

Labour productivity, hourly compensation and unit labour cost, fourth quarter 2022

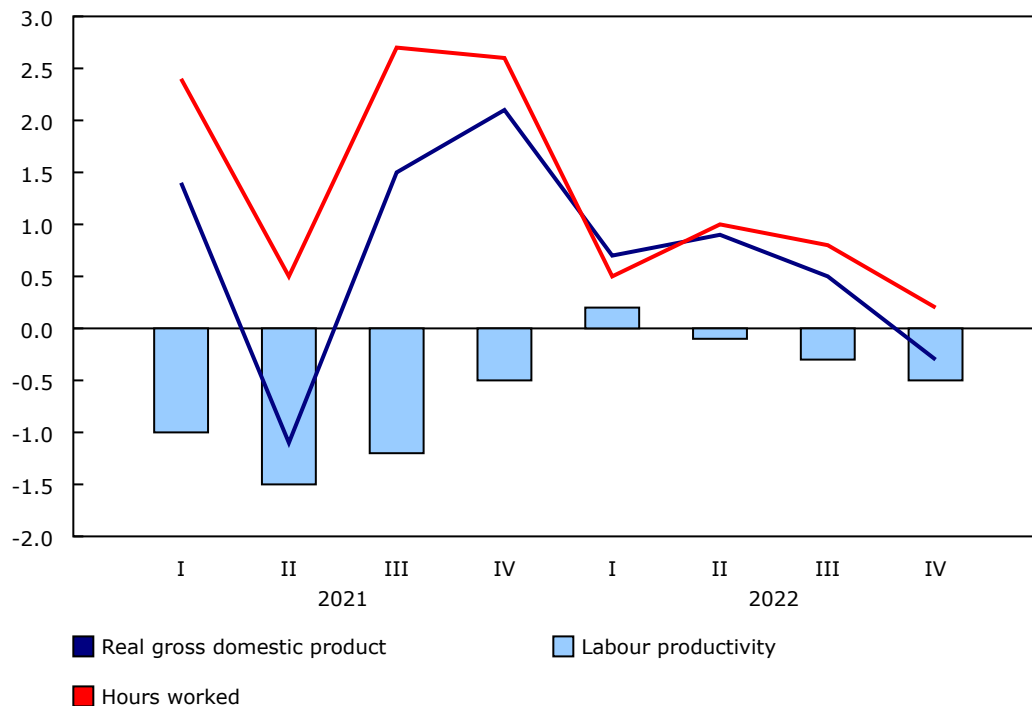
Released at 8:30 a.m. Eastern time in *The Daily*, Friday, March 3, 2023

Productivity declines again amid a slowdown in both business output and hours worked

The labour productivity of Canadian businesses fell 0.5% in the fourth quarter, a third consecutive quarterly decline.

Chart 1
Business output declines for the first time in six quarters, while growth in hours worked decelerates

quarterly % change



Source(s): Table 36-10-0206-01.

The decline in productivity in the fourth quarter primarily reflects the contraction in business output after five quarters of growth, while hours worked continue to increase, but at a much slower pace.

Between the fourth quarter of 2019—the last quarter before the start of the COVID-19 pandemic—and the fourth quarter of 2022, labour productivity decreased 0.1% on average per quarter.

The real gross domestic product (GDP) of businesses fell 0.3% in the fourth quarter after growing for five consecutive quarters.

Growth in hours worked slows considerably in the fourth quarter

Growth in hours worked in the business sector, which had reached 0.8% in the third quarter, fell sharply to 0.2% in the fourth quarter, the slowest pace in 10 quarters.



In the fourth quarter, hours worked were up in 8 of the 16 industry sectors, while in transportation and storage services, they were essentially unchanged for a second consecutive quarter.

Goods-producing businesses are primarily responsible for the overall decline in productivity

In the fourth quarter, the productivity decline in the business sector was driven mainly by goods-producing businesses, with productivity decreasing by 1.0% after three consecutive quarters of growth. In contrast, productivity in service-producing businesses (+0.1%) showed a positive growth for the first time since the second quarter of 2020, which was marked by the initial lockdown measures associated with the pandemic.

Overall, productivity declined in 7 of the 16 main industry sectors and was unchanged in manufacturing and professional services.

Unit labour costs increase for a fourth consecutive quarter

The unit labour costs—that is, the cost of labour per unit of output—of Canadian businesses increased for a fourth consecutive quarter, up 1.1% in the fourth quarter.

This increase in unit labour costs reflects the growth in average compensation per hour worked (+0.6%) combined with the decrease in productivity (-0.5%).

Annual averages for 2022

On average, for all of 2022, labour productivity of Canadian businesses declined 1.5%, after a historic decline (-6.2%) in 2021 and record growth (+8.8%) caused by the pandemic in 2020.

The annual decline in productivity in 2022 is the result of real business GDP growth (+3.6%) being lower than the growth in hours worked (+5.2%).

In 2022, the decline in productivity in service-producing businesses (-2.0%) was partly offset by productivity growth in goods-producing businesses (+0.9%).

Sustainable development goals

On January 1, 2016, the world officially began implementing the [2030 Agenda for Sustainable Development](#)—the United Nations' transformative plan of action that addresses urgent global challenges over the following 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

Revisions

With this release, data were revised back to the first quarter of 1997 at the aggregate and industry levels. These revisions are consistent with those incorporated in the annual benchmarks on provincial and territorial labour productivity and related measures, released on February 10, 2023. They are also consistent with those incorporated in the quarterly gross domestic product (GDP) by income and expenditure and monthly GDP by industry, released on February 28, 2023. In addition, all series (except for GDP and the implicit price deflator) at the aggregate level were subject to revision going back to 1981, as a result of revisions to the values for the 2012 reference year. However, the resulting revisions to growth rates were negligible.

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 first quarter of 2023 will be released on June 7.

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

	Fourth quarter 2020	First quarter 2021	Second quarter 2021	Third quarter 2021	Fourth quarter 2021	First quarter 2022	Second quarter 2022	Third quarter 2022	Fourth quarter 2022
	% change from the previous quarter								
Canada									
Labour productivity	-1.6	-1.0	-1.5	-1.2	-0.5	0.2	-0.1	-0.3	-0.5
Real gross domestic product (GDP)	2.4	1.4	-1.1	1.5	2.1	0.7	0.9	0.5	-0.3
Hours worked	4.0	2.4	0.5	2.7	2.6	0.5	1.0	0.8	0.2
Hourly compensation	-1.2	-0.2	2.4	0.8	-0.9	3.3	1.6	0.4	0.6
Unit labour cost	0.3	0.8	4.0	2.1	-0.4	3.1	1.7	0.7	1.1
Exchange rate ²	2.1	3.0	3.0	-2.5	0.0	-0.5	-0.9	-2.2	-3.9
Unit labour cost in US dollars	2.5	3.7	7.2	-0.5	-0.4	2.6	0.9	-1.6	-2.8
United States³									
Labour productivity	-1.1	0.7	0.7	-0.5	1.1	-1.5	-1.0	0.3	0.8
Real GDP	1.3	2.0	2.1	0.6	2.2	-0.6	-0.4	0.9	0.8
Hours worked	2.5	1.2	1.4	1.2	1.1	0.9	0.6	0.6	0.0
Hourly compensation	2.1	-0.3	1.8	1.7	2.0	0.5	0.7	0.8	1.1
Unit labour cost	3.3	-1.0	1.1	2.3	0.9	2.1	1.7	0.5	0.3
	2018	2019	2020	2021	2022	First quarter 2022	Second quarter 2022	Third quarter 2022	Fourth quarter 2022
	% change from the previous year					% change from the same quarter of the previous year			
Canada									
Labour productivity	0.3	0.4	8.8	-6.2	-1.5	-3.0	-1.6	-0.6	-0.7
Real GDP	2.7	1.9	-6.8	5.2	3.6	3.2	5.3	4.2	1.8
Hours worked	2.4	1.5	-13.9	11.5	5.2	6.4	7.0	4.9	2.5
Hourly compensation	3.0	2.8	12.8	-1.4	5.2	5.7	4.9	4.5	6.0
Unit labour cost	2.7	2.4	3.6	5.1	6.8	8.9	6.6	5.1	6.7
Exchange rate ²	0.1	-2.3	-1.1	7.0	-3.6	0.0	-3.8	-3.5	-7.3
Unit labour cost in US dollars	2.7	0.0	2.5	12.4	2.9	8.9	2.5	1.4	-1.0
United States³									
Labour productivity	1.6	1.8	4.3	2.4	-1.2	-0.3	-2.0	-1.2	-1.4
Real GDP	3.5	2.6	-3.4	7.7	2.2	4.4	1.8	2.1	0.7
Hours worked	1.9	0.8	-7.4	5.1	3.5	4.7	3.9	3.3	2.2
Hourly compensation	3.5	3.7	8.0	4.9	4.6	6.2	5.0	4.0	3.1
Unit labour cost	1.8	1.9	3.6	2.5	5.9	6.6	7.1	5.3	4.6

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: Fourth Quarter and Annual Averages 2022, Preliminary — published in news release, February 2. 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,
fourth quarter 2022

	Real gross domestic product	Hours worked	Labour productivity	Total compensation per hour worked
	% change from the previous quarter			
Business sector, goods	-0.6	0.5	-1.0	0.6
Agriculture, forestry, fishing and hunting	1.3	-0.5	1.8	0.0
Mining and oil and gas extraction	-2.6	-0.6	-2.0	0.7
Utilities	-0.8	-1.6	0.8	8.0
Construction	0.8	2.3	-1.4	0.2
Manufacturing	-0.7	-0.8	0.0	0.5
Business sector, services	0.3	0.1	0.1	0.5
Wholesale trade	0.4	-0.9	1.3	1.2
Retail trade	-0.3	-1.5	1.3	1.8
Transportation and warehousing	1.6	0.0	1.6	0.8
Information and cultural industries	-0.1	1.0	-1.0	0.2
Finance and insurance, and holding companies	-0.2	0.4	-0.6	-0.8
Real estate and rental and leasing	-1.1	-0.5	-0.5	3.3
Professional, scientific and technical services	1.0	1.0	-0.0	-0.1
Administrative and support, waste management and remediation services	0.1	0.7	-0.6	-1.0
Arts, entertainment and recreation	4.0	2.5	1.5	-2.5
Accommodation and food services	-0.5	0.9	-1.4	-0.9
Other business services	0.9	0.2	0.7	2.1

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 the Statistics Canada website, features an up-to-date portrait of national and provincial economies and their structures.

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; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).