

SPECIAL REPORT

PART II

Small business productivity: Industry and regional trends

JUNE 2024



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Executive summary

Building on the findings from Xero Small Business Insights (XSBI) report, <u>Small business productivity: Trends,</u> <u>implications and strategies</u>, this special report presents industry and regional labour productivity data for small businesses.



Labour productivity measures the output of workers, in terms of what they can produce in an hour of work or per employee. For a full refresher on what labour productivity is, why it matters and how we measure it in this report, see page five. In this report, references to productivity specifically relate to labour productivity.

Part 1 of this report, released in April 2024, was, to our knowledge, the first time that small business labour productivity had been measured using anonymised and aggregated data¹ (not surveys) for just small businesses on a monthly basis, using the same methodology across Australia, New Zealand and the United Kingdom (UK). In another potential first, this latest report further dissects this data to provide industry and regional measures of labour productivity in small businesses.

What extra insights can this more granular data provide?

Industry and regional level data can help us understand the drivers of change in national productivity and identify what the different experiences are across industries and regions. It also shows whether or not industries and regions are becoming more similar or more different, which has implications for broader economic issues such as income inequality. This more granular data, including the lessons that can be learnt from more productive regions or industries, is also useful when trying to design policies to lift productivity.

1 Both XSBI productivity reports use the aggregated and anonymised data of over 240,000 small businesses in Australia, New Zealand and the United Kingdom to track small business labour productivity trends between January 2017 and December 2023. Detailed definitions and the methodology can be found in the appendix. Small businesses in this report refers to both small and medium businesses.

Summary of findings

In Australia, New Zealand and the UK:

- There were significant differences in productivity across industries, less so across regions
- The decline in national productivity over 2023 identified in our first report was generally seen across both industries and regions
- Small businesses working in construction had similar productivity outcomes in Australia, New Zealand and the UK, but hospitality showed considerable variation across the three countries.

In the UK:

4

In Australia:

In New Zealand:

Productivity became more similar across regions post-pandemic, but this was driven by a fall in the most productive regions. In contrast, differences in productivity became greater across industries since the pandemic, as less productive industries fell further behind. Agriculture and construction are two of Australia's most productive industries, in part due to their continual commitment to embracing new technology and upskilling the workforce. Hospitality has been able to lift its productivity post-pandemic as it adapts to staff shortages. Urban regions that employ the most people tended to have declining productivity post-pandemic, potentially limiting the growth opportunities of the country and the wage growth prospects for small business employees in these areas.

What does this mean for small businesses, their advisors and governments?

These findings underline the need for all small businesses and their advisors, no matter where they are located or what industry they are in, to think about how to lift their own productivity. There may be lessons that can be learnt from more productive regions or industries.

Governments need to think about productivity enhancing policies that have widespread application for small businesses, in any location or industry.

Governments also need to be particularly aware of a deterioration in productivity in more populous regions and of increased differences in productivity across industries or regions. Both these trends have implications for overall national economic growth and can potentially contribute to a rise in income inequality or differences in living standards across a country.

Labour productivity refresher: why it matters and findings of the first report

Productivity is the **ratio of the volume of output to the volume of inputs**.

Labour productivity specifically focuses on the output of workers, in terms of what they can produce in an hour worked or per employee. Very simply, it can be seen as **sales per hour worked, or sales per employee**.

This report primarily measures monthly small business labour productivity in terms of:

- the level of productivity, as measured by XSBI sales per hour worked, and
- productivity growth, as measured by the year-on-year percentage change in XSBI sales per hour worked

Lifting labour productivity can deliver benefits to workers, businesses and the broader national economy.

Potential benefits to small businesses:

- Lift profits
- Pay higher wages to workers
- Lower prices for customers

Potential benefits to the whole economy:

- Stronger economic growth
- Lower inflation

In part I of this report series we found:

- New Zealand small businesses have led the pack in terms of productivity since 2017, followed by Australia and then the UK
- All three countries saw small business labour productivity fall during the period of Covid lockdowns (March 2020 to December 2021) as many small businesses were forced to temporarily close but still had wage subsidy supported employees
- In the post-Covid lockdown period, productivity has rebounded in all three countries but it remains below the pre-Covid average
- A period of significant uncertainty, including leaving the European Union (EU), has likely contributed to the productivity gap widening between the UK, and Australia and New Zealand
- Small business productivity growth, as measured by the XSBI data, tends to be equal to or higher than national level (GDP per employee) productivity growth

UK industry and regional labour productivity

Current XSBI industry² and region³ productivity rankings

In the UK there was considerable variation in productivity performance across industries in 2023, with the most productive industry, construction, around three times more productive than the least productive, education and training (figure 1). Service-based industries tended to be at the lower end of the productivity rankings.

Figure 1: 2023 UK industry productivity rankings, sales per hour worked

Monthly, seasonally adjusted, £, constant prices (base year 2015)



Source: Xero Small Business Insights

2 Manufacturing; construction; retail trade; accommodation and food services (hospitality); information, media and telecommunications; rental, hiring and real estate services (real estate services); professional, scientific and technical services (professional services); administrative and support services (admin services); education and training; healthcare and social assistance (healthcare); arts and recreation; and other services.

3 East Midlands (England), East of England, London, North East (England), North West (England), South at (England), South West (England), Wales, West Midlands (England), Yorkshire and The Humber.

The variation across regions was smaller than across industries in 2023, with the most productive region, London, averaging productivity that was 53% higher than the least, North East (figure 2).

Figure 2: 2023 UK regional performance, sales per hour worked Monthly, seasonally adjusted, £, constant prices (base year 2015)

Below the national average labour productivity

Above the national average labour productivity

Data not available



What drove the decline in UK productivity in 2023?

Ten out of twelve industries contributed to the 2.9% national fall in productivity

One of the findings from the <u>Small business productivity: Trends, implications and strategies</u> report was that productivity fell in the UK during 2023. The industry-level data shows this decline in productivity was experienced, to varying degrees, in most industries. Ten of the twelve industries tracked by XSBI experienced lower average productivity in 2023 compared to 2022 (figure 3). The exceptions to this were other services, and education and training.

Figure 3: Percentage change in industry productivity (sales per hour worked), 2023

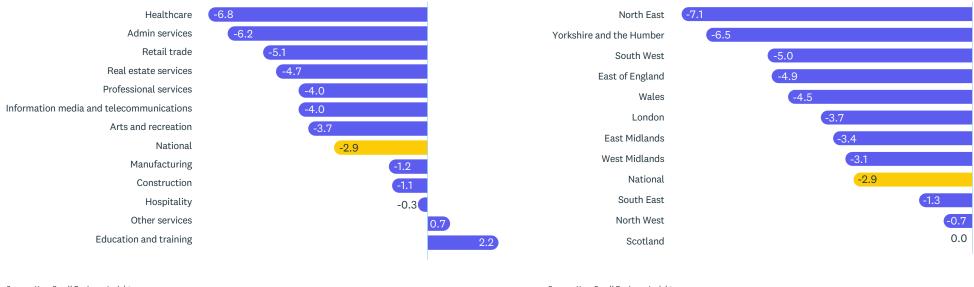
Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023



Similarly, almost all the regions of the UK contributed to the national productivity fall in 2023 (figure 4). Scotland was the only region that didn't record a decline, although it also didn't record a rise either, as productivity in 2023 averaged the same as in 2022.

Figure 4: Percentage change in regional productivity (sales per hour worked), 2023

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023



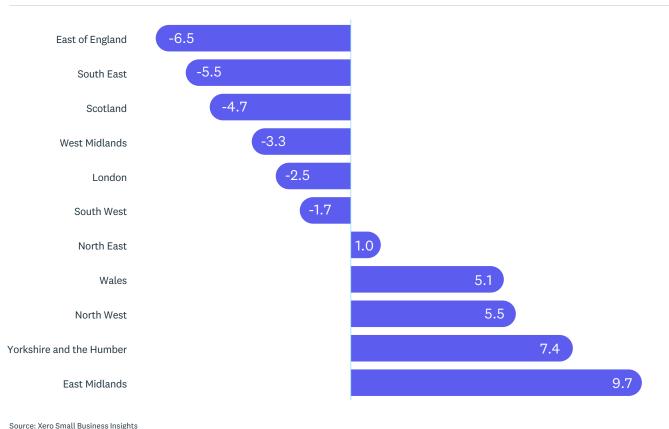
Source: Xero Small Business Insights

Source: Xero Small Business Insights

Mixed trends for productivity equality across regions and industries

Figure 5: Longer term trend in productivity performance across regions, percentage change in sales per hour worked

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average productivity pre-pandemic (Jan 2017 – Feb 2020) versus post-pandemic (Jan 2022 – Dec 2023)



Productivity equalised across regions but it is largely due to a decline in the strongest regions

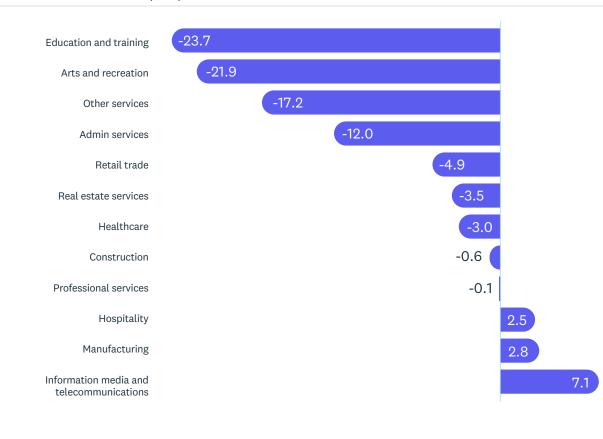
The differences across regions, in terms of productivity performance, became narrower over the seven years from 2017 to 2023. This can be measured mathematically using an equation for inequality in productivity outcomes.⁴ On the face of it, this more equitable productivity outcome is a positive development as it can potentially flow through to more equal wage and living standard outcomes across the UK. Unfortunately the increased similarities were **largely due to a decline in the productivity of the strongest regions**, which offset more modest improvements in some of the previously lagging regions.

To illustrate the extent of this trend, we compared average productivity levels in the period before the pandemic (January 2017 to February 2020) with the period after the disruptive pandemic lockdowns had ended (January 2022 to December 2023) (figure 5).

The four most productive regions pre-pandemic – London, East of England, South East and West Midlands – all experienced a fall in productivity in more recent years. Improved performance by less productive regions – East Midlands, Yorkshire and the Humber, Wales, North West and North East England – was not enough to offset this impact.

Figure 6: Longer term trend in productivity performance across industries, percentage change in sales per hour worked

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average productivity pre-pandemic (Jan 2017 – Feb 2020) versus post-pandemic (Jan 2022 – Dec 2023)



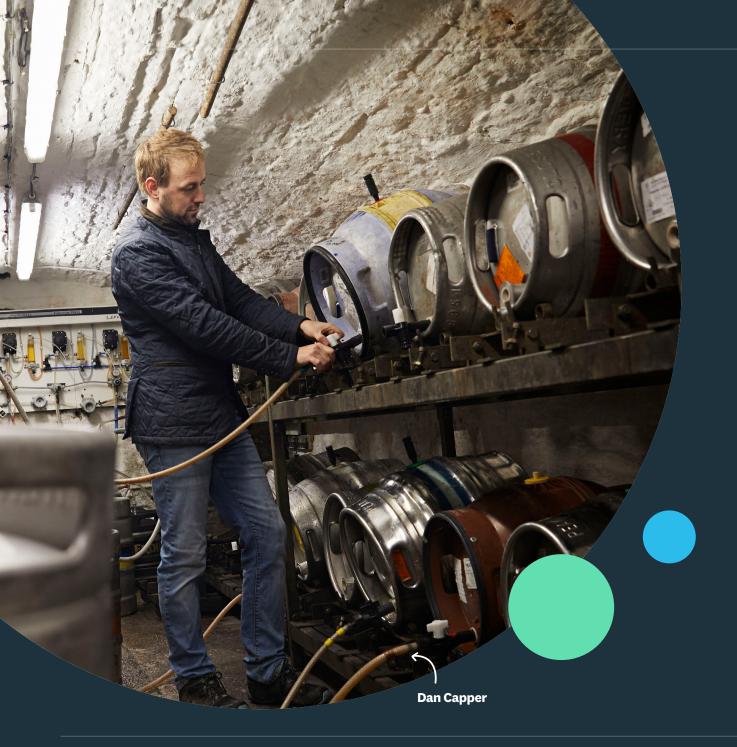
Source: Xero Small Business Insights

The least productive industries are falling further behind the most productive

Inequality in the productivity performance of industries has increased over the past seven years (2017-2023).⁵ This is largely due to a **deterioration in the productivity of the least productive** industries. As with the regions, we can illustrate the extent and drivers of this deterioration by comparing average productivity levels in the period before the pandemic (January 2017 to February 2020) with the period after the disruptive pandemic lockdowns had ended (January 2022 to December 2023) (figure 6).

Three of the five least productive industries prior to the pandemic had a fall of more than 15% in productivity between the two time periods. At the other end of the scale, four of the top five most productive industries either increased productivity or had only a small decline. Only three industries had higher productivity in the most recent two years, compared to the 2017–2019 period: manufacturing, information media and telecommunications, and hospitality.

Increased inequality in productivity across industries has important implications for inequality in living standards, given that higher productivity allows firms to potentially increase wages.



The Old Hall Inn

Derbyshire, United Kingdom

Dan Capper might be running the same business his parents once did, but using his **entrepreneurial skills** he has reimagined and completely transformed The Old Hall Inn in Derbyshire. This approach has unlocked productivity in the business by delivering the **benefits of scale** and fostered a culture of being prepared to **embrace new ways** of serving customers.

When Dan took over the family business about 14 years ago The Old Hall Inn was a struggling traditional English pub in Derbyshire's stunning Peak District. Dan's entrepreneurial skills brought new energy and ideas, and have completely transformed the business into a thriving local establishment.

SMALL BUSINESS PRODUCTIVITY: INDUSTRY AND REGIONAL TRENDS



"Despite the current challenging trading environments we are still putting in place more expansion plans and constantly innovating."

As a result of **identifying opportunities to expand and reinvent their offering,** Dan has now opened a second venue, the nearby Paper Mill restaurant, which has both a regular menu plus a constantly changing pop-up menu featuring different global foods. There are also multiple accommodation options, at the two venues and around the village of Chinley. Visitors can borrow free GPS devices to help navigate multiple local walks and bike rides, further adding to the experience of a visit to The Old Hall Inn.

"I want to be ahead of the game and be more exciting and more interesting than my competition," says Dan. "Despite the current challenging trading environments we are still putting in place more expansion plans and **constantly innovating**." Dan also understands the importance of making sure you have **staff with the right skills** who enjoy working in your business, even when introducing change.

"We have an amazing team and we've kept them for a long time," Dan says. "The nature of hospitality means that we have a lot of casual staff, many of them are here while they are studying and then leave us to go and work in the field they have got their degrees in. But a lot stay with us and make it their career because I am really focused on this being a place that people both enjoy working and can also **grow their skills** in."





Australian industry and regional labour productivity

Current XSBI industry⁶ and region⁷ productivity rankings

A deeper dive into small business productivity data shows a lot of variation across industries in Australia (figure 7). The most productive industry (wholesale trade) was five times as productive as the least (hospitality) in 2023. Ten industries tracked by the program had productivity per hour worked above the national average. The remaining seven industries, which are below the national average, tended to be servicebased industries. Figure 7: 2023 Australian industry productivity rankings, sales per hour worked Monthly, seasonally adjusted, A\$, constant prices (base year 2015)



Source: Xero Small Business Insights

6 Agriculture; manufacturing; construction; wholesale trade; retail trade; accommodation and food services (hospitality); transport, postal and warehousing (transport); information, media and telecommunications; financial and insurance services (financial services); rental, hiring and real estate service (real estate service (real estate services); professional, scientific and technical services); administrative and support services (admin services); public administration and safety (public admin); education and training; healthcare and social assistance (healthcare); arts and recreation; and other services.

7 Australian Capital Territory (ACT), New South Wales (NSW), Queensland, South Australia (SA), Tasmania, Victoria, Western Australia (WA).

The geographic variation in labour productivity was smaller than it was across industries in 2023, with the most productive state, Western Australia, recording average productivity 15% higher than the least productive, Tasmania (figure 8).

Figure 8: 2023 Australia state and territory productivity, sales per hour worked

Monthly, seasonally adjusted, A\$, constant prices (base year 2015)

- Below the national average labour productivity
- Above the national average labour productivity
- Data not available



What drove the decline in Australian productivity in 2023?

One of the findings from the *Small business productivity: Trends, implications and strategies* report was that productivity fell in Australia during 2023, averaging 2.5% lower than in 2022. This report's more granular data allows us to understand what industries and regions contributed to this decline.

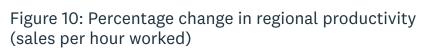
All Australian industries and regions contributed to the fall in national productivity

The industry data shows the decline in productivity in 2023 was experienced, to varying degrees, in all industries tracked by the XSBI data (figure 9). Two industries that stand out are wholesale trade and agriculture. These are two of the more productive industries in Australia but had falls in productivity of at least 5% during 2023.

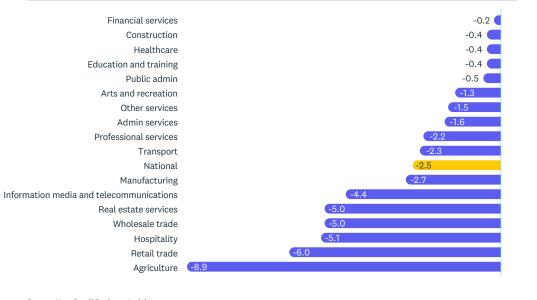
Similarly, all Australian regions tracked also experienced a decline in productivity, compared to 2022 (figure 10). The largest decline was in the most productive region, Western Australia (-4.0%).

Figure 9: Percentage change in industry productivity (sales per hour worked)

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023



Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023





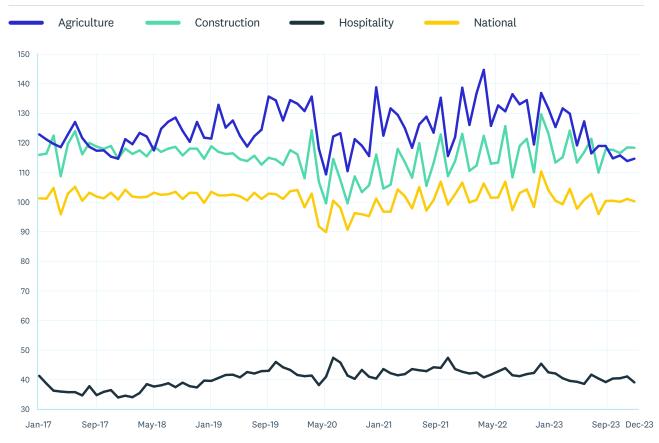
Source: Xero Small Business Insights

Source: Xero Small Business Insights

High performers and a recent improver: Agriculture, construction and hospitality

Figure 11: Productivity performance of agriculture, construction and hospitality, sales per hour worked

Monthly, seasonally adjusted, A\$, constant prices (base year 2015)



Two of the strongest productivity performers over the past seven years were construction and agriculture (figure 11). These industries might not immediately come to mind when thinking about productivity-boosting innovation, especially agriculture. Hospitality consistently had one of the lowest levels of productivity but it has been able to lift this slightly since the pandemic, from an average of A\$38.90/hour, between January 2017 and February 2020, to an average of A\$41.30/ hour, between January 2022 and December 2023.

We know from <u>other Xero research</u>, that there are four ways a small business can lift their productivity.

- Find tools that amplify their work and invest in them
- Reevaluate current processes: are they really working?
- Set workers up for success through upskilling and training
- Harness their inner entrepreneur to build a business that operates at its full potential

Collectively, small businesses in these three industries have adopted at least some of these strategies, providing real-world examples for all small business owners on how to potentially lift productivity.

Source: Xero Small Business Insights



Agriculture had the third highest average productivity, between January 2017 and December 2023, of the industries tracked in XSBI. This is one of the oldest industries and yet this result highlights how the sector has consistently incorporated innovation into its operations to achieve this productivity result. Farming today has become a <u>data- and</u> <u>technology-intensive industry</u>, as farmers grapple with big challenges such as minimising the impact on climate and maximising capacity to feed a growing global population. Agriculture is a great example of an industry that has embraced the productivity-boosting idea of **investing in tools to amplify work**.

Another consistently above-average productivity performer is **construction**. This sector has a high proportion of staff doing apprenticeships by combining post-school studies with on-the-job training. According to <u>Master Builders Australia</u>, around 10% of the construction workforce are apprentices and 3 in 10 apprentices in Australia work in the construction sector, higher than any other industry. In addition, more than 40% of construction apprentices <u>work in small businesses</u>. The industry has <u>identified</u> it needs to train even more people to work in construction if they are to meet Australia's growing housing needs. Nevertheless, it is likely that the historical strong culture of supporting **skill development** by small businesses in this industry is a contributing factor to its above-average productivity outcomes over a long period of time.

Hospitality consistently has one of the lowest productivity levels and small businesses have struggled to find staff since the economy reopened post-pandemic. This is clear in the regular XSBI data: in 2023 this industry employed only 0.7% more staff than it did in 2022 (the third smallest rise of all the industries tracked by XSBI), yet it had the highest wages growth over this period (+4.1%) of all the industries tracked by XSBI. This combination indicates an industry trying, and failing, to attract staff. This lack of staff may have encouraged hospitality firms to reevaluate their current **process** and turn to other solutions, such as increased use of technology, to fill the staffing gap. For example, one simple tech-based solution - and something everyone learnt to use in the pandemic – is QR codes. The use of QR codes has allowed at-table ordering which has freed up hospitality staff to focus on more highly skilled, and thus more productive tasks such as preparing food and running operations. Another example of change in the industry is the increase in online delivery ordering. Similar to the QR code change, the use of online ordering has meant staff no longer spend time taking orders over the phone or in person, leaving them with more time to spend on more productive work such as preparing orders.

Natura Pacific

Queensland, Australia

Thinking about **how things could be done better** sits at the core of environmental social enterprise and certified B Corp, **Natura Pacific**. Running both an environmental consultancy business, while developing and delivering environmental education programs means the team is always busy. Natura Pacific's customers range from government departments and utility companies, to schools and special interest groups. With so much on the go it's important they **find ways to keep track of all their activities.**



"Over ten years ago we first introduced a digital job management tool into our business to help boost our productivity by tracking timesheets and managing projects," says Kieran Richardt, Director and Senior Environmental Consultant at Natura Pacific.

When news arrived in March 2023 that the job management tool they were using was being retired, it was time to **review their needs and find something more fit for purpose.** Setting a goal of having a new system in place by December 2023, Kieran and his team started exploring options.



"We knew we needed something that could manage timesheets, streamline workflows, improve task delegation and enhance collaboration among team members." "We knew we needed something that could manage timesheets, streamline workflows, improve task delegation and enhance collaboration among team members," says Kieran. "Once we had a shortlist, we arranged demonstrations from the top five and then narrowed it down to two. A pilot team then tested the final two - one clearly stood out in what we were looking for."

Identifying the right product is one thing, but implementing it into your business is another. Staff buy-in and training is key, and Natura Pacific had to navigate this challenge. **Comprehensive training and ongoing support** helped upskill staff, instill confidence and break down change resistance. Kieran concludes that this is where governments could really lend a hand: "For small businesses like ours, **increased funding, subsidies or tax incentives for workforce development initiatives** would help ease the financial burden associated with up- and re-skilling. Such a policy would enable us to further invest in our staff's growth and development, ultimately leading to enhanced productivity and competitiveness in the market."

New Zealand industry and regional labour productivity

Current XSBI industry⁸ and region⁹ productivity rankings

Of the eight industries tracked by XSBI in New Zealand, five had productivity levels above the national average in 2023, led by real estate services (NZ\$125.20/hour) (figure 12). The industry with the lowest productivity was hospitality, generating only NZ\$14.30/hour.¹⁰ Figure 12: 2023 New Zealand industry productivity rankings, sales per hour worked Monthly, seasonally adjusted, NZ\$, constant prices (base year 2015)



Source: Xero Small Business Insights

8 Agriculture, manufacturing; construction; retail trade; accommodation and food services (hospitality); rental, hiring and real estate services (real estate services); professional, scientific and technical services (professional services); and other services.

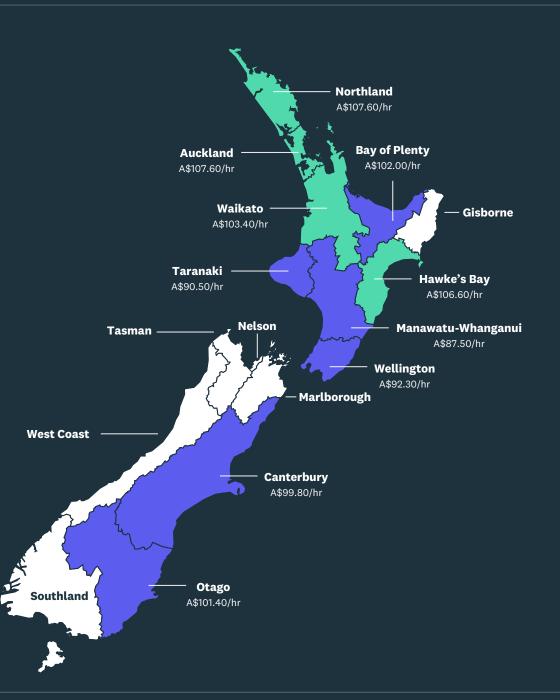
9 Auckland, Bay of Plenty, Canterbury, Hawke's Bay, Manawatu-Whanganui, Northland, Otago, Taranaki, Waikato, Wellington.

10 This result, while a lot lower than other industries, is not out of step with <u>Statistics NZ industry data</u>. Unfortunately, only annual data as an Index is available from Statistics NZ, not actual NZ\$ levels. Nevertheless, this sector is clearly well behind the others that are covered by XSBI. The gap between hospitality and the other sectors is also exacerbated because, unlike in Australia, there is no XSBI data for other low productivity industries such as arts and recreation or education and training.

There was also variation across New Zealand's regions, although less than for industries. The northern regions of Auckland and Northland recorded the highest productivity in 2023 and four regions had productivity above the national average (\$102.40/hour) (figure 13).

Figure 13: 2023 New Zealand regional productivity, sales per hour worked Monthly, seasonally adjusted, NZ\$, constant prices (base year 2015)

- Below the national average labour productivity
- Above the national average labour productivity
- Data not available



Source: Xero Small Business Insights

What drove the decline in New Zealand productivity in 2023?

All New Zealand industries contributed to the 6.1% national-level fall in productivity

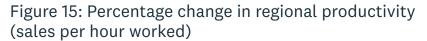
National productivity fell in 2023 in New Zealand, with average productivity 6.1% lower than in 2022. The industry-level data shows this decline was experienced by all industries, with the largest fall in agriculture (figure 14).

All New Zealand regions contributed to the 2023 fall in national productivity

All the regions in New Zealand tracked by XSBI also experienced a decline in productivity in 2023 compared to 2022. These ranged from a 7.9% decline in Waikato to a 3.2% fall in Otago (figure 15).

Figure 14: Percentage change in industry productivity (sales per hour worked)

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023



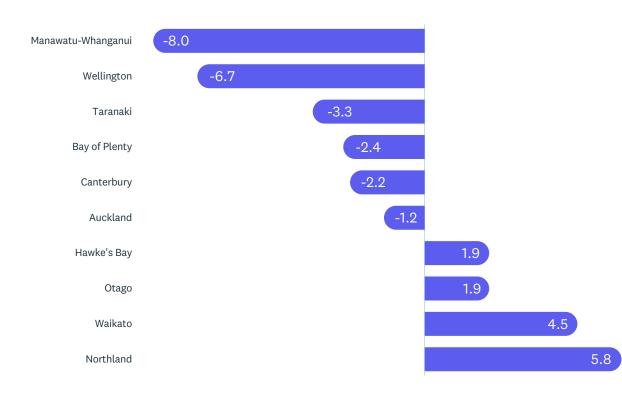
Monthly, seasonally adjusted, constant prices (base year 2015), % change in average of 2022 to average of 2023



Urbanised regions leading productivity decline post-pandemic

Figure 16: Longer term trend in productivity performance across regions, percentage change in sales per hour worked

Monthly, seasonally adjusted, constant prices (base year 2015), % change in average productivity pre-pandemic (Jan 2017 - Feb 2020) versus post-pandemic (Jan 2022 - Dec 2023)



Source: Xero Small Business Insights

Urban regions have tended to show a decline in productivity in recent years

Auckland, Canterbury, Wellington, Waikato and Bay of Plenty are the five <u>most populated</u> regions of New Zealand and contain the six largest cities in the country. Four of these five urbanised regions experienced a decline in productivity when comparing the period before the pandemic (January 2017 to February 2020) with the most recent two years (January 2022 to December 2023) (figure 16). The exception to this was Waikato, which includes the city of Hamilton, where productivity rose 4.5% between the two periods.

The decline in productivity in **Auckland** is of concern, as it is by far the <u>largest city</u> in New Zealand and so has a major impact on national trends. The Auckland region accounts for around <u>38% of the New Zealand economy</u>, so it's not surprising that the average overall level of productivity in New Zealand also fell in this period. Productivity in New Zealand was 1% lower for the period after the pandemic (January 2022 to December 2023) compared to the period before (January 2017 to February 2020).

In contrast to Auckland, neighbouring **Northland**, which is home to only around 200,000 people, saw an improvement in productivity over this period, and small businesses in the region now have the same sales per hour worked as Auckland (figure 13).

Riki Kinnaird

Duke of Marlborough Hotel

Northland, New Zealand

The Duke of Marlborough Hotel first opened its doors in 1827, but today's four co-owners of this iconic business are constantly embracing change and **finding smarter ways of operating** to boost productivity.

The Northland business employs around 120 staff and provides all key aspects of hospitality, including accommodation, event spaces and a restaurant and bar. At least once a year co-owner Riki Kinnaird **reviews all the processes in the business** with the other owners to ensure they're operating as productively as possible.

"The Covid pandemic brought into focus some key challenges and has seen us refine a lot of processes which has improved our productivity," says Riki.



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It's often initially more expensive to improve productivity and it's important to understand the overall benefits of productivity, rather than just looking at the impact on wages."

"There's a natural tension between productivity improvements and sustainability.

Recently, the team **increased their use of technology** to automate and streamline some business operations, including improving workflow management, automating journals, linking up calendars and introducing a more efficient payroll system. An **openness to new ways of working** has also seen them embrace collaboration with other businesses, including developing a new rubbish management partnership. This has been a great way for the businesses to work together and leverage benefits for all partners.

Pursuing greater productivity is **not without its challenges**. For example, implementing new technology without a dedicated project manager, which bigger businesses would have, has been tricky. The Duke of Marlborough team also found that some technology providers don't always offer the level of support that smaller businesses and their staff need. Rolling out change and introducing new processes also involves educating staff on what the owners are trying to achieve. Getting staff to stick to the new ways of working isn't always easy and can require behavioural change and incentives. "Thankfully, all the co-owners of the business come from a change management background which has meant we have worked through these productivity challenges together," adds Riki.

Government also has a role to play in helping small businesses boost productivity. Riki suggested that small business grants could help cover some of the costs if businesses can show clear productivity outcomes. Another option could be government-funded specialist advisers who offer grass-roots, practical support that's outcomes focused, rather than purely strategic.

Riki has some advice for other small business owners wanting to implement new processes, including that improving productivity is not a cost-cutting exercise.

"There's a natural tension between productivity improvements and sustainability. It's often initially more expensive to improve productivity and it's important to understand the overall benefits of productivity, rather than just looking at the impact on wages," concludes Riki.



International comparisons

In addition to the specific insights from the industry and regional data within countries, it is also possible to draw some international comparisons by converting national currencies into US dollars (using the <u>OECD's 2015 PPP basis</u>).

Industry productivity across countries

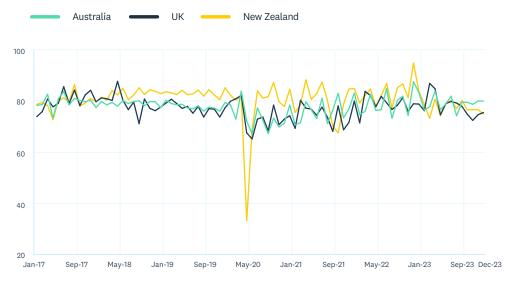
The industry data reveals some similarities and differences for the same industry in the three countries (figure 17)."

Construction had similar results in Australia, New Zealand and the UK. **Manufacturing** showed similar results for Australia and New Zealand but productivity in the UK was lower. **Retailers** in the UK and Australia had similar productivity outcomes but productivity was a little lower in New Zealand, especially during the pandemic and in 2023. **Hospitality** was an industry that had considerable variation across the three countries. This variation could be due to differences in workforce structure, with New Zealand's hospitality workforce having a higher proportion (around <u>30%</u>) of short-term, temporary migrant workers (such as backpackers or students) than in Australia (around <u>15%</u>) and the UK (around <u>16%</u>). This makes it harder for New Zealand small businesses to train and retain staff than in the other two countries.

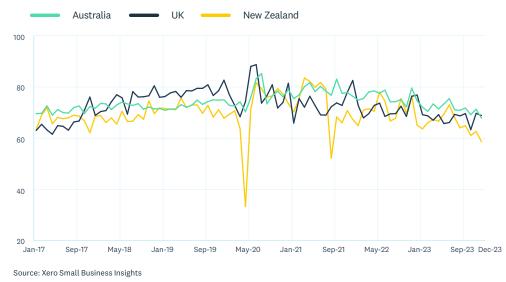
Figure 17: Selected industry productivity results, sales per hour worked

Monthly, seasonally adjusted, US\$, constant prices (base year 2015)

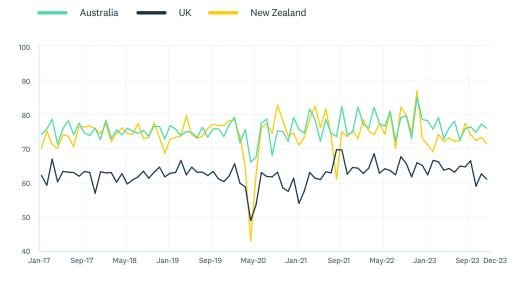
Construction



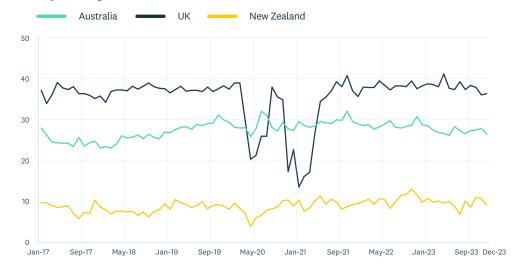
Retail trade



Manufacturing



Hospitality



Implications for small businesses, their advisors and governments

In addition to providing valuable insights, these industry and regional results have some important implications and lessons for small businesses, their advisors and governments. What are the implications of the widespread decline in productivity last year, in terms of both industries and regions?

- This decline underlines the need for all small businesses and their advisors, no matter where they are located or what industry they are in, to think about how to lift their own productivity. To get started, <u>check out this guide</u>
- Governments need to think about productivity policies that have widespread application for small businesses, in any location or industry

What can we learn from the better performing industries and regions?

- The Australian section (page 16) in this report highlighted some practical ways three industries have tackled productivity, which could also be applied in other small businesses
- Governments can put policies in place that encourage and support small businesses to implement practical change that will assist them in their business

What does a decline in productivity in key regions, such as Auckland or London, mean for the economic success of a country more broadly?

- Reduced productivity in more populous regions has negative implications for the growth potential of the country, given how important they are to the national economy
- The relationship between wage growth and productivity growth potentially reduces the size of wage rises for the many people living in these regions

What does high inequality of productivity in regions or industries mean for overall equality in a country?

- Higher inequality in productivity across regions or industries can lead to increased inequality in incomes and living standards
- Business owners in the increasingly lower productive industries are likely to find it more difficult to pay competitive wages to either attract or hold on to staff. Employees in small businesses in these industries risk not being able to have the same wage growth as in other industries. At the national level, this trend risks increased income inequality if left unaddressed

This is why it's in everyone's interest to improve productivity equality, in particular by lifting the productivity of the least productive regions or industries.



This is the second part of a two-part special report series on small business labour productivity from Xero Small Business Insights.

In the future, the XSBI program plans to release regular updates of this productivity data. This will include spreadsheets of the national, industry and regional monthly productivity data in terms of both levels and growth rates, and in both US\$ and local currencies going back to January 2017.

We hope that by releasing this data other researchers interested in exploring more about small business labour productivity will be able to use the XSBI data as part of their research. There are many areas of potential future research from this high frequency data such as looking at the empirical relationships between productivity and wages, productivity and sales, productivity and jobs in the short-run, medium-run and long-run using national, regional and industry data.

The Seam United Kingdom

Appendix

Definitions and methodology

Small business

For the purpose of this report, a small business refers to any business present in the Xero data with annual sales less than the following thresholds in local currency: Australia <\$50m (consistent with definitions under the Corporations Act), New Zealand <\$30m (Inland Revenue definition), United Kingdom <£6.5m (Companies House definition).

Productivity

The report primarily measures monthly labour productivity in terms of:

- the level of productivity, as measured by XSBI sales per hour worked, and
- productivity growth, as measured by the year-on-year percentage change in XSBI sales per hour worked

Productivity calculations

Initial calculations are based on firm-level data that is converted to industry-level and regional-level data using a median of these firm-level results. A 99% winsorisation method removes outliers from the data.

Sales per employee and sales per employee hours are measured using constant prices (OECD Quarterly CPI Base Year 2015) and seasonally adjusted. For country comparisons, data is also adjusted to constant international USD (OECD 2015 PPP).

Unless otherwise stated, growth in sales per employee and sales per employee hours are calculated using nominal values and local currency (ie, not adjusted for prices or exchange rates) and expressed as year-on-year growth.

Sales

Sales data is drawn from businesses who use Xero's invoicing platform to issue invoices (including via apps linked to a Xero account) to customers. We also apply a number of filters to both the sample of invoices and the sample of firms to achieve a high quality sample of small businesses which we analyse and draw our insights from. In particular: we exclude trusts, clubs and societies, and other unclassified organisations; and we restrict to small businesses by excluding firms who recorded annual sales greater than each country's small business revenue threshold.

Hours worked and employees

Hours worked and employee data is drawn from businesses who use the Xero Payroll product. We count a person as 'employed' in a month if we can observe them working for more than one hour on a payslip in the Xero Payroll product. Any person who is not issued with a payslip is not counted as an employee and the hours worked are not included in the calculations. This means that some owners, including sole traders, may be excluded from the data set. We also apply a number of filters to the data to achieve a high quality sample for which to draw our insights from. In particular: we restrict to small businesses (based on employment size), and exclude clearly erroneous payslips or payslips unlikely to be for wages and salaries.

Industry and region classifications

Industry classifications in all XSBI countries are made using the <u>ANZSIC</u> system. Using a consistent classification system allows for comparisons to be made between industries in different countries.

Regional classifications are based on:

- Australia: <u>State and Territories</u> (ABS)
- New Zealand: <u>Regional Council</u> (Stats NZ)
- United Kingdom: <u>International Territorial Level 1 regions</u> (Office of National Statistics)

Industry or region are optional fields that a subscriber can populate in Xero. If populated, the information supplied by the subscriber has not been verified by Xero. The underlying sample sizes for the industry and region insights are of sufficient size to be representative, but they are smaller than the country-level productivity metrics so could be more likely to fluctuate and/or be susceptible to change.

Sample reweighting

We reweight the data to ensure that it is representative of all small businesses. The sample weights used to create the metrics are taken from the following statistical offices for each country: Australian Bureau of Statistics, Statistics New Zealand, Office for National Statistics (for the UK).

Appendix

Authors and disclaimer

About Xero

Xero is a global small business platform with 4.2 million subscribers. Xero's smart tools help small businesses and their advisors to manage core accounting functions like tax and bank reconciliation, and complete other important small business tasks like payroll and payments. Xero's extensive ecosystem of connected apps and connections to banks and other financial institutions provide a range of solutions from within Xero's open platform to help small businesses run their business and manage their finances more efficiently.

About Xero Small Business Insights

The aim of Xero Small Business Insights is to create insights to help inform decision makers in support of the small business economy as a whole. The principal source of small business insights in this report is customer data from Xero – a small business platform that supports online accounting and a range of other applications. Xero is a responsible custodian of our customers' sensitive data and does not release any data that could identify individual businesses. The data used is aggregated and anonymised to ensure the privacy of Xero subscribers, and their counterparts.

As part of the program, we publish regular blogs, research notes and deep-dive special reports on specific small business topics. These can all be found at <u>xero.com/xerosbi</u>.

Disclaimer

This report was prepared using Xero Small Business Insights data and publicly available data for the purpose of informing and developing policies to support small businesses.

This report includes and is in parts based on assumptions or estimates. It contains general information only and should not be taken as taxation, financial, investment or legal advice. Xero recommends that readers always obtain specific and detailed professional advice about any business decision.

The insights in this report were created from the data that was available as at the date it was extracted. Data used was anonymised and aggregated to ensure individual businesses can not be identified.

