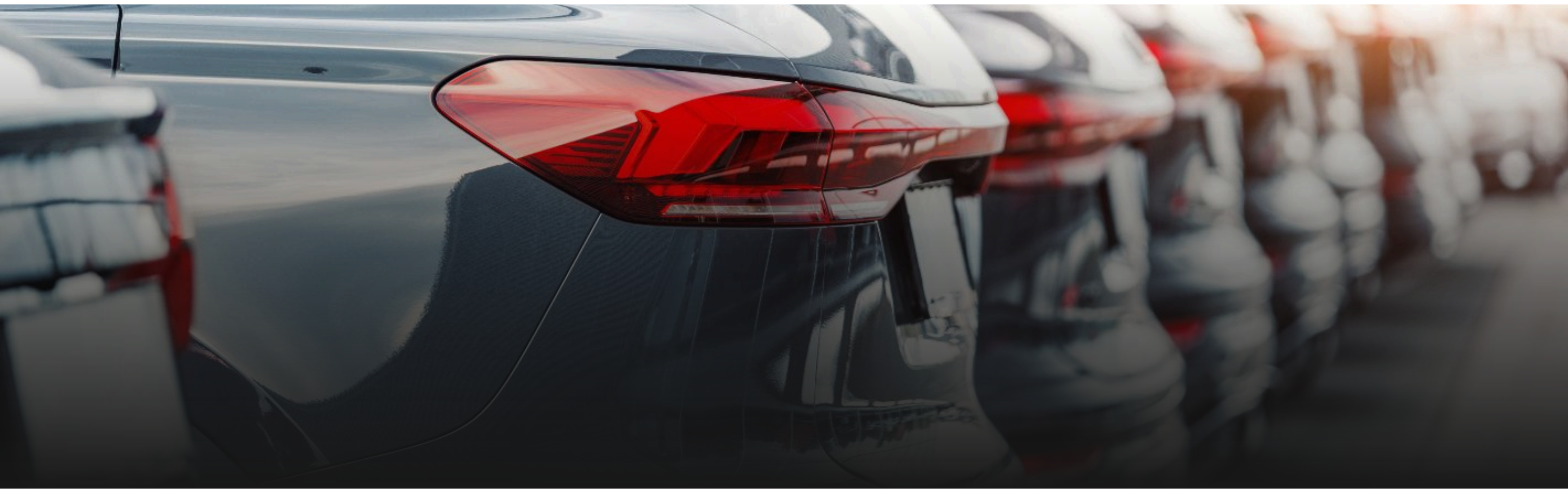

Andreas Teichgraeber Tim Obermeier November 5th, 2024

The productivity boom in the British car industry benefited workers, with a caveat

Productivity growth can play an important role in raising wages. The UK car industry experienced fast productivity growth over the past 40 years, and by the 2010s car workers were earning about 37 per cent more than the average manufacturing employee. ***Andreas Teichgraeber*** *and* ***Tim Obermeier*** *write that while wages have gone up, the share of the productivity gains going to workers has declined.*

Real wages of British workers have stagnated since the financial crisis of 2007-2009. At the same time, labour productivity, the value of goods produced per worker, has seen minimal growth. Many politicians, policymakers and economists attribute the stagnation in wages to sluggish productivity growth. In a recent study, we examined the relationship between productivity and wage growth in the UK car industry, providing evidence that increases in productivity can indeed benefit workers. This evidence from one industry offers valuable insights to address the UK's broader productivity and wage growth challenges.

Our study covers the period from 1980 to 2018. With 1.5 million passenger cars produced in 2018, the UK was the fourth largest car-producing country in Europe (just behind France with 1.8 million cars). Several multinational companies such as Jaguar Land Rover, Honda, Nissan and Toyota produce in the country.

Over time, employment in the industry has declined, but there has been a strong increase in productivity. Our findings suggest that while this has helped boost wages, the extent to which workers have benefited has changed. Among important insights for policymakers, we find that productivity growth can play an important role in raising wages. This is even more relevant in view of the stagnation of wage growth in the UK over the last 20 years.

Productivity surge in the car industry

Over the past 40 years, the growth in productivity has been remarkable in the UK car industry, with output per worker increasing twelvefold since 1980, far exceeding the fourfold increase seen across the broader manufacturing sector. By 2018, the car industry had grown to account for over 11 per cent of the UK manufacturing output, up from just five per cent in 1980.

There are a few key drivers behind this. The industry became more deeply integrated into global supply chains, increasing outsourcing and reliance on parts from other countries. At the same time, carmakers invested heavily in automation, boosting the amount of machinery and technology used per worker. We find that this shift led to a significant improvement in total factor productivity, which is a measure of how efficiently resources like labour and capital are used. In fact, total factor productivity in the car industry grew at twice the rate of the rest of manufacturing.

Car workers fared better than others

The big question is whether these productivity gains have led to higher wages for car workers. Based on our findings, it appears that these workers have earned more compared to their counterparts in other manufacturing sectors. The "wage premium", that is, the difference between what car workers earn and what workers in other manufacturing sectors make, has grown significantly since the 1980s.

Back in the 1980s, car workers were earning about 18 per cent more than the average manufacturing worker. We find that by the 2010s, that premium had nearly doubled to 37 per cent. Even when we adjust for differences in education, experience and job roles, the premium increased from around eight per cent in the 1980s to 17 per cent in the 2010s.

Linking productivity growth and wages

Both productivity and wages have increased substantially more in the car industries than in other sectors in the UK economy since 1980. However, a separate analysis of productivity and wages does not imply a causal link between the two. To understand how productivity growth has impacted wages, we use a so-called rent-sharing model. Rent sharing occurs when firms share a portion of their profits or productivity gains with workers in the form of higher wages. Our results suggest that around 63 per cent of the increase in wages for car workers can be linked to the industry's productivity growth.

That said, rent sharing has fallen over time. In the 1980s, a larger share of productivity gains went to workers, but by the 2010s, this share had dropped. In fact, if rent-sharing had stayed at 1980s levels, wages for car workers today might be around 38 per cent higher.

Lessons for policymakers

The experience of the UK car industry suggests that productivity growth can be an effective tool for raising wages. Supporting innovation, encouraging investment in new technologies, and helping industries integrate into global value chains can help sectors become more productive.

As the car industry demonstrates, when companies become more efficient, there's an opportunity for workers to benefit as well. The sector's strong productivity growth has led to significant wage gains for its workers, particularly in comparison to other manufacturing sectors. This shows that increasing productivity can play a critical role in improving pay and living standards across the economy. Indeed, increasing productivity is a key part of the UK chancellor's "new era for economic growth", which she announced shortly after taking office.

However, while productivity growth is key, it is also important to ensure that workers receive a fair share of the gains. Our findings suggest that car manufacturers have shared less of their gains with workers over time. Evidence from other research suggests that this holds more broadly in other sectors as well. Implementing policies that bolster workers' bargaining power could help ensure that productivity improvements translate into wage increases for workers.

Notably, productivity growth among UK car manufacturers (and other industries) has been on a downward trend since the Brexit referendum. If this pattern persists, the repercussions are likely to extend beyond job losses and reduced profits, impacting workers' wages as well.

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- *This blog post is based on An Engine of (Pay) Growth? Productivity and Wages in the UK Auto Industry, by Agnes Norris Keiller, Tim Obermeier, Andreas Teichgraeber and John Van Reenen, National Bureau of Economic Research Working Paper 32695.*
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