PROSPECTS FOR THE UK ECONOMY

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Introduction

GDP growth remained below trend into the second half of this year. Early estimates of GDP show the economy expanding by 0.4 per cent in the third quarter of the year, similar to the rate we projected when constructing the forecast. The economy has now expanded at a rate below 0.6 per cent for five consecutive quarters (chart 1), and this is now affecting the annual figures. Our forecast shows GDP growth this year at 1.7 per cent. This is the weakest growth rate observed in the past decade in a single calendar year.

Some softening of growth from the strong rates observed last year was expected. In April our forecast showed annual GDP growth weakening from 3.1 per cent in 2004 to 2.7 per cent this year. Since then we have revised down our forecast for growth this year by 1 percentage point. As we discuss in Box A, the downward revision to our growth forecast since the time of the last Budget statement is only partly explained by data revisions and identified shocks to the economy. The majority of the revision to the growth forecast in 2005 is a result of unaccountedly weak growth in the first three quarters of the year. At the same time, we have revised up our forecast for inflation by 1/3 percentage points per annum for the remainder of the short-term forecast horizon. Inflation is now expected to remain above the central target for the next few years (chart 2). Unlike the revisions to the growth forecast this year, the revisions to our inflation forecast can be explained in terms of recent identified shocks to the economy, in particular by rising world oil prices.

Looking to the components of demand for an account of recent economic weakness we note that strong growth last year was led by domestic demand, which accounted for 3.8 percentage points of GDP growth in 2004. In comparison, our expectation is that domestic demand will account

Chart 1. Real GDP growth (per cent per quarter)

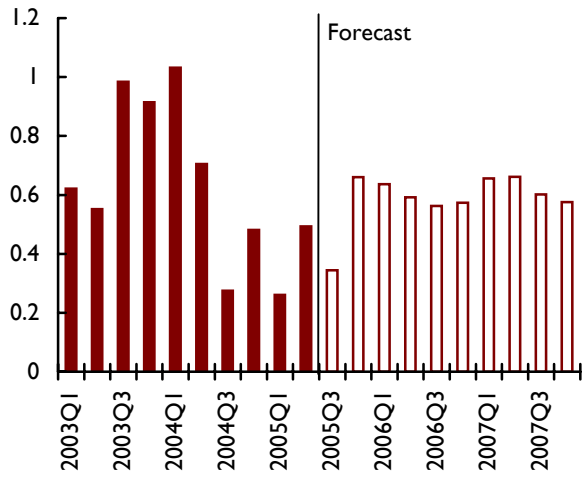
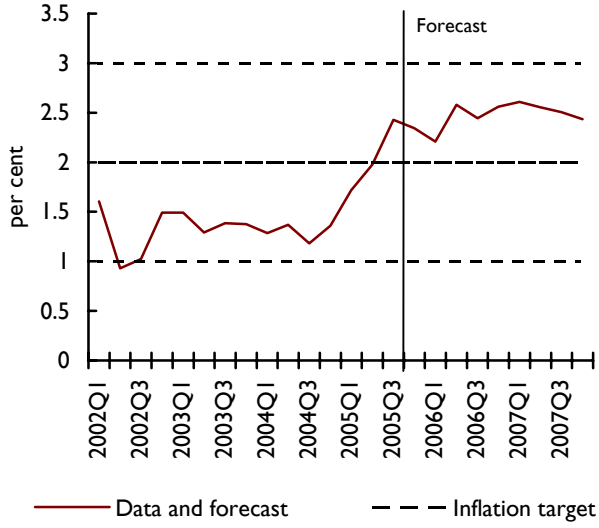


Chart 2. CPI inflation



Box A. A decomposition of forecast revisions

The current forecast shows the UK economy growing by 1¾ and 2¼ per cent this year and next. This is substantially weaker than anticipated in our April forecast at the time of the Budget statement. At that time the UK economy was expected to grow by 2¾ per cent in both 2005 and 2006. Over the same six months we have revised up our forecast of inflation in the consumer prices index for this year and next by approximately a 1/3 percentage point.

There are a number of shocks to the economy that have occurred in the past six months and that have led to changes in key forecasting assumptions. We use our model, NiGEM, to decompose the impacts of the major shocks to the economy since April. We have simulated the effects of a further rise in the oil price of approximately $10, lower than anticipated long-term interest rates and a strong depreciation of the euro against the dollar.

Chart A1. Revisions to GDP growth forecast: April – October 2005

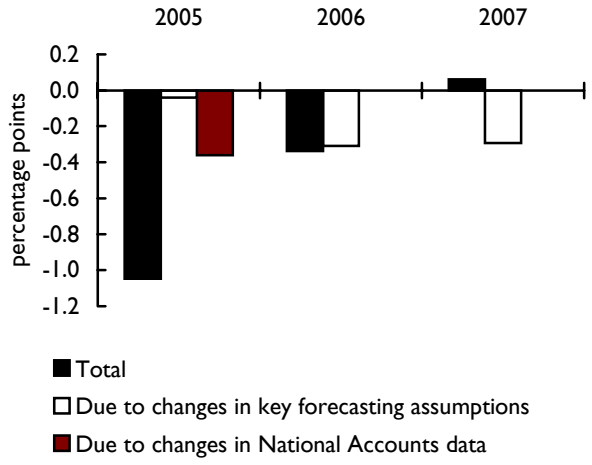
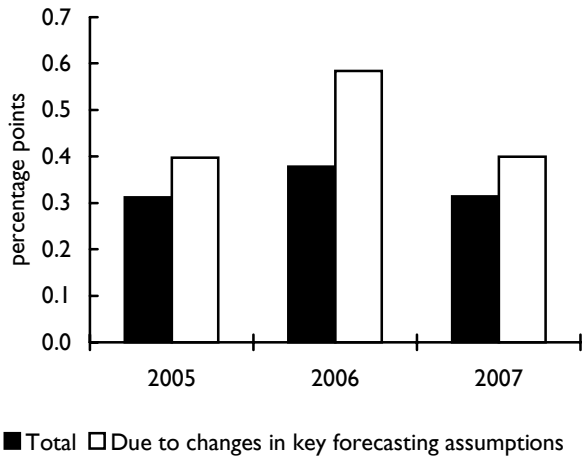


Chart A2. Revisions to inflation forecast: April – October 2005



In charts A1 and A2 we illustrate the combined effect on the forecast of these shocks alongside the actual revision to the forecast. The shock to oil prices and the depreciation of the euro against the dollar serves to dampen UK growth, whereas the reduction in long-term interest rates might be expansionary if it is driven by longer-term factors that are independent of the slowdown in activity.

The combined effect of these shocks on the forecast for GDP growth this year is negligible, but they take approximately a 1/3 percentage point off forecast GDP growth in 2006 and 2007. Far more important this year are the revisions to National Accounts data for 2004. The latest National Accounts data show a much sharper slowdown in growth throughout 2004 than did the vintage of National Accounts data available in April, and this affects the annual growth rate this year. Assuming that quarterly growth rates were as forecast in April, these data revisions alone would imply a reduction in GDP growth this year of 0.4 percentage points. Nevertheless, more than half the revision to forecast GDP growth this year cannot be explained by visible exogenous shocks to the economy or by data changes.

As illustrated in chart A2, the combined effect of the above mentioned shocks to the economy since April is to raise inflation by on average a ½ percentage point per annum over the forecast horizon. The actual revision to our inflation forecast is less than that implied by the economic shocks as it takes into account the underlying weakness in GDP growth observed this year.

for only 1.8 percentage points of GDP growth this year. This is mostly explained by a softening in consumer expenditure this year, prompted by a reasonably sharp moderation to house price inflation and an associated moderation in the rate of increase in household sector housing wealth. We have not had reason to revise our forecasting assumptions for real house price inflation or our forecast of consumer expenditure in the past six months as we have been projecting slow house price growth and weak consumption in our previous

Table 1. Growth and inflation forecasts

CPI inflation	2005Q4	2006Q4
Central projection	2.3	2.6
Root mean squared error	0.32	0.69
Probability of 12 month CPI inflation falling in the following ranges		
less than 1 per cent	0	1
1 to 1.5 per cent	1	4
1.5 to 2 per cent	17	14
2 to 2.5 per cent	56	25
2.5 to 3 per cent	25	28
more than 3 per cent	1	28
	100	100

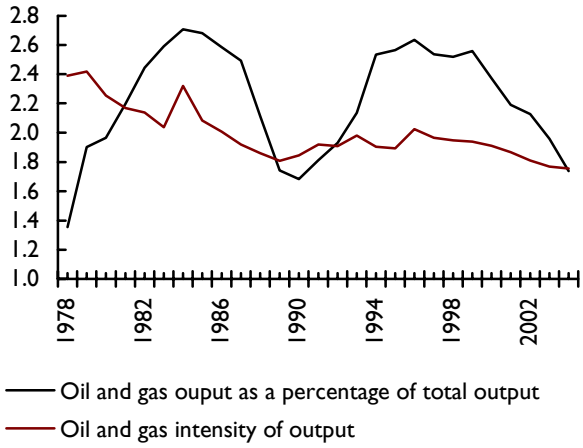
GDP growth	2005	2006
	1.7	2.3
	0.64	1.2
Probability of annual growth rate falling in the following ranges		
less than 0 per cent	1	3
0 to 1 per cent	13	11
1 to 2 per cent	54	26
2 to 3 per cent	30	32
3 to 4 per cent	2	20
more than 4 per cent	0	8
	100	100

forecasts. As we noted in our January *Review*, evidence of a structural shift in the relationship between consumer expenditure and its determinants could not necessarily be interpreted as a weakening in the link between house prices and consumption. Interestingly, as we discuss on page 44, recent revisions to the National Accounts data mean that there no longer exists any obvious structural shift in the relationship between consumer expenditure and its determinants.

We note that the downward revision to our projection for growth in 2005 is accounted for by downward revisions to gross fixed capital formation and government consumption spending. All components of gross fixed capital formation, i.e. stockbuilding, housing, business and government investment, are significantly weaker than expected in April. The unexpected weakness in UK investment mirrors the puzzle of weak investment in the global economy, at a time when interest rates are low and when companies do not appear to be cash constrained. The weakness in real government spending is a result of strong upward data revisions to growth of the deflator for government spending and a sharp fall in government investment volumes in the second quarter of the year. It is of course always a possibility that further data revisions will allocate more government spending to volume rather than price growth, such that GDP growth will appear stronger. We assume that some of the recent weakness in government consumption and investment spending, measured in volume terms, is reversed in the near term and this helps to support growth at the turn of the year.

The forecast shows GDP growth rising next year, to 2.3 per cent per annum. Growth is expected to remain relatively weak over the near and medium term. This is in large part attributable to the shock we have seen to oil prices in the past couple of years. We discuss the effect of

Chart 3. Oil and gas industry share of output and the oil and gas intensity of output

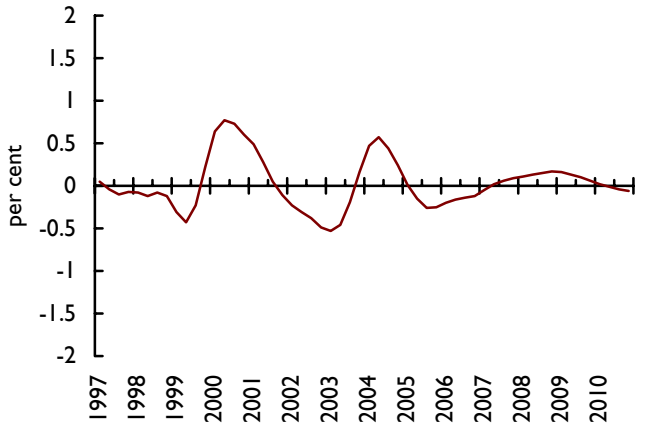


Note: oil and gas extraction industry and GDP are measured in 2002 basic prices, £mn. Inland consumption of petroleum products and gas is measured in millions of tonnes of oil equivalent

rising oil prices on the economy more generally elsewhere in this *Review*, and on the public finances later in this chapter. Our model simulations suggest that in and of itself the $30 rise in the world oil price that has occurred in the past two years should, if it is a permanent rise, lower growth by approximately ¼ to ½ percentage points for several years, and should raise inflation by approximately 1.4 percentage points.

In the longer term the UK economy is less exposed to oil price shocks than many other European economies, due to its oil production capacity. Thus the UK reaps some benefits from the reallocation of resource to oil producers. However, the share of output of the oil and gas extraction industries has fallen sharply since 1999. Chart 3 shows

Chart 4. The output gap



oil and gas output as a per cent of total UK output and oil and gas usage relative to GDP. In the latter half of the 1990s UK oil and gas supply significantly exceeded home demand. This is no longer the case, and the UK economy is at this point merely self-sufficient in oil and gas. Nevertheless, the position now is not comparable to the situation in the 1970s when oil prices last rose sharply. At that time much of energy demand had to be met through imports. The ability of the UK economy to weather a shock to oil prices is also helped by its stakes in companies involved in oil and gas extraction in other parts of the world. These benefits should increase income earned on assets owned abroad. In passing we note that the rate of return on assets owned abroad has significantly exceeded the rate of return on foreign owned assets in the UK in the past three years, which may partly reflect higher oil company profits.

Weak growth this year has led to the emergence of some spare capacity in the economy. Our estimate of the output gap is shown in chart 4. However, current economic weakness is partly associated with a reduction in trend growth induced both by the shock to oil prices and a reduction in the rate of expansion of the workforce. Thus, the amount of spare capacity we observe is limited.

The important risks to the outlook are related to recent developments in oil prices. The possibility that inflation expectations may begin to drift upwards in the current economic environment is one that could have severe implications for growth. We discuss this in more detail in Box B in the following section. Although the housing market has slowed in a reasonably measured fashion this year, the possibility of a sharper slowdown remains a risk to the outlook and is brought to the fore in a situation where interest rates may need to rise to curb inflationary pressures.

Interest rates, exchange rates and prices

CPI inflation rose above the Bank of England's central target of 2 per cent in the third quarter of the year, driven to a large extent by rising fuel prices, although there is also likely to be some stimulus to inflation from strong economic growth last year. In the current situation one of the main dilemmas facing the Bank of England is in ascertaining to what extent recent weakness in GDP growth mirrors the rise in inflation being brought about largely by rising energy prices, and to what extent it can be attributed to shocks to demand, such as the shock we see to the housing market and therefore consumer expenditure. If sluggish growth is due primarily to demand shocks, then one might expect to see inflationary pressures weakening further out. If in contrast sluggish growth is associated with a shock to supply, then there is no obvious reason to think that inflationary pressures will weaken in response to weak growth.

Our forecast shows CPI inflation remaining above the central target for a few years, as the effect of rising fuel prices propagates throughout the economy. This occurs despite recent weakness in output and demand. While our interest rate expectations are not very different from those implied by the markets, we have assumed that interest rates do not fall further from where they are currently. Given our inflation projections we think it unlikely that the Bank would follow the yield curve in cutting interest rates next year. In particular it must be concerned about the risk that inflation expectations start to drift, if inflation moves further above target. If this were to occur, it would be far more difficult for the Bank to control inflation without stronger movements in interest rates, as we discuss in Box B.

One of the comforting signs at the moment is that wage inflation does not appear to be creeping upwards, as one might expect following a shock to oil prices of the magnitude we have seen regardless of the increase in labour market flexibility gained over the past twenty years. Settlements data show wage pressures remaining broadly stable in the first half of this year, but these may be providing a false sense of security. First, we note that inflation in the retail price index has not accelerated,

Box B. Inflation and the expectations anchor

The stability of inflation over the past ten years or so in the UK (and elsewhere) has rested to a large extent on the belief that the Central Bank will react to keep inflation on its target. If there is a loss of faith in the Bank, or a misperception of the implications of recent events for inflation, then the monetary anchor will be dragged, and inflation will rise more than it would otherwise. More formally, wage and price setting in the economy depends upon expectations of future events, and those expectations can help anchor the inflation process. If wage bargainers believe that the Bank will ensure inflation will stay on target, they will take this into account in setting wages. Similarly, producers will set their prices now in relation to their expectations of future prices. If they lose faith in the target, inflation will rise.

Expectations of the future feed into the wage price system of our model in both wage setting and in the formation of producer prices. The wage equation is a version of the standard bargaining based relationship discussed in Layard, Nickell and Jackman (1991):

$$\Delta\log(\text{wage}) = \alpha + \lambda(\log(\text{wage}(-1)/\text{producerprice}(-1)) - \log(\text{trendproductivity})) + \theta\,\text{unemployment}(-1)$$
$$+\beta\Delta\log(\text{consumerprices}(-1)) + (1-\beta)\Delta\log(\text{consumerprices}(+1))$$

Whilst the producer price equation is written as an error correction on long-run determinants with both backward and forward elements in the adjustment process:

$$\Delta\log(\textit{producerprices}) = \alpha + \lambda(\log(\textit{producerprice}(-1)) - \delta\log(\textit{unittotal costs}(-1)) - (1-\delta)\log(\textit{importprices}(-1)))$$
$$+\beta\Delta\log(\textit{unittotal costs}) + \chi\Delta\log(\textit{importprices}) + (1-\beta-\chi)\tfrac{1}{8}\textstyle\sum_{i=1}^{8}\Delta\log(\textit{producerprices}(+i))$$

In policy analysis we normally assume that expectations are formed in a rational way and are consistent with our model based results. In the case of both wages and prices we normally use model outturns for the next period for the variables denoted with a plus sign for timing. However, we can undertake experiments where expectations lose their anchor, albeit temporarily. This could happen particularly during an oil price shock, as these are widely believed to have caused the major bursts of inflation that we saw in the 1970s and 1980s.

We have undertaken an experiment where oil prices rise permanently by $10 a barrel. If we assume that expectations are formed in relation to the inflation target, they remain anchored in response to shocks, but we can change expectations by adding temporarily an intercept to the equation determining expectations. In particular we assume that inflation expectations rise by 0.6 percentage points more than justified by our target anchored equation in the first year after an oil shock and by 0.5 percentage points in the second year.

Given our wage price system, a rise in inflation expectations will raise inflation, and the Bank will have to react more strongly to the oil price shock than it would otherwise have to do. Despite the Bank's stronger reaction, inflation would rise by 0.4 percentage points in the first year and 0.5 percentage points in the second in comparison to the case where expectations remained anchored (see chart B1). In our forecast this would bring inflation almost exactly to the upper threshold of the inflation target range. If expectations were

Chart B1. Inflation responses to a drifting anchor

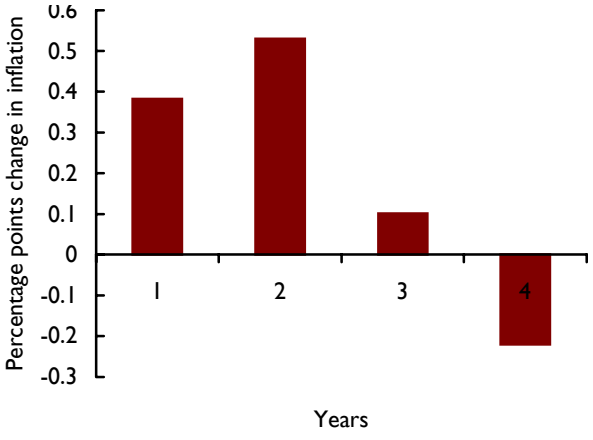
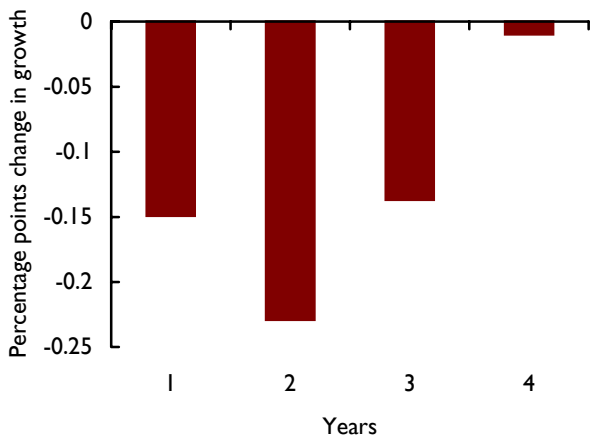


Chart B2. The overall impact of a drifting anchor on growth



Box B. (*continued*)

to become unanchored in this way the Bank would have to raise interest rates by 0.6 percentage points more than it would otherwise have done for two years. In part because of a loss of competitiveness, but also because of the extra increase in interest rates, growth would be up to a quarter of a percentage point lower for several years if expectations were to drift, as illustrated in chart B2.

An increase in oil prices is likely to cause a period of stagflation, in that trend growth will be lower and inflation higher. A $10 oil price shock would already lower growth by around 0.2 percentage points a year for several years, and drifting expectations, even on this scale, would lower growth further. Inflation is likely to rise by a half of a percentage point for several years in response to this shock, and a drifting anchor, even on this limited scale, could raise it up to half a point further. Stagflation would be significantly more noticeable if inflation expectations start to drift.

REFERENCE

Layard, R., Nickell, S. and Jackman, R. (1991), *Unemployment, Macroeconomic Performance and the Labour Market*, Oxford, Oxford University Press.

Table 2. Exchange rates and interest rates

	UK exchange rates				FT All-share index	Interest rates			
	Effective (Old BoE series) 1990 = 100	Effective 2000 = 100	Dollar	Euro		3-month rates	Mortgage interest	10-year gilts	World[a]
2000	107.56	100.01	1.52	1.64	3045.8	6.1	6.8	5.3	5.5
2001	105.78	98.53	1.44	1.61	2681.2	5.0	5.9	4.9	4.0
2002	105.99	100.98	1.50	1.59	2224.5	4.0	5.0	4.9	2.7
2003	100.21	98.28	1.63	1.45	1978.1	3.7	4.7	4.5	2.0
2004	104.10	103.49	1.83	1.47	2250.9	4.6	5.0	4.9	2.2
2005	*103.30*	*101.95*	*1.82*	*1.46*	*2592.0*	*4.7*	*5.1*	*4.4*	*2.9*
2006	*103.00*	*100.88*	*1.75*	*1.47*	*2863.6*	*4.4*	*5.0*	*4.3*	*3.5*
2007	*101.94*	*100.07*	*1.76*	*1.45*	*3047.1*	*4.4*	*4.9*	*4.4*	*3.7*
2004 Q1	104.07	103.60	1.84	1.47	2219.1	4.1	4.8	4.8	1.9
2004 Q2	105.20	104.07	1.81	1.50	2230.7	4.5	4.9	5.1	2.0
2004 Q3	104.79	103.97	1.82	1.49	2206.0	4.9	5.2	5.0	2.3
2004 Q4	102.35	102.31	1.86	1.44	2347.7	4.8	5.2	4.7	2.5
2005 Q1	102.87	102.37	1.89	1.44	2473.7	4.9	5.2	4.7	2.7
2005 Q2	104.28	103.23	1.86	1.47	2479.1	4.8	5.3	4.4	2.9
2005 Q3	*102.97*	*101.24*	*1.78*	*1.46*	*2661.0*	*4.6*	*5.1*	*4.3*	*3.0*
2005 Q4	*103.07*	*100.96*	*1.75*	*1.47*	*2754.2*	*4.5*	*5.0*	*4.3*	*3.1*
2006 Q1	*103.08*	*100.96*	*1.75*	*1.47*	*2793.0*	*4.5*	*5.0*	*4.3*	*3.3*
2006 Q2	*103.10*	*100.96*	*1.75*	*1.47*	*2839.8*	*4.5*	*5.0*	*4.3*	*3.4*
2006 Q3	*103.11*	*100.96*	*1.75*	*1.47*	*2887.5*	*4.4*	*5.0*	*4.3*	*3.5*
2006 Q4	*102.72*	*100.65*	*1.76*	*1.47*	*2934.2*	*4.4*	*4.9*	*4.3*	*3.6*
Percentage changes									
2000/1999	3.7	2.5	–6.3	8.2	4.4				
2001/2000	–1.6	–1.5	–5.0	–2.1	–12.0				
2002/2001	0.2	2.5	4.3	–1.0	–17.0				
2003/2002	–5.5	–2.7	8.8	–9.2	–11.1				
2004/2003	3.9	5.3	12.1	1.9	13.8				
2005/2004	*–0.8*	*–1.5*	*–0.6*	*–0.9*	*15.2*				
2006/2005	*–0.3*	*–1.0*	*–3.7*	*0.6*	*10.5*				
2007/2006	*–1.0*	*–0.8*	*0.2*	*–1.3*	*6.4*				
2004Q4/03Q4	2.2	3.3	9.3	0.4	9.3				
2005Q4/04Q4	*0.7*	*–1.3*	*–5.9*	*2.2*	*17.3*				
2006Q4/05Q4	*–0.3*	*–0.3*	*0.1*	*–0.5*	*6.5*				

Note: (a) Weighted average of 3–month interbank rates in other OECD economies.

due in part to the greater reflection of various housing costs in the RPI in comparison to the CPI. Wage settlements are typically indexed to the RPI. Second, productivity growth has proved remarkably weak this year, as reflected in the sharp rise in unit costs projected for this year as a whole. Seen against the productivity and unit cost data, wage inflation may appear less subdued than at first glance.

We report two different measures of the sterling effective exchange rate. The first is similar to the Bank of England's old IMF based series. The second is better compared with the Bank of England's more up-to-date and broader indices. We discuss the differences in Barrell *et al.* (2005). The two indices show different developments in sterling over the forecast horizon. The new index shows sterling depreciating by a small amount from current levels. The older index shows sterling remaining broadly constant until 2007.

At the time of constructing the forecast, equity prices showed a sharp rise in the second half of this year. Since then equity prices have fallen back somewhat. The year-on-year rise in the equity index at the end of 2005 still suggests strong performance in equity markets, but the rise may be weaker than shown in the table.

Demand

Our forecast shows the economy becoming more balanced over the near term, with domestic demand accounting for less growth and net trade ceasing to be a drag on growth.

The quarterly growth profile of household consumption expenditure has been somewhat weaker over the past year or so. This is a position we have forecast for some time, and is a consequence of moderate growth in real disposable income and slow growth in housing wealth. We expect growth in consumer expenditure to remain relatively subdued in the near term. Indeed, growth in retail sales volumes, which account for approximately 40 per cent of total household consumption, have been relatively stable in the second and third quarters of this year. In our forecast, continuing weakness in housing wealth and real disposable income results in annual growth in household consumption expenditure of around 1¾ per cent for the next years.

Chart 5 shows inflation as measured by three different National Accounts deflators. It is clear from this chart that inflation is much higher for government consumption than it is for both household consumption and GDP as a

Table 3. Price indices *2002=100*

	Unit labour costs	Imports deflator	Exports deflator	Whole-sale price index[a]	World oil price ($)[b]	Consump-tion deflator	Consumer prices index	Retail price index: All items	Retail price index: Excluding mortgage interest	GDP deflator (market prices)
2000	94.2	102.4	100.3	100.7	27.2	96.4	97.6	96.6	95.8	94.8
2001	97.6	102.3	99.5	100.1	23.6	98.5	98.8	98.4	97.8	97.0
2002	100.0	100.0	100.0	100.0	24.4	100.0	100.0	100.0	100.0	100.0
2003	102.4	100.4	101.5	101.3	27.8	102.0	101.4	102.9	102.8	102.9
2004	104.2	99.9	100.4	103.2	35.9	103.3	102.7	106.0	105.1	105.0
2005	*107.8*	*104.6*	*104.6*	*105.5*	*53.2*	*105.5*	*104.9*	*109.0*	*107.5*	*107.5*
2006	*110.8*	*109.6*	*109.3*	*108.0*	*59.6*	*108.3*	*107.4*	*112.3*	*110.6*	*110.5*
2007	*113.5*	*112.2*	*111.5*	*110.6*	*56.7*	*111.3*	*110.2*	*115.9*	*113.9*	*113.5*
Percentage changes										
2000/1999	3.4	3.1	2.3	–0.2	56.4	1.1	0.8	2.9	2.1	1.2
2001/2000	3.6	0.0	–0.7	–0.6	–13.4	2.3	1.2	1.8	2.1	2.3
2002/2001	2.4	–2.3	0.5	–0.1	3.4	1.5	1.3	1.6	2.2	3.1
2003/2002	2.4	0.4	1.5	1.3	14.1	2.0	1.4	2.9	2.8	2.9
2004/2003	1.8	–0.5	–1.1	1.9	29.1	1.3	1.3	3.0	2.2	2.0
2005/2004	*3.5*	*4.7*	*4.2*	*2.2*	*48.2*	*2.1*	*2.1*	*2.9*	*2.3*	*2.4*
2006/2005	*2.7*	*4.8*	*4.5*	*2.4*	*12.1*	*2.7*	*2.4*	*3.0*	*2.9*	*2.8*
2007/2006	*2.5*	*2.3*	*2.1*	*2.4*	*–4.9*	*2.8*	*2.5*	*3.2*	*3.0*	*2.7*

Notes: (a) Excluding food, beverages, tobacco and petroleum products. (b) Per barrel, average of Dubai and Brent spot prices.

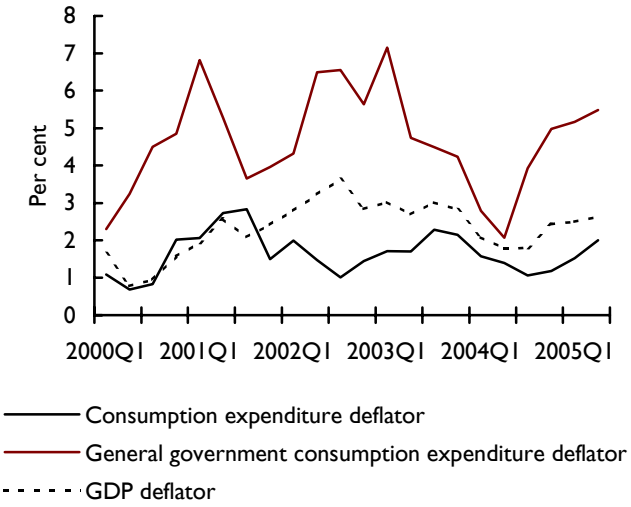
Table 4. Gross domestic product and components of expenditure

£ billion, 2002 prices

	Final consumption expenditure		Gross capital formation		Domestic demand	Total exports	Total final expenditure	Total imports	GDP at market prices	Net trade
	Households & NPISH[a]	General gov't	Gross fixed investment	Changes in inventories[b]						
2000	650.4	198.6	163.7	5.3	1018.0	266.5	1284.6	279.8	1005.5	–13.3
2001	670.1	202.0	167.6	6.6	1046.4	274.3	1320.8	293.2	1027.9	–18.9
2002	693.4	211.0	172.6	3.1	1080.0	274.9	1355.0	306.5	1048.5	–31.6
2003	711.1	220.4	172.6	4.6	1108.7	278.2	1386.8	312.0	1074.9	–33.8
2004	737.0	226.2	181.0	5.1	1149.4	289.0	1438.4	330.4	1108.9	–41.4
2005	*750.1*	*230.1*	*186.4*	*3.2*	*1169.8*	*301.4*	*1471.2*	*345.0*	*1127.2*	*–43.6*
2006	*763.4*	*236.6*	*194.0*	*2.3*	*1196.2*	*317.9*	*1514.2*	*361.8*	*1153.3*	*–43.9*
2007	*775.5*	*242.7*	*201.5*	*3.2*	*1222.9*	*336.6*	*1559.5*	*378.6*	*1181.9*	*–42.0*
Percentage changes										
2000/1999	4.6	3.7	3.5		4.1	9.1	5.1	9.0	4.0	
2001/2000	3.0	1.7	2.4		2.8	2.9	2.8	4.8	2.2	
2002/2001	3.5	4.4	3.0		3.2	0.2	2.6	4.5	2.0	
2003/2002	2.6	4.5	0.0		2.7	1.2	2.4	1.8	2.5	
2004/2003	3.6	2.6	4.9		3.7	3.9	3.7	5.9	3.2	
2005/2004	*1.8*	*1.7*	*3.0*		*1.8*	*4.3*	*2.3*	*4.4*	*1.7*	
2006/2005	*1.8*	*2.8*	*4.1*		*2.3*	*5.5*	*2.9*	*4.9*	*2.3*	
2007/2006	*1.6*	*2.6*	*3.9*		*2.2*	*5.9*	*3.0*	*4.6*	*2.5*	
Decomposition of growth in GDP[c]										
2000	2.9	0.7	0.6	–0.1	4.1	2.3	6.5	–2.4	4.0	–0.1
2001	2.0	0.3	0.4	0.1	2.8	0.8	3.6	–1.3	2.2	–0.6
2002	2.3	0.9	0.5	–0.3	3.3	0.1	3.3	–1.3	2.0	–1.2
2003	1.7	0.9	0.0	0.1	2.7	0.3	3.0	–0.5	2.5	–0.2
2004	2.4	0.5	0.8	0.1	3.8	1.0	4.8	–1.7	3.2	–0.7
2005	*1.2*	*0.4*	*0.5*	*–0.2*	*1.8*	*1.1*	*3.0*	*–1.3*	*1.7*	*–0.2*
2006	*1.2*	*0.6*	*0.7*	*–0.1*	*2.3*	*1.5*	*3.8*	*–1.5*	*2.3*	*0.0*
2007	*1.1*	*0.5*	*0.7*	*0.1*	*2.3*	*1.6*	*3.9*	*–1.5*	*2.5*	*0.2*

Notes: (a) Non-profit institutions serving households. (b) Including acquisitions less disposals of valuables and quarterly alignment adjustment. (c) Components may not add up to total GDP growth due to rounding and statistical discrepancy included in GDP.

Chart 5. Inflation as measured by National Accounts deflators



whole. Data revisions suggest that the growth in real government expenditure in 2004 was almost half that originally estimated at the time of the April *Review*. However, in nominal terms growth is only 20 per cent less. Thus much of public expenditure growth in 2004 is thought to have been associated with inflation rather than growth in real terms. This is consistent, at least in part, with strong pay pressures in the public sector. Our forecast for growth in real government consumption expenditure is based on projections set out in *Budget 2005*, but we have modified these in light of the latest data. For this year we expect much of the expenditure to be absorbed by inflation, as in 2004, with stronger real growth in 2006 and 2007.

Trade data for the second quarter and first months of the third quarter of the year are difficult to interpret. Net trade provided a positive contribution to growth in the second quarter, which is partly due to the flattering

Table 5. External sector

	Exports of goods	Imports of goods	Net trade in goods	Exports of services	Imports of services	Net trade in services	Export price competitive-ness[d]	World trade[c]	Terms of trade[b]	Current balance
	£ billion, 2002 prices[a]						2002=100			% of GDP
2000	184.8	212.4	–27.6	81.6	67.5	14.2	99.6	96.9	98.0	–2.6
2001	189.7	224.0	–34.3	84.5	69.2	15.3	96.8	97.8	97.3	–2.2
2002	186.5	233.6	–47.1	88.4	72.9	15.5	100.0	100.0	100.0	–1.6
2003	186.0	238.2	–52.2	92.1	73.8	18.4	99.8	103.8	101.1	–1.5
2004	189.3	254.4	–65.1	99.7	76.1	23.6	101.0	112.8	100.5	–2.0
2005	*200.0*	*265.2*	*–65.3*	*101.4*	*79.7*	*21.7*	*96.8*	*119.3*	*100.0*	*–1.9*
2006	*212.2*	*279.6*	*–67.4*	*105.7*	*82.2*	*23.5*	*96.2*	*126.5*	*99.7*	*–2.1*
2007	*225.2*	*293.0*	*–67.8*	*111.4*	*85.6*	*25.8*	*96.8*	*134.5*	*99.4*	*–2.3*
Percentage changes										
2000/1999	12.2	9.3		2.3	8.0		–2.5	11.8	–0.8	
2001/2000	2.7	5.4		3.5	2.6		–2.8	0.9	–0.7	
2002/2001	–1.7	4.3		4.7	5.3		3.3	2.3	2.8	
2003/2002	–0.3	2.0		4.2	1.2		–0.2	3.8	1.1	
2004/2003	1.7	6.8		8.2	3.1		1.2	8.7	–0.6	
2005/2004	*5.7*	*4.3*		*1.7*	*4.8*		*–4.1*	*5.8*	*–0.5*	
2006/2005	*6.1*	*5.4*		*4.2*	*3.1*		*–0.7*	*6.1*	*–0.4*	
2007/2006	*6.1*	*4.8*		*5.4*	*4.2*		*0.7*	*6.3*	*–0.3*	

Notes: (a) Balance of payments basis. (b) Ratio of average value of exports to imports. (c) Weighted by import shares in UK export markets. (d) A rise denotes a loss in UK competitiveness.

effect of Missing Trader Intra-Community fraud on the export figures for June. Export data available for the third quarter appear weak in comparison. Furthermore the trade deficit worsened significantly in August due to a deterioration in the surplus on services trade, which can largely be attributed to the estimated payment Lloyd's of London will have to make for claims arising from the effects of hurricane Katrina of £1.4bn. Due to the nature of Lloyd's of London, this figure enters the trade statistics as a reduction in services exports when the event took place, rather than when the payment is actually made. This effect is specific to Lloyd's of London, which does not have actuarial reserves from which to make such payments. Measured as a share of GDP, the Lloyd's of London payment reduces the current balance this year by 0.1 percentage points.

Over the past two decades the UK has been consistently losing its trade share of world merchandise exports as the emergence of newly industrialised economies in Asia, Latin America and more recently Eastern Europe increase competition in the global export platform. The UK's share of world merchandise exports fell from 5.3 per cent in 1981 to 3.7 per cent in 2004. More importantly, almost half of this drop in export share has come since 2000 as China expanded its share of markets by 85 per cent. Much of this increase has come as a result of the removal of barriers to trade, such as the dismantling of the Multi Fibre Agreement and the subsequent opening of European Union markets to cheap textile imports form China. Partly as a result, growth in UK goods export has remained anaemic in the past few years with negative growth in 2002 and 2003 and only 1.7 per cent in 2004 even as world trade grew by 8.7 per cent in 2004. This loss of market share will have reduced trend growth over the past few years, but the effect may be declining.

We remain optimistic that this decline in the UK's exports has almost run its course and we forecast the external sector to begin contributing positively to overall economic growth by 2007. A recent report by Betschart *et al.* (2005) found the UK's export structure to be one of the most favourable among the EU economies in terms of future growth prospects. The UK ranked fourth behind the US, Germany and Japan in the share of world exports of high tech goods, which has grown twice as fast as total world exports between 1997 and 2002. Information and communication technologies (ICT) goods, which are the dominant subgroup within the high tech goods segment in the UK, are expected to continue their high growth in the medium term. Furthermore, there is evidence that while the UK has been losing some market share of these ICT exports to the East Asian economies in the past, these are

Table 6. Household income and expenditure

	Average[a] earnings	Compen-sation of employees	Total personal income	Gross disposable income	Real disposable income[b]	Final consumption expenditure		Savings ratio[c]
						Total	Durable	
	2002=100	£ billion, current prices			£ billion, 2002 prices			per cent
2000	91.9	532.0	842.2	646.1	670.5	650.4	69.0	5.0
2001	96.1	563.4	896.0	688.3	698.4	670.1	76.3	6.3
2002	100.0	588.6	921.5	710.1	710.1	693.4	80.4	4.8
2003	104.6	617.6	969.3	744.4	730.1	711.1	87.6	5.3
2004	109.1	648.8	1012.0	770.2	745.8	737.0	94.4	4.4
2005	*114.0*	*682.5*	*1063.7*	*803.2*	*761.6*	*750.1*	*98.8*	*5.0*
2006	*119.5*	*717.2*	*1119.2*	*844.2*	*779.4*	*763.4*	*104.2*	*5.5*
2007	*125.2*	*753.3*	*1175.7*	*885.4*	*795.3*	*775.5*	*108.3*	*5.9*
Percentage changes								
2000/1999	5.7	7.6	6.5	6.0	4.8	4.6	9.2	
2001/2000	4.7	5.9	6.4	6.5	4.2	3.0	10.6	
2002/2001	4.0	4.5	2.8	3.2	1.7	3.5	5.4	
2003/2002	4.6	4.9	5.2	4.8	2.8	2.6	8.9	
2004/2003	4.4	5.0	4.4	3.5	2.1	3.6	7.8	
2005/2004	*4.4*	*5.2*	*5.1*	*4.3*	*2.1*	*1.8*	*4.7*	
2006/2005	*4.8*	*5.1*	*5.2*	*5.1*	*2.3*	*1.8*	*5.5*	
2007/2006	*4.8*	*5.0*	*5.0*	*4.9*	*2.0*	*1.6*	*3.9*	

Notes: (a) Average earnings equals total labour compensation divided by the number of workforce employee jobs. (b) Deflated by consumers' expenditure deflator. (c) Includes adjustment for change in net equity of households in pension funds.

mainly more labour intensive products in the assembly and packaging stage while the UK has retained the market share of the more sophisticated research-based goods. Despite the phenomenal development in China over the past decade, it is unlikely that China could gain the export market share of these knowledge based products at a similar pace to that of the labour intensive products given that a large majority of its labour force remains unskilled. On the other hand, the UK is in a good position to take advantage of the rapid growth in China, the continuing industrialisation process and rising per capita income within Asia. As it is, the UK's merchandise export to China has seen a compounded annual rate of growth of 12 per cent between 1981 and 2000, and this has since increased to 18 per cent between 2000 and 2004.

We expect total import growth to be slower than exports due to weaker domestic demand growth. Consequently, our forecast is for net trade to stop subtracting from growth in 2006 and to contribute to growth in 2007. However, the deficit in the nominal trade balance as a per cent of GDP continues to worsen through to the end of 2007 as the terms of trade declines in each year to 2007. The overall current balance measured as a percentage of GDP remains broadly stable in our forecast due to rising income from abroad.

Income and savings

Annual growth of real household disposable income was relatively weak in 2004, despite strong growth in the economy as a whole. This was due to weak growth in personal income and due to the increase in the effective tax rate on household incomes, which reduced disposable income growth by 0.9 percentage points. We expect growth in total personal income to pick up this year, remaining at around 5 per cent through to the end of our forecast horizon. Policy announcements in previous *Budget* and *Pre-Budget* Reports together with fiscal drag suggest that the tax take will still subtract around ¾ percentage point from income growth this year. However, the negative impact of a rising effective tax rate on growth in disposable income reduces to around 0.1 percentage points in 2006 and 2007. Real disposable income growth does not pick up in these years as nominal increases are eroded by accelerating inflation.

Quarterly growth in average earnings weakened in the second quarter of this year. Our measure of average earnings is constructed from National Accounts consistent compensation data, and includes wages and salaries, together with employer social contributions. This differs from the headline rate of average earnings, which

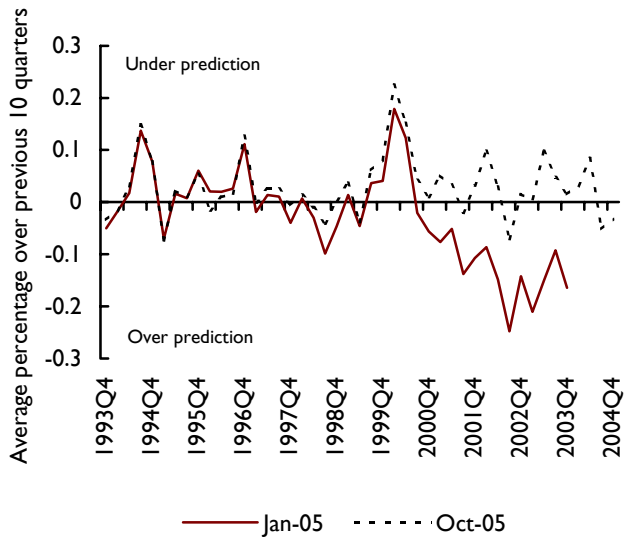
Table 7. National and sectoral saving *As a percentage of GDP*

	Household sector		Company sector		Government sector		Whole economy		Finance from abroad	
	Saving	Investment	Saving	Investment	Saving	Investment	Saving	Investment	Total	Net factor income
2000	3.5	4.1	8.6	12.2	2.9	1.2	15.0	17.5	2.6	–0.5
2001	4.5	4.4	8.1	11.6	2.5	1.3	15.1	17.3	2.2	–1.1
2002	3.3	4.8	11.7	10.6	0.2	1.4	15.2	16.8	1.6	–2.2
2003	3.7	5.0	12.3	9.7	–1.2	1.6	14.8	16.3	1.5	–2.2
2004	3.0	5.3	12.8	9.7	–1.0	1.7	14.7	16.8	2.0	–2.3
2005	*3.4*	*5.7*	*11.9*	*9.2*	*–0.5*	*1.9*	*14.9*	*16.8*	*1.9*	*–2.8*
2006	*3.8*	*5.7*	*11.2*	*9.2*	*–0.1*	*2.1*	*14.9*	*17.0*	*2.1*	*–2.8*
2007	*4.1*	*5.7*	*11.2*	*9.4*	*–0.2*	*2.2*	*15.1*	*17.3*	*2.3*	*–2.5*

measures the year-on-year growth in wages and salaries per employee. The headline rate of average earnings including bonuses has proved to be relatively stable in the half year up to August 2005. The acceleration in average earnings including bonuses in the first quarter of this year was partly due to different timings in the payment of bonuses this year, compared to last (Freeman, 2005), and thus should not necessarily be treated as a period of increasing pay pressures. The headline rate of average earnings excluding bonuses has remained stable into the third quarter of this year.

Settlements data from the IRS pay databank suggest that pay settlements continue to be relatively stable, pointing to stable average earnings growth in the economy in the short term. Our projections show no change in average earnings growth this year. Looking further ahead we expect average earnings growth to increase to around 4¾ per cent in 2006 and 2007. In our forecast, average earnings growth rises due to an improvement in productivity growth which appears unusually weak this year, allowing increased earnings growth without accelerating unit labour costs. The growth per annum in employee compensation remains broadly constant, despite stronger earnings growth, due to weaker growth in employee jobs than has been the case in recent years.

Chart 6. Household consumption residual error



We anticipate that consumption growth will continue to be weak in part because of weakness in the housing market. This projection is based on our econometric equation linking consumption, income, real net financial wealth and real housing wealth, reported in Barrell *et al.* (2003). In our January *Review* we discussed what appeared to be a breakdown in the estimated relationship between household consumption expenditure, household incomes and wealth. A ten-period average of the difference between actual and predicted household consumption expenditure is plotted in chart 6 between the fourth quarter of 1993 and the end of 2003, to illustrate the performance of the equation with the data available at the time of our January forecast. The structural shift evident in the difference between actual and predicted values coincided with large changes in both financial and housing wealth, suggesting that the deterioration in the predictive power of the equation could be related to a change in the relationship between consumption and the two main components of household wealth. We also plot an identical ten-period moving average of this residual using the data available for this current forecast. We extend this series to 2004, due to the availability of housing wealth data, which is one of the determinants of consumption expenditure. With the data revisions that have occurred to household consumption expenditure and its determinants, it is clear that there

no longer exists any evidence of a structural shift as the residual on our equation remains centred around zero.

The household savings ratio increased by 0.4 percentage points in the first half of 2005 to 4.7 per cent. We expect the savings ratio to rise further through to the end of the forecast horizon, as household consumption expenditure continues to grow at a lower rate than real disposable income, due to weak growth in housing wealth. We expect the annual average savings ratio to reach almost 6 per cent by 2007.

Table 7 shows the balance between gross saving and gross investment in the economy as a whole. These figures for saving and investment are gross of depreciation. An excess of investment over saving is financed by means of a financial deficit, and an excess of investment over saving for the nation as a whole is represented by the current account deficit of the balance of payments. The ratio of household savings to GDP is lower than the ratio of household savings to disposable income because nominal GDP is larger than household disposable income. We expect the saving rate of the economy as a whole to remain relatively stable at around 15 per cent of GDP to 2007, though this is an increase of approximately a ¼ percentage point of GDP compared to 2004. This is due to the household sector increasing saving as a proportion of GDP, and the general government sector reducing dissaving as a share of GDP. The company sector is expected to retain its position as net lender to the rest of the economy. Data for the second quarter of this year show that private non-financial corporate sector net lending reached a record high for the period since 1987. In the forecast, company saving remains buoyant as a consequence of the increase in profits as a percentage of GDP.

Supply conditions

Business investment growth has accelerated a little into the second quarter of this year, though a strong recovery has yet to occur, with quarterly growth rates being quite erratic. We do not project a strong recovery in business investment to materialise in the next couple of years. Part of this is due to the user cost of capital rising from 14.3 per cent in 2004, to around 14¾ per cent this year. The user cost of capital rises, despite weaker forward looking long-run real interest rates, because of an increasing effective tax rate on corporate incomes. With the majority of the rise in the effective tax rate occurring this year, we expect the user cost of capital to remain broadly constant hereafter. Also, we note that business investment has recently been weak relative to that which our model would predict. We expect business investment growth to be around 3¼

Table 8. Fixed investment and capital — *£ billion, 2002 prices*

	Gross fixed investment				User cost of capital (%)	Corporate profit share of GDP (%)	Capital stock	
	Business investment	Private housing[a]	General government	Total			Private	Public[b]
2000	108.2	43.4	12.0	163.7	13.9	24.9	1846.7	438.3
2001	109.8	43.5	14.0	167.6	13.3	23.8	1902.5	444.4
2002	110.2	46.9	15.5	172.6	13.8	24.9	1935.6	471.5
2003	107.7	46.8	18.0	172.6	14.0	25.4	2001.6	462.3
2004	111.4	49.7	20.0	181.0	14.3	25.8	2051.9	472.7
2005	*115.0*	*49.2*	*22.1*	*186.4*	*14.6*	*25.9*	*2117.3*	*478.7*
2006	*119.9*	*49.7*	*24.3*	*194.0*	*14.7*	*26.5*	*2184.6*	*486.6*
2007	*124.4*	*50.5*	*26.7*	*201.5*	*14.8*	*26.6*	*2253.6*	*496.6*
Percentage changes								
2000/1999	4.5	–0.6	6.3	3.5			3.5	–0.2
2001/2000	1.5	0.3	16.7	2.4			3.0	1.4
2002/2001	0.3	7.6	10.8	3.0			1.7	6.1
2003/2002	–2.2	–0.1	15.9	0.0			3.4	–2.0
2004/2003	3.4	6.1	10.9	4.9			2.5	2.2
2005/2004	*3.3*	*–0.9*	*10.8*	*3.0*			*3.2*	*1.3*
2006/2005	*4.2*	*1.0*	*10.0*	*4.1*			*3.2*	*1.7*
2007/2006	*3.7*	*1.4*	*9.5*	*3.9*			*3.2*	*2.1*

Notes: (a) Includes private sector transfer costs of non-produced assets. (b) Including public sector non-financial corporations.

Table 9. Output and productivity

2002=100

	Output		Productivity		Output gap[a]	Capacity utilisation (industry)
	Whole economy	Manufacturing	Whole economy (per hour)	Manufacturing	per cent	
2000	96.4	104.5	97.2	95.3	0.7	95.5
2001	98.3	103.2	98.2	98.2	0.2	93.9
2002	100.0	100.0	100.0	100.0	–0.3	90.9
2003	102.5	100.0	102.0	104.9	–0.3	90.6
2004	105.6	102.0	104.6	110.9	0.4	95.5
2005	*107.3*	*101.7*	*105.5*	*114.3*	*–0.2*	*95.7*
2006	*109.7*	*103.8*	*108.0*	*119.6*	*–0.2*	*95.8*
2007	*112.4*	*105.7*	*110.8*	*124.1*	*0.0*	*96.2*
Percentage changes						
2000/1999	4.1	2.4	3.8	5.7		
2001/2000	2.0	–1.3	1.0	2.9		
2002/2001	1.7	–3.1	1.8	1.9		
2003/2002	2.5	0.0	2.0	4.9		
2004/2003	3.0	1.9	2.5	5.8		
2005/2004	*1.6*	*–0.3*	*0.8*	*3.0*		
2006/2005	*2.2*	*2.1*	*2.4*	*4.6*		
2007/2006	*2.5*	*1.8*	*2.6*	*3.8*		

Note: (a) Calculated using an approximate band pass filter on historical data and our projection of GDP: see p. 101 of Massmann, M., Mitchell, J. and Weale, M. (2003), 'Business cycles and turning points: a survey of statistical techniques', *National Institute Economic Review*, no. 183, January.

Table 10. The labour market

Thousands

	Workforce jobs		Claimant unemployment	Workforce[b]	Population of working age	Underutilisation %		
	Employees	Total[a]				ILO unemployment rate	Claimant rate	Population not employed rate[c]
2000	25590	29428	1088	30517	36138	5.5	3.6	18.6
2001	25891	29717	970	30687	36405	5.1	3.2	18.4
2002	26008	29893	947	30840	36622	5.2	3.1	18.4
2003	26097	30213	933	31146	36828	5.0	3.0	18.0
2004	26268	30439	854	31292	37064	4.8	2.7	17.9
2005	*26463*	*30586*	*859*	*31445*	*37200*	*4.8*	*2.7*	*17.8*
2006	*26526*	*30597*	*930*	*31527*	*37392*	*5.0*	*2.9*	*18.2*
2007	*26594*	*30631*	*1012*	*31644*	*37506*	*5.3*	*3.2*	*18.3*
Percentage changes								
2000/1999	1.7	1.3	–12.8	0.7	0.6			
2001/2000	1.2	1.0	–10.9	0.6	0.7			
2002/2001	0.5	0.6	–2.4	0.5	0.6			
2003/2002	0.3	1.1	–1.4	1.0	0.6			
2004/2003	0.7	0.7	–8.5	0.5	0.6			
2005/2004	*0.7*	*0.5*	*0.6*	*0.5*	*0.4*			
2006/2005	*0.2*	*0.0*	*8.3*	*0.3*	*0.5*			
2007/2006	*0.3*	*0.1*	*8.8*	*0.4*	*0.3*			

Notes: (a) Includes self-employed, HM Forces and government-supported trainees. (b) Workforce jobs plus claimant unemployment. (c) One less ratio of workforce jobs to population of working age (multiplied by 100).

per cent this year, rising to around 4¼ per cent next year. This forecast is based on the assumption that recent unexplained weakness in business investment continues in the near term.

As we have discussed in previous *Reviews*, our forecast for general government investment is based on the projections set out in the latest *Budget* or *Pre-Budget* report. However, data for the first half of the year suggest that government investment will not achieve growth as reported in *Budget 2005*. The level of general government investment in the second quarter of this year was below the level for the fourth quarter of last year. Thus, it appears unlikely that government investment volumes will rise by 22¾ per cent this year, as projected in *Budget 2005*. Rather we assume that the annual growth rate remains around 10 per cent per annum through to 2007, making the assumption that some of the public investment previously expected this year is shifted into later years.

The difference in GDP at market prices and GDP at basic prices is due to the treatment of indirect taxes and subsidies. GDP at basic prices includes subsidies and excludes indirect taxes. Our forecast shows weaker household consumption expenditure growth than we have seen in the recent past. This will dampen growth in indirect taxes, narrowing the discrepancy between the growth rates for GDP at market and at basic prices that has persisted for some time.

Our estimate of the output gap suggests we have currently moved into a period of slight spare capacity. In contrast, data for industry capacity utilisation suggest that there has been a reduction in spare capacity in industry. The measure of industry capacity utilisation we use comes from the Confederation of British Industry. The continued reduction in spare capacity into this year comes despite a decline in the output of industry. It is possible that we are currently losing the inputs into the production process faster than output is declining due to weak investment. With the improvement in manufacturing output in our forecast, due to the performance of the external sector, we expect some further reductions in spare capacity in industry.

We have seen weaker than usual productivity growth since the second half of last year. We measure productivity as output per employed hour. Productivity growth has slowed due to an increase in the labour input just as the economy was weakening. Hours worked are more responsive than employment levels to changes in output growth in a flexible labour market. But, they have not reacted enough to offset a sharp deceleration in productivity. Employment does change in response to changes in output eventually, and we expect employment growth to stall next year. With a continued decline in hours worked per employee, this means a decline in the labour input. Employment growth is expected to remain weak, resulting in rising unemployment. We expect the claimant count, on an annual average basis, to breach the one million mark in 2007. This would be for the first time since 2000; though it should be noted that the rate of unemployment is lower due to a much larger workforce. Indeed the percentage of the working age population not employed would still be around ¼ percentage point below that in 2000. We also expect the government's preferred measure of unemployment – the survey based ILO definition – to rise, reaching around 5¼ per cent in 2007 and around 6 per cent in the medium term.

Public sector

In the short term our projections for the public finances show an improvement in the current budget balance, particularly this year. The improvement comes from stronger revenues, with the share of total revenues in money GDP rising from 38 per cent last fiscal year to 39 per cent this fiscal year. The rise in the tax take comes primarily from rising taxes on household incomes and profits. The rise in corporate sector tax revenue is due in part to policy announcements in *Budget 2005*, such as

Chart 7. Oil profits, prices and output

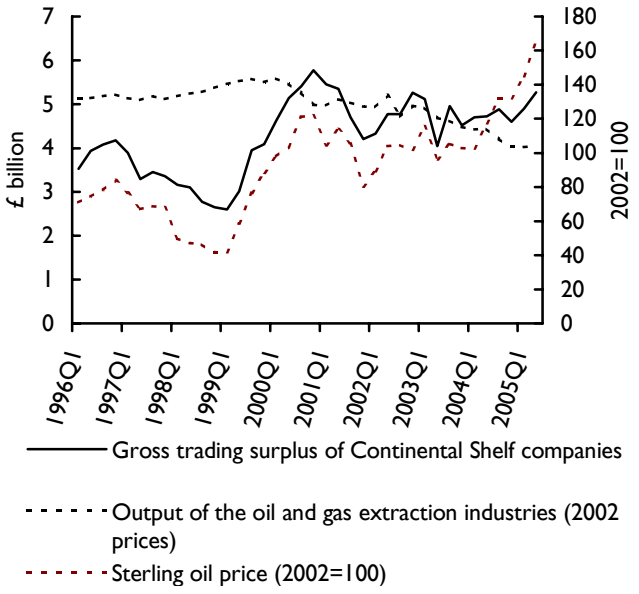


Table 11. Public sector financial balance and borrowing requirement

£ billion, fiscal years

		2003–4	2004–5	2005–6	2006–7	2007–8	2008–9	2009–10
Current receipts:	Taxes on income	260.4	283.7	308.4	327.4	345.7	367.0	391.6
	Taxes on expenditure	148.7	154.3	159.6	167.6	174.9	182.4	189.7
	Other current receipts	8.5	9.2	10.7	12.7	15.9	17.8	18.7
	Total	417.7	447.3	478.7	507.7	536.5	567.2	599.9
	(as a % of GDP)	37.3	38.0	39.0	39.3	39.5	39.8	40.2
Current expenditure:	Goods and services	236.1	249.7	263.9	280.3	297.2	312.9	326.2
	Net social benefits paid	132.5	139.5	149.5	156.0	164.5	173.0	182.2
	Debt interest	22.9	24.6	27.3	28.9	30.7	33.1	35.6
	Other current expenditure	35.1	38.2	36.0	36.3	38.0	39.6	41.2
	Total	426.5	452.0	476.6	501.6	530.4	558.6	585.2
	(as a % of GDP)	38.0	38.4	38.9	38.9	39.1	39.2	39.3
Depreciation		14.3	14.9	15.2	16.1	17.0	17.9	18.8
Surplus on public sector current budget[a]		–23.0	–19.6	–13.1	–10.0	–10.9	–9.3	–4.1
(as a % of GDP)		–2.0	–1.7	–1.1	–0.8	–0.8	–0.7	–0.3
Gross investment		25.5	30.0	32.4	36.0	40.2	44.2	47.8
Net investment		13.5	18.6	20.5	23.6	27.2	30.4	33.0
(as a % of GDP)		1.2	1.6	1.7	1.8	2.0	2.1	2.2
Total managed expenditure		454.3	485.5	512.3	541.3	574.6	606.9	637.1
(as a % of GDP)		40.5	41.3	41.8	41.9	42.3	42.5	42.7
Public sector net borrowing		36.5	38.2	33.6	33.5	38.0	39.7	37.1
(as a % of GDP)		3.3	3.2	2.7	2.6	2.8	2.8	2.5
Financial transactions		–4.6	–1.3	–5.3	–3.3	–1.9	–1.1	–1.1
Public sector net cash requirement		41.1	39.4	38.9	36.8	39.9	40.8	38.2
(as a % of GDP)		3.7	3.3	3.2	2.9	2.9	2.9	2.6
Public sector net debt (% of GDP)		33.0	34.9	36.2	36.8	37.6	38.4	39.0
GDP deflator at market prices (2002=100)		103.4	105.6	108.2	111.3	114.2	117.2	119.9
Money GDP		1121.3	1176.2	1225.8	1291.1	1358.1	1426.4	1490.8
Financial balance under Maastricht (calendar year, % of GDP)		–3.2	–3.1	–2.8	–2.6	–2.7	–2.8	–2.5
Gross debt under Maastricht (calendar year, % of GDP)		39.7	41.5	42.7	43.4	44.1	44.9	45.6

Notes: These data are constructed from seasonally adjusted national accounts data. This results in differences between the figures here and unadjusted fiscal year data. (a) Public sector current budget surplus is total current receipts less total current expenditure and depreciation.

the efforts to modernise North Sea corporation tax that add £1.1bn to revenues this fiscal year, but is also a result of strong equity markets and profits. Both non-North Sea and North Sea corporation taxes appear buoyant.

North Sea revenues are sustained by rising oil prices. As illustrated in chart 7, the trading surplus of Continental Shelf companies has been relatively strong since 2000, when oil prices rose sharply. In comparison, the more recent rise in oil prices has so far had a less visible effect on oil sector profits. This is due to a sharp decline in output of the oil and gas extraction industries over the same period and the depreciation of the dollar, which has meant that the recent rise in oil prices is significantly smaller when measured in sterling. In the forecast the trading surplus of Continental Shelf companies rises further helped by the continued strength of oil prices. We also assume that growth in output of the oil and gas extraction industries eventually returns to its average over the past 25 years. Given recent investment activity in these industries this seems a reasonable assumption.

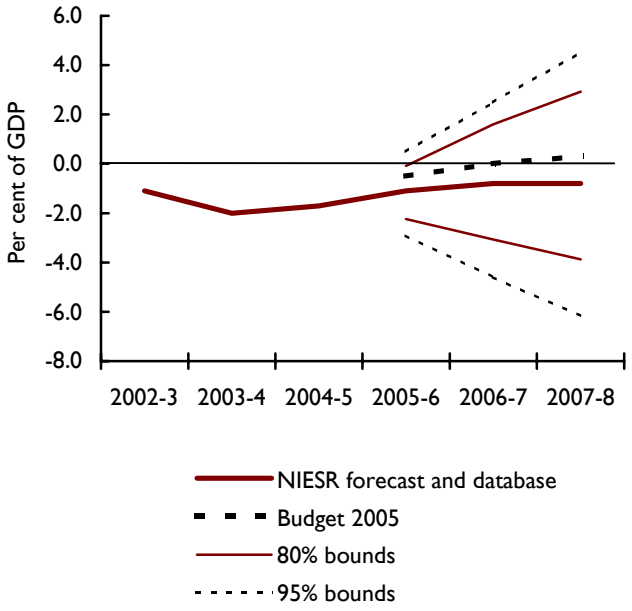
We discuss the implications of rising oil prices for the revenue share of GDP in Box C. Our modelling work would suggest that the overall fiscal position is broadly neutral to rising oil prices, although there may be some short term improvement if spending on goods and services is restrained by cash limits.

Table 12. Cumulated public sector current budget balance *Fiscal years*

	NIESR		Budget 2005[c]	
	£bn[a]	Average % of money GDP[b]	£bn	Average % of money GDP
1997–8	–1.2	–0.2	–1.2	–0.2
1998–9	9.1	0.5	9.1	0.5
1999–0	29.4	1.1	29.4	1.1
2000–1	50.9	1.4	50.9	1.4
2001–2	61.1	1.3	61.1	1.3
2002–3	48.0	0.9	48.0	0.9
2003–4	26.8	0.5	26.8	0.5
2004–5	7.9	0.2	7.9	0.2
2005–6	*0.6*	*0.1*	*1.9*	*0.1*
2006–7	*–7.1*	*0.0*	*2.9*	*0.1*

Notes: (a) These numbers are calculated from the seasonally unadjusted public sector finance statistics and our forecast for the current budget surplus, reported in table 11, adjusted for the average discrepancy between the public sector finance statistics and the seasonally adjusted national accounts data, measured as a percentage of money GDP, over the past five years. (b) These numbers are based on our forecast for the current budget surplus as a percentage of GDP, reported in table 11, adjusted for the average annual difference between the public sector finance statistics and the seasonally adjusted national accounts data over the past five years. (c) These numbers are calculated from the seasonally unadjusted public sector finance statistics and the latest Treasury forecast presented in *Budget 2005*.

Chart 8. Confidence limits for the Government current budget balance



Given the improvements in revenue discussed above we expect to see an improvement in the current budget balance of approximately 0.6 per cent of money GDP this fiscal year and a further improvement of 0.3 per cent next fiscal year. This is despite further increases in the share of public sector current expenditures in the economy as a whole.

Although we see some short-term improvement in the fiscal position, the forecast shows the balance on the current budget remaining in deficit close to 1 per cent of money GDP over the next three years. From 2008–9 we have assumed that taxes are raised to ensure fiscal solvency. In comparison to the Budget statement earlier this year our forecast shows a deterioration in the fiscal position of approximately 1 percentage point of money GDP by 2007–8 (see chart 8). The difference arises in part because we project marginally higher government interest payments and stronger net social benefit payments, in line with differences in our projections for government borrowing and unemployment. The weaker tax take in our forecast as compared to the Treasury is to some extent due to weaker taxes on expenditure, related to differences in our projections of weaker growth in consumer expenditure.

The Treasury now take the ciew that the cycle began in 1997 rather than in 1999. With this change in the starting point of the cycle the cumulative surplus on the Government current budget appears more favourable. We note that although estimates of cycle turning points made in real time are frequently subject to revision, ex-post estimates are far less likely to change. To illustrate Treasury calculations based on our forecast table 12 shows the cumulative public sector current budget balance from the beginning of fiscal year 1997–8. Real time estimates of cycle end points are associated with a large degree of uncertainty and therefore we show in table 12 the cumulated current budget balance to this fiscal year and next. Estimates of the timing of the cycle depend on estimates of trend growth and these can be revised in response to events such as oil price shocks. As shown in table 12, if the cycle is more protracted than on current estimates, our forecast suggests that the Golden Rule is less likely to be met. Our estimates of the dating of the cycle suggest that it began in 1999–2000 and ended in 2003–4, and so the Golden rule was met over this period with 0.5 per cent of money GDP to spare, or £17.6bn if calculated correctly.

Regardless of the issue of the exact turning points of the cycle, our forecast shows a current budget deficit of close to 1 per cent of money GDP over the next several

Box C. Oil prices and tax revenues

A shock to oil prices has a direct impact on government tax revenues by changing the level and company distribution of corporate sector profits. A shock to oil prices further impacts upon tax revenues through its effects on the economy elsewhere. Here we briefly describe the way in which we model tax revenues within the model of the economy we use to construct the forecast. Based on model simulations, we illustrate the impact of a $10 rise in oil prices on government tax revenues.

We distinguish between three main groups of tax revenues: those which are deducted from corporate sector profits, personal incomes and consumer expenditure. Tax revenues grow in line with the base from which they are deducted and the effective tax rate as shown below. The base is determined endogenously within our macroeconomic model. The effective tax rate follows a random walk and is adjusted for policy changes and other shocks by residual. Tax revenues then feed back into the model via their links to real disposable income, the basic price adjustment, and the user cost of capital.

$$TAX = TAX_{-1} \cdot (RATE/RATE_{-1}) \cdot (BASE/BASE_{-1})$$

$$RATE = RATE_{-1} + A$$

For the purposes of analysing the effect of oil price shocks on tax revenues, corporate sector profits are divided into two sub groups: those which accrue to Continental Shelf (CS) companies and those which accrue to non-Continental Shelf (NCS) companies. CS company profits rise in line with output of the oil and gas extraction industries and world oil prices measured in sterling, with some adjustment for domestic output prices. NCS company profits are determined by whole economy profits, nominal GDP less employment compensation and less taxes on production less subsidies, adjusted for the output share of the non-oil and gas industries.

Corporation taxes as a share of money GDP will change when the profit share of the economy changes and, due to differences in tax regimes, when the distribution of profits between CS and NCS companies changes. The effective tax rate for CS companies is greater than the same for NCS companies. This is because they will generally be classified as large companies for tax purposes, and these pay a higher rate of corporation tax than companies classified as medium or small, and they are subject to additional supplementary charges, petrol revenue tax and royalty fees, although the latter has recently been abolished. In 2004, CS companies paid approximately 26 per cent of their trading surplus in tax. In comparison, NCS companies paid 15.7 per cent of their gross operating surplus in tax revenues.

The timing of tax payments is also different for CS and NCS companies, with CS companies unable to defer tax payments as long as NCS companies, and there are differences in deductable capital allowances to encourage oil exploration and field development. We take these differences into account in modelling the tax base for corporation taxes.

Table C. A permanent $10 rise in oil prices: implications for taxes as a share of money GDP

Years following shock	Corporation taxes	Taxes on personal sector incomes	Indirect taxes	Total tax revenues
1	0.02	–0.04	0.00	–0.02
2	0.17	–0.09	0.00	0.08
3	0.22	–0.13	0.01	0.11
4	0.25	–0.12	0.00	0.13
5	0.26	–0.07	0.00	0.19

Table C illustrates the impacts on tax revenues measured as a share of money GDP of a permanent rise in the world oil price of $10. We show results for the three main revenue groups and in aggregate. The numbers in table C take into account the direct and indirect effects of the shock to oil prices on revenues. As a result of a $10 increase in the oil price, the share of corporation taxes in the economy rises by a ¼ percentage point over 4–5 years. The direct effect of the shock to oil prices on corporation taxes, that comes about by directly increasing CS company profits, is to raise tax receipts by 0.2 percentage points of money GDP. This is similar to the magnitude of the direct effect discussed in *Pre-Budget Report 2004*. Including the indirect effects of the shock, the share of corporation taxes in the economy rises a little further as the rise in oil prices brings about a small rise in the profit share of the economy, by putting downward pressure on labour compensation.

Box C. (*continued*)

The effect of the rise in oil prices on the aggregate tax take is smaller. Relative to money GDP total receipts rise 0.1–0.2 percentage points after a couple of years. This is mainly due to a reduction in household sector income taxes as a share of GDP, resulting from weaker employment and real wages relative to the base case.

Indirect taxes, which grow in line with consumer expenditure, are largely unaffected as a share of money GDP, although they may be reduced if there is a significant drop in the consumption of highly taxed petrol. The negative effect on consumer expenditure, via a reduction in gross disposable incomes relative to base, is offset by a small reduction in the household savings ratio.

These simulations imply that the $30 rise in oil prices observed in the past two years would raise the share of government tax revenues in the economy by approximately ½ percentage point over the current parliament.

years. Public sector net borrowing remains between 2.5 and 3 per cent as a share of money GDP. This points to a structural deficit on the current budget and is inconsistent with the notion of fiscal sustainability. Indeed, our projections show public sector net debt rising to 38.4 per cent of GDP by 2008–9, raising the likelihood of breaching the Chancellor's second fiscal rule, to maintain public debt below 40 per cent of GDP. This is still below the debt level that prevailed at the time the current Chancellor took office, and indeed there is nothing of economic importance in whether debt is 35 or 45 per cent of GDP. However, 40 per cent was chosen as the target and hence we anticipate some action must be taken.

Accumulation

The slowdown in house price inflation which started at the end of last year has continued into the third quarter of 2005. Annual house price inflation as given by a seasonally adjusted version of the Office of the Deputy Prime Minister mix-adjusted house price index has fallen from 13.9 per cent in the third quarter of 2004 to 5.9 per cent in the second quarter of 2005. The latest monthly data suggest that annual house price inflation has fallen further in the third quarter to less than 3 per cent. While house price inflation momentum as shown by the month-on-month changes has turned positive on the Halifax house price index in August and September, it has remained marginally negative on the Nationwide house price series over the same period. However, recent data from the Bank of England point to some renewed activity in the housing market. According to the Bank's figures, the number of mortgage approvals for house purchases increased by 15 per cent in August over the same period last year – the first positive annual growth in 2005. We continue to take the view that the current level of house prices is unsustainable given incomes levels and interest rates. Thus we have assumed house price inflation will continue to moderate from the 5¼ per cent expected this year to 2 per cent by 2007. As our projection for house price inflation is below that of the consumer expenditure deflator in 2006 and 2007, we are expecting some modest falls in real house prices.

Renewed mortgage lending activity is also apparent in the Bank's August data on the flow of net lending to individuals secured on dwellings which show monthly growth of 13 per cent after falling for two consecutive months. Further data from the Council of Mortgage Lenders show gross mortgage lending rising even further in September. Nonetheless, in line with our assumption that the housing market continues to slow, we expect mortgage lending to weaken somewhat. Weak private consumption expenditure growth in the next few years should also result in slower growth in household non-mortgage debt, which includes unsecured loans and credit cards amongst other instruments. Monthly data from the Bank on consumer credit show the downward trend on consumer credit growth has continued in the three months to August. Taken together our forecast shows a marked reduction in the growth of household financial liabilities from double digits in the past four years to around 9¼ per cent by 2007.

The rebound in the equity market since the end of last year, and the sharp rise in equity prices in the third quarter of this year, to the highest level achieved in four years, drives our forecast of 14.6 per cent growth in household financial assets in 2005. This, together with our projection of a moderation in household financial liabilities, gives rise to our forecast of strong double digit growth in net household financial assets to the end of 2006. Consistent with our projection of a moderation in house price growth, housing wealth is forecast to see a decline in growth from 12 per cent in 2004 to only 1.9 per cent and 2.8 per cent in 2005 and 2006. However

Table 13. Wealth *£ billion*

	Household sector						Whole economy net financial assets[c]	
	Financial assets	Financial liabilities	Net financial assets	Housing wealth	Net worth to income ratio[a]	House prices[b] 2002=100	Total	Per cent of national income
2000	3117.4	734.4	2383.0	2014.9	6.5	79.6	–34.9	–3.6
2001	2922.3	810.4	2111.9	2162.9	6.0	86.1	–72.1	–7.1
2002	2680.7	923.1	1757.6	2617.0	5.9	100.0	–48.3	–4.5
2003	2930.3	1047.4	1882.9	2919.7	6.1	115.7	–39.6	–3.5
2004	3174.8	1195.0	1979.7	3271.1	6.5	129.4	–120.0	–9.9
2005	*3639.7*	*1308.2*	*2331.5*	*3333.9*	*6.7*	*136.2*	*–150.2*	*–11.9*
2006	*3996.7*	*1430.4*	*2566.3*	*3427.8*	*6.7*	*139.6*	*–99.5*	*–7.5*
2007	*4313.6*	*1563.7*	*2749.9*	*3498.6*	*6.7*	*142.3*	*–104.3*	*–7.5*
Percentage changes								
2000/1999	–0.3	8.8	–2.8	14.3		14.9	–45.7	
2001/2000	–6.3	10.4	–11.4	7.3		8.1	106.6	
2002/2001	–8.3	13.9	–16.8	21.0		16.1	–33.0	
2003/2002	9.3	13.5	7.1	11.6		15.7	–18.1	
2004/2003	8.3	14.1	5.1	12.0		11.9	203.2	
2005/2004	*14.6*	*9.5*	*17.8*	*1.9*		*5.2*	*25.1*	
2006/2005	*9.8*	*9.3*	*10.1*	*2.8*		*2.5*	*–33.7*	
2007/2006	*7.9*	*9.3*	*7.2*	*2.1*		*2.0*	*4.7*	

Notes: (a) Net worth is defined here as housing wealth plus net financial assets. (b) Office of the Deputy Prime Minister, mix-adjusted. (c) Net overseas assets.

this is expected to be more than compensated by the robust growth in net household financial assets over the next two years such that the household net worth to income ratio is likely to increase marginally from 6.5 per cent in 2004 to 6.7 per cent for the period 2005–7. Our empirical work suggests that changes in housing wealth have more impact on consumption in the short run than do changes in financial wealth, and hence these developments colour our forecast of slow consumption growth. Our forecast does not take into account the recent softening in equity markets which, at the time of writing, saw the FT All-Share Index falling 6 per cent from its peak in early October. Should this decline in equity prices fail to reverse its course in the coming months, growth in household gross financial assets and net financial assets could be slower than our current forecast shows.

Long-term projections

Table 14 shows our projections for the longer term. These do not incorporate future shocks that hit the economy, as they are inherently unpredictable. Our longer-term projections do take into account the impact on the economy from the disturbances we already know about and other important longer-term influences such as the size and composition of the population, and forthcoming changes to the policy framework that can be anticipated with some accuracy.

Looking ahead, growth is just under 2½ per cent per annum, a result of trend productivity growth of 2¼ per cent per annum and growth in the labour input of 0.1 per cent per annum. This is somewhat weaker than the trend rate of growth observed in the past decade. In the first economic cycle of that period, which ran its course from 1994 to 1999, productivity rose at just over 2 per cent per annum and the labour input rose by 1¼ per cent per annum. In the economic cycle that followed productivity rose at 2¼ per cent per annum and the labour input rose by ½ per cent per annum. Thus, our expectation of a softening in trend growth in the medium term is due to our expectation of weaker growth in the labour input than we have seen in the past decade. Over the cycle from 1994 to 1999, strong growth in the labour input was mostly due to a steep fall in the unemployment rate. During the next cycle the unemployment rate fell a little further and stronger population growth (of working age) helped to sustain growth in the labour input. Over the medium term the population will rise less quickly, and we do not expect to see further

Table 14. Long-term projections *All figures percentage change unless otherwise stated*

	2002	2003	2004	2005	2006	2007	2008	2009–13
GDP (market prices)	2.0	2.5	3.2	1.7	2.3	2.5	2.4	2.4
Average earnings	4.0	4.6	4.4	4.4	4.8	4.8	4.6	4.2
GDP deflator (market prices)	3.1	2.9	2.0	2.4	2.8	2.7	2.6	2.1
Consumer Prices Index	1.3	1.4	1.3	2.1	2.4	2.5	2.4	2.0
Manufacturing productivity	1.9	4.9	5.8	3.0	4.6	3.8	3.2	2.5
Whole economy productivity[a]	1.8	2.0	2.5	0.8	2.4	2.6	2.4	2.3
Labour input[b]	–0.1	0.4	0.5	0.7	–0.2	–0.1	0.0	0.1
ILO Unemployment rate (%)	5.2	5.0	4.8	4.8	5.0	5.3	5.5	6.1
Current account (% of GDP)	–1.6	–1.5	–2.0	–1.9	–2.1	–2.3	–2.3	–1.2
Total managed expenditure (% of GDP)	38.9	40.5	40.9	41.8	41.9	42.2	42.5	42.7
Public sector net borrowing (% of GDP)	1.7	3.3	3.1	3.0	2.6	2.7	2.8	2.2
Public sector net debt (% of GDP)	30.9	32.2	34.0	35.6	36.4	37.1	37.9	39.3
Effective exchange rate (2000 = 100)	101.0	98.3	103.5	101.9	100.9	100.1	99.3	97.8
3 month interest rates (%)	4.0	3.7	4.6	4.7	4.4	4.4	4.4	4.6
10 year interest rates (%)	4.9	4.5	4.9	4.4	4.3	4.4	4.4	4.7

Notes: (a) Per hour. (b) Total hours worked.

reductions in unemployment. An upside risk to these projections is the possibility that people begin to retire later in response to the rise in life expectancy and the looming pensions crises.

Recent shocks to oil prices are dampening the outlook for medium-term growth, as is the potential unsustainability of the fiscal position, which means that either taxes need to rise or government spending needs to be reduced to maintain medium-term fiscal solvency. In and of itself the $30 increase in the world oil price of the past two years reduces medium-term growth by 0.1 to 0.2 percentage points per annum, although the initial impact on growth is larger. The unemployment rate is increased by more than a percentage point by this shock to the supply side of the economy, and this alone reduces the level of trend output by over half a percentage point. Over the past few years there has been a structural change in export markets that has reduced trend growth during the last cycle, as we discuss on pages 42–3 of this chapter. In the medium term we expect a softening of the decline in UK export market share and this will be a positive influence on growth.

On average between 2009 and 2013 we expect short-term interest rates to rise to 4.6 per cent, with inflation expected to be around its target level of 2 per cent per annum. At these levels, the real interest rate is marginally above output growth. This condition has to be met over the longer term if the economy's resources are allocated efficiently over time. If the real interest rate is lower than the growth rate of GDP for a sustained period of time, consumption could be raised in both the short and the long run by continually reducing the nation's capital stock until the rate of return increased to ensure sustainability.

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