

Box 1 Equilibrium unemployment and labour market pressures

The state of the domestic labour market has a significant impact on price and wage developments. Labour market pressures fuel wage rises, which in turn contribute to higher prices and inflation. Positive measured unemployment could be assumed to preclude the presence of labour market pressures, since by definition unemployment means that individuals who are prepared to work do not have jobs. Supply of labour therefore exceeds demand, which on first impression ought to restrain wage rises. However, this cannot be taken for granted. A certain low rate of unemployment may still represent excess overall demand for labour, e.g. when vacancies exceed the number of unemployed, or some of those registered as unemployed are not really actively seeking work or are unsuitable for the type of jobs available.

Unemployment which is compatible with equilibrium in the labour market and a stable rate of inflation is known as the natural rate of unemployment or equilibrium unemployment. This refers to the level of unemployment where inflation tends neither to increase nor decrease, since wage rises are in pace with productivity developments and inflation expectations. Research widely suggests that the equilibrium rate of unemployment varies over time. This is considered to be the result of both social and economic factors, which may include unemployment benefit arrangements, labour market institutions, regulations on employee appointment and dismissal, competition in the goods market and the efficiency of the market economy. Easy access of foreign labour can also lead to a lower equilibrium rate of unemployment. Monetary policy does not affect equilibrium unemployment. However, it can cause the actual unemployment rate to fluctuate around the equilibrium rate. Monetary policy which aims to maintain unemployment systematically below its equilibrium value will only generate increasing inflation.

Over the past two years, Iceland's labour market has been characterised by overheating. This has taken the form of, for example, competition among businesses for new recruits, problems in retaining employees, sizeable wage drift over and above generous wage

rises, and inflation. At the same time unemployment has measured in the range 1%-1½%. Most indicators therefore suggest that equilibrium unemployment in Iceland is somewhat higher than this figure. Accurate estimation of the equilibrium rate is, however, very difficult. This especially applies to the current rate at any time. In Iceland the problem is compounded by easier access of foreign labour in recent years, which has probably decreased the equilibrium rate of unemployment. Estimation methods that rely on historical relationships may, however, fail to take sufficient account of these changes. The point remains, that in order to establish equilibrium in the Icelandic labour market, a rise in measured unemployment is in all likelihood unavoidable.

The charts overleaf show an attempt to estimate the equilibrium rate of unemployment using simple time series techniques.¹ It should be underlined that the estimation is subject to considerable uncertainty. Be that as it may, the equilibrium rate of unemployment seems to have increased in the first part of the 1990s, probably as the result of lower fish catches and deteriorating terms of trade at the beginning of the decade. Equilibrium unemployment apparently fell again in the second half of the 1990s, converging to a level around 2½%. Presumably this rate of unemployment is close to being compatible with equilibrium in the Icelandic labour market.

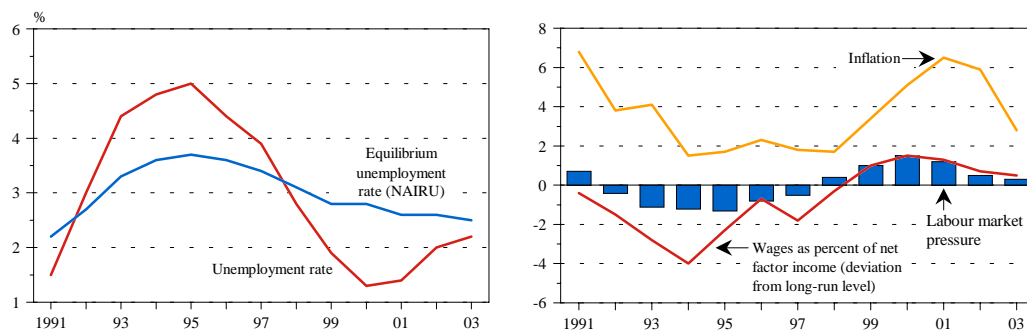
The chart also shows the interaction of labour market pressure (the difference between equilibrium and actual unemployment), the wage share in net factor income (as a deviation from long-run equilibrium, which is assumed to be at 64%) and inflation.² The

1. The result is based on three approaches. Firstly, a simple Hodrick-Prescott filter is applied to measured unemployment. Secondly, a simple Kalman filter model of Okun's Law (the relationship between equilibrium levels in the goods and labour market) is estimated. The third approach is based on the estimated relationship between unemployment and inflation in Þórarinn G. Pétursson (2001), "Wage and price formation in a small open economy: Evidence from Iceland", a pending Central Bank of Iceland Working Paper.

2. From a historical perspective, a wage share of 64% seems to be well compatible with a low and stable rate of inflation. The average over

Chart 1

The labour market and inflation 1991-2003



Forecast 2001-2003. Source: Central Bank of Iceland.

interaction can be interpreted as showing that excess demand in the economy causes unemployment to fall below its equilibrium level. Demand for labour increases, firms start competing for capable employees by offering higher wages, and the bargaining position of labour unions strengthens. The wage share rises above its equilibrium level and firms' profit margins are squeezed. Combined with increased demand in the goods market, such conditions contribute to higher inflation, which calls for even higher wage rises, etc. Such a spiral is only broken when equilibrium is re-established in the goods and labour market and wages and profits as a share of factor income move towards their long-run equilibrium levels. Monetary policy can play a key role in this adjustment process. A tighter monetary stance can squeeze excess demand until inflation moves into line with monetary policy targets.

the period 1980-2003 was slightly under 63% and the average for 1990-2003 is marginally above 63%. The actual choice makes no difference to this analysis; the process shows a slight upward or downward shift but the path remains the same.

A scaling-down of economic activity is inevitable while the spiral is being broken. If inflation goes seriously out of control a temporary recession may even become unavoidable.

This trend is clearly shown on the chart. During the first half of the period, a slack in the economy went hand in hand with higher unemployment and a falling wage share. Pressure began to mount again around the middle of the period and peaked in 2000, accompanied by higher inflation. The monetary stance was tightened in response. According to the latest inflation forecast of the Central Bank and National Economic Institute output and unemployment projections, pressure will ease in the next few years and macroeconomic imbalances and inflation will decrease. The chart shows that, on the basis of current forecasts, the landing will be a relatively soft one compared with earlier periods. For example, no slack will develop in the labour market. It is conceivably unrealistic to assume that, in the wake of one of the most intense periods of economic overheating for decades, such a soft landing can be achieved.