THE SEK/EUR EXCHANGE RATE

The euro is the dominant foreign currency for Sweden's economy. Its weight in the TCW index is around 56 per cent. The euro area receives about 40 per cent of Swedish exports of goods and supplies about 50 per cent of imports. Sweden's membership of the European Union underscores the links with the euro area. Were Sweden to join the euro area, the Swedish krona would be replaced by the euro. The Swedish Riksdag has stated that participation in ERM2 can be seen as a preparation for Sweden's membership of the euro area. The Government decides the exchange rate system for the krona but in the event of Sweden adhering to ERM2, the Riksbank would have a responsibility for the rate at which the krona is tied to the euro. The central rate, however, is ultimately a matter for negotiation and would be decided together with the Government in discussions with the other EU member states.

Historical picture

In that the euro has functioned as a currency only since the monetary union was established at the beginning of 1999, its relationship with the krona is equally brief. A longer period can be illustrated, however, by relating the krona to the currencies that have been converted into euro. This 'euro component' of the TCW index is shown in Fig. B6 together with the non-euro currencies and the total index.

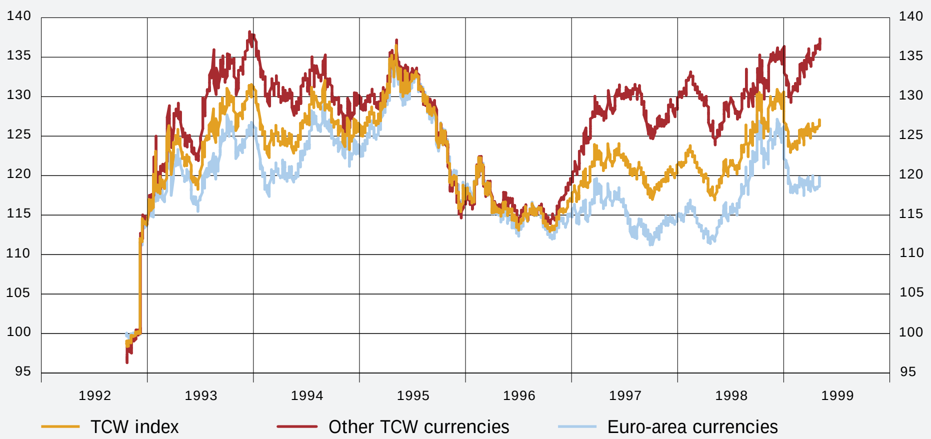
Except in the second half of 1998, since 1996 the krona has been more stable against the currencies that have been converted into euro than against the non-euro currencies in the TCW index. Early in 1999 the krona appreciated very rapidly and strongly both against the euro and in terms of the TCW index. Since February, however, the krona has been fairly stable against the euro and tended to weaken against the non-euro currencies.

One explanation for the krona's tendency to be more stable against the euro compared with other currencies is that Sweden's cyclical position in recent years has been roughly in phase with the euro area, while activity in countries such as the United Kingdom and the United States has been stronger (Fig. B7). As a result, the monetary stance in Sweden in this period has not differed much from the euro area, while countries such as the United Kingdom and the United States have had a more restrictive stance. This tended to strengthen the currencies of the latter countries relative to the euro as well as the krona.

Future path

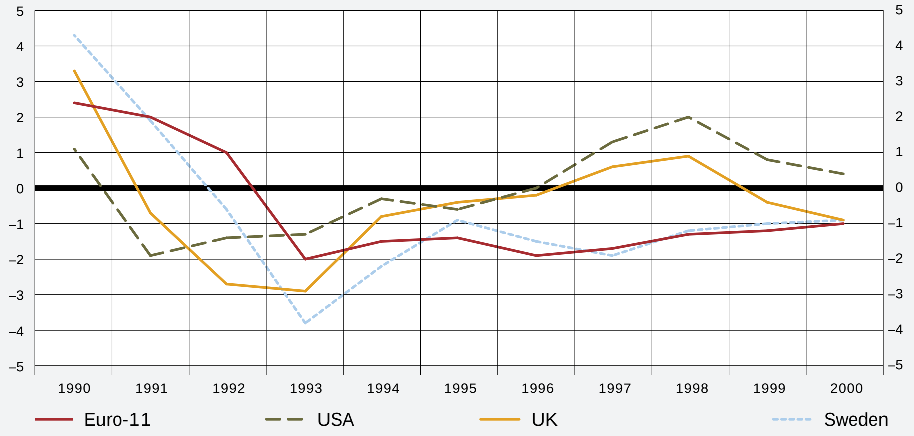
The Inflation Report's main scenario assumes that in the coming years the krona will appreciate in terms of the TCW index by approximately 7 per cent. This raises the question of the krona's future path against the

Figure B6. The Swedish krona's nominal effective exchange rate with euro-area and other currencies in the TCW index.
Index: 18 November 1992=100



Source: The Riksbank.

Figure B7.
Cyclical position in terms of OECD indicator of the output gap in the United States, the United Kingdom, Sweden and Euro-11.
Per cent of potential GDP

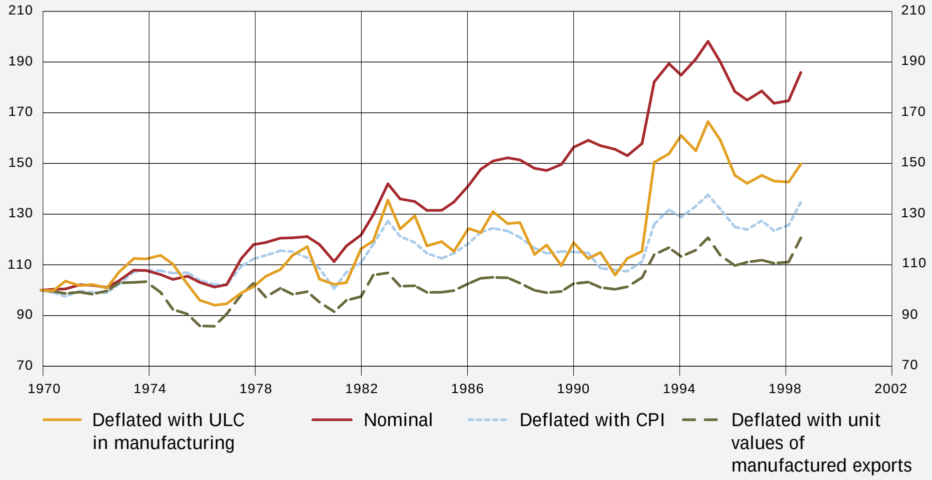


Note. For 1999 and 2000 the output gaps are based on forecasts.
Source: OECD.

euro. To throw light on the issue one needs to consider the degree of internal and external imbalances in Sweden and the euro area. Internal balance in this context is defined as full capacity utilisation and price stability, external balance as a stable GDP share for external debt.

The real exchange rate is considered to be in *long-term equilibrium* when the economy is in both internal and external balance. In a state of internal balance with current-account surpluses or deficits that are moving external debt towards its long-term level, the exchange rate is said to be in *medium-term equilibrium*. If external debt relative to GDP is above its long-term level, for instance, a period with current-account surpluses and an exchange rate below its long-term level is needed to complete the adjustment of debt, given that the economy is in internal equilibrium. The *short-run equilibrium exchange rate* is determined by the country's cyclical

Figure B8.
SEK real exchange rate with the currencies in the euro area.
Semiannual data, index: 1970=100



Sources: IMF, OECD and the Riksbank.

position and monetary stance relative to the rest of the world. Short-run equilibrium implies that monetary policy is consistent with achieving internal balance within a certain period at the same time as the current-account trend is consistent with achieving external balance in the long run.[22]

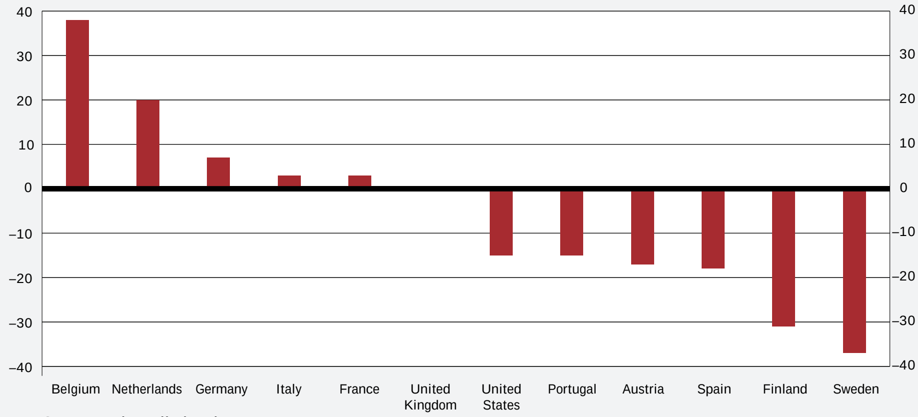
Sweden's weak cyclical position compared with the United States and the United Kingdom, with the relatively more expansionary monetary stance this entails, indicates that the krona's TCW exchange rate can be expected to strengthen in the future. In time, the krona will probably appreciate against the US dollar and sterling as the Swedish economy moves towards full capacity utilisation and activity in the US and British economies slackens. On the other hand, the cyclical positions of Sweden and the euro area do not differ appreciably. There are no indications that the monetary stance in Sweden is, or is expected to become, more expansionary than in the euro area. This assessment is essentially confirmed by the expectations of future monetary policy that can be derived from Swedish and German forward interest rates (Annex: Fig. 12).[23] All in all, this suggests that the krona will not strengthen as much against the euro as in terms of the TCW index.

What, then, are the arguments in favour of an appreciation of the krona against the euro? Traditional indicators of competitiveness suggest that the krona is comparatively weak at present, at least in a historical perspective (Fig. B8). This by itself should affect the krona's exchange rate. One ground for a comparatively low exchange rate with the euro in the present situation and an appreciation further ahead is that, relative to the euro area, Sweden's external debt is higher, so a long-term undervaluation of the krona against the euro is needed in the coming years to support a trend towards external balance.

Sweden's net external debt is considerably higher than that of many euro countries, including Germany, France and Italy (Fig. B9).[24] Although the level of Sweden's external debt is exaggerated in Fig. B9 on account of measurement problems, there are reasons for reducing it.[25] The trend towards an increased proportion of pensioners some time after the turn of the century, for instance, calls for increased saving and thereby decreased external debt. As the external debt-to-GDP ratio declines towards its long-term equilibrium level, there is less need for current-account surpluses and the krona appreciates.

To sum up, the krona is judged to strengthen against the euro in the coming years but the appreciation can be expected to be less than in TCW terms.[26] This is because decreased cyclical differences point to a diminishing short-term interest rate differential with the United States and the United Kingdom, accompanied

Figure B9.
Net international investment position of selected countries in 1998.
Per cent of GDP



Source: The Riksbank.

by the prospect of this differential with the euro area being rather small in the future. The similarity of inflation prospects in Sweden and the euro area should imply continued stability in the krona's rate against the euro. In time, however, the krona will probably appreciate against the euro as Sweden's external debt approaches the levels in the euro area. This view is also supported to some extent by market expectations of the future exchange rate as reported in survey data. The May survey by Statistics Sweden indicates that, on average, money market players expect the krona to strengthen in the coming twenty-four months to a rate of 8.70 against the euro.

22 The concepts of long-term, medium-term and short-run equilibrium are discussed more fully in *Inflation Report 1998:3*, box on pp. 27-29.

23 The forward interest rate differential does not exclusively represent differences in monetary policy expectations because it includes a Swedish risk premium, estimated earlier to about 0.3 percentage points.

24 No data are available on the external position of the euro area.

25 Preliminary calculations indicate that in 1998 Sweden's external debt was equivalent to about 20 per cent of GDP; see Blomberg, G. & Östberg, J. (1999, forthcoming), Market-valued external position—a new picture of Sweden's dependence on the rest of the world, *Quarterly Review 2*, Sveriges Riksbank.

26 This assessment is fairly close to the exchange rate expectations of financial market investors (Annex: Table 1).

Import prices

Import prices affect inflation both directly and indirectly. Changes in international export prices and in the krona's exchange rate have a *direct* impact on consumer prices because a sizeable part of the CPI consists of imported goods and substitutes for imports. Moreover, movements in international prices and the exchange rate affect inflation *indirectly* via effects on the relationship between domestic demand and supply. It is the direct effect that is discussed here.

The link between international price movements for commodities and manufactured products on the one hand and Swedish producer and consumer prices on the other is complex. The exchange rate is highly important for the prices to producers but the pass-through, particularly for manufactured goods, is liable to be both lagged and incomplete. This is even more the case for the pass-through to consumer prices, which can take several years.[27] The pass-through for commodity prices is more immediate, which has to do with these items being homogeneous and priced in the world market.

Commodity prices are assumed to rise.

Since the March Report the development of international prices for manufactured exports has been adjusted upwards for 1999, partly in view of the stronger outturn to date and rising commodity prices. Some downward revision has been made, however, to the export price forecast for 2000, because the trade-off between growth and inflation is judged to be marginally lower than assumed earlier. The Riksbank's assessment is therefore in line with those of the OECD and the IMF, for example. The krona has strengthened more slowly this spring than expected but, as in the March Report, an appreciation is assumed in the forecast period. It is also assumed that the commodity price rise in recent months will be followed by some further increase. The forecast for international oil prices twenty-four months ahead has been revised upwards from US$15 to US$16.5 a barrel. Some further increase is likewise foreseen for other commodity prices (see the box on pp. 30-32).

The international price rise for manufactured exports in the coming twelve to twenty-four months is judged to somewhat slower than assumed in March.

The somewhat stronger international price trend in 1999 that follows from rising commodity prices, together with the assumption of a weaker exchange rate tendency, leads to an upward revision of the consumption-weighted development of prices to pro-