Who benefits from firm success?

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Inclusive growth – economic growth that delivers benefits to all members of society – is a hot topic right now. Many countries around the world are grappling with issues related to persistent inequality and disadvantage. In this work, we continue our examination of inclusive growth at the firm level by looking at which workers benefit most from improvements in firm performance in New Zealand. We call this relationship between firm performance and wages *rent sharing*. This gives us further insight into the micro-level drivers behind the gender wage gap, ethnic wage gaps, and other labour market disparities in New Zealand.

We use the rich data on firm financial performance and individual wage and salary earnings from StatsNZ's Longitudinal Business Database (LBD) and Integrated Data Infrastructure (IDI) to link improvements in firm performance to wage growth for different groups of workers. We focus on firms in the private-for-profit sector with at least 5 employees over the period 2002-2018. We have information on 47,000 firms and 1.75 million workers.

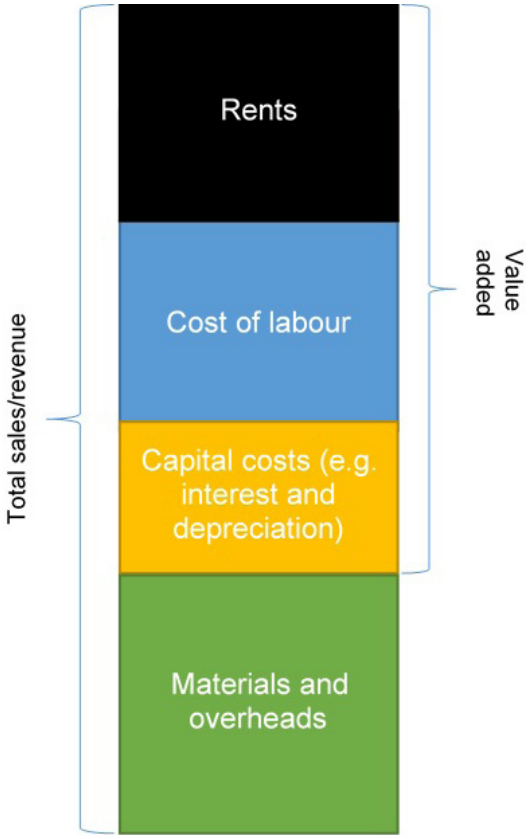
Measuring firm performance and who benefits

We use the same measure of firm performance as in our **previous work** – namely quasi-rents per worker. This measures the amount a firm has left over after paying materials costs, capital costs (including financing and depreciation) and the cost of employees' *reservation wages*. You can think of quasi-rents as the profit a firm would earn if they paid their workers what they could expect to earn at a low paying firm.

One way to think about quasi-rents is to consider a breakdown of how firms use their revenue (see Figure 1). Firms must pay materials costs and other overheads, capital costs, and the 'cost' of labour. The cost of labour is valued at workers' *reservation wages* and is not necessarily the same as the wage bill. The cost of labour reflects what workers could expect to earn at a low paying firm. Any money left over after paying these costs is what we call *quasi rents*.

Firms can use these rents to reward workers with higher wages (or other non-wage benefits), finance capital investment or R&D, save the money to help them through bad times, or provide income to the business owner(s).

Figure 1: Breakdown of firm revenue



Rent sharing is simply the sharing of a portion of these rents with workers in the form of higher wages. One way to think about rent sharing is comparing a living wage firm with a minimum wage firm that has a similar level of revenue and other costs. One firm chooses to pay its workers the living wage and therefore earns lower profit, all else equal. It could pay its workers the minimum wage, like the other firm. In this case, the 'cost' of labour, or the workers' reservation wage, for the living wage firm is the minimum wage, and the difference between the living wage and minimum wage represents rent sharing.

To look at whether different types of workers benefit more from rent sharing, we look at how improvements in the performance of the firm they work at translates into wage growth. We consider this relationship for men and women, for workers of different ethnicities, workers with different qualifications, by worker age, by worker tenure, and for workers in different industries. Our method of looking at changes in firm performance and changes in wages means we are controlling for things that affect the level of both wages and firm performance (e.g. worker skill).

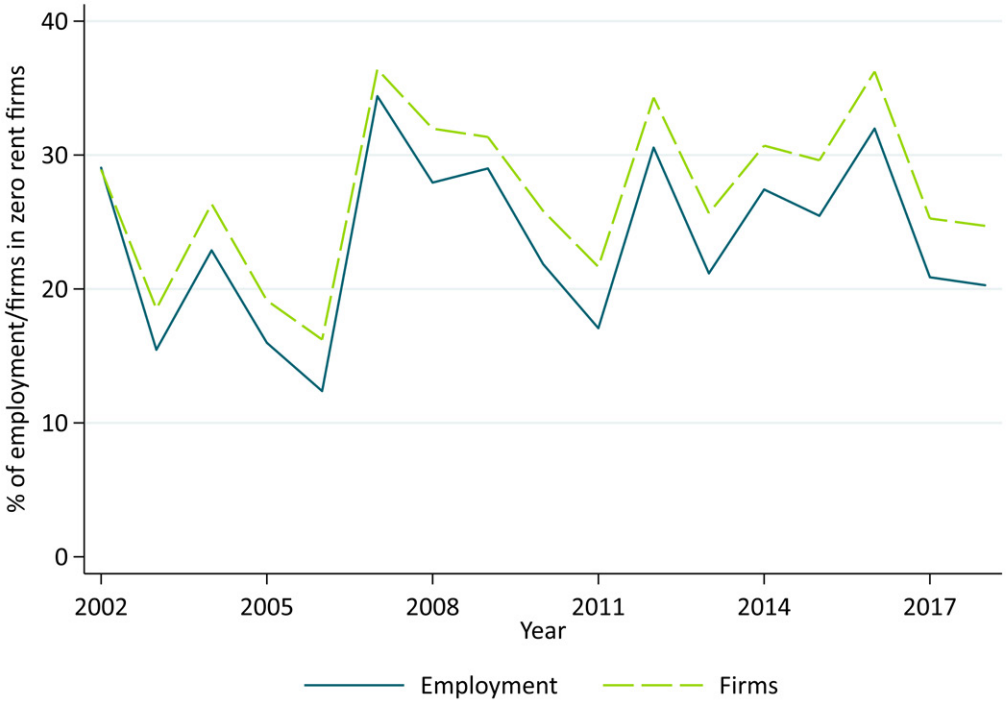
Which firms are successful enough to consider sharing?

One thing that international research emphasises is that rent sharing occurs in firms that earn a sufficient level of rents. In firms that are not as profitable, wages are more determined by institutional factors such as statutory minimum wages. In this work, we estimate what this 'threshold' level of rents, below which we see no relationship between firm performance and wages. We then look at the characteristics of firms and workers below this threshold.

We find that rent sharing occurs in firms that earn more than $18,000-$20,000 in rents per worker (in 2018 NZD). This threshold level is steady over time. We call firms that earn below this threshold level 'zero rent firms.' Around 1 in 5 workers (~23%) in our sample work in these firms and this proportion is consistent over time (see Figure 2). Workers in these zero rent firms tend to have lower levels of qualifications and are disproportionately Māori and Pacific Peoples. These firms are far more prevalent in the hospitality, retail, and administrative and support services industries.

As rent sharing does not occur in these firms, we exclude them from further analysis.

Figure 2: Percent of employment in firms that earn zero rents



Not all workers benefit from improvements in firm performance

We find some large and important differences in the extent to which different workers benefit from improvements in firm performance, particularly by qualification levels, job tenure, and ethnicity. We estimate the percentage increase in wages in response to a given percentage increase in firm performance, which we then translate into dollar changes. In general, groups that already have higher average wages experience larger percentage increases in their wages in response to a given percentage increase in firm performance.

Workers with a postgraduate qualification can expect to see a $900 increase in annual wages in response to a $10,000 increase in rents per worker. Workers with no formal qualifications, on the other hand, experience a $130 increase in annual wages. This likely reflects that those with advanced qualifications have specialist skills that are in high demand, giving these workers greater bargaining power and the ability to benefit more from improvements in firm performance. Conversely, there are many jobs that don't require advanced skills, skills obtained through years of training and experience. For these jobs there is a large supply of potential workers, meaning there is little pressure for firms to increase wages to attract new workers.

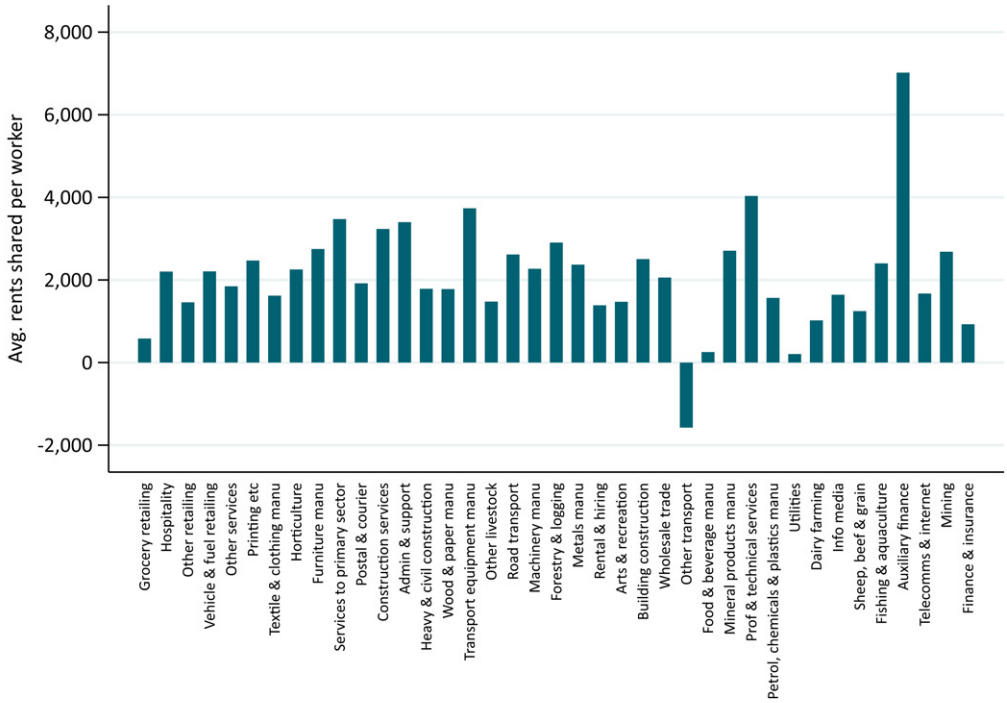
Workers who have been with a firm for more than three years can expect a $500 increase in wages in response to a $10,000 increase in rents per worker, while workers in their first year with the firm receive very little. Part of this reflects that the firm and worker are still figuring out if this job match is a good one. Workers who are a good match with the firm are more likely to make it to the 3+ year category and are then able to benefit more from rent sharing. Firms want to avoid making costly, permanent increases in wages for workers they have not decided whether they would like to keep. This result also reflects that workers who have been with the firm for longer are more likely to have reached higher rungs of the job ladder and may be more likely to benefit from rent sharing.

We also find that Māori and Pacific workers receive less than $100 from a $10,000 increase in rents per worker, whereas workers who identify as European receive $460. This difference partly reflects factors such as differences in rates of university qualification between groups. After accounting for these factors, the gap between ethnicities is approximately halved. The remaining gap likely reflects differences in relative positions within a firm, differences in industries where different groups are more likely to work, differences in the ability or willingness to bargain, or discrimination.

Men also tend to benefit more from rent sharing than women, although the evidence for this difference is not as strong as for ethnicity. The gap is particularly large between highly qualified men and women.

Industries vary in the amount of rents earned by firms as well as how these rents are distributed. When we look across industries, we find that workers in most industries receive between $1,500 and $2,000 of their firms' rents in total per year, on average (see Figure 3). Workers in the auxiliary finance industry (mostly brokers) receive around $7,000, while workers in the professional, scientific, and technical services receive $4,000. At the other end of the spectrum, workers in grocery retailing, food and beverage manufacturing, and utilities receive less than $600 per year. Workers can earn higher wages if they work in a high rent industry or if they work in an industry where firms tend to share more of the rents.

Figure 3: Average annual amount of rents received per worker by industry



We also test whether insurance-type behaviour on the part of firms explains some of the differences we observe across industries. Firms may keep wages steady in the face of potentially large, temporary swings in firm performance as workers value the stability and predictability in income.

If firms were to pass-through more of improvements in performance to wages (reducing savings), then they will be more inclined to cut wages and/or reduce employment in a bad year as they have less 'rainy day' savings. Firms can be reluctant to cut wages for fear of their best workers leaving, so keeping wages stable can benefit both firms and workers.

We find that an insurance-type story is partially consistent with our results across industries. Firms that face greater uncertainty in their trading environment tend to share less of their rents, consistent with an insurance story. However, it does not explain all the differences we see across industries, meaning other factors are playing an important role in driving the differences we see.

Conclusions and implications

In many ways, the results we have found here confirm familiar stories about the labour market. Part of the reason why more highly qualified workers are paid more is because they benefit more from improvements in firm performance, as well as being more productive. Similarly, part of the reason why Māori and Pacific Peoples have lower average wages is that they are more likely to work in zero rent firms and, when working in better performing firms, they don't share in firm success to the same extent as other groups. We have found suggestive evidence that this might reflect some insurance-type behaviour on the part of firms, but other explanations are likely more important, particularly for differences between different groups of workers.

A more likely explanation is that some workers have greater bargaining power than others, allowing them to benefit more from rent sharing. This could reflect a relatively short supply of workers with skills that are in high demand, differences in the willingness, ability, and experience with wage bargaining, or differences in which groups reach higher rungs of the job ladder within firms. These differences could reflect deeper issues, such as discrimination against certain groups.

Another potential explanation is that firms have greater monopsony power over certain groups of workers. Monopsony power refers to the ability of firms to hold wages down without experiencing a mass exodus of workers. This power can arise from difficulties workers face in finding another higher paying job, differences in preferences for what people want from a job, workers not knowing what alternative job options might look like, or simply that the firm is the only employer in a local area. Things that make it easier for workers to change jobs, such as access to training, easier geographic mobility, or better information about likely pay for different types of jobs, will help to reduce any monopsony power that firms can exercise.

We also find that there is a significant segment of the labour market where rent sharing doesn't occur, largely in the hospitality, retail, and administrative services sectors. Wages at these firms are likely determined by institutional factors such as the minimum wage. It is likely that these low rent firms would pay lower wages in the absence of a minimum wage, suggesting that the minimum wage is supporting income growth for workers in these firms. What happens to these firms and workers is an important question for future research. Do low rent firms persist as low rent firms? Do they grow or exit the market? Do workers tend to remain in these firms, or do they find higher paying jobs in other industries?

Our future work will look more directly at the question of firm monopsony power in the labour market, or the ability of firms to keep wages low. Monopsony power has important implications for wage growth and bargaining power, but also important consequences for firms facing labour shortages. The presence of monopsony power makes it more difficult for competing firms to attract workers, potentially contributing to a lack of productivity-enhancing reallocation. This future work with the work described here will give us a detailed picture of the role of bargaining power in the New Zealand labour market.

Caveats

Data limitations mean that some results may not be fully representative of the outcomes for particular groups. First, we exclude the education, healthcare, and public administration sectors. These are predominantly public sector industries where the more traditional meanings of firm performance don't really apply, making rent sharing a difficult question to ask for these sectors. These sectors are also important employers of women and Pacific Peoples, resulting in a significant fraction of these groups being excluded from our analysis.

Data limitations also mean that we focus on full-time employees and exclude part-time and casual workers. These types of working arrangements are more prevalent in certain sectors (e.g. hospitality, grocery retailing). This means we end up excluding a significant fraction of the workforce in some industries. These industries also tend to have low average rents and have a high percentage of the workforce in zero rent firms. Our estimates for these industries therefore reflect the amount a full-time worker (who may be more likely to benefit from rent sharing) might expect to receive at a firm with sufficient rents to consider sharing. It may not reflect the experience of the average worker in these sectors.

The exclusion of part-time and casual workers also means that more women, Māori, and Pacific workers are excluded from the analysis. These workers may be less likely to benefit from improvements in firm performance than the workers we include in our analysis. Therefore, our estimates of the differences in rent sharing for these groups is likely an *underestimate* – the true gap could well be larger than what we've found here.

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