad \alpha^* = \alpha + \frac{1}{2} \qquad (5)$$

These specifications for exports were estimated for total exports, exports of goods, and manufacturing exports (Table 9). For Y_w, export market volume was used, which is given by the trade weighted average of total imports, in volume terms, of all trading partners to which the Netherlands exports.

36. Using *relative export prices*, estimated price elasticities of exports range between 0.22 percent for total exports and some 0.57 percent for manufacturing exports.[9] [10] Activity elasticities are 1 percent for total exports and 1.25 percent for manufacturing exports.[11] The lower elasticities for total exports might be due to the high share of agricultural products in total exports, which are usually characterized by low price-and income elasticities. The unitary elasticity obtained for total exports suggests that the market share of exports should be relatively stable over time, a trend confirmed by the data for total exports.

37. When relative export prices are replaced by *relative unit labor costs*, the price elasticity estimates reduce by almost half. This suggests that, in accordance with equation (4),

---

[9]Goldstein and Khan (1985) report a selection of long-run price elasticities between 0.59 and 2.72 for total Dutch exports.

[10]Statistical properties of the data enable the estimation of a stable relationship only for total exports and exports of goods when logarithmic levels of the data were used. The equation for manufacturing exports appears to represent a spurious relationship based on Augmented-Dickey Fuller test results. However, due to power problems of these tests, caution should be exercised in interpreting these results.

[11]Deppler-Ripley, (1978) report a long-run activity elasticity of 0.65 for manufacturing goods. Goldstein and Khan (*ibid.*) recount estimates ranging from 0.85 to 1.91 for total Dutch exports.

Table 9. Netherlands: Export Volumes: Annual Data, 1970–96

	XGSV		XGV		XMV	
Constant	1.45 (0.35)	1.77 (0.54)	1.36 (0.32)	1.96 (0.48)	0.54 (0.48)	1.57 (0.71)
XGVMKT	1.00 (0.02)***	1.02 (0.02)***	1.01 (0.02)***	1.04 (0.01)***	1.20 (0.03)***	1.25 (0.02)***
ULCMDRA	-0.12 (0.05)**		-0.17 (0.04)***		-0.29 (0.07)***	
PXMDRA		-0.22 (0.10)**		-0.33 (0.09)***		-0.57 (0.13)***
R-bar 2	0.99	0.99	0.99	0.99	0.99	0.99
D-W	1.01	1.04	1.32	1.41	0.92	1.12
Q(lag)	8.84(5)	8.68(5)	3.27(5)	4.61(5)	9.28(5)	6.55(5)
Significance of Q statistic	0.11	0.12	0.65	0.46	0.09	0.25
ADF test of residuals	-3.70*	-3.46*	-3.80**	-3.78**	-2.99	-3.16

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

XGSV: Volume of Exports, Goods and Services
XGV : Volume of Exports, Goods
XMV: Volume of Exports, Manufacturing
XGVMKT : Market Growth Index: Export, Manufacturing Goods
PXMDRA : Relative export prices in manufacturing, calculated using export weights.
ULCMDRA : Relative unit labor costs in manufacturing, calculated using export weights.
All variables are in logarithms.
Standard errors are in parentheses.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

almost half of a change in relative labor costs is absorbed by profit margins.[12] The estimations would suggest that a one percent decline in relative labor costs leads to an increase in total export volumes by 0.11 percent. A similar calculation for manufacturing exports implies that a 1 percent decline in unit labor costs leads to a 0.29 percent increase in export volumes.

Imports

38. For import demand the following functional form was adopted:

$$M_d(Y, P_d, P_m) = Y^{\nu}(P_d / P_m)^{\rho} \qquad (6)$$

where M_d is volume of imports demanded, Y is the a scale variable denoting domestic activity, P_m is the price of imports and P_d is the domestic price of import-competing goods. In the empirical analysis alternative measures of relative prices were used, viz. the ratio of domestic demand deflator to import prices; the relative consumer price index, relative unit labor costs in manufacturing; and the real effective exchange rate based on consumer prices.

39. It was not possible to find an *empirically* meaningful relation between exchange rates and imports (Tables 10, 11, 12 and 13).[13] This is likely the result of multicollinearity of the exogenous variables in the equation, which are both influenced by labor costs. A decline in labor costs results in a real exchange rate depreciation; it also results in a decline in the labor income share, and this shift in income from labor to capital reduces spending and hence imports. However, real effective exchange rate depreciation are likely to have a quite important impact on imports, both through their price effect (making imports more expensive) as through their income effect (shifting income from labor to capital).

Trade balance

40. A regression of exchange rate on the **trade balance** would suggest that a 1 percent increase in relative unit labor costs would reduce the trade balance by 0.33 percent for total goods and services, and by 0.31 percent for total goods (Table 14). With strong multicollinearity between the exchange rate and domestic demand, it was not possible to include demand variables; thus, this result should be interpreted with care.

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[12]The estimated response of relative export prices to changes in cost competitiveness (Box 2) is slightly lower than ½, but the restriction of a 0.5 coefficient can not be rejected.

[13]Regression results obtained from first differences of the data confirm that none of the relative price terms have economically meaningful coefficient estimates.

Table 10. Netherlands: Import Volumes: Annual Data, 1970–96

	MGSV		MGV		MMV	
Constant	-4.01 (0.53)***	-3.03 (0.96)***		-5.89 (0.39)***	-4.81 (0.73)***	-7.79 (0.61)***
FDDV	1.77 (0.03)***	1.07 (0.29)***	1.90 (0.04)***	1.85 (0.06)***	2.15 (0.04)***	2.10 (0.10)***
CPIDR	-0.30 (0.10)***		-0.29 (0.12)**		-0.70 (0.14)***	
PDD		-0.10 (0.07)		-0.09 (0.08)		-0.06 (0.12)
R-bar 2	0.98	0.98	0.98	0.98	0.98	0.97
D-W	1.08	0.99	0.97	0.89	0.70	0.48
Q(lag)	7.33(4)	13.09(4)	12.45(4)	15.58	23.69(6)	22.76(6)
Significance of Q statistic	0.29	0.04	0.05	0.01	0.00	0.00
ADF test of residuals	-3.02	-2.77	-2.88	-2.57	-2.00	-2.10

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

MGSV: Volume of Imports, Goods and Services
MGV : Volume of Imports, Goods
MMV: Volume of Imports, Manufacturing
FDDV: Volume of Domestic Demand
CPIDR: Relative Consumer Price Index
PDD: Ratio of Imports Prices (Goods and Services) to domestic demand deflator
All variables are in logarithms.
Standard errors are in parentheses.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

Table 11. Netherlands: Import Volumes: Annual Data, 1970–96

	MGSV		MGV		MMV	
Constant	-5.02 (0.61)***	-4.50 (0.65)***	-5.47 (0.82)***	-5.32 (0.71)***	-5.58 (1.40)***	-5.17 (0.94)***
FDDV	1.86 (0.03)***	1.70 (0.06)***	1.99 (0.50)***	1.84 (0.60)***	2.25 (0.08)***	1.93 (0.08)***
EREER	-0.22 (0.11)*		-0.28 (0.15)*		-0.68 (0.25)***	
ULCMDRA		-0.10 (0.07)		-0.10 (0.07)		-0.33 (0.10)***
R-bar 2	0.99	0.98	0.98	0.98	0.97	0.98
D-W	1.22	0.87	1.07	0.84	0.72	0.50
Q(lag)	12.96(6)	11.44(6)	11.35(6)	13.38(6)	12.34(4)	21.09(6)
Significance of Q statistic	0.01	0.07	0.02	0.03	0.01	0.00
ADF test of residuals	-4.36***	-2.49	-3.86**	-2.44	-1.65	-1.74

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

MGSV: Volume of Imports, Goods and Services
MGV : Volume of Imports, Goods
MMV: Volume of Imports, Manufacturing
FDDV: Volume of Domestic Demand
EREER: Real effective exchange rate based on consumer prices.
ULCMDRA: Relative unit labor costs in manufacturing, calculated using export weights.
All variables are in logarithms.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

Table 12. Netherlands: Import Volumes: Differenced Data, 1971–96

	DMGSV		DMGV		DMMV	
Constant	0.003 (0.009)	0.005 (0.009)	0.007 (0.009)	0.008 (0.009)	0.004 (0.01)	0.006 (0.01)
DFDDV	1.66 (0.36)***	1.58 (0.36)***	1.62 (0.38)***	1.55 (0.38)***	1.98 (0.39)***	1.89 (0.40)***
DCPIDR	-0.17 (0.20)		-0.11 (0.21)		-0.45 (0.22)**	
DPDD		0.03 (0.10)		0.006 (0.10)		0.18 (0.11)
R-bar 2	0.44	0.43	0.41	0.40	0.47	0.44
D-W	2.27	2.23	2.12	2.12	1.74	1.65
Q(lag)	6.56(6)	6.30(6)	11.11(6)	11.14(6)	6.16(6)	4.95(6)
Significance of Q statistic	0.36	0.38	0.08	0.08	0.40	0.54
ADF test of residuals	-5.54***	-5.41***	-5.19***	-5.18***	-4.30***	-4.13***

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

D represents the first difference of the variable.
Standard errors are in parentheses.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

Table 13. Netherlands: Import Volumes: Differenced Data, 1971–96

	DMGSV		DMGV		DMMV	
Constant	0.003 (0.009)	0.01 (0.007)***	0.005 (0.008)	0.007 (0.01)	0.005 (0.01)	0.002 (0.01)
DFDDV	1.72 (0.28)***	1.61 (0.34)***	1.80 (0.35)***	1.58 (0.36)***	2.20 (0.48)***	1.86 (0.37)***
DEREER	-0.14 (0.15)		-0.09 (0.19)		-0.38 (0.26)	
DULCMDRA		-0.11 (0.13)		0.05 (0.14)		-0.29 (0.14)**
R-bar 2	0.69	0.44	0.62	0.40	0.53	0.47
D-W	1.83	2.25	1.66	2.12	1.51	1.69
Q(lag)	6.62(6)	7.11(6)	6.76(4)	11.48(6)	3.45(4)	7.00(6)
Significance of Q statistic	0.15	0.31	0.14	0.07	0.48	0.32
ADF test of residuals	-5.03***	-5.48***	-4.86***	-5.16***	-2.98	-4.22***

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

D represents the first difference of the variable.
Standard errors are in parentheses.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

Table 14. Netherlands: Trade Balance: Annual Data, 1970–96

	TBGSV	TBGV	TBMV
Constant	1.66 (0.30)***	1.28 (0.29)***	-1.90 (0.54)***
ULCMDRA	-0.33 (0.06)***	-0.31 (0.06)***	-0.48 (0.11)***
R-bar 2	0.50	0.48	0.39
D-W	0.42	0.51	0.46
ADF test of residuals	-3.83**	-4.47***	-5.48***

Sources: OECD, Analytical Database and Economic Outlook; and Fund staff calculations.

Note: Estimation by Least Squares.

TBGSV: Volume of Trade Balance, Goods and Services
TBGV : Volume of Trade Balance, Goods
TBMV: Volume of Trade Balance, Manufacturing
ULCMDRA: Relative unit labor costs in manufacturing, calculated using export weights.
All variables are in logarithms.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

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II. RECENT DEVELOPMENTS IN THE DUTCH FINANCIAL SECTOR[14]

41. Two important financial sector trends across advanced economies, concentration and internationalization, are clearly apparent in the Netherlands. The deregulation of the financial sector during the 1970s and the 1980s was brought to a conclusion in 1990, when the prohibition on mergers between banks and insurance companies was lifted. Competition in the financial sector was enhanced by the liberalization of international financial transactions, completed in 1986.[15] The new regulatory environment has triggered a process of change that is still underway, and that is enhanced further by the prospect of more intense cross-border competition with the upcoming move to EMU. On the domestic market, banks and insurance companies have developed into large financial conglomerates, and financial institutions are diversifying their investment portfolios as well as the services they offer. Exploiting the creation of a solid home base, the main financial groups are vigorously expanding their activities abroad, with varying degrees of selectivity.

42. Rapid changes in financial markets have continued to pose a variety of challenges for supervisors, including the central bank (The Netherlands Bank—DNB). With the increasing complexity of banking operations, including derivatives trade, emphasis is shifting to control system supervision, while the development of financial conglomerates requires supervisors to take into account group-wide considerations. Financial sector diversification can be a key element in reducing risks, but entering new markets and setting up new activities also requires careful risk management. In this setting, the importance of cross-border supervision and of the adequate monitoring of international exposure has again been highlighted by the Asian crisis, to which some Dutch banks have significant exposure. Further questions about financial sector soundness have been raised by the rapid expansion of mortgage credit in recent years. In addition to upgraded prudential supervision, financial sector consolidation also calls for the safeguarding competition. And, finally, the aggressive marketing of new investment products in the retail market has raised concerns about consumer protection.

A. Basic Features of the Financial Sector

43. An important role of institutional investors, a well-developed banking and equity market, and limited demand for external funds by firms are among the main features of the Dutch capital market.[16] Table 15 illustrates these and other characteristics.

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[14]Prepared by Jan Kees Martijn.

[15] See Hilbers (1997).

[16]See Van Ewijk and Scholtens (1996).

Table 15. Supply and Demand in the Capital Market, 1990 and 1997 1/

(In billions of guilders)

	By Provider			By User	
	1990	1997		1990	1997
Funds	29.6	48.7	Government 2/	24.2	-0.5
Investment funds 3/	...	6.3	Households	11.3	60.4
Households and firms	6.2	8.5	Firms	13.6	14.6
Mortgage banks	1.4	3.5	Investment funds	...	12.4
Banks	22.1	106.8	Other financial institutions	2.1	11.3
Foreign	3.9	25.7	Banks	1.8	23.0
Total	63.2	199.6	Foreign	7.4	80
Of which:			Total	63.2	199.6
Shares	7.7	41.9			
Bonds	26.5	103.3			
Loans	15.5	-5.5			
Mortgages	10.7	57.9			

Source: De Nederlandsche Bank (1998).

1/ On the capital market, financial instruments with a maturity of two years or more are traded. Reported flows exclude portfolio shifts by a sector within a category of assets or liabilities.

2/ The negative net demand in 1997 largely stems from a decrease in government deposits at the central bank.

3/ Also comprising investment companies. Included in 1990 under net supply by households and firms, and net demand by other financial institutions.

44. A high share of savings is channeled through institutional investors. These funds mainly include pension funds and insurance companies. The important role of pension funds stems from the funded pension system in which about 1,000 (company or branch-wide) funds guarantee defined benefits to retirees. With compulsory participation, these funds account for most of personal savings. The position of institutional investors is also reflected in a relatively low market share of banks in terms of financial sector assets (Table 16).

45. Investments are mainly financed internally out of retained profits, explaining the limited demand on the capital market by firms. During 1991–93, internal financing accounted for 61 percent on average of total financing of nonfinancial firms.[17]

[17]Boot, Ligterink, and Schmeits (1997), p. 9.

46. With a 1995 stock market capitalization close to GDP, and a ratio of bank assets to GDP in line with neighboring countries, both the bank market and the stock market appear well-developed in the Netherlands (Table 16). As in most countries in continental Europe, the market for bonds issued by nonfinancial enterprises is not highly developed.[18]

47. Credit to firms and households takes the form of loans rather than securities, with banks providing about three-quarters of the total, followed by pension funds and mortgage banks (Table 16). The significant role of bonds, evident from Table 1, mainly concerns foreign bonds and bonds issued by the government and banks, and held by institutional investors and banks. This pattern puts the Netherlands in between Germany—with a larger role of banks—on the one hand and the United Kingdom on the other.

Table 16. Indicators of Financial Sector Structure, 1993 1/

(In percent)

	Banks' Market Share 2/	Bank Credit Share 3/	Loan Share 3/	Fixed Rate Share 3/	Stock Market Capitalization 4/	Bank Assets 4/
Netherlands	52 (1994)	73	97	75	90 (1995)	114 (1995)
Belgium	...	90	93	56	...	...
Germany	77 (1995)	89	94	65	24 (1995)	119 (1995)
U.K.	56 (1995)	56	81	27	127 (1995)	117 (1995)
France	73 (1995)	74	85	57	34 (1995)	99 (1995)

Sources: Borio (1995); Huizinga (1998); and McCauley and White (1997).

1/ Credit in this table refers to credit to firms and households, from domestic financial institutions plus any securities outstanding.

2/ Assets of banks (not including insurance companies within the same group) as a percentage of assets of all financial institutions.

3/ In percent of total credit.

4/ In percent of GDP.

B. Developments in Recent Years

48. Since the late 1980s, there have been several important developments in the capital market in the Netherlands. Of these changes, the development of large financial conglomerates is discussed in some detail in the next section.

[18]Boot, Ligterink, and Schmeits (1997).

49. Reflecting the improved fiscal balance, the general government's demand for funds has declined. In the first half of the 1980s, the government accounted for almost three-quarters of total net demand, compared to 15 percent on average between 1988 and 1997, with a sharp decline after 1992.

50. Both institutional investors and households are diversifying their financial assets. After strict limitations on investments by public sector pension funds were lifted in the early 1990s, funds have gradually diversified their portfolios, shifting out of domestic loans into domestic and foreign bonds and shares. Insurance companies have made similar adjustments, and overall, the share of equity in institutional investors' portfolios has increased from less than 15 percent in 1990 to about a third at end-1997.[19] At the same time, households have shifted from savings accounts to investments in shares, either directly or through investment funds, attracted by low current interest rates, high stock market returns, and, possibly, also the improved functioning of the stock exchange. Lead by Robeco, investment funds and investment companies, which invest in both financial securities and real estate, became more important during the 1980s. As these investment products compete with bank savings accounts, banks have responded by also setting up their own, in-house, investment funds.

51. In recent years a range of new investment products has been offered in the retail market, often supported by aggressive marketing approaches. Second mortgages and mortgage refinancing at a lower interest rate have, in part, been used to finance investments in equity; a strategy that inherently increases households' financial risks. Banks have successfully marketed new mortgage types that include such investment schemes, exploiting the deductibility of mortgage interest and the absence of a capital gains tax.[20] Insurance companies provide schemes in which premium income is invested for at least 15 years, after which part of the resulting investment income is reimbursed tax exempt. Investment companies offer various lease constructions of shares, and 'click' funds that limit the downward price risk on share holdings.

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[19]The larger pension funds have up 60 percent of their portfolio invested in shares. In 1998, institutional investors have become more active as shareholders, voicing opinions on company management at shareholder meetings. This change was a concerted response to a private sector initiative to improve corporate governance on a voluntary basis (See Box 4).

[20]Generally, interest paid on mortgages is fully tax deductible. However, the interest deduction on second mortgages used for purposes other than house improvements was capped in 1997. Also, imputed rental income from owner-occupied housing is added to taxable income, limiting the net tax advantage.

Box 4. Improving Corporate Governance

In 1997, the Peters Committee, set up by the Dutch Association of Stockbroking, published an influential report with 40 recommendations to improve corporate governance in the Netherlands, within the existing legal framework. The recommendations are being discussed at the 1998 General Meetings of Shareholders. The goals of the initiative were to promote openness, accountability, and shareholder influence. However, the committee did not seek a fundamental shift away from the current stakeholder concept, in which independent company supervisors should respond not just to shareholders, but also to employees and other interested parties.

For large firms, which have the so-called structure regime, the Netherlands has a formal separation of management, carried out by the Board of Directors, and supervision, by the Supervisory Board. Members of the Supervisory Board are nominated by the board itself; while the shareholders' meeting and the workers council have a right the recommend or object to candidates. The Peters report advised that both boards should ensure to have the confidence of the shareholders' meeting and that Supervisory Board members should no longer be reappointed automatically.

Several arrangements are often used to limit the rights of ordinary shareholders. About a third of all listed nonfinancial companies has issued shares that are held by a trust office. Investors can buy certificates of shares that carry dividend but no or limited voting rights. About 40 percent of listed nonfinancial companies makes use of priority shares, while restricting the right attached to normal shares. The Peters report recommended that management should assess in what respect it would be desirable to increase shareholders influence, and report its findings at the shareholders' meeting. It also recommended that under normal circumstances, holders of certificates should be allowed to vote by proxy.

52. The size of the Dutch capital market has grown fast, by more than 15 percent on average from 1990 to 1997. An important component of this growth has been a sharp increase in mortgage lending from 15 billion to 58 billion guilders, with banks accounting for almost all final component of growth has been large and increasing capital outflow, which largely reflects increased holdings of stocks and bonds by institutional investors (Box 5); the share of foreign bonds in institutional investors' total bond holdings increased from 19 percent at end-1995 to 31 percent at end-1997 (see also Box 5).

53. In line with developments throughout the EU, the exchanges on which financial instruments are traded have modernized and merged their operations following the European Union's initiative to complete the internal market. The Amsterdam Stock Exchange (ASE) and the European Options Exchange (EOE) merged in early 1997. Before the merger, the ASE introduced a range of improvements in its trading systems for shares and bonds, to stem the shift, especially of institutional investors, to exchanges abroad. The Amsterdam Financial Futures Market was established in 1987, with trade in futures on government bonds and a limited number of financial market indices. In 1994, share trade on the ASE amounted to US$85 billion, making it the sixth largest in Europe, well behind London (US$1,029 billion), Frankfurt (US$570 billion), and Paris (US$202 billion). The EOE is one of the larger option markets in Europe, while the FTA has remained small in comparison with foreign competitors.

54. The payments system is characterized by the widespread use of credit transfers, direct debits, and, recently, electronic payments using debit and credit cards. In 1995, these means of payment accounted for 61 percent, 22 percent, and 13 percent, respectively, of the number of non-cash transactions. This structure is similar to that in Belgium and Germany, but differs from the United Kingdom and France, where checks play a more prominent role. A bank project to introduce prepaid cards has been slow to take off, because of the incompatibility of two competing systems and the limited number of locations accepting the cards. A 1998 agreement between the banks to make the systems compatible may help speed up acceptance. For the near future, the main issue will be the introduction of the euro. From the beginning of 1999, the AEX will switch to the euro for all transactions. At the same time, banks will make payment facilities in euro available to the private sector. However, the standard payment facilities operated by banks will remain in guilders until the start of 2002, when euro notes and coins will also be issued.

C. Consolidation and Internationalization in Banking

55. Compared to other European countries, the degree of bank concentration is very high. Concentration started in the 1960s and, following a wave of mergers in the late 1980s and

Box 5. Portfolio Diversification and Capital Outflows

It is sometimes asserted that the portfolio diversification by institutional investors, especially pension funds, is behind the sizable capital outflows of the Dutch non-monetary sector, as these funds shift from domestic into foreign securities. In 1997, net foreign assets of the nonmonetary sector decreased by 8.9 percent of GDP.

Bookkeeping principles illustrate, however, that diversification in itself cannot be causing *net capital outflows*. If, for example, a pension fund swaps domestic for foreign bonds with a foreign investor, both foreign assets held by the domestic nonmonetary sector and Dutch assets held abroad would increase, with no change in the net position, and, thus, no net capital outflow. More generally, the exchange of domestic for foreign securities by a domestic nonmonetary entity cannot affect net foreign assets of the nonmonetary sector.

The key to the capital outflows must be the rapid expansion of credit in recent years. This credit must be held in the form of money or non-monetary assets, unless it has leaked abroad through the current account. However, the credit expansion has not been associated with a corresponding increase in money holdings. In 1997, net credit to the private sector amounted to 12.9 percent of GDP (accounting for most of total domestic liquidity creation of 12.1 percent of GDP), while the money supply increased by 5.3 percent of GDP. Also, given a fairly constant current account surplus (of 3.1 percent of GDP in 1997) this credit was not used for purchasing higher net imports. Thus, a large part is held in the form of nonmonetary assets, such as shares and bonds, which is reflected in a capital outflow. The counterpart of this development is a decrease in net foreign assets held by the monetary sector (by 6.8 percent of GDP in 1997), as the private sector has drawn on its credit, and directly or indirectly, used the funds for purchasing securities.

Institutional investors can still play a role in this scenario for capital outflows, but then as agents for households. Also, their portfolio diversification can induce valuation effects; but these are not included in the balance of payments. A hypothetical shift out of domestic into foreign bonds might lower domestic share prices, with a positive effect on the domestic net foreign asset position. In practice, the recent diversification into both domestic and foreign shares has likely had the reverse effect.

early 1990s, the three largest banks now account for between 70 percent and 80 percent of total bank assets, loans to the nonbank sector, and nonbank deposits (see Table 17 and Box 6).

Table 17. Banking Sector Characteristics

	Period	Concentration 1/	Bank Branches 2/	ATM Machines 2/	Average Return on Assets 3/	Risk-Assets Ratio 4/
Netherlands	1995	81	4.3	3.6	0.71	11.3
	1990	77	5.3	1.8	0.59	
Belgium	1995	59 (1994)	7.4 (1986)	...	0.24	11.9
	1990	58	...	...	...	...
Germany	1995	17	6.4	4.4	0.54	9.4
	1990	...	7.0	1.4	0.90	...
U.K.	1995	57 (1994)	2.8	3.6	1.25	12.3
	1990	58	3.5	3.0	0.28	...
France	1995	47	4.4	3.9	0.22	11.6
	1990	52	4.5	2.5	0.49	...

Sources: Pratt and Schinasi (1997), McCauley and White (1997), Groeneveld and Swank, 1998, DNB (1998), and Bank for International Settlements (1991) and (1996).

1/ Percentage share of the five largest banks in total assets.
2/ Per 10,000 inhabitants.
3/ Average pretax profits of major banks in 1989 and 1990, and in 1994 and 1995.
4/ Average of the five largest banks, provided these are included in The Banker top 50 (1997).

There are more than 90 smaller general banks, about half of which (accounting for about 10 percent of total bank assets) are foreign controlled.[21] While cost savings have been put forward as a motive for these mergers, empirical evidence shows no significant cost savings resulting from bank mergers, unless duplications in local bank branch can be eliminated.[22] Indeed, by end-1995 the number of branches had been reduced by 25 percent since 1985, and by 15 percent since 1990; although the rapid spread of ATM's also contributed to this trend

[21]Not including 26 savings banks, 18 specialized credit institutions, 4 mortgage banks, and 22 branches of foreign banks (DNB, 1998).

[22]See Swank (1996).

Box 6. Profile of the Main Financial Groups

Table 18. Key Indicators, End-1997

	Assets 1/	Net Profits 1/	Personnel	Of which: Outside the Netherlands	Risk-Assets Ratio
ABN-AMRO	836	3.9	76,749	42,678	10.65
ING group	620	4.1	64,162	33,288	10.77
Rabobank	423	1.9	40,927	Approx. 2,500	11.1

Sources: 1997 Annual reports (internet).
1/ In billions of guilders.

ABN-AMRO resulted from a 1990 merger between two banks, ABN and AMRO. The bank is relatively strong in commercial banking, with emphasis on international and trading companies. Accordingly, it has a large foreign network with branches in 71 countries. Its US subsidiaries, LaSalle and European American Bank, operate under their original names. In 1998, the bank took a 75 percent interest in a Thai Bank, Bank of Asia, while a bid on the privatized French CIC bank, was not successful.

The **Rabobank** is a cooperative bank. It is relatively strong in retail banking, with the highest share in domestic savings and mortgages. In its commercial business, the bank has a traditional focus on the agricultural and agro-industrial sectors; an emphasis that also characterizes its international activities. The group includes Interpolis, an insurance company, and Robeco, the largest Dutch investment firm.

Within the **ING** group, founded in 1990, the Postbank still operates under its original name, while its partner, NMB, now uses the name ING Bank. The third party was Nationale Nederlanden, the largest insurance company in the Netherlands. The Postbank has a very strong position in domestic nonbank deposits and payments; ING Bank is active in merchant banking in emerging markets. After the group took over Barings bank in 1995, ING Bank continued its foreign activities within ING-Barings. The Belgian bank BBL was taken over in 1997, while a take-over of the securities bank Furman Selz was announced.

Unlike the above groups, the **Fortis** group is not built around a large bank. The group includes several investment banks and insurance companies, as well as two smaller Dutch general banks, VSB and Mees Pierson, and a Belgian Bank, ASLK.

(Table 17).[23] More important motives have probably been the establishment of a solid home market, and a financial base for subsequent foreign expansion, anticipating increased cross-border competition due to the internal market and, eventually, EMU.

56. Non-interest income has become more important for Dutch banks; accounting for 36 percent of total revenue in 1996, compared to 25 percent in 1987.[24] This reflects banks' increasing emphasis on underwriting, market making, consultancy, and fund management. Bank participation in active securities trade has remained limited in comparison with that in, for example, Switzerland or the United Kingdom. Nevertheless, share holdings have increased from 0.2 percent of total assets in 1990 to 0.7 percent in 1997.

57. After the legal separation of banking and insurance services was fully lifted in 1990, banks and insurance companies have been developing into financial conglomerates offering a wide range of financial services.[25] Thus, they seek to exploit synergies in marketing and increased in-house placing power in arranging large transactions. Currently, the main bank and insurance groups are associating with the branch institutions responsible for administrating the social security system, which are to be fully privatized by 2000. The new combinations would be able to offer a complete set of employee benefits, including health, employment, and disability insurance, and supplementary pensions.

58. A further development has been the sector's vigorous internationalization in recent years. Overall, the main financial groups are well-positioned for international expansion: they have established a secure home market base; they are large, even by international standards; and they are financially sound, enjoying a good reputation.[26] The three major banks have internationalized using different approaches, in some cases with selectivity, but also with heavy recruitment in merchant banking. The Rabobank exploits its specific expertise, by focusing on financial services relating to trade in food and agricultural products. Overall, ABN-AMRO is the most foreign oriented of the main Dutch banks, with branches in more than 70 countries, and foreign assets accounting for about half of the total. The ING group

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[23]Overall there has been a small decrease in operating costs in terms of bank assets, from 2.0 percent in 1979–84 and in 1985–89, to 1.8 percent in 1990–95. See Groeneveld and Swank (1998), and Scholtens and van Wensveen (1998) on the significance of this change.

[24] De Nederlandsche Bank (1998).

[25]Such cross-sector mergers are still subject to a declaration of no objection, and banking and insurance activities must be organized in separate legal entities.

[26]Moody's (1998, internet page), for example, confirmed the banks' ranking among the world's stronger financial institutions, with good profitability and liquidity, a healthy asset portfolio, and consistent returns on capital. On the other hand, the report also noted the increased risks associated with internationalization and diversification.

has embarked on the most vigorous expansion. The group has specialized in merchant banking in emerging markets, and took over Barings Bank in 1995 and the Belgian bank BBL in 1997. ING-Barings recently announced its retreat from trade in financial derivatives. In its 1998 Annual Report, the central bank, noting disappointing financial results of the new or expanded securities divisions of the banks, such as in London, pointed to the importance of selectivity in expanding bank activities.

D. Financial Sector Competition and Price Developments

59. In most submarkets for financial services, competition is high, reflecting the large number of domestic and foreign, bank and nonbank competitors. Disintermediation, increased openness, and the strong growth of investment funds have contributed to competition.[27] Nevertheless, in the retail market the degree of bank competition is often considered to be rather limited, mainly reflecting the high concentration of the banking sector and limited cross-border competition.[28] In the past, there have been cases of collusion among the main banks. The funded pension system is also of some importance, because the large share of institutionalized savings has reduced the retail market for savings and investment products.[29]

60. The overall interest margin of Dutch banks is small by international standards: 1.8 percent on average during 1990–94 (Table 19). This comparison provides no indication of an upward effect of the high bank concentration in the Netherlands on interest margins. A crude comparison of the interest margin on mortgages and savings accounts also does not suggest a higher degree of competition in neighboring countries (Table 20). Given sufficient interbank competition, the low spread may reflect stable macroeconomic conditions, and relatively low costs and taxes.[30]

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[27]Disintermediation includes near-banking by large firms as Philips, issuing, e.g., commercial paper instead of borrowing from a bank, and securitization. Securitization has become more important in recent years, as banks have turned loans into tradable securities.

[28] See Van Bergeijk, Van Gent, Haffner, and Kleijweg (1995), and Haffner and Waasdorp (1998). Swank (1995) estimated a model of financial sector behavior in the markets for mortgages and savings deposits during 1957-90, and found evidence of a significant degree of oligopolistic behavior. However, competition in the mortgage market had increased during the estimation period.

[29] McKinsey (1997).

[30]Huizinga (1998).

Table 19. Bank Earnings and Costs, 1990–94

(Average; in percent of total assets)

	Net Interest Margin	Non-Interest Revenue	Operational Costs	Net Revenue
Netherlands	1.8	0.9	1.8	0.9
Belgium	1.3	0.4	1.3	0.3
Germany	2.1	0.6	1.7	1.0
U.K.	2.7	1.9	3.0	1.6
France	1.6	0.7	1.5	0.8

Source: Groeneveld and Swank (1998); and Drees and Pazarbaşioğlu (1998).

Table 20. Average Interest Margin on Retail Products, September 1995

(In percent)

	Savings account	5-year mortgage	10-year mortgage
Netherlands	1.6	0.7	1.1
Belgium	0.8	1.5-2.2	1.3-1.9
Germany	1.1	0.7	1.0
U.K.	0.9-1.9	...	...
France	1.1	1.5-2.0	1.2-1.8

Source: Van Roy (1997).

61. Available evidence suggests that Dutch companies do not face higher costs of debt financing than firms in neighboring countries.[31] However, reliable international comparisons of the cost of capital is scarce. A recent study found that the cost of debt through bond financing was relatively low in the Netherlands. However, only large, 'low risk' firms made use of the market, which may indicate serious access barriers.[32]

62. While the availability of risk-bearing capital has increased in the past few years, access to such capital is still considered problematic, especially for small firms. Historically, the

[31]Ministry of Economic Affairs (1997), p. 164.

[32]Boot, Ligterink, and Schmeits (1997).

price-earnings (P/E) ratio on the Amsterdam stock market has been rather low (at 9.6 on average during 1970–96), pointing to a high risk premium. In 1997, a new stock exchange (NMAX) was opened in Amsterdam for small expanding firms. However, after one year only six firms were listed. Venture capital (project financing with above-normal risks) and informal investments complement the equity market in the supply of risk bearing capital. In 1995, venture capital amounted to 0.6 percent of GDP, which is much lower than in the UK (2.5 percent of GDP), in line with Belgium, and higher than in Germany (0.3 percent of GDP).[33] Informal investments were estimated at approximately the same level. With government support, three Private Sector Participation Companies were established in 1996, to supply risk capital to new technology based firms. A government fund to supply venture capital to information and communication technology based firms is in preparation.

63. Stock prices have increased sharply during the past six years, and especially since 1996 (Figure 12). A high rate of economic growth, reflecting a boom in both exports and consumer demand, has provided the macroeconomic background to this development. Current and expected future profits are also bolstered by the impact of recent structural reforms and sustained wage moderation. On the demand side, low interest rates and portfolio diversification by households and, more importantly, pension and life insurance companies, have contributed. However, the increase may, to some extent, reflect excessive optimism. Indeed, a recent central bank study indicated that the peak P/E level of 26.6 (August 7, 1997) was out of line with fundamentals.[34] A subsequent downward adjustment was caused by the Asian crisis. The end of year level of 21.6, was still high, and could only be in line with fundamentals on the assumptions of a significant fall in the required risk premium (from 6.5 percent to about 3 percent) and a high scenario for expected profit growth. Notably, the buoyant stock market has induced a marked increase in equity financing by nonfinancial firms.[35]

64. Between 1982 (after the collapse of the 1977–79 house price boom) and end-1997, house prices have increased by almost 110 percent, with sharp increases of about 10 percent in 1996 and 1997 (Figure 13). In real terms, the increase since 1982 amounted to 54 percent, while the increase was about 14 percent if deflated by average household income. A range of factors help explain the increase: low interest rates, high consumer confidence, and increased purchasing power (largely reflecting higher employment) have stimulated demand, while supply is inelastic because of the limited availability of locations for new housing (see the Appendix III). A relaxation of mortgage requirements (see below) and the general

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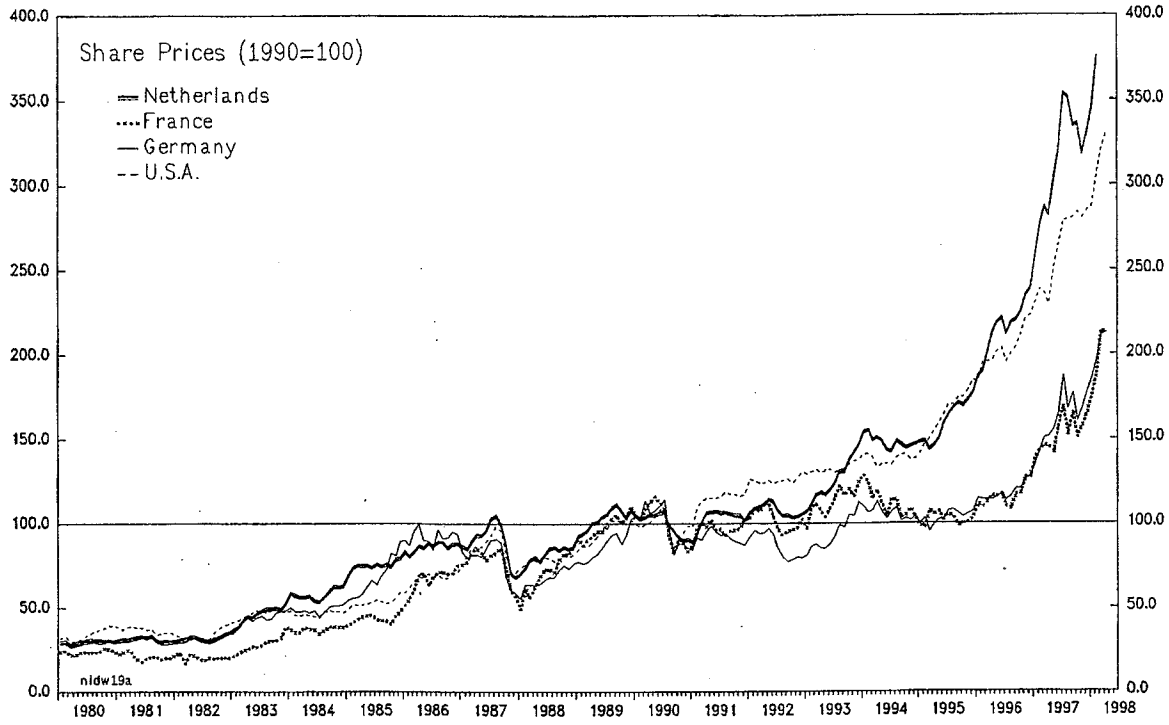
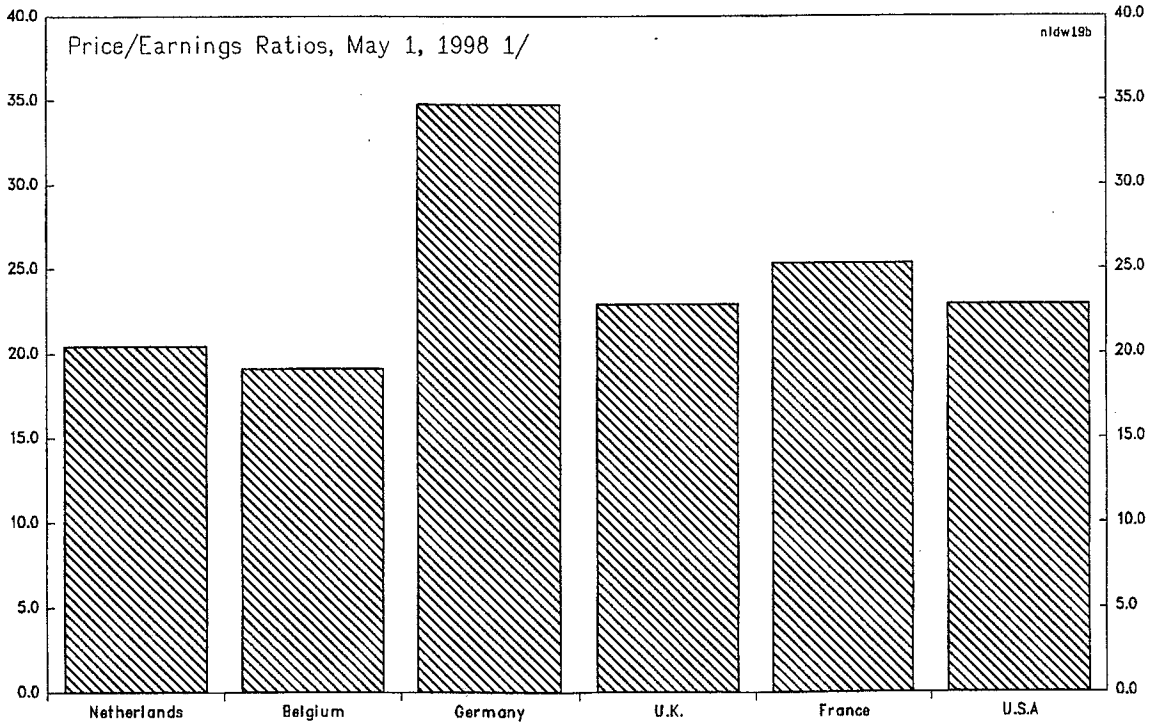
[33]Ministry of Economic Affairs (1997), p. 163.

[34]Capel and Houben (1998).

[35]Equity financing during 1993–97 was more than five times higher than in the previous five-year period.

FIGURE 12
NETHERLANDS
Share Prices



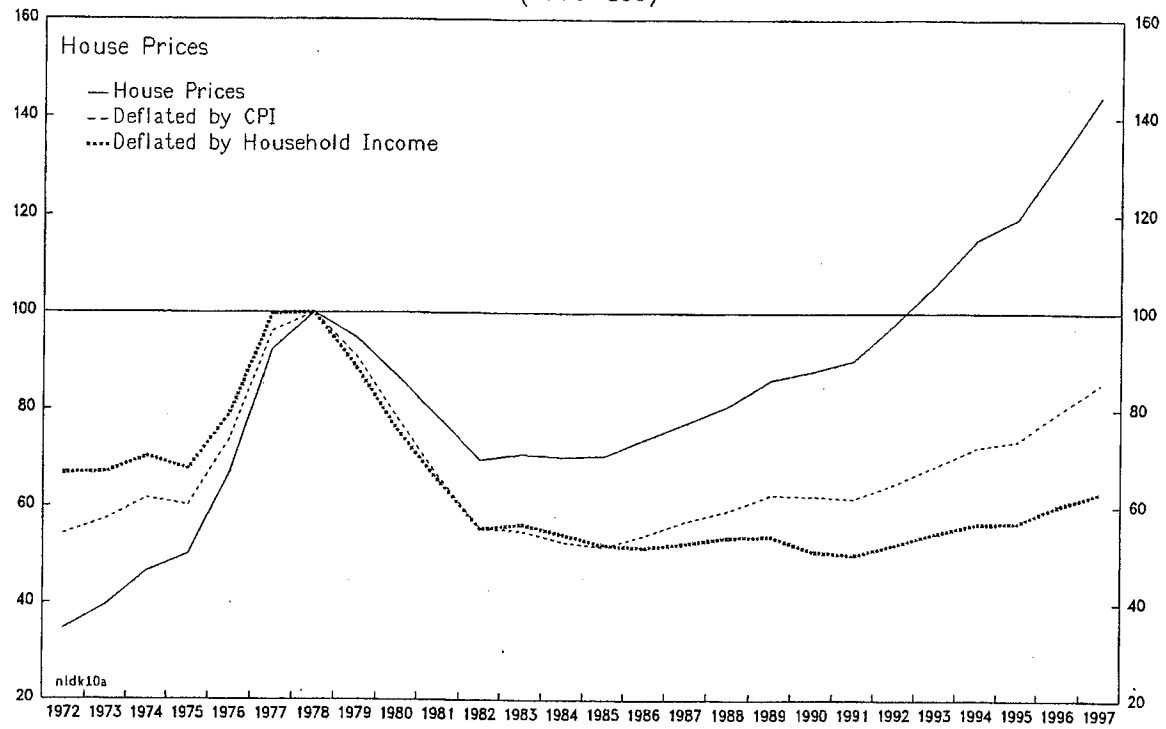


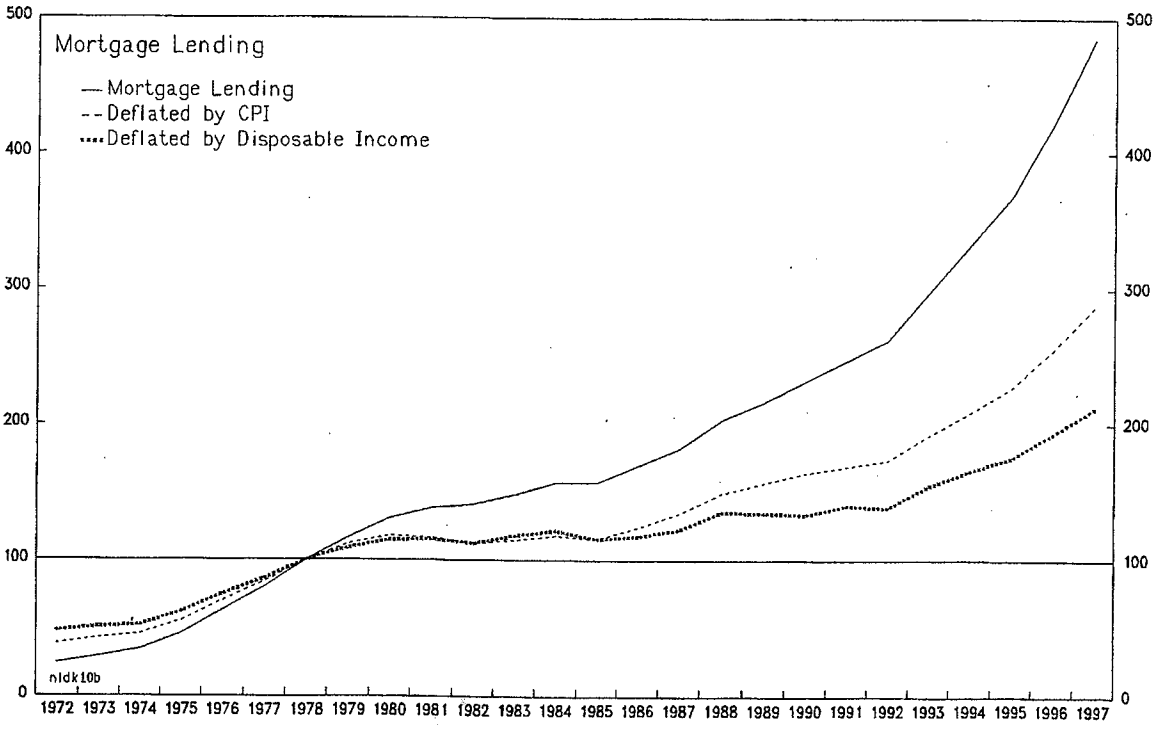
Sources: IMF, International Financial Statistics and Bloomberg.
1/ Cross-country comparisons of price/earnings ratios should be interpreted with care, given differing accounting practices across countries.

FIGURE 13
NETHERLANDS

Housing Prices and Mortgage Lending

(1978=100)





Sources: OECD, Analytical Database; and data provided by the authorities.

deductability of mortgage interest have also been of importance. Still, given real shortages of owner-occupied dwellings, there does not appear to be a large overvaluation.

E. The Regulatory Framework and Financial Supervision

65. The central bank is responsible for prudential supervision of banks and other credit institutions.[36] Prudential supervision is in line with international standards, as provided by the Basle Committee and the European Union. The Act on the Supervision of the Credit System was amended in 1997 to include further authorization criteria, implementing the minimum standards for the supervision of internationally operating banks formulated by the Basle Committee in 1992. The Insurance Board is charged with the supervision of insurance companies and pension funds, and securities trade is subject to supervision by the Securities Board of the Netherlands.

66. The DNB and the Ministry of Finance are charged with supervising structural developments in financial markets, to ensure competition, and to control the degree to which credit institutions are interwoven with other sectors. A number of prescribed actions by or concerning credit institutions require a declaration of no-objection. These actions include a bank's acquisition of a substantial (more than 10 percent) share-holding position in other firms, bank mergers, and obtaining a substantial (more than 5 percent) position in a bank. Approval depends on prudential considerations and the effects on market transparency and concentration. These rules give the authorities relatively strong powers in controlling the development of financial conglomerates. Based on a new competition law, enacted in 1998, the newly established Competition Authority will also judge financial sector mergers and participations, starting in 2000.

67. Bank solvency has been adequate and fairly stable. The risk assets ratio of the main Dutch banks declined slightly in recent years, from 11.3 percent at end-1995, to 11.0 percent at end-1996, and 10.8 percent at end-1997. Two tests of bank liquidity are conducted, based on the weighted liquidity of bank assets and the weighed risk of withdrawal of its liabilities. The tests only relate to the domestic operation of Dutch banks, and liquidity requirements are raised in the presence of large obligations. In recent years, actual liquidity by far exceeded the required levels. On-site examinations by the DNB, including of foreign branches and subsidiaries, are conducted in cooperation with local supervisors, and focus on specific aspects of bank operations such as control systems and credit valuation. In addition, central bank officials regularly discuss a bank's organization and financial situation with its top management.

68. Since 1993, European legislation no longer allows banks to maintain hidden reserves by provisioning for general risks. Moreover, starting 1998, the alternative used by the Dutch

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[36]The DNB is also responsible for supervising investment funds and investment companies, and, since 1995, foreign exchange bureaus.

banks, and approved by the DNB, of an asset undervaluation of up to 4 percent is also disallowed. Anticipating this change, the banks have published their end-1996 hidden reserves (of Hfl 12 billion) and in 1997, these were added to stated reserves, and were reflected in a shift from supplementary capital to core capital.

69. Recent financial sector developments have raised new challenges for control system supervision, cross border supervision, and functional supervision. The banking, insurance, and pension services industry has become more dynamic, with more and more complex ties among providers, and expanded activities. As is growingly recognized, these changes require adequate internal risk management as well as upgraded supervision. In response, several changes have been made to the supervisory framework. The DNB's Directorate for Banking Supervision has been reorganized in 1996 and 1997 to effect a clearer separation between policy development and policy implementation. Designated supervisory teams have been set up for each of the four largest financial groups: ABN-AMRO, ING, Rabobank, and the Fortis group. More specialists have been recruited in areas such as information technology and risk control systems, where there used to be a shortage of sufficiently well-trained staff. Also, the central bank had called on banks to prepare for software problems related to the year 2000, and to include this issue in credit evaluations of firms.

70. With the increasing variety and complexity of banks' operations, traditional supervision based on solvency, liquidity, and profitability, is now supplemented by extensive monitoring of the quality of **risk management** within banks. This in-house risk management comprises the administrative organization, internal control system, and supplementary risk management systems, such as models for assessing specific risks. The increasing complexity of bank operations and control systems has also made it more efficient to have specialized teams for the main banks. An important provision of the 1995 Basle Committee rules on solvency requirements for market risk was that banks would be permitted to use their own in-house risk assessment models to calculate their solvency requirements. Through its on-site examinations, the DNB has evaluated the in-house risk models that will be used by the main banks, and approved them before the new system came into force, at the beginning of 1998. At least one commercial bank has also started working with credit risk models. The increasing use of derivatives has complicated the determination of interest risks. In response, in 1997, a new quarterly reporting system was introduced for both on and off balance sheet risks, allowing banks to use their own risk assessment methods.

71. The current economic upturn is associated with a sharp increase in credit to the private sector, in particular **mortgage lending**, which is partly explained by a relaxation of mortgage eligibility requirements (such as less stringent criteria for including partner income and for accepting collateral).[37] The share of banks in mortgage lending increased from 69 percent in

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[37]For about a third of all house purchases, a mortgage guarantee is provided. Since the establishment of the uniform National Mortgage Guarantee scheme in 1995, mortgage takers

(continued...)

1991 to 78 percent in 1997, reflecting a relatively active sales approach.[38] In late 1997, the central bank had publicly raised questions about the effect on bank soundness. Between 1991 and 1996, the average amount per mortgage increased by 10.7 percent per year, while house prices increased by 7 percent on average, increasing the average loan-to-value ratio. In addition, large increases in house prices that were partly triggered by the mortgage lending boom have raised concerns about the possibility of a downward price correction, which would further undermine the quality of the banks' asset portfolio. Also the degree of interest rate mismatching, while still considered as tolerable by the central bank, has worsened due to the increase in mortgage lending. Following the DNB's warning, banks have stress-tested their mortgage portfolio, but found no major risks. Still, in some cases, lending criteria have been adjusted. However, so far the pace of mortgage lending has hardly slowed down.

72. The Basle solvency ratios do not adequately reflect systemic risks in case of a skewed international diversification of bank assets. The associated risks have again been highlighted by the current **Asian financial crisis**. End-1996 exposure to Asian countries, excluding Japan, Hong Kong, and Singapore was significant, amounting to 23 percent of the banks' (tier 1 and tier 2) capital.[39] Adding lending to Hong Kong and Singapore would bring this figure to 43 percent. Dutch subsidiaries of Asian banks account for a large part of this exposure. At end-1997, the DNB has introduced a weekly monitoring system of the associated risks. In 1998 the DNB increased banks' autonomy in determining the size of their provisions for country risk, as the previous rule-based system was considered overly complex. For the most exposed Dutch banks, ABN-AMRO and ING, end-1997 credit to Asia amounted to 7 percent (3 percent for Korea, Thailand, Indonesia, and Malaysia) and 6 percent, respectively, of total credit. Both banks have recently reported substantial provisions, equal to about 1 percent of total credit, to cover possible losses.

73. The Ministry of Social Affairs and Employment has recently announced measures to prevent **unfair competition by pension funds** in the market for supplementary pensions. Following a 1997 revision of the law, pension funds started offering a range of supplementary pension products, competing with insurance companies. However, pension funds are not subject to profits taxes and also benefit from priviliged information through the extensive

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[37](...continued)
pay a one-time premium for entering the scheme. In return, mortgage providers charge a lower interest rate, as the government backed scheme would pay back the loan in case of default.

[38]Groeneveld (1997).

[39]Consolidated claims of BIS reporting banks on Asia. Claims on Indonesia, the largest borrower, amounted to more than 6 percent of capital and reserves.

client data base they derive from their protected function in providing pensions.[40] To restore a level playing field, new regulations will prohibit the funds from differentiating premiums among its customers, thus limiting their ability to exploit client knowledge. Also, the ministry has expressed concerns about the ability, especially of smaller pension funds, to adequately control the risks associated with their current more active investment strategy. So far, this issue has remained under review.

74. In reaction to the aggressive marketing of new investment products, the central bank issued a marketing directive for investment companies in early 1998. For reasons of **consumer protection**, the directive seeks to ban misleading information and stipulates that the risks inherent to investments have to be made clear. Also, in consultation with the Ministry of Finance, insurance companies have recently adopted a code of conduct with a similar purpose. However, not all investment products are covered by the new rules.

75. In recent years, the legal framework has been adjusted to reinforce **the integrity of the financial system**, and further measures have been announced. Supervision of financial asset trading (both within and outside the organized exchanges) was transferred from a self-regulatory body to an independent supervisor (the Securities Board of the Netherlands) in 1997. Additional measures that have been announced include a registration system, and the obligation to have a code of conduct, for relevant staff in financial institutions. Also, enforcement will be enhanced through improved exchange of information among supervisors and legal enforcement authorities. To some extent, the proposed measures are inspired by possible irregularities on the equity market, involving three securities firms, and within several pension funds, that were discovered in 1997.

76. The development of broad **financial conglomerates** complicates financial supervision. Potential problems include a heightened risk of conflicts of interest within the group—in particular, if the deal buying side is dominant—and difficulties in controlling exposure on a group-wide basis. The control structure of a group could be inadequate or intransparent—and certainly very different from the legal structure.

77. There is no formal lead supervisor or direct supervision addressing conglomerates of banks and insurance companies as a whole. A protocol between the DNB and the Insurance Board contains rules for their cooperation in supervising such groups. This structure is known as the solo-plus approach. Based on the protocol, supervision of the individual bank or insurance firm is supplemented by an evaluation of relevant aspects of the group as a whole. The three supervisory institutions meet twice a year at the board level. While it remains to be seen if a more formal approach to group supervision will be required, the DNB's current role in overseeing systemic risks is widely acknowledged.

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[40]See Kremers and Flikweert (1998).

F. Recent Developments in a Policy Perspective

78. With domestic asset markets exuberant, credit to the private sector expanding sharply, and vigorous diversification by financial institutions into new markets at home and abroad, it is reasonable to ask: (1) whether it is likely that the boom-and-bust cycle of the late 1970s may be repeated; (2) if not, to what extent there are heightened financial risks for the sector or the broader economy in the current situation; (3) what policy responses would be prudent to help minimize such risks; and (4) whether any more general lessons emerge from these trends in the financial sector, both for the Netherlands and more broadly as economies in Europe move into monetary union and respond to increasing competition in regional and global financial markets.

- ***A number of considerations suggest that the history of the 1970s should not repeat itself in the sense of a seriously de-stabilizing cycle in both financial and real markets.***

While house prices are high, their relationship to household earnings does not yet suggest major concerns. A possible decline of house prices probably would not seriously affect bank soundness, as banks have stress-tested their mortgage portfolios; and interest rate mismatching is monitored by the authorities using a new, detailed, reporting system. A significant price correction in the stock market at some point in the future appears more possible; but direct bank exposure to movements in stock prices is limited and wealth effects have in the past been relatively modest. In addition, with a competitive exchange rate, prudent and consensus-based wage setting, and given past structural reforms, the economy now has greater resilience to shocks than in the late 1970s.

- ***Nonetheless, there are risks of a more moderate asset cycle that could result in some stresses in the financial sector and possibly impart a degree of instability to the real economy.***

Current equity prices reflect the economic boom, portfolio diversification by households and institutional investors, and expectations of increased returns generated by recent structural reforms. Household investment in securities is favored by the generous interest deductibility of household borrowing and contractual savings. The expectations of increased returns on equity may well be exaggerated—a concern that arises in some other advanced economies. There is the risk, also, that some institutions may join the bandwagon of diversification without having the management skills necessary to ensure that the risks in new businesses are well-contained. These developments, moreover, are taking place at a time when the real economy, with confidence very strong, is entering uncharted waters in terms of the level to which unemployment can be reduced without triggering inflation. In this setting, there is a concern that further upward movements in real asset prices could be followed by a simultaneous reversal of psychology in both financial and real markets—leading to a sharp correction of asset prices and an intensification of the underlying cycle in the real economy.

• ***Certain policy adjustments in both macroeconomic and structural policies could help to minimize current risks.***

As regards, first, the macroeconomic framework, the overall stance of policies appears unduly expansionary in the near term. Easy monetary conditions are currently resulting from the peg to the deutsche mark, while recent tax cuts are likely to cause an expansionary fiscal impulse (albeit on a modest scale) in 1998. With monetary policy determined solely by the exchange rate link (and locking rates for EMU indeed agreed), only fiscal policy is available to address this concern. Fiscal tightening could offset some of the wealth effects on demand, which appear still to be building; and could dampen asset prices and mortgage lending through its effect on incomes and expectations. In these regards, it could minimize the risks to a sustained expansion. At the microeconomic level, this would be an appropriate time to reassess the deductibility of loan interest, and perhaps also the broader bias in the tax system in favor of contractual saving. In supervision, there is a welcome, continuing movement to strengthen the supervision of financial groups, to improve the monitoring of control systems, and to underpin the integrity of financial markets, and this needs to be pressed forward effectively. Over the medium term, further reforms to strengthen the supply response of the real economy should to help avoid risks to economic performance related to overheating.

• ***Experience in recent years suggests some lessons for the future and possibly for other economies facing similar challenges.***

In several respects, recent trends in the Dutch financial system can be viewed as a rational response to intensified domestic competition and to the internationalization of the sector. Three key phases can be identified in this regard. Initially, faced with domestic deregulation and the prospect of increasing international competition, the predominant trend was toward *domestic consolidation within banking*, with some associated cost-savings (essentially, through the rationalization of overlapping branch networks). Over time the pattern shifted toward *consolidation within the broader financial sector* in the Netherlands, particularly between banking and insurance; and as investment funds began to offer attractive liquid instruments to consumers, banking groups moved effectively to command a significant share of the securitized liquid savings market also. A further trend, still actively underway, has been increased *consolidation and diversification in international markets*, including acquisitions of banks both within and beyond the immediate region. In practice, of course, the phases of financial sector development have overlapped, and have been influenced by strictly local features such as the prominence of contractual saving, the openness of the economy, and the long-standing tradition of international trade and investment financing.

Each of these phases in financial sector development has brought its own challenges to regulation and supervision—and here, too, adaptations are still underway. Domestic consolidation in and beyond the area of banking has required supervisors to increasingly look beyond narrow functional activities, taking account of *broader group operations*; it has also underscored the importance of supervising *risk-management and control systems*, and

ensuring *effective information exchange among supervisors*. Changes in these areas have been continuing over the past two years. *Consumer protection* in the domestic market has also had to be strengthened, to deter price-fixing on retail instruments; and a further phase of changes is currently underway to ensure that consumers are sufficiently informed about the risks of complex personal financial planning instruments, and that there is a reasonably level playing field in the contractual savings market. The continuing internationalization of groups has added further complexity to the task of supervising groups, and has of course increased the importance of effective *cross-border collaboration*. Elements of this same pattern in sector developments and supervisory responses can certainly be discerned in neighboring economies, although the experience in the Netherlands appears notable for the extent and timing of the domestic consolidation that took place both among banks and more widely.

Finally, an important related development in the recent past has been the possible emergence of an *asset price cycle*, which may in part reflect the mismatch of monetary conditions with the anchor economy. These trends in asset markets have rightly prompted heightened vigilance in financial sector supervision. They also raise issues that go well beyond the purview of supervisors. They warrant a re-examination of *distortions in the tax system* that may unduly favor mortgage borrowing or contractual saving. More generally, however, they have already contributed to a growing debate on the *cyclical challenges* that can arise for fiscal policy when monetary conditions are out of line with domestic requirements. In this latter regard, among others, developments in the Netherlands point to issues that may arise over time for other economies with which it will be linked in EMU.

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THE HOUSING MARKET[41]

79. In recent years, both housing prices and mortgage lending have increased strongly. Housing prices have risen by 64 percent since 1990, and by some 30 percent since 1995; and mortgage lending expanded by FL 94 billion, equivalent to 15 percent of GDP over 1996–97.

80. This annex tries to assess what lies behind these developments. While the strong housing market can in part be explained by strong "fundamentals," such as housing shortages and low interest rates, housing prices and mortgage lending might also be driven by self-fulfilling expectations of further prices increases. To the extent that price increases are indeed the result of a bubble, this would raise concerns about the potential financial and real economic impact when the process reverses.

Overview of Recent Developments

81. Concerns about a possible housing market bubble are partly rooted in the experience of the late 1970s: house prices more than doubled between 1974 and 1978, and dropped sharply afterwards. Since 1993, house prices have been above their 1978 level. However, in contrast to the previous boom, the increase in the housing prices over the last four years has been only 36 percent in nominal terms Figure 13. Real housing prices (deflated by the consumer price index) have increased since 1991, but are still below their 1978 level; and this measure does not take into account quality improvements, or increases in incomes.

82. Both structural and cyclical developments in the housing market appear to have contributed to the recent increase in housing prices.

83. Intrinsically, the supply of housing is inelastic in the short run, due to time-to-build and planning lags. In the case of the Netherlands this problem has been exacerbated by the limited availability of locations for new housing. Thus, the housing stock has grown more slowly than the number of households: since 1990, the increase in the number of households outpaced that of new housing by some 1.5 percent. Under these conditions, any changes in demand may have a sizable effect on prices.

84. The government has been heavily involved in the housing market since the late 1940s, with a succession of instruments including a rent control system, public housing, and a range of subsidies for construction of owner-occupied housing. In 1993, the rent control system was changed to allow higher rent increases. In 1995 the housing corporations, which provide rental housing, became financially independent from the government. These recent changes added to the increase in demand for owner-occupied

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[41]Prepared by Meral Karasulu.

houses, as rents started to increase making home ownership a more attractive option. This is reflected in Figure 14, which shows a decline in house-ownership costs relative to rental costs.

86. Cyclical developments have also exercised a favorable influence on the demand side of the housing market. Buoyant economic growth, declining unemployment, and rising disposable income have increased households' borrowing capacity and confidence.

87. Nominal mortgage rates dropped to a 10- year- low in 1996 and have declined further in 1997, contributing to higher mortgage lending and increasing the effective demand for housing.

88. The availability of mortgages has been a further factor that has added to demand. The increase in the number of mortgages is partly due to an aggressive marketing by banks, which included an easing of lending practices by making temporary or part-time work income eligible for mortgage borrowing and including full spousal income when calculating mortgage limits.

89. The number of new mortgages increased by some 16 percent in 1994 as compared to its peak level in 1978, before declining to 10 percent in 1995. When the increase in the number of households is taken into account, the percentage of households with a new mortgage has been increasing since 1991, but with some 6 percent is still below its level of 7.7 percent in 1978.

An Empirical Analysis

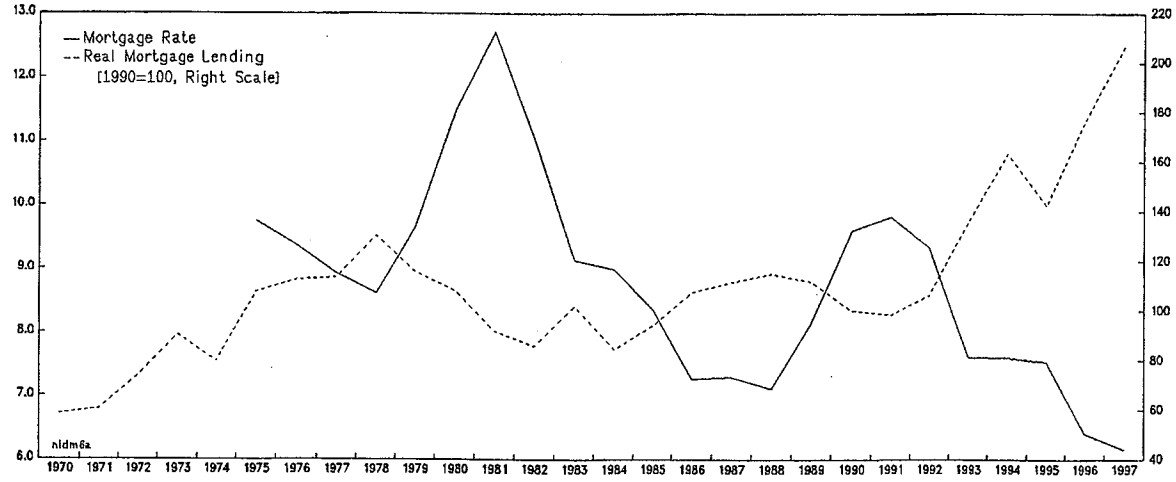
90. In order to assess the effect of these developments on house prices and the mortgage market, real house prices, real mortgage lending, and the number of new mortgages were modeled as follows:

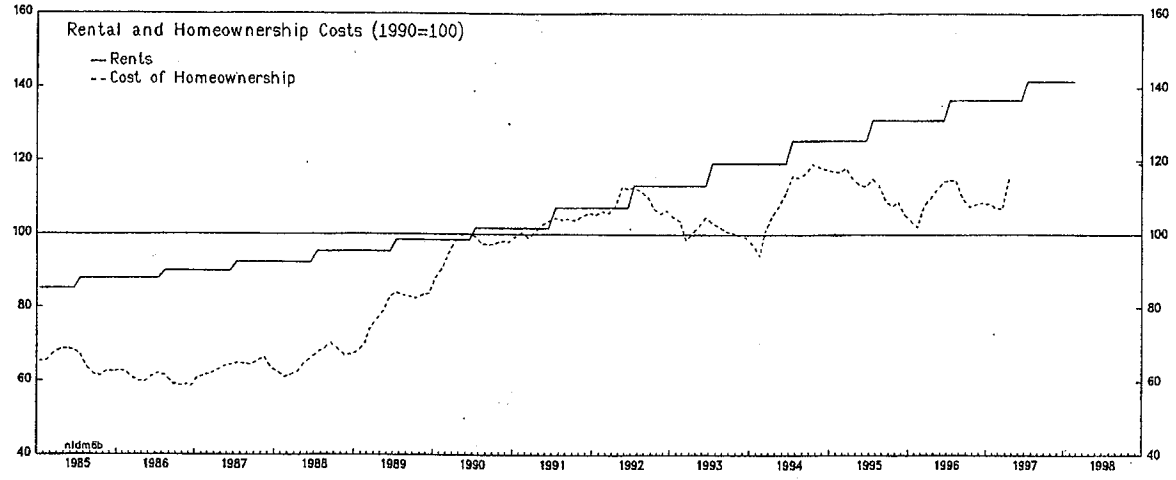
$$P_h = F_1(Y,H/HH,mr,D93), \quad M = F_2(Y,P_h,mr,D93), \quad V/HH = F_3(Y/HH,mr,D93)$$

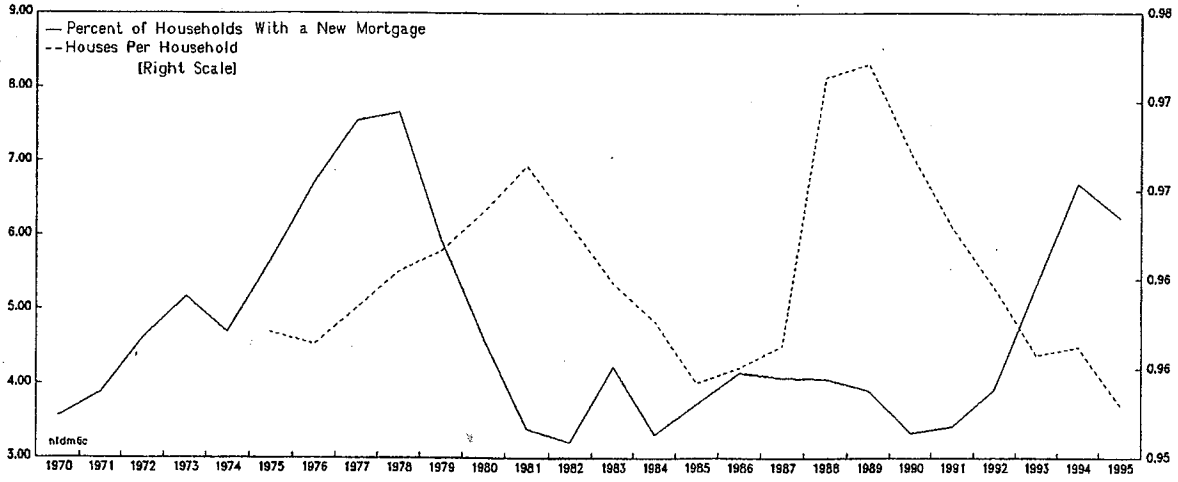
91. Based on a structural demand equation for housing, real house prices (deflated by the CPI), P_h, were modeled as a function of real non-property disposable income, Y, the housing stock, H, scaled by the number of households, HH, the real mortgage rate, mr, and a dummy variable, $D93$, for the change in rent control policy in 1993. The stock of housing relative to the number of households enters the equation with a lag, due to endogeneity of housing supply and the number of households to house prices. Real mortgage lending, (deflated with the CPI) M, was modeled as a function of real non-property disposable income, real house prices, real mortgage rate, and the dummy

FIGURE 14
NETHERLANDS

Mortgage Lending and Homeownership Costs







Source: Data provided by the authorities.

variable, *D93*. The number of new mortgages, *V*, is assumed to depend on real mortgage rate, real non-property disposable income, the number of households and the dummy variable, *D93*. Since the number of households is correlated with real non-property income, both number of mortgage lending and income are scaled by the number of households to circumvent a multicollinearity problem.

92. Housing stock relative to the number of households exerts the largest effect on house prices, suggesting that a one percent increase in housing stock relative to the number of households reduces house prices by some 9 percent.

93. Income also plays an important role: house prices respond by some 1.3 percent to a one percent change in income. The elasticity of mortgage lending to real disposable income is 1.8.

94. The sensitivity of mortgage lending and housing prices to mortgage interest rates is surprisingly low. The estimation results in Table 21 suggest that real house prices tend to decline by only 0.1 percent for a unit increase in mortgage rates. Both real mortgage lending and the number of mortgages respond by around 0.1 percent to a one unit change in mortgage rates.

95. These results appear to suggest that income growth and housing shortages play an important role in housing price developments; they also would indicate that low mortgage rates might not be the leading cause of increasing house prices. This perhaps somewhat surprising result calls for further analysis; but these findings tend to support the view that the absence of an independent monetary policy need not be an insuperable handicap in addressing the house price boom. On the other hand, fiscal policy, with its direct repercussions on disposable income may exercise some impact; and the effect on expectations of a change in policy on interest rate deductibility could be significant. Finally, the results do not suggest that recent housing price increases are substantially out of line with fundamentals, although they would be consistent with a view that there were changes in mortgage lending behavior, as well as some impact of rent decontrol in the early 1990s.

Table 21. Netherlands: Housing Market: Annual Data, 1979–96

	Ph	M	V/HH
Constant	-6.02 (2.40)**	-7.98 (1.86)***	2.39 (3.07)
MR	-0.11 (0.03)***	-0.10 (0.03)***	-0.09 (0.04)***
RNPDINC	1.30 (0.52)**	1.79 (0.40)***	
HH{3}	-9.86 (4.96)**		
Ph{1}		0.70 (0.20)***	
RNPDINC/HH			1.28 (0.83)*
DUM93	-0.16 (0.12)	0.10 (0.12)	0.26 (0.10)***
R-bar 2	0.50	0.70	0.52
D-W	1.41	1.07	1.17

Sources: OECD, Analytical Database and Economic Outlook; DNB, and CBS publications and web pages, Nederlandse Vereniging van Makelaars; and Fund staff calculations.

Note: Estimation by Least Squares.

P_h : Price of existing houses, deflated by CPI
M : Value of New Mortgages to Households, deflated by CPI
V: Number of New Mortgages to Households
MR: Real mortgage rate
RNPDINC: Real non-property disposable income of households
HH : Housing stock per household
DUM93 : A time dummy that takes the value 1 after 1993.
Except DUM93 and MR all variables are in logarithms.
Standard errors are in parantheses.
* : significant at 10 percent
** : significant at 5 percent
*** : significant at 1 percent

III. LIVING WITH THE PEG AND THE CHALLENGE OF EMU[42]

A. Introduction

96. The Netherlands has extensive experience with economic policies under a stable or pegged exchange rate. Since the start of the Bretton Woods regime the authorities have aimed at keeping the guilder relatively stable vis-à-vis the German mark. Following a weakening of the guilder during the 1970s, there has been a *de facto* monetary union with Germany since 1983, which will be subsumed in the broader European Economic and Monetary Union (EMU) from January 1999. In this chapter the Dutch experience since the early 1970s is reviewed with the aim of gaining, on the threshhold of EMU, some insight into domestic economic policy making under the fixed exchange rate regime.

97. It is concluded that, until 1993, high integration largely shielded the two economies from recurrent asymmetric shocks. Subsequently, growth and inflation diverged. This reflected the turnaround in Dutch wage setting in the early 1980s following destabilizing wage-price cycles in the 1970s—together with some stresses resulting from German reunification. However, the structural reforms in the Dutch labor market during the 1980s were, in a longer run context, essential for the preservation of the peg. In fact, wage-price flexibility has been the key adjustment mechanism under the peg, as fiscal policy has not been used for stabilization, and has often been procyclical. The current situation provides a clear example of this policy setting: fiscal policy is mildly expansionary, while, with growth well ahead of Germany, monetary conditions are unduly easy. For the future, the challenge will be to complement ongoing structural reforms with a new focus on the scope for fiscal policy to help cushion cyclical disturbances.

98. The main reasons for pegging the guilder to the deutsche mark peg have been: (I) to anchor expectations to a low inflation currency; (ii) to secure a relatively low risk premium in interest rates, owing to the Bundesbank's credibility (and the growing credibility of the DNB); and (iii) to reduce the costs of international trade and investment with respect to the country's largest trading partner. On the downside, adjustment to asymmetric real shocks and cyclical developments is hampered by the loss of exchange rate flexibility, the associated decreased monetary autonomy, and the imposed low inflation combined with nominal wage rigidity (limiting the scope for real wage adjustments).

99. The Dutch authorities have repeatedly underscored their satisfaction with the exchange rate link, as it has contributed much to restoring price stability and financial and economic stability in general. Moreover, despite several important disturbances (changes in wage setting, oil price changes, and German unification), employment growth and output growth have developed favorably in the Netherlands since the early 1980s. Indeed, in empirical evaluations of the desirability of currency unification, the Netherlands and Germany are

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[42]Prepared by Jan Kees Martijn.

often—although usually with caution, given the tentative nature of such evaluations—considered part of one optimum currency area.[43] These conclusions essentially are based on quantitative analysis of the considerations noted above.

100. The analytical framework of the optimum currency area approach is drawn on in this chapter to evaluate the Dutch experience with exchange regimes. Following an overview of the evolving monetary policy rules, economic developments under the peg are described. The ensuing analysis focuses on, first, the asymmetric shocks that have affected the two economies and, subsequently, the Dutch adjustment mechanisms for coping with such divergences. Drawing lessons from the experience so far, an assessment of policy requirements under EMU completes the chapter.

B. The Exchange Rate Constraint on Monetary Policy

101. While exchange rate stability relative to the German mark was an important policy goal during the 1970s, declining competitiveness rendered the peg insufficiently credible, and there were several devaluations. Before that, exchange rate stability had been maintained under the Bretton Woods system (1958–73), until this regime started to collapse at the end of the 1960s.[44] In 1972, the Snake arrangement of European Community member countries was created to promote exchange rate stability. Under the latter system, with a 4½ percent fluctuation band, the Netherlands followed only partly, and with some delay, two early revaluation of the deutsche mark in 1973 (Table 22). Subsequently, the peg was subject to several attacks and two actual 2 percent devaluations (in line with the Belgian franc).

Table 22. Changes in the Deutsche Mark-Guilder Central Rate, 1970–97
(In percent)

December 1971	-2.0
March 1973	-3.3
June 1973	-5.5
September 1973	+5.0
October 1976	-2.0
October 1978	-2.0
September 1979	-2.0
March 1983	-1.9

Source: De Nederlandse Bank, Annual Reports.

102. Since 1983, the peg has been maintained within the Exchange Rate Mechanism of the European Monetary System (EMS), ending a period of instability. The monetary authorities

[43]See, for example Bayoumi and Eichengreen (1997).

[44]See Wellink (1993) for an account of the gradually increasing monetary orientation towards Germany.

favored a firmer link to the mark already at the end of the 1970s, to reduce inflation which averaged almost 8 percent between 1971 and 1978. But, while the establishment EMS created a timely setting for such stability, the guilder did not follow a 2 percent revaluation of the mark in September 1979, shortly after the start of the new regime. The last devaluation vis-à-vis the mark occurred in 1983, against the advice of the Netherlands Bank (DNB), and was soon considered a policy mistake by the government as well, as it triggered an increased risk premium that lasted until 1988 (see Figure 15). Afterwards, the DNB maintained a narrow margin vis-à-vis the mark, within the 4½ percent EMS band. The 1992 and 1993 EMS crises illustrated the restored credibility of the peg of the guilder to the mark, as at no point did the guilder come under attack. While the EMS fluctuation margins were widened after the 1993 crisis, the DNB has maintained the existing narrow band to the mark under a bilateral agreement with the Bundesbank. The Netherlands easily qualified for participation in the future EMU—albeit with a waiver for the convergence criterion on government debt.

103. Until the late 1980s, the central bank to some extent combined its exchange rate policy with separate policies for controlling money and credit.[45] The exchange rate was targeted through an active money-market interest rate policy, combined, if necessary, with interventions. At the same time, domestic credit expansion was controlled through a succession of direct and indirect controls, traditionally with the aim of managing the money supply; but from 1986 to 1989, the main aim was to help underpin the exchange rate target. As capital account transactions were progressively liberalized between 1977 and 1983, the distinction between the two separate forms of monetary policy became increasingly untenable. Since 1990, maintaining the exchange rate link with the deutsche mark has been the overriding aim of monetary policy.

104. In line with the above, the degree to which monetary policy could be used for counteracting cyclical developments has been limited and decreasing. Before the mid-1980s, when there was still a separate money supply policy, this was aimed mainly at stabilizing the liquidity ratio to contain inflation over the medium term, rather than for short-term macroeconomic stabilization. Since 1983, the exchange rate goal has greatly limited the latitude for attuning official interest rates to cyclical stabilization. Still, in September 1997, for example, an official interest rate increase, while largely following an increase in the Bundesbank's rates, was also partly motivated by concern over excessive domestic demand pressure and asset price inflation.

C. International Price Linkages and Cyclical Developments

105. The exchange rate regime shapes the pass-through of shocks and cyclical developments into prices. Under stable exchange rates, international arbitrage tends to equalize prices of traded goods and production factors (rate of return on capital). Given a credibly fixed exchange rate such arbitrage becomes more effective. Prices of non-traded

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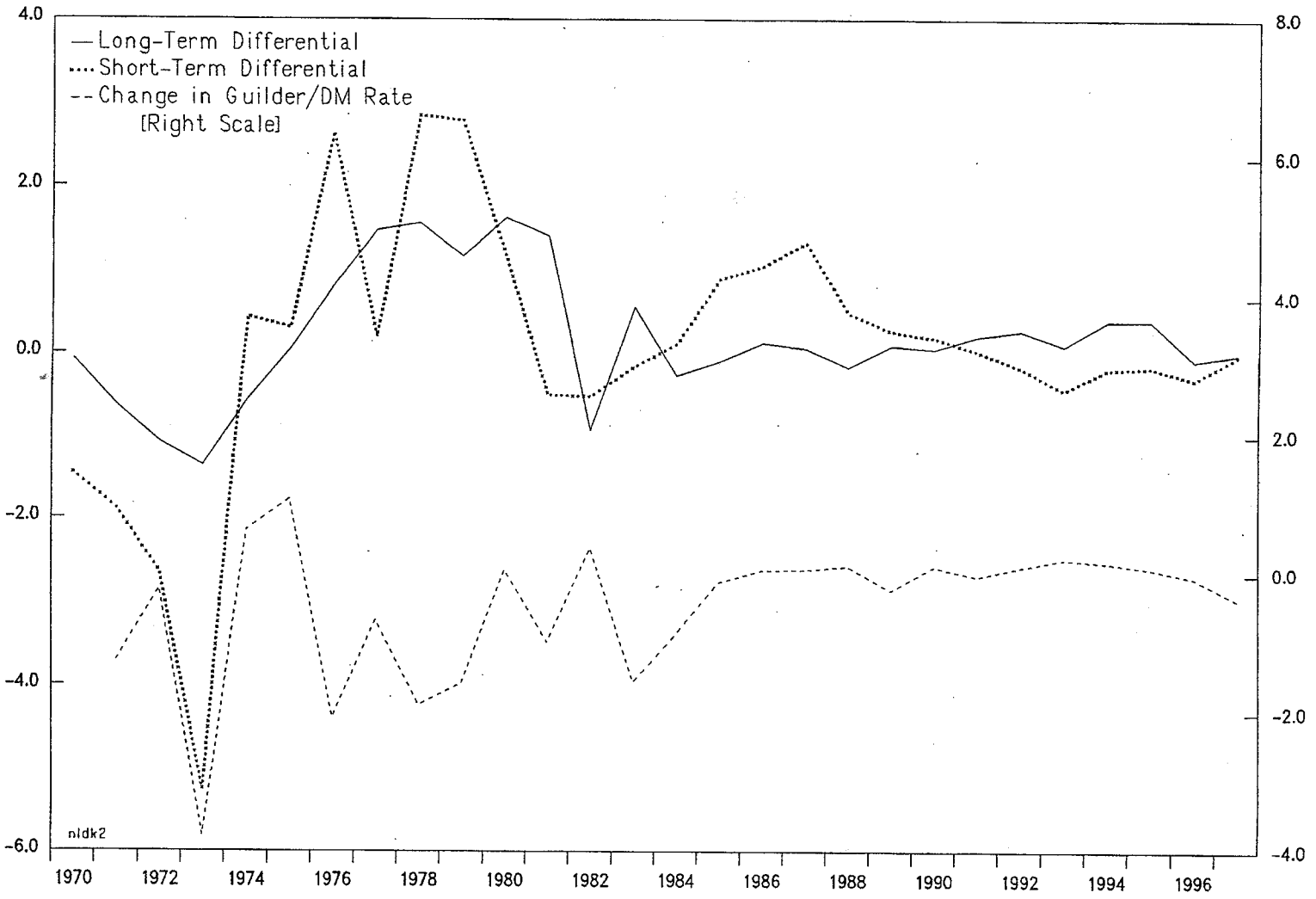
[45]See Hilbers (1998).

FIGURE 15
NETHERLANDS

Dutch and German Exchange Rate Changes and Interest Rate Differentials



Source: IMF, International Financial Statistics.

goods and production factors (wages and prices of physical assets) then reflect supply and demand on the domestic market. It follows that even for a country that has anchored its currency to a large low-inflation country, domestic price stability still depends on the bilateral similarities in these demand and supply forces.

106. A comparison of Dutch and German inflation illustrates the above principles. The purpose of such an exercise is twofold. First, it gives a structured overview of the strains on the exchange rate link. Second, it provides insight into the suitability of the link. On the second point, two views can be distinguished. On the one hand, inflation divergences within a monetary union have been proposed as an indicator of the compatibility of fixed internal exchange rates with union-wide price stability, and thus of the desirability of the arrangement.[46] On the other hand, if the desirability of currency unification is taken as given, diverging rates of inflation can be considered as an indicator of the existence of wage-price flexibility needed to allow the union to absorb asymmetric shocks (see Section E).

107. Given the stable guilder-deutsche mark exchange rate, wholesale price developments in the Netherlands and Germany have been largely similar (Figure 16).[47] The wholesale price index (WPI) mainly relates to tradable goods. Taking into account actual devaluations, the ratio of the Dutch to the German WPI decreased somewhat between 1970 and 1979 and has been almost constant since.

108. By implication, relative nontradables prices determine the overall bilateral inflation differential, as reflected by the ratio of the Dutch to the German consumer price index (CPI). The development of the CPI ratio is determined by a range of factors. In the short run, it mainly reflects the relative cyclical stance and cost shocks (e.g., in taxes). In the longer run, structural supply factors, typically reflected in unit labor costs, are expected to dominate.

109. Figure 16 shows that, adjusted for the exchange rate, the Dutch CPI increased sharply from 1973 to 1978, by about 12 percent; but this real appreciation was gradually undone over the 1985–93 period. Table 23 indicates that, on average, both the Netherlands and Germany enjoyed high growth during most of the 1970s and between 1984 and 1989, but combined with high inflation in the former and more moderate price increases in the latter period. This change in inflation was more pronounced in the Netherlands than in Germany; and whereas inflation was, on average, 2.6 percent higher in the Netherlands during 1971–78, it was slightly lower than in Germany during the 1984–89 period. In terms of wages or unit labor

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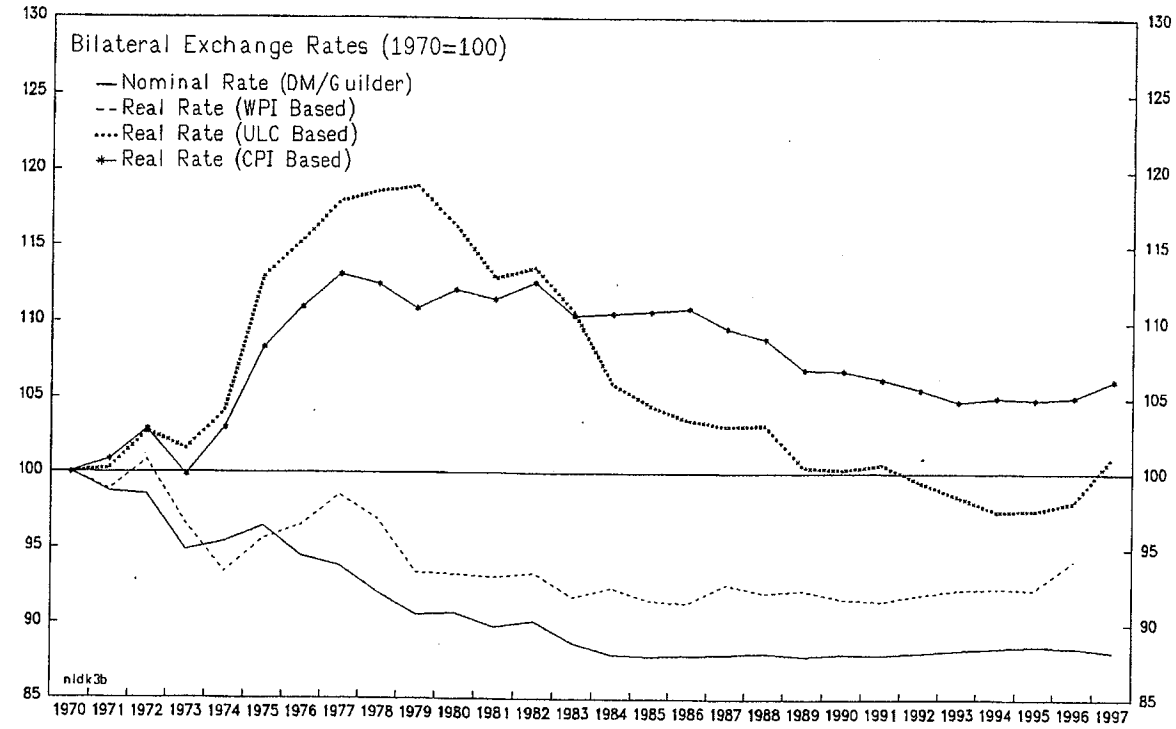
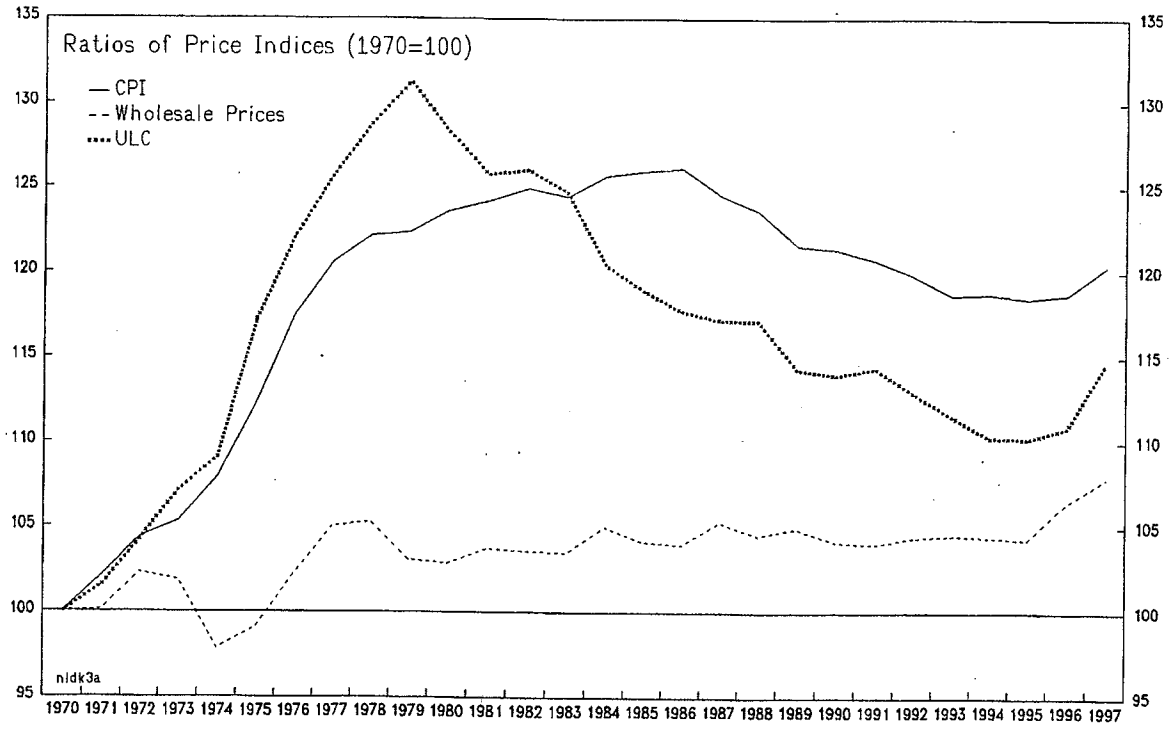
[46]In this view, diverging rates of inflation in a monetary union reflect changes in equilibrium real exchange rates that could, alternatively, have been absorbed through changing nominal exchange rates, without sacrificing price stability. See Vaubel (1978).

[47]Most figures for Germany refer to Western Germany only, to ensure consistency over time, and because the Netherlands is mainly influences by developments in western Germany.

FIGURE 16
NETHERLANDS
Ratios of Dutch to German (Western) Inflation and Exchange Rates





Sources: IMF, International Financial Statistics; OECD, Analytical Database; and Bundesbank.

costs the change was even more pronounced. The period in between included the 1979–81 recession and the unstable first phase of the EMS. Developments since 1989 have been heavily influenced by the consequences of German unification, which gave a positive impulse to German, and, to a lesser extent, Dutch, output, wage costs, and inflation.

Table 23. Selected Dutch and German Economic Indicators 1/

	GDP		Unit Labor Cost (overall)		Workers Compensation 2/		CPI		Exchange Rate (DM/Hfl)
	Neth.	Germ.	Neth.	Germ.	Neth	Germ.	Neth.	Germ	
	(Average annual growth, in percent)								
1971–78	3.3	2.8	9.2	5.8	12.4	8.9	7.8	5.2	-1.0
1979–83	0.7	1.2	3.3	3.9	5.2	5.3	5.3	4.9	-0.7
1984–89	3.0	2.7	-0.1	1.4	1.4	3.4	1.1	1.4	-0.2
1990–93	2.3	5.0	2.8	3.4	3.7	3.1	2.9	3.5	0.1
1994–97	3.0	2.1	0.6	-0.1	2.3	2.9	2.3	1.9	-0.0

Sources: IFS; OECD Economic Outlook; and Bundesbank.

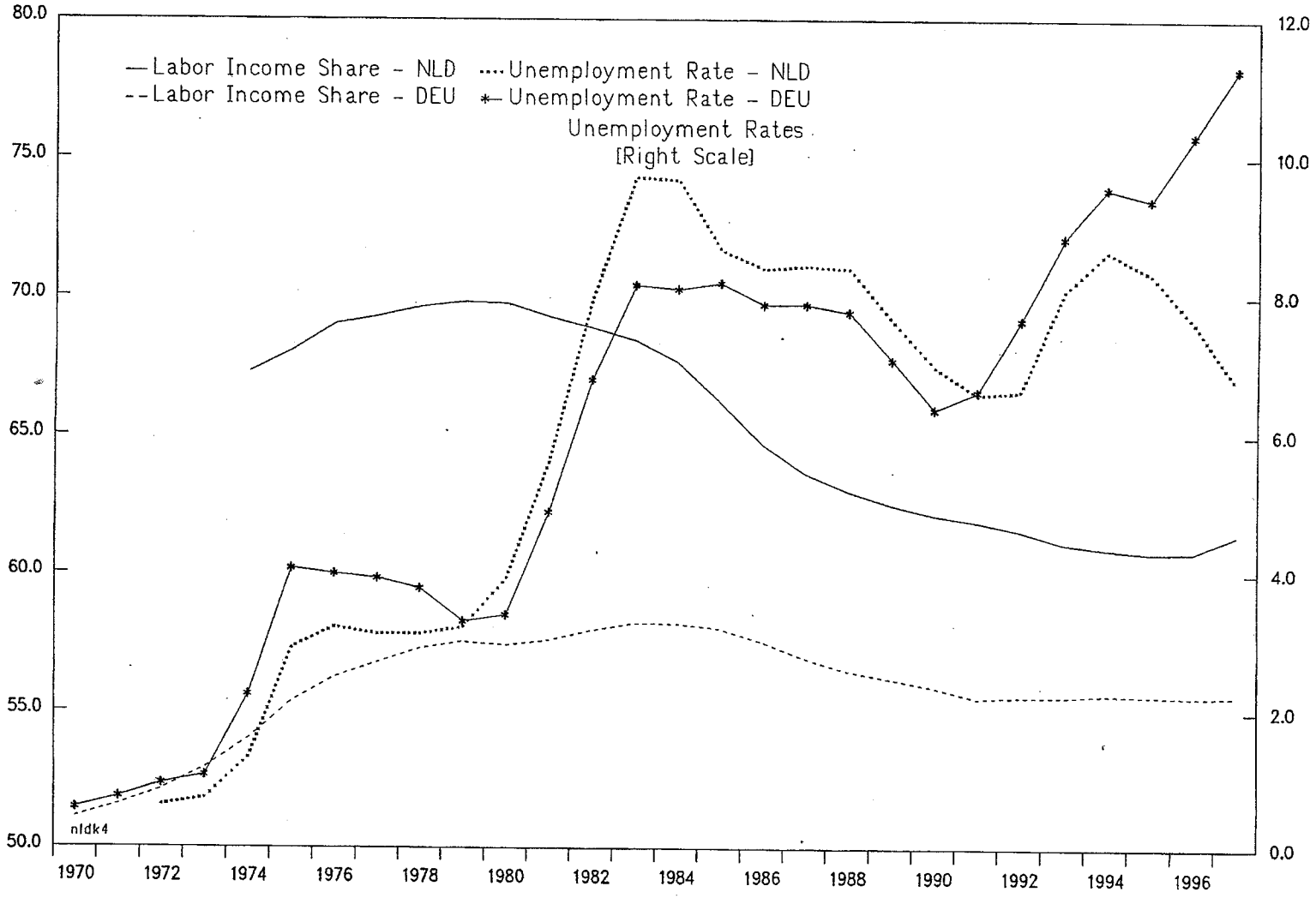
1/ Figures refer to western Germany only.
2/ Since 1989, including eastern Germany

110. Based on this framework, the reversal of earlier excessive wage increases in the Netherlands in the early 1980s and shifts in German wage setting in the aftermath of unification in 1989 have been the most important shocks that help explain the 1970–97 relative CPI changes. A more detailed overview of the relevant divergences between the two economies is presented below.

- During the 1970s, the Netherlands was subject to a wage-price spiral, which was only partly reflected in nominal devaluations, as the monetary authorities were reluctant to accommodate this inflationary process (Table 23). Increasing wage costs resulted in a sharply increasing labor income share and weakened the business sector (Figure 17). The subsequent slowdown in employment induced by the 1979–80 oil price shock and the world recession was more pronounced in the Netherlands than in Germany. This shock, however, triggered a **turnaround in Dutch wage setting**. Following a 1982 framework agreement on wages between unions and employers' organizations, the slowdown in wage increases was more pronounced in the Netherlands than in Germany, and from 1983 to 1991, Dutch nominal and

FIGURE 17
NETHERLANDS

Labor Income Shares and Unemployment Rates



Sources: IMF, World Economic Outlook; and OECD, Analytical Database.

Countries are: NLD=Netherlands, DEU=Germany.

real wages rose less.[48] Accordingly, higher Dutch nontraded goods price and CPI inflation in the 1970s was followed by lower price increases after 1982, in accordance with moderate increases in unit labor costs (ULC), and an associated increase in the participation of low- and medium-skilled workers.[49]

- **German unification** was a prime example of a large asymmetric shock within the EMS. The initial demand effect lead to a real appreciation of the mark, which took the form of increased German wage growth and inflation (see Table 23). Reflecting the high degree of integration of the two economies, the external demand effect on the Netherlands was relatively strong, and the resulting export boom helped prolong the boom of the late 1980s up to mid-1991. Consequently, the bilateral real exchange rate change remained limited (Figure 16). The positive demand shock was followed by a symmetric negative monetary shock, as the Bundesbank attempted to stem the inflationary process, and other ERM countries followed the increase in interest rates.

- **Oil price changes** have affected Dutch and German economies and inflation differently, both through their terms-of-trade effect, and through their effect on domestic energy prices. As is evident from Figure 18, oil price changes were mirrored in the German terms of trade, while, given roughly balanced energy trade, the Dutch net trade prices were not affected much.[50] However, as about three-quarters of gas export revenue was captured by the government, the terms of trade for the business sector did deteriorate substantially in 1973 and 1979–80, fueling economic downturns, and negating an opportunity to limit the devaluation need vis-à-vis the mark. The German terms-of-trade changes were reflected in a 1979 real effective depreciation of the mark and a real appreciation in 1986. Given the exchange rate link, the Netherlands followed these adjustments. Dutch consumer price inflation has reacted to oil price changes with a time lag, as natural gas features more prominently in Dutch than in German consumption, and Dutch gas price adjustments have been based on discretionary policy decisions.

- At times, **tax policies** have exerted significant sudden changes in relative price levels; an example was the 1989 increase in German excise duties, while VAT rates were reduced in the Netherlands.

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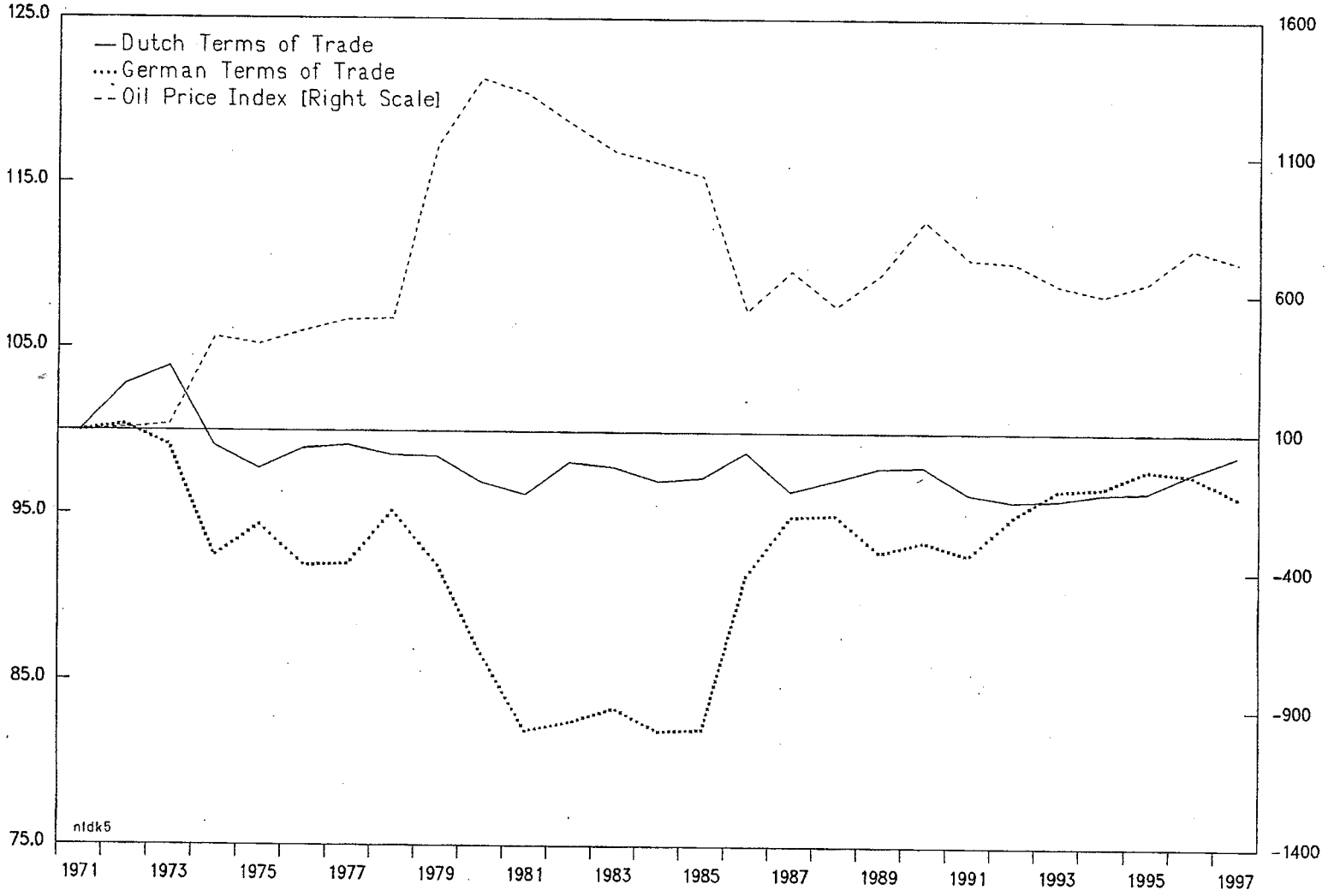
[48]Some wage moderation actually started already before that, during 1977–79.

[49]Changes in unit labor costs reflect both wage cost adjustments and productivity increases. In explaining CPI developments, we focus on unit labor costs as these provide the link between wage changes and price changes.

[50]Especially before 1982, Dutch natural gas export prices reflected oil price changes only with a lag, explaining the initial terms-of-trade deterioration in 1973 and, to a lesser extent, 1979.

FIGURE 18
NETHERLANDS

Dutch and German Terms of Trade and Oil Price Index



Sources: IMF, International Financial Statistics; and World Economic Outlook.

• As is clear from Figure 19, until 1993, the turning points of the Dutch and the German **business cycles** generally coincided. Following the crisis of the early eighties, both countries recovered at approximately the same speed, until they were both hit by the less severe economic slowdown of 1984–87. Only after 1993 is there a strong recovery in the Netherlands that is not mirrored by German developments. High consumer confidence and sustained wage moderation helped lift the Dutch economy out of the 1991–93 recession. In Germany, on the other hand, excessive real wage costs have continued to hamper economic growth. This helps explain the stabilization of Dutch-German price ratios in recent years, as Dutch inflation has edged up, while German inflation has declined. During cyclical upturns, relative nontraded goods prices are likely supported by wage pressure—and, more fundamentally, the associated demand increase for nontraded goods can be satisfied only by increased domestic supply which requires a relative price increase.

111. The sequence of events that shaped Dutch-German real exchange rates is also reflected in Dutch and German ULC-based real effective exchange rates as depicted in Figure 20. Wage adjustment was reflected in real depreciation of the guilder from the late 1970s up to 1984. Since then, the ULC-based real effective exchange rate has remained fairly stable, while the mark has appreciated considerably in real terms.[51]

112. Suggestions that—given a largely fixed nominal exchange rate—the recovery in the Netherlands based on a low wage cost strategy amounted to a beggar-thy-neighbor policy, whereby unemployment is lowered at home at the expense of an increase in trading partner countries, such as Germany, appear to be misguided. First, wage moderation in the Netherlands was required to address the severely distorted labor market; and would have increased employment even if the economy had been closed. This is supported by the domestic employment contribution of the nontradables sector[52] and the cost-induced shift towards more labor intensive production.[53] Second, whereas the current account indeed improved at the start of the wage moderation period, this merely restored the pre-1976 surplus (see Chapter I). And after 1984, as employment creation took off, the real effective exchange rate did not change much, and only relative to Germany was there an ongoing improvement in comparative labor costs. Third, for a real depreciation associated with an increase in total

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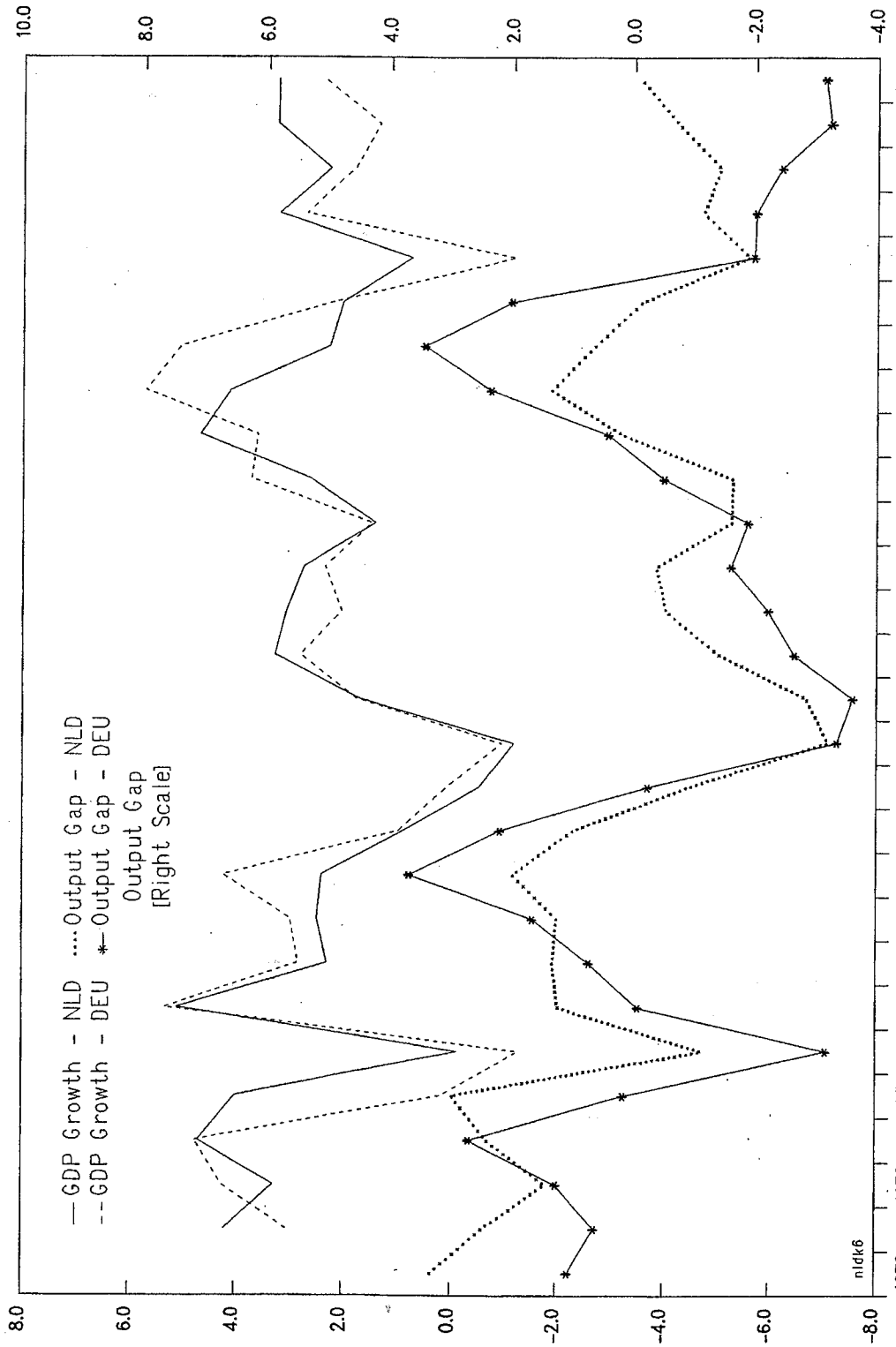
[51]See de Grauwe and Vanhaverbeke (1990).

[52]A reduction in wage costs and an increase in the effective supply of labor favors the production of nontraded goods and services, as these make relatively intensive use of this production factor. This is similar to the familiar Rybczynski theorem in international trade theory, and is associated with lower relative nontradables prices, shifting domestic demand towards these goods. For an unemployment decrease resulting from cutting above-equilibrium real wages, the analysis is more complex, but the outcome is similar, see Bhagwati and Srinivasan (1983), pp. 214–218.

[53]See International Monetary Fund (1997), Chapter IV.

FIGURE 19
NETHERLANDS
Cyclical Indicators (A)

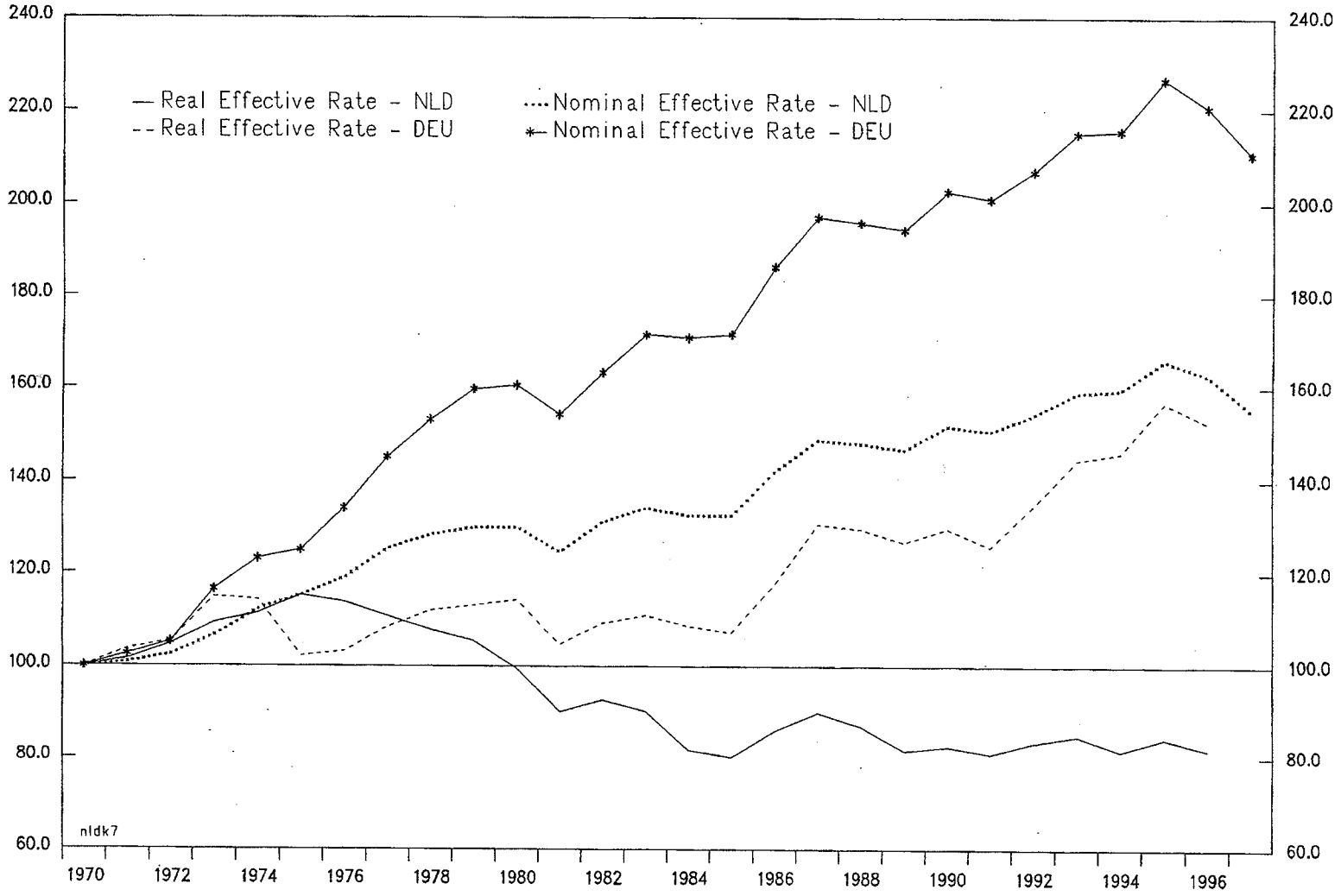


Source: OECD, Analytical Database.

Countries are: NLD=Netherlands, DEU=Germany.

FIGURE 20
NETHERLANDS

Effective Exchange Rates



Source: IMF, International Financial Statistics.

Countries are: NLD=Netherlands, DEU=Germany.

employment (as opposed to one associated with a contraction in domestic absorption), there is no a priori theoretical presumption of a resulting current account improvement, as both domestic absorption and production would increase at a given trade balance.

113. Turning to financial asset markets, the long-term interest rate differential with Germany has gradually declined, and virtually disappeared since 1988 (Figure 15). The convergence of borrowing costs and increased capital mobility have also induced a convergence in the rates of return to capital. As the returns on fixed assets are linked to national economic growth and production costs, diverging price changes of these assets (i.e., real estate and stock prices) will reflect these factors, eliminating differences in the rates of return. Accordingly, relative Dutch-German stock prices show sharp movements, reflecting relative economic performance—rising in the 1980s until the Netherlands was struck relatively severely by the recession at the end of the decade, and increasing again after the German unification boom wore off in 1992 (Figure 21).

D. Underlying Structural Divergences

114. Rather than looking at actual historic price divergences, most empirical studies of optimum currency areas focus on the underlying economic characteristics that reveal either the susceptibility to, or the capacity to adjust to, asymmetric shocks.[54] Such shocks can stem from local disturbances (e.g., in wage setting) or from differences in the economic structure that imply a different reaction to common shocks. Useful criteria, applied below, include similarities in the production and trade structure and the intensity of bilateral trade relations. Factor mobility, fiscal stabilizers, and wage-price flexibility are common criteria for evaluating a region's capacity to absorb asymmetric shocks (addressed in the next section).

115. The correlation coefficient between Dutch and German real GDP growth, which provides a broad picture of the degree to which the two economies have been subject to asymmetric shocks and cycles, has generally been high in comparison with other immediately neighboring countries (Table 24, last column).[55] However economic growth has diverged between Germany and most neighboring countries in recent years. For the Netherlands, the correlation coefficient decreased from 0.79 in 1971–82, and also from 1971–90, to 0.65 in 1983–96. This recent divergence reflects the initial growth effect of unification on Germany,

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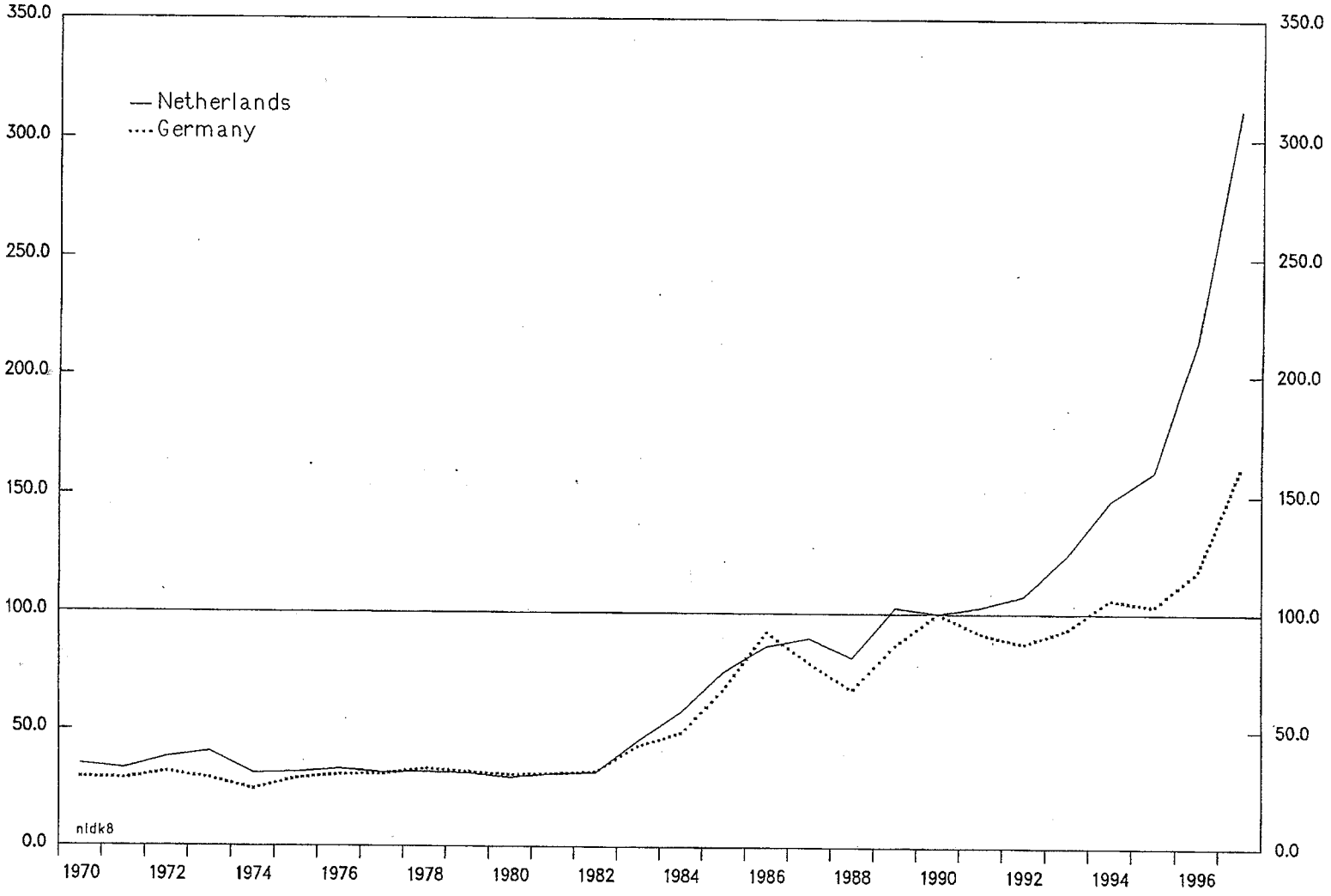
[54]For an overview of this literature, see de Grauwe (1997).

[55]Bayoumi (1992), however, warns that the simple correlation coefficient conflates shocks hitting the economies and the responses to these shocks. In addition, shocks originating from diverging monetary policies should not be included in the evaluation, as these would be eliminated by currency unification.

FIGURE 21
NETHERLANDS

Share Price Indices



Source: IMF, International Financial Statistics.

and the following recession that has hit Germany relatively hard. Growth convergence between the Netherlands and comparator countries has also decreased, as the Dutch economy has performed relatively well since the early 1980s.

Table 24. Correlation Coefficients for Growth Between EU Member States

	Dutch GDP Growth			German GDP Growth 1/		
Relative to:	1971–82	1983–96	1971–96	1971–82	1983–96	1971–96
Netherlands				0.79	0.65	0.73
Belgium	0.85	0.63	0.75	0.70	0.70	0.68
France	0.82	0.66	0.64	0.82	0.57	0.64
Denmark	0.53	0.15	0.44	0.78	-0.15	0.45
Austria	0.76	0.61	0.68	0.72	0.84	0.72
Memorandum item: Standard Deviation	2.11	1.05	1.60	2.30	1.84	2.02

Sources: IMF, World Economic Outlook; and Bundesbank.

1/ Figures refer to western Germany only.

116. A second comprehensive measure to evaluate asymmetric shocks is the variability of the real exchange rate, on the assumption that it broadly reflects country-specific real shocks.[56] Eichengreen (1990) showed that the degree of bilateral real exchange rate variability among European countries was significantly higher than among different regions within the United States, which served as a benchmark. The only exception to this finding was the guilder-deutsche mark relation in the 1980–87 period, for which the standard deviation was 1.05, compared to between 1.30 and 1.54 for inter-regional real exchange rates in the United States.[57] These results are similar to those presented in Table 25. However, it also appears that this episode ended with German unification.

[56]See footnote 4. Bofinger (1994) argued that this assumption is not justified; particularly under floating exchange rates, there was no empirical evidence of a stable relation with real fundamentals. Moreover, monetary shocks—that would be eliminated under monetary union—did seem to play an important role.

[57]See also Von Hagen and Neumann (1994), who showed that during the 1980s, the conditional variance of exchange rate shocks vis-à-vis Germany and the degree of first-order autocorrelation in monthly real exchange rates were relatively low for the Netherlands, Belgium, Austria, and France, pointing to a high degree of economic integration.

Table 25. Real Exchange Rate Variability vis-à-vis Germany

(Standard deviation of the bilateral CPI based real exchange rate)

	1970–82	1983–96	1983–96	Memorandum item: 1980–88
Netherlands	5.38	2.47	4.05	1.15
Belgium	5.12	1.72	4.21	4.39
France	4.42	3.52	3.45	2.79
Denmark	4.03	3.80	5.37	3.63
Austria	5.99	2.37	8.37	4.31

Sources: IMF, World Economic Outlook; and Bundesbank.

1/ Figures refer to western Germany only.

117. The "uniqueness" of the Dutch situation should not be exaggerated, however, judging by the variability in relative growth and the real exchange rate of the selected EU countries, which have also experienced rather similar shocks to Germany.

118. Turning to the underlying causes of real divergences, clear differences between the Dutch and the German production structure may limit the benefits of currency unification. Germany has a larger manufacturing sector, in particular for investment goods (Table 26). The Netherlands has large natural gas production, and, overall, produces more homogeneous products. Importantly, this composition also leads to a somewhat different growth pattern of the two countries over the cycle: demand for Dutch output is less cyclical (agricultural and food products) and responds relatively strongly to the early stage of an economic recovery (chemicals and other semi-manufactures). This is one factor behind the relatively low variability of real GDP in the Netherlands. Generally, the Netherlands and Germany are considered well diversified, notwithstanding their distinct production patterns. As a high degree of industrial diversification limits the economy-wide impact of sectoral disturbances, this feature constitutes a stabilizing factor for both economies.

119. Openness and the country distribution of trade relations affect the suitability of an exchange regime in various ways. Mckinnon (1963) argued that countries that are open in the sense of having a high proportion of tradables in domestic expenditure would be suitable for currency unification, as real wages would then be largely invariant to the nominal exchange rate, and exchange rate adjustments would result in undesirably high price instability. This argument is fully in line with the Dutch experience of wage-price cycles in the late 1970s. Openness also implies that domestic aggregate demand shocks

quickly spill over to neighboring countries, dampening their impact.[58] Clearly this argues for monetary unification vis–à–vis a country's main trading partners. With combined imports and exports amounting to 101 percent of GDP in 1996, the Netherlands is a very open economy. Trade is skewed towards other EU countries, with Germany accounting for 28 percent of exports and 21 percent of imports (Statistical Appendix Table 24, SM/98/104).

Table 26. The Sectoral Composition of GDP in the Netherlands and Germany 1/

	1980		1995	
	Netherlands	Germany	Netherlands	Germany
Agriculture	4.3	1.4	4.6	...
Energy, Water, Mining	5.0	2.8	5.0	2.6
Manufacturing	19.6	30.2	19.0	26.4
Construction	5.9	5.4	5.0	5.0
Government	11.0	11.0	10.3	10.2
Other	57,5	43.8	59.4	...

Source: OECD, Economic Surveys.

1/ Figures refer to western Germany only.

120. The high degree of integration is reflected in largely synchronized aggregate demand cycles. Several studies have confirmed that the cyclical behavior of a core group of ERM countries has exhibited a high degree of synchronization since the late 1970s, both compared to earlier periods and to other country groups.[59] This group comprises

[58]This argument relates to the marginal net import share in domestic demand rather than to the share of tradables or actual trade in total income. The latter, however, is the basis for gains from currency unification through savings on transaction costs and reduced exchange uncertainty.

[59]See Formby, Norrbin, and Sakano (1993) and Bayoumi and Prassad (1995). Instead of using simple measures of growth correlation, in these analyses economic fluctuations are decomposed, to separate country specific shocks, industry specific shocks, and aggregate disturbances. Bayoumi and Prassad found that in both the United States and the EU, aggregate shocks accounted for slightly more than a third of total short-term growth fluctuations. Bayoumi and Eichengreen (1992), using a VAR approach to estimate demand and supply shocks, as well as policy responses, also found a high correlation of shocks with

(continued...)

Germany, the Netherlands, Belgium, Denmark, Austria, and, with less unanimity among the studies, France and the United Kingdom.

121. Overall, and perhaps surprisingly for a much larger country, Germany is more specialized than the Netherlands in terms of its sectoral trade balances. Sectoral export-import ratios, shown in Table 27, reveal the economies' susceptibility to terms of trade shocks. The difference for energy is most important: Germany is a large net importer, while the Netherlands is self-sufficient. As a result, oil price shocks have dominated their relative terms of trade developments.

Table 27: Net Export Position by Sector for the Netherlands and Germany
(100 denotes self sufficiency)

	1980		1995	
	Netherlands	Germany	Netherlands	Germany
Agriculture	173	56	176	58
Crude Materials, Energy, Mining	93	28	109	32
Chemicals	145	164	141	165
Manufactured goods	78	115	88	111
Machinery and transport equipment	78	178	91	166
Miscellaneous manufactures	67	86	82	77

Source: OECD, Economic Surveys.

1/ Figures refer to western Germany only.

122. In addition to these economic factors, institutional differences, in particular in wage determination, can also give rise to country-specific shocks. While both the end of the Dutch wage-price spirals in the late 1970s and the German post unification wage boom were rather singular events, they were not unrelated to the institutional setting. In principle, the wage bargaining processes in Germany and the Netherlands are rather similar, with national accords providing a framework for decentralized negotiations on sectoral labor agreements. In both countries employers are strongly organized, and work councils at the firm level have a similar function and structure. However, in Germany these work councils have a strong influence on union behavior, and the increased demand for

[59](...continued)
Germany for a core group comprising the Netherlands, Belgium, Denmark, and France.

skilled workers following German unification strengthened the position of these groups even further. In the Netherlands, on the other hand, the government has a strong presence in the bargaining process. These differences help explain both the German wage shock after the unification and the relative sensitivity of Dutch wage setting to the position of outsiders.[60] In addition, as stressed by Calmfors (1993), in small open economies, foreign competition propels wage restraint, by strengthening the unemployment repercussion of excessive real wages—a lesson learned in the Netherlands after the dramatic rise in unemployment of 1982. The change in the exchange rate regime in the early 1980s may also have contributed to the elimination of Dutch wage shocks of the 1970s (to the extent that, rather than just accommodate given increases in real wages, a flexible exchange regime may induce labor unions to aim for higher wage increases). Finally, structural reform policies played a key role in shifting labor market behavior (see below).

123. Germany and the Netherlands have a rather similar financial structure, reflected in similarities in monetary transmission. In both countries, almost all credit is in the form of loans, especially medium- and long-term bank loans in domestic currency, as opposed to securities. In 1993, fixed rate loans to firms and households accounted for 65 percent of the total in Germany and 75 percent in the Netherlands (compared to 27 percent in the United Kingdom, for example).[61]This similarity in transmission has bolstered the sustainability of the peg, as the common monetary policy has affected the countries largely symmetrically.[62] Also, in both countries, most business investment is financed internally within the firm, limiting the importance of monetary transmission in general.

E. Adjustment Mechanisms and Policies Under the Peg

124. The above overview of diverging shocks and cycles provides the background to a discussion of the need for, and use of, adjustment policies in the Netherlands. As mentioned earlier, up to 1983 exchange rate adjustments were used, although reluctantly and to a limited extent. Thus the decline in competitiveness in the 1970s was partly alleviated through a series of small devaluations. However, as the monetary authorities emphasized, given real wage rigidity, these devaluations were rapidly incorporated in further wage increases, without effecting a lasting improvement in competitiveness and merely resulting in higher inflation.[63] In fact, the resulting wage spiral implied a

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[60]See Soskice, Hancké, Trumbull, and Wren (1997), and van de Meerendonk (1997).

[61]Borio (1995).

[62]Ramaswami and Sloek (1997) confirmed this similarity for a group of countries that also included Belgium, Austria, Finland, and the United Kingdom.

[63]See Szasz (1981).

deterioration in competitiveness. These considerations led to the abandonment of the exchange rate instrument in the early 1980s.

125. With Germany providing a nominal anchor, the onus has been on the Netherlands to defend the peg and provide for effective alternative adjustment mechanisms. In this respect, a distinction should be made between addressing the severe structural labor market problems that had built up by the early 1980s and coping with cyclical developments and temporary shocks. The orchestrated wage moderation since 1982 has been crucial to redressing the increase in structural unemployment and to increasing participation. However, it took many years (and three successive governments) for the required consensus to develop, and given the combination of low inflation rate dictated by the peg and nominal wage rigidity, the required adjustment in real wages could come about only very gradually.[64]

126. Overall, until 1993, the need to adjust to asymmetric shocks vis-à-vis Germany was limited (see Section C and Figure 22). As a result, German monetary policy was also broadly appropriate for the Netherlands—only since 1996 are the resulting monetary conditions unsuitable for the Netherlands, as illustrated by the monetary conditions index in Figure 23. Moreover, growth disturbances have not been excessive in the Netherlands: the standard deviation of real output growth during 1983–97 was 1.0, compared to 1.8 for Germany. In this context, the positive demand effect of German unification when the 1988–89 economic upturn was wearing off was a timely stroke of good fortune. Also, the relatively cyclically insensitive production composition partly shielded export demand against the 1993 recession. And when, in 1996, exports slowed down, domestic demand took over.

127. International factor mobility provides several important adjustment mechanisms. Labor mobility among EU countries, including between the Netherlands and Germany, is low compared to mobility within countries, and has hardly cushioned local shocks.[65] On the other hand, high capital mobility allows for temporary relief through the smoothing of spending, both by households and, potentially, through the government budget (by government borrowing at a given common interest rate). Such fiscal stabilization can be an effective tool in offsetting unsynchronized cyclical developments in aggregate demand.[66] For structural shocks, however, ultimately wage-price flexibility and resource reallocation

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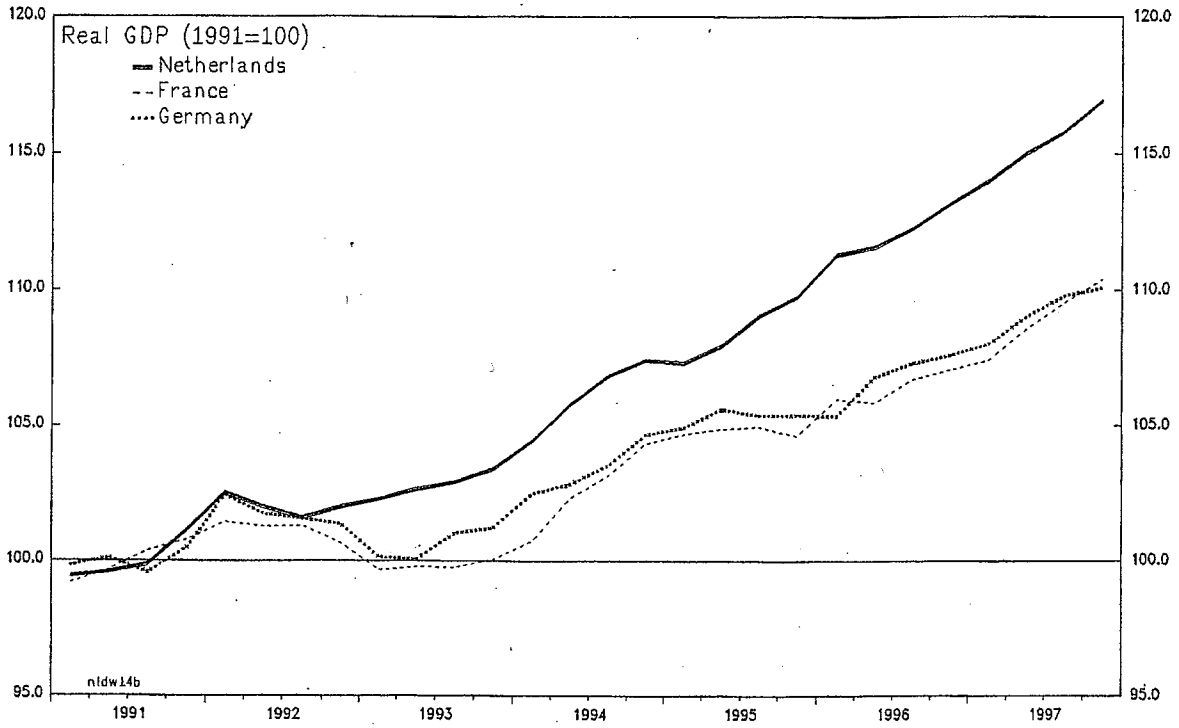
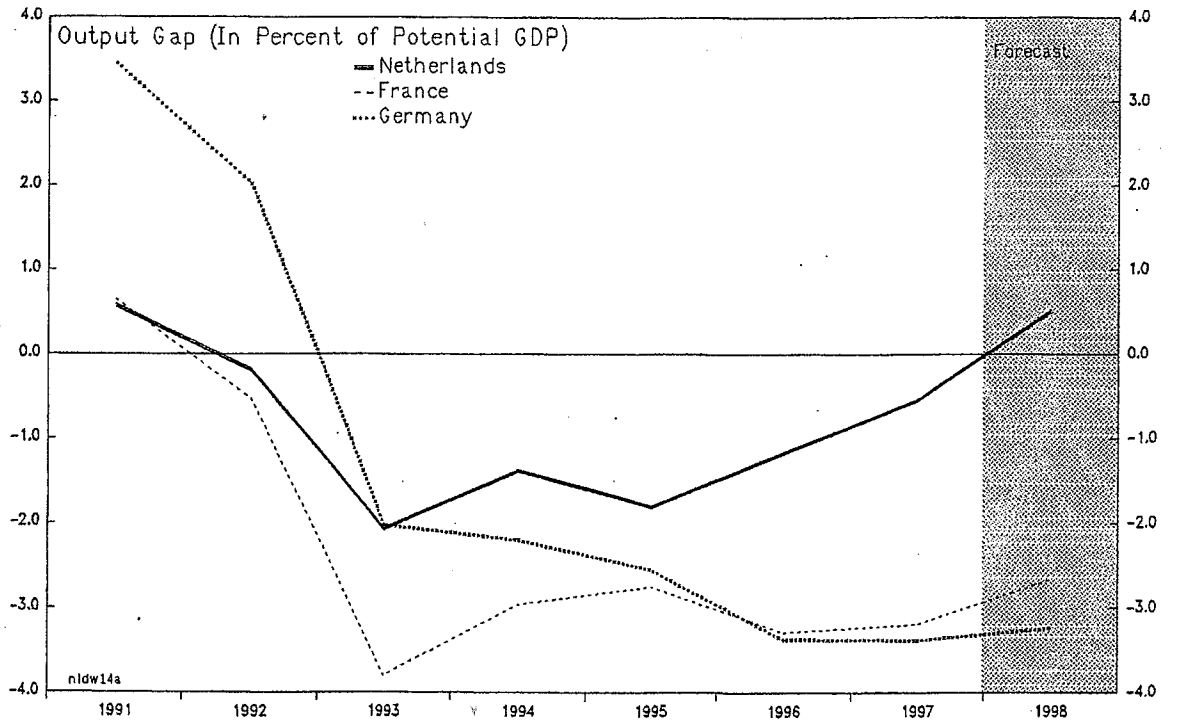
[64]In fact, given the 1982 agreement on wage restraint, the 1983 devaluation may actually have been effective in reducing real wage costs and promoting competitiveness (disregarding its effect on interest costs).

[65]See Molle and Zandvliet (1993).

[66]The alternative of having explicit fiscal transfers among governments does not play an important role in the EU.

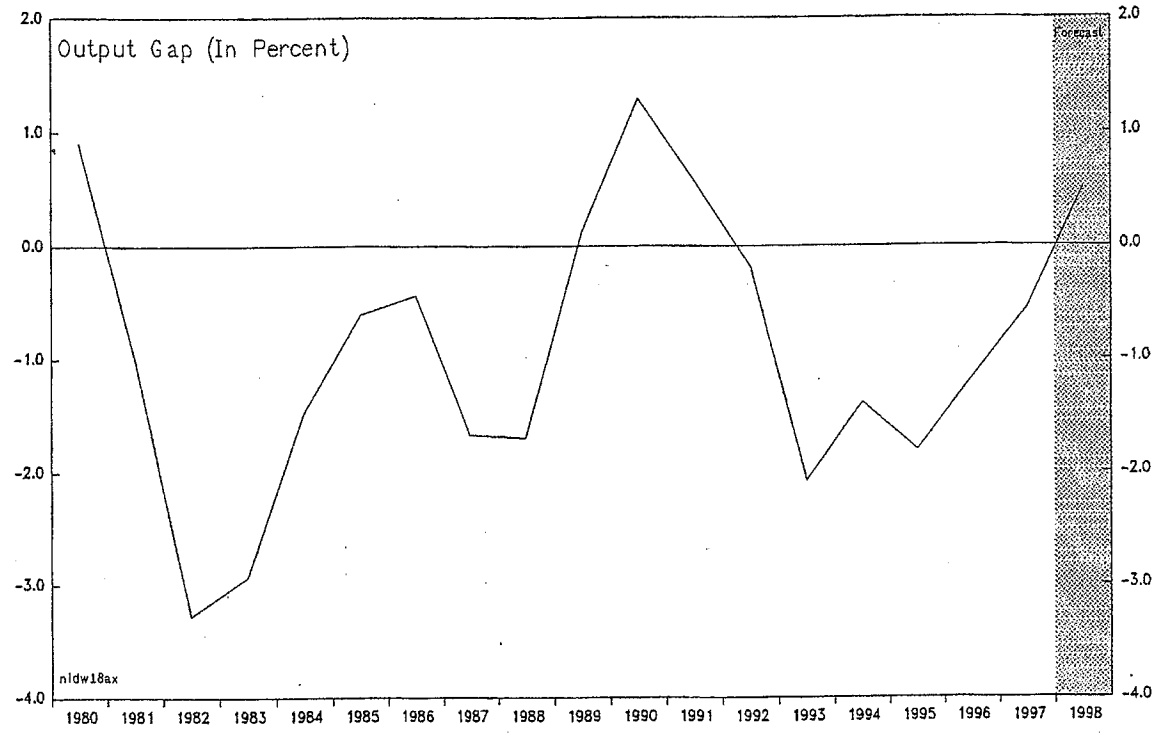
FIGURE 22
NETHERLANDS
Cyclical Indicators (B)

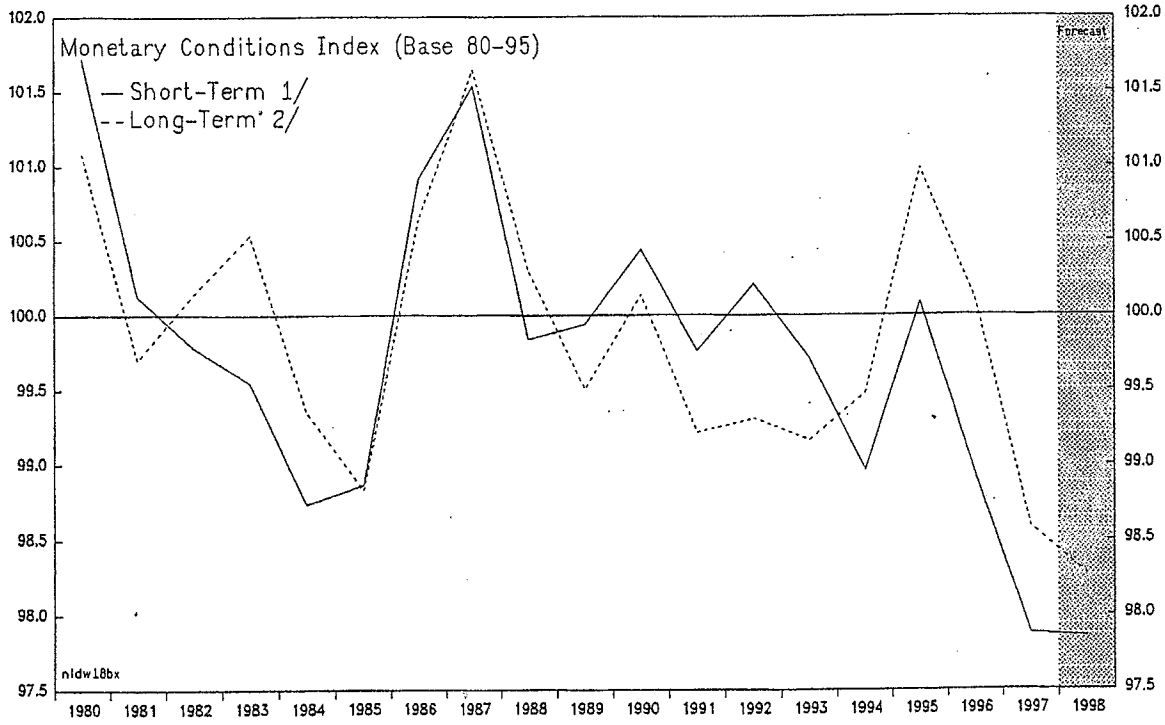




Sources: IMF, World Economic Outlook and International Financial Statistics.

FIGURE 23
NETHERLANDS
Output Gap and Monetary Conditions





Source: IMF, World Economic Outlook.
1/ The index is the weighted moving average of real short-term interest and real effective exchange rates (deflated by CPI); weights reflect the ratio of exports of goods and services to GDP.
2/ The index is the weighted moving average of real long-term interest and real effective exchange rates (deflated by CPI); weights reflect the ratio of exports of goods and services to GDP.

will be required. Moreover, a durable fiscal response to cushion the impact of such shocks likely delays the adjustment, as was the case in the Netherlands after the first oil price shock. A misguided fiscal stimulus reinforced the misalignment by promoting continued wage and price increases, while moderation was required.

128. After a period in the 1970s, when fiscal policy was actively used for stabilization purposes, resulting in a sharply increasing deficit by the end of the decade, fiscal consolidation became the overriding objective. The actual deficit was reduced from 9.5 percent of GDP in 1982 to 1.4 percent in 1997.[67] However, there is a conflict between the fiscal rules that have been instrumental in reducing the deficit since 1982 and cyclical stabilization. The practice in fiscal policy in the 1980s to up to 1994 of targeting the actual fiscal deficit, rather than a cyclically adjusted measure, did not allow for automatic, let alone additional discretionary, fiscal stabilization. As a result, fiscal policy has often been procyclical (Figure 24); this was especially the case during 1978–83, when the structural deficit increased sharply from 1978 to 1980 and was then contained once the recession had set in. The sharp increase in the structural deficit in 1986 did not entail a corresponding fiscal impulse, as it was an immediate result of a loss of gas revenue. The increasing deficit in 1989 and 1990, however, did imply an unnecessary fiscal impulse. The subsequent fiscal consolidation in 1993 was also cyclically "ill-timed," although the confidence effects of consolidation in fact helped sustain demand.

129. Since the decision to move to EMU and the adoption of the Stability and Growth Pact, the awareness of the desirability of automatic fiscal stabilizers has grown.[68] The 1994–98 government shifted the focus of its fiscal rules to lay emphasis not on annual actual deficit targets but on an expenditure framework in which real expenditure growth was determined at the start, which was less prone to result in procyclical policies. This only eliminated the scope for automatic stabilization through government spending. However, in practice, on the revenue side, the phasing of tax cuts interfered with the operation of stabilizers. For example, tax cuts are likely to increase the 1998 structural deficit at a time when economic growth is well above potential.

130. Compared to exchange rate adjustment, wages and prices can change only sluggishly. Moreover, the moderating effect of a rise in unemployment builds up only slowly in the Netherlands, as in all ERM countries (Englander and Egebo 1993). Measures to improve labor market flexibility and, more recently, product market flexibility, have thus been helpful, both to increase labor participation over the medium term and to increase the economy's adaptability to shock (Box 7). These measures clearly contributed

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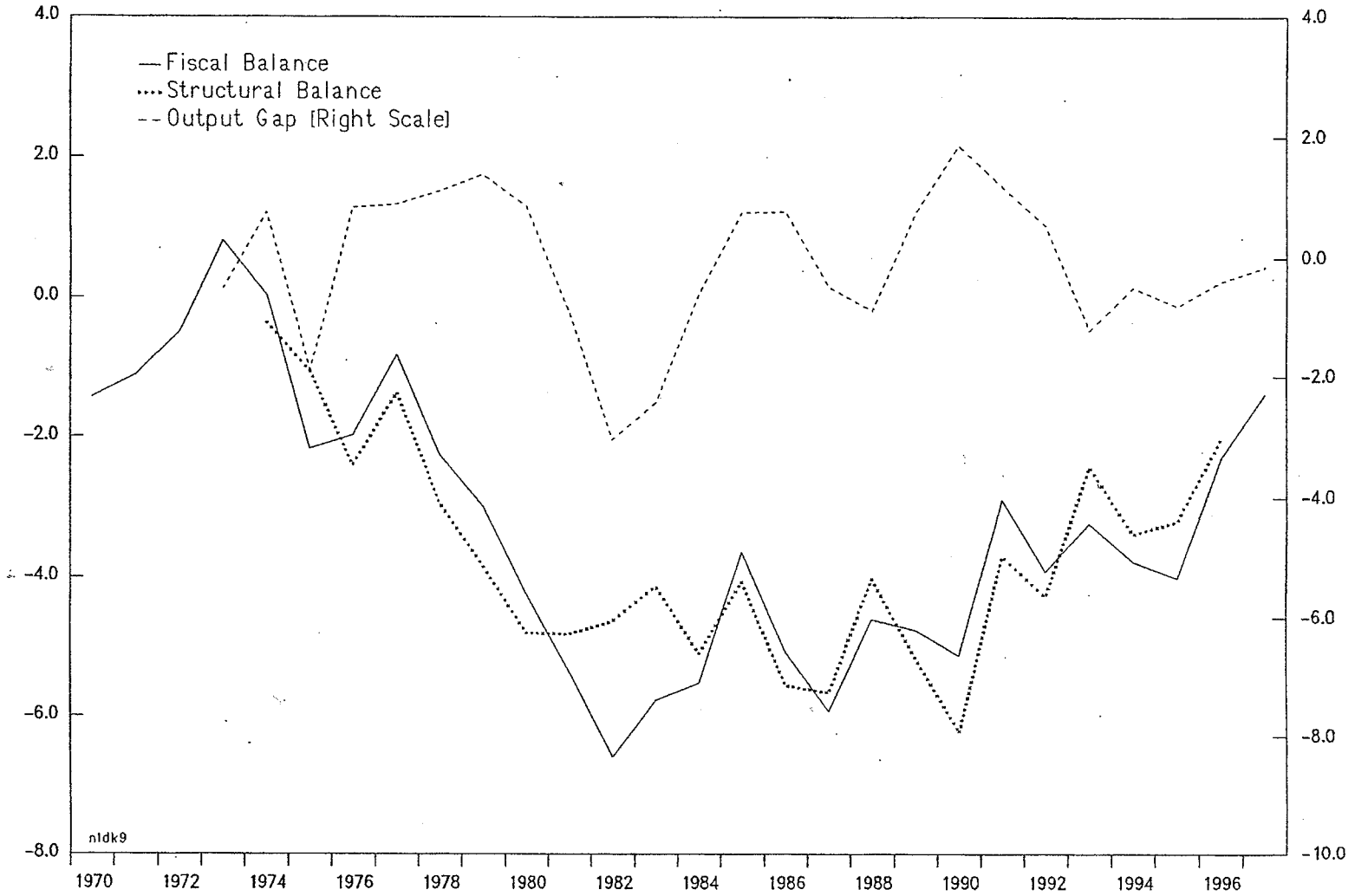
[67]The structural deficit was cut from 4.6 percent of GDP in 1982, to 1.4 percent in 1997.

[68]See Brouwer and Kremers (1993).

FIGURE 24
NETHERLANDS

Output Gap and Fiscal Balance



Source: OECD, Analytical Database.

Box 7. Key Structural Policy Reforms in 1982–97

• **Wage moderation**—which cut the labor income share in the value added by firms by 10 percentage points—was triggered by a change in labor union attitudes, in the face of mounting unemployment and a macroeconomic crisis; but fiscal and labor market reforms played a role in sustaining the change in wage behavior.

• **Labor market** and associated **social security reforms** focused on measures to encourage labor supply and job search as well as labor demand:

• Measures to improve **the supply of labor and job search** included: lowering the replacement ratio for unemployment and disability benefits from 80 percent to 70 percent; shortening the duration period for unemployment benefits; tightening eligibility criteria for social benefits, particularly disability; cutting the tax burden on persons; and, most recently, privatizing initial sickness benefits.

• Measures to stimulate **labor demand** included: substantially cutting real minimum wages, especially for youths; cutting social premiums across-the-board; reducing non-wage labor costs for the low-skilled (lowering their labor costs by currently some 5 percent), and, most recently, virtually eliminating employers' social contributions for the low-skill long-term unemployed (cutting the labor cost of such workers by 17 percent).

• **Product market deregulation** was added to the agenda more recently (longer shopping hours, tougher competition legislation, lower entry barriers, reduced administrative burden), with a view to increasing domestic competition, business creation, and jobs—notably in services.

Source: IMF Staff Country Report No. 97/69 (August 1997).

to the relative resilience of the economy during the 1991–93 downswing. However, their effectiveness in the context of the current economic boom, as well as their continued functioning during future cycles, remains to be seen.

F. The Challenge of EMU

131. EMU will imply the complete loss of a national monetary autonomy. For the Netherlands, given the undisputed currency link of the past 15 years, the change will be small. There will be no significant adjustment costs associated with joining a stability-oriented monetary union, as policy preferences and inflationary expectations are already fully in line with the expected future monetary policies.

132. The Dutch experience in a de facto monetary union has provided several important lessons and insights that will remain valuable under the new system.

- Developments in 1970s illustrated the limited effectiveness of the exchange rate as an adjustment mechanism for a small open economy in the presence of real wage rigidity. A second finding was the inefficacy of fiscal policy to address structural cost misalignments.

- Experience in the 1980s illustrated the effectiveness of subordinating national monetary policy for containing inflation, given both a fully credible peg and the Bundesbank's stability oriented policies.

- Experience in the 1980s and 1990s showed the crucial nature of labor market policies in addressing diverging shocks and cycles given a largely fixed exchange rate (especially if fiscal policy is not used, or not available, for cyclical stabilization).

- Experience of the past three decades overall is indicative of the long-term nature of structural cycles in a monetary union, as policy makers have no direct tools to adjust real wages, even in case of nominal but only partial real wage rigidity. On the upside, the example of the relative success of the post-1982 adjustment and a lasting increase in labor and product market flexibility may facilitate future adjustment.

133. There are, nonetheless, several notable differences for the Netherlands between the current and the upcoming monetary arrangement.

- EMU will be a more symmetric arrangement, and monetary policy will be tuned to conditions in the union as a whole, as compared to the Bundesbank's primary focus during most of the past 15 years on the German economy. For asymmetric shocks originating in Germany, this should be benign for the Netherlands, while for shocks that originate elsewhere in the union (or outside the former core-ERM), the Dutch-German union obviously loses an adjustment tool.

- EMU will comprise members that are more dissimilar in a structural sense than the Dutch-German union, or the extended grouping that also included Belgium, Austria, and France. This will likely complicate the design a monetary policy suitable for all member states.

- Budgetary incentives will be affected. The Stability and Growth Pact puts limitations on the scope for running budget deficits, through the stipulated deficit ceiling. Without these limits, EMU might have reduced the incentive for individual member states to pursue sound fiscal policies by reducing the exchange rate and interest rate repercussion of higher government borrowing.

- To the extent that EMU will promote integration among the member states, this will strengthen the synchronization of aggregate demand shocks, but further limit the effectiveness of fiscal stabilization at the national level. Also, as stressed by Krugman (1991), EMU may increase the regional concentration of industrial activities, and thus increase the occurrence of asymmetric shocks.

134. On balance, it appears likely that even for the Netherlands, adjustment instruments other than the exchange rate will be, if anything, needed more under EMU. In light of past experience and the differences between the old and the new monetary system, several policy issues emerge. A main issue in case of asymmetric adverse shocks affecting the Netherlands will be the scope for fiscal stabilization. In the longer run, the operation of automatic stabilizers without exceeding the agreed deficit ceiling of 3 percent of GDP will require a structural deficit of no more than 1 percent of GDP. This is, of course, fully consistent with the goal laid down in the Stability and Growth Pact of a budget "close to balance or in surplus," a goal that was also recommended by the Tenth Study Group on the Budget Margin (June 1997), a high-level civil service advisory committee. Currently, there is wide support in the Netherlands for reducing the structural deficit to no more than 1 percent of GDP by the end of the new four year government period at the latest, and aiming over time for structural balance. For the coming years, this would somewhat increase the room for automatic fiscal stabilizers (but provide no further room for counter cyclical policy). As important, however, will be the required change in fiscal policy rules and practices, to allow for fiscal stabilization, even if only through automatic stabilizers on the revenue side. As regards structural reforms, efforts to strengthen market forces in products markets are continuing. A new emphasis on fostering entrepreneurship, by removing regulatory and financial obstacles to starters, can also help bolster economic flexibility. It will be essential, finally, to press on with labor market reforms, particularly to address hard core inactivity.

G. Conclusions

135. While the monetary and exchange arrangements of the past decade and a half amount to a **de facto** monetary union, this should be distinguished sharply from EMU.

The commitment to the peg by the Netherlands was one-sided; there was no sharing of decision-taking; and there was no convergence progress ahead of time to establish credibility on the Dutch side. Quite the contrary. The Netherlands entered the arrangement to import credibility in circumstances of economic crisis—indeed it was this sense of crisis that triggered a far-reaching program of structural as well as macroeconomic reforms.

136. The Netherlands has benefited greatly from the peg. The abandonment of monetary autonomy was followed by a period of price stability and a sustained recovery in output and employment—one of the success stories of the 1980s and 1990s. However, the approach to economic management adopted by the authorities was not classic in one interesting respect: rather than let fiscal stabilizers operate under the de facto monetary union, they concentrated on giving resilience to the economy through structural reforms in the public finances and the real economy. The results have been impressive, because the reforms proved mutually reinforcing, and had powerful confidence effects. But it should also be kept in mind, that the strains on the system have been limited, not the least because, in the early 1980s, the Netherlands and Germany were already notably suitable partners for monetary union. In particular, cyclical disturbances have mostly been synchronized.

137. The impact of changes in the labor market has been sufficiently far-reaching to constitute, in itself, an asymmetric shock to the economy. Thus, while prices of tradables have converged, economic growth and asset prices have recently moved ahead of the levels in Germany—implying that the monetary conditions flowing from the peg are currently too easy. Moreover, this is occurring at a time when the stance of fiscal policy is mildly pro-cyclical. In these circumstances, the earlier abstinence from use of fiscal stabilizers needs to be rethought, and fiscal policy redirected, to underpin macroeconomic stability.

138. At the end of the day, flexibility in the real economy and the operation of fiscal stabilizers emerge as complements in coping with the loss of monetary authority. The challenge for the future is thus double. First, to deepen the process of structural reform in labor and product markets, as is currently planned. Second, to ensure that the fiscal stance contributes to preserving stability, while continuing to chart a decisive medium-term path for the public finances that blends further deficit reduction with a continuing lightening of the tax burden on labor income.

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