

# National Institute Economic Review No. 187 January 2004

### **Executive Summary**

The Review is the quarterly publication of the National Institute of Economic and Social Research. Each issue contains a survey of the economic situation and prospects in the UK and in the World. In addition there are articles which cover related issues in greater depth.

The latest issue is published on:

Friday 30th January with a release time to the press of 00.01 hours on that day.

The January 2004 edition contains the following research articles:

 Productivity impacts and spillovers from foreign ownership in the United Kingdom

by Richard Harris and Catherine Robinson

 The zero interest rate floor (ZIF) and its implications for monetary policy in Japan

by Benjamin Hunt and Douglas Laxton

• The effects of Euro Area interest rate changes: evidence from macroeconomic models

by Peter McAdam and Julian Morgan

#### The world economy

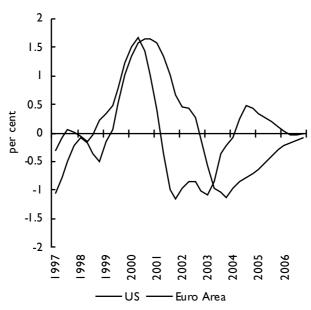
Ray Barrell, Bettina Becker, Sylvia Gottschalk, Dawn Holland and Olga Pomerantz

- The world recovery is gathering strength: global GDP will rise by 4.1 per cent in 2004, up from 3.3 per cent in 2003.
- The United States economy will grow by 3.9 per cent this year, its best performance since 1999, and by 3.1 per cent in 2005.
- The US current account deficit will narrow in 2005 to 4.6 per cent of GDP.
- Recovery in the Euro Area remains on track despite the appreciation of the euro. GDP will grow by 2.0 per cent this year and by 2.4 per cent in 2005.
- The upturn in Japan will be sustained over the next two years: GDP will grow by 1.9 per cent this year and by 2.1 per cent in 2005.
- Japanese deflation is easing and prices will rise a little in 2005.

The world economy is set to grow by around 4 per cent a year in 2004 The world economy is set to grow by around 4 per cent a year in both 2004 and 2005, virtually unchanged from our previous forecast in October. But there has been a shift in the composition of that growth in 2004, with more now occurring in the United States and Japan. This reflects the stimulus from the falling dollar to the American economy and the sustained recovery in Japan.

The depreciation of the dollar is now boosting American growth substantially. Exports will increase by 9.8 per cent in 2004 whereas imports will rise by 5.2 per cent. As a result, net exports will contribute to GDP growth for the first time

Output gaps in the US and Euro area (% deviation of actual from potential output)



since 1995. Consumer spending will remain robust in 2004, rising by 3.4 per cent, but business investment will increase by only 2.8 per cent despite a rebound in profits. The unexpectedly strong recovery after a shallow downturn means that the economy will be operating at capacity by the middle of this year, according to NIESR estimates of the output gap.

It will take much longer for the output gap to close in the Euro Area. But although recovery

will be sluggish in comparison with the American upswing, it remains intact. Despite the sharp rise in the euro, buoyant demand in export markets means that net trade will contribute to GDP growth in 2004. However, consumer spending will grow this year by a modest 1.5 per cent, rising to 2.4 per cent in 2005. With business investment accelerating next year to 3.8 per cent, GDP growth will reach 2.4 per cent in 2005, the highest since 2000.

Net trade will add about half a percentage point to GDP growth

The Japanese economy will continue to grow by about 2 per cent a year in 2004 and 2005. The output gap will close by the end of this year, causing deflationary pressures to ease: prices will rise by 0.1 per cent in 2005. Continuing strong export growth of around 9 per cent will support the economy in 2004: net trade will add about half a percentage point to GDP growth. In 2005, the recovery will be helped by strong business investment, which will increase by 5.6 per cent.

#### The UK economy

Ray Barrell, Simon Kirby, Robert Metz, Rebecca Riley and Martin Weale

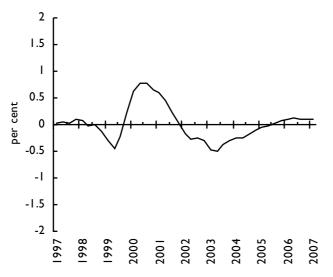
- The economy will grow by 2.7 per cent this year and by 2.8 per cent in 2005.
- Consumer spending will grow by 2.3 per cent this year and by 1.6 per cent in 2005, the lowest in ten years.
- Public spending will contribute around I and ¾ percentage points to annual GDP growth in 2004 and 2005.
- The output gap presently less than ½ per cent of potential GDP-will close in mid-2005.
- CPI inflation will rise to 1.8 per cent by the final quarter of 2004, just under the new target of 2 per cent.
- The budget deficit will continue to breach the Maastricht limit of 3 per cent of GDP over the next few years.
- The letter of the Golden Rule is close to being broken.

Consumer spending will contribute 1.5 per cent to GDP growth

The economic recovery will become entrenched this year. Consumer spending will contribute 1.5 per cent to GDP growth; public spending – both consumption and investment – will account for over 1 per cent. Net trade will subtract 0.5 per cent from growth. In 2005, however, consumer spending will contribute only 1.1 per cent to GDP growth, whereas net trade will add 0.3 per cent.

The rebalancing in growth from domestic demand to net trade is a response both to the world recovery and to exchange-rate movements. Despite the recent

The output gap in the UK (% deviation of actual from potential output)



appreciation of the pound against the dollar, the trade-weighted index is 4 per cent lower than in late 2002. On the basis of interest-rate expectations, our forecast assumes a further depreciation in the effective rate of sterling of 3.5 per cent by the end of 2005.

With the economy growing above trend, the output gap will close by the middle of 2005. As GDP approaches its full capacity, inflationary

pressures will mount. The Consumer Price Index, the new measure for the Government's inflation target, will increase by 1.8 per cent in the year to the fourth quarter, up from 1.3 per cent, its current rate of increase. This in turn will prompt a further tightening in monetary policy during 2004.

The outlook for the public finances remains bleak

The UK's economic performance appears to have improved relative to our European partners since 2002. This is partly the consequence of the fortunate, and fortuitous, timing of government spending in the UK. It has also been helped by the impacts of relatively strong house price inflation. These factors are associated with about a third of the UK's recent better performance. Despite the robust recovery, the outlook for the public finances remains bleak. The current-account budget is forecast to remain in substantial deficit over the next five years. Total current receipts will rise from 38 per cent of GDP in 2003–4 to 38.7 per cent in 2005–6.

The total budget deficit, under the Maastricht definition, will be 3.4 per cent of GDP between 2004–5 and 2006–7. The issue of whether the letter of the Golden Rule will be met or not over the current economic cycle is very finely balanced.

#### Productivity impacts and spillovers from foreign ownership in the United Kingdom

by Richard Harris and Catherine Robinson

Governments, the world over, view foreign direct investment (FDI) in a largely positive light because of the potential productivity benefits that it promises - through enhanced competition, increased demand for local resources and by the best practice and latest technology of foreign-owned firms 'spilling over' to domestic firms.

Research by Richard Harris and Catherine Robinson raises important questions about these 'spillovers'. Their analysis of 20 UK manufacturing industries (including motor vehicles and their parts, chemicals, aerospace and pharmaceutical products) reveals a net impact of around 13% of gross output (i.e. sales); however, there is no clear pattern of benefits for domestic firms from the presence of foreign-owned firms. Indeed, spillovers are as likely to be negative as positive.

FDI in UK manufacturing has increased from around 14% in 1974 to almost a third of sales by 1997. Foreign-owned firms are expected to bring productivity increases from direct and indirect sources: by the healthy injection of competition; from the increased demand for local capital and labour resources; and indirectly, by their best practice and latest technology spilling over to domestic firms. Indeed, the main stated motivation of a number of regional and industrial policies has been to attract foreign investment.

Harris and Robinson's study measures spillovers from FDI to domestic firms from three directions: from domestic firms being located in the same region as a concentration of foreign firms; from being in the same industry as a concentration of foreign firms; and finally from being in the same supply chain as a concentration of foreign firms (agglomeration, intra and inter spillovers, respectively). Their analysis uses the ARD (Annual Respondents Database), the micro data that underlies the Census of Production (ONS). The research looks at total factor productivity changes over time in 20 industries with a significant foreign presence.

The competition effect of FDI entry outweighs the potential productivity gains through spillovers

The results indicate that the impact of spillovers from FDI on the 20 selected manufacturing industries in the UK has accounted for around 13% of gross output (i.e. sales), the majority of which comes from inter-industry spillovers. This suggests that, within the same industry, the competition effect of FDI entry outweighs the potential productivity gains through spillovers. In contrast, regional spillovers are found to be negligible in the industries chosen.

Whilst there may be a net gain for the 20 selected industries, spillovers vary considerably across industry and there is no clear pattern. Thus, policies that encourage inward investment on the assumption that spillover benefits will automatically accrue to local plants are misguided.

## The zero interest rate floor (ZIF) and it implications for monetary policy in Japan

by Benjamin Hunt and Douglas Laxton

Larry Summers predicted that the issue of the zero nominal interest rate floor (ZIF) would become of central importance to monetary policy in an era of low rates of inflation. Summers argued that the resulting low average levels for nominal interest rates would limit the scope for monetary authorities to reduce real interest rates to stabilize output and inflation. Research efforts examining this issue have followed two tracks:

The first investigates how the design of the monetary policy framework, as summarized by policy rules and the choice of the target rate of inflation, can mitigate the extent to which the ZIF becomes binding.

The second examines what other policy channels, besides the short-term interest rate, are available to stimulate the economy once the ZIF becomes binding. Following along both of these two research tracks, the IMF's macroeconomic model MULTIMOD has been used to study the implications for Japan of the ZIF.

The key results from the analysis can be summarized as follows:

- In Japan, target rates of inflation below two percent notably increase the likelihood that the ZIF will become binding. Further, the likelihood of the constraint becoming binding, the associated deterioration in macroeconomic performance, and the possibility of entering into a deflationary spiral all increase significantly as the target for inflation falls from two percent to zero percent.
- Once the constraint has become binding, both an increase in government expenditure and a credible monetary-policy commitment to increase future inflation can help stimulate aggregate demand. However, the level of government debt evolves quite differently under the monetary versus the fiscal policy action suggesting that coordinated monetary and fiscal actions are preferable to fiscal actions alone. The important caveat here is that private agents need to believe the commitment to future inflation.
- Modifications to the basic monetary policy rule that alter the way that monetary policy systematically responds to stabilize output and prices can help to mitigate the negative implications of the ZIF. However, the most important component of the monetary policy framework appears to be the numerical value for the inflation target. Policymakers should target a sufficiently high rate of inflation. In the case of Japan, this analysis suggests that the optimal value for the inflation target may be as high as 2.5 percent.

## The Effects of Euro Area Interest Rate Changes: Evidence from Macroeconomic Models

by Peter McAdam and Julian Morgan

Since the introduction of the single currency on the 1 January 1999 there has been a pressing need to understand how the economy of the 'Euro Area' behaves. To this end, we examine the effects of changes in Euro Area interest rates using a range of macroeconomic models.

Across these models we find broad similarities in the pattern of results following a temporary shock to Euro Area interest rates. Following the rise in policy rates of one percent for two years, output is around 0.2 to 0.3 per cent lower than it would otherwise have been in the first year. The magnitude of the effect on output typically reaches a maximum, of between 0.4 and 0.7 per cent, after around 2 years. Thereafter, with the cessation of the shock, the effects on output tend to diminish. Among the components of aggregate demand, investment is the most affected by the change in interest rates.

The adjustment of prices tends to be somewhat slower. In the first year prices are around 0.1 per cent lower than they would have been without the change in interest rates. However, the effect on prices becomes more noticeable in subsequent years, reaching around -0.4 to -0.7 per cent after 5 years. The more sluggish adjustment of prices - or longer transmission lag - may reflect the existence of rigidities, such as costs in adjusting prices and wages and contracts that are fixed in nominal terms.

Interest rate changes are found to have a more immediate effect on output than on prices in the Euro Area Thus, interest rate changes are found to have a more immediate (but more short-lived) effect on output than on prices in the Euro Area. This is a typical finding of studies of the effects of interest changes, including work on other countries such as the US.

Overall, it is reassuring that a broadly similar pattern of results emerges even when using a variety of models of the Euro Area. This is despite the fact that there are notable differences in the design of these models.