

Adding up to increased optimism

C. Hoare & Co. Investment Management
Economics and Asset Allocation Team

August 2010

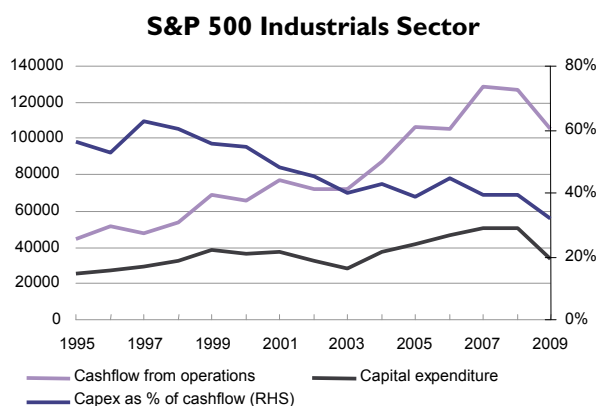


We understand concerns that debt levels in Western economies will prohibit economic growth in the years ahead, but we believe this does not fully take account of how growth is achieved. In this article, we discuss academic evidence that shows capital investment is a primary source of growth, and we are struck by the balance sheet strength and cash generation of the world's leading companies, resources that are available for investment. Furthermore, educational attainment and research & development are integral to long-term growth levels, and, here again, Western economies are well placed.

We preface our article with an acknowledgement that deleveraging in the Western world will constrain economic growth in the years ahead, particularly in the real estate and banking sectors. Our experience leads us to temper this pessimism, however, recognising that there are other growth drivers, especially business investment, which appears to be functioning as normal. We argue that economic growth is ultimately driven not by demand but by supply, and not by the aspirations of a given population, but by the productive inputs they can bring to bear. This includes capital and savings, and governance and institutional frameworks, which explains why the academic evidence shows demographics alone are poor predictors of growth.

Companies with cash aplenty

In developed economies, physical capital is primarily within the corporate sector. Unlike previous cycles, corporate leverage has actually been fairly stable this time around, and balance sheets have remained in good shape. This is also reflected in a rate of corporate profits to GDP in the US, which remains at elevated levels despite a sharp drop in 2008. We can attribute this to the prompt and wide-ranging actions taken by companies to reduce inventory and labour costs, as they went into cash-conservation mode.



Source: Bloomberg

With a more stable economy over the last 12 months, this caution has been rewarded. The cash balances of non-financial companies in the S&P 500 total \$973bn. When deciding what to do with this cash, the simplest choice for companies is to pay dividends or buy back shares, which of course allow the investment community to recycle the funds into newer and more productive ventures. An alternative is mergers and acquisitions. These deals are highly cyclical, and tend to follow market movements with a 6-12 month lag, and are potentially economically productive, leading to industry consolidation and the pursuit of growth opportunities.

Arguably, the most appropriate choice for companies is capital expenditure, and we see this beginning to pick up. From a fundamental perspective, investment makes sense when the return on capital, net of depreciation and taxes, exceeds the cost of borrowing, and the price of investment goods relative to output is attractive.

With low policy rates, and modest pricing power, these conditions are broadly met, particularly with lending conditions beginning to improve. Indeed, Tobin's Q ratio takes this a step further by measuring the relationship between the market value of a company's assets versus their replacement cost. A recovery in financial markets encourages firms to increase investment, as they know it will be rewarded in their overall market valuation.

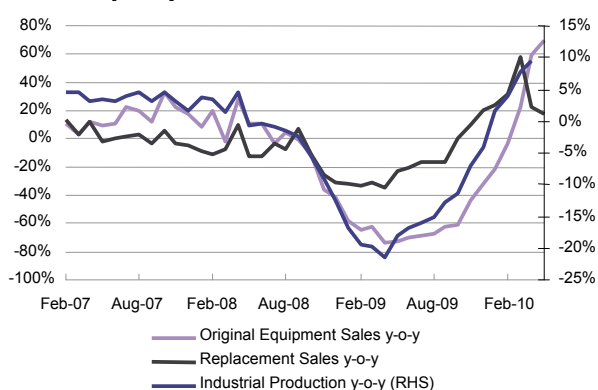
Replacement expenditure to increase

Business investment fell by around 25% in the US, UK, EU and Japan through the downturn, and although only around 12% of GDP, the arithmetic 3% (12% x -25%) contribution to recession was sizeable. With capacity utilisation now rising again, companies need to pick up their investment programmes just to maintain capital stock at stable post-depreciation levels. When a factory's utilisation rate is low and falling, maintenance and replacement machinery can be deferred, but as it rises, new equipment needs to be bought. This is why capital expenditure spiked up quarter-on-quarter in the US in 1983, 1992 and 2003, and we expect it do so again in the next 12 months.

We can illustrate this by looking at the equipment used and purchased in the haulage sector, as it corresponds closely to overall industrial output, as well as demonstrating the cyclicity of capital expenditure. In North America, truck sale volumes have declined 67% from their peak levels in 2006, but with tonnage expected to increase 2-3% this year, followed by 3-5% next year, truck sales should rise 18% this year and 68% next year. This will be driven by increased utilisation, an ageing fleet and higher emission standards for engines.

An interesting way of watching these trends develop is through tyre sales, with original equipment sales attached to new trucks and replacement sales illustrating utilisation rates of trucks being operated. In Europe, replacement sales started to turn positive year-on-year (y-o-y) in October 2009. Original equipment sales declined 64% for the whole of 2009, however, and only turned positive y-o-y in March. Overall, we believe truck and tyre sales illustrate how, once the inventory cycle turns positive, utilisation rates and capital expenditure pick up again, requiring only a modest gain in confidence.

Europe Tyre Sales v Industrial Production



Source: Michelin, Bloomberg

Longer-term growth

For decades, economists and academics have discussed factors for economic growth. In the 1960s, Solow's model suggested that growth in output is determined by savings that can be used for investment, while labour and technology are essentially exogenous. The 1980s saw human capital and technological progress being included increasingly in the model.

Whereas investment and labour are direct inputs, technology is less tangible. Intangible factors comprise "total factor productivity", or TFP, which might account for 15-45% of overall economic growth across time and across countries. On a per worker basis, it explains 60% of the variation of income across countries, and 90% of the variation of growth rates.

Taking human capital first, the rise in college education in the US during the 20th Century accounted for an estimated quarter of the growth of income per worker. Interestingly, as the proportion of graduates in the workforce has risen, the wage premium has continued to grow. This reflects the transition, made possible by investment, from unskilled to skilled labour, of which manufacturing and finance are good examples.

Technology is central to productivity growth, but major innovations such as the steam engine, dynamo and computer take considerable time to be adopted fully and successfully. This was described by economist Kenneth Arrow as 'learning by doing' where the productivity of a firm was a function of cumulative investment in the industry, exemplified by the patent process. While one product or process may have declining marginal productivity, that knowledge can be put to use many times. Paul Romer illustrates that although physical capital expenditure is 5-10 times larger, research and development has important spill-over effects, on improving TFP, inducing further capital accumulation, and reducing future R&D costs.

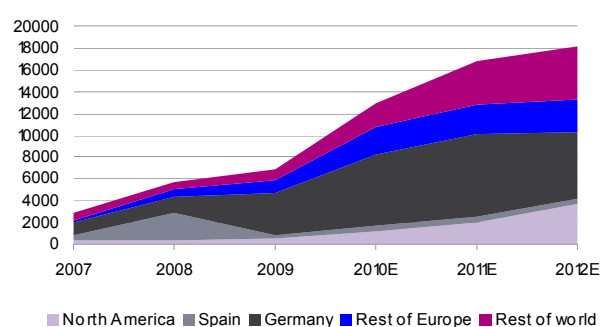
These positive effects allow developed economies to continue growing at sustainable long-term growth rates of which the UK is no exception. Also important are institutional frameworks, the most advanced of which are industrial clusters like California's Silicon Valley and biotech firms in and around Cambridge, although at present these factors are hard to model.

A good example: the solar sector

Solar is a good example of an industry that is developing from a couple of the factors mentioned. The first is incremental improvement to manufacturing processes, including the recycling of silicon, which has brought prices down from \$4.5/watt 10 years ago to \$1.8/watt currently, and is effectively 'learning by doing'.

The second is the subsidies granted by various national governments, particularly in Europe, as part of the wider 'institutional framework' of combating climate change. The table below shows expected installation growth, but we also expect spill-over effects in future to include innovations in grid infrastructure and power storage, adding further economic value.

Solar Module Growth



Source: Goldman Sachs

We remain quietly confident

We acknowledge the headwinds from deleveraging governments and consumers in the near term, but by detailing these dependable long-term drivers, we are able to look through the current uncertainty. With investment integral to growth and companies well positioned to increase investment in the near term, we believe economic growth will remain positive.

We continue to invest monies with the confidence these factors will deliver satisfactory returns on capital over appropriate time horizons and, in addition, some of the funds we own and have recently purchased have specific exposures to the industries discussed.

C. Hoare & Co.
37 Fleet Street
London EC4P 4DQ

T: +44 (0) 20 7353 4522
F: +44 (0) 20 7353 4521

C. Hoare & Co.
32 Lowndes Street
London SW1X 9HZ

T: +44 (0) 20 7245 6033
F: +44 (0) 20 7823 1975

www.hoaresbank.co.uk

For questions about this article, please contact:

[Economics & Asset Allocation team](#)

David Crichton (david.crichton@hoaresbank.co.uk)
Head of Economics & Asset Allocation

Richard Garland (richard.garland@hoaresbank.co.uk)
Senior Investment Strategist

or

David Cavaye (david.cavaye@hoaresbank.co.uk)
Chief Investment Officer

Sources: 'The mystery of economic growth', Elhanan Helpman, Harvard University Press, 2004. 'The economic implications of learning by doing', Kenneth Arrow, Review of Economic Studies, vol. xxix, 1962. 'Increasing returns and long-run growth', Paul M Romer, The Journal of Political Economy, 1986. 'Endogenous technological change', Paul M Romer, The Journal of Political Economy, 1990. 'Ideas, institutions, population and human capital', Charles I Jones & Paul M Romer, National Bureau of Economic Research, 2009.

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Published on the 1st August 2010 by C. Hoare & Co., 37 Fleet Street, London, EC4P 4DQ.

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