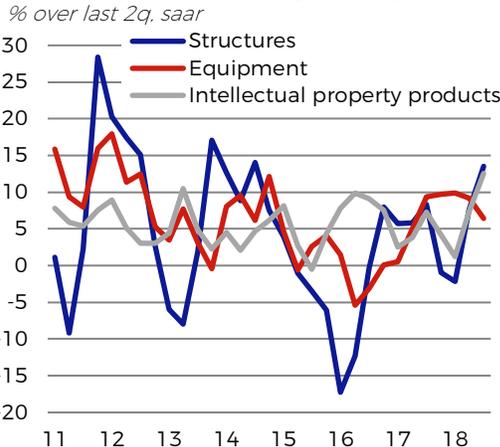


THE CASE OF THE MISSING US BUSINESS INVESTMENT

Suttle Economics Notes #49

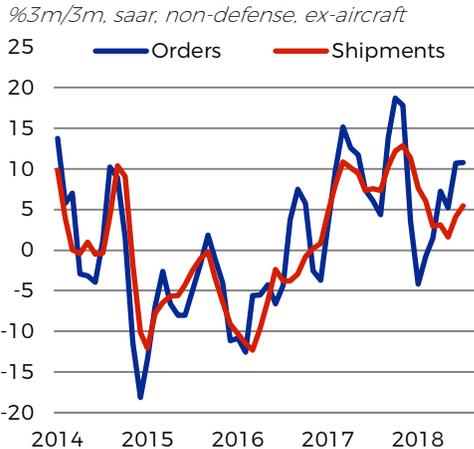
- US business fixed investment is on an upswing, helped by fiscal stimulus
- Intangible investment—intellectual property—has become more important than buildings
- Despite the latest upswing, investment has been surprisingly weak since the mid-2000s
- Equity buybacks appear to be the factor behind this weakness, both now and in the '80s

Chart 1
Fixed investment during this expansion



US business fixed investment has strengthened in recent quarters, accounting for the lion's share of the acceleration in growth in the past two years. In the year through 2018Q2, real GDP was up 2.9%; in the year through 2016Q2, it has been up just 1.3%. Business fixed investment added 0.9%-points to growth in the latest year, while it provided no contribution in the year through 2016Q2. The main turnaround has come from outlays on new structures (Chart 1). In large part, this reflects a rebound in mining investment—especially new oil and gas drilling—after a severe (oil-price-driven) slump in 2015. The rebound has also become more prominent in outlays on intellectual property (IP) products—especially software—which enjoyed their best 2-quarter performance of the expansion in 2018H1.

Chart 2
Trends in core capital goods



Looking ahead, the prospects are quite good for sustaining solid business spending until well into 2019. Full first-year expensing of capital outlays was a key part of the corporate tax reform. More fundamentally, profit growth remains strong (albeit given a huge, one-time boost by tax rate cuts in 2018); borrowing costs remain low; banks are more willing (and able) to lend; and deregulation is helping, especially in key sectors, such as mining. The recent renewed uptick in incoming orders is encouraging, although uncertainties relating to unfolding trade conflicts are a concern (Chart 2).

Despite these favorable conditions, however, we do not expect an extended phase of buoyant capital spending growth, as in 1990s H2. Indeed, we see plans as somewhat vulnerable to tighter financial conditions in 2019H2 and, especially, in 2020. One factor behind this view is extreme caution exhibited by businesses, especially evident since the financial crisis. This seems to reflect a number of factors, some of which are technology-related, and which are thus hard to fit into historic context. But the bottom line is that business decision-makers have become relatively cautious, preferring to use cash generated by the business to buy back stock, rather than acquire fixed

Chart 3
Business fixed investment by type

as % of nominal GDP

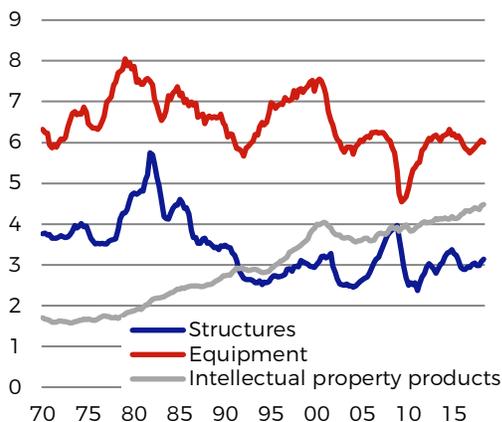


Chart 4
Real IT investment outlays

%oya

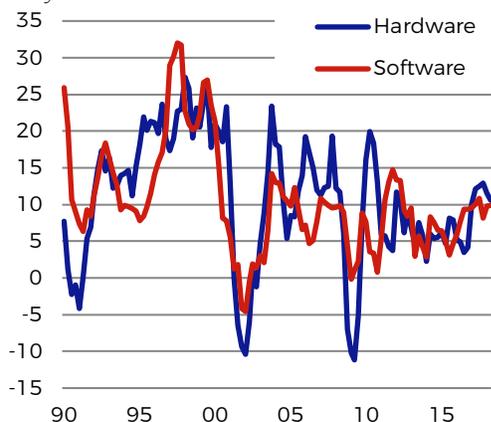
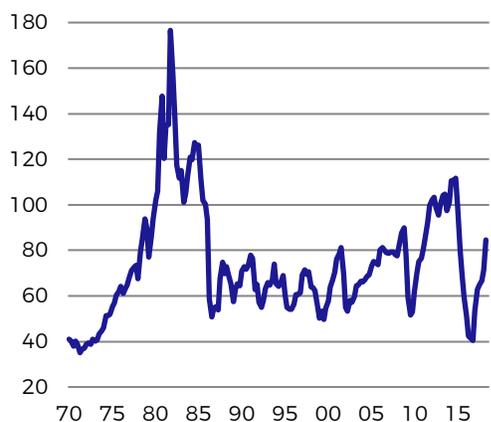


Chart 5
Real mining structures

index, 2012 = 100



assets. In this context, the strength of the equity market is not so much a sign of more capex to come (although that effects is presumably still at work), but more a reflection of capex not done.

Not your father’s capital goods industry

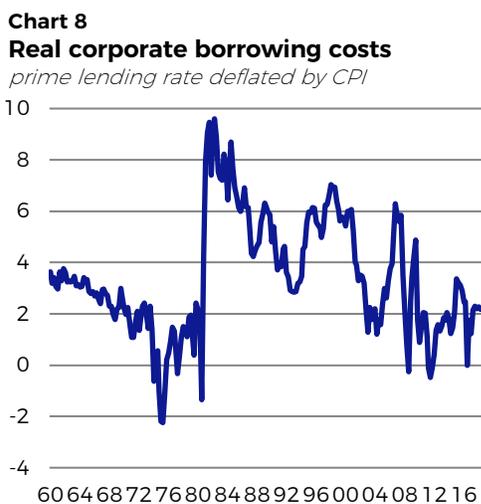
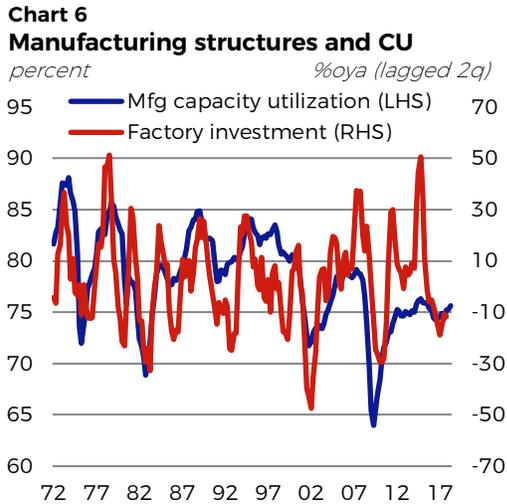
There have been some important changes in the nature of business fixed investment in the economy in recent decades. Typically, investment implied the acquisition of equipment or structures: long-lived and very tangible capital goods. Outlays on equipment have fallen significantly relatively to GDP since 2000, however (Chart 3). This component includes not just turbines and machines, but also transportation equipment and, increasingly, information technology (IT) hardware. Investment in structures has become increasingly oriented towards the service-sector through recent expansions, although much of the volatility in this category is accounted for massive swings in the resources sector. In the past two years, service-sector-related outlays on structures (proxied by real outlays on commercial structures—e.g. offices, health-care facilities and retail) has stagnated, having grown at a 15% annual rate in the 3 years to 2016Q3.

The most buoyant category of capital spending is IP products—mainly software and research and development. These are intangible capital goods, which (in many cases) have only been treated as capital (rather than current) outlays in recent years. Engineering hours are now spent developing code in front of multiple screens, rather than in factories producing physical capital goods. By value, outlays on IP products account for 33% of all business fixed capital outlays; equipment accounts for 44%; and structures for 23%. In 1970, those shares were 14%, 53% and 33%, respectively. The shift towards IP investment has two other noteworthy aspects relative to broader macroeconomic analysis. First, it has been accompanied by the rise of new large technology companies (both providers of and users of these capital goods), which have had a persistently disruptive effects on economic structures.¹ Second, IP capital goods are typically much shorter-lived than traditional capital goods (raising conceptual issues, in my mind at least, about what actually qualifies as a capital outlay; this debate is not entirely academic—ask Bernie Ebbers). In this connection, note that real GDP growth in 1970-99 was 3.3%, while net domestic product (NDP; gross less depreciation) was 3.2%. From 2000-18, GDP growth averaged 2%, while NDP growth averaged 1.8%.

Other aspects of the current capex upswing

Three other recent capital spending trends are noteworthy. First, real IT outlays have been relatively

¹ The latest Kansas City Fed conference had some fascinating [papers](#) touching on this issue.



weak through this expansion, especially when viewed against the boom years of the 1990s (Chart 4). Hardware purchases, in particular, have been much lower. Second, average investment in the resources sector has been stronger (albeit volatile) during this expansion than at any time since the mid-1980s (Chart 5). The innovation of fracking in the late 1990s, combined with the sharp rise in energy prices after 2003 promoted rapid investment growth in energy (briefly, but seriously, interrupted by the financial crisis in 2008). This boom peaked when oil prices collapsed in late 2014 (caused, in large part, by the surprising strength in US oil production resulting from this investment boom). The rebound from the trough in 2016Q4 has been equally impressive (although will not last). Finally, the strength in manufacturing investment through this expansion has been quite robust, given the relatively low level of capacity utilization—somewhat of a contrast with the 1980s, 1990 and early 2000s, which were the years of chronic US de-industrialization (Chart 6).

The mysterious case of the missing capex

Financial factors supporting business capital spending have been unusually supportive through the current expansion. The profit share of national income has risen to an unusually high ratio, signaling strong returns to investment in fixed capital (Chart 7). Moreover, real financing costs have been unusually low (Chart 8). Early in the expansion, there were significant constraints on the ability of risky borrowers to raise financing, but these constraints appear to have eased after 2014 and conditions in recent years have been unusually favorable. Banks—the typical source of funding for small and medium-sized enterprises—once again seem eager to lend. The Administration’s recent measures to ease the regulatory burden on smaller banks should further ease the supply of credit in coming quarters.

A final financial factor boosting investment in recent quarters is the incentive implied by the equity market. When the second-hand “price” of the capital stock (both tangible and intangible) in the stock market is high relative to its replacement cost (a ratio known as Tobin’s quotient, or Q), then firms have more incentive to create rather than buy fixed capital. According to the Federal Reserve, the market value of the US corporate sector was 112% of its book value in March (given the rise in equities since, it will have risen appreciably further). Q has been above 100% only 15% of the time since 1952 (Chart 9). Aside from the recent period, the only other period when its value was sustained above 100% was 1995-00, which is when the last significant investment boom occurred.

Following the lead of some US academics, we estimated a simple investment equation, fitting net investment (i.e. investment net of depreciation)

Chart 9
Tobin's Q ratio

% market-to-book value of non-fin. corp. sector



Chart 10
Net investment: actual versus fitted

net investment/post-tax profits, non-fin. corps.

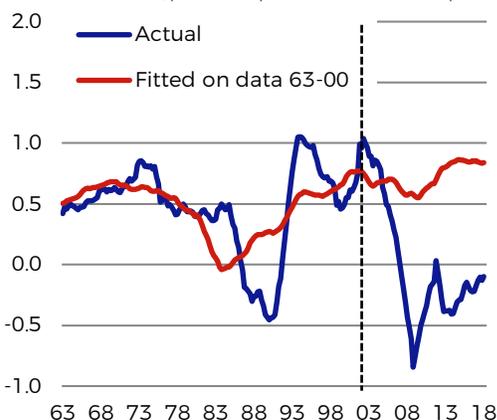
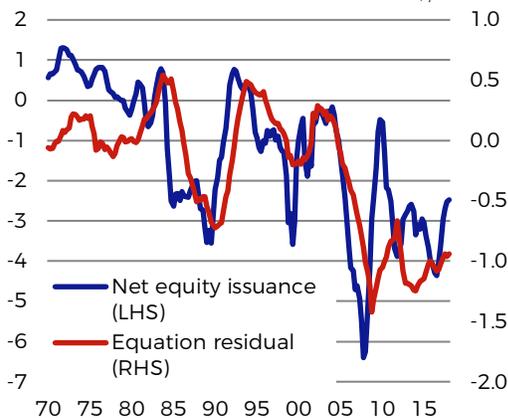


Chart 11
"Missing" capex and equity buybacks

net issuance as % of value added net I/profits



relative to post-tax earnings to: Tobin's Q (as a proxy for the incentive to invest); and the real borrowing cost (as a proxy for the cost of investment). The terms in the equation were "correctly"-signed and statistically significant. The overall fit (R^2 0.37) was not overwhelming, however. We estimated the equation on quarterly data from 1963-2000 (Chart 10).

When we fitted the equation out sample (i.e. over the 2001-2018 period), we confirmed what academics have shown, which is that the model *substantially overpredicts* actual net corporate investment in recent years, starting in the mid-2000s. In other words, given the low cost of finance and apparent attractiveness to firms of fixed asset accumulation (in terms of visible cost versus benefit), net investment has been *way below* where it should have been.

We have two explanations for this apparent shortfall: one obvious; one less so. The sustained negative shortfall in capital spending (on our equation) is mainly a post-crisis event. Given the number of CEO careers cut short in 2006-2009 by apparent reckless expansion (as also in 2001-03), it is not surprising that the survivors became extremely risk averse.

Another factor seems relevant, however. We took the residuals from the equation and lined them up against net equity issuance (using Fed data from the flow of funds accounts; Chart 11). The blue line is net equity issuance (the sum of IPOs, retirement through M&A and net buybacks) scaled by (non-financial sector) corporate income; the red line is the residual from our fitted equation, both in and out-of-sample.

The apparent linkage between the two series strongly suggests to us that the preference to retire equity—which has spiked in the post-crisis period through buybacks—is an important explanation for this "missing" capex, as indeed was also the case in the second half of the 1980s. The corporate bias to use cash for balance sheet management, rather than capital spending, seems to reflect a new, post-crisis, collective corporate wisdom that may be hard for individual CEOs to buck. But, if true, it suggests that we should be somewhat skeptical that a surging stock market will fuel further investment.

Philip Suttle
phil@suttleconomics.com
202-378-6793

Important Information

While we make every effort to ensure that the analysis in this note is as accurate as possible, we do not guarantee that the information contained is either complete or correct. The material has been provided for informational and educational purposes only. The information is not intended to provide or constitute investment, accounting, tax or legal advice.