Raising the bar

The impact of minimum wage hikes

12 April 2018

The planned increase in the minimum wage over the next few years to $20/hr will have modest impacts on employment, costs and inflation.

- The new Labour-led Government plans to increase the minimum wage to $20 an hour by April 2021. After accounting for general growth in wages over that time, this amounts to a 13% relative increase in the minimum wage.
- New Zealand already has the highest minimum wage in the developed world, and this lead will extend further over the coming years. International research on the impact of minimum wage hikes is mixed, but we can reasonably expect the impact in New Zealand to be towards the upper end of estimates.
- We estimate that by 2021 the change in the minimum wage will affect a quarter of the workforce, will increase total labour costs by 1%, add about 0.3% to consumer prices, eliminate or reduce the hours of 8,500 jobs, and raise the unemployment rate by 0.2%.
- Minimum wage jobs are concentrated in a few industries, with hospitality and administrative services by far the most affected by a minimum wage hike. Minimum wage workers are disproportionately young, working part-time – and not necessarily the least well off.

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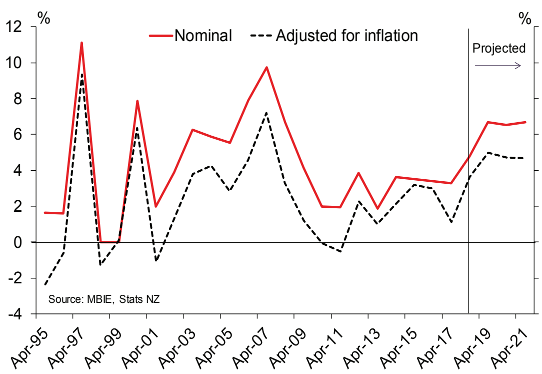
In discussions with businesses we've noted a lot of concern about the impact that the new Government could have on the costs of doing business. Minimum wages are one aspect of that. In this article we draw on a range of evidence to quantify the impact that the planned minimum wage hikes could have on employment, costs and inflation.

From the start of April the minimum wage increased from $15.75/hr to $16.50/hr. This was the first step in the new Government's plan to raise the minimum wage to $20/hr by April 2021, economic conditions permitting.

Minimum wage increases have typically outpaced inflation over time, and this year's increase of 4.8% is not that much larger than those seen in the last few years under the National-led Government. The increases planned for the next three years are more significant, but not unprecedented – after adjusting for inflation, they will be on a par with what we saw during the last term of the previous Labour administration.

Minimum wage increases



New Zealand's minimum wage is already high by world standards, and by the time it reaches $20/hr it will capture a significant share of the workforce, either directly or indirectly. The effects on wages, inflation and employment certainly won't be trivial, though they are unlikely to be harmful to the economy as a whole. However, the impact won't fall evenly, as some groups are much more exposed than others to changes in the minimum wage.

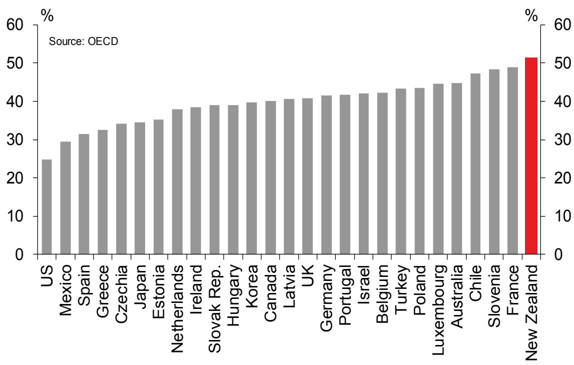
The economics of minimum wages

The impact of minimum wages is one of the more contested topics in economics. The standard argument is that if wages are fixed above the level that would prevail in a free market, demand for workers will fall and the supply will rise, leading to a persistent level of unemployment.

In practice, studies have not consistently found an impact on employment; where there is an impact, it tends to be small. Part of the challenge is that the minimum wage usually rises in small increments and affects only a fraction of the workforce, so the impact can easily be swamped by other forces.

Another issue is the degree to which it is binding, as measured by the level of the minimum wage relative to the average market-determined wage. Notably, much of the research that questions the impact of minimum wages on employment comes from the US, which has the least binding minimum wage in the OECD.[1] In contrast, New Zealand already has the highest minimum relative to the average wage rate in the OECD, and will extend its lead further over the next few years. We can reasonably expect the impact of minimum wage hikes in New Zealand to be towards the upper end of what the international research suggests.

Minimum wage as a % of average hourly earnings



The research shows that minimum wage increases are still a net gain to workers – the rise in income for those who keep their jobs outweighs the lost income from layoffs or reduced hours. However, the gain depends on the interaction with the country's system of taxes and transfers. New Zealand does not have a tax-free bracket for low-income workers, and some will find that a wage increase is offset by the abatement of Working for Families payments.

A rise in the minimum wage represents a transfer to low-income workers, who tend to spend any extra income, and away from business owners who have a low propensity to spend. This means there are likely to be some second-round effects for the economy in terms of an increase in spending in retail and consumer services.

[1] This refers to the Federal government's minimum wage; some states and cities set higher minimums.

The impact on inflation depends on the extent to which firms can pass on cost increases, which varies across industries. It will also depend on the state of the labour market more generally. A minimum wage hike is unlikely to spark a wage-price spiral on its own, but it could exacerbate one that had already developed.

Finally, the full impact of a minimum wage hike could take several years to play out. Initially, both consumers and employers may be willing to live with higher prices. But in the longer term there is more scope for a shift in activity away from labour-intensive industries, and for firms to invest in labour-saving technology. A minimum wage hike may not obviously lead to layoffs, but over time there may be fewer jobs created than there would otherwise have been.

Estimating the impact

To calculate the impact of the Government's planned minimum wage hikes, we first need to know how many workers will be affected. Stats NZ has kindly provided us with a breakdown of hourly pay rates at the lower end of the distribution. This is drawn from the income module of the Household Labour Force Survey, which was conducted in the June 2017 quarter.

Distribution of hourly earnings

We note that this was just before the pay equity settlement for aged care workers came into force in July 2017, lifting about 55,000 workers (including 20,000 on the minimum wage) to wage rates of $20/hr or more. We've made our own adjustments to the data to avoid double-counting these workers.

There are a couple of points to note here. The data shows that a small share of workers are currently paid less than the adult minimum wage. Some of these will be young workers – the starting-out and training minimum wage rates are set at 80% of the adult rate, though they only apply in limited circumstances. The Government plans to abolish the starting-out rate and review the training rate later this year.

Another part of it could be mismeasurement. The survey doesn't collect hourly pay rates; instead, it asks for earnings and hours worked during the survey week. If either of those numbers is misreported, or is atypical in that week, the implied hourly wage rate won't fall precisely on the minimum wage. For this reason, the data from Stats NZ specifies a wage range that is likely to capture most minimum wage earners.

Based on this data, we estimate that around 8% of workers (about 155,000 people) were on the previous minimum wage. Since minimum-wage workers are paid less than the average worker and are more likely to work part-time, their share of the total wage bill for employers was closer to 3%.

The next question is how binding the minimum wage hikes will be. The planned increase to $20/hr is a 27% rise on the previous rate, but spread over four years. We would expect to see a rise in pay rates across the spectrum in that time. Assuming an average increase of 3% per year, this implies a 13% relative increase in the minimum wage – the equivalent of raising it to $17.80/hr immediately.

We estimate that a 13% relative increase in the minimum wage will capture an additional 10% of the workforce. There will also be a group of workers who are already earning more than the new minimum wage, but may receive a pay rise so that employers can maintain pay grades across roles. This means that by April 2021, as much as 25% of the workforce – about 530,000 workers – will have their pay rates affected by the increase in the minimum wage.

The impact on labour costs is not as dramatic as this figure might suggest. As noted earlier, these workers are paid less than the average wage and work shorter hours, so their share of the total wage bill will be around 12%. In addition, the average pay increase is likely to be substantially less than 13%. Not all of the affected workers will be starting from the previous minimum wage. These workers may receive a pay increase of less than 13%, implying some compression in the distribution of wages.

All together, we estimate that the minimum wage hikes will add about 1% to the Labour Cost Index (LCI) over the next four years – that is, compared to what would have happened if the minimum wage had continued to rise at the same rate as in recent years. Recent minimum wage hikes have added no more than 0.1% to the LCI each year.

The impact will be staggered over time: this year's 4.8% increase in the minimum wage is smaller than the average 6.6% increase that is planned for the following three years, and each successive increase will capture a greater share of the workforce. In our forecasts we've assumed that the minimum wage will add 0.1% to wage inflation over the next year, then 0.2%, 0.3% and 0.4% in the following three years.

The impact on employment depends on how sensitive the demand for labour is to price changes. Overseas studies suggest a sensitivity of at least -0.1 between wage changes and hours paid (that is, it could take the form of fewer workers or fewer hours per worker). But as noted earlier, the impact is likely to be greater in New Zealand. The Treasury used a sensitivity of -0.3 in its estimates,[2] and we have adopted the same number.

[2] As detailed in the December 2017 Half-Year Economic and Fiscal Update.

A 1% rise in the Labour Cost Index as a result of minimum wage hikes is expected to reduce the number of hours worked by 0.3%, The prevalence of part-time work mean that the share of affected workers will be slightly higher.

We expect that around 0.4% of the workforce, or 8,500 people, will either find themselves out of work or will have their hours reduced over the next three years. While not a large number, bear in mind that the impact will be concentrated at the bottom end of the income scale: this number represents 3.5% of the workers who are currently on the minimum wage.

There will be a corresponding rise in the unemployment rate, although we would put it at closer to 0.2%. A large number of minimum wage earners are working part-time while studying; if they find themselves out of a job, most will classify themselves as outside the labour force rather than unemployed and actively seeking work. And those workers who have their hours reduced will still be classified as employed (though they may fall into the broader 'underutilisation' category).

The impact on consumer price inflation is perhaps the most difficult to pin down. Our inflation models suggest a passthrough of about one-third from wages to prices, implying a 0.3% rise in the Consumer Price Index spread over four years. It's not really feasible to try directly mapping wage increases on to the CPI – as we discuss below, many minimum wage jobs are not consumer- focused.

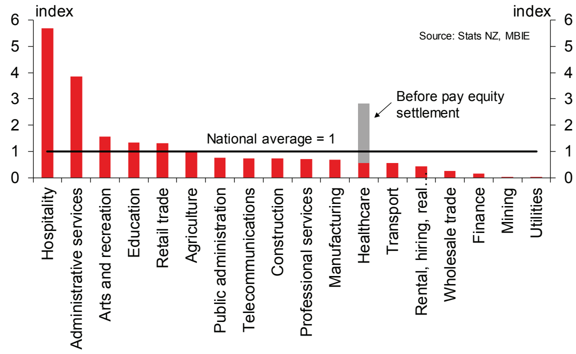
Who is affected by the minimum wage?

Minimum wage earners are much more likely to be under the age of 25, to be in study, and to be working part-time. Indeed, the evidence suggests that a large share of minimum wage workers are students working part-time jobs, who come from households across the entire income distribution. This is one reason why minimum wages are considered a poorly targeted way to address poverty or inequality. Another reason is that many of the lowest-income households have no members in paid work, so do not benefit from a minimum wage.

Minimum wage workers are more likely than the average worker to be female, and of Maori or Pasifika descent. However, the distinction is not as sharp as the one by age. Migrants are no more likely than those born in New Zealand to be on the minimum wage, but for those who are, they tend to be more recent arrivals.

The impact by sector depends on two factors: the share of workers on the minimum wage, and labour as a share of firms' inputs. In the following chart we have combined these two measures to give a ranking of which sectors are most exposed to a minimum wage hike.

Relative exposure to minimum wage hikes



The most exposed sector by a wide margin is hospitality, which is both labour-intensive and has a high proportion of workers on the minimum wage. Anecdotes of cafes and restaurants raising their prices to recover the cost of a minimum wage hike should not be surprising, but they're also the biggest responses that we would expect to see.

The other highly exposed sector is administrative services, which includes temping agencies and contract cleaners. In this case, the cost of a minimum wage hike will ultimately be borne by the wide range of firms that employ these services.

Education, retailing, and arts and recreational services all have a slightly higher than average exposure to minimum wage hikes. In terms of 'manual labour' roles, agriculture's exposure is about average (the most labour-intensive subgroup is horticulture), while manufacturing and construction have a relatively low share of minimum wage workers.

The healthcare sector did have a high share of minimum wage workers. But last year's pay equity settlement means that most pay rates have already overtaken the planned minimum wage hikes.

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