Economy Module

Latest labour productivity & business profitability data

July 2012

SOUTH WEST OBSERVATORY

Background

Productivity is fundamentally important in underpinning long-term competitiveness at an individual, firm and economy level. In the long-run, *relative* productivity levels will influence competitiveness – at a micro and macro level – and therefore the strength of economic growth.

In general, the UK experienced improvements in its productivity levels from the late 1980s through the 1990s and into the early 2000s. This was influenced by a number of factors, principally labour market reforms and technological adoption. Its relative position was also improved by the long-term weakening of Sterling against other currencies (effectively reducing relative unit labour costs). However, the data indicates that this competitive position was adversely affected in the period leading up to the financial crisis in 2008 though as wage growth outpaced output growth (see below explanation about how productivity is measured).

In many respects this deterioration of relative competitiveness underpinned the severity of the subsequent recession, as firms that had become relatively unproductive were exposed by the environment of weakened demand.

Competitiveness will therefore ultimately feed through to the profitability of firms and, in that context, the quarterly data relating to the profitability of UK firms is interesting to follow as it sheds light on market conditions in relatively timely manner.

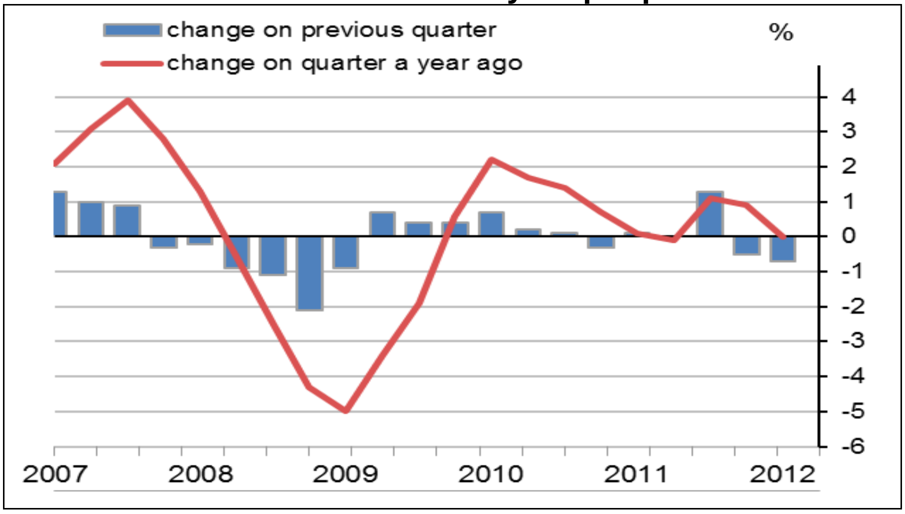
Labour productivity

Data relating to labour productivity in the first quarter of 2012 has just been released. Labour productivity measures the amount of real (inflation adjusted) economic output that is produced by a unit of labour input (in terms of workers, jobs and hours worked) and, as stated above, is a key indicator of economic performance.

For the whole economy output (as measured by Gross Value Added (GVA)) fell by 0.4% in Q1 2012 (slightly more than the 0.3% fall in the headline GDP measure). During the same period the number of workers rose by 0.4%, and the number of hours worked rose by 0.9%. Arithmetically, therefore, UK output per worker fell sharply over this period (by 0.7%), while UK output per hour fell by 1.3%.

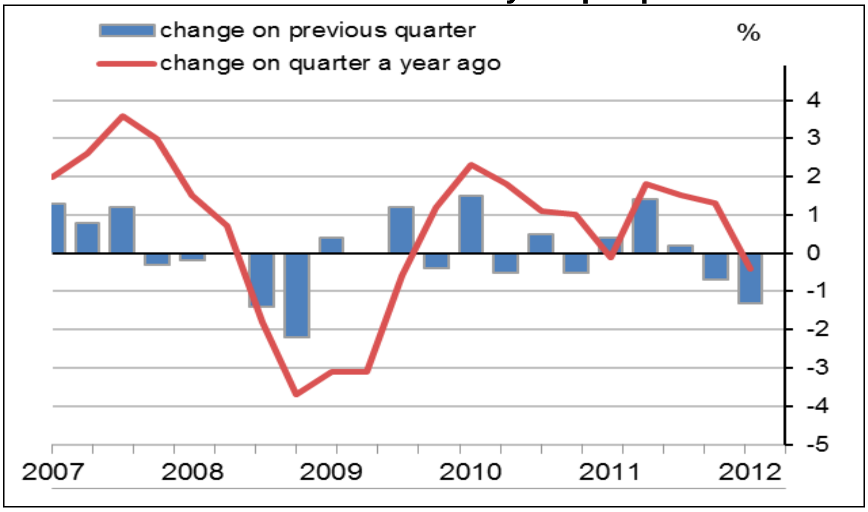
This data is presented in Charts 1 & 2 below. These highlight the significant output falls during the recessionary period and the subsequent weakness in the 'recovery'. This has already been well-documented and, as we explain later, this has also impacted on productivity performance.

Chart 1: UK whole economy output per worker



It is useful to note that the falls in output per worker exceeded the fall in output per hour during 2008 & 2009. This reflected the number of hours adjusting more sharply than falls in the numbers employed, through practices adopted by firms/individuals such as shortened working hours. As such, the 'denominator' in the output per hour calculation fell more sharply in this instance – making the overall decline less severe. Conversely, the 'denominator' in the output per worker was 'stickier' and consequently the decline was sharper.

Chart 2: UK whole economy output per hour

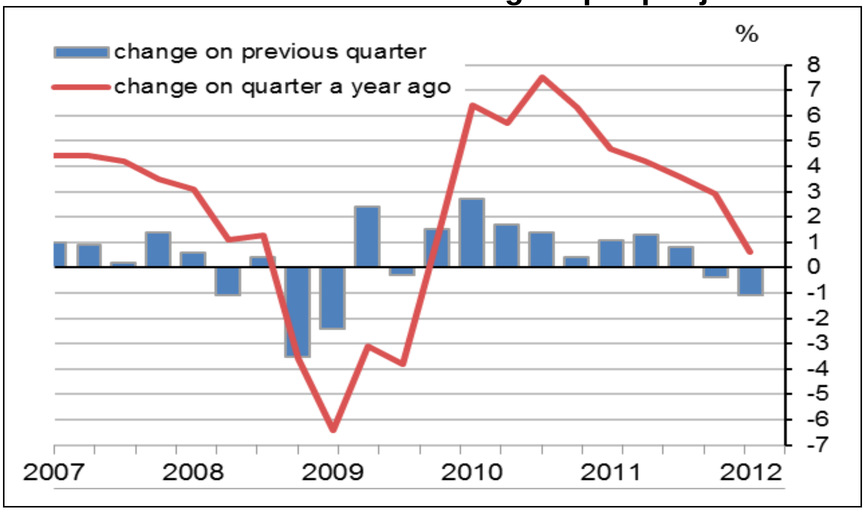


Unit labour costs reflect the full labour costs, including social security and employers' pension contributions, incurred in the production of a unit of economic output, while unit wage costs are a narrower measure, excluding non-wage labour costs. Growth rates of these series can be decomposed as growth of labour costs (or wages) per unit of labour input *minus* growth of labour productivity. An inverse relationship between unit costs and productivity tends to be observed, as wage growth is less cyclical than productivity.

In Q1 2012, whole economy unit labour costs were 1.4% higher than in the previous quarter. However, this increase is entirely due to lower productivity[1]; labour costs per hour were broadly unchanged in Q1. This rather succinctly shows that the 'effective' cost to businesses of producing the same level of output is increasing even though wage growth is negligible. It highlights why productivity is so important.

This situation has been more marked in manufacturing where unit wage costs increased by 2.1% in Q1, reflecting the steep fall in manufacturing labour productivity in this period. Whilst labour productivity in the manufacturing sector recovered more strongly after the recession (see below Chart 3) than productivity in services and the economy as a whole, it has dropped back in the last two quarters. Comparing Q1 2012 with the trough of the recession in Q2 2009, manufacturing output has increased by 4.7 percentage points, hours worked in manufacturing have fallen by 3.0 percentage points and output per hour has increased by 8.0 percentage points (the difference being a rounding effect).

Chart 3: UK manufacturing output per job

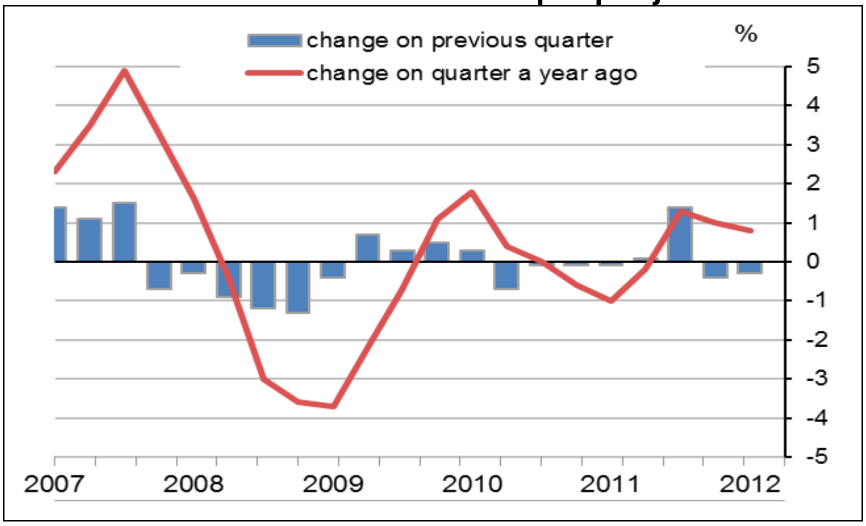


In comparison, output per hour in the services sector has remained very subdued since the end of the recession. Comparing Q1 2012 with Q2 2009, output in services has increased by 3.3 percentage points, and hours have increased by 2.0 percentage points, delivering cumulative productivity growth of just 1.2 percentage points (again, there is a slight rounding effect). There has been a particular deterioration in the competitive position in the finance and insurance services sector, productivity levels are 8.3 percentage points below their level in the middle of 2009 and continue to fall.

[1] Fewer units of output were produced for a given input of labour, effectively reducing productivity.

Given that the financial services sector remains a fundamentally important part of the UK economy (providing most of the growth in the decade prior to the recession), this presents some concern regarding its longer-term competitive position. Whilst service output is more difficult to measure than manufacturing output, the data is important for indicating future issues.

Chart 4: UK services output per job



In many respects, the main story that emerges from the data is that the recovery in productivity levels in the 'recovery period' has not been as strong as perhaps expected. Analysis of historical productivity levels usually shows a bounce in the period after a recession as output expands once more but using lower levels of labour. This is normally due to employment levels having been reduced, and as output begins to recover using these lower levels of labour then productivity growth tends to be stronger. However, what is of concern is that, although productivity levels for the whole economy did recover between the end of 2009 and 2011, they have done so at relatively weak levels. This suggests deterioration in the competitive position of the UK economy, particularly in services. To understand how this has affected our relative position we would need to analyse changes in productivity for other economies.

UK firm profitability

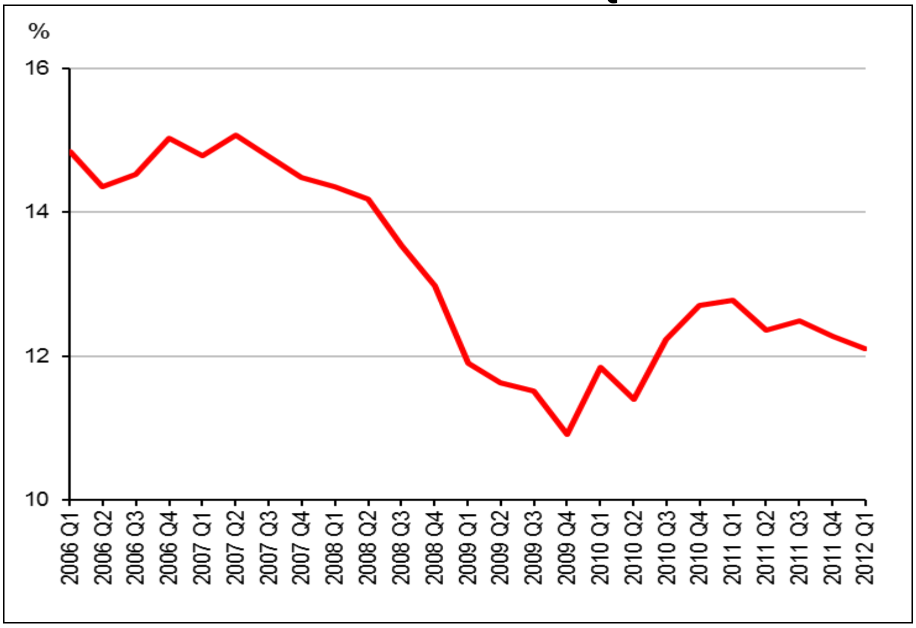
The net rate of return[2] of all non-financial companies in Q1 2012 was estimated at 12.1%. This was lower than the estimate of 12.3% in the previous quarter. The revised annual net rate of return in 2011 was estimated at 12.5%, higher than the revised estimate of 12.0% in 2010[3].

---

[2] Rates of return are ratios of operating surpluses compared to capital employed, expressed as percentages. The ratios measure the 'accounting' rates of return achieved in a particular year against total capital employed.
[3] Provisional SIC 2007 estimates for capital employed and capital consumption are used to calculate the rates of return. Due to a postponement of updated Capital Stocks and Capital Consumption estimates, the estimates in this release have been produced using the assumption that capital by sector has changed the same way as gross operating surplus by sector. As a consequence, rates of return estimates should be used with caution.

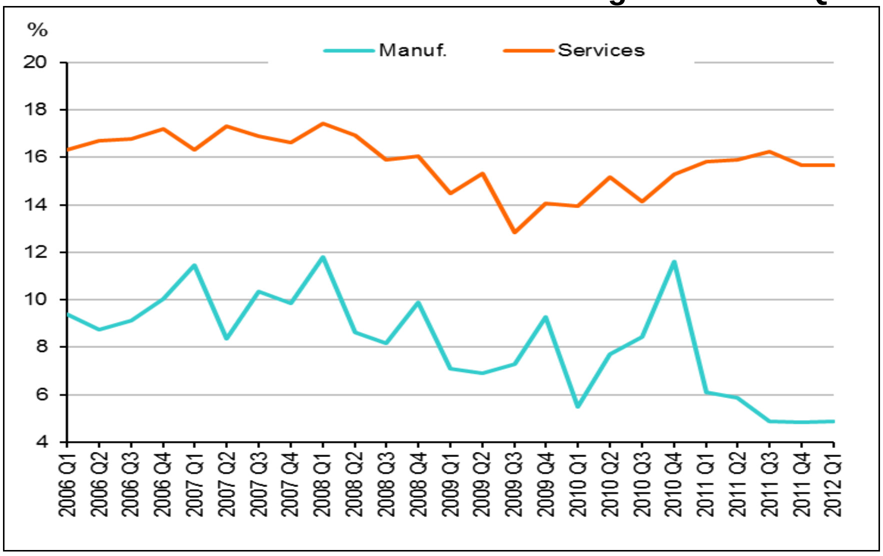
The net rate of return fell for the second consecutive quarter. It now lies at its lowest rate since Q2 2010, 0.4 percentage points below the 2011 average (Chart 5).

Chart 5: Net rate of return Q1 2012



The net rate of return within the services sector rose slightly in Q1 2012, increasing by 0.1 percentage points to 15.7%. The net rate of return remained unchanged for manufacturing firms for the second successive quarter at 4.9% in Q1 2012. The profitability of manufacturing firms has been volatile since the most recent recession ended in Q2 2009. The net rate of return in Q1 2012 was 2.0 percentage points below the net rate of return in Q2 2009.

Chart 6: Net rate of return for manufacturing & services Q1 2012



What is always interesting, when presented with this data, is to ask the question about what incentive there is to invest in manufacturing when the returns are so low. There are potentially different forms of investment which could offer greater returns (albeit returns on savings are also low). These marginal returns are inexpiably linked to the long-term structural shift away from manufacturing activity that has occurred over the last 30 years. In particular – as illustrated by these figures – the returns for investing successfully in the services sector have exceeded those for manufacturing.

On a more positive note, the accompanying ONS statistical release, does argue that whilst there has been this fall in net rate of return, UK National Accounts suggests that gross trading profits for the whole economy have actually performed better over the past few quarters.

Conclusion

The labour productivity and profitability data (in its form of net rate of return) are linked. In essence, they show that there was less being produced in the economy over the end of 2011 and start of 2012 for the factors of production that were 'input'. In terms of labour productivity, the data shows that the returns on labour have fallen. Similarly, the profitability data suggests a falling net rate of return on the capital employed.

Of course, this weakness over the early part of 2012 has already been indicated through the preliminary estimates of Gross Domestic Product (GDP) for the same period. However, what is of concern for both sets of data is that they may indicate longer-term problems. The deterioration in competitiveness indicated by the fall in labour productivity is accentuated by questions over the longer-term sustainability of businesses due to falling rates of return.

What is to be hoped is that both sets of data show cyclical movements, rather than structural shifts.

Contacts

Please contact the SW Observatory Core Unit for any queries relating to this data alert.