The UK economy

Andrew P Blake, Martin Weale and Garry Young

NIESR UK forecast recommends that the Bank of England should raise interest rates

- **The Bank of England needs to raise the base rate to 6.5 per cent by the start of 2001.**
- **There will be a £15bn budget surplus this financial year, £10bn more than projected by the Treasury in the March Budget. The current budget will be in surplus by £19bn.**
- **Restoring earnings indexation for the basic state pension would require around a 5p increase in the standard rate of income tax, according to the National Institute's generational accounting model.**
- **The economy will grow at over 3 per cent a year in 2001 and 2002, continuing the second longest sustained expansion since the war.**
- **While there is little room for further declines in unemployment, the labour market is in broad balance, and strong productivity growth will offset an increase in the growth of average earnings to above 5 per cent a year.**

Contrary to expectations in financial markets, interest rates should rise further, by half a point by the beginning of next year. The continuing economic expansion and decline in unemployment now mean that the risks of monetary policy being too loose outweigh the risks of it being too tight. In addition, the rise in oil prices adds a modest inflationary impulse which should be countered through monetary tightening.

The public finances continue to be bolstered by strong economic growth. For 2000/01, we are forecasting a surplus of a similar magnitude to last year's record. The run of surpluses will continue until 2003/04 when the deficit will be much lower than the Treasury's projection. However, the boost to tax revenues from North Sea oil production from a rise in oil prices does not give scope for a cut in fuel duties. A simulation of the impact of a sustained increase in the oil price shows that short-term budgetary gains are followed by longer-term revenue losses caused by lower economic activity.

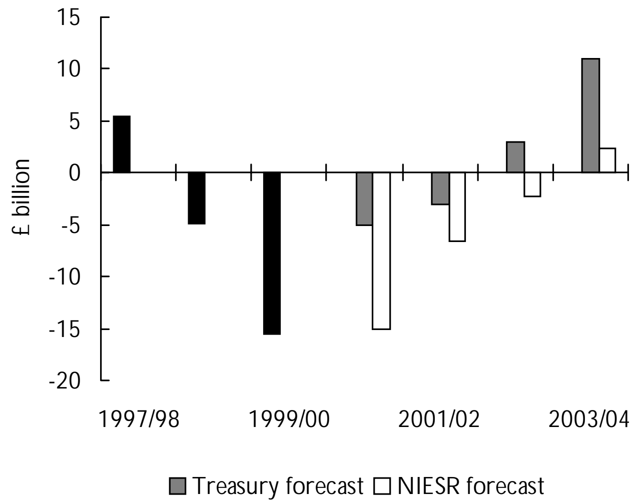
The present strength of the public finances appears to make more generous state pension provision eminently affordable. However, a proper assessment should take into account the effects of population ageing on a pay-as-you-go pension system. The National Institute's generational accounting model shows that the basic rate of income tax would need to be 5p higher if pensions are indexed to earnings than if they remain indexed to prices.

The sustained economic recovery since 1992 will continue and strengthen over the next two years. Compared with a similar point in the recovery of the 1980s, overall output growth in the current expansion has been less vigorous. GDP has risen by 26 per cent since the 1992 trough, compared with 31 per cent from the 1981 trough to 1989 – a shortfall roughly equivalent to two years' growth. However, there is no sign as yet of the severe imbalances that brought the 1980s recovery to an abrupt end.

In particular, the labour market is in much better shape. Average earnings growth is running at less than half the rate of the late 1980s. However, there

A buoyant outlook for the public finances

Public sector net borrowing



is little scope for further falls in unemployment. There will be some modest increase in wage pressures over the next two years – earnings growth is forecast to grow above 5 per cent a year – but this should be offset by a rise in annual productivity growth to around 3 per cent.

The world economy

Paul Ashworth, Ray Barrell, Karen Dury, Dawn Holland, Florence Hubert, Ian Hurst, and Nigel Pain

Global growth to slow as monetary tightening and the oil price shock take effect

- **Growth in global output will slacken from 4.7 per cent in 2000 to 4.1 per cent in 2001 as the monetary tightening of the past eighteen months takes full effect and economies adjust to the oil price shock.**
- **If the correction in American equity prices is sustained, the US Federal Reserve will only have to raise interest rates from 6.5 to 6.75 per cent in order to contain inflationary pressures in the US.**
- **The European Central Bank will need to raise interest rates to 5.25 per cent by the middle of 2001 in order to keep inflation in the Euro Area under control.**
- **The modest Japanese recovery will continue, with GDP growth of 2.1 per cent in 2001, the best performance for five years.**
- **The rise in the oil price will have a much more muted effect on output and inflation than previous shocks.**

The world economy is currently experiencing its fastest growth since 1984. World trade will grow by more than 12 per cent, the fastest rate for more than two decades. The global expansion has been fuelled by the acceleration in American growth, also at its highest since 1984, the rebound in Asia and the pick-up in the Euro Area in response to faster world trade growth and the decline in the euro. Next year, however, will see a significant reduction in global growth, as past rises in interest rates in America and Europe bite and the oil price shock dampens growth in demand.

The American economy will slow down to growth of just over 3 per cent in 2001 after an extraordinary year in which growth has exceeded 5 per cent. The recent sharp correction in equity prices together with the contractionary effect of the oil price rise should be sufficient to bring about this slowdown without much further monetary tightening. However, we still expect the US Fed to raise interest rates by a further quarter point.

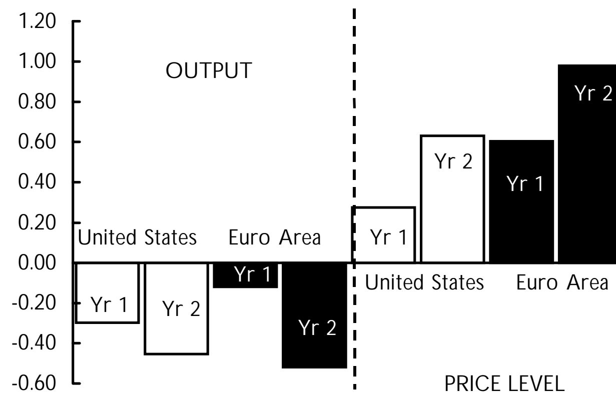
In Europe, however, the ECB will have to raise rates by a further half point by the middle of next year to contain the inflationary effects of the depreciation of the euro and the oil price shock. Even with this further tightening in monetary policy, inflation is forecast to remain above the ECB's target ceiling of 2 per cent a year in both 2001 and 2002.

The Japanese economy is forecast to grow by 1.6 per cent this year, strengthening to an annual rate of around 2 per cent in both 2001 and 2002. The improvement in the economic outlook is timely since the scope for further fiscal stimuli has virtually been exhausted. With a budget deficit of around 7 per cent of GDP in both 2000 and 2001, fiscal packages have recently been contributing to economic volatility rather than sustaining demand. Further budgetary boosts are now likely to be offset by lower private investment as long-term interest rates rise. In the longer term, the Japanese tax burden needs to rise very sharply to finance the effects of demographic change.

The rise in the oil price will act as a brake on the world economy, but the effects of this oil price shock will be much less traumatic than earlier ones. A simulation on the NIESR world model shows that a permanent 50 per cent

Modest effects from the oil price shock

Effects of a 50% oil price increase % deviations from baseline, year-end figures



increase in the oil price reduces output in the United States and the Euro Area after two years by up to half a per cent and raises prices by up to 1 per cent. These effects are much lower than those of the 1970s.

Monetary and fiscal policy in Europe

Ray Barrell and Nigel Pain
(National Institute of Economic and Social Research)

The formation of EMU and the adoption of the Stability and Growth Pact moved Europe toward a set of 'automatic pilot' policy rules and away from the discretionary use of policy to change demand. This environment can be emulated by interest rate rules and budget targeting regimes.

Monetary policy has been hard to understand in this new world. The primacy of price level stability in the ECB's strategy in the medium term has not been fully appreciated Targeting inflation alone leads to price level drift, and this is something the ECB wants to avoid. Its objectives are clearly focussed on the medium term and on price developments in the Euro Area

Central bankers' decisions need to be made in relation to whether the euro is weak or the dollar strong

Policy makers have to base their decisions on what is expected to happen if they do not act. They need to separate signal from noise when something happens, and this is difficult without good models and good research. The recent fall in the euro is a case in point. If the euro has been weak, then there are inflationary consequences, if the dollar has been strong then there are no such consequences. Central Bankers have to gauge which of these has happened before they act. The recent rise in inflationary pressures in Europe suggest the euro has been weak, and the ECB should raise interest rates further.

Fall in the euro has helped increase demand, improving unemployment levels, growth and fiscal outturns

Much of the recovery in Europe has been stimulated by the increase in demand that has followed from the fall of the euro. This has improved growth, cut unemployment (and payments to the unemployed) and improved fiscal outturns. Taxes have been cut as a result. The authors argue that there has been an unwise fiscal loosening in Europe tax revenues have been strong as a consequence of the fall in the euro and not because of structural improvements.

Both fiscal and monetary policy seem to be loose in Europe, and demand pressures are strong. Policy makers have a lot to learn about their own new framework.

Price level stability: some issues

Vitor Gaspar and Frank Smets
(European Central Bank)

Does price level targeting make the economy more volatile?

This paper written by senior officials from the European Central Bank, challenges the conventional wisdom that price level rather than inflation targeting necessarily increases the volatility of inflation and economic activity. It shows that the optimal policy under commitment for a society that cares only about the variability of output and inflation involves only a limited degree of base price level drift.

In models in which people are sufficiently forward-looking, a small weight on price level stability allows, under discretion, for reductions in the variability of both inflation and output (the efficiency frontier shifts inward). This holds true for the parameters estimated for the euro area. The intuition here is that some weight (even small) on the price level is sufficient to avoid base drift. This is well understood by rational forward-looking agents. Therefore the response to price shocks is dampened. In this model the monetary policy regime affects the propagation mechanism of shocks in a fundamental way. The result crucially depends on the credibility of the commitment to the price level target.

Price level targets could be used as a barrier to deflationary risks

The case for price level targeting is strengthened when the possibility of a binding lower bound on nominal interest rates is considered. This may be increasingly relevant in a low inflation environment, when price level targeting leads to inflationary expectations and a decline in real interest rates (for unchanged nominal rates) after a deflationary shock . For small weights on the price level this effect is dominant and leads to lower interest rate volatility. That makes the lower bound on nominal interest rates less likely to be binding. This justifies renewed interest on price level targets in the context of thinking through how to prevent and respond to deflationary risks.

Optimality and Taylor rules

Andrew P. Blake
(National Institute of Economic and Social Research)

Suggestions on how to specify policy rules for the control of inflation have gained considerable popularity in recent years with an almost worldwide switch to inflation as an explicit target. The leading contender has become the *Taylor rule*, which relates the level of nominal interest rates to the deviation of inflation from the announced target as well as some measure of demand pressure, such as the output gap, by the use of a feedback rule. The Taylor rule has provided valuable service, by focusing attention on the appropriate specification of interest rate rules that can adequately control inflation. This approach has been extended considerably, incorporating both policy inertia, where interest rates are set with reference to their last value, and, more importantly, incorporating a forward-looking element, where policy reacts to the *forecast* of inflation rather than its current value. Such generalisations have some empirical success in explaining monetary policy in the United States and elsewhere. This empirical success can be interpreted to indicate that *whatever* the monetary authorities are reacting to in the short term can be translated very straightforwardly into a simple rule.

Can forecast-based rules be used to control inflation?

This paper discusses the role of such forecast-based rules in the control of inflation and gives an alternative interpretation. The main policy discussed is the forward-looking Taylor rule when the nominal interest rate reacts to the *endogenous* forecast of inflation: the forecast is therefore conditional on the implemented policy rule. This is termed an *ex post* forecast. The alternative is termed an *ex ante* policy regime, where the forecast is predicated on some fixed, exogenous policy - usually fixed nominal interest rates. Such a forecast underlies the Bank of England's fan-chart diagram. The author describes the difference between the two policy regimes algebraically.

One reason why such Taylor-type policy rules have become a serious policy proposal is that they are argued to be able to deliver close to *optimal* outcomes. To investigate why this might be so, Blake reconciles error-correcting simple rules, forward-looking simple rules and optimal polices in a common framework, using a simple open economy macromodel. He shows that just as any optimal policy for such a model can be interpreted as a feedback rule, so can reduced forms of forecast-based Taylor rules. In particular, for this model it turns out that forward-looking Taylor rules and optimal rules are closely related.

Vector error correction representation could provide the best control framework

This yields important policy conclusions. Instead of the attention given by the Bank of England to the inflation forecast, it might be better to adopt a more general policy rule which takes account of the factors used in constructing that forecast. In particular, the informational requirements of forecast-based rules include a detailed specification of the forecasting model, just as optimal policies do. Although *ex post* forward targeting may deliver close to optimal policies it is by definition inferior. Conversely, observed behaviour may be consistent with complex optimising behaviour by policymakers as much it is with simpler but forward-looking feedback rules.

Open issues in the implementation of the stability and growth pact

Marco Buti and Bertrand Martinot
(European Commission)

Will the Stability and Growth Pact have any influence on member countries' fiscal policies?

Now that the budget deficits in the euro area keep coming down and are approaching balance, the Stability and Growth Pact (SGP) looks like an institutional framework that will have little impact on national fiscal policies.

This paper, written by senior officials of the European Commission, challenges this view and argues that the implementation of the SGP « at cruising speed », for which we have no experience, is faced with a number of open issues :

First, current estimates indicate that broadly balanced budgets are required for most EU countries to ensure that automatic stabilisers fully operate without breaching the 3% reference value. However, we do not know how the business cycle will change with the adoption of the euro, nor do we know what the role of fiscal stabilisation in the new EMU regime will be. As we gather experience with these structural changes, the issue of the appropriate medium term budgetary target will need to be addressed again.

National and ECB fiscal policies need to be coordinated

Second, the asymmetric nature of the Pact (there is no reward for running surpluses in «good» times) may result in a pro-cyclical bias in fiscal behaviour. If governments remained trapped in the « no surplus » culture of the 1970s and 1980s, they would tend to offset the working of automatic stabilisers for sufficiently large, positive output gaps. Such behaviour would worsen the cyclically-adjusted budget balance during upturns, thus adding to the risk of overheating. The result would be an overburdening of monetary policy and an unbalanced policy mix at euro area level. If the current cyclical upturn continues in the coming year, there could be a risk of "coordination failure" between national fiscal policies and the single monetary policy of the ECB.

Third, the SGP in itself does not ensure the long term sustainability of public finances. A simple way out of this issue would be to set an ambitious fiscal target in order to cushion the financial consequences of ageing. While this would preempt, at least partly, the financial consequences of ageing, it might not be optimal from the point of view of intergenerational equity. Such considerations may lead to favour actively using debt swings for intergenerational redistribution. The appropriate medium to long term fiscal strategy is directly linked with reforms envisaged to the pension systems (be it whether changing the parameters of the current Pay As You Go system or partly shifting to funding schemes) for which no clear plans so far.

The paper concludes that enlarging the scope and enhancing the credibility of the Member States' stability and convergence programmes to become a true instrument of fiscal policy coordination in the euro area would be a first step to lift the uncertainties surrounding the implementation of the SGP.

An evaluation of monetary targeting regimes

Ray Barrell and Karen Dury
(National Institute of Economic and Social Research)

How should monetary and fiscal policy environments be designed now EMU exists?

With European Monetary Union now in place discussion has turned to approaches to designing monetary and fiscal policy environments. The 'best' policy reaction to shocks to the economy depends on the objectives of the authorities, the pattern of shocks the economy faces and the response of the private sector to those shocks.

The authors discuss two polar types of rules describing the reaction of the monetary authorities. One targets a nominal aggregate and the other targets the inflation rate. They examine the stabilising properties of these rules, and discuss varying policy horizons over which the objectives are sought. They also examine the role of labour market rigidities in determining the best policy reaction function. In addition they discuss appropriate fiscal targets for the European economies.

These rules are implemented on the National Institutes Global Econometric model, NiGEM, a large forward-looking macroeconomic model. The model is subjected to a sequence of random shocks using stochastic simulation techniques and the outcomes are evaluated in terms the variability of output, inflation and the price level. The results are summarised for the UK, US, Japan and the Euro area.

Chosen rules should be dependent on the structure of the economy

The authors show that nominal aggregate targeting can be superior to inflation targeting at stabilising output and the price level. Inflation targeting can perform better at stabilising inflation variability for all countries considered except in large closed inflexible economies such as the Euro Area. Different objectives for the central bank are considered. It is shown that the preferred rule depends on the structure of the economy. Policy regimes that are appropriate for small open economies or very flexible ones may not be the best choice for large and inflexible groupings such as the Euro area.

The appropriate policy horizon is also investigated and the authors show that a rule that contains a nominal aggregate takes the price level back to its baseline trajectory. This has important implications for economic growth especially in economies where long term contracting is prevalent. Contracts that can be safely made in real terms are important in constructing an environment to encourage growth.

Rigidities in the labour markets are also shown to have important implications for policy setting. The authors find that the more inertial the economy, the more the authorities will favour a nominal aggregate rule. The authors also discuss the possibility of a liquidity trap and show that the risk of deflationary spirals is reduced if a nominal aggregate is targeted.

There is concern that the new fiscal framework set up by the Stability and Growth Pact will be too binding in that governments will be unable to use fiscal stabilisation policies. The authors show that this is not the case and that there is room for much stronger automatic stabilisers in the Euro Area economies without breaching the Stability and Growth Pact criteria on fiscal deficits.