Have Canadians become more productive during COVID-19?

A lot of discussion surrounding the economic effects of COVID-19 has focused on labour productivity. More specifically, how the introduction of stay-at-home orders, PPE, and government stimulus measures like CERB and wage subsidies will affect workers in the various sectors. This is important because, in the long-run, changes in sectoral labour productivity are determinants of nominal wages and hence, labour allocation (Borio et al., 2015). Changes in labour allocation and sectoral productivity are very interesting as there is a significant amount of variance across countries as to how these measures respond to recessionary shocks. This implies that there may be a strong link between government policy and long-run labour allocation and productivity. As we will see, the COVID-19 shock has flipped the historical data on its head, at least in context of Canada.

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Let’s start by looking at overall labour productivity across all sectors. As we can see, the second quarter of 2020 saw the largest single period increase in labour productivity ever experienced in Canada. The single period increase is irrelevant in the long run as it was the result of the mass layoffs in the quarter combined with a proportionally smaller than expected decrease in output. The most important, observation we can see in the figure is that productivity has settled at a higher point than before the crash.

This result is very unexpected for several reasons. First and foremost is the fact that COVID-19 has forced businesses to operate under conditions that are not theoretically conducive to labour productivity. Work-from-home, PPE, shut-downs associated with outbreaks and contact tracing should theoretically put downwards pressure on labour productivity, yet we continue to see sustained growth in this metric. Now, a second and equally important observation is that this result is not inherent to recessions in Canada. One might be tempted to argue that increased labour productivity is a natural result of recessionary periods as companies reduce the least productive staff. In the same figure we can see that in the shaded recessionary periods as defined by OECD metrics, labour productivity has either fallen or stagnated in the 4 previous examples; the most relevant of these being during the 2008 financial crisis.

Sectoral Trends

Now, the Canadian economy is not a homogenous number of firms making the same product under the same circumstances, so, let’s look at the sectoral breakdown. Breaking this result into individual industries we can observe an interesting phenomenon. Very few individual industries have experienced significant labour productivity gains. Of the 16 different industries that were examined, only 5 experienced an increase in labour productivity, indicating that gains in the total measure came from labour reallocation rather than individual industry productivity gains. Unfortunately for many, this rules out the productive home office theory but still does not explain why the COVID recession is contradictory to previous evidence on the Canadian labour market.

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Let’s highlight some specific industries that benefited from this reallocation.

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Finance, Insurance, Real Estate, Rental and Leasing

Already the largest industry by value, employment in the financial industry has grown by approximately 5% from pre-pandemic levels and there are several benefits and concerns about this trend. First among these is sustainability, the growth in the financial sector is likely the result of a few phenomenon in Canada, chief among which is the massive growth in investment and savings levels since the pandemic began. Currently the Canadian savings rate sits at ~12.7%, nearly 3x the 25-year historical average. (*Canada Household Saving Rate | 1961-2020 Data*, n.d.). This savings boom, in combination with near-zero interest have created a massive tide of liquidity in financial markets and hence, large demand for new financial products as a sink for that liquidity. Questions about the sustainability of this growth are worth considering but are beyond the scope of this analysis. For now, we will see Canadian labour productivity continue to benefit from reallocation towards a highly productive industry.

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Forestry, Fishing, Mining, Quarrying, Oil and Gas

The oil, gas and mining industries have had a wild ride during the pandemic. From oil prices briefly going negative in April of 2020 to the beginning of what many are calling the beginning of a new commodities super cycle, there seems to be no predicting the future for this industry. Beyond the headlines surrounding oil prices and copper for electric cars, the industry has been one of the few Canadian industries hiring during the pandemic, also increasing employment hours by 5% since pre-pandemic levels. This may be even more important than the changes in the financial industry as it represents a reversal of the long-run trend. The same questions of sustainability surrounding the financial industry are also relevant for oil and gas as we cannot determine to what degree the rebound is fueled by a speculative rebound in prices vs actual demand. Recessionary periods are historically and naturally associated with lower oil prices so seeing a return of oil prices to pre-pandemic levels is likely the result of the same speculative boom that has fueled growth in the financial industry. The question that arises in both these industries is what is going to happen once the economy reopens, savings are drawn down, and interest rates rise again.

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Summary

These observations really open more questions than they answer, and we will be able to speak more definitively on them as more data comes in. For now, we can raise some serious doubts about Canada’s ability to maintain higher productivity levels and hence future growth prospects as current trends appear to be reliant on the temporary speculative behaviour resulting from the massive injections of liquidity by both governments and central banks. This is a serious issue as if the current injections of liquidity and high unemployment rates do not beget higher future growth prospects as the Canadian economy will then be at risk of a plethora of damaging economic phenomena including debt default, liquidity traps, and further secular stagnation.