HSBC Global Investment Research

Nine Themes

26 August 2026

Breaking the data

Is a lot of manufacturing data meaningless?

Economics
Global

- Structural shifts in the global economy mean manufacturing data no longer correlate with other indicators…
- …and many of our historical guide points have lost value…
- …meaning we must be careful how we interpret them

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In this edition of our 'Breaking the data' series, which focuses on interesting data that show how our Nine Themes are shaping the future, we explore why manufacturing data are much less relevant to the whole economy than in the past.

The rapid changes in the global economy in recent decades have rendered these once-key indicators much less relevant – with manufacturing making up a much smaller share of overall activity and employment in all economies. We are also now seeing correlations with other parts of the economy break down.

There are many reasons for this, including the rise of global trade (which despite fears continues to reach record high levels) breaking relationships between domestic production and consumption if more products are imported, the continued digitisation of the global economy, which means more of our consumption requires no physical production, and policy changes, such as tariffs, and geopolitical events that cause manufacturing data to move out of sync with the economic cycle.

All of this means that our manufacturing data – be that hard data or surveys – carry much less weight than they used to when thinking about how the overall economy is faring. And that challenge is even greater when thinking about the labour market. The continued rise of automation – which may get another leg up from humanoid robots in the coming years – means that output and employment have become much less correlated. We are seeing manufacturing employment play such a small role in overall hiring and so signals we are used to tracking – such as manufacturing employment components of series like PMIs – are of little value when thinking about the whole economy.

Finally, structural changes in the global economy are meaning that some previously key global bellwether data releases have lost their value. Most notably, the shift in the global car market towards both electric vehicles and Chinese producers means that German manufacturing data are weighed down by structural factors, losing their global cyclical signal. The same is true for mainland China's own industrial data which continue to completely break away from the rest of the domestic data – such as retail sales – due to the structural growth in high-tech and AI-related products.

As a result, we need to think about interpreting manufacturing data very differently in 2026 than we have in the past. These data points may have previously been useful guides for the whole economy, but a combination of economic shifts means that their value is now much reduced. They may tell us about how a very small section of the economy is faring – but that read across to overall employment, consumption or GDP growth is seemingly weaker than it ever has been.

This is our latest report on the Nine Themes. If you want to subscribe to any of our nine big themes, *click here*.

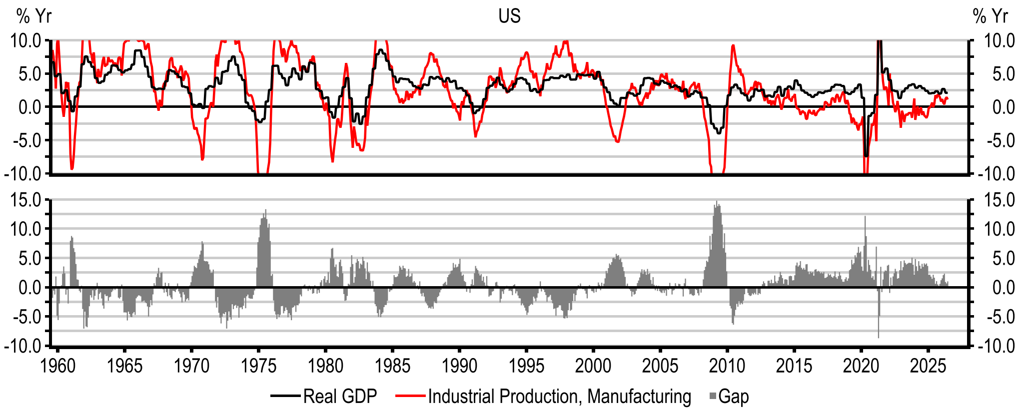
A new world for manufacturing data

- Changes in the structure of the global economy means less value in much of our manufacturing data
- We have to be more careful with interpreting these variables…
- …particularly in terms of read across to the whole economy

A loss of value

Historically, manufacturing data have worked as a solid barometer of the health of an economy - with the drivers of the industrial cycle being the same as the whole economy. Better manufacturing output also spilled into the labour market, confidence and spending, and there was a tight correlation between manufacturing data and GDP. But that relationship has evolved – and it's very clear in the US data, where manufacturing and GDP data used to go roughly hand in hand (albeit at different magnitudes) whereas since 2012, GDP data have consistently surpassed the manufacturing economy, even if there has been some directional correlation. The relationship has broken.

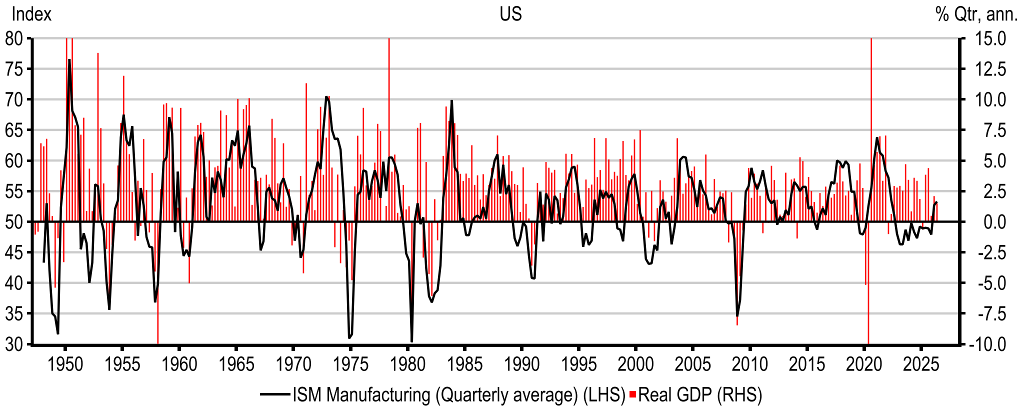
1. Industrial production data have broken away from GDP



Source: Macrobond

This is true across the manufacturing data spectrum. The ISM manufacturing has historically been a fantastic indicator in live-tracking the health of the US economy – but in the post-pandemic period it has purely produced noise. Throughout the entirety of 2023 and 2024 the ISM manufacturing was pointing to a US recession, and yet the economy grew at a healthy clip – other parts of the economy have become uncorrelated from the manufacturing data.

2. The ISM has lost a lot of its old predictive power



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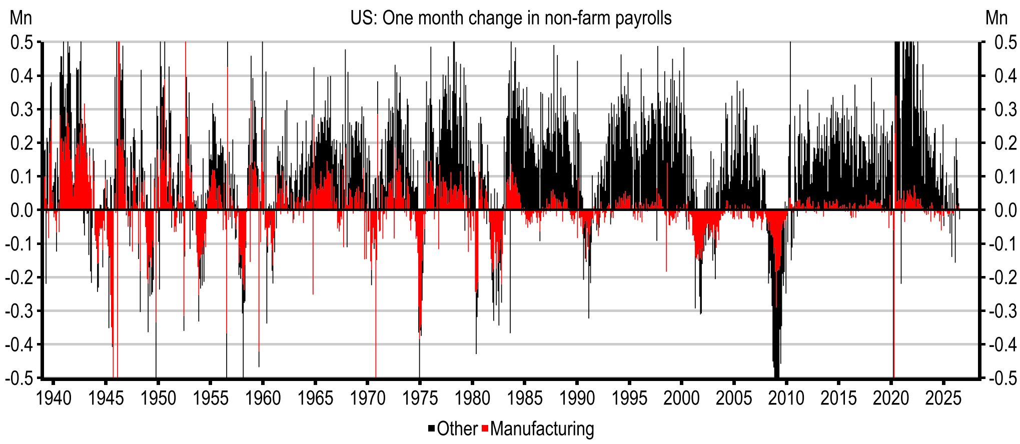
Why? There are a number of broader economic forces at play at once, all of which have intensified in recent years. Firstly, the rise of global trade, which has continued even in recent years, has meant less reliance on domestic production for local consumption, as well as tying more of the production data into global supply chains. Equally, the continued digitisation of the global economy means that less of our spending is on physical items, a trend amplified by the continued shift in spending towards leisure – again, away from physical items. On top of this, policy changes such as tariffs or geopolitical events cause manufacturing data to move away from the broader economic cycle – as firms react to the news flow.

Employment data losing even more value

The same is true with the employment data on the manufacturing side, but to an even bigger degree. This is partly a ‘share’ problem – where with the impact of manufacturing employment on the total labour market reduced, swings in this now tiny share of employment are much less impactful to the overall health of the labour market or consumer demand. In the US, Japan, Germany and Sweden – economies often held up as industrial bellwethers, the share of employment in manufacturing has halved since the 1990s, and is now no more than 15% of the total in each, and below 10% in the US. We can see this looking at the US non-farm payrolls data, where the role of the manufacturing sector in driving this key data point has diminished to just a rounding error since the financial crisis.

3. Manufacturing employment is a rounding error in the labour market data now



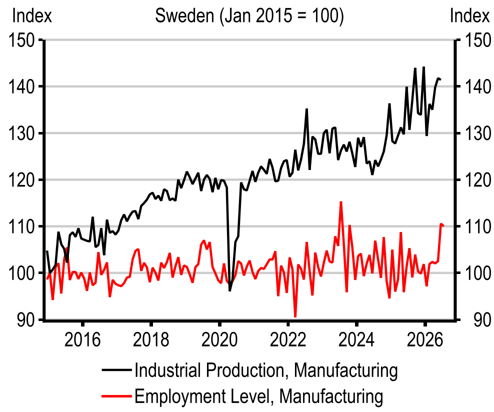
Source: Macrobond

But, importantly, with the continued spread of automation in the sector, the employment data have lost all correlations with output. This is an area that will have to be watched closely in the coming years with the spread of humanoid robots bringing more roles within manufacturing processes into scope. As a result, the degree of employment in the manufacturing sector has become disconnected from the cyclicality of the sector, and the economy as a whole – and this will only get worse in the coming years.

4. Manufacturing output in the US has held up as employment has dropped…

Source: Macrobond

5. …and surged in Sweden while employment stagnated in recent years



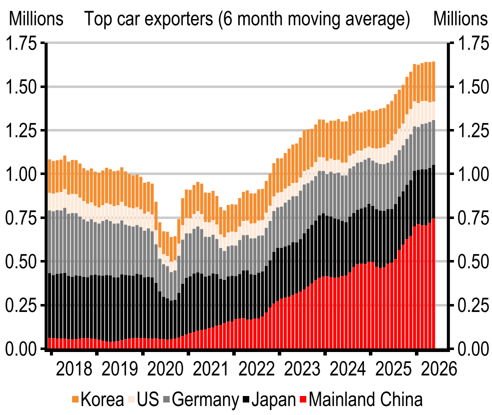
Source: Macrobond

Old guides now less useful

On top of this, some of the old favourite metrics are no longer as valuable as they once were. For a long time, a number of key variables were held up as 'guides' to the health of the global economy – such as German orders and Chinese industrial output.

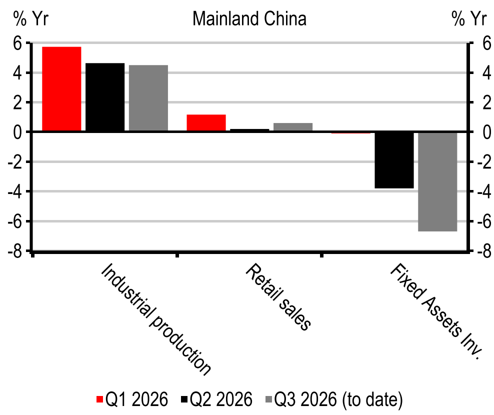
But due to some structural changes in product demand, these variables carry less value than ever before. For example, while German and Japanese car sales historically have told us about the cyclical nature of both global consumer demand and industrial data, we can see the shift in the global car market – towards both electric and Chinese produced cars – meaning that these historical ready-reckoners have less value than before.

6. Mainland China's role in the global car market changes the value of other data



Source: Macrobond

7. Chinese data show how a divide can open up between industrial and consumer data



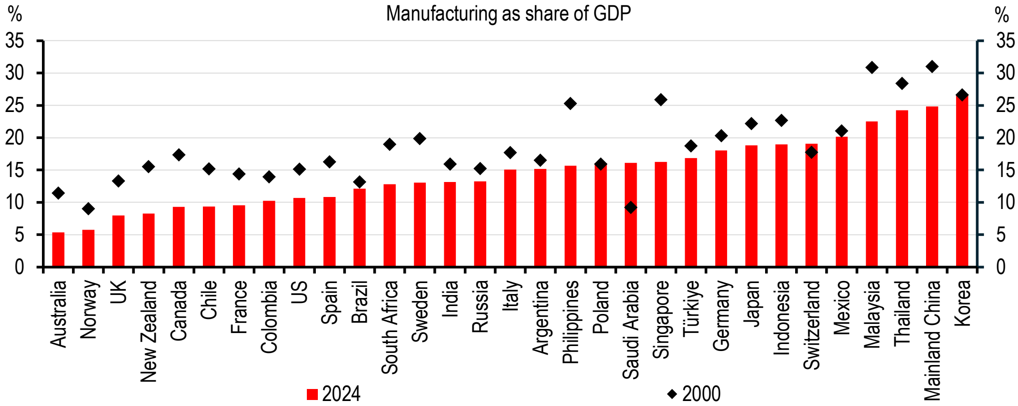
Source: Macrobond

At the same time, Chinese data show another challenge we face due to structural shifts (chart 7). The boom in the AI sector continues to lift Chinese production and exports, but this remains heavily concentrated in high-tech sectors, rather than being broad-based across the economy. As a result, retail spending and domestic investment are lagging well behind – a key reason for continued policy support (see: *China Macro Tracker: Domestic weakness calls for more support*, 18 August 2022). In Korea and Taiwan, huge AI-led export booms aren't rippling through to the broader economy to the same degree. While these data points are useful – they're not able to be translated across to the whole global economy in the way they used to be.

A new approach to interpreting manufacturing data is needed

Instead of telling a cyclical story, too much of our manufacturing data are being overridden by structural changes that mean that the correlation with the broader economy has diminished in recent years. Even in economies with large manufacturing sectors, the share of the economy and employment that is manufacturing has dropped substantially so far this century, and with the correlations between this sector and the rest of the economy receding, we shouldn't be relying on manufacturing data to read across the whole economy like we used to.

8. Manufacturing's share of the economy has fallen in almost all economies in recent years



Source: World Bank

That's not to say that manufacturing data are completely meaningless for economists. But it's important to remember that they only tell us about the manufacturing sector itself – which in most economies is less than 20% of the economy. As the world gets even more digitised and spending and trade continues to tilt towards services (especially digital ones), the value of these manufacturing readings as barometers of the whole economy should weaken further.

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