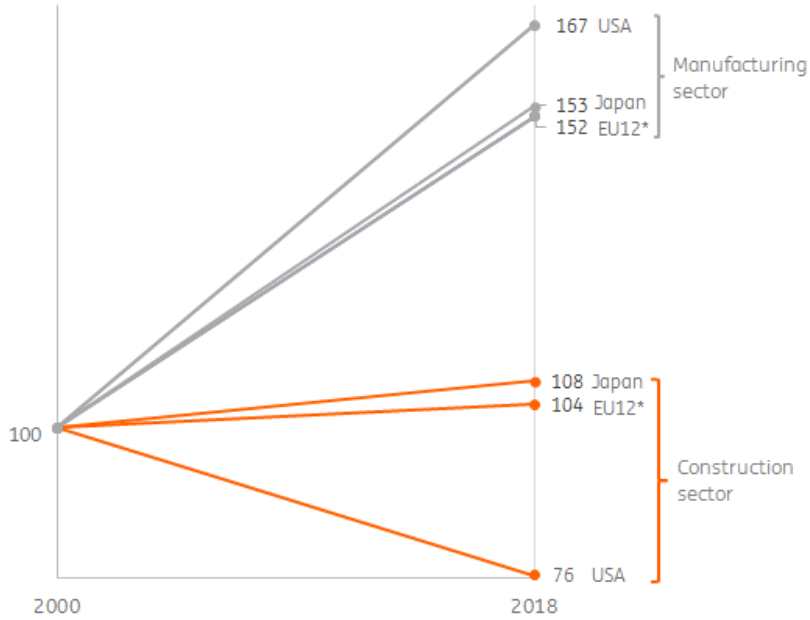
Why construction prices are surging

Labour productivity in the construction sector is growing at a much slower rate than in other sectors such as manufacturing. As a result, higher wages and increasingly expensive materials cannot be absorbed and prices are rising fast

Labour productivity growth in the construction sector is much slower than in manufacturing

Changes in labour productivity in terms of the added value (volume) per employee (index 2000=100)



Source: Oxford Economics & Eurostat, processed by ING Economics Department

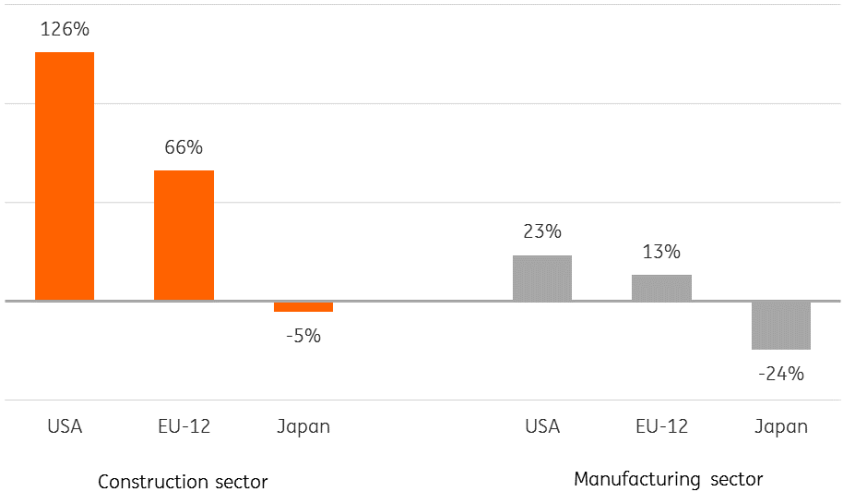
**Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal & Spain

Slower growth in labour productivity in construction sector

In recent years, labour productivity in the construction sector has grown much more slowly compared to the manufacturing sector in the US, Japan and the 12 most important countries in the European Union (the EU12). Growth in the EU12 has been just 3% since 2000, while the region's manufacturing labour productivity increased by 51% over the same period. The trend in Japan has been very similar. In the US, labour productivity in the construction sector actually decreased by almost a quarter while the country's manufacturing sector became much more efficient (with a 67% improvement).

Big price increases in construction

Changes in output prices, 2018 compared to 2000



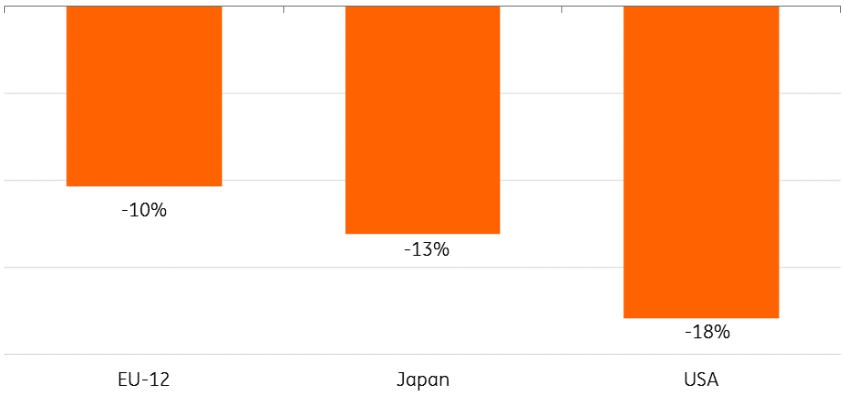
Source: Oxford Economics and Eurostat, processed by the ING Economics Department

Big price increases in construction sector

The slow rate of productivity growth in the construction sector has given rise to significant increases in prices. For example, prices in the US construction sector have increased by 126% since 2000. In the EU12, prices in the construction sector have risen by 66%. In manufacturing, prices in both the EU12 and the US increased much less steeply, by 23% and 13%, respectively. In Japan, prices in the construction sector actually decreased, but prices in manufacturing dropped even more sharply. The slow growth in labour productivity means that increases in costs related to wages and materials cannot be sufficiently covered by simply improving efficiency. Consequently, construction firms need to increase the prices they charge to clients. In manufacturing, on the other hand, significant increases in productivity often allow companies to keep prices down. In the electronics sector, for example, products are becoming cheaper, or better quality products are being made available at the same price.

Sharp drop in construction production in the US in particular

Volume changes in construction production (Added value, 2018 compared to 2000)



Source: Oxford Economics, processed by the ING Economics Department

Overcapacity and reduction in investment

There has been a great decline in construction activity in many regions in the first two decades of the 21st century, and this has had a hugely negative impact on labour productivity growth in the sector. Construction activity in the EU12 in 2018 was 10% below the levels in 2000. The decline was even greater in the US, at 18%. The shrinking market has led to overcapacity in construction firms, which in turn prevents them from deploying their employees efficiently. In addition, this overcapacity and the shrinking turnover has led to the postponement or even cancellation of investments in new and more efficient production processes such as digitisation and industrialisation. This is reflected in the relatively small-scale use of robots in the construction sector. In European manufacturing, there are currently 160 robots in operation for every 10,000 employees compared to 1.2 robots per 10,000 employees in the European construction sector. The number of robots in use in the American and Japanese construction sectors is also relatively small.

Need for flexibility makes innovation difficult

The shrinking construction volume is one issue hindering efficiency in the construction sector, but it is by no means the only factor. Construction personnel the world over have to work in accordance with specific building processes and the demands that these bring. Flexibility is often a requirement, and machines generally don't offer enough of that. This results in a structural slowdown in productivity growth. The following aspects are important factors in this:

- Production is tied to specific location: Every construction project is different, and the construction firms have to move all their expensive machinery to new locations for each project, requiring challenging and time-consuming transportation.
- Specifications and drawings: The design of the building is generally taken care of by architects and structural engineers rather than by the construction firms. Construction firms are therefore constructing different objects in different ways in every new project. It is almost impossible for them to standardise their working methods.
- Volatile market: Construction firms operate within a volatile market, with periods of peak activity alternating with periods of inactivity. Such conditions demand rapid scaling up and

down. This is not conducive to making big investments in efficiency-enhancing means of production.

Author

Maurice van Sante
Senior Economist Construction & Team Lead Sectors
maurice.van.sante@ing.com

Disclaimer