

Scotland's Productivity Gap – an Analysis

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Productivity alone can be a misleading measure of economic performance. To get a true picture we should take into account further factors such as employment, land costs, infrastructure and much more. But looking at the differences between Scotland and the rest of the UK can provide some interesting clues to the weaknesses of the Scottish economy.

Previous research has shown that there is considerable variability in the performance of the Scottish economy. For example, the top 10% performing manufacturing plants are more than 5 times as productive as the worst.¹

As part of ongoing research into Scottish productivity we have used a similar approach. We have used the Labour Force Survey (LFS)² to divide the Scottish workforce into ten equal groups according to productivity for the 2001 to 2004 period, as measured by gross hourly pay.

Chart 1 below shows that the bottom group of the Scottish workforce earns £3.33 per hour with the top 10 per cent earning £23.95 per hour on average. Increases between each group are gradual until the ninth, with the highest paid Scots earning two thirds more than the next 10 per cent. In terms of wages (or productivity) generated, a worker in the bottom 10 per cent has to work almost a full working day³ to produce what a worker in the top 10 per cent produces within one hour.

¹ Fiona Roberts in 2001 divided the plants into ten equal parts. The top group therefore represented the top 10% of the most productive manufacturing plants in Scotland and the bottom group the least. Roberts concluded "The ratio between these two points is 5.3 i.e. better performing plants are more than 5 times as productive as worse performing plants."

² Earnings are a reasonable proxy for GDP as they account for around two thirds of all 'value added' in the Scottish economy. The other third of value added is accounted for by 'gross operating surplus' which, per worker, is associated with higher earnings. Earnings data from the LFS was also used to investigate productivity by Walker and Zhu (March 2003) *Education, Earnings and Productivity: Recent UK evidence, Labour Market Trends*.

³ About 7.2 hours.

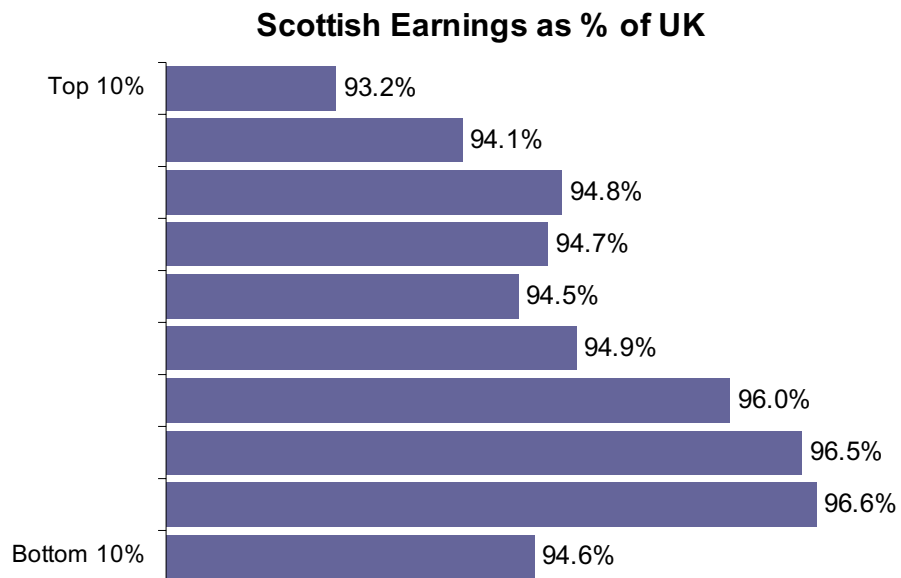
Chart 1: The Pay Gap



Source: Labour Force Survey, Adapted by DTZ Piedad Consulting

These large disparities in income across the population are not unusual when compared to the UK as a whole. However, whilst on average gross hourly pay in Scotland is around 95% of that for the UK, there is a much bigger discrepancy in wages (and therefore productivity) between Scotland and the UK in the top 20 per cent of earners, as demonstrated in Chart 2 below.

Chart 2: The Gap Widens At The Top

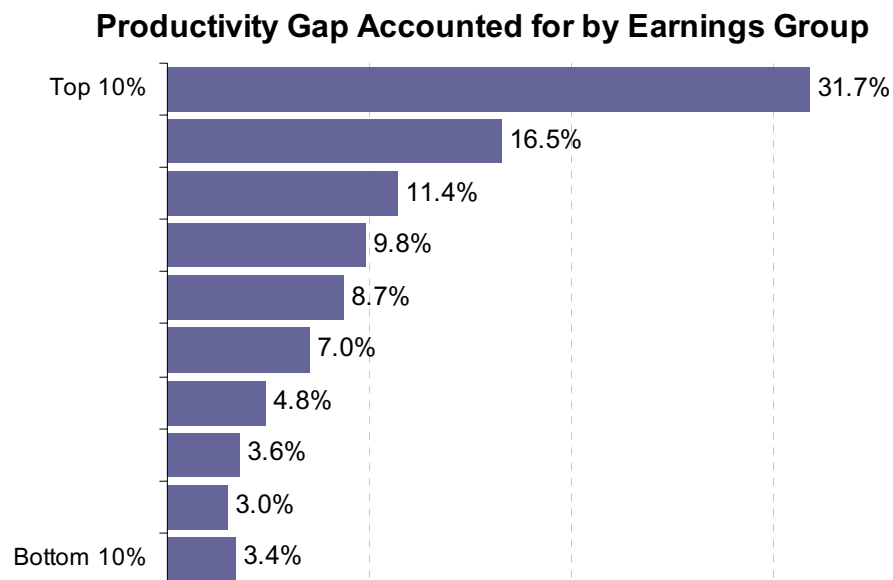


Source: Labour Force Survey, adapted by DTZ Piedad Consulting

The gross hourly pay of the top 10% of Scots earners is only 93.2% of the top 10% of earners across the UK as whole. This provides a useful insight into how the difference in productivity is distributed across the Scottish workforce. While all groups in Scotland are below their UK equivalent, the productivity difference is greatest among higher earners.

What is more, the higher the wages, the more impact they will have on the overall picture. Chart 3, next, shows the overall difference between UK and Scottish productivity attributed to each group of earners.

Chart 3: The Productivity Gap Is Mainly At The Top End



Source: Labour Force Survey, Adapted by DTZ Piedad Consulting

Raising the bottom 10% of earners in Scotland to same level of pay as their UK equivalents closes the overall productivity gap by only 3.4%. Closing the gap in the top 10% of Scots earners, by contrast, reduces the overall productivity gap by 31.7%. Closing the gap in the top 20 per cent of earners nearly halves the overall productivity gap between Scotland and the UK.

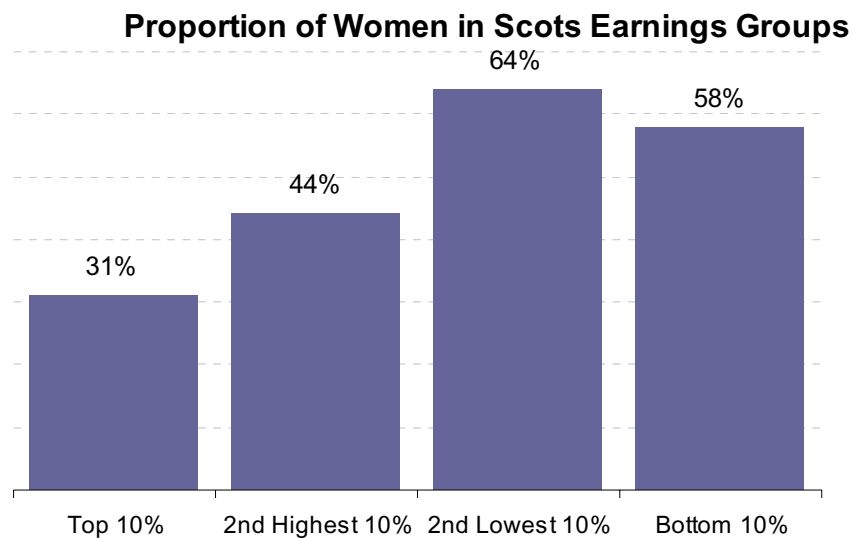
This suggests that one way of boosting Scotland's productivity performance is to improve the productivity of Scotland's top earners.

Expanding labour market participation for women might be regarded as a noble aim. But is it likely to have a desirable impact on productivity? Chart 4 demonstrates that women tend to be over represented among lower earners. This does not suggest that

women are potentially less productive than men. But female workers are more likely to return from childcare commitments and experience interrupted careers. It is well known that they are under-represented at management level in many industries. This means that recent increases in overall female participation in the workforce is likely to have slowed average earnings and productivity growth.

Only in the longer term might we expect increases in productivity as the labour market moves to a more equal distribution and with greater female representation in senior positions.

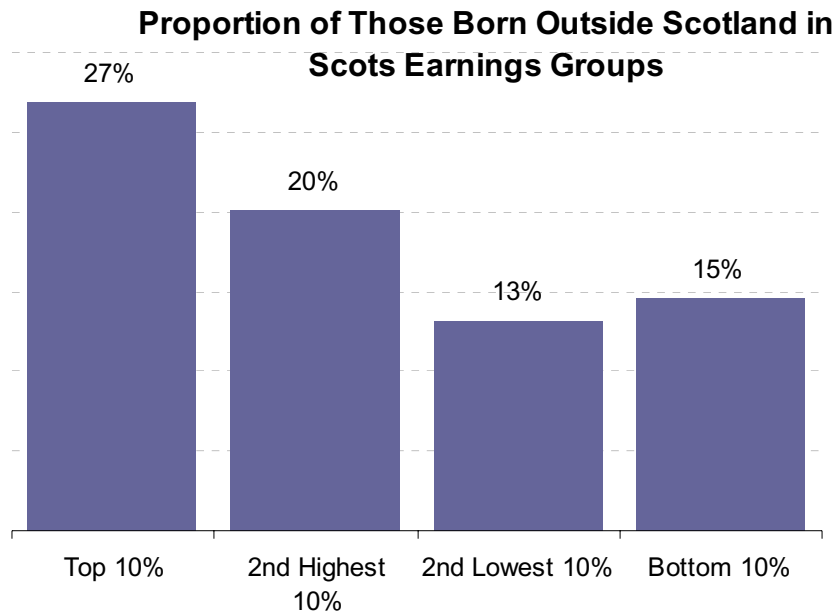
Chart 4: Not Yet A Woman's World



Source: Labour Force Survey, adapted by DTZ Piedad Consulting

Meanwhile, those born outside Scotland are over represented among higher earners, as is demonstrated in the following Chart 5. This would suggest that attracting high earners from outside Scotland could significantly improve productivity. More than one in four of the top earners in Scotland were born outside of Scotland.

Chart 5: Importing Skills



Source: Labour Force Survey, adapted by DTZ Pidea Consulting

This research shows some of the complex patterns which contribute to Scotland's economic performance. There may well be conclusions that can be drawn in the light of the Executive's professed policies to improve productivity, attract 'fresh talent' and encourage 'social inclusion'.