



Is the recent slowdown in capex cause for concern?

- The paltry 0.8% annualized gain in nonresidential fixed investment (capex) last quarter has raised concerns that growth prospects have dimmed. While we fully expect capex to recover in the current quarter, we do expect growth to gradually slow next year.
- Compared to a year ago, capital spending continues to expand at a healthy pace. Near-term leading indicators of capex remain favorable and do not point to an imminent sharp deceleration that would send a more ominous signal about the overall economic outlook.
- With respect to risks, on the upside, our forecast for capex spending may be conservative given that we have only factored in a modest supply-side boost from tax cuts. Regarding downside risks, financial conditions and trade policy may present headwinds to business spending. Corporate credit conditions, which are a useful leading indicator of capital spending, remain buoyant but are bound to tighten as the Fed continues to raise rates.

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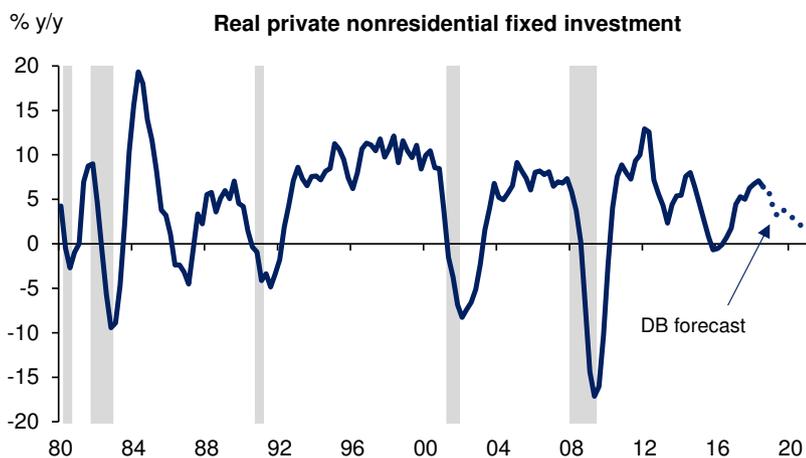
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Figure 1: Capex spending is projected to slow over the next couple of years



Source: BEA, Haver Analytics & Deutsche Bank

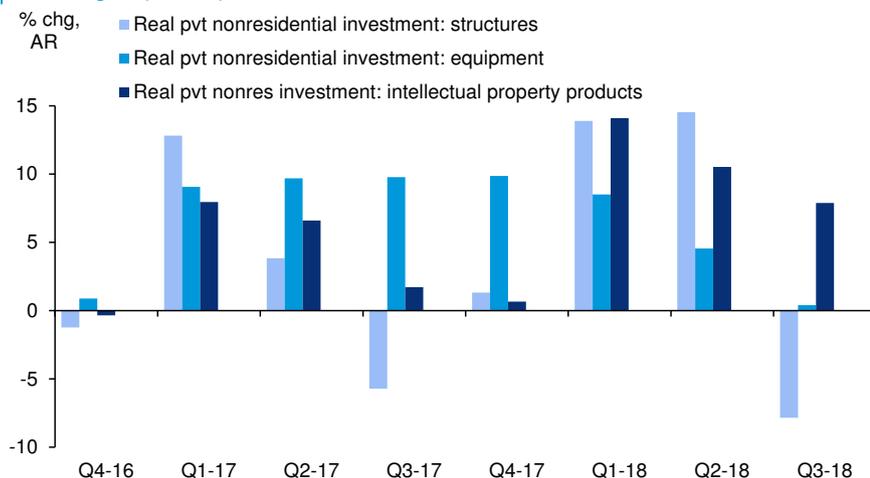


Dissecting the "collapse" in Q3 capex growth

Last quarter, nonresidential investment spending (capex) expanded by just 0.8% annualized after a heady 10.1% gain in the first half of the year. This begs the question of whether the pronounced drop off in business spending growth is a harbinger of a more worrisome decline in overall growth prospects. In our view, this is not the case, and last quarter's paltry growth in capital spending may reflect a temporary pause in a few particular components of business investment after heady growth in the first half of the year. To be sure, at this stage of the business cycle, we do not anticipate a meaningful acceleration in nonresidential investment spending. However, we also do not foresee a pronounced downshift that would point to a near-term risk of recession. In short, the Q3 capex "collapse" needs to be put in the proper context.

Nonresidential fixed investment (capex) accounts for roughly 14.5% of real GDP. There are three main subcomponents of nonresidential investment: structures (~20%), equipment (~47%) and intellectual property products (~33%). As illustrated in Figure 2, structures spending plunged 7.9% last quarter following two consecutive quarters of strong growth. Equipment spending growth also slowed sharply after six consecutive quarters of sturdy gains. While intellectual property investment growth still expanded at a robust rate, it was well below the heady pace seen in the first half of the year. On the surface, the sharp drop in some of these capex components appear worrisome. In our view, this may more so reflect a temporary pause in an otherwise healthy growth environment.

Figure 2: Two of the three main subcomponents of capex decelerated meaningfully last quarter



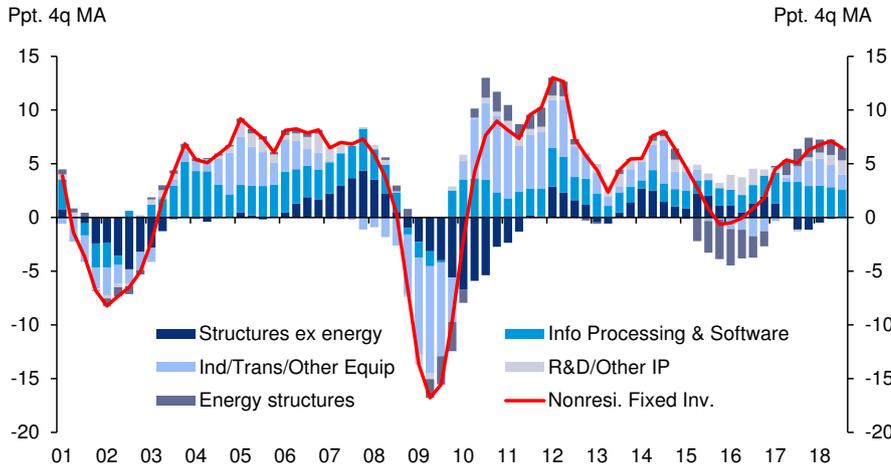
Source: BEA, Haver Analytics & Deutsche Bank

Figure 3 illustrates the four quarter average of the year-over-year growth rate of nonresidential fixed investment and the contributions from the main sectors within the aforementioned subcomponents (four-quarter moving averages). Technology spending, defined as information processing equipment and software, has been the largest contributor to overall capex growth over the past couple of years. Energy-related structures spending has also been a modest contributor of late after weighing meaningfully on capex growth in 2015 and 2016 in the wake of the oil price collapse. With respect to last quarter's downturn, these



two sectors were particularly weak, at least relative to their performance in the first half of the year.

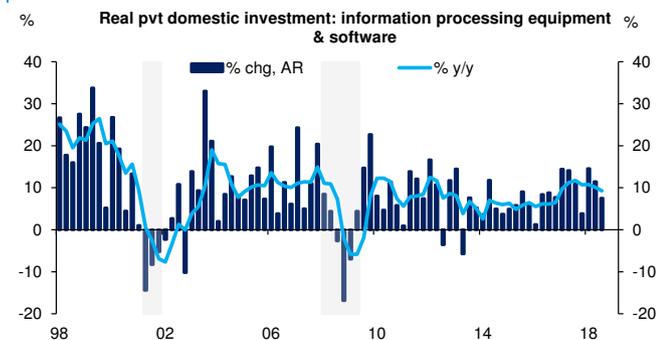
Figure 3: Information processing and software have been significant drivers of capex spending over the last couple of years



Source: BEA, Haver Analytics & Deutsche Bank

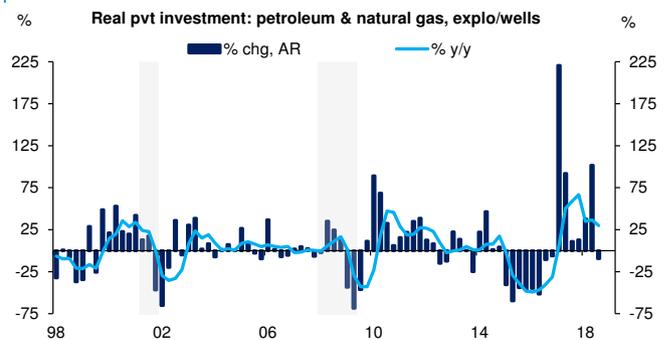
As Figure 4 shows, while technology spending still increased at a healthy 7.5% annualized rate in Q3, this was down from 13% growth over the first two quarters of the year. Within tech spending, the most pronounced decline was in information processing equipment, which grew only 3.5% compared to first half growth of 10.9%. The slowdown in software spending was not as dramatic as this sector expanded by 12.6% compared to H1 growth of 15.6%. Over the past four quarters, tech spending remains up 9.3% and should remain sturdy after a period of possible underinvestment earlier on in the cycle. To be sure, ongoing tightening of the labor market and rising wages should provide ample incentives for firms to enhance the productivity of their existing labor force with better technology. Indeed, our previous work (see ["Chicken or the egg: Are firmer wages a precursor to a productivity pickup?"](#)) has found evidence that productivity gains tend to follow rising wage growth.

Figure 4: Information processing and software spending growth dropped off in Q3



Source: BEA, Haver Analytics & Deutsche Bank

Figure 5: Energy-related structures spending plunged last quarter



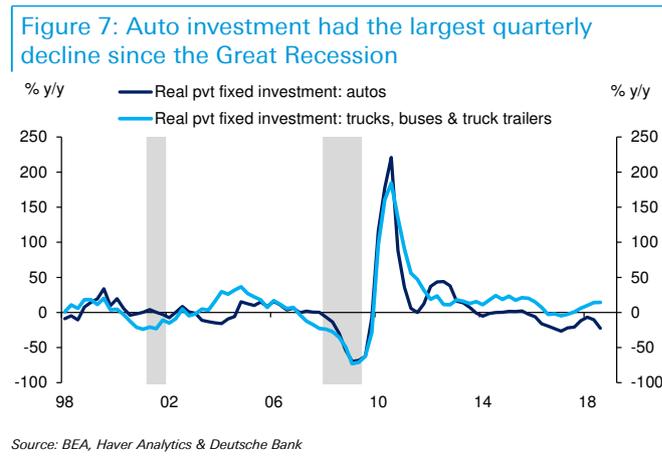
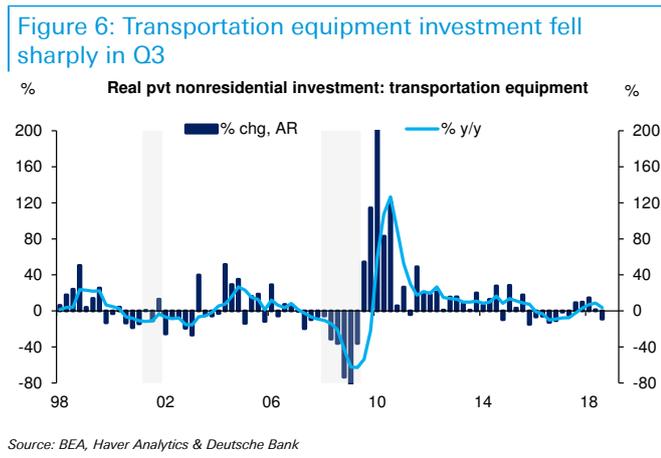
Source: BEA, Haver Analytics & Deutsche Bank



As illustrated in Figure 5, the Q3 drop in structures spending was in part due to a 9.6% decline in petroleum and natural gas wells. Note that petroleum and natural gas wells expenditures were up nearly 67% in the first half of the year. The fact that oil prices remain elevated should be a modest positive for energy-related investment given that the year-over-year growth rate of the former leads the latter by two quarters. Additionally, lack of pipeline capacity maybe delaying further spending on drilling rigs.

Importantly, the latest data for commercial construction spending point to a moderate upward revision to Q3 structures investment. In addition, Hence, we are less concerned about the Q3 sharp drop in structures spending since some of the decline should be revised away when the BEA releases its preliminary estimate of Q3 real GDP on November 29. By our calculations, Q3 growth of structures investment should be revised up roughly five percentage points (ppts) to -2.9%, which would add around a tenth to Q3 GDP growth all else being equal.

Regarding other subsectors of capex in Q3, there was notable weakness within transportation equipment investment (Figure 6). Transportation equipment spending dropped -9.1% in Q3. This largely reflected a 47.7% plunge in automobile investment, the largest quarterly decline since the Great Recession. As Figure 7 indicates, auto investment has been particularly weak for the past several years. However, given that auto investment, which includes used cars, is only 2% of overall nonresidential investment, we do not believe that weakness within this sector is too concerning. In fact, similar to the mix shift we have noticed in retail auto sales, where consumer purchases of light trucks and SUVs have vastly outperformed small cars, the same mix shift is likely occurring among businesses. Note that investment in light trucks and SUVs is up 9% over the past year compared to a 22.5% decline in auto investment over the past four quarters.



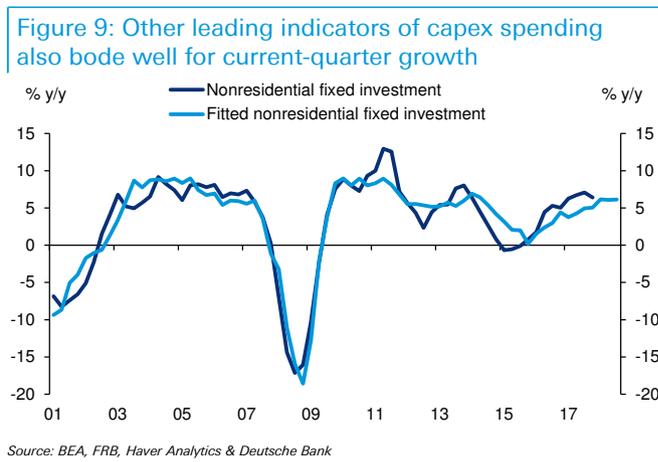
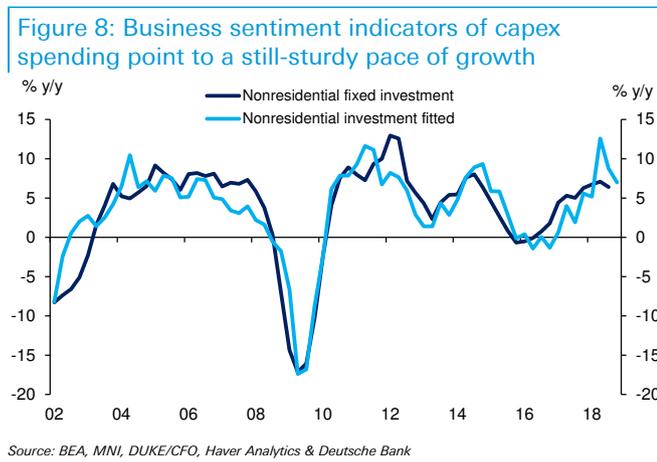
The near-term outlook remains sound...

With respect to the near-term outlook, there are a couple of reasons to expect a sturdy rebound in the aforementioned capex components. One, indicators of business sentiment, which typically lead nonresidential investment, still point to a sturdy pace of growth. We have found that since 2001, the Chicago PMI and the Duke/CFO magazine surveys have been useful leading indicators of the year-over-year trend in capex. As we can see in Figure 8, a regression-based model of nonresidential fixed investment utilizing the Chicago PMI (two-quarter lead) and



the Duke/CFO magazine outlook for capital expenditures (one-quarter lead) points to roughly 7% year-over-year growth in the current quarter.

In addition, our other near-term forecasting model for nonresidential fixed investment, which utilizes the year-over-year change in the capacity utilization rate (one-quarter lead), the year-over-year change in corporate profits (six-quarter lead), Commercial and Industrial (C&I) lending standards from the Fed's Senior Loan Officer Survey (three-quarter lead) and the Fed's measure of recession risk over the next 12 months implied by the excess bond premium (two quarter lead) points to year-over-year growth of a little over 6% in the current quarter. Even assuming a modest decline in the year-over-year growth of capacity utilization and rising probability of recession over the next couple of quarters, capex spending could be a bit better than we are projecting (Figure 9). In short, the Q3 plunge in capex likely reflects a brief pause in a few particular components rather than a harbinger of a more serious downturn in business spending.



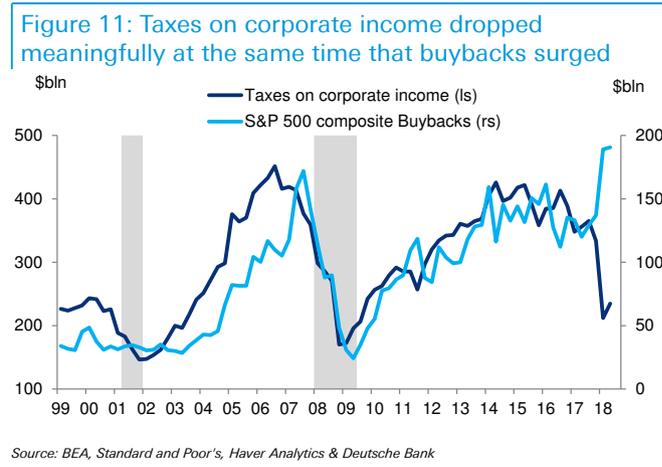
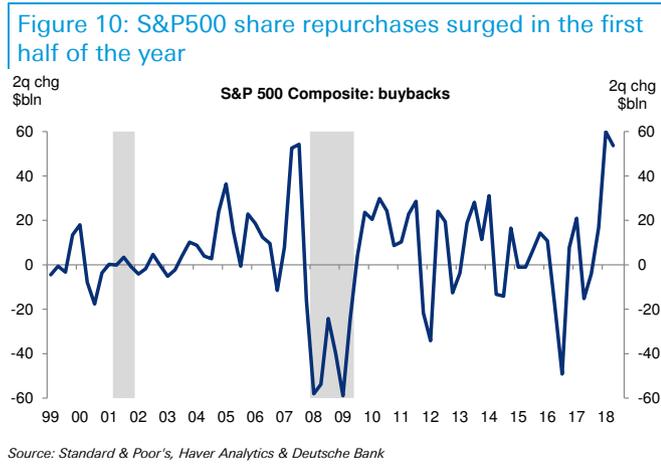
Potential upside risks of a stronger intermediate-term rebound

As we look further out the forecast horizon into next year, there are a couple of reasons why our forecast may be too conservative. For one, we have only factored in a modest boost to business fixed investment in the wake of the tax cuts (see ["Priming of the fiscal pump presents upside risks to growth"](#)). Recall that the JCT estimated that corporate tax reform could boost the capital stock by 0.9% over the next ten years. If the cash savings to corporates was expected to be \$654 billion between 2018 and 2027, the JCT would be assuming roughly 15% of that gets put back into capital investment over time. While we are slightly more positive than the JCT in assuming that 20% of the tax savings is invested, the supply side boost could be greater if the multiplier is higher. As we noted earlier, a tight labor market could also induce firms to invest more in capex to enhance the productivity of their existing work force.

At this point, it is too early to quantify with any precision the impact of corporate tax cuts on economy-wide capex spending. On the one hand, the strong pace of growth in information processing equipment and software over the first half of the year could be an indication that firms are putting their tax savings to work. However, this has been a secular trend as tech spending now accounts for nearly



35% of real nonresidential fixed investment, a bit more than double what its share was two decades ago. In addition, we can see in Figure 10, S&P500 share buybacks have surged by \$53.7 billion over the first two quarters of the year, the most since the two quarters ending in Q3 2007 (\$54.3). The pickup in share buybacks unsurprisingly coincided with a \$99 billion decline in corporate taxes in H1 (Figure 11). In short, there is some evidence that corporates are buying back shares with their tax savings as opposed to meaningfully boosting investment.



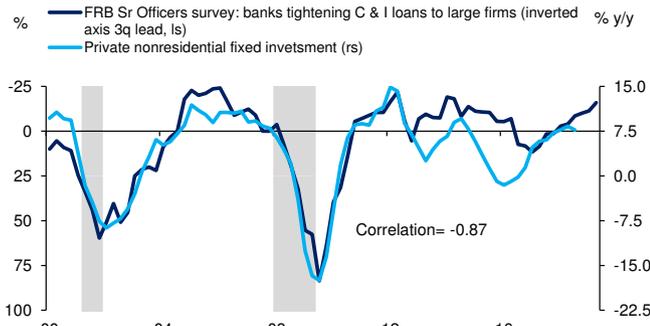
Longer-term, downside risks may abound

On the downside, financial conditions are one source of risk. As mentioned above, C&I lending conditions from the Fed's Senior Loan officer survey are a leading indicator for nonresidential fixed investment (Figure 12). With the Fed expected to continue raising rates, C&I lending standards are bound to tighten, which will eventually weigh on capex spending further down the line. Recall that the minutes of the September FOMC meeting noted that "Some participants commented about the continued growth in leveraged loans, the loosening of terms and standards on these loans, or the growth of this activity in the nonbank sector as reasons to remain mindful of vulnerabilities and possible risks to financial stability."

Moreover, as shown in Figure 11, the ratio of nonfinancial corporate debt to nonfinancial corporate profits from current production in the NIPA accounts has been rising of late. This is all the more interesting in that prior periods of this ratio being elevated coincided with recession—i.e. the denominator was contracting. At present, debt levels are elevated at a time when corporate profits are also rising in the wake of tax cuts. The aforementioned preliminary print on Q3 GDP should shed more light on Q3 profit growth in this regard.

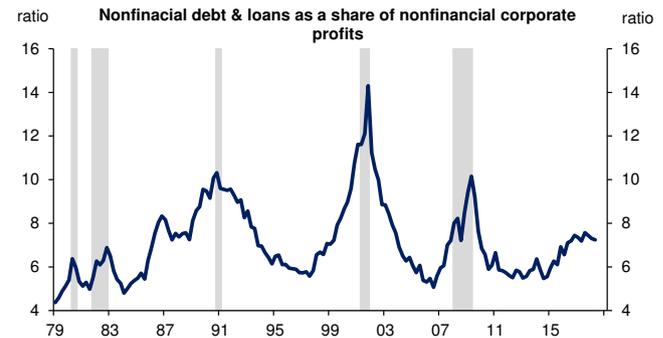


Figure 12: C&I lending standards lead the trend in capex by three quarters



Source: FRB, BEA, Haver Analytics & Deutsche Bank

Figure 13: The ratio of nonfinancial corporate debt to profits is moderately elevated



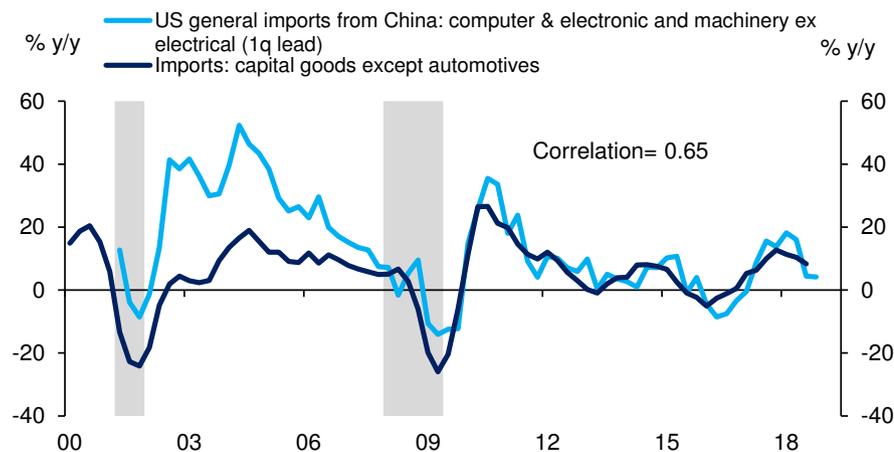
Source: FRB, BEA, Haver Analytics & Deutsche Bank

Trade policy may present another downside risk to capex spending. At minimum, the uncertainty may delay investment plans. In a worst-case scenario, a full 25% tariff rate on all Chinese imports, which are running at around a \$540 billion pace through the first eight months of this year, would represent a roughly \$135 billion tax on those goods. This would essentially wipe out all the benefits of the corporate tax cut if firms are unable to pass on the added costs to consumers. Even if some of these costs are passed on, it could also negatively impact end demand. There is also the risk to business sentiment in the face of protracted uncertainty with respect to supply chains, which could delay investment. Fed officials have noted anecdotal evidence of delays to investment in the face of trade fears.

The latest trade data may present preliminary hard evidence of a potential negative effect on investment. As Figure 14 below illustrates, imports of Chinese machinery, computer and electronic products have dropped off sharply in recent months, possibly due to fears of tariffs. This recent slowdown is all the more notable because as the chart also indicates, imports of these goods from China have historically led the year-over-year growth rate of capital goods imports (excluding automobiles).



Figure 14: Imports of Chinese computer/electronic products and machinery leads the trend in capital goods imports (ex autos)



Source: Census Bureau, Haver Analytics & Deutsche Bank

In summary, we believe the sharp drop in nonresidential investment spending growth last quarter likely reflected one-off factors that should unwind over the next couple of quarters. However, there are growing risks as we look further out. Hopefully, the trade dispute with China will not result in a worst-case protracted battle with the US implementing a full 25% tariff on all Chinese goods. A 10% tariff rate would be manageable, a 25% rate could have a meaningfully more deleterious impact. With respect to interest rates, the Fed's Congressional mandate is full employment and price stability, and they will react accordingly. However, if the Fed is going to be able to engineer a "soft landing", which has historically never been the case (see "[How the Powell Fed can make history](#)"), the Committee will have to tread carefully toward the end of next year, when most Fed officials expect the policy rate to enter the range of what they consider to be a "neutral" setting.



Appendix 1

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