Labour productivity, hourly compensation and unit labour cost, third quarter 2020

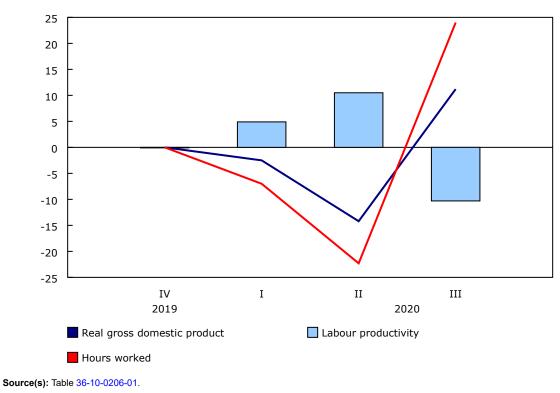
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Record decline in productivity following record increase the previous quarter

Labour productivity of Canadian businesses dropped 10.3% in the third quarter, as hours worked rebounded faster than business output. This was the largest quarterly decrease on record.

Chart 1 Hours worked in Canadian businesses rebound more strongly than real output

quarterly % change



The decline in labour productivity in the third quarter was in stark contrast to the previous quarter, when productivity saw a record 10.5% increase. While the second quarter was marked by lockdown measures imposed because of the COVID-19 pandemic, the third quarter saw a strong recovery in hours worked and, to a lesser degree, in output, as many businesses resumed their activities.

Compared with the same quarter the previous year, productivity rose 4.0% in the third quarter, up for the tenth consecutive quarter. This year-over-year gain was mostly the result of the record quarterly growth in the second quarter, which was only partially offset by the historic decrease in the third quarter.

In the third quarter, easing of the restrictions implemented to contain the pandemic led to a significant rebound in hours worked and business output, both of which saw record gains. Given the very low level to which hours worked fell in the previous quarter, hours worked posted a much sharper rebound than business output, which resulted in an exceptional decrease in labour productivity in the third quarter.





In the third quarter, small and medium-size businesses recovered more worked hours lost than large enterprises. Moreover, self-employed workers—usually owners of small businesses—recovered almost three times more their losses in hours worked than paid workers. Consequently, a reallocation of hours worked occurred in favour of smaller businesses for which economies of scale are limited. That explains, in part, why the productivity declined.

Activities resumed following the easing of restrictions in the third quarter, which also led to a historic gain in employment, while hours worked per job saw little change.

Business output rebounds in the third quarter, but remains well below the previous year's level

In the third quarter, real gross domestic product (GDP) of businesses picked up, posting a sharp rise of 11.2%, which came on the heels of a record 14.2% drop in the second quarter. Nevertheless, it remained well below its pre-pandemic level. Compared with the third quarter of 2019, the GDP of businesses was down 6.9%.

Hours worked also rebound, but in much greater proportions

Hours worked in the business sector posted a significant increase in the third quarter (+24.0%), in sharp contrast with the 22.3% decline in the second quarter. However, despite this strong rebound in the third quarter, hours worked were 10.5% below the level observed in the same quarter of 2019.

Hours worked rose strongly in both goods-producing businesses (+25.2%) and service-producing businesses (+23.4%). All industry sectors rebounded in the third quarter. However, finance and insurance was the only sector to get close to its level posted in the third quarter of 2019 (-0.4%), given that hours worked in this sector fell much less in the second quarter.

This sharp rebound in hours worked in the third quarter largely reflects the gain in employment (+24.2%), whereas hours worked per job edged down 0.2%. The number of people who had more than one job rose by just over one-third (+36.5%). In contrast, the number of people who were absent without pay fell by just over half (-52.0%), which contrasts with the situation in the second quarter.

Impact of the COVID-19 pandemic on hours worked in the business sector, third quarter of 2020

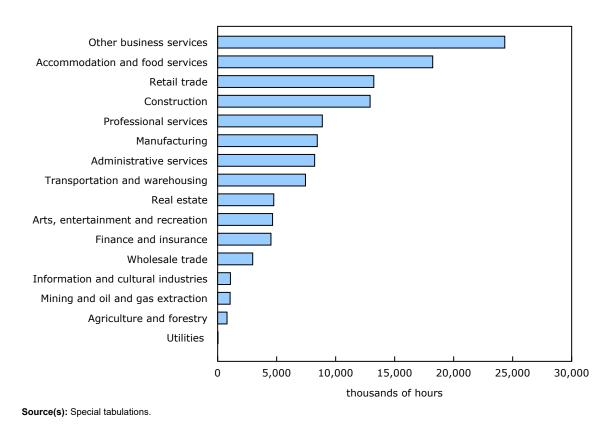
The estimates of hours worked in the business sector are primarily based on data from the Labour Force Survey (LFS). Note that for hours worked (used to measure productivity), both main and secondary jobs are considered—not only the main job as in the LFS. The main survey for the reference period that includes the months of July, August and September did not capture the significant job losses outside the reference weeks. To account for those, the estimates of hours lost were adjusted using a compilation of questions added to the LFS questionnaire in August, September and October for the respective reference months of July, August and September. These adjustments are reflected in the data on hours worked and related measures (including labour productivity) for the third quarter of 2020.

Despite the fact that restrictions imposed on account of the pandemic were eased in the third quarter, many workers continued to have reduced working hours, while others worked more overtime hours. In the business sector, if only those in the labour force or on paid leave are considered, 182.1 million hours of work were lost in the third quarter, while 60.5 million hours of overtime were worked. The result was a net loss of 121.1 million hours. These hours are added to the 450.0 million hours lost in the first half of 2020.

Hours lost continue in some industry sectors, but to a lesser extent than in the second quarter

Overall, hours lost continued to be unevenly spread across industry sectors in the third quarter. However, hours lost by sector in the quarter were much smaller than in the second quarter. The "other business services" sector was the most affected for a second straight quarter, posting a loss of 24.3 million hours. In the second quarter, this sector (-48.3 million hours) lost double the number of hours worked, as a result of pandemic restrictions imposed on many of its activities, particularly repair and maintenance services, personal services, and laundry services.

Chart 2 Work hours lost in the third quarter of 2020 as a result of COVID-19, by industry, business sector



Productivity down in all industry sectors in the third guarter

In the third quarter, productivity fell in both goods-producing businesses (down 13.1%, following a 10.6% gain in the previous quarter) and service-producing businesses (down 10.1%, following a 13.8% increase in the previous quarter).

Overall, all industry sectors saw a decline in productivity in the third quarter, but to varying degrees. Agriculture and forestry, construction, real estate and other business services posted the largest decreases. In contrast, these sectors were the largest contributors to the overall growth in productivity in the second quarter.

In the United States, the labour productivity of businesses rose 1.6% in the third quarter, following a marked increase of 2.3% in the previous quarter. Like in Canada, real GDP (+9.5%) of American businesses and hours worked (+7.8%) rebounded to post record increases. In the second quarter, real GDP and hours worked posted record decreases of 10.8% and 12.9% respectively.

Unit labour costs fall for the first time in two years

Labour costs per unit of output in Canadian businesses fell 1.5% in the third quarter, after seven consecutive quarters of growth. This was the largest quarterly decrease since the first quarter of 2016 (-1.9%)

This drop in unit labour costs in the third quarter reflects a record decrease in average compensation per hour worked (-11.6%), which was sharper than the historic decline in productivity (-10.3%).

After two quarters of depreciation, the average value of the Canadian dollar relative to the US dollar rose 4.0% in the third quarter. Given this appreciation, unit labour costs in US dollars for Canadian businesses were up 2.5%, following an increase of 1.3% in the previous quarter.

In comparison, unit labour costs of American businesses fell 2.4% in the third quarter, after rising 2.2% in each of the first two quarters of 2020. This was the largest decrease since the first quarter of 2009 (-3.6%).

Sustainable development goals

On January 1, 2016, the world officially began implementation of the 2030 Agenda for Sustainable Development—the United Nations' transformative plan of action that addresses urgent global challenges over the next 15 years. The plan is based on 17 specific sustainable development goals.

The release "Labour productivity, hourly compensation and unit labour cost" is an example of how Statistics Canada supports the reporting on the global sustainable development goals. This release will be used to help measure the following goal:



Note to readers

Volatile data in recent quarters

Data from one quarter to the next have been quite volatile, reflecting the impacts of the pandemic on economic activity and the labour market. Given the sharp changes in the first three quarters of 2020, the percentage changes from the same quarter a year earlier better reflect the changes in productivity and its related measures than percentage changes from quarter to quarter. Note that the quarterly data in table 1 of this release are presented in the usual format: the percentage change from the same quarter (q/q-4), and the change from the previous quarter (q/q-1).

Revisions

With this release on labour productivity and related measures, data were revised back to the first quarter of 2016 at the aggregate and industry levels. These revisions are consistent with those incorporated in the release on quarterly gross domestic product (GDP) by income and expenditure and the release on monthly GDP by industry, published yesterday.

This release also incorporates the 2019 as well as revised 2017 and 2018 benchmark data on provincial and territorial labour productivity and related measures, published on August 18, 2020.

Productivity measures

The term **productivity** in this release refers to labour productivity. For the purposes of this analysis, labour productivity and related variables cover the business sector only.

Labour productivity is a measure of real GDP per hour worked.

Unit labour cost is defined as the cost of workers' wages and benefits per unit of real GDP.

The approach to measuring real output in the business sector differs from the one that is used in the estimates by industry. For the business sector, output is measured using the expenditure-based GDP approach at market prices. This approach is similar to that used for the quarterly measures of productivity in the United States. However, output by industry is based on the value added at basic prices.

All the growth rates reported in this release are rounded to one decimal place. They are calculated with index numbers rounded to three decimal places, which are now available in data tables

All necessary basic variables for productivity analyses (such as hours worked, employment, output and compensation) are seasonally adjusted. For information on seasonal adjustment, see Seasonally adjusted data – Frequently asked questions.

Next release

Labour productivity, hourly compensation and unit labour cost data for the fourth quarter will be released on March 4, 2021.

Table 1 Business sector: Labour productivity and related variables for Canada and the United States¹ – Seasonally adjusted

| | Third quarter 2018 | Fourth quarter 2018 | First quarter 2019 | Second quarter 2019 | Third quarter 2019 | Fourth quarter 2019 | First quarter 2020 | Second quarter 2020 | Third quarter 2020 |
|-----------------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| | | | | % change fr | om the previo | ous quarter | | | |
| Canada | | | | | | | | | |
| Labour productivity | 0.5 | -0.4 | 0.2 | 0.3 | 0.4 | -0.1 | 4.9 | 10.5 | -10.3 |
| Real gross domestic product (GDP) | 0.9 | 0.0 | -0.0 | 1.3 | 0.4 | -0.0 | -2.5 | -14.2 | 11.2 |
| Hours worked | 0.3 | 0.4 | -0.3 | 1.0 | 0.1 | 0.0 | -7.0 | -22.3 | 24.0 |
| Hourly compensation | 0.5 | 1.0 | 1.3 | 0.5 | 1.4 | 1.1 | 5.2 | 15.4 | -11.6 |
| Unit labour cost | -0.0 | 1.4 | 1.0 | 0.2 | 1.0 | 1.2 | 0.3 | 4.4 | -1.5 |
| Exchange rate ² | -1.2 | -1.0 | -0.7 | -0.5 | 1.2 | 0.1 | -1.8 | -3.0 | 4.0 |
| Unit labour cost in US dollars | -1.3 | 0.3 | 0.4 | -0.4 | 2.3 | 1.2 | -1.5 | 1.3 | 2.5 |
| United States ³ | | | | | | | | | |
| Labour productivity | 0.0 | 0.2 | 0.9 | 0.5 | 0.0 | 0.3 | -0.0 | 2.3 | 1.6 |
| Real GDP | 0.6 | 0.4 | 0.9 | 0.3 | 0.7 | 0.7 | -1.5 | -10.8 | 9.5 |
| Hours worked | 0.5 | 0.2 | -0.0 | -0.2 | 0.7 | 0.4 | -1.5 | -12.9 | 7.8 |
| Hourly compensation | 1.1 | 0.4 | 2.1 | 0.4 | -0.0 | 0.8 | 2.2 | 4.5 | -0.8 |
| Unit labour cost | 1.1 | 0.2 | 1.2 | -0.1 | -0.1 | 0.4 | 2.2 | 2.2 | -2.4 |
| | 2015 | 2016 | 2017 | 2018 | 2019 | Fourth quarter 2019 | First quarter 2020 | Second quarter 2020 | Third quarter 2020 |
| | | % change | from the previ | ous year | | % change f | rom the same yea | ne quarter of the ear | e previous |
| Canada | | | | | | | | | |
| Labour productivity | -0.6 | 0.1 | 2.0 | 0.4 | 0.7 | 0.8 | 5.5 | 16.3 | 4.0 |
| Real GDP | 0.3 | 0.5 | 3.5 | 2.3 | 1.7 | 1.6 | -0.8 | -16.0 | -6.9 |
| Hours worked | 0.9 | 0.4 | 1.5 | 1.9 | 1.0 | 0.8 | -6.0 | -27.7 | -10.5 |
| Hourly compensation | 2.0 | -1.3 | 2.7 | 3.2 | 3.6 | 4.3 | 8.3 | 24.4 | 8.4 |
| Unit labour cost | 2.7 | -1.4 | 0.7 | 2.8 | 2.9 | 3.4 | 2.7 | 7.0 | 4.3 |

| Unit labour cost | 2.7 | -1.4 | 0.7 | 2.8 | 2.9 | 3.4 | 2.7 | 7.0 | 4.3 |
|--------------------------------|-------|------|-----|-----|------|-----|------|-------|------|
| Exchange rate ² | -13.6 | -3.6 | 2.1 | 0.1 | -2.3 | 0.1 | -1.1 | -3.5 | -0.8 |
| Unit labour cost in US dollars | -11.2 | -4.9 | 2.9 | 2.8 | 0.5 | 3.5 | 1.5 | 3.3 | 3.5 |
| United States ³ | | | | | | | | | |
| Labour productivity | 1.5 | 0.4 | 1.3 | 1.6 | 17 | 1.8 | 0.9 | 2.7 | 4.3 |
| Real GDP | 3.8 | 1.9 | 2.7 | 3.5 | 2.4 | 2.6 | 0.2 | -11.0 | -3.2 |
| Hours worked | 2.3 | 1.5 | 1.4 | 1.9 | 0.7 | 0.8 | -0.8 | -13.3 | -7.2 |
| Hourly compensation | 2.9 | 1.1 | 3.6 | 3.4 | 3.6 | 3.3 | 3.3 | 7.6 | 6.7 |
| Unit labour cost | 1.4 | 0.7 | 2.3 | 1.8 | 1.9 | 1.4 | 2.4 | 4.8 | 2.4 |
| | | | | | | | | | |

1. Calculations of growth rates are based on index numbers rounded to three decimal places.

2. The exchange rate corresponds to the Canadian dollar value expressed in US dollars.

3. US data are from Bureau of Labor Statistics (BLS), Productivity and Costs: Third Quarter 2020, Preliminary - published in news release, November 5. Due to rounding, the annual growth rates presented in this table can sometimes differ slightly from the annual rates published by the BLS. **Source(s):** Table **36-10-0206-01**.

Table 2 Labour productivity and related measures, by business sector industry, seasonally adjusted, third quarter 2020

| | Real gross domestic product (GDP) | Hours worked | Labour productivity | Total compensation per hour worked |
|---|---|---------------------|------------------------|--|
| | | % change from the p | revious quarter | |
| Business sector, goods | 8.8 | 25.2 | -13.1 | -12.4 |
| Agriculture, forestry, fishing and hunting | 1.1 | 27.0 | -20.4 | -16.8 |
| Mining and oil and gas extraction | -1.6 | 10.9 | -11.3 | -11.8 |
| Utilities | 1.7 | 8.8 | -6.5 | -12.7 |
| Construction | 8.4 | 33.7 | -18.9 | -14.5 |
| Manufacturing | 18.7 | 22.0 | -2.8 | -8.8 |
| Business sector, services | 11.0 | 23.4 | -10.1 | -11.3 |
| Wholesale trade | 16.7 | 18.3 | -1.4 | -6.0 |
| Retail trade | 19.7 | 22.3 | -2.1 | -9.2 |
| Transportation and warehousing | 12.5 | 15.9 | -3.0 | -9.3 |
| Information and cultural industries | 4.0 | 16.2 | -10.5 | -8.1 |
| Finance and insurance, and holding companies | 2.5 | 10.9 | -7.6 | -8.4 |
| Real estate and rental and leasing | 13.3 | 30.3 | -13.0 | -19.0 |
| Professional, scientific and technical services | 7.1 | 18.8 | -9.9 | -11.0 |
| Administrative and support, waste management and remediation services | 14.2 | 20.7 | -5.4 | -9.7 |
| Arts, entertainment and recreation | 21.7 | 50.5 | -19.1 | -9.2 |
| Accommodation and food services | 54.2 | 60.1 | -3.7 | -15.4 |
| Other business services | 20.1 | 36.1 | -11.7 | -11.8 |

Source(s): Table 36-10-0207-01.

Available tables: 36-10-0206-01 and 36-10-0207-01.

Definitions, data sources and methods: survey number 5042.

The Economic accounts statistics portal, accessible from the *Subjects* module of our website, features an up-to-date portrait of national and provincial economies and their structure.

The Latest Developments in the Canadian Economic Accounts (13-605-X) is available.

The User Guide: Canadian System of Macroeconomic Accounts (13-606-G) is available.

The Methodological Guide: Canadian System of Macroeconomic Accounts (13-607-X) is available.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; **STATCAN.infostats-infostats.STATCAN@canada.ca**) or Media Relations (613-951-4636; **STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca**).