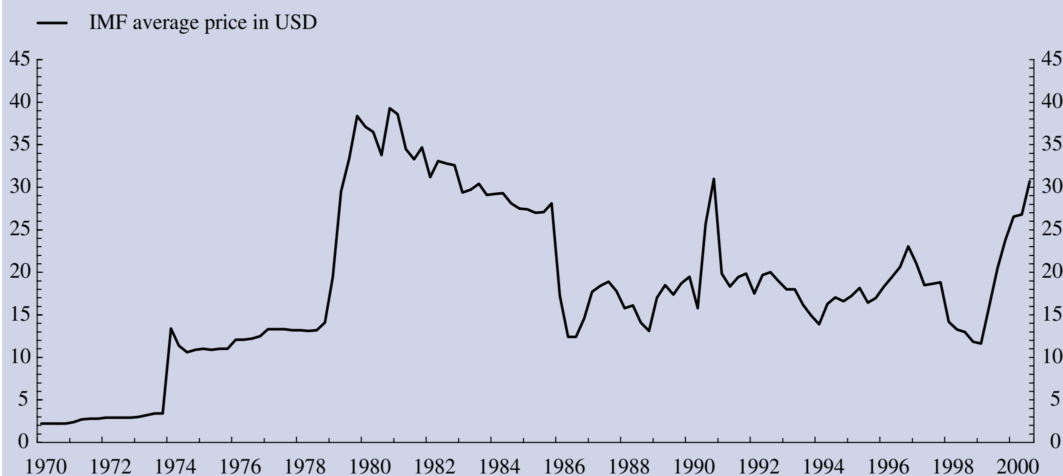
Box 2

Lessons to be drawn from the oil price shocks of the 1970s and early 1980s

Since January 1999, i.e. in little more than a year and a half, the price of crude oil has more than tripled in US dollar terms (see Chart A). Since oil price increases of a similar magnitude also occurred in the 1970s, this box analyses what lessons can be drawn from these previous oil price shocks. Although any interpretation of aggregated euro area data for the 1970s and 1980s must be made with caution, for reasons of comparison the attention in this box is focused mainly upon the stylised average response of the 11 countries which currently form the euro area (Euro 11) to the shocks.

Chart A: Oil price developments

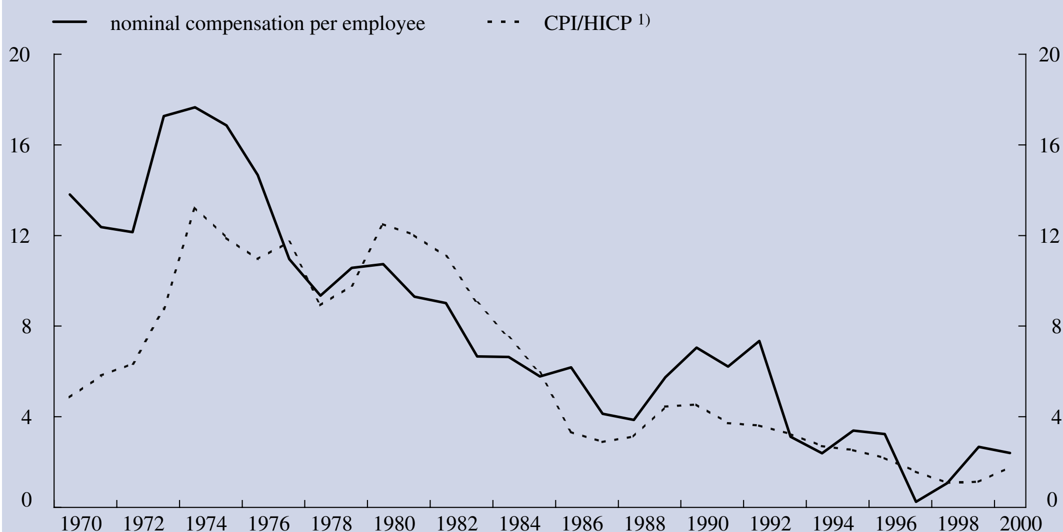
(per barrel; quarterly data)



Source: IMF.

Chart B: Wage and price developments in the Euro 11

(annual percentage changes; annual data)



Source: European Commission.
Note: European Commission spring 2000 estimate/forecast for nominal compensation per employee for 1999 and 2000, and HICP forecast for 2000.
1) HICP series starts in 1990.

The first oil price shock

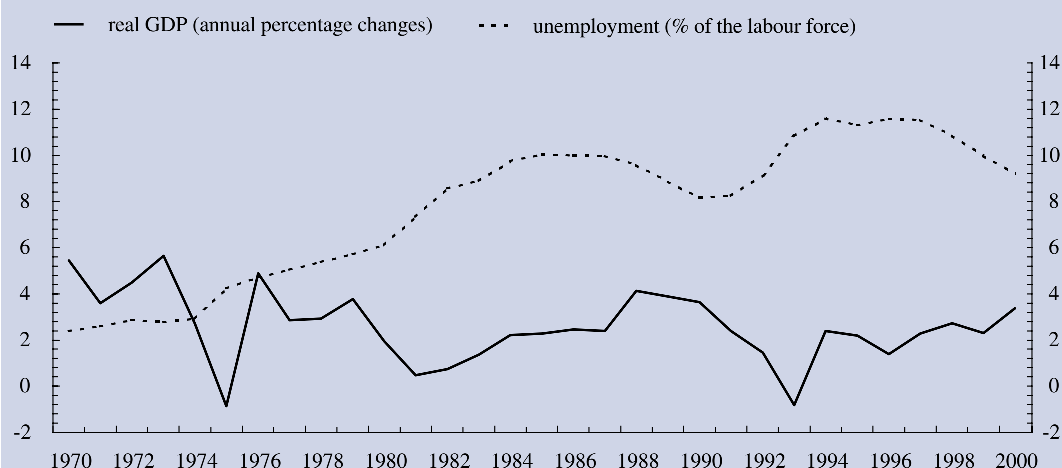
Between 1974 and 1978 the average crude oil price per barrel, according to the average crude oil price series computed by the International Monetary Fund (IMF) was in the range of USD 10 to USD 15. This increase, on average, represented an approximate fivefold rise in respect of the range observed between January 1971 and September 1973.

In the period following the first oil price shock, the annual rate of change in the Consumer Price Index (CPI), as an average for the Euro 11, increased from 6.3% in 1972 to 8.7% in 1973 and 13.2% in 1974. Thereafter, it only fell back gradually and remained high throughout the 1970s (see Chart B). All Euro 11 countries experienced an increase in consumer price inflation, but the impact differed significantly between them.

On average, the oil price increase in the early 1970s had strong negative inflationary consequences, as it occurred in an environment of overheated economic activity in which consumer price inflation and wages were already rising. First, at the outset of the first oil price crisis, real GDP in the Euro 11 increased by 5.7% in 1973 following an average rate of growth of 4.5% in the years 1970 to 1972 (see Chart C). Second, wage growth stood at very high levels, as the annual rate of increase in compensation per employee was 12.2% in 1972 and rose to 17.3% in 1973 (see Chart B). Moreover, after the oil price rise, wage rounds tried to compensate for the loss in disposable income resulting from rising oil prices. In 1974 the year-on-year rate of nominal wage increases remained very high, at 17.7%, and only declined slowly thereafter. In real terms, wages in the Euro 11 increased by 4.2% on average in 1974 and 1975.

Chart C: Real GDP growth and unemployment in the Euro 11

(annual data)



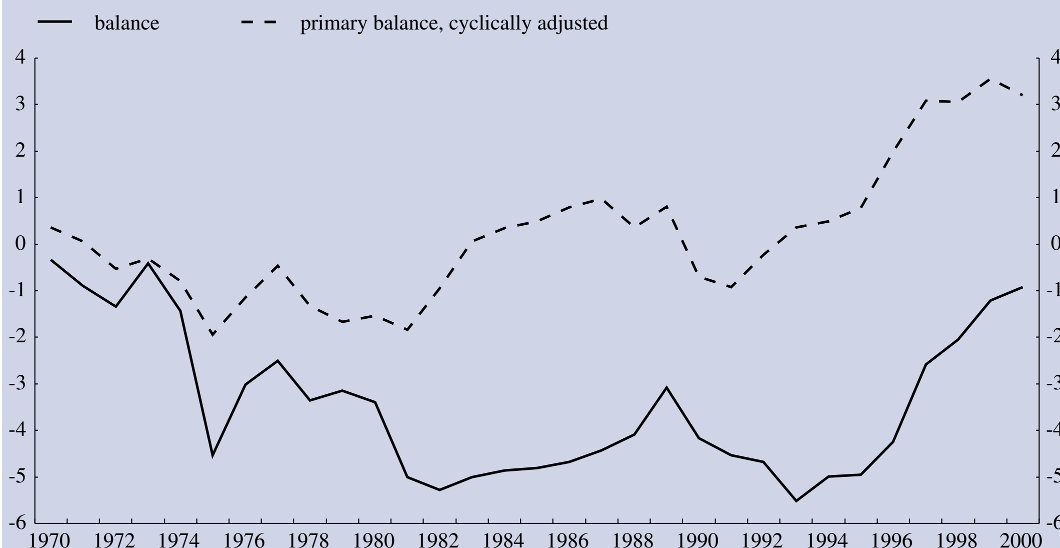
Source: European Commission.
Note: European Commission spring 2000 estimate/forecast for 1999 and 2000.

Against this background of fast increases in consumer prices and wages, the reaction of fiscal and monetary policy was, in most of the countries which now form the euro area, inadequate.

Looking first at fiscal policy, budgetary policies attempted, on average, to cushion the negative income effects of the increase in oil prices. This led to a significant increase in the average general government deficit in the Euro 11, from a position of near balance in 1973 to a deficit of more than 4% of GDP in 1975. Although the economy recovered after a contraction in 1974 and real GDP growth in the Euro 11 reached an annual average of 3.6% over the period 1976-78, fiscal deficits remained sizeable, since policy measures aimed at reducing fiscal imbalances were partly offset by higher interest payments (see Chart D).

Chart D: Fiscal balances in the Euro 11 excluding Luxembourg

(as a percentage of GDP)



Source: European Commission.

Note: Data from 1995 onwards according to the ESA 95. European Commission spring 2000 estimate/forecast for 1999 and 2000.

Turning to monetary policy, as oil prices rose sharply towards the end of 1973 within an environment of growing inflationary pressures, a strong monetary policy response was needed. However, despite some increases in nominal short-term interest rates in 1973 (see Chart E), the monetary policy response was insufficient to keep the rise in inflation rates in check. While policy reactions differed significantly across countries, it can be noted that on average ex post "real" interest rates became negative in the second quarter of 1974 and remained so for 16 quarters.

The second oil price shock

The IMF average oil price per barrel first exceeded USD 30 in mid-1979, at which level it remained until early 1983, reaching almost USD 40 in early 1981. As a result, between 1979 and 1983 the average IMF oil price in US dollar terms was almost three times higher than in 1974-78.

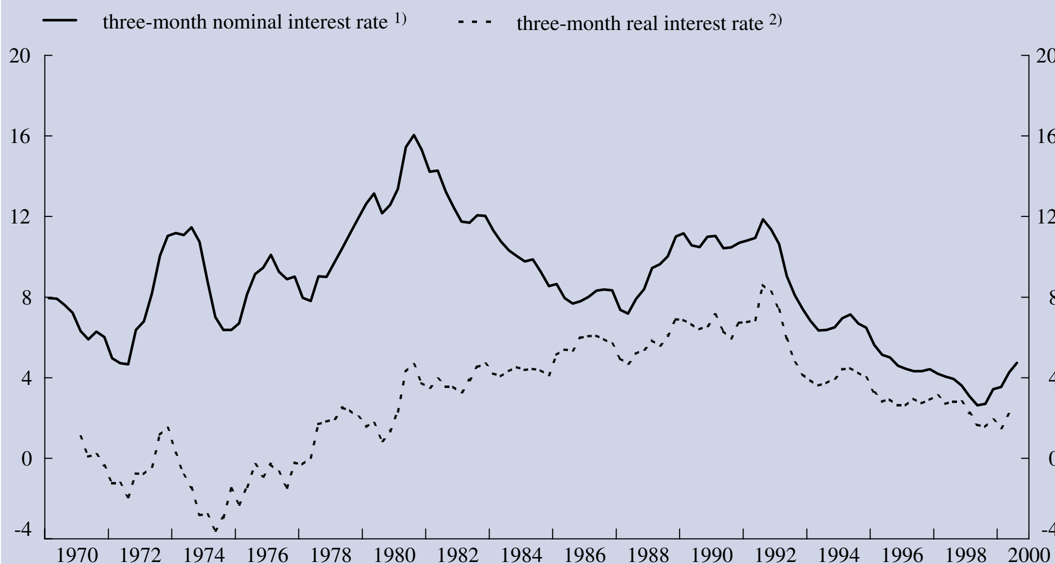
Owing to the policy mistakes made in the early 1970s, by the time the world economy was hit by the new increase in oil prices in the late 1970s, the average Euro 11 unemployment rate had risen from 2.8% in 1973 to 5.7% in 1979 and inflation was still hovering at a high level. This time, after the oil price shock, the average CPI in the Euro 11 increased by 2.7 percentage points between 1979 and 1980, to stand at 12.5% on average in 1980. Inflation remained at double-digit rates in the period 1981-82 but, by contrast with the previous shock, it fell significantly in the subsequent years.

One reason for the somewhat better inflation performance after the second oil price shock was that in view of the high level of unemployment, the annual rate of increase in nominal compensation per employee remained almost unchanged between 1979 and 1980. Real wages actually declined by 1.1% on average between 1979 and 1981.

However, following the deterioration which occurred in the mid-1970s, the total general government budget deficit peaked at more than 5% of GDP in 1982. In some euro area countries, fiscal deficits were higher still and gave rise to the very high public debt burdens from which some countries are still suffering.

Chart E: Real and nominal short-term interest rates in the Euro 11

(percentage per annum, quarterly data)



Source: ECB.

1) *Based on national three-month interbank interest rates or, where these are not available, other short-term money market interest rates. From January 1999, the three-month EURIBOR.*

2) *Deflated by the Euro 11 HICP/CPI inflation rate.*

The initial monetary policy response to the second oil price shock differed significantly across countries. On average, short-term nominal interest rates rose in 1980 but ex post "real" interest rates declined slightly in 1980. Only the subsequent steady rise in average nominal (and real) interest rates contributed to the decline in consumer price inflation throughout the 1980s and beyond. However, the need to curb inflation expectations and re-establish price stability after the experience of the early 1970s was costly in terms of growth and employment, and real GDP growth remained extremely subdued until the mid-1980s.

Lessons for the euro area today

Although the increase in oil prices since February 1999 has been sizeable, the recent rise comes after the price of oil reached its minimum level in more than two decades in February 1999. Oil prices are currently, in US dollar terms, below the peaks reached in the early 1980s.

The euro area is clearly in a better position today to withstand an oil price shock and to avoid a recurrence of the consequences of the previous oil price shocks. First, the ratio of oil imports to GDP has declined significantly since the 1970s. Second, while the increase in oil prices occurred in an inflationary environment in the early 1970s, monetary policy in the euro area is committed to guaranteeing the maintenance of price stability, and fiscal policies are subject to compliance with the obligations spelled out in the Stability and Growth Pact. Third, some changes in product and labour markets which occurred in the 1990s, due in part to the environment of price stability, have made the economy of the euro area more resilient to this kind of shock than in the past. (In the 1970s and early 1980s wage indexation was present in several of the countries which now form the euro area, and this contributed to an automatic response of wages to external shocks, which, in turn, contributed to creating a difficult environment for monetary policy.)

It is important, however, that past mistakes are not forgotten. There is no scope for the euro area as a whole to escape the terms-of-trade loss which is associated with the oil price increase. Furthermore, struggles within the

economy on how to distribute this terms-of-trade loss would not be helpful. They would only increase the risk of output losses and spillovers from current oil price increases to future inflation. For these reasons in particular, a continuation of wage-setting compatible with the maintenance of price stability is called for at the present juncture, especially given the still high level of unemployment. Furthermore, fiscal policy should avoid trying to accommodate negative economic effects associated with the oil price increases by a deterioration in the fiscal position and adhere to the overall budget objectives set for 2000 and beyond. At the current juncture it would be problematic to give a pro-cyclical stimulus to the economy. Fiscal budgets are on average still not close to balance or in surplus and debt ratios are high. A proper response by fiscal policies at this stage would help to curb the emergence of inflation expectations which could otherwise affect the medium-term inflation outlook.

An appropriate wage and fiscal policy reaction to the oil price shock will contribute significantly to strengthening the economic prospects for the euro area as a whole and facilitate the conduct of a monetary policy aiming at the maintenance of price stability. The oil price shock as such implies a one-off shift in the price level. Provided that wage developments remain moderate and fiscal policy stays on its consolidation course, the recent oil price increases should not be expected to lead to protracted deviations from price stability and losses in terms of output growth in the euro area in the coming years.