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Economic Insight

The German productivity disaster

German labour productivity has barely increased since 2008. One reason is the success of the Hartz reforms, which has put the less productive long-term unemployed back to work again. Furthermore, since the financial crisis, less productive parts of the value-added chain are being repatriated to Germany. Today's globally spread protectionism suggests that the productivity malaise will continue and this will burden the German economy and probably also the German equity market.

Productivity is waning ...

In Germany, labour productivity rose significantly in past decades (Chart 1). Between the 1970s and mid-2000s, gross value added increased per year on average at a sharper rate than hours worked. Since 2008, however, labour productivity has barely risen – posting an annual average growth rate of $\frac{1}{2}$ %. Since 2012 – so without the distortions of the financial and sovereign debt crisis – labour productivity has picked up by $\frac{1}{2}$ % per year on average.

This phenomenon is not restricted to a few sectors; the rise of labour productivity has slowed across the board (Chart 2, page 2). In manufacturing alone, contributing somewhat more than a quarter to the total gross value added, average annual productivity growth has dropped from 3¼% to ½%. The service sectors of wholesale/retail trade, transport and hotels/restaurants, real estate services and business services posted not much higher rates, while productivity actually declined in the case of public and financial services. Only the information and communication services have been able to improve labour productivity by about 2½% a year since 2012, but its growth rate has still halved relative to the years before the sovereign debt crisis.

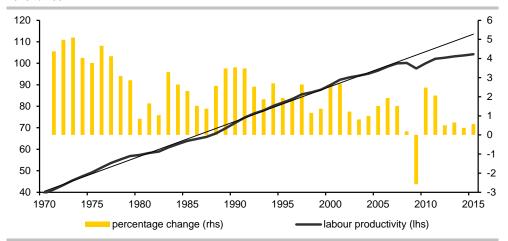
... in other countries too

Germany is not alone in this respect; the phenomenon is widespread among OECD countries. In Scandinavia and continental European euro and non-euro countries as well as in the UK and the USA, productivity growth has slowed considerably since the financial crisis (Chart 3, page 2).

Cause: the financial crisis

This is linked first and foremost to the financial crisis. The Bank for International Settlements showed in its annual report that when debt bubbles burst, productivity also suffers. This finding is supported by economists at the Bank of England, who have studied the effects of bank crises in 60 countries since the 1950s. They draw the conclusion that a credit crisis

CHART 1: **Productivity growth slow-down ...**Labour productivity on an hourly basis, Index 2010=100 and year-on-year change in per cent; trend: 1970 to 2007



Sources: Destatis, Commerzbank Research

For important disclosure information please see pages 6 and 7.

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Please follow this link for video summary

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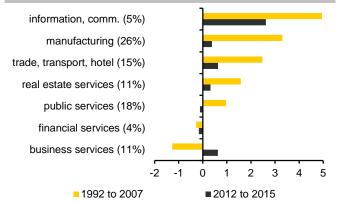
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CHART 2: ... especially in services sectors

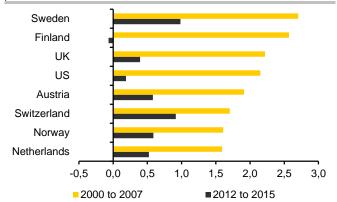
Labour productivity on hourly basis by sector, year-on-year change in per cent; in brackets: share of sectors in total value added, in per cent



Sources: OECD, Commerzbank Research

CHART 3: Globally weak productivity growth

Labour productivity on hourly basis, average year-on-year change in per cent, selected OECD countries

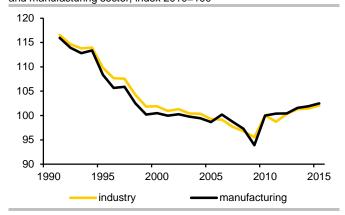


can dampen labour productivity by 0.6%-0.7% per year on average. This is partly because banks often renew loans to highly indebted companies to avoid additional write-offs. This is all the easier if interest rates are low amid expansionary monetary policy. Consequently, unproductive companies are kept afloat and prevent what economists call "creative destruction" – a process whereby unproductive businesses have to exit the market so that new and more productive companies can emerge with the released labour and capital.

Offshoring is "out", domestic production is "in" again

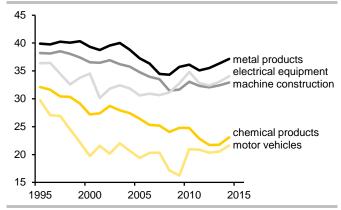
Furthermore, the "offshoring" trend has reversed as a result of the financial and sovereign debt crisis and this is now weakening domestic productivity. For decades, following the principle of labour division, countries like Germany have transferred work-intensive and typically less productive operations of the value-added chain overseas. China was used as the "extended workbench". In recent years, this trend has reversed and operations previously outsourced have been repatriated, as is indicated by the recently increasing domestic depth of production in the manufacturing sector (Chart 4). For example, the share of domestic gross value added in the total production value of the metal industry rose from 34% in 2008 to 37% lately (Chart 5). The value-added ratio in the production of electrical equipment has risen from 31% to 34%. Returning less productive operations back to Germany is therefore one reason why productivity in the manufacturing sector has barely picked up in recent years (Chart 2).

CHART 4: **More production at home again**Share of domestic gross value added in production value in industry and manufacturing sector, index 2010=100



Sources: Destatis, Commerzbank Research

CHART 5: ... for example in the metal industry ... Share of gross value added in production value, in per cent, selected sectors



Sources: Destatis, Commerzbank Research

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¹ "Long and short-term effects of the financial crisis on labour productivity, capital and output", Bank of England, Working Paper No. 470, January 2013.



This "onshoring" means higher costs for companies but they are apparently willing to accept this, presumably also because of the rise of economic and political uncertainty (Chart 6). In mid-2015 and early 2016, turmoil in China shook financial markets worldwide and the various problems facing the world's most populous economy are still unresolved. EU countries extended economic sanctions against Russia in the summer and the Brexit decision has brought future European integration into question. These factors are making German companies cautious.

Hartz reforms: Success with unsavoury aftertaste

The success of the Hartz reforms in 2004 and 2005 is another contributing factor. What may seem strange at first sight is obvious on a second look. One aim of the labour market reform was to reduce structural unemployment and integrate people into the labour market who had not found work with their (low) skills previously. This was indeed a success; in the years that followed, the unemployment rate fell rapidly from its peak since reunification of 10.3% in 2005 to its lowest level in 25 years, at 4.3%, in 2015 (Chart 7). In this same period, the number of unemployed dropped from almost 5 million to less than 3 million (Chart 8, page 4) and the number of long-term unemployed decreased from almost 2 million to about 1 million. The flip side of this success story is that people have gained employment again who were not needed by the labour market beforehand, i.e. relatively low qualified and unproductive workers.

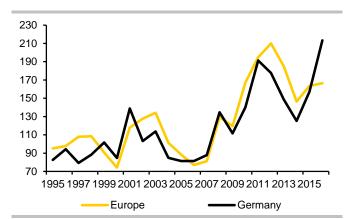
This integration effect in itself has already hindered the growth of the overall labour productivity. In addition, employment has been increased in sectors with below-average productivity (Chart 9, page 4), with around 2 million jobs being created in the past ten years in sectors – especially in public service and in wholesale & retail trade, transport and hotels & restaurants – where productivity was at least 20% below overall labour productivity, based on the gross value added per hours work in 2005. This compares with a job growth of merely 320,000 in the information and communication sectors and the manufacturing sector, with above-average productivity. At the same time, the business services sector has recruited almost one and a half million people, but this sector has average productivity.

Outlook: Productivity growth will remain weak

The key question for the future is: will productivity growth remain weak or can we expect it to rise at a stronger pace again in the near future? We remain cautious and do not expect productivity growth in Germany to accelerate considerably in the coming years, for the following reasons:

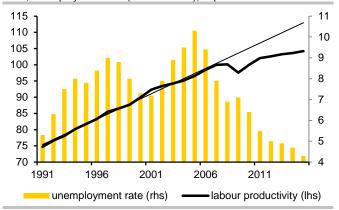
Protectionism in international trade, which is evident at present and likely to persist in the next few years, is a major argument against a fast recovery of productivity growth. The present US election campaign is a good example of this. A key part of Donald Trump's campaign is that the US are losers of globalisation, which is why customs should be introduced or hugely increased if he were to become president and production sites previously moved overseas should be brought back to the US. Similarly, Hilary Clinton is saying that she will no longer be working towards the Trans-Pacific Partnership (TPP) or the Transatlantic Trade and Investment Partnership (TTIP). And euro zone countries like Austria meanwhile openly oppose TTIP and CETA, the trade agreement with Canada.

CHART 6: ... also amid the high uncertainty
Uncertainty indicator for economic uncertainty in a country, index



Sources: Policyuncertainty.com, Commerzbank Research

CHART 7: **More – also less productive – are back to work** Labour productivity on hourly basis, index 2010=100, trend: 1970 to 2007; unemployment rate (ILO definition), in per cent



Sources: Destatis, Commerzbank Research

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• Friedrich August von Hayek, well-known economist and one of the most important liberalist thinkers of the 20th century already pointed out the negative effects of too loose monetary policy on the real economy in his economic theory. At close to zero, interest rates are effectively abolished and no longer fulfil their allocation function; bad investment is the result, as low yield or less productive projects that would not be viable at higher interest rates can also be financed with cheap money. Consequently, there is considerable risk that the ECB will weaken productivity on a lasting basis with its present cheap money policy.

At the same time, "Industry 4.0" is unlikely to bring rapid change. Many are praising this as the silver bullet for the German economy, a fourth industrial revolution, and comparing it to the transformation to mechanical mass production (first industrial revolution around 1800), the introduction of electricity (second industrial revolution towards the end of the 19th century) and the introduction of computers (third industrial revolution around the 1970s). There can be no doubt that Industry 4.0, which aims at automation and data exchange in manufacturing technologies, is an important innovation. But it is unlikely to happen instantly and will be adopted by companies over some time. A "digital factory", the vision of the architects of Industry 4.0, cannot be created overnight even in an advanced industrial nation such as Germany. Consequently, its positive impact on productivity is likely to spread over decades.

The big picture: Germany's competitiveness is eroding ...

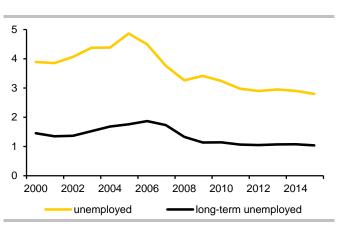
All in all, there is much to suggest that labour productivity in Germany will only rise very slowly in the years ahead and this will have consequences for production overall. On the back of weak productivity growth and given that the working population is set to fall even more sharply in the next 15 years, the long-term trend growth of the German economy will probably settle at well below 1%. We are heading towards Japanese standards.

Furthermore, productivity weakness will promote the erosion of Germany's competitiveness across the board; respectable wage growth for some time by German standards of between 2½ and 3% amid low productivity growth is already translating almost 1:1 into rising unit labour costs. The rapid rise of unit labour costs has been a regular burden to euro periphery countries during the financial and debt crisis. In the meantime, Germany's unit wage costs are rising almost as fast as in Italy ten years ago. Germany's competitive advantage over its euro partners is melting.

... and affecting stocks

Ultimately, the production weakness of the German economy and the above-average rise of unit labour costs is a negative factor for the German equities market. The average EBIT margin of non-financial stock market companies in Germany has been stagnating at around 8% for years. We now believe that earnings margins of companies on the German stock market could even fall marginally. Stagnating margins are an important reason why earnings expectations for the DAX

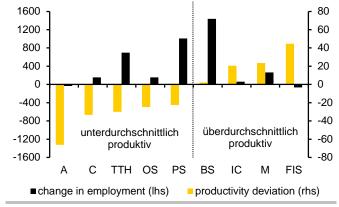
CHART 8: Less long-term unemployed Unemployed and long-term unemployed, in millions



Sources: Federal Labour Agency, Commerzbank Research

CHART 9: More employed in unproductive sectors

Change in employment between 2005 and 2015, in 1,000 persons; deviation of productivity of a sector from overall labour productivity in 2005; agriculture (A) construction (C), wholesale & retail trade, transport, hotel & restaurants, (TTH), other services (OS), public services (PS), business services (BS), Information and communication (IC), manufacturing (M), financial & insurance services (FIS)



Sources: Destatis, Commerzbank Research

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price index have been moving sideways at around 400 for the past five years. We believe that earnings expectations on the German stock market will rise marginally in the next few years, driven by 3% growth of the global economy. However, in our view, the times when earnings expectations for DAX companies rose by 8% to 10% a year are over against the backdrop of falling productivity and rising unit labour costs.

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