SPECIAL REPORT

TD Economics

May 25, 2012

MILKING AMERICA'S CASH COW: THE CASE FOR STRONGER INVESTMENT GROWTH

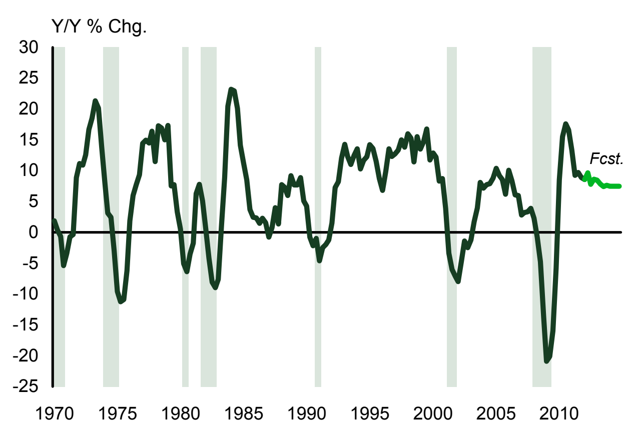
Highlights

- Once a key driver of the economic recovery, business investment has slowed markedly in the last six months. We believe corporate balance sheet fundamentals augur for a more robust pace of investment growth than is currently the case.
- Corporate profits and liquidity as a share of gross domestic product are at record highs, yet the share of these profits going towards investment is lower than ever. History shows that investment "gaps" never last. Periods of high liquidity, such as the current one, ultimately usher in periods of stronger investment growth.
- The severe pullback in investment during the recession caused the nation's stock of equipment & software to shrink in real terms for the first time since WWII. There is evidence that the process of rebuilding that stock is not yet complete, even in the face of rising consumer demand.
- Investment intentions are sensitive to shocks, and an unruly progression in European sovereign risks would certainly delay or mute the strength of a rebound. However, investment tends to recover quickly once the negative shock parts way, especially when supported by strong underlying fundamentals, as is currently the case.

After experiencing double-digit growth rates in the first year of the economic recovery, business equipment and software investment (ESI) has slowed substantially. Last quarter, ESI advanced a mere 1.7% annualized, the slowest pace since the recession ended. If this is a harbinger of what's to come, then forecasts for ESI are bound to be disappointed. Worse, private demand will be in a poor position to offset the impending drag from the public sector.

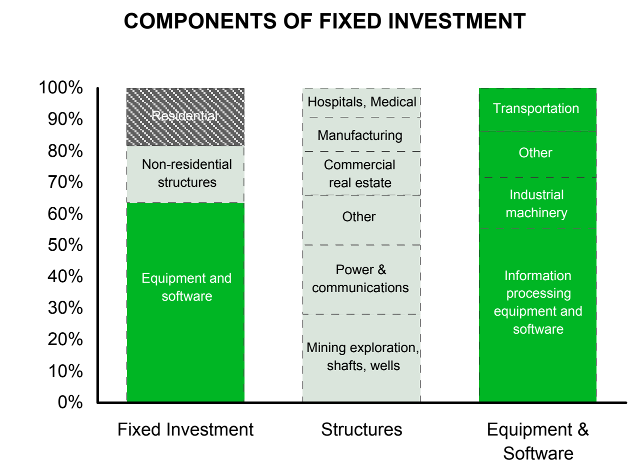
Fortunately, the fundamentals don't support this outcome. During the downturn, a dirth of investment, in combination with depreciation, resulted in a decline in the net stock of equipment and software for the first time since World War II. The process of replenishing these stocks, particularly in the manufacturing sector, is not yet complete. By our estimates, overall business investment is well shy of levels justified by underlying corporate liquidity and profit growth, implying that the country continues to suffer from underinvestment. However, history shows investment deficits never last. As the recovery advances, businesses will have the motivation and means to support a stronger level of investment relative to what we have seen in the last six months.

EQUIPMENT AND SOFTWARE INVESTMENT



Forecast by TD Economics as of March 2012
Source: Bureau of Economic Analysis, TD Economics

Beata Caranci, Vice President & Deputy Chief Economist, 416-982-8067
Chris Jones, Economist, 416-983-0500



Source: Bureau of Economic Analysis, TD Economics

ESI has led the current economic recovery

One under-appreciated aspect of the current recovery is how well equipment and software investment has performed relative to other sectors of the economy. Between 2010 and 2011, the share of GDP devoted to ESI grew at its fastest pace in three decades. Today, ESI makes up 9% of the economy – its highest level in U.S. post-war history. From this perspective, the weak performance at the start of this year is rather anomalous.

The rebound in ESI in the early stages of the recovery was due to a variety of factors. To start off, equipment and software can have relatively short lifespans. Businesses that put off investing in E&S during the recession responded by replacing their aging stocks once the recovery was underway. Federal stimulus measures – such as the bonus depreciation tax credit – helped lower the user cost of capital, further supporting ESI in the wake of the downturn. And, unlike housing investment, ESI wasn't plagued by overcapacity, falling asset prices, and bad debts. Finally, a rebound in ESI could not have been possible were it not for a corresponding sharp recovery in profits and build-up in liquidity.

However, what was initially strong ESI growth has slowed substantially in recent quarters. In the opening quarter of 2012, ESI contributed a mere 0.1 percentage points (pp) to GDP growth, compared to 0.7 pp in 2011 and 0.9 pp in 2010. Part of the slowdown represents the economy's natural transition from investment-led to consumption-led growth. However, because the underpinnings of ESI look so favorable, it should remain a key contributor to economic growth over the next few years.

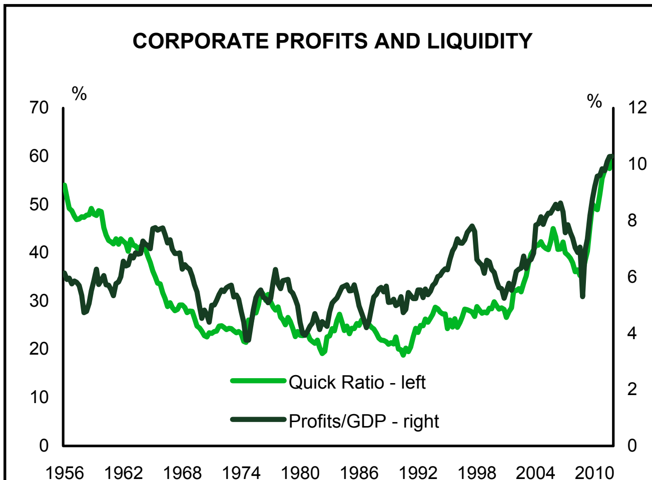
Businesses won't sit on elevated liquidity and profits forever

An unusual feature of this economic cycle is that both profits and liquidity are at record levels relative to GDP. Corporate profits now make up an astounding 10% of gross domestic product, nearly double its pre-recession average. Meanwhile, corporations are sitting on a mountain of cash. Liquid assets as a share of the economy have grown almost 50% since the recession. The ratio of current assets to short term liabilities – a common measure of liquidity – has risen to levels not seen in over 60 years.

Although corporate profits and liquidity are linked, they are not the same thing. Capital-intensive businesses that hold a lot of real assets can be highly profitable but they may have a relatively small share of assets that are very liquid. So, we ran some statistical simulations to figure out which one is a stronger driver of ESI growth. While both profits and cash are important for investment, cash is the more potent fuel. In our simulations, over a period of about nine quarters, the effect on ESI of a rise in the rate of liquidity accumulation was about two-thirds greater than that of a similar change in the rate of corporate profit growth.

However, we do not want to understate the importance of profits as a guide to ESI. We also compared after-tax profits of nonfinancial corporate businesses (net of dividends) with business fixed investment over time. Taking the difference between the two as a share of GDP offers a rough measure of over/under-investment in the economy.

This measure shows that a substantial gap has opened up between corporate internal funds and fixed investment since the recession. Currently at 16%, this is the largest and



*Quick ratio = liquid assets / short-term liabilities
Source: Federal Reserve, Bureau of Economic Analysis, TD Economics

most sustained investment deficit on record. But if history is any guide, the gap will not persist indefinitely. Notice in the graph below that the series trends around 0 – the point where internal funds exactly equals fixed investment as a share of GDP. This means that while there are times when business investment exceeds or falls below internal funds, such deviations do not last. We forecast that by the end of this year, the gap will have closed to 10% and further to 3% by 2013.

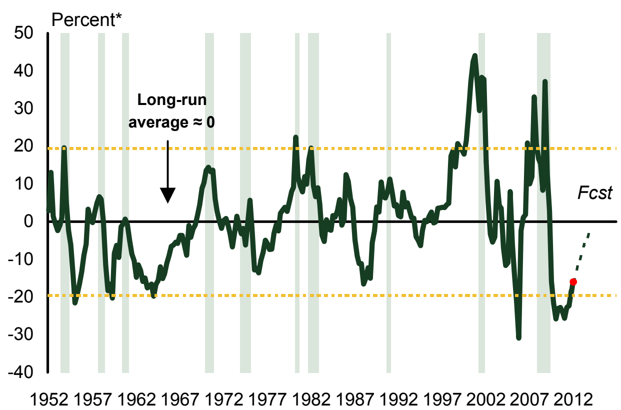
With both profits and liquidity at elevated levels, it offers a compelling case that there's simply too much gas in the tank for ESI growth to sputter out, irrespective of the recent slowdown. The perceived need for extra liquidity will diminish eventually, and some of this surplus cash will find its way to other uses. While investment is one choice, there are other avenues – such as increasing dividend payouts or engaging in share buybacks. Evidence also indicates that periods of strong M&A activity are associated with higher levels of corporate liquidity.

What about dividends?

In fact, there is the possibility that an increase in dividend payouts would lower internal funds and narrow the investment gap even if business investment growth does not change. That is exactly what happened in 2005, when a one-time tax break on foreign earnings led to a mass repatriation of profits back to the United States. The result was a spike in internal funds in late 2005, followed by large dividend payouts and a subsequent drop in internal funds in early 2006. All the while, investment growth stayed stable.

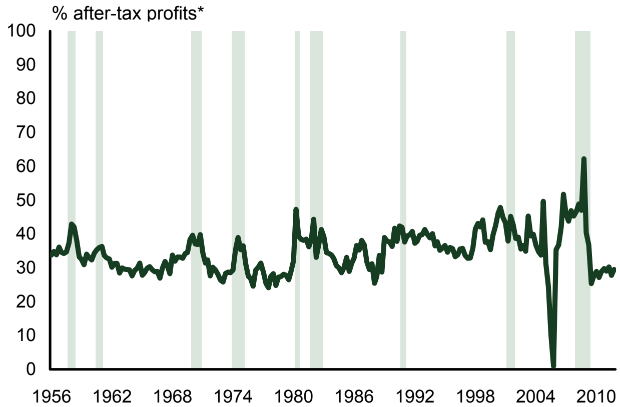
If dividend payments were exceptionally low relative to history, it would have the effect of beefing up internal funds,

INVESTMENT GAP



*% difference between fixed investment and internal funds as share of GDP
Source: Federal Reserve Board, TD Economics

NON-FINANCIAL CORPORATE DIVIDENDS



*With IVA and CcAdj.
Source: Federal Reserve, Bureau of Economic Analysis, TD Economics

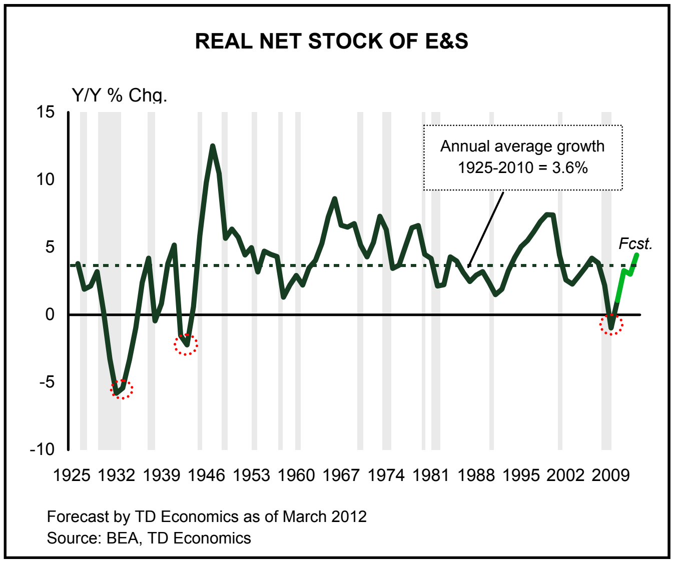
making today's investment gap look larger than it really is. But we suspect dividends are not skewing the overall picture. First, dividends are somewhat low relative to their historical average, but not particularly so. Between 1980 and 2007 dividends payments averaged 37% of after-tax profits; since 2009, when corporate profits began recovering, they've averaged 30%. Furthermore, if we add dividends back into the mix and just look at the ratio of fixed investment to corporate after-tax profits before dividend payouts, we find that it's still at its lowest level in history. This tells us that in the past businesses put a larger portion of after-tax profits towards investment than is currently the case. In our opinion, an investment gap very much exists.

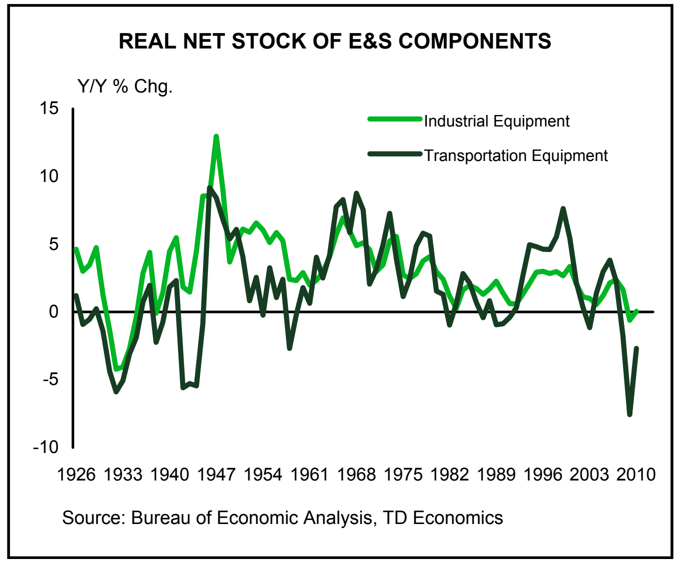
Need to replace depreciated stock

Corporations are well-positioned to support a higher level of investment spending. The question now is which components of ESI are likely to see the most strength as liquidity is unleashed? To answer this, we need to know something about the country's oustanding stock of all equipment and software (E&S).

Each year a portion of the nation's capital stock depreciates through normal wear and tear or technological advances that make existing equipment obsolete. Assuming no efficiency gains in the production process, businesses must invest enough not only to replace this depreciated stock, but also to expand the stock to keep pace with growing output.

Rarely does aggregate ESI fall below the level needed to replace the portion of the stock lost to depreciation, but it does happen: in the 1930s, during the Great Depression; in 1942 and 1943, when private investment was diverted to build up the government-owned capital stock for the war

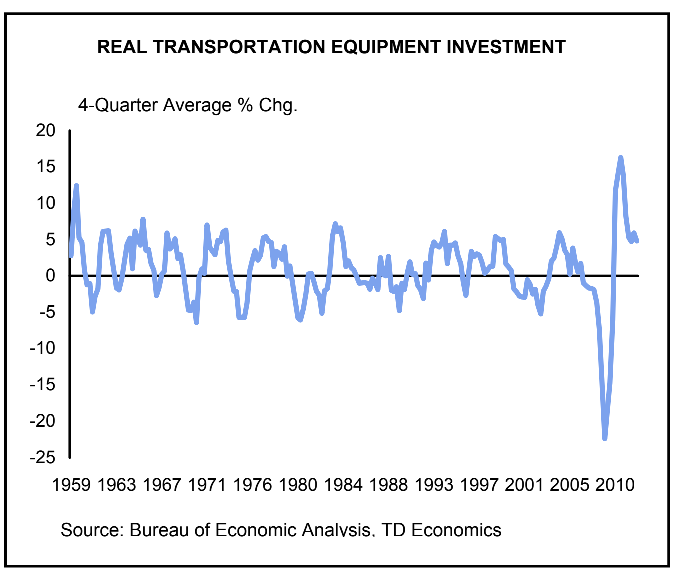




effort; and, finally, in 2009. The dramatic 22% drop in ESI during the recent recession led the nation's stock of equipment and software to shrink 1% in real terms for the first time in 66 years. That may not seem like much, but consider that on average the E&S stock grows by 3.6% a year.

Not all parts of the E&S stock shrank during the downturn. The net stock of computers and software, which accounts for half of the overall E&S stock, continued to grow but at a slower rate than before. The two areas that suffered most were industrial equipment (machinery, engines, fabricated metal products, etc) and transportation-related equipment (particularly trucks, but also autos, aircraft, ships, etc). The latter shrank an astounding 12% in real terms between 2008 and 2010, the last year for which data is available.

Three years after the recession and there's still a lot of room for these stock to recover, especially in the areas where they suffered the steepest declines. Sticking with the transportation equipment example, in 2010, transportation investment surged 68% in real terms, but even this wasn't enough to outpace depreciation and the real net stock shrank yet again that year. In 2011, investment growth slowed to 26%, likely hindered by a lack of supply in the wake of the Japanese earthquake. By our calculations, this was enough to generate an increase in net stock for the first time since 2007, but there still remains a significant gap to make up from the recession. Indeed, if the goal is to get the stock of transportation equipment back to pre-recession levels, the process still has a lot of runway.



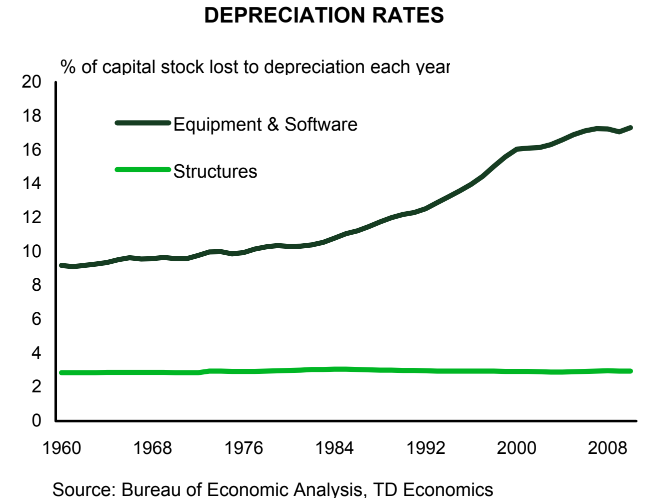
Admittedly, we have no way of knowing how much of the decline in any component of the E&S stock was structural rather than cyclical in nature. It could be that businesses implemented efficiency measures during the recession that reduced their need for certain types of equipment. If so, then the need to reconstitute these stocks may not be as pressing. However, it's likely safe to say that given the unusually steep nature of the past recession, cyclical forces were key to the declines and the ongoing need to build back stocks will continue to support investment growth in the future.

Headwinds remain

Although we can argue until the cows come home that the fundamentals support ongoing strength in ESI, we are cognizant of the possibility that elevated risk aversion behavior by firms, as evidenced by their cash stockpiles, could persist longer than anticipated. If so, this would stunt the growth momentum in ESI in the near term, but ultimately it won't change the solid underpinnings that exist.

There are a myriad of potential shocks that could lead to a rise in risk aversion, including worsening uncertainty over government policy or a disorderly resolution to Europe's sovereign debt problems. To gauge their potential impacts, we took a stab at quantifying the effects of uncertainty on ESI using a new index of policy uncertainty created by economists at Stanford and the University of Chicago. The index takes into account the frequency of references to economic and policy uncertainty in major newspapers in addition to forecasting disagreement among economists of major data indicators.

We found that uncertainty does in fact drag on investment growth, but only if it's a relatively large shock. There have only been three shocks large enough to inflict damage on ESI in the last three years: during the last two quarters of 2008 at the height of the financial crisis, and in the third quarter of 2011 during the debt ceiling debate and subsequent credit downgrade. We found that the negative effects on investment are strongest in the quarter when the shock occurs, but typically peter out in the quarters following. Thus, it seems reasonable to assume that high or sudden uncertainty in the future could delay investment intentions, but not derail it once there's resolution of the situation. An unruly progression in European sovereign developments is one such possibility comes to mind.



Conclusion

Despite slowing in recent quarters, ESI will continue to be a reliable engine of growth at a time when the public sector is retrenching and the private sector must pick up more of the economic slack.

Elevated corporate profits as a share of the economy and unusually high liquidity will propel ESI over the longer term as under-investment during the recession has yielded a wealth of investment opportunities that businesses haven't taken full advantage of. The ongoing need to replace depreciated asset stocks in other sectors of the economy will limit the persistence of any near-term ESI weakness.

Crucial to the timing of this investment pickup is a reduction in macroeconomic risks. Europe's crisis is intensifying, and the U.S. is set to tumble over a fiscal cliff in 2013 if the current policy trajectory isn't altered. All this may induce businesses to keep a lid on investment longer than expected.

But, assuming these risks are minimized, we suspect ESI will rebound in the second half of the year, with growth averaging 6-8% through 2013. This, in turn, will help make significant headway in closing the investment gap, which we estimate will fall to 3% by the end of next year.

Beata Caranci
VP & Deputy Chief Economist
416-982-8067

Chris Jones, Economist
416-983-0500