Germany Economic Watch

An export rollercoaster

Bank of America Merrill Lynch

13 August 2018

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Key takeaways

- German manufacturing momentum does not look great. Trade data points to weaker US and China demand since 1Q.
- The cut in Chinese car tariffs by 10% in July could push German GDP up by c 0.2%. But watch out for CNY offset.
- Ultimately, demand matters most. What helps Chinese demand helps German exports more than pain or gain from FX or tariffs.

German exports mean imported growth momentum

Data-flow was disappointing last week, with misses in German factory orders and industrial production for June. The first German GDP estimate for 2Q (to be released on Tuesday) should still be ok, leaving 1H18 growth at 1.6% annualized on average, close to growth potential. Chinese demand can go a long way in explaining German growth gyrations. The share of German exports going to China is close to 7%, close to that of the UK and the US. This also reflects in the explanatory power of Chinese surveys in German quarterly GDP growth. We find that over time, the coefficient on German domestic surveys declined, while that of China rose.

Chinese tariff cuts can boost German GDP, but watch CNY

We like to look at Chinese imports of German goods for an early glimpse of developments (this data is available more than a month before the German equivalent). After weakness in 2Q, demand for German goods has rebounded in July. We focused so much on the risk of higher US tariffs on EU car imports that we nearly forgot China's cut in tariffs effective from July. That could bolster German GDP by 0.2% in our calculation. All good then? Not quite. CNY depreciation is working the other way already – half of the tariff effect may already be offset. And ultimately, underlying Chinese growth dynamics trump tariff gains or FX pains from a German exporters' perspective.

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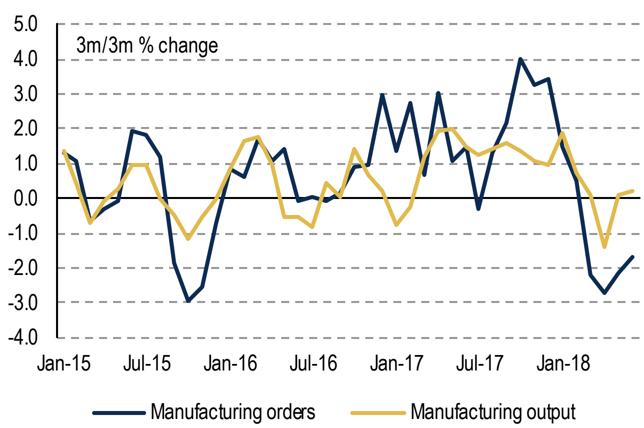
An export rollercoaster

Manufacturing momentum not great, but decent GDP

German manufacturing data disappointed again in June, after a welcome reprieve in May. Factory orders declined 4.0% mom and industrial production was down 0.9% mom. During January-March, one-offs were at play (weather, sickness, strikes), but in 2Q, such 'excuses' for weakness no longer hold (or at least, any additional one-off factors should have offset the unwinding of previous ones). The underlying momentum is unspectacular, at best. And, with factory orders down 1.7% qoq in 2Q, similar to what was last observed in 2Q15 (Chart 1), the prospects into 3Q are not improving.

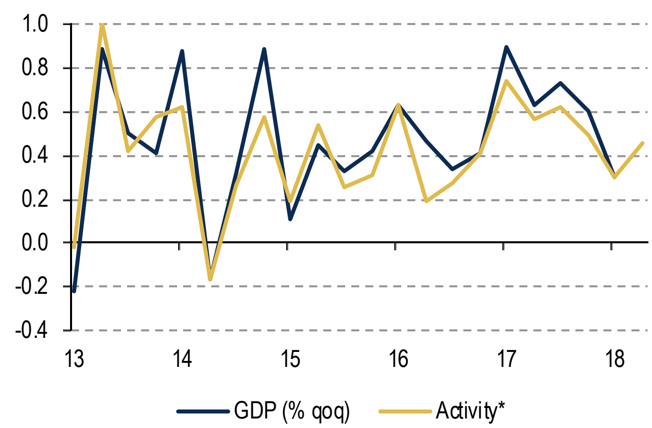
Still, implications for growth in 2Q GDP remain manageable. May data ensured positive manufacturing growth of 0.2% qoq in 2Q . And thanks to dry weather, construction grew 1.6% qoq, which typically reflects in capex data in GDP. Retail sales were up 0.9% qoq and If typical relationships between this mix of demand and value-added signals to GDP hold, we should see GDP growth of around 0.5% qoq in 2Q in Tuesday's preliminary release (Chart 2). Although this points to small downside risks to our 0.6% qoq forecast, it would leave 1H18 average growth around 1.6% annualised – back to where we were in 2015/16 and somewhere around current potential growth.

Chart 1: Not a great quarter for the manufacturing sector



Source: Destatis, BofA Merrill Lynch Global Research

Chart 2: But GDP should be a tad better than in 1Q again



Source: Destatis, BofA Merrill Lynch Global Research

*we estimate quarterly GDP growth as a function of quarterly growth rates in manufacturing, construction activity and retail sales over the 2012-2017 time period

Manufacturing wobbles come from elsewhere in the world

Manufacturing accounts for c23% of total output in the economy. It is more volatile than the rest of the economy, and is therefore typically the swing factor in GDP growth. Foreign orders account for 57% of total manufacturing orders now, suggesting that what happens abroad has a bigger weight than domestic demand gyrations.

Our regular readers know that we keep an eye on Chinese imports of German goods to get an early idea of foreign demand momentum. Chinese trade details are released more than a month earlier than the German equivalent. Around 6.9% of German goods exports went to China (3Q17-2Q18 average) vs 6.4% to the UK or 8.6% to the US. Our global value chain calculation shows that German exposure to China is not only down to the production chain feeding into final demand elsewhere. Indeed, we found that by 2014, the share of German GDP linked to Chinese end-demand had increased to 2.8%, just a tad below exposure to the US of 3.4% (here).

In other words, big swings in Chinese demand can go a long way in explaining German growth volatility, we think; a year ago, we argued that we should look at China to know what happens in Germany (here). We update our estimates today, including three quarters of additional data. Specifically, we explain German quarterly GDP growth as a function of individual domestic or foreign surveys (we normalise surveys to the period

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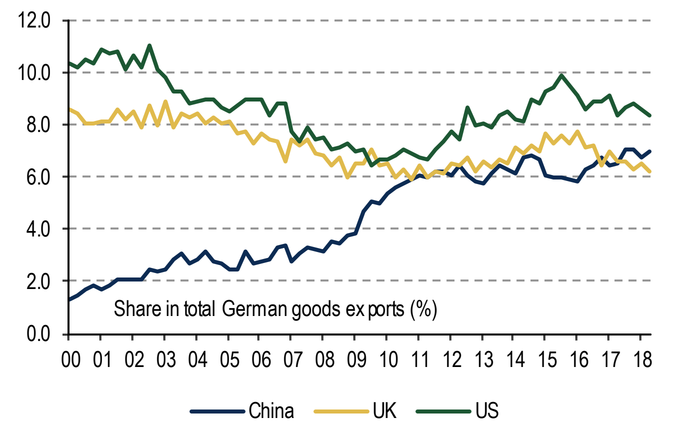
2005-16 and include a dummy variable for 4Q08 and 1Q09 to capture the global crisis). We show recursive coefficient estimates for the period 2000-2011 (or 2005-2011 conditional on data availability) and 2000-2017 in Chart 4 (blue dots) including 2stdev confidence intervals (grey bars).

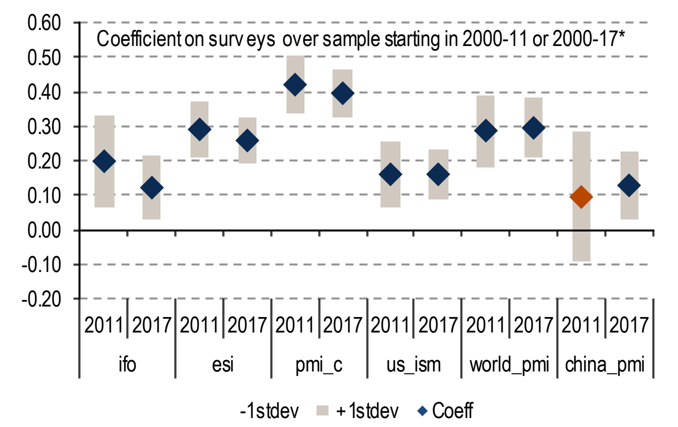
We find that coefficients on German national surveys (Ifo business climate, European Commission Sentiment or the composite PMI) are lower in the longer sample, while the coefficient on US manufacturing ISM and world manufacturing PMIs remain broadly unchanged. We find that the coefficient on the Chinese manufacturing PMI has grown in importance, becoming more significant in the latter part of our sample (it was statistically not significant during 2004-2011), coinciding with the increase in Germany's trade exposure to China.

Chart 3: China, US, UK all similarly important to German trade now



Source: Destatis BofA Merrill Lynch Global Research

Chart 4: Chinese data can increasingly help to explain German GDP



Source: BofA Merrill Lynch Global Research

We estimate German GDP growth (% qoq) as a function of a constant and the quarterly average of one of the above listed sentiment indicators (normalized to 2005-2016):

Δgdp(t) = c0+c1*survey(t)+c2*dummy(t)+residual(t). The dummy variable is one in 4Q08 and 1Q09, capturing the global crisis, and zero otherwise.

We show recursive coefficient estimates for the sample starting in 2000 going to 2011 or 2017. Samples for Ifo or Chinese PMIs only start in 2005 and 2004, respectively, due to data availability. Blue dots reflect the point estimate for the coefficient on the survey, grey bars are the one-standard deviation confidence interval. Red dots are statistically not different from zero.

Ifo is the Ifo business climate, pmi_c is the German composite PMI, US ISM is the US manufacturing ISM, and world and china_pmis are manufacturing PMIs.

Chinese weakness in 2Q meets lower car tariffs from July onwards

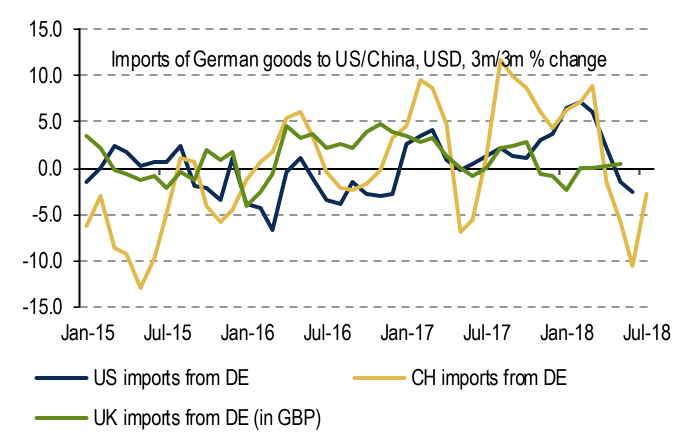
Chinese imports of German goods were +8.8% qoq in 1Q18 and then declined -10.7% qoq in 2Q. The pattern of Chinese trade data in 1H18 resembles that of 2017, which could reflect seasonality linked to the Chinese New Year. But this year's decline was deeper and longer-lasting (Chart 3), which would match our Chinese colleagues' scenario of slowing growth in 2H18 on the back of past policy tightening (here). In previous episodes of Chinese weakness, demand from the US (or the UK) helped stabilise foreign demand. The UK has lost momentum for some time, no longer accentuating or smoothing the impact of demand volatility from other regions. And in 2Q this year, US imports from Germany declined 2.5% qoq after a 6.1% increase in Q1. Of course, some of that is a pure FX effect. But with both China and US demand showing signs of slowing in 2Q, German manufacturing weakness in the same period is less of a mystery.

Chinese import data in July was strong. On 3mma, growth improved to -2.9% from -10.7% in July. Did we ring a false alarm and is 2018 a replay of 2017 seasonality after all? We are not convinced. The reason for the rebound in imports could be tariff-related. As of 1 July, Chinese import tariffs on cars have been cut from 25% to 15%, and tariffs on car parts from 8-25% to 6%, which could benefit German exporters. Indeed, our Chinese colleagues pointed out the strong rebound in Chinese car imports in July (here).

We recently looked at the potential implications of an increase in US import tariffs from 2.5% to 25%. Around 0.4% of Euro area GDP is tied to US final demand for cars (see here). We assume an elasticity of 3, ie, a 1% rise in prices leads to 3% lower demand. This is relatively high, based on the assumption that tariff changes are perceived as permanent and that car consumption is sensitive to purchasing power. A 22.5% ad hoc increase in US prices through tariffs could therefore put c0.3% of Euro area GDP directly at risk.

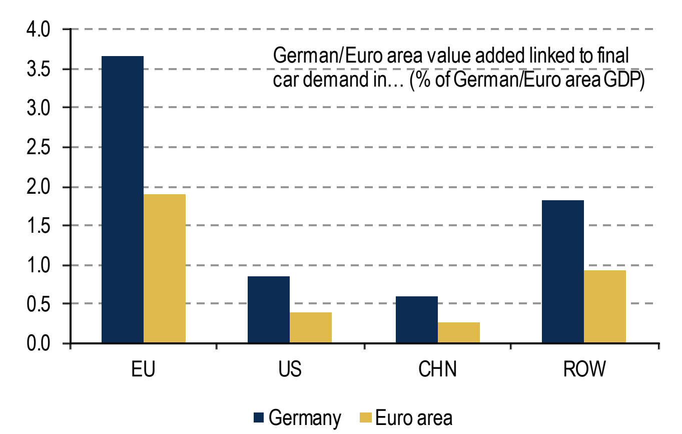
So what "gain" could there be from the cut in Chinese tariffs? We follow the same methodology. Global value chain calculations suggest c0.2% of Euro area and 0.6% of German GDP linked to final Chinese car demand (exposure not only through car exporters, but also through suppliers, including services). A price change of 10% from tariffs would have a very small effect on the Euro area (less than 0.1% of GDP) but nearly 0.2% on Germany.

Chart 5: Imports of German goods slowed in the US and in China



Source: Census, Chinese Customs, BofA Merrill Lynch Global Research

Chart 6: Euro area and German GDP exposure to car demand



Source: BofA Merrill Lynch Global Research
We use World-Input-Output-Tables for 2014. We calculate the exposure across German (Euro area) sectors to final car demand across the world. Exposure to the "EU" includes the German (Euro area) domestic demand. For more details see here.

FX can offset tariffs and, in the end, demand dynamics rule

Of course, the price-effect from tariff changes is only part of the story. We argued that from a Euro area perspective, a rise in US car tariffs could be offset by a strengthening USD, which would impact all Euro area exports to the US.

The same holds true for China. Former IMF Chief Olivier Blanchard recently argued that the 7% CNY depreciation against the USD could be enough to offset the impact of higher US tariffs on Chinese goods (for USD50bn imports and possibly even for all USD200bn imports that could eventually be subject to higher tariffs).

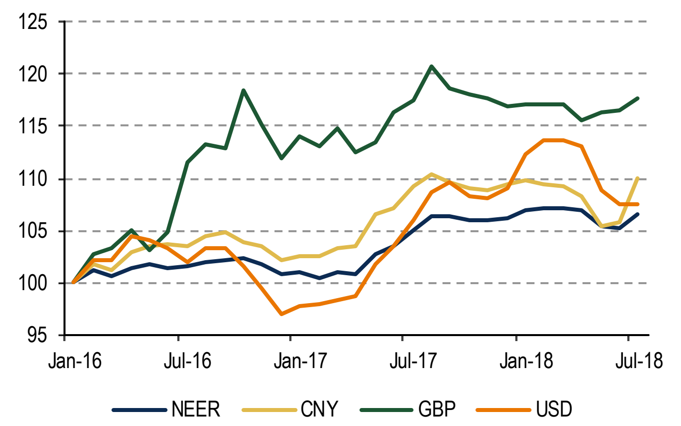
A similar argument should hold for trade with Europe. The CNY has depreciated by c5% against the EUR since May. This reverses the previous appreciation since the beginning of the year but has the potential to offset European price competitiveness gains in the auto sector through price competitiveness losses across the whole trade basked.

We run simple single equation regressions explaining quarterly German export growth to China (% yoy, deflated with the export price index for non-Euro area exports) as a function of the bilateral exchange rate (% yoy) and a metric for Chinese demand (we use GDP or industrial production in % yoy). We find the best fit for a one-quarter lag in the demand proxy and a six-quarter lag in the exchange rate. We show the coefficients in Chart 6. For reference, we replicate the same exercise for German exports to the US and the UK, where the lag on FX seems to be relatively shorter (we use two quarters). The result suggests that 1% CNY depreciation would lower German exports to China by c0.5% within 1.5 years. Chinese exports account for just below 7% of German goods exports, which represents c 2.6% of German GDP. Hence, with the 5% CNY depreciation, almost half of the benefit from lower car tariffs might already be offset.

We conducted a very similar exercise in August 2015, when CNY depreciation had affected markets and sparked concerns of a downward spiral for German exporters. Similarly to today, we found that German export growth was more sensitive to demand than to FX. To offset a one standard deviation shock in GDP or IP growth (2.3ppt and 4.5ppt, respectively since 2002), we would need to see a c16% movement in the exchange rate.

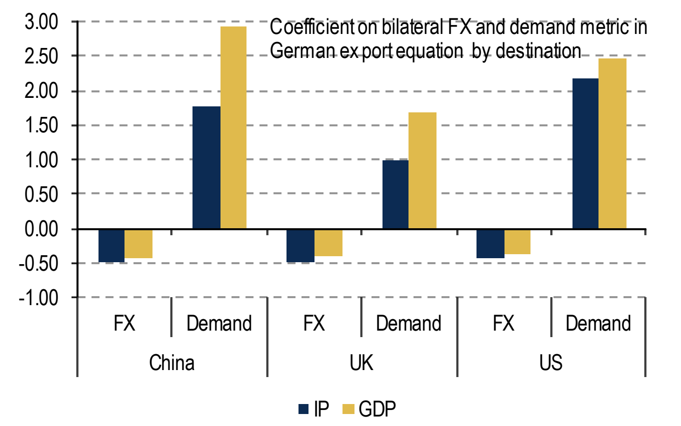
Consequently, the 'pain' to German exporters from slower Chinese growth dynamics, induced either by past policy tightening or potentially by trade war escalation with the US, could be much more important than the potential implications from CNY depreciation or the cut in selective Chinese tariffs.

Chart 7: Bilateral EUR exchange rates and the EUR-NEER (Jan2016=100)



Source: ECB, BofA Merrill Lynch Global Research

Chart 8: Elasticity of German exports to FX or demand by region



Source: BofA Merrill Lynch Global Research

We estimate single equations explaining German export growth (% yoy) as a function of a constant (not shown), bilateral exchange rates (% yoy, 6q lag for China and 2q lag for US and UK) and either IP or GDP (% yoy, 1q lag). We use quarterly data from 2002Q1-2018Q2. All coefficients are statistically significant (|tstat| >1.96).

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