



Household economic well-being during the Covid-19 pandemic

Group of Experts on National Accounts
Jennifer Withington, Statistics Canada



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Overview

- The Distributions of Household Economic Accounts (DHEA) are part of a larger effort to extend the System of National Accounts (SNA) to include measures of economic well-being
- The DHEA use various microdata sources to disaggregate and allocate published SNA data to various groups of households (i.e. income quintile, age, household composition etc.)
- Statistics Canada is the first statistical agency to publish sub-annual DHEA
- Hold constant the demographic and socio-economic conditions (groupings of households) of the 2019 DHEA for ease of comparison

Data sources

- Income
 - Social Policy Simulation Database (SPSD) Model Cov 3.0
 - Canada Emergency Response Benefit (CERB) microdata from Employment and Social Development Canada
- Wealth (liabilities)
 - Purchased sub-aggregate tabulations on household debt from Equifax Canada
- Consumption and Wealth (assets)
 - No sub-annual micro data available
 - Applied quarterly changes in household final consumption expenditure and assets from the published SNA data proportionally to all households



Social Policy Simulation Database (SPSD) Model Cov 3.0

- Cov Model 3.0 released in October 2020 includes:
 - Dynamic labour adjustment module
 - Probabilities of lay-off and absence from work
 - Parameters derived from the Labour Force Survey data by industry and full/part time status
 - Canada's COVID-19 Economic Response (all benefits up to September 26, 2020)
 - Provincial COVID-19 Responses (all benefits up to September 26, 2020)
- Additional parameter adjustments for the DHEA
 - New labor adjustment by industry and wage level (low, medium, high)
 - Shift from regular EI to CERB
 - People receiving sickness or regular EI on or after the week of March 15 2020 receive CERB instead
 - Increases to earnings due to overtime
 - Probabilities derived using the LFS data by industry and wage level

Additional adjustments by NEAD

- Quarterly distribution of wages and salaries by wage quintile using changes in the distribution of earnings from the LFS
 - Shift the share of wages and salaries for lowest wage persons down and up for highest wage persons
- Adjust CERB distribution by age to align with micro data from ESDC
 - Shifted CERB down for 44-64 year olds towards under 35 years (more to under 25)
- Both adjustments were made to the microdata (individuals) before rolling up to households or benchmarking to quarterly SNA indicators

Distribution of household disposable income

	2019	2020 Q1	2020 Q2	2020 Q3
Quintile 1	6.3%	6.1%	7.2%	7.1%
Quintile 2	12.8%	12.9%	14.0%	13.4%
Quintile 3	17.5%	17.7%	18.2%	17.9%
Quintile 4	23.4%	23.2%	23.0%	23.2%
Quintile 5	40.1%	40.1%	37.7%	38.3%

- In the second and third quarters of 2020 there was a slight reduction in income inequality as the gap between the lowest and highest income groups declined.
- This change was driven by increases in the disposable income of lower income households as transfers from governments exceeded losses in wages and self-employment income.

Changes in household disposable income

	2020 Q1	2020 Q2	2020 Q3	2020 Q2 (excluding Covid-19 support measures)		2020 Q1	2020 Q2	2020 Q3	2020 Q2 (excluding Covid-19 support measures)
Quintile 1	-3.6%	33.6%	2.4%	-5.3%	Under 35	-3.1%	20.1%	0.1%	-6.2%
Quintile 2	-1.2%	23.9%	-0.8%	-4.9%	35 to 44	-2.4%	12.6%	4.1%	-6.3%
Quintile 3	-0.8%	17.0%	2.2%	-5.8%	45 to 54	-2.9%	15.5%	3.6%	-5.3%
Quintile 4	-2.6%	12.9%	4.6%	-4.6%	55 to 64	-2.6%	13.9%	6.1%	-3.1%
Quintile 5	-1.9%	7.1%	5.5%	-1.4%	65+	1.3%	9.1%	3.9%	2.1%

- Lowest income and younger households recorded the largest declines in the first quarter of 2020 and the largest rebound in the second quarter
 - Second quarter was led by increases in transfers from government (introduction of Covid-19 support measures)
- Without Covid-19 support measures disposable income would have fallen in the second quarter

Change in compensation of employees

	2020 Q1	2020 Q2	2020 Q3
Quintile 1	-3.7%	-11.6%	11.0%
Quintile 2	-2.3%	-10.5%	10.9%
Quintile 3	-0.9%	-8.8%	7.7%
Quintile 4	-0.6%	-7.1%	7.7%
Quintile 5	0.6%	-5.7%	5.9%

	2020 Q1	2020 Q2	2020 Q3
Under 35	-1.6%	-7.9%	8.5%
35 to 44	0.4%	-7.9%	6.2%
45 to 54	0.0%	-7.4%	7.4%
55 to 64	-0.4%	-5.4%	6.7%
65+	-0.5%	-7.4%	8.9%

- Lowest income and youngest households recorded earlier and larger declines than other households

Change in self-employment income

	2020 Q1	2020 Q2	2020 Q3
Quintile 1	-9.0%	-25.1%	114.3%
Quintile 2	-6.0%	-6.6%	38.7%
Quintile 3	-5.9%	-8.7%	45.8%
Quintile 4	-4.6%	-4.0%	28.6%
Quintile 5	-3.3%	-3.1%	21.2%

	2020 Q1	2020 Q2	2020 Q3
Under 35	-7.8%	-4.6%	29.5%
35 to 44	-5.2%	-5.4%	31.9%
45 to 54	-5.9%	-5.4%	30.9%
55 to 64	-5.3%	-12.6%	54.9%
65+	-1.4%	-3.1%	26.5%

- Lower income and younger and pre-retirement households recorded largest declines

Changes in current transfers received

	2020 Q1	2020 Q2	2020 Q3		2020 Q1	2020 Q2	2020 Q3
Quintile 1	4.0%	45.6%	-13.6%	Under 35	20.0%	135.1%	-34.4%
Quintile 2	7.2%	56.6%	-19.0%	35 to 44	12.0%	105.8%	-29.2%
Quintile 3	9.5%	61.0%	-21.5%	45 to 54	16.3%	139.5%	-32.4%
Quintile 4	6.9%	69.6%	-23.3%	55 to 64	10.7%	69.5%	-22.6%
Quintile 5	16.1%	53.3%	-16.2%	65+	4.3%	10.1%	-0.3%

- Transfers from governments makes up the largest proportion of current transfers received by households
- The increases in the second quarter are due to the introduction of Covid-19 support measures

Impact of Covid-19 support measures

Government Covid-19 support measures as a percentage of disposable income 2020 Q1 - Q3			
Quintile 1	16.4%	Under 35	11.3%
Quintile 2	12.6%	35 to 44	8.5%
Quintile 3	10.1%	45 to 54	9.3%
Quintile 4	7.9%	55 to 64	7.7%
Quintile 5	4.3%	65+	4.2%

- Although higher income and older households did receive large proportions of the Covid-19 support measures, the impact of these measures was greater for lower income and younger households
- This is because the average value of the Covid-19 support measures was greater than the losses in wages and self-employment income

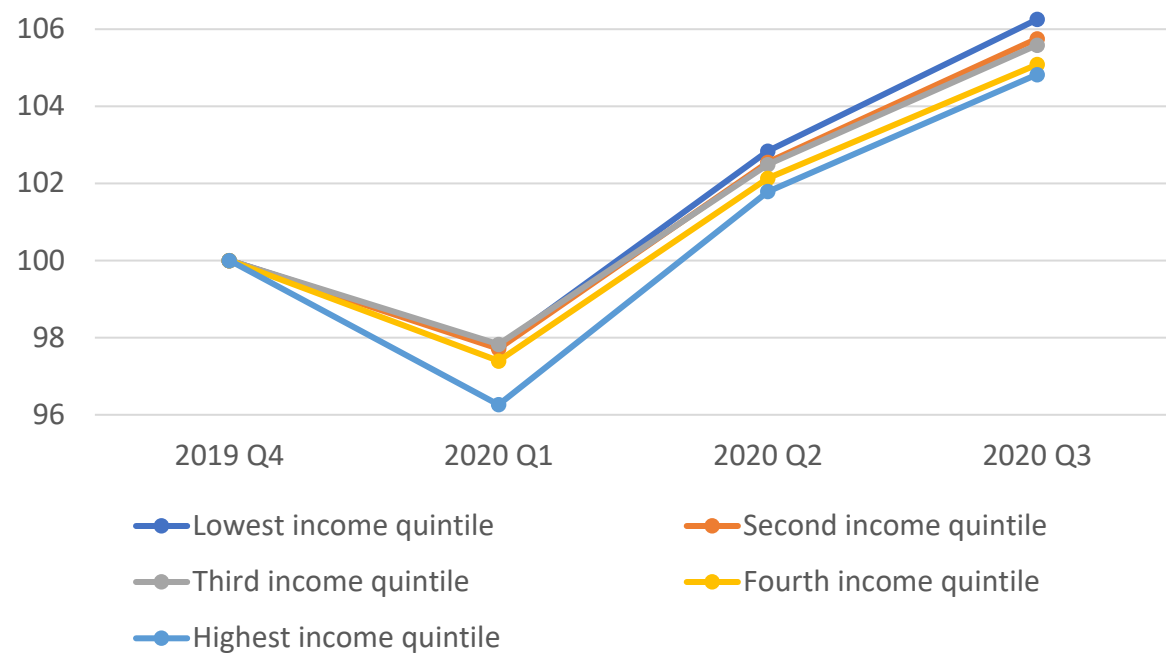
Households improve their average net saving

	2019	Q1 2020 (annual rate)	Q2 2020 (annual rate)	Q3 2020 (annual rate)
Quintile 1	-27,426	-35,768	-23,212	-29,464
Quintile 2	-12,035	-11,492	4,780	-3,524
Quintile 3	-4,156	-1,932	16,308	7,220
Quintile 4	8,948	14,248	34,936	25,760
Quintile 5	40,454	57,184	82,424	72,664
Under 35	7,220	10,028	32,204	20,524
35 to 44	14,963	19,300	39,060	28,840
45 to 54	11,324	14,920	40,892	29,164
55 to 64	668	2,684	22,564	15,792
65+	-16,918	-13,292	-2,920	-7,552

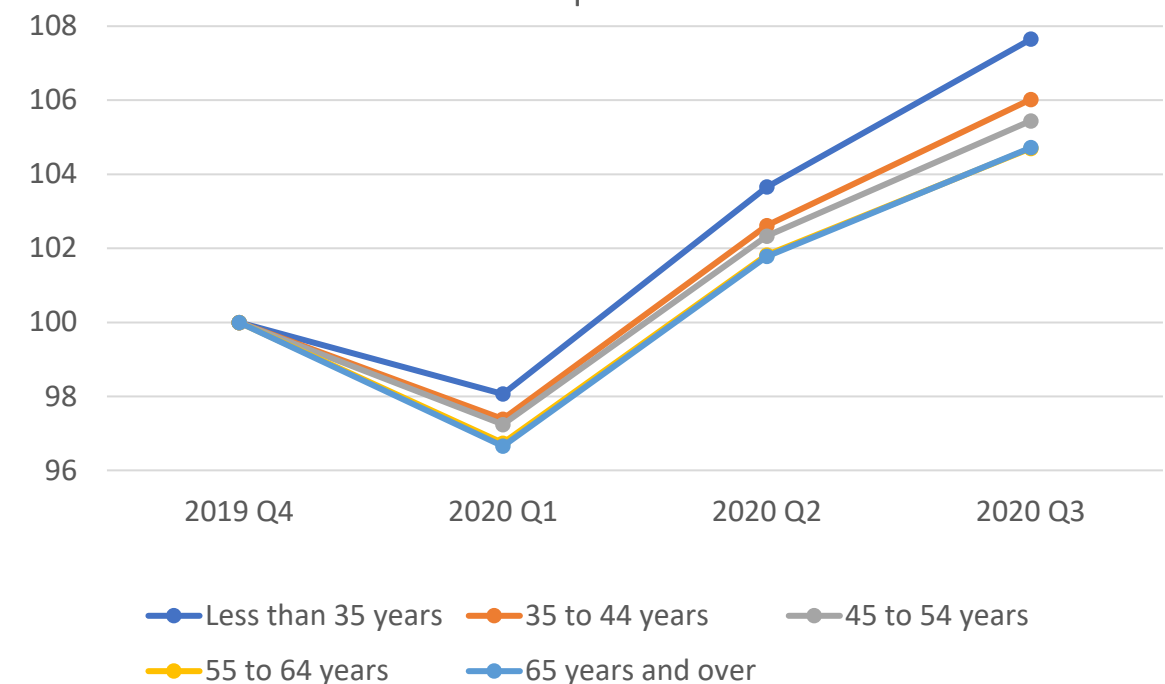
- On average most households improved their net saving in 2020
- Lowest income quintile improved in Q2 only
- Middle income, households switched from net dissaving to net saving position

Change in average household net worth

Quarterly change in net worth by income quintile, indexed to fourth quarter 2019



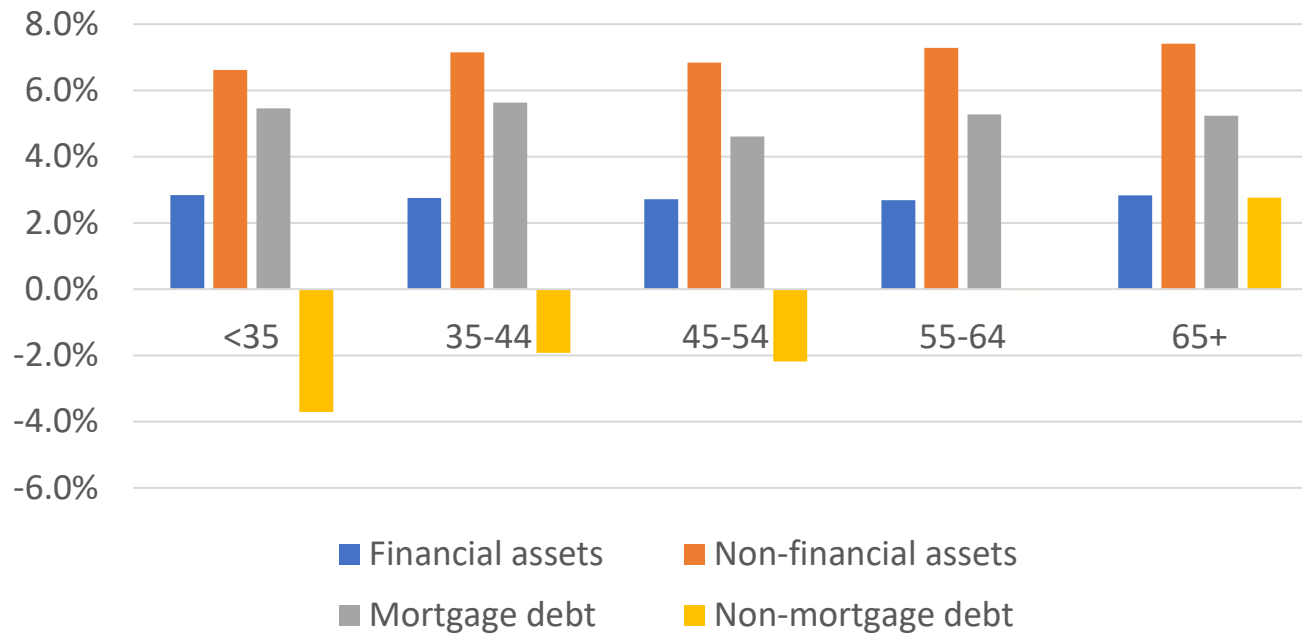
Quarterly change in net worth by age group, indexed to fourth quarter 2019



- Lower income and younger households saw largest improvement in net worth over first three quarters of 2020

Household Assets & Liabilities

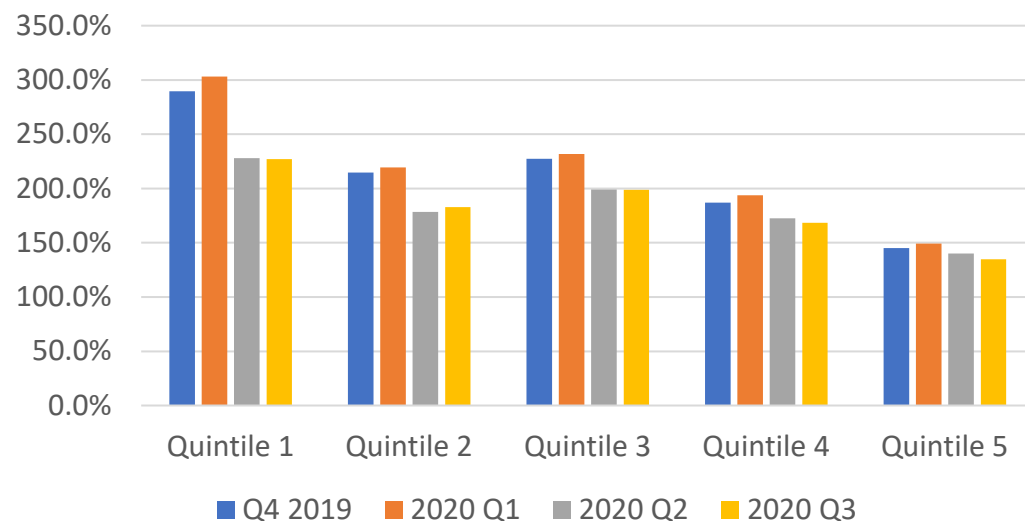
Change in average households' assets and liabilities
Q4 2019 to Q3 2020



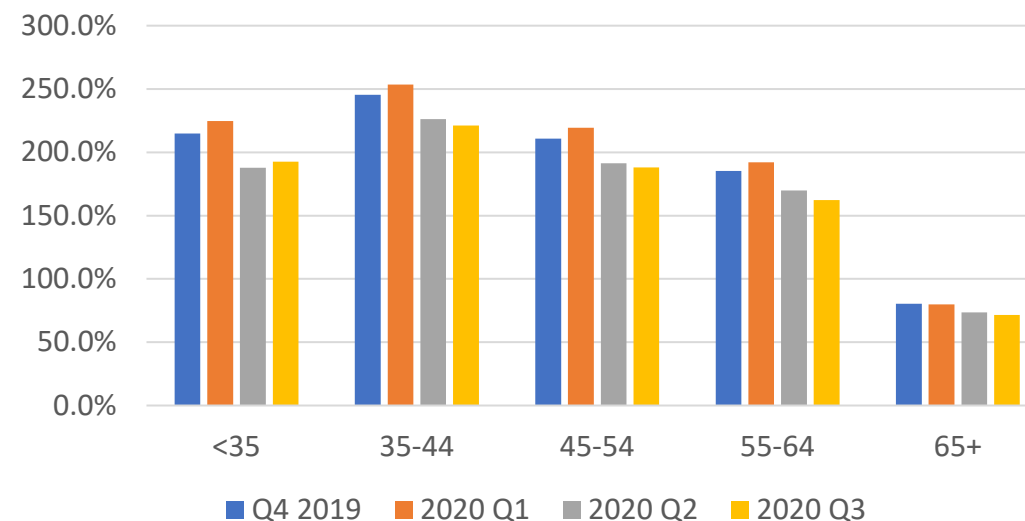
- Similar increases in financial assets
- Older households saw slightly larger gains in non-financial assets
- Younger households recorded slightly larger increase in mortgage debt
- Younger and core working aged households recorded notable declines in their non-mortgage debt
 - Paid down balances or limited new borrowing

Debt-to-income-ratios decline

Debt-to-income-ratio (%), by income quintile



Debt-to-income-ratio (%), by age group



- All households recorded decline in debt-to-income ratio in 2020 compared with 2019
- Most pronounced decline for lowest income and young and middle aged households

Next steps

- Continue producing quarterly DHEA for 2021
 - Rely on continued production of SPSPD-M glass box
 - Require more timely access to admin data for Covid-19 support measures
- Develop a production and revision cycle to integrate annual updates into quarterly DHEA
 - Incorporate SFS 2019 and SHS 2019
 - Updates to SPSPD-M
 - Bring in new annual SNA benchmarks
 - Incorporate other admin sources