

Economics IN FOCUS

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Wage pressures not as inflationary as perceived

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Last year the average wage in Canada rose by 4.8%. Now, before you storm into your boss's office to complain about your below average pay raise, you have to remember that this average masks more than it reveals. At any point, a change in average wage reflects not only a pure pay increase but also changes in the composition of labour. And during each one of the pandemic years, that change in composition was very pronounced. This has important implications for our understanding of the inflationary potential of the current wage trajectory.

Lower share of low paying jobs—higher average wage

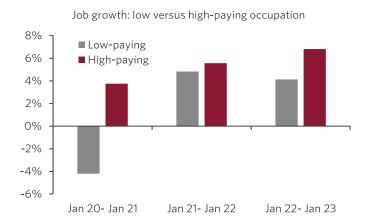
Chart 1 tells the tale. The COVID recession has been the most asymmetrical recession on record as the vast majority of the jobs lost were low-paying jobs. In 2020, the number of jobs in occupations that paid below average wage fell notably while higher paying occupations saw their job count rising. The recovery in the job market in 2021 and 2022 did not close that

gap, with the number of jobs in high-paying occupations continuing to outpace growth in the number of low-paying jobs. Accordingly, the share of full-time paid employment in low-paying occupations fell from almost 65% in 2019 to the current record low of just under 61%. Now, all other things being equal, a lower share of low-paying jobs in total employment means of course a higher average wage.

Digging deeper we now focus on a few examples of that asymmetric job market performance that resulted in a higher average wage due to the compositional factor. The first is job creation by education (Chart 2). The Canadian economy created more than 800,000 jobs since the beginning of covid. On a net basis, virtually all of them were among university educated. Given that workers in that category earn 26% more than the national average, it is clear that that abnormal distribution is putting upward pressure on the national reported average wage.

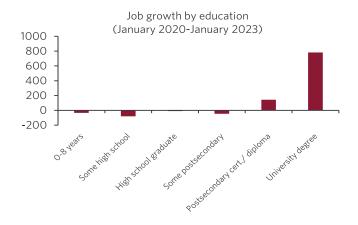
Another example is job creation by establishment size (Chart 3). During COVID, job creation by very small establishments

Chart 1: Asymmetrical job market performance



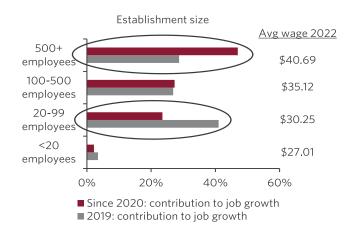
Source: Statistics Canada, CIBC

Chart 2: More jobs for educated workers



Source: Statistics Canada, CIBC

Chart 3: Strong hiring by larger establishments



Source: Statistics Canada, CIBC

(less than 20 employees) and those who employ between 100 and 500 employees was in line with their pre-COVID contribution. Where we see a significant difference is among very large employers that saw their share rising notably during COVID, at the expense of smaller establishments that employ between 20-99 employees. Given that the average wage in establishments with more than 500 employees is 35% higher than the average wage paid by establishments with 20-99 employees, it is clear that this deviation from the pre-COVID distribution is working to lift the current average wage.

Another asymmetrical behavior can be seen in self-employment. Since the beginning of COVID, the number of self-employed in Canada fell by no less than 175,000, taking its share in total employment from 17.3% pre-COVID to 15.4% — the lowest reading since the early 1980s (Chart 4, left). Given that on average self-employed earn 30% less than paid employees (Chart 4, right), that drop again suggests an upward pressure on the average wage, as those self-employment jobs

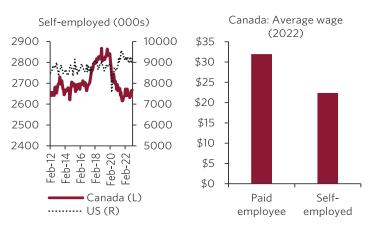
were replaced by higher paying paid employment positions¹. Note that we haven't seen the same trajectory in the US where the share of self-employment in total employment is in fact higher than it was pre-covid. Why? We are not sure. Stay tuned.

Higher share of low tenure workers puts downward pressure on average wage

Not everything works to reduce the actual wage growth, however. With the upheaval of the labour market created by wave after wave of layoffs and rehiring during the pandemic, the distribution of employee tenure has also changed. The extremely tight labour market of the past year has also encouraged many to seek new opportunities, though the turnover rate didn't climb as much in 2022 in Canada as it did in the US. Now of course, in general, job changers, those who leave a job to jump into another one, tend to have the highest wage growth, and will by definition have low tenure. But that is generally a small portion of the workforce (less than 1%). More generally, the more tenure you get with your employer, the higher your wage. For instance, the average wage of someone with one-to-two-year tenure is about 10% more than someone who has been with their current employer for less than a year. That means that a change in the tenure profile of the workforce also has implications for average wages. And with a concentration in lower tenure now relative to pre-pandemic (Chart 5), that means that the average wage should be lower, all else equals.

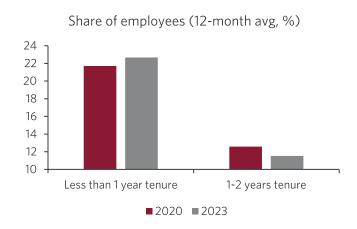
Putting it all together, we can decompose wage growth into the parts that are due to compositional changes, and what represents actual wage growth (Chart 6). To avoid double counting, we control for the occupation mix of employees, which should mostly cover changes to the average establishment size and educational level, as discussed above. The change in the occupation distribution of employees since 2019 accounts for about 20% of the overall wage growth over

Chart 4: Self-employment in Canada hasn't recovered lost ground



Source: Statistics Canada, CIBC

Chart 5: rising share of low tenure workers

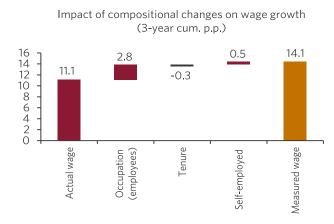


Source: Statistics Canada, CIBC

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Published wage measures are for employees only, so official statistics would not be impacted by the change in the share of self-employed.

Chart 6: composition factor accounted for one fifth of wage inflation



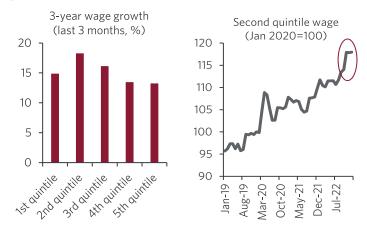
Source: Statistics Canada, CIBC

the past 3 years. Changes in tenure offset a small portion of this effect. Finally, and though measured wages are for employees only, the large drop in the number of self-employed in Canada means that overall wages would have grown 0.5p.p. less over the past three years than if the share of self-employed had stayed constant, assuming average wage growth was the same across both types of workers. That means that overall, about a fifth of measured wage growth is attributable to compositional changes. That can explain at least some of the gap between wage growth as measured by surveys, such as the LFS, and perceived wage growth as reported in the Bank of Canada's Canadian Survey of Consumers Expectations.

Low-wage workers finally get pay increase

But that doesn't mean that parts of the economy have not seen impressive wage growth, particularly in areas where the vacancy rate remains elevated. Back in November of last year, we questioned what at the time seemed like an inappropriate wage response to significant shortages in lower-skilled jobs. Since then, it appears that the forces of supply and demand have started to reassert themselves. A decomposition by quintile shows that wages have grown markedly at the bottom of the distribution, particularly in the second quintile (Chart 7).

Chart 7: 2nd quintile seeing some recent acceleration in wage pressure



Source: Statistics Canada, CIBC

This growth has been especially pronounced in the last quarter of last year, and corresponds with a reduction in vacancies, suggesting that firms were finally able to recruit workers, even if that cost them extra.

Interestingly, the distribution of wage growth does not reflect a change in the mix of occupations. Indeed, even within occupation, most of the wage growth occurred at the bottom of the distribution, with almost 90% of occupations seeing the largest wage growth in the bottom two quintiles of their wage distribution. Overall, many occupations tied to sales, such as those in retail, or supply chain logistics contributed to the impressive wage growth observed in the second quintile. Considering those were in high demand, that suggests that firms had to react to start clearing the labour market.

The Canadian labour market is tight, but the headline wage figures overstate its strength. The dramatic change in the composition of labour is responsible for no less than one-fifth of current observable wage inflation. A simple compositional reversal to the mean could eliminate a notable portion of today's wage pressures. The Bank of Canada is well aware of this issue, but market participants should also look beyond the headline wage numbers and pay attention to the composition effects.

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