Talking point

Capital stock of many industrial sectors is crumbling in Germany

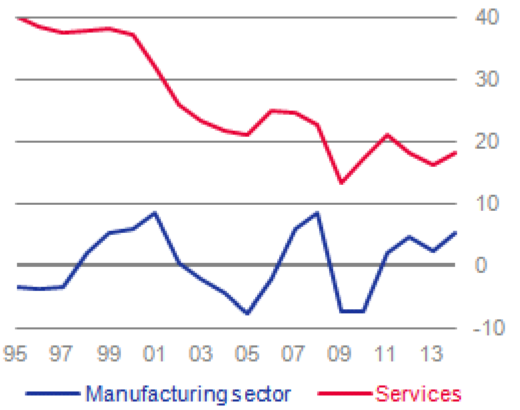
November 19, 2015

In the German manufacturing sector real net fixed assets in 2013 were 0.8% lower than in 2000. Looking at the average, however, masks the fact that only four out of 19 manufacturing sectors expanded their capital stock compared with 2000. The major importance of the automotive industry is striking. Its net fixed capital formation exceeded that of all other manufacturing sectors combined between 1995 and 2006 and has done so since 2009. The auto industry boosted its real net fixed asset in Germany between 2000 and 2013 by nearly 38%. In the energy-intensive sectors, by contrast, the capital stock in Germany continues to shrink, a trend that has been ongoing for years. If economic policy conditions in Germany were to deteriorate in future, we would expect manufacturing companies to invest even more heavily abroad.

The manufacturing sector continues to make only cautious investments in Germany. Nominal net fixed capital formation, i.e. gross fixed capital formation minus depreciation, was in positive territory in 2014 at around EUR 5.9 bn, and for the fourth time in succession incidentally. However, investment by manufacturers is modest compared with that of service providers. Net fixed capital formation by all segments of the service sector in 2014 combined amounted to EUR 82.5 bn. Overall, the manufacturing share of total fixed capital formation in Germany came to just 6.9%.

Industry reluctant to invest in Germany

Nom. net fixed capital formation as a share of nom. gross fixed capital formation, Germany, %



Source: Federal Statistical Office

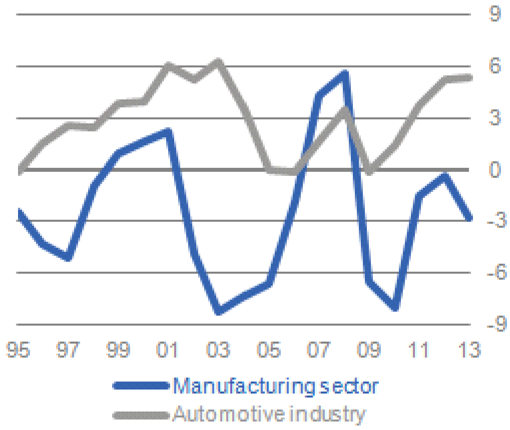
The level of industrial investment stated cannot be described as exhilarating for a variety of reasons. For instance, it should be noted that since the revision of the national accounts last year spending on research and development (and other types of intellectual property) has been counted as fixed capital formation. This accounted for nearly 48% of total fixed capital formation in the manufacturing sector in 2014. When net fixed capital formation including R&D spending, which is important for Germany as a country with few natural resources, is only slightly positive, this can be regarded as a warning sign. Put differently, it is not surprising that the industrial sector in a mature economy such as Germany only invests small amounts in new factories. However, one would expect greater momentum in investment in new machinery, and above all research and development, especially as innovative products and efficient production processes are essential to the success of German manufacturers.

Auto industry raises the average

This is all the more sobering when sector-specific developments are taken into account. Net fixed capital formation by the entire manufacturing sector depends extensively on the automotive industry. Net fixed capital formation by the automotive sector exceeded that of all other manufacturing sectors combined between 1995 and 2006 and has done so since 2009. Between 1995 and 2013 net fixed capital formation by the entire manufacturing sector excluding the automotive industry was positive in just five of those 19 years. On the one hand, these figures reflect the especially high R&D spending by the German automotive industry, and the low investment in most other industrial segments of the economy on the other.

Automotive industry major investor in Germany

Nominal net fixed capital formation in Germany, EUR bn



Sources: Federal Statistical Office, Deutsche Bank Research

Real net fixed capital formation shrinking in many manufacturing segments

It is true that real net fixed capital formation is the best indicator of the development of the capital stock of an economy or of individual sectors. Ultimately it is the product of previous investment activity adjusted for the decline in value (depreciation) and the inflation rate. In the German manufacturing sector, real net fixed assets were 0.8% lower in 2013 than in 2000. By contrast, the service sectors boosted their capital stock over the same period by no less than 14.5%.

At first glance a roughly flat real net fixed asset level in the manufacturing sector appears to be a marginally satisfactory result. However, focusing on the average masks the fact that only few segments in the manufacturing sector have expanded their capital stock in recent years. Of the 19 manufacturing segments defined in the national accounts only four managed to increase their capital stock compared with 2000. The rankings are topped by the automotive industry (2013 vs. 2000: +37.6%), followed by the pharmaceuticals industry (+19.7%), mechanical engineering (+6.3%) and the manufacturing of IT equipment, electronic and optical products (+5.4%). In all cases the growth in real net fixed assets is largely due to increased R&D spending and not at all or far less to higher investment in machinery, vehicles or buildings.

In all other manufacturing segments real net fixed assets contracted between 2000 and 2013. The sharpest decline came in textiles and clothing (-48.6%), which was probably due mainly to labour cost-related offshoring of production facilities. A key factor in the appreciable decline in the printing business (-31%) is likely to be increasing competition from digital media.

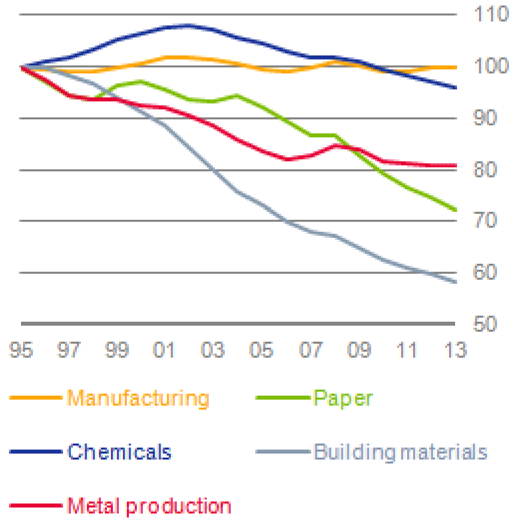
Energy-intensive sectors avoiding Germany as a production location

In the energy-intensive sectors the capital stock in Germany continues to shrink, a trend that has been ongoing for years – despite the partial increase in domestic output. Real net fixed capital formation declined particularly sharply in the building materials industry (2013 vs. 2000: -36.1%) as well as in the paper industry (-25.5%). Capital stock has been steadily shrinking in metal production (-12.8%) and the chemicals industry (-9.9%), too. To recap, this capital stock figure includes the capitalised R&D spending by the sectors concerned.

There are several reasons for the above-mentioned negative development in the energy-intensive sectors. For instance, the building materials sector felt the effects of the poor state of the construction industry in Germany in the early years of this century. Overcapacity is a structural problem in metal production. However, it is clear that ongoing uncertainties concerning Germany's energy and climate policy, as well as its energy prices (electricity and gas) which are high by international standards, are a huge brake on the willingness to invest – in Germany at least. In some cases, considerable foreign investments by the sectors or companies concerned suggest that investment leakage and thus carbon leakage are already taking place. A turnaround in this trend is not currently in sight.

Decline in capital stock in energy-intensive sectors

Real net capital formation by individual industrial sector, Germany, 1995=100



Source: Federal Statistical Office

Conditions for investment must not deteriorate further

It is one of the standard elements of nearly every economic policy speech in Germany to stress the major importance of industry for the country's economy. This is also true of course. The manufacturing sector alone is responsible for 86% (!) of all R&D spending in Germany. After all, Germany is indeed very well placed with regard to many location factors. However, in many areas the policy parameters have been altered to such a degree in recent years that they are now a major impediment to investment. This applies to the stated uncertainties pertaining to energy and climate policy, which are detrimental to long-term, capital-intensive investments by energy-intensive sectors. Recently, also, there have been changes to retirement and labour market policies, the effects of which are not yet reflected in investment activity statistics. Less flexibility in the labour market ("subcontracting" is the keyword) or the government incentive for experienced workers to retire early (retirement at the age of 63) will, however, undoubtedly fail to encourage companies to invest. We expect real gross fixed capital formation to rise only by just under 2% in 2016 – despite low interest rates and a cheap euro. Therefore, we should not derive a false sense of security from relatively strong GDP growth in Germany, as this is based primarily on the favourable development in private consumption. Growth in the industrial sector has only been minimal since 2012.

Ultimately it is not enough to praise the manufacturing sector in political speeches; rather the corresponding framework conditions must also be created and existing conditions must not be eroded further. Should this fail to happen, it should come as no surprise if manufacturing companies vote with their feet and increase their investments abroad.

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See also:
Capital investment in Germany at sectoral level: Service providers continue to expand while industry contracts slightly

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