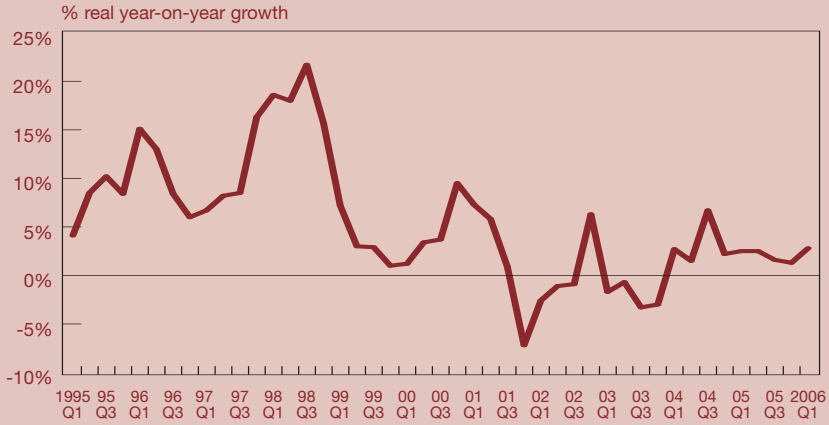
III – Why has UK business investment been relatively weak recently?

Introduction

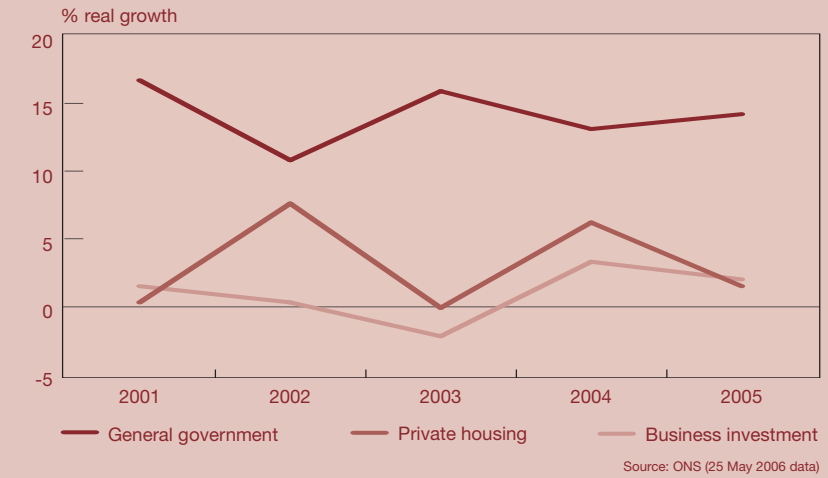
As noted in Section II.1 above, the relative weakness of business investment has been one of the major 'puzzles' in UK macroeconomic data recently. Despite relatively strong corporate financial positions, low and stable inflation, low real interest rates and, generally, a relatively stable macroeconomic environment in the UK, business investment growth was surprisingly subdued during 2005, although it did then pick up in the first quarter of 2006 (see Figure 3.1).

Figure 3.1 – UK business investment growth



Source: ONS (25 May 2006 data)

Figure 3.2 – Real growth in components of total UK fixed investment



Source: ONS (25 May 2006 data)

The relative weakness of business investment growth during 2005 has been reflected in forecasts for 2006. The Treasury, for example, was projecting an increase of 3.5-4.25% in its March 2005 Budget forecasts, but then successively revised this down to 3-3.5% in its December 2005 Pre-Budget Report projections and then to only 1-1.5% in its March 2006 Budget forecasts. Published private sector forecasts tend not to distinguish business investment as a separate item, but their projections for total investment (i.e. gross fixed capital formation, including government investment and housebuilding as well as business investment) have generally also been revised down over the past 18 months despite strong trends in public sector investment.

Although business investment accounts for only around 10% of total GDP (in chained volume terms in 2005), it tends to be one of the most volatile components of GDP and so has an important influence on overall economic trends and prospects. At present, many forecasters, including most importantly (from a policy perspective) the Treasury and the Bank of England, are relying on a relatively robust recovery in business investment later this year and into 2007-8. With consumer spending growth still relatively subdued, government spending growth decelerating and net exports expected to have a broadly neutral impact on GDP growth in 2006-7, a robust rebound in business investment plays a key role in their overall view that the UK economy will pick up some steam over this period.

It is therefore important from a macroeconomic perspective to understand why business investment has been relatively weak recently and whether this is likely to be a temporary phenomenon (or perhaps just an aberration due to measurement error) or a more permanent feature of the UK economic outlook. Longer term, maintaining reasonable levels of business investment is also important to renew the capital stock and support economic growth, as well as being of particular interest to suppliers of capital goods and associated services (including those relating to commercial buildings, vehicles, equipment and machinery, IT systems and software).

The discussion of these issues below is structured as follows:

- Section III.1 reviews recent trends in business investment in more detail;
- Section III.2 describes and evaluates six possible explanations for the recent relative weakness of business investment; and
- Section III.3 summarises and draws conclusions for future business investment growth.

III.1 Recent trends in UK business investment

As noted above, there are three main elements in total UK fixed investment[1]. As shown in Figure 3.2, general government

[1] Fixed investment excludes stockbuilding. Note that all investment data in this article are consistent with the ONS national accounts release of 25 May 2006. Subsequent data revisions on 30 June 2006 are only briefly referred to due to print deadlines.

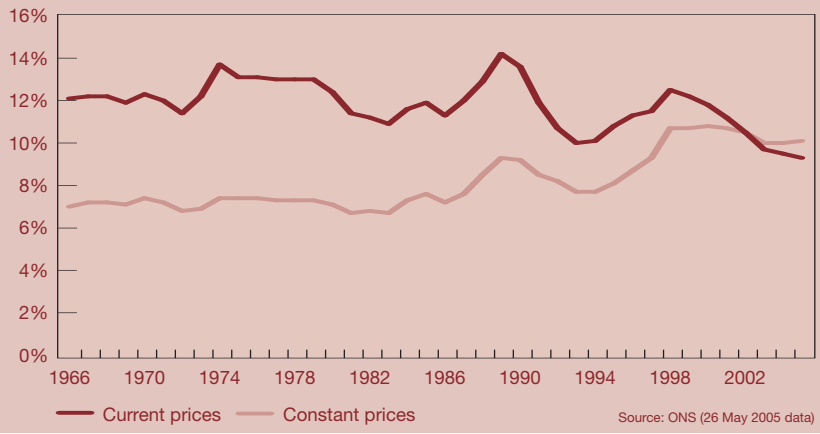
investment, which accounted for just over 12% of total fixed investment in 2005, has shown double digit real growth for some years, albeit from a low base. Private housebuilding, which accounted for around 27%[2] of the total in 2005, has been more erratic, with strong growth in 2002 and 2004 in response to rapid house price increases, but much more subdued growth in 2003 and 2005 when house prices were generally less buoyant.

Business investment, which is the largest item in total UK fixed investment with a share of around 60% in 2005, saw particularly weak trends in 2002-3, a recovery in 2004, but then renewed weakness in 2005. As a share of GDP, business investment has fallen to a record low in nominal terms (see Figure 3.3), although a significant part of this relates to a fall in the relative price of capital goods due to technological advances (most notably in computers). This trend seems likely to continue in the long run.

In volume terms, which is probably a better indicator to focus on, the ratio of business investment to GDP reached a peak in 2000 at 10.8%, but has since fallen back to around 10%. This is still high by historic standards, but has nonetheless been relatively disappointing in an environment where corporate profitability, even excluding the oil sector, has generally been at or somewhat above its long-term average rate (Figure 3.4), while the real cost of long-term debt has been relatively low and the revival in share prices since 2003 has reduced the cost of equity finance.

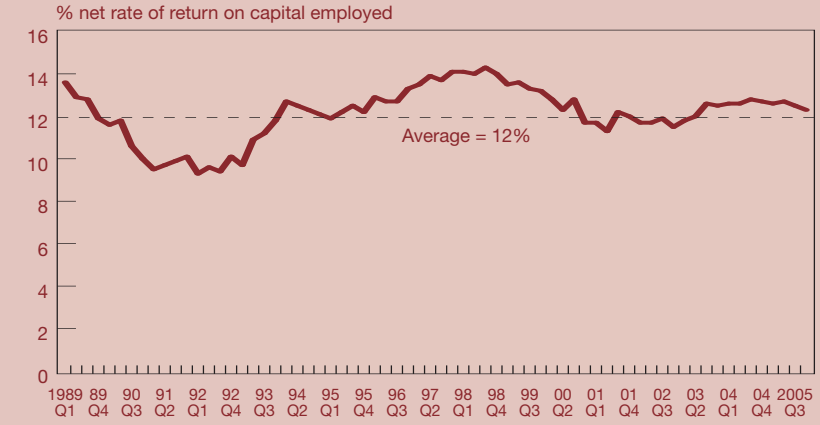
We can also split business investment growth down by broad industry sector (see Figure 3.5). By far the most important sector, and on average the fastest growing in the last three years[3], is 'other private services'. This has had an average real increase of 2.6% per annum in investment in 2003-5, taking its share of total business investment to 61.2% in 2005. This reflects the more general trend for this sector, which includes business and financial services and transport and communications, to be the main driver of growth for the UK economy. Even, here, however, business investment growth has been somewhat slower on average than output growth in these sectors since 2002.

Figure 3.3 – Business investment as % of GDP at current and constant prices



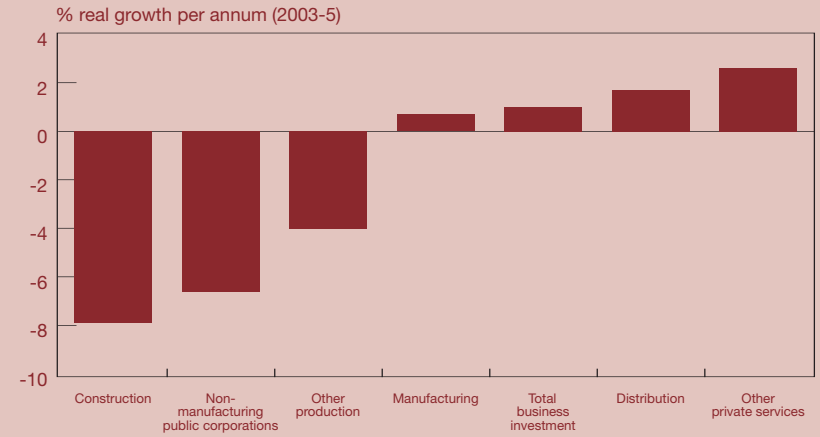
Source: ONS (26 May 2005 data)

Figure 3.4 – UK non-oil corporate profitability



Source: ONS (for non-financial private corporations excluding Continental Shelf companies)

Figure 3.5 – Business investment growth by industry sector



Source: ONS (26 May 2005 data)

The next most significant contributors to business investment are manufacturing (12.4% share in 2005) and distribution (12.0%). Manufacturing investment, like manufacturing output, has been relatively subdued, rising by just 0.7% per annum on average in 2003-5. Distribution investment growth has been somewhat stronger, although not as strong as other services sectors, at an average of 1.7% per annum, although this disguises very strong investment growth in 2004 followed by a marked decline in 2005 as retail sales growth stalled.

Other sectors (other production, construction, non-manufacturing public corporations) have all seen varying degrees of declining business investment over the past three years. The construction sector

[2] Including private sector transfer costs of non-produced assets.
[3] Shorter term investment trends can be very erratic, so we prefer to focus on average growth over the past three years.

saw particularly marked drops in investment in 2004-5, although it contributes a relatively small share of total business investment (2.3% in 2005, bearing in mind that this excludes private housing and general government investment in the construction sector).

None of these sectors, however, can be said to have sustained very strong business investment trends over the past three years. The next question is: why?

III.2 Possible explanations for the recent relative weakness of UK business investment

A number of possible explanations have been put forward for the relative weakness of business investment in recent years, including in particular the following:

(i) Business investment growth (as currently defined) has been understated in the official statistics.

(ii) National accounting definitions of business investment are too narrow for modern services-driven economies, failing to capture investments in human capital and other intangibles that are now at least as important for business success as physical investment.

(iii) Low business investment has been common to most major advanced economies in recent years, not just the UK. This reflects excess capacity in the aftermath of the late-1990s investment boom, the impact of higher global oil prices, and a reluctance amongst OECD businesses to make physical investments in their own countries in the face of competition from low cost emerging market economies like China, India and Eastern Europe.

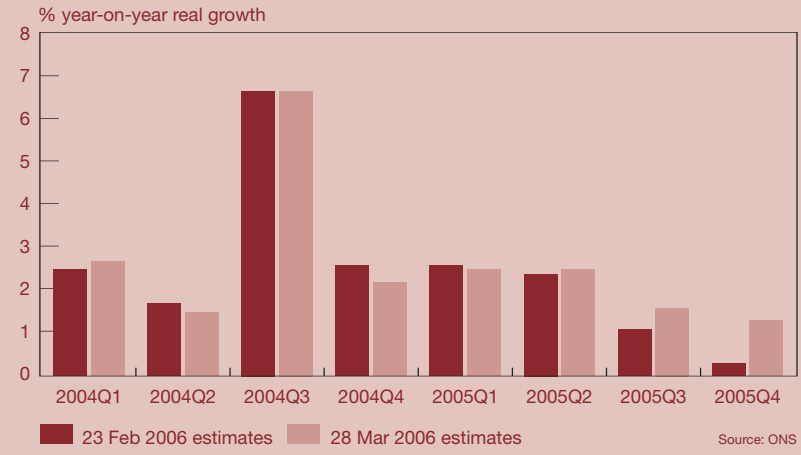
(iv) UK corporate balance sheets have become more highly geared in recent years, making companies reluctant to engage in further debt-financed investment despite low real interest rates.

(v) UK companies with defined benefit schemes have had to increase their pension contributions significantly in recent years, so squeezing the cash flow available for investment.

(vi) A less favourable tax and regulatory regime has reduced the relative attractiveness of the UK as a location for internationally mobile investment.

We review these arguments in turn below.

Figure 3.6 – Revisions to business investment growth estimates



(i) Business investment growth understated on current definitions

As shown by Bank of England research by Barnes and Ellis (2005), there has been a systematic tendency for initial estimates of business investment growth to be revised significantly in subsequent periods as more data become available. Such revisions often continue to occur several years after the periods concerned and are generally greater for investment growth than any other major expenditure component of GDP.

Barnes and Ellis consider the period from 1995 to 2004 and compare initial ONS estimates of quarterly business investment growth with the latest estimates published at the time of their study (these were the data released on 25 February 2005). They find that:

- the average absolute revision (whether positive or negative) was just under 3 percentage points; and
- there was a systematic downward bias to the original estimates, with an average net upward revision of 1 percentage point between the initial and latest estimates.

Bearing in mind that we are talking here about quarter-on-quarter volume growth, which over the period concerned had an average value of just under 1% per quarter, these are substantial margins of error and bias. The explanation may lie in the fact that business investment growth rates tend to be higher for smaller, more dynamic companies that tend to be underestimated in the initial survey samples used to compile initial quarterly estimates, but are represented more fully in the more comprehensive business surveys used to compile the full annual national accounts published in the ONS Blue Book each year.

There was another example of this pattern of upward revision earlier this year. In the 24 February 2006 provisional release on business investment, the annual average growth rate for 2005 was estimated at 1.6% and the growth rate in the year to Q4 2005 at just 0.3%. When revised data were published in the quarterly national accounts of 28 March 2006, however, the annual growth estimate for 2005 was revised up from 1.6% to 2.0% and the year to Q4 2005 growth estimate was revised up even more sharply from 0.3% to 1.3% (see Figure 3.6). Latest data released on 30 June, too late to be included in the charts here, showed further upward revisions.

Some of the apparent weakness of business investment growth during 2005 that was commented on by the Treasury in its March 2006 Budget Red Book and by the Bank of England in its February 2006 Inflation Report has therefore already been revised away, and it is possible that future revisions could further improve this picture (note that this article was written

before the Blue Book revisions were published on 30 June 2006). It is notable here that business surveys of investment intentions by the CBI and the BCC, which in the past have sometimes proved a more accurate indicator of short-term trends, showed a clear improvement in Q1 2006 from below-average levels in 2005 (see Table 3.1). Provisional ONS estimates also point to stronger business investment in Q1 2006, with an estimated increase of 1.7% relative to the previous quarter. It seems quite possible that at least part of the story of weak business investment growth in 2005 may prove to be either a statistical mirage or a purely temporary phenomenon, although this will only become clear over time.

Table 3.1 – Recent survey evidence on business investment intentions

Survey	Average since 1997	Q1 2005	Q2 2005	Q3 2005	Q4 2005	Q1 2006
BCC services	17	11	8	6	8	15
BCC manufacturing	10	10	9	9	8	15
CBI manufacturing	-13	-16	-15	-19	-14	-9
CBI distributive trades	-1	-18	-29	5	-8	-8

Source: Bank of England Inflation Report (May 2006, Table 2.C)

(ii) Incomplete definition of business investment

Even if business investment were measured accurately on current national accounting definitions, however, some economists have questioned whether these definitions any longer reflect the reality of a services-led economy where investment in intangibles (e.g. human capital, brands, knowledge management, new ways of working) is of increasing importance relative to traditional physical capital investment.

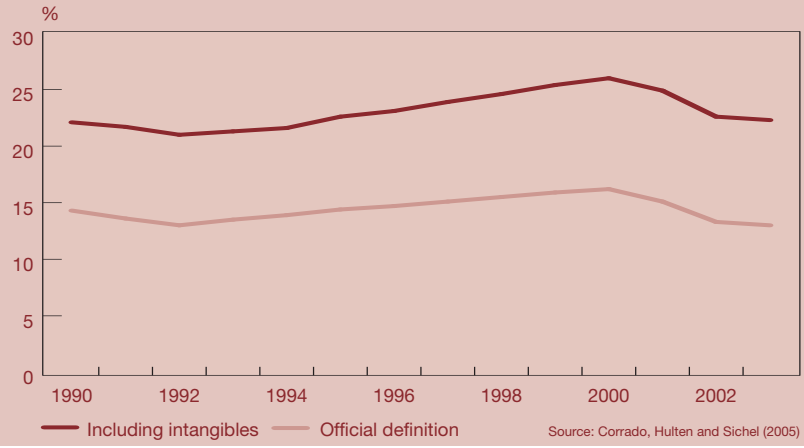
The ONS has recently accepted the need for one such revision by announcing changes to the extent to which spending on computer software will be included in official estimates of business investment from the 2007 Blue Book onwards. Provisional estimates suggest that in 1999, for example, these methodological changes will boost total estimated software investment from 0.8% to 1.8% of GDP. On the other hand, these estimates also see software investment peaking in 2000 at around 2.1% of GDP and then declining to around 1.9% of GDP in 2003. If anything, therefore, these new estimates reinforce the evidence of relative weakness in business investment over this period, even if the level of business investment is higher as a result of the methodological changes (because both business investment growth and overall GDP growth will be higher in the late 1990s than previously estimated due to these changes).

Table 3.2 – Estimates of US intangibles investment (annual average, 1998-2000)

Type of investment	Included in official estimates of business investment ($ billion)	Alternative estimate by Corrado et al. ($ billion)
1. Computerised information (mostly software)	151	154
2(a). Scientific R&D	16	201
2(b). Non-scientific R&D	40	223
3(a). Brand equity	0	140
3(b). Firm-specific resources (training, organisational change etc)	0	365
Total intangibles investment	**205**	**1085**

Note : columns do not add up exactly due to rounding
Source: Corrado, Hulten and Sichel (2005)

Figure 3.7 – Alternative estimates of US business investment as a % of non-farm business output



Source: Corrado, Hulten and Sichel (2005)

Some US economists have argued that revisions to national accounting investment definitions need to go a lot further than just looking at software investment. In particular, Corrado, Hulten and Sichel (2005) present estimates (see Table 3.2) that intangible investment might be around five times higher in the US than recorded in the official national accounts once account is taken of investment in 'innovative property' (R&D other than computer software), brand equity, firm-specific training and spending on long-term organisational change. As the authors admit, their estimates are subject to large margins of error, but their conclusion that total business investment in 2000-3 might be around 85% greater than official estimates, and that GDP might therefore be around 10% higher, is a dramatic one even if the precise figures are open to considerable debate.

If we look at trends over time, however, their estimates still seem to be consistent with a marked decline in US business investment as a share of total non-farm business output since 2000, following a faster than previously estimated rise during the 1990s (see Figure 3.7). Changing the definition of investment to give fuller coverage of

intangibles, while a sensible step in itself, does not therefore seem to resolve the puzzle of the recent weakness of investment in the US and seems unlikely to do so in the UK either[4].

(iii) Weak investment is an international phenomenon, not specific to the UK

This argument was made by, among others, the IMF in its April 2005 World Economic Outlook report. It is related to the argument by Bernanke (2005) that the world has been experiencing a glut of planned savings relative to planned investment, so helping to explain unusually low levels of real interest rates in recent years. One could also argue that recent low levels of OECD investment in part reflect the rising wave of competition from emerging markets such as China, India and Eastern Europe, as well as high oil prices and the hangover of excess capacity after the bursting of the dotcom bubble in 2000.

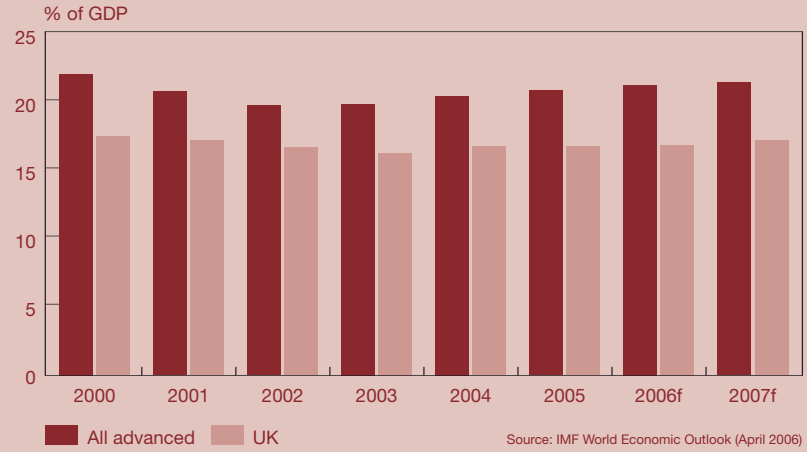
While this argument is supported by data showing a marked decline in investment relative to GDP by the advanced economies between 2000 and 2003, latest estimates, however, show this ratio bouncing back in 2004-5, most notably in the US. The IMF, for example, projects that this recovery in investment will continue in 2006-7 (see Figure 3.8). Particularly in relation to 2005, the question is why, data issues aside, the UK should not have seen the recovery in investment seen in many other OECD economies.

(iv) Higher UK corporate gearing

Bank of England data suggest that average corporate gearing, measured as the ratio of debt to net assets, has risen in recent years and the Treasury suggested in the Budget 2006 Red Book that this might have been one reason for the relative weakness of business investment in 2005.

As discussed by the Bank of England in its May 2006 Inflation Report (p.13-14), however, there is little hard evidence to support this argument. With low interest rates on corporate debt, the ratio of interest payments to profits remains affordable despite the rise in capital gearing and there is little sign that companies have reined in borrowing recently to reduce gearing ratios. There is evidence, however, that they have been more inclined to use this extra borrowing to buy back shares than to increase capital spending in recent years.

Figure 3.8 – Savings and investment as a % of GDP for UK relative to average for all advanced economies



Source: IMF World Economic Outlook (April 2006)

(v) Rising pension fund contributions

Another argument is that the cash available for investment has been squeezed by the significant rise in employer pension contributions in recent years. For companies with large pension deficits, research conducted last year by PricewaterhouseCoopers for the Pension Regulator indicates that this could continue to be a significant squeeze on cash flows in future years, depending on how equity prices and bond yields evolve.

Whether higher pension contributions have had, or will have, a material adverse effect on business investment is more debatable. Economic theory would certainly suggest that this should only be the case for companies that are liquidity-constrained. But, even then, if extra money flows into pension funds and this is invested, at least in part, in UK equities and bonds, then this should tend to boost the supply (and so reduce the cost) of finance available for investment by other UK companies.

The most rigorous assessment of this effect we are aware of is a Bank of England paper by Bunn and Trivedi (2005), which looked at data for a panel of 1,544 firms over the period from 1983 to 2002. Using econometric techniques that controlled for other differences across companies, they found that higher employer pension contributions had a significant negative impact on dividend payouts, but that there was only weak evidence that these firms reduced their investment in a statistically significant way. The authors conclude that:

"adjustment to corporate balance sheets on account of increased financial pressure from higher pension contributions comes mainly through financial rather than real channels." (p.5)

However, this study did not cover the most recent period of large pension contribution increases since 2002, so the jury is still out on whether their conclusion also holds true for this latest period.

(vi) Less favourable tax and regulatory regime

Business organisations such as the CBI and the BCC have shown an increasing tendency in recent years to argue (e.g. in their annual Budget submissions) that the UK is now a somewhat less attractive location for internationally mobile investment due to unfavourable trends in our tax and regulatory regime relative to other European countries. The 2006 IMD World Competitiveness Yearbook ranked the UK at 21st overall out of 61 countries assessed, similar to 2005 and ahead of the other large EU economies, but contrasted the UK's ranking of 8th on economic

[4] At present, the new estimates for software investment in the UK and intangibles in the US only extend to 2003, so it remains to be seen whether they can throw any light on the specific issue of UK business investment in 2005 when these data series are extended to that year.

performance with a ranking of 26th for government policy/efficiency (although such rankings inevitably involve subjective judgements on the weighting and scoring of different factors).

In relation to corporate taxation, the headline UK rate was reduced from 33% in 1997 to 30% in 1999, but since then other EU countries have tended to reduce their rates while the UK rate has remained static. Analysis by the IFS (see Table 3.3) shows that, as a result, the UK corporate tax rate, which was the third lowest in the EU15 in 1996 is now only the 7th lowest, and this falls to the 16th lowest for the expanded EU25, reflecting that, of the ten new EU members, only Malta has a higher headline rate than the UK. The UK rate remains the lowest of the largest G7 economies, but the differential with average G7 rates has fallen since 1996, as Table 3.3 shows, and the overall corporate tax take in the UK was the third highest in the G7 on average between 1999 and 2003 according to OECD estimates (Figure 3.9).

Of course, the headline tax rate is not the only aspect of the corporate tax regime of relevance to investors, but other developments since 1997, such as the abolition of dividend tax credits and recent anti-avoidance measures, have also arguably made the UK a somewhat less attractive place for mobile international investment, at least at the margin.

Regulatory burdens on business are harder to compare across countries, although past OECD studies on labour and product market regulation[5] have indicated that the UK ranks less well than the US, but generally ahead of other large EU economies. These studies tend to be based on data from the late 1990s or early 2000s, however, and do not reflect either the latest trends in UK regulatory regimes or the rise in competition from Eastern Europe and Asia. The Government has recognised this issue in commissioning the Hampton review of UK regulation and through its plans to implement the recommendations of this review.

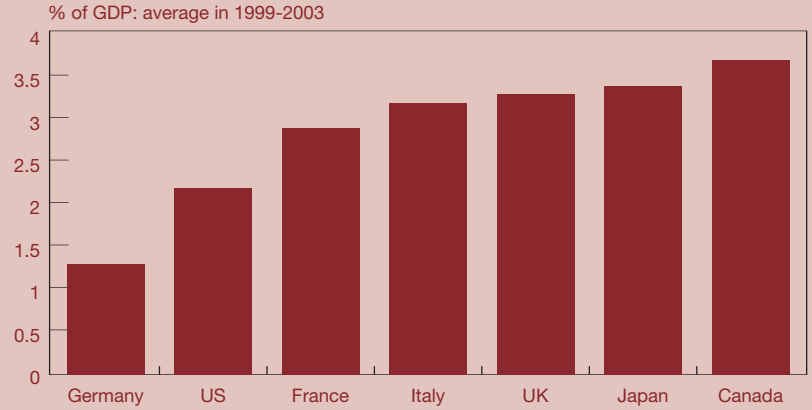
While there is a certain amount of anecdotal evidence of these factors translating into decisions to reduce UK-located investment in individual cases, hard data to back up this hypothesis is not conclusive. Headline FDI figures were relatively strong in 2005, although a large part of this reflected financial flows related to mergers and acquisitions. The record on job creation by inward investors has been relatively weak in recent years compared to the 2000/1 peak, although this did pick up somewhat in 2004/5 (see Figure 3.10). However, the concerns about tax and regulatory issues expressed with increasing frequency by business organisations in recent years, although clearly coming from interested parties, cannot be entirely dismissed to the extent that they could be a leading indicator of weaker net foreign direct investment in the UK in the longer term. But, as yet, this evidence is largely anecdotal.

Table 3.3 – Statutory corporate income tax rates, including local taxes

% rates and rankings	UK headline rate	G7 countries		EU 15 countries		EU25 countries	
		Average rate	UK ranking*	Average rate	UK ranking*	Average rate	UK ranking*
1996	33	43.5	1	38.1	3	-	-
1999	30	39.8	1	35.9	4	-	-
2005	30	36.3	1	30.1	7	26.3	16

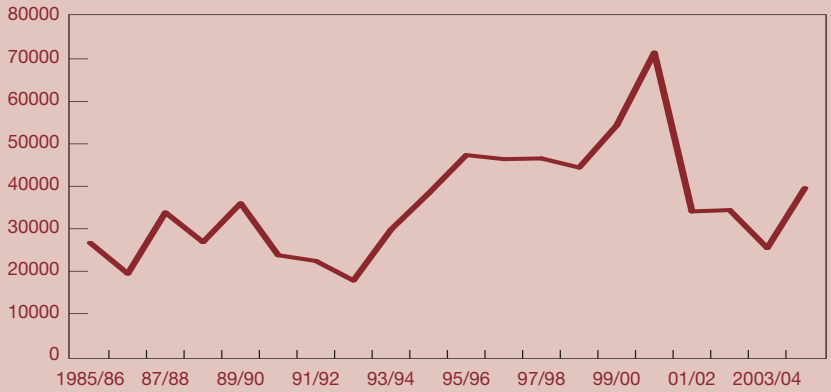
*Ranking of 1 indicates lowest rate of countries considered in each column
Source: IFS Green Budget (2006, Table 9.1)

Figure 3.9 – Corporate tax revenues as % GDP for G7 countries



Source: OECD (as quoted in 2006 IFS Green Budget, p.167)

Figure 3.10 – New job creation from inward investment to UK



Source: DTI

III.3 Summary and conclusions on future business investment growth

In the period from 2001 to 2003, relative weak UK business investment appears largely to have reflected OECD-wide trends for businesses to retrench following the high investment levels of the late 1990s and the subsequent global economic downturn. In 2004, both OECD and UK business

[5] See, for example, the discussion in Nicoletti and Scarpetta (2003).

investment showed signs of recovery, but what is notably about the UK is that business investment growth then weakened again in 2005.

This apparent recent weakness may partly be due to measurement bias, and past evidence suggests that these preliminary business investment figures are more likely to be revised up than down in future (as indeed occured on 30 June 2006). But there may also be influences relating to a general loss of economic confidence in the UK last year and higher pension contributions, although academic research on earlier periods suggests that this latter effect should not be over-exaggerated. There is little evidence that higher corporate gearing had an impact and the evidence on lower internationally mobile investment due to a relatively less favourable UK tax and regulatory regime remains largely anecdotal at this stage.

Bearing in mind also the signs from both business surveys and provisional official estimates of somewhat stronger business investment growth and intentions in early 2006, it seems most likely on the balance of the evidence reviewed above that the recent relative weakness of UK business investment will turn out to be a temporary rather than a permanent phenomenon.

This conclusion is reflected in our main scenario for UK GDP growth in Section II.2 above, which assumes a pick-up in business investment growth from 3% in 2005 to around 4% in 2006 and 2007. Total fixed investment growth is projected to be higher at around 5% in 2006 due to continued strong planned government investment growth. The latter is planned to decelerate next year, however, so total fixed investment growth is also projected to be around 4% in 2007, in line with business investment growth.

The strength of any such recovery in business investment remains highly uncertain and could be blown off course by shocks such as higher oil prices, falling share prices and/or rising real interest rates. On the other hand, by historic standards, the upturn in business investment we are assuming in 2006-7 is comparatively modest. Overall, therefore, we would judge the risks around our main scenario for business investment growth to be broadly balanced over this period.

In the longer term, we would expect a continued structural shift in UK investment from manufacturing to services and, partly linked to this, from tangibles to intangibles. To the extent that the latter are not fully recorded as capital spending in the national accounts, this could lead to a persistent tendency to understate investment looking forward unless these accounting conventions are changed.

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