#### CHAPTER 2

# Determinants of inflation

This chapter presents the assessment of the main factors that will be determining inflation in the coming twenty-four months. International factors are considered first, followed by a survey of demand relative to supply in the Swedish economy. The discussion then focuses on effects of deregulations, the extent to which the consumer price index is affected by political decisions, changes in interest expenditure and also inflation expectations.

## International activity and inflation

In many respects the international economic situation is now more robust than at the time of the March Report. The strength of the US economy has been reconfirmed and the interest rate cut by the European Central Bank (ECB) at the beginning of April has countered the slowdown in the euro area. The succession of crises in emerging markets also

#### FACTORS BEHIND THE PATH OF INFLATION

Because of the time lag before monetary measures affect economic activity and inflation, policy has to be guided by an inflation forecast. The present forecast, like those in earlier Inflation Reports, starts from an unchanged repo rate. This is a technical assumption and its primary purpose is educational—to clarify whether a repo rate adjustment is called for and, if so, in which direction. Thus, an inflation assessment which results in the conclusion that, at the time horizon of twelve to twenty-four months which is the Riksbank's primary concern, inflation will be above (below) the target rate, normally implies that there is reason to raise (lower) the repo rate. With a time horizon of twelve to twenty-four months, the factors that, in addition to monetary policy, essentially determine the development of inflation are as follows.

1) International activity and inflation
In that Sweden's economy is highly dependent on foreign trade, external economic developments are an important consideration in the assessment of inflation.

Economic activity in the rest of the world affects demand for Swedish exports and is therefore an important component in the assessment of total demand. External inflation affects the price of imported goods in foreign currency, while exchange rate movements condition the extent to which changes in world market prices pass through to import prices in Swedish kronor. An appreciation of the krona tends to reduce the impact on domestic inflation from a given external price rise. The effect on domestic inflation is also conditioned by the development of profit margins on imports. Moreover, changes in world market prices that are not countered by exchange rate move-

ments affect the competitive position for Swedish exports and this can have repercussions on the rate of wage increases and other production costs in Sweden.

#### 2) Demand relative to supply

Demand that exceeds long-term production capacity normally generates inflationary pressure. Monetary policy therefore has to be gauged so that demand is kept as close as possible to the development of production capacity. A variety of indicators can be used to obtain an overall picture of the inflationary pressure that is emanating from demand in relation to supply. One of these indicators is the National Institute's business tendency data on industrial *capacity utilisation*. Another is the *labour market situation*, where, for example, comparatively high wage increases despite high unemployment may indicate a limited possibility of enlarging total demand without incurring wage inflation. A third type of indictor is the *output gap*—an econometric estimate of the difference between GDP's registered and potential long-term levels.

The higher the level of production relative to potential output, the greater the probability of capacity shortages arising in parts of the economy. The occurrence of bottlenecks can therefore be a sign that output is approaching its potential long-term level. A shortage of a particular category of labour may be such a sign. A complication here, however, is that high demand and high wage increases for a certain category of labour can also result from better productivity and profitability compared with other activities. In that case, such wage increases are not a direct inflationary threat, though they do call for efficient wage formation and labour market flexibility. Assessments must also allow for the fact that, in time, high investment, an increased labour supply or improved technology lead to increased production capacity.

Changes in demand do not, however, exert an influence on all prices through market mechanisms. Some prices are set by administrative decisions, based above all on the cost side or with a sizeable element of subsidy. Examples of fully or partly administered prices in Sweden are housing rents and charges for medical care and certain municipal services. One consequence for monetary policy is that for certain prices, the impact of interest rate adjustments is subject to particularly long lags. Monetary policy can influence these prices only

through effects on the general development of costs, e.g. wages.  $^{14}$ 

### 3) Other cost shocks, effects of political decisions and interest expenditure

Inflationary impulses can also be generated by cost increases that are specific instead of stemming from a general increase in world market prices or strong domestic demand. A price movement for primary products as a consequence of supply-side shocks is one example. Similar impulses can come in the form of changes in indirect taxes and subsidies, or from deregulations. Such inflationary impulses are normally transitory in the sense that they entail an immediate change in the general price level. They may still have a lasting impact on the inflation process. In that case inflation expectations will be affected. In order to gauge trend inflation (inflation excluding transitory impulses), the Riksbank uses various indicators of underlying inflation.

#### 4) Inflation expectations

High demand prompts producers to raise prices and employees to bargain for higher wages. But inflationary price and wage increases can also stem from high inflation expectations as such, because economic agents strive to maintain or increase their real income level. In this way, if confidence in monetary policy is lacking, inflation expectations are liable to be self-fulfilling.

When assessing the significance of inflation expectations for monetary policy, it must be born in mind that the expectations often relate to the prospect of a particular policy. The fact that inflation expectations are in line with the target does not therefore necessarily show that the monetary stance is well balanced—the expectations themselves may rest on a presumption that the instrumental rate is going to be adjusted.

The factors outlined above are those, which, according to accepted economy theory as well as practical experience, affect inflation. An analysis of these factors is accordingly an important component of the foundation for monetary policy decisions.

<sup>14</sup> For an account of administered prices in the CPI, see *Inflation Report 1997:3*, p. 8.