Latest Developments in the Canadian Economic Accounts

An analysis of Canadian business support programs in response to the global COVID-19 pandemic

by Xiaobao Lin and Matthew Hoffarth

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An analysis of Canadian business support programs in response to the global COVID-19 pandemic

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Introduction

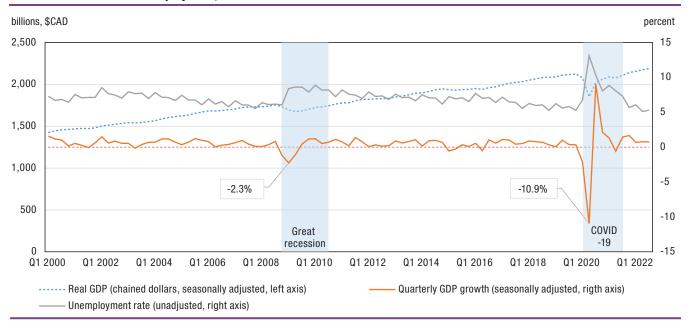
On March 11, 2020, the World Health Organization (WHO) officially declared a pandemic related to the emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the resultant and accelerating progression of COVID-19, the concomitant disease, across the globe1. This event caused, and continues to cause, significant disruptions in people's health and way of life, the global economy, and the financial system. Like other countries, Canada was greatly affected by this event, as all levels of government enacted a range of public health measures including lockdowns and other restrictions meant to slow the spread of COVID-19 and ease the strain on the healthcare system. These led to significant, but predictable impacts on the economy including a steep rise in unemployment², a drastic drop in revenues and output among many industries³, and an overall disruption to economic activity including consumer expenditures on many goods and services. Compared with the great recession and global financial crisis that affected the Canadian economy starting in late 2008, the COVID-19 pandemic has had a more acute impact akin to a natural disaster. During the global financial crisis, real gross domestic product (GDP) fell 2.3% in the first guarter of 2009 whereas in the second guarter of 2020 GDP contracted 10.9% (Chart 1). The economic rebound in the COVID-19 era was also noticeably sharper. By the end of 2021, real GDP had reached its pre-pandemic level with the easing of restrictions and the pickup in consumer demand. Labour markets largely recovered as the participation rate nearly returned to pre-pandemic levels (Chart 2). However, new challenges to economic expansion arose in the form of rising and persistent inflation, conflict induced commodity disruptions, and supply-chain instabilities.

I. Timeline: WHO's COVID-19 response (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline)

^{2.} Statistics Canada. Table 14-10-0287-01 Labour force characteristics, monthly, seasonally adjusted and trend-cycle, last 5 months

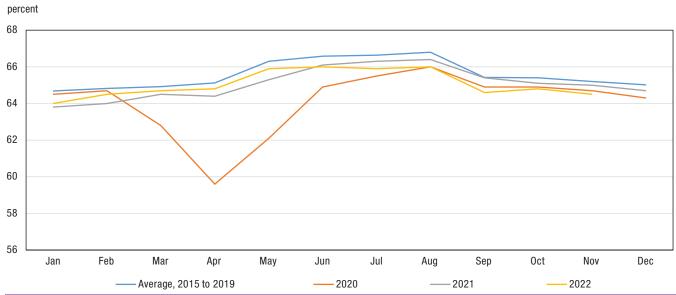
^{3.} COVID-19's impact on the financial health of Canadian businesses: An initial assessment (https://www.bankofcanada.ca/2021/05/staff-analytical-note-2021-8)

Chart 1 Canadian real GDP and unemployment, 2000 to 2022



Note: The shaded areas represent the Great recession (from Q4 2008 to Q3 2010) and COVID-19 pandemic (Q1 2020 to Q3 2021). Both timespans are measured as the first qurater of decline in real GDP up to and including the quarter when real GDP reached pre-event levels. **Source:** Statistics Canada, tables 14-10-0077-01, 36-10-0104-01.

Chart 2
Labour participation rate from 2020 to 2022, not adjusted for seasonality



Source: Statistics Canada, table 14-10-0017-01.

In response to the COVID-19 pandemic, governments around the word implemented policies, both fiscal and monetary, and launched support programs meant to blunt the economic and financial distress created by the pandemic and associated health measures. These efforts were unprecedented in both their size and swiftness, with significant amounts of funds distributed from government coffers within weeks of the WHO declaration. In Canada, the federal government announced numerous financial support measures over the course of 2020, with new programs coming online in 2021 as successors to previously phased out initiatives and more targeted

interventions as the situation continued to evolve. These programs served both households and businesses with some supports directly funded and administered by the federal government while others were funded by the federal government but administered by federal government business enterprises⁴.

The Canadian COVID-19 Business Support Measures database

This introductory paper will focus on specific COVID-19 support programs that were available to businesses in Canada since 2020 with the objective of providing a high level, but comprehensive overview of the overall uptake of business support programs across a range of characteristics. To accomplish this, data across an array of programs has been organized in terms of structure and classifications (i.e., industry, business size) and integrated into a consistent dataset referred to as the Canadian COVID-19 Business Support Measures database (CCBSM). Results are drawn from a **preliminary version** of the CCBSM_{LE}, which is based on the legal entity concept (i.e., incorporated and unincorporated businesses and partnerships) and captures information from the program applicant perspective. As such, the CCBSM_{LE} represents a consolidated administrative file covering claimants at the same level they would file taxes for their business⁵. For groups of corporations that comprise larger and complex enterprises, each legal entity is treated as its own unique business. For the purposes of this paper, the term business and legal entity will be used interchangeably. **The process used to allocate program amounts by industry, sector, and business size as well as the vintage of source data result in estimates that may not necessarily align with official program costs.**

Table 1 provides an overview of the eight measures covered by the CCBSM, which account for the bulk of government outlays on COVID-19 business support and covers the major programs announced by the federal government. However, this list is not exhaustive, and measures enacted by other levels of government as well as smaller programs are omitted. In addition, future policies may still be adopted. As such, the CCBSM data referenced in this paper includes information updated as of November 2nd, 2022.

Table 1
Summary of business support programs found in the Canadian COVID-19 business support measures database

COVID-19 Measure	Brief Description
Canada Emergency Wage Subsidy (CEWS)	A subsidy for eligible businesses, charities, and non-profits covering salary, wages, certain taxable benefits, and fees/commissions.
Canada Recovery Hiring Program (CRHP)	A subsidy for eligible businesses, charities, and non-profits covering salary, wages, certain taxable benefits, and fees/commissions.
Canada Emergency Commercial Rent Assistance (CECRA)	A subsidy for eligible businesses, charities, and non-profits covering 50 percent of three to six monthly rent payments for commercial property between the months of April and September 2020.
Canada Emergency Rent Subsidy (CERS)	A subsidy for eligible businesses, charities, and non-profits covering real or immovable property that does not generate primarily rental income.
Tourism and Hospitality Recovery Program (THRP)	A combined wage and rent subsidy targeting specific sectors of the tourism and hospitality industry that continued to face difficulties due to COVID-19.
Hardest-Hit Business Recovery Program (HHBRP)	A combined wage and rent subsidy targeting those businesses that continued to face significant challenges, but who did not qualify for the THRP.
Canadian Emergency Business Account (CEBA)	An interest-free loan for eligible businesses and non-profits of up to \$60,000. Repaying the balance of the loan on or before December 31, 2023 will result in loan forgiveness of up to 33 percent (up to \$20,000).
Large Employer Emergency Financing Facility (LEEFF)	An interest-bearing term loan for large employers of at least \$60 million. Eligible businesses wer required to have significant operations in Canada or support a significant workforce in Canada.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

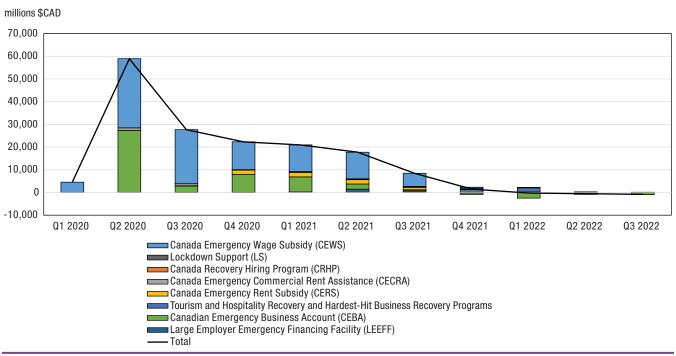
^{4.} Government business enterprises are entities that are controlled by government, but which operate at market prices.

^{5.} Many support programs for businesses were also available to non-profit institutions serving households (NPISH) such as charities that were similarly able to apply for wage subsidies and other supports. While businesses account for the lion's share of overall business support measure uptake, entities classified as NPISH are also included as recipients.

Business supports peak at outset of pandemic

Within a month after the pandemic was officially declared, the federal government had announced and began to roll out a set of measures, some effective retroactively, to help counter the initial widespread lockdowns. The two largest of these programs were CEWS and CEBA, each accounting for roughly half of the business support funds provided in the second quarter of 2020 (Chart 3).

Chart 3
Business support programs, quarterly



Note: CEBA and LEEFF amounts reflect the change in the stock of loans. These quarterly estimates may not align to the annual values from the CCBSM given different data vintages and allocation methods.

Source: Statistics Canada, table 36-10-0687-01.

Wage subsidies served as the primary vehicle of support

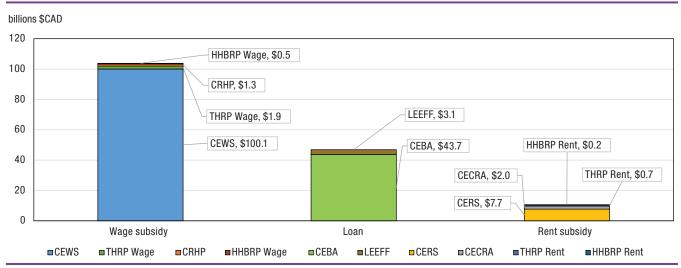
Overall, from March 2020 to June 2022, wage and rent support programs totalled approximately \$114 billion⁶, representing 71% of the total funds provided to businesses while loans accounted for the remaining 29% (\$47 billion). As the largest portion of the total measures, wage subsidies⁷ accounted for 62% of funds disbursed with CEWS as the dominate contributor representing 96% of total wage subsidies (Chart 4). CEWS was the principal wage subsidy program during the first year of the pandemic in 2020 as real GDP declined 5.1% annually and the unemployment rate reached almost 10% for the year (Chart 5), peaking in the month of May at 13.4%. During this period many businesses scaled back production and furloughed workers. Against this backdrop, wage subsidies such as CEWS helped businesses that were significantly impacted by the pandemic to retain their workforce until economic activity resumed. Without CEWS, the unemployment rate would likely have been higher as these subsidies acted as a buffer to lessen financial hardships faced by businesses and their employees.

^{6.} Includes CEWS, CHRP, CECRA, CERS, THRP, and HHBRP. Excludes the Temporary Wage Subsidy (TWS).

^{7.} In the macroeconomic accounts, support payments made to non-profit institutions serving businesses and other non-business sectors are classified as current transfers, rather than subsidies. For the sake of brevity and because they account for a small share of overall support this distinction is not made in the data as presented and subsidies includes both payments to businesses and non-businesses.

^{8.} Statistics Canada. Table 14-10-0287-01 Labour force characteristics, monthly, seasonally adjusted and trend-cycle, last 5 months

Chart 4
Business support programs classified by type

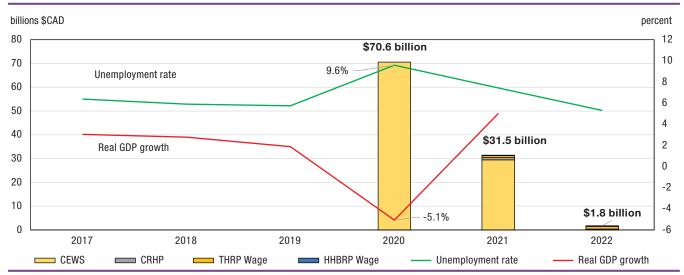


Note: Wage subsidies include: CEWS, CRHP, and the wage portion of THRP and HHBRP. Loan includes: CEBA and LEEFF. Rent subsidies include: CERS, CECRA, and the rent portion of THRP and HHBRP. In the macroeconomic accounts, support payments made to non-profit institutions serving businesses are classified as current transfers, rather than subsidies. For the sake of brevity and because they account for a small share of overall support this distinction is not made in the data as presented.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

In 2021, with the rising vaccination rate and the re-opening of businesses, the general economic situation improved and the pool of affected businesses and the degree to which they were affected became smaller. As the unemployment rate trended lower, business revenues recovered, and the formula and qualification criteria for determining CEWS subsidies evolved⁹, the level of wage subsidies fell by more than half from 2020 to 2021. By 2022, the employment situation across the country had recovered to pre-pandemic levels. CEWS and CERS, having ended in October 2021, were replaced by new programs, including the THRP and HHBRB, each offering wage and rent support to specific industries or more affected businesses. Together with CRHP, the number of applicant and eligible businesses for such subsidies decreased significantly at the end of 2021 and into 2022.

Chart 5
Evolution of wage subsidies during the pandemic

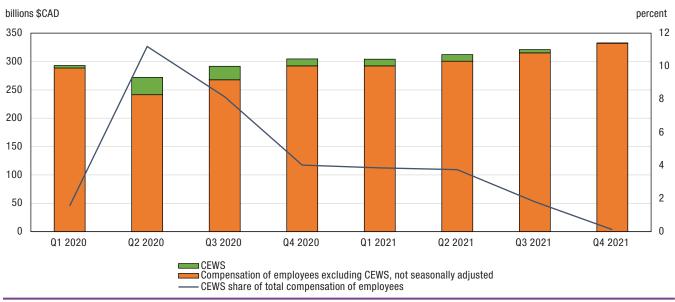


Note: The annual unemployment rate is calculated as the average of the monthly unemployment rates for a given year. Reference year 2022 includes all unemployment rates up until November. Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023; tables 14-10-0287-01, 36-10-0104-01.

^{9.} Higher levels of CEWS payments in the second and third quarter of 2020 relative to later periods are chiefly attributable to changes in the formula for determining subsidy amounts. See Discussion in Sections 2.3 and 2.4: Report on Federal Tax Expenditures - Concepts, Estimates and Evaluations 2022: part 11 - Canada.ca

Wage subsidy programs were also beneficial to households, who are the primary recipients of wages and salaries. While there was significant direct support to households in the form of government transfers via the Canada Emergency Recovery Benefit (CERB) and other household support programs, wage subsidies also bolstered household incomes. CEWS-related wage subsidies accounted for over 11% of household compensation of employees during the second quarter of 2020. In this way, CEWS provided relief to both employers and employees. Business supports in general likely benefitted employees by ensuring that businesses were able to maintain staffing levels, continue operations even if partially, weather temporary financial difficulties, and more readily resume operations once the situation improved.

Chart 6
CEWS and compensation of employees



Source: Statistics Canada, tables 36-10-0687-01 and 36-10-0103-01.

Non-financial corporations capture majority of business support dollars

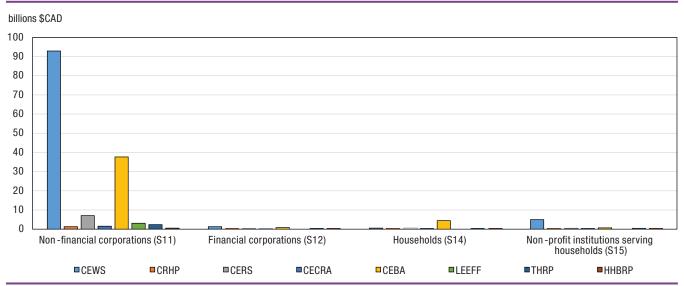
Within the macroeconomic accounts, the domestic economy is divided into institutional sectors given their different roles and economic behaviour. Broadly, these sectors include households, non-profit institutions serving households (NPISH), financial and non-financial corporations, and government. During the pandemic, the greatest flow of business supports was directed to industries concentrated in the non-financial corporations sector, which accounted for 91% (\$146 billion) of overall funds received. This was likely the result of a higher proportion of non-financial businesses that met the revenue decline thresholds and the sheer number of businesses that produce goods and non-financial services in Canada relative to other sectors. Within the financial corporations sector, a much smaller amount of support was received (\$2.5 billion), as this sector fared better during 2020 and 2021 and did not have the same eligibility for many support programs¹⁰.

Unincorporated businesses, which are classified to the household sector, received the second largest amount of funds (\$5.5 billion)¹¹. Agriculture, forestry, fishing and hunting as well as construction, transportation and warehousing and other services (except public administration) were the predominant recipient industries within the household sector, together representing almost half of what households received overall. Agriculture and construction are two notable industries where there is sizeable activity undertaken by unincorporated businesses. Additionally, unincorporated businesses tend to feature a higher percentage of smaller businesses making programs such as CEBA popular whereas many unincorporated businesses may not be significant employers resulting in lower uptake of wage subsidy programs.

^{10.} Between 2019 and 2020, the gross operation surplus of non-financial corporations declined slightly while that of financial corporations increased. Statistics Canada, "Current and capital accounts – Corporations", Table 36-10-0116-01.

^{11.} In the macroeconomic accounts, unincorporated businesses are included within the household sector given the difficulty in fully delineating their financial information from that of their household owners. A common form of unincorporated business is a sole proprietorship.

Chart 7
Program amounts by economic sector



Note: Loan support amounts reflect total gross amounts disbursed. Government sector not shown.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

CEWS accounts for largest distribution of funds, **CEBA** supports greatest number of businesses

According to the various policies and eligibility requirements specific to each program (i.e., size of business, industry of activity, revenue decline recorded), a business could receive varying amounts from one or more programs. The distribution and summary statistics for each program can be found in the following table:

Table 2
Summary statistics on Canadian COVID-19 business support measures

	Program recipients	Amoun	t received	Mean of amount received	Median of amount received	Standard deviation for amount received	Skewness for amount received
	count	thousands of dollars	percent	tho	usands of do	llars	measure of symmetry
Total all programs	1,056,946	161,202,489.4	100.0	153.0	60.0	2,872.3	578
Canada Emergency Wage Subsidy (CEWS)	446,936	100,063,724.6	62.1	223.9	50.2	2,532.8	214
Canada Recovery Hiring Program (CRHP)	58,064	1,336,948.7	0.8	23.0	5.8	145.5	72
Canada Emergency Commercial Rent Assistance (CECRA)	44,376	2,034,216.2	1.3	45.8	15.3	297.6	70
Canada Emergency Rent Subsidy (CERS)	223,438	7,690,835.9	4.8	34.4	14.1	106.4	46
Tourism and Hospitality Recovery Program (THRP)	29,764	684,521.9	0.4	23.0	10.5	58.2	18
Tourism and Hospitality Recovery Program (THRP)	29,303	1,918,125.7	1.2	65.5	21.4	369.4	34
Hardest-Hit Business Recovery Program (HHBRP)	20,480	160,266.7	0.1	7.8	3.9	20.3	19
Hardest-Hit Business Recovery Program (HHBRP)	10,611	481,359.6	0.3	45.4	12.4	316.5	47
Canadian Emergency Business Account (CEBA)	892,811	43,729,680.0	27.1	49.0	40.0	10.1	0.33
Large Employer Emergency Financing Facility (LEEFF)	7	3,102,810.0	1.9	443,258.6	259,470.0	420,165.5	1.7

† The CEBA value reflected above is a preliminary estimate and differs from the official estimate due to the methods used to integrate this information into the CCBSM. The official total is available at Canada Emergency Business Account.

Note: CEWS excludes amounts related to the Temporary Wage Subsidy (TWS).

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

From March 2020, when the pandemic was officially declared by the WHO, until June 2022, a total of \$161 billion of financial support went to over 1 million businesses across Canada. As the largest programs, CEWS and CEBA combined account for roughly 90% of the total business support (Table 2). CEWS, being the program active for the longest duration from March 2020 to October 2021, recorded the greatest amount of funds disbursed at over

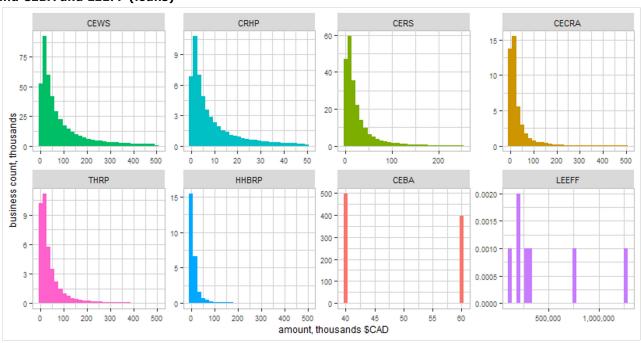
\$100 billion. This accounted for 62% of the total amount of funds received across the eight programs. In terms of number of recipients, the CEBA program outnumbered all the other programs with almost 900 thousand recipients; however, the smaller loan size of CEBA (i.e., targeting smaller businesses, which are more numerous), the absence of qualification criteria based on revenue decline, and the forgiveness aspect of the program whereby applicants could keep a portion of the borrowed funds, may have contributed to greater uptake among small businesses. CEWS and CHRP as well as CECRA and CERS were targeted measures that focused on providing wage and salary or rent support, while CEBA had broader coverage as an emergency loan program providing funds to cover various operating expenses including wage, salary and rent expense and other non-deferrable expenses.

Distribution of support programs amounts impacted by large values

On average, businesses participating in the LEEFF program received the highest amount of the eight support programs. By the design of the program, loans of \$60 million and above were made available, based on the applicant's cash flow needs for the subsequent 12 months. Next to LEEFF, the CEWS program had the next highest average amount disbursed.

Except CEBA and LEEFF (i.e., loan programs), all other programs (i.e., subsidies/transfers) had high positive skewness with a mean that was higher than the median value for the amount received. This implies a right skewed distribution (Image 1). With a skewness of over 200, CEWS had a much longer tail, as more extreme values influenced the entire distribution. At the same time, CEWS receipts produced the highest standard deviation as values were spread out over a wider range. In this case, the median is a more robust statistic compared to mean as it represents a better measure of the central distribution. Overall, because CEWS was open to many businesses it more closely mirrored the general variability seen in the size distribution of businesses. Additionally, the CEWS program underwent changes in eligibility and subsidy calculations that may have also contributed to this increased skewness. CEBA, designed to provide loans of either \$40K or \$60K to each business, possessed a symmetric bimodal distribution while LEEFF, with only a handful of participants, had a symmetric multimodal distribution.

Image 1
Distribution of amounts received for CEWS, CRHP, CERS, CECRA, HHBRP, and THRP (subsidies) and CEBA and LEEFF (loans)



Note: To make the distributions easily viewable an upper limit has been applied to remove extreme values (e.g., for CEWS, this threshold is \$500 thousand, compared to \$50 thousand for CRHP).

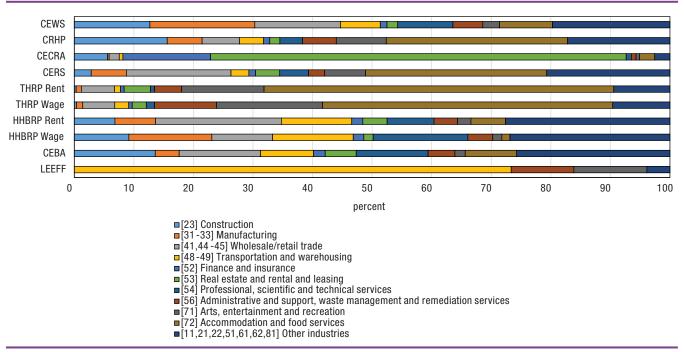
Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Program uptake varies significantly by industry

The distribution of amounts received by industry¹² can provide a clear picture of the scale of each program by economic activity (Chart 8). Across CEWS, CRHP, CERS, CEBA and HHBRP (both wage and rent portions), the distributions are relatively even as the bulk of these programs were open to all industries. On the other hand, THRP (both wage and rent portions), as its name suggests, was designed to help impacted business in the tourism, hospitality, arts, entertainment, and recreation industries. Therefore, accommodation and food services along with arts, entertainment and recreation together account for almost 70% of the total THRP claims amount. This compares with administrative and support, waste management and remediation services, which is the third largest industry after those two listed above, accounting for 9% of THRP wage and rent claims.

The CECRA program was targeted at landlords to enable lower rent expenses for tenants. Thus, landlords can be considered the direct beneficiaries with most of the funds disbursed ending up in the real estate and rental and leasing industries. Those CECRA funds outside this industry group represent businesses in other industries that may have secondary activities involving rental of commercial real estate. Compared to other programs, LEEFF only targeted seven large businesses for which the transportation and warehousing industry dominates.

Chart 8
Program amount allocation by industry, proportion (based on amounts received)



Note: Excludes businesses where no industry classification was available and public administration.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Fewer and fewer businesses involved as program uptake count increases

Most programs were implemented at the outset of the pandemic and ended in 2020 or 2021, such as CEWS, CERS, CECRA, and CEBA, whereas CRHP, THRP and HHBRP began in mid-to-late 2021. Therefore, even though a business could apply for one or more programs, it could not necessarily be involved in multiple programs simultaneously because they may have been active over different time periods. Several more recent programs were successors of preceding support measures and thus share a certain amount of continuity. If a business applied for CEWS, for instance, then it was likely to be eligible for CRHP assuming the business' situation remained challenging as per the eligibility criteria of the new program; both CRHP and CEWS shared similar requirements for

^{12.} Industries are assigned according to the North American Industry Classification System or NAICS. More information is available here: https://www.statcan.gc.ca/en/subjects/standard/naics/2022/v1/index

prospective applicants. By the same token, if a business applied for CEWS or CERS, it may also have been eligible for THRP or HHBRP, so long as it met the conditions of each program.

Table 3 Number of businesses by program uptake count

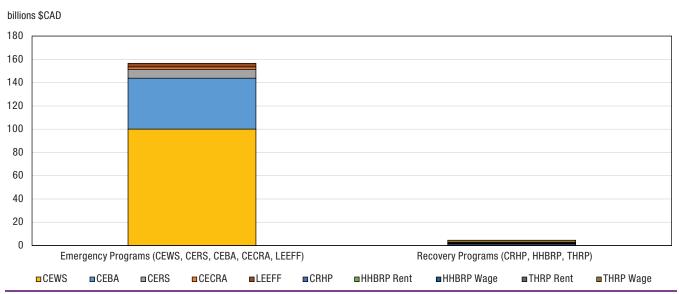
Program uptake count	Business count	Percentage
1	613,191	58.0
2	277,242	26.2
3	116,977	11.1
4	36,094	3.4
5	12,637	1.0
6	Less than 900	< 0.1
7	Less than 10	< 0.01
Total	1,056,946	100

Note: Excludes the LEEFF program.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Over the course of more than two years, around 600,000 businesses, representing nearly 60% of all participants across the seven support measures, took part in only one program (Table 3). As the program participation count increased, the number of participating businesses declined, with less than ten businesses participating in all seven programs. There are two main explanations for this trend. First, a business which is eligible for one program may not meet the requirements for another. Hence, as the program participation count increases, the overall pool of eligible businesses declines.

Chart 9
Program phases, emergency versus recovery programs



Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Second, recovery programs such as CRHP, THRP and HHBRP were implemented much later in the pandemic at a time when the general economic situation had improved, and the initial emergency programs had ended. Altogether, these three programs accounted for a relatively small portion of the entire support amount (Chart 9) and had considerably fewer recipients than the earlier programs. Businesses participating in five or more programs would have participated in one of these three.

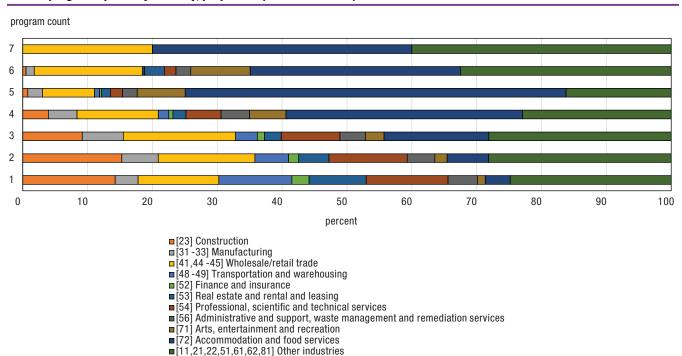


Chart 10 Overall program uptake by industry, proportion (based on counts)

Note: Excludes businesses where no industry classification was available and public administration.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

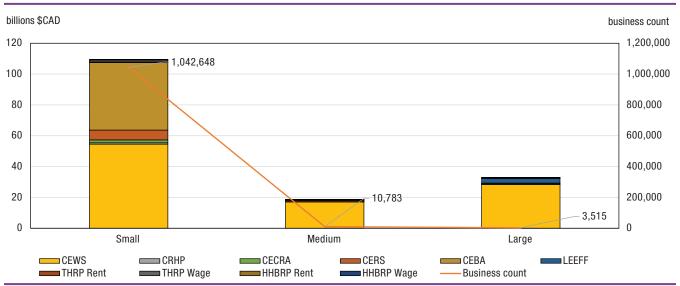
Businesses from the accommodation and food service industry tended to participate in more programs compared to other industries (Chart 10), while they represented about 7.3% of total recipients. This industry's share grew as the program participation count increased to five programs.

Small businesses receive majority of support

Businesses can be classified by size based on employee count, that is, small businesses (0 to 99 employees), medium businesses (100 to 499 employees) and large businesses (over 500 employees)¹³. Overall, small business recipients accounted for about 98.6% of total participants while only 0.3% were large businesses (Chart 11). However, the story is different when considering the amount of funds received, with 68% of funds going to small businesses compared with 20% to large businesses. On average, large businesses received more support per business. This is attributable to the fact that CEWS accounted for the lion's share of support and that CEWS applicants provide the wages and counts of eligible employees on which claim amounts are based. Thus, larger businesses or those business with more employees were able to make larger CEWS claims.

^{13.} Employee counts are based on information from annual 2020 T4 filings. They represent the total number of employees working for a particular business over the calendar year. The 2020 counts were linked to 2021 businesses to provide consistency for business size classifications.

Chart 11 Support amount by business size

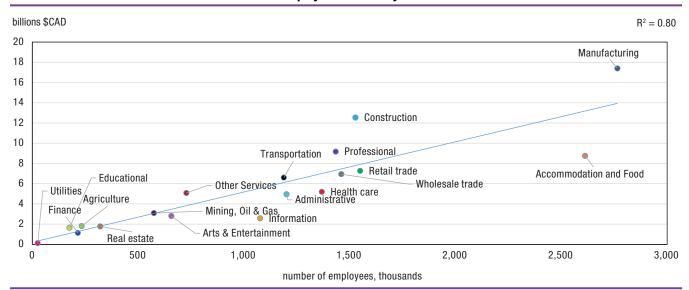


Note: Businesses with no employees are categorized as small businesses.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

At the industry level, there is a significant positive correlation between the number of employees within an industry and the CEWS support received (Chart 12). Among applicants for CEWS, manufacturing represented the greatest share of employees compared with other industries and consequently, it received the most CEWS support (Chart 13). Beyond this, another factor contributing to the difference in amounts received is the gap between employee wages by industry. In 2020 and 2021, for example, the average hourly wage rates were \$26.91 and \$27.67 in the manufacturing industry, compared to \$16.86 and \$17.18 in accommodation and food services¹⁴. This helps explain the significant discrepancy in the amount received by the two industries, even with the similar number of employees within each industry and given the maximum subsidy allowable per employee.

Chart 12 Correlation between CEWS amount and number of employees at industry level



Note: Excludes businesses where no industry classification was available and public administration.

The R-squared (R²) represents a measure of how much variance in CEWS receipts is explained by the number of employees within businesses applying for CEWS by industry. It ranges from 0 to 1 with a higher value representing a closer relationship between the two variables.

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian

^{14.} Average hourly earnings for employees paid by the hour, by industry, annual (statcan.gc.ca)

10

■CECRA

billions \$CAD

■CEBA

12

14

LEEFF

16

THRP

18

HHBRP

20

[31-33] Manufacturing [23] Construction [72] Accommodation and food services [54] Professional, scientific and technical services [48-49] Transportation and warehousing [44-45] Retail trade [81] Other services (except public administration) [62] Health care and social assistance [41] Wholesale trade [56] Administrative and support, waste management and remediation services [53] Real estate and rental and leasing [71] Arts, entertainment and recreation [11] Agriculture, forestry, fishing and hunting [21] Mining, quarrying, and oil and gas extraction [51] Information and cultural industries [61] Educational services [52] Finance and insurance

Chart 13 Industry allocation by program of amounts received

Note: Excludes businesses where no industry classification was available and public administration.

[22] Utilities

Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

-CRHP

2

CEWS

The domain of small business was CEBA, while larger businesses claim the largest share of CEWS support

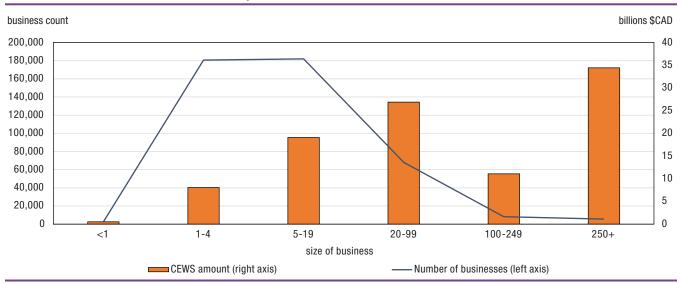
6

■CERS

Looking at the data by more granular categories of business size, most recipients of CEWS are businesses with 1 to 4 and 5 to 19 employees. The amount of CEWS support received generally increases with the greater number of employees a business has, consistent with the positive correlation mentioned previously.

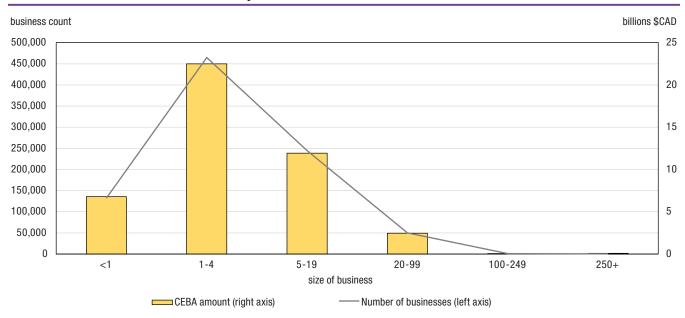
For CEBA, as with CEWS, most businesses receiving loan support had 1 to 4 employees. For this particular program, the total amount received and the number of recipients are highly related. This reflects the structure of the program for which each business could only receive \$40,000 or \$60,000, regardless of how many employees were on payroll.

Chart 14
CEWS amount received and business count by business size



Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Chart 15
CEBA amount received and business count by business size



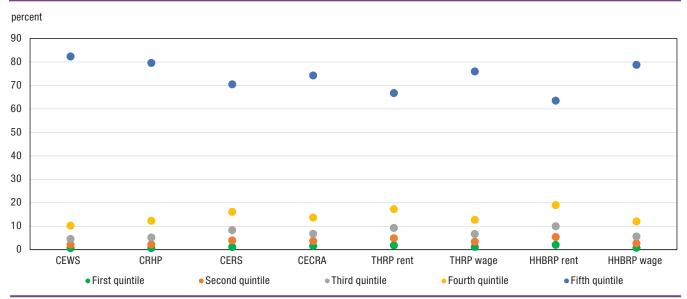
Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Quintile distribution analysis: top 20% of businesses (based on total claim amount) receive majority of support

If we rank all the businesses by the total support amount they received and assign them into five groups with equal number of businesses, then across all the programs (except CEBA and LEEFF), the quintile distribution shows that the top 20% of businesses (fifth quintile) received at least 60% of the total support amounts (Chart 16). This grows to over 80% for CEWS, higher than the same quintile among other programs. With CEWS, almost 90% of large business are in the top quintile and represent nearly all (99.9%) support received in this quintile. Consistent with the previous analysis, CEWS claims are highly related with the number of employees and, therefore, most

large businesses are classified within the top quintile. While there are still about 10% of large businesses in other quintiles, they accounted for only 0.1% of the total amounts received. In particular, around 2% of large businesses appear in the bottom quintile where, on average, they received disproportionally less than their counterparts in the top 20%. This may indicate that among larger businesses in the lower quintiles, some did not have as significant a revenue drop and therefore qualified for smaller subsidy amounts.

Chart 16
Program amount quintile distribution



Source: Statistics Canada, "Statistics Canada, An analysis of Canadian business support programs in response to the global COVID-19 pandemic", Latest Developments in the Canadian Economic Accounts (13-605-X), 2023.

Next steps

Overall, business support measures during COVID-19 were both significant in size and scope, with the uptake of many programs occurring very broadly across industries and business sizes. In terms of sectors, non-financial corporations were the main recipients of support while within this sector businesses classified to the accommodation and food services industry were significant beneficiaries in terms of the number of support programs. As these programs have ended, there remains future work in terms of analyzing other business characteristics and medium-term outcomes of support program participants. This can help reveal additional insight into the effectiveness of these programs in bolstering a return to economic activity as conditions improved while highlighting the structural shifts among businesses and industries that may have occurred because of this significant event.

A preliminary version of the $CCBSM_{LE}$ data, on which the analysis above is based, will be made available in the future along with a guide to the methodologies and data sources used.