The misery index

The misery index is a very simple concept, devised by Arthur Okun, which sums the rates of unemployment and inflation. These are the two variables that form the Phillips curve trade-off, so in a way the misery index represents the (dis)utility obtained by policy-makers.

Obviously shifts in the Phillips curve have large implications for the measurement of this index. As figure 1 shows, the misery index has fallen throughout the G7 (with the exception of Germany) over the last 25 years. Figure 2 breaks the misery index down into the contributions of inflation and unemployment for each country. It is clear that the current downward trends are driven by a fall in inflation from the high levels in the early 1980s induced by the sharp increase in oil prices in 1979, to the low levels today where inflation targeting and central bank independence appears successful in anchoring inflation expectations.

In the new era of low inflation the index has become trivial. Inflation is low almost everywhere, so it unemployment that is the main determinant of cross-country differences. The recent experiences of the UK and the US- low inflation and low unemployment- has seen the misery index fall substantially. Unemployment in France and Germany though has remained stubbornly high. In Germany, the rise in unemployment has offset the fall in inflation leaving the overall index broadly constant over the past 25 years.

There have been arguments that the misery index should be broadened to incorporate a wider set of factors, including GDP growth rates, interest rates and the budget and current account deficits. These indicators would give an impression of a country's ability to sustain its current level of misery. For example, a nation with large deficits in the current and budget accounts might require a future contraction in monetary or fiscal policy with implications for unemployment.

The misery index assumes that inflation and unemployment are direct substitutes, so regardless of the level of each a 1% reduction in one can be offset by a 1% increase in the other. Alternatively, this implies that there is a constant marginal rate of substitution in the (dis)utility function defined by preferences of policy-makers. A more realistic situation would be for the marginal rate of substitution to fall, so at lower rates of inflation policy-makers are more willing to trade-off a given amount of inflation for a fall in unemployment and vice-versa.

Another reason why the misery index is perhaps outdated is that deflation counts positively. For example, in Japan prices have been falling but few would argue that this has relieved the overall level of misery. In an era of low inflation the possibility of deflation becomes a more significant possibility, but this is not necessarily a good thing.

The misery index in the G7 1980-2005



Figure 1: Source IMF World Economic Outlook database





Figure 2: Unemployment and Inflation in the G7, 1980-2005 Source: IMF World Economic Outlook database