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Remarks

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A Look Under the Hood of Canada's Job Market

Introduction

It is a pleasure to be here in Toronto today, and I'd like to thank the Toronto Region Board of Trade for the invitation.

In many ways, 2019 has gotten off to a challenging start. What's happening in the housing market here at home, lower oil prices, the trade conflict between the United States and China, and Brexit are top of mind for all of us.

Canadians will be more confident facing these challenges if they feel secure in their jobs. This is vital to your bottom lines as business people: without secure, good-paying work, sooner or later demand for your products and services will suffer.

For central bankers like me, the job market is a bellwether of financial health *and* a useful gauge of inflation pressures. And by many measures, the labour market in Canada is in good shape. The unemployment rate is at its lowest level in records going back more than 40 years. Firms across the country tell us that it's difficult to fill openings. I suspect many employers here in Toronto can relate.

These are signs of labour market strength. Certainly, many are benefiting from the positive overall environment. Not everyone is, though; recent layoffs in the auto sector have touched many families in this region, and there have been layoffs and closures elsewhere in the country. Moreover, wages overall in Canada are not rising as fast as we would expect given how low unemployment is.

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Today I will look under the hood of the Canadian labour market to answer a few important questions:

- How well is the job market really doing?
- If firms are finding it so tough to fill jobs, why don't they just offer higher wages?
- What structural factors could weigh on wage growth going forward?

The answers to these questions will help the Bank find the right path for interest rates to meet our inflation objective. They will also help businesses and governments develop strategies to boost Canada's prosperity over the longer term.

So, how well is the job market really doing?

Let's start with a few basic facts.

Last year, the economy added a net 163,000 jobs, all full-time positions. The unemployment rate fell to 5.6 per cent, a historic low. The participation rate for prime-age workers (those aged 25 to 54) is around 87 per cent, near its all-time high.

If that sounds positive, it's because it is. However, it raises the question for the Bank of Canada of whether the job market is at a point where inflation pressures are starting to build. If you use the trend or "natural" rate of unemployment as a guide—that's the rate that puts neither upward nor downward pressure on inflation—then, at first glance, the answer could be yes.¹ That's because our most recent staff analysis puts Canada's trend or natural rate of unemployment in the range of 5½ to 6½ per cent.²

However, I think this conclusion would be too hasty. The natural rate of unemployment is like dark matter in physics. Estimates are subject to great uncertainty, perhaps even more so than with other useful economic concepts like potential output. They also move around as the structure of the economy changes. The natural rate of unemployment in Canada was estimated to be around 9 per cent during the 1990s—it was brought down in large part by labour market reforms, although estimates in real time only captured these changes with a lag.³

¹ The term "non-accelerating inflation rate of unemployment," or NAIRU, is often used interchangeably with "natural rate of unemployment." NAIRU comes from a framework that includes an "accelerationist" Phillips curve. Accelerationist Phillips curves are no longer commonly used and are not a part of the Bank's main macroeconomic models. The reason there is a trend or natural rate of unemployment is because unemployment would never fall to zero since, in a well-functioning labour market, there is always some degree of job turnover.

² See D. Brouillette, M.-N. Robitaille, L. Savoie-Chabot, P. St-Amant, B. Gueye and E. Nelson, "The Trend Unemployment Rate in Canada: Searching for the Unobservable," Bank of Canada Staff Working Paper (forthcoming).

³ The experience of other countries is very similar. Estimates of natural rates of unemployment have fallen over the past two decades. For example, the Congressional Budget Office's estimate for the US natural unemployment rate has fallen from a peak of around 6.2 per cent in the late 1970s to around 4.6 per cent now.

This uncertainty means that it is imperative to look beyond such measures of “full” or maximum employment toward other indicators of labour market slack. In this instance, the Bank has pointed to relatively subdued wage growth as a possible sign that the job market may have more room to run.

Economic theory tells us that when the actual jobless rate is at the natural rate, an economy is essentially at full employment. At that point, we would expect wages to be rising at the same pace as the target inflation rate plus the trend rate of productivity growth. This is because the strongest underlying factors that determine worker pay in real terms are how productive workers are and their value to an employer’s production process.⁴ So, for Canada, this implies wage growth of around 3 per cent—2 per cent for inflation and 1 per cent for trend productivity growth.

Wage growth has picked up considerably to average about 2½ per cent in 2018, compared with 2 per cent over the past five years.⁵ But we are still shy of what one would expect in a tight labour market.

The story is similar in the United States. The US jobless rate has been below 4 per cent for a while. This is much lower than the estimate of the US natural rate—currently pegged at around 4½ per cent.⁶ Yet, wage gains only recently reached the sum of inflation and productivity growth.

In Canada, regional and sectoral factors can explain a lot of why wage growth has been tame. The steep drop in oil prices that occurred in the second half of 2014 had an impact that rippled across Canada and is still being felt. Wage gains in energy-intensive regions continue to lag behind those in the rest of the country.

To give you a sense of how big a deal this is, wage growth in the third quarter of 2018 was just under 2 per cent in Alberta, Saskatchewan, and Newfoundland and Labrador. It was about three-quarters of a percentage point higher in Ontario and Quebec, so closer to the 3 per cent one would expect.

⁴ For more detail on how wages are determined, see *The Economy, Plain and Simple* article that we released today.

⁵ This is according to the Bank of Canada’s composite wage measure, called the “wage-common.” This measure is created by extracting the common signal from four sources of wage data (the National Accounts; the Productivity Accounts; the Survey of Employment, Payrolls and Hours; and the Labour Force Survey) and filtering out indicator-specific movements. See D. Brouillette, J. Lachaine and B. Vincent, “[Wages: Measurement and Key Drivers](#),” Bank of Canada Staff Analytical Note No. 2018-2 (January 2018); and J. Lachaine, “[Applying the Wage-Common to the Provinces](#),” Bank of Canada Staff Analytical Note No. 2018-16 (May 2018).

⁶ For further detail, see Congressional Budget Office, “[The Budget and Economic Outlook: 2019 to 2029](#)” (January 2019). Differences in Canadian and US unemployment rates stem from differences in how statistics agencies define unemployed workers and those not participating in the labour force. For more detail, see R. Bender, “[Measuring Employment and Unemployment in Canada and the United States – a Comparison](#),” Statistics Canada (January 18, 2016).

That divergence makes sense when you consider that investment and jobs in energy-intensive regions respond to oil prices. In fact, there was a massive increase in employment in these regions from 2000 to the end of 2014, and they led wage growth. With much lower oil prices since 2015, employment in the oil and gas sector has fallen by about 20 per cent—that is about 30,000 jobs.

Other goods-producing sectors, such as manufacturing and agriculture, are also becoming less prominent employers.⁷ Instead, a range of service sectors have contributed to job growth, in exactly the places you would expect given longer-term trends. Digitalization has led to a burst of jobs in computer system design—up by around 40 per cent over the past five years. There has also been a boom in health-related jobs, particularly elder care.

Almost all the jobs created in services have been full-time, and about two-thirds have been in industries that pay higher-than-average wages. Over the past year, service-sector wage gains were much stronger than those in the goods sectors.⁸

Yet, even after accounting for these regional and sectoral factors, wage growth overall is still a bit short of what one would expect at this stage.

This is particularly puzzling when you consider what businesses are telling us about how hard it is to fill jobs. Firms in our latest *Business Outlook Survey* reported one of the highest levels of labour shortages since the Great Recession. And job vacancies continue to rise, now totalling about 550,000.

Why aren't labour shortages driving up wages?

If the right workers are so hard to attract, why not simply offer more money? Many firms are doing just that. However, other factors must be holding back wages, or the national numbers would be higher. As far as I can tell, no one has found a smoking gun. But there are at least a couple of compelling suspects.

The first is that it might be difficult to find the right person for the job. Attracting the right talent is rarely just about money. I can tell you, in my business it is not easy to find all the specialized talent the Bank needs. Estimates suggest that about 1 out of every 10 jobs in Canada is affected by mismatches between the skills that the job requires and the skills that workers actually have.⁹ The sectors with skills shortages are no surprise:

⁷ The share of these industries in total employment has fallen by nearly half a percentage point over the past five years to 17 per cent.

⁸ Based on data from Statistics Canada's monthly Survey of Employment, Payrolls and Hours, average year-over-year wage growth in 2018 was 2.8 per cent in the services sector compared with 1.8 per cent in the goods sector.

⁹ Bank of Canada calculation, using material from Employment and Social Development Canada, "[Canadian Occupational Projection System \(COPS\): Imbalances Between Labour Demand and Supply \(2017-2026\)](#)" (2017).

health care and the digital economy top the list. Meanwhile, sectors like manufacturing and natural resources have a surplus of people with the required skills.

The second suspect is a sense of caution. People may be reluctant to search for a better job even if they would like one. The data bear this out. Turnover in the Canadian job market, a process known as job “churn,” is relatively low these days.¹⁰ Higher churn usually means higher wages, because the people willing to change jobs—to trade up—typically drive wage gains in the economy. Job churn is especially sluggish in oil-producing provinces, where wage gains have been most restrained.¹¹ As a comparison, job churn in the United States has recovered more quickly, in part because the oil price shock was positive for the US expansion. That churn has supported US wage growth.

Another suspect is geography. Canada is a beautiful country, but its sheer size does not help. The data show that Canadians have become more open over the past few decades to relocating for new opportunities.¹² Still, it is no small thing to pull up stakes and move to a new city or province, often far from friends and family. If you are fortunate enough to find a job that is a good match for your skills and ambition, you still have to ask yourself: Will housing be affordable? Will the commute be a nightmare? Will my partner be able to find meaningful employment too?

I’ll bet a few people in this room have had prize candidates slip away once they realized that they could not afford Greater Toronto Area housing prices, or were not keen to spend hours commuting to work every day if they lived further out.

As the expansion continues, history tells us that job churn will pick up as employment continues to grow. This should lead to more employers finding it necessary, and worth their while, to offer higher wages.

¹⁰ Job churn is technically the sum of all workers who change jobs from an existing job, enter the workforce by obtaining a job, leave their job (voluntarily or not) or quit the labour force altogether (e.g., through retirement or becoming a discouraged worker). Aside from the lingering effects of the oil price shock, the aging workforce may also be contributing to slow job churn. Older workers tend to value stability more than younger workers do.

¹¹ See O. Kostyshyna and C. Luu, “The State of Labour Market Churn in Canada,” Bank of Canada Staff Analytical Note No. 2019-4 (January 2019).

¹² Interestingly, labour mobility has increased significantly in the last 20 years. Bank staff have found that the mean absolute difference in employment rates between provinces has converged to be the same as the difference between US states. See D. Amirault and N. Raj, “[Canadian Labour Market Dispersion: Mind the \(Shrinking\) Gap,](#)” Bank of Canada Staff Analytical Note No. 2016-3 (March 2016).

What structural factors could weigh on wage growth going forward?

All that said, some forces that have been weighing on wage growth are structural, and therefore are likely to persist. In fact, these forces are not unique to Canada; they are being felt in many advanced economies.¹³

How innovation is playing out in the global economy is at the centre.

Technological advances have lowered demand for many types of routine jobs, both cognitive and manual, in all advanced economies, including Canada. These losses have been more than offset by jobs in other sectors that are experiencing stronger employment and wage growth. High-tech workers are the most obvious example. At the same time, more and more workers have to compete for jobs with people around the world as firms work to stay competitive in global markets.

Another effect of the most recent wave of innovation is the rise of “superstar” firms that are making the competitive landscape more challenging.¹⁴ While issues around market power are hardly new, control of valuable consumer data and of electronic platforms can act as modern impediments to competition. When a few firms dominate an industry, or a firm becomes the only major employer in town, workers have little choice but to stay in their jobs regardless of wages or other labour conditions. Consequently, those firms may feel less pressure to raise wages for many of their workers even as the job market tightens. It is not just digital firms: concentration is growing across many industries in some countries, including Canada and the United States.¹⁵ Because workers’ wages have not kept pace with gains in productivity over the last few decades, their share of income has fallen, particularly in the United States but also in Canada.

The relationship between employers and workers has also changed. We know that employers are making greater use of employment agencies and short-term contractors

¹³ See A.-K. Cormier, M. Francis, K. Hess and G. Poulin-Bellisle, “[Drivers of Weak Wage Growth in Advanced Economies](#),” Bank of Canada Staff Analytical Note No. 2019-3 (January 2019).

¹⁴ Autor et al. (2017) document evidence showing that US industries have become more concentrated on average (see D. Autor, D. Dorn, L. F. Katz, C. Patterson and J. van Reenen, “[The Fall of the Labor Share and the Rise of Superstar Firms](#),” National Bureau of Economic Research Working Paper No. 23396 [May 2017]). De Loecker and Eeckhout (2018) show that firm markups have risen globally, a sign of weaker competition, particularly in North America and Europe (see J. De Loecker and J. Eeckhout, “[Global Market Power](#),” National Bureau of Economic Research Working Paper No. 24768 [June 2018]).

¹⁵ The rate of industrial concentration for Canada, specifically, is historically high: economists at Innovation, Science and Economic Development Canada estimate that the median concentration of Canadian industries in the early 2000s was about 75 per cent higher than in the United States. See M. Duhamel and S. Crépeau, “[Competition Intensity in Canada: A Critique of Recent OECD Findings](#),” Industry Canada Working Paper No. 2008-09. In the United States, such “monopsony” power can be seen in the use of no-poaching agreements among firms and non-compete contracts for workers. These are less common in Canada, but for the US experience see A. B. Krueger, “[Reflections on Dwindling Worker Bargaining Power and Monetary Policy](#)” (luncheon address at the Jackson Hole Economic Symposium, Jackson Hole, Wyoming, August 24, 2018) and the references there-in.

to replace salaried employees. Unionization rates in the private sector are down. And we hear from labour market experts that this has changed the social contract between companies and their workers.

The gig economy has also created a new set of jobs in Canada and elsewhere that reduces the bargaining power of workers as well. These non-standard jobs may have advantages, such as the ability to work as needed—Uber drivers come to mind—but many workers in these jobs indicate that they would prefer more stability. A recent Bank survey of Canadians found that roughly one-third of respondents were participating in some form of non-standard or gig employment.¹⁶ For many it was as a side job to top up income. These workers were more likely to be young and to live in provinces where jobless rates are historically high. By our count, the number of people in Canada doing non-standard work because of weak economic conditions who would rather be doing something more formal is equivalent to about 700,000 full-time positions.

To be sure, monetary policy can do little to directly influence structural issues affecting the labour market and the wider economy. My job is to keep inflation low and stable so that people like you in the business community can operate in a predictable environment that supports sustainable economic growth.

That said, there is considerable scope for other public policies, and for businesses, to enhance the long-term prosperity of workers—your customer base—and by extension the economy.

We all recognize the importance of investing heavily in the right skills for the digital economy, and for other growing sectors like elder-care services. While governments may be on the front lines, businesses need to play a stronger role in partnering with schools and universities. We want more students to gain pertinent experience *and* to develop the working relationships that foster entrepreneurship. This has been happening for years. For instance, about two-thirds of University of Waterloo students are in co-op placements with firms across Canada. Other schools, such as Carleton University, are expanding their links to locally based tech industry leaders. And it does not stop once you have made the hire. More businesses need to invest in their employees throughout their careers. Many tell us that is exactly what they are doing, through intensive in-house training.

What is less prominent in discussions on how to improve the job market is supporting worker mobility—this would help businesses attract the right people for the job. Affordable housing is front and centre. It is to a large extent an issue of supply. Then

¹⁶ See O. Kostyshyna and C. Luu, “The Size and Characteristics of Informal (“Gig”) Work in Canada,” Bank of Canada Staff Analytical Note (forthcoming). For another example of how economists are trying to get a handle on the size and characteristics of the gig economy, see the Oxford Internet Institute’s [Online Labour Index](#), which uses real-time tracking to measure supply and demand in online freelance labour across many countries and occupations.

there is the issue of transportation infrastructure in major job markets. And supporting mobility also includes removing barriers to interprovincial trade.

Finally, let's not forget that the competitiveness of Canadian businesses is at the foundation of a robust job market. The tax changes made by the federal government last autumn are a positive step in this regard and should lead to more investment in capacity and productivity. Higher productivity would make it easier for wages to rise faster without increasing inflation pressures. Strategies geared to developing and adopting new technologies in a digital and data-driven economy—across all sectors—will also be critical to our economic potential.

Conclusion

It is time to wrap up.

Despite a challenging start to the year, the labour market in Canada is in a solid place overall. It is worth looking under the hood of the job market to better understand emerging inflation pressures and what strategies might add to Canada's prosperity.

Some of the weakness in wage growth can be explained by continued adjustment in energy-intensive regions to lower oil prices. There are also some structural factors both inside and outside Canada that may continue to weigh on overall wage growth.

That said, we also need to be mindful of stronger wage gains and signs of labour shortages in other parts of the economy. Monetary policy must be forward-looking. As you know from our latest outlook published a couple of weeks ago, the recent weakness in oil prices and softness in housing mean that we expect growth to slow temporarily. We expect the economic expansion to pick up again after this detour, in the second quarter of 2019. This should lead to a pickup in wage growth as well.

There are risks on both sides of this outlook, so we will continue to pay close attention to wages and to other developments that are driving our projection for inflation. This includes how oil prices, the Canadian housing market and global trade policy evolve.

Rest assured that the Bank of Canada will do its part to meet our inflation objective.

And as I've just discussed, businesses and governments can help build an even more vibrant job market by investing in education and training, encouraging labour mobility, and improving the competitiveness of Canadian companies.