The Financial Resilience of Mortgage Holders

December 2022

Financial Resilience Institute

We're a non-profit organization that strives to help improve financial resilience and well-being for all.

Financial Resilience Institute

Impact Goals

1. **Reduce financial vulnerability:** in particular for those who need help most or are underserved [1]
2. **Be a catalyst for positive change:** through knowledge mobilization, solutions that create value and cross-sector collaboration.
3. **Foster financial inclusion and empowerment:** while helping to build a resilient, equitable and inclusive Canada.

Improving Financial Resilience For All

We partner with financial institutions, business leaders and policymakers to develop and implement solutions that improve financial resilience, health and well-being for all.

[1] These include households that are most financially vulnerable based on their mean financial resilience score and/or who are challenged from a financial help or 'access' perspective. It also includes key populations facing barriers, households who are using predatory financial services, have specific financial stressors; are underserved by their primary Financial Institutions and/or exhibiting financial behaviours that impact their financial resilience and financial well-being.

About the Seymour Financial Resilience Index TM

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WHAT THE INDEX MEASURES

Financial resilience: i.e. **household's ability to get through financial hardship, stressors and shocks as a result of unplanned life events.** The Index measures and tracks this for Canadian households across nine behavioural, sentiment and resilience indicators. Financial resilience measurement and tracking is available at the national, provincial, segment and individual member household levels.

The ability to balance your needs of today with those of tomorrow, as a result of decisions and behaviours that move you forward.

The ability to get through financial stressors, shocks and financial hardship as a result of unplanned life events.

Financial wellness speaks to one's emotional peace of mind in terms of your financial situation and current and future financial obligations. The opposite is financial stress, with financial and debt stress indicators measured.

Peer-reviewed by Statistics Canada, the C.D. Howe Institute, leading FIs and NPOs, the Index has a pre-pandemic baseline of February 2020. It builds on over six years of longitudinal Financial Well-Being studies data for Canada with applicability to other countries [1]

[1] Seymour Financial Resilience Index TM is a proprietary Index and trademark used under license. The Index is being licensed to the Financial Resilience Institute. More information on the Index and development methodology is at http://finresilienceinstitute.org and in the appendices.

Seymour Financial Resilience Index ™ Indicators

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1
Debt management composite.

2
Plans ahead financially for upcoming and unexpected expenses or to save for long-term goals.

3
Change in household financial situation over the past 12 months.

4
Social capital: close person(s) who could provide financial support in times of financial hardship.

5
Liquid savings buffer.

6
Self-reported credit score.

7
Confidence in ability to meet short-term savings goals.

8
Financial stress composite.

9
Financial stress over current and future financial obligations.

The Seymour Financial Resilience Index ™ is a proprietary regression model that has been validated against all years of Financial Well-being studies data between 2017 and 2022. This has revealed consistency in results, represented by a strong R-squared as well and similar weights of the independent variables as predictors of financial resilience. Note: weightings for the model are based on their overall contribution to the dependent variable in the model and are not equal.
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Scoring Model

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Extremely Vulnerable	Financially Vulnerable	Approaching Resilience	Financially Resilient
0 10 20 30	40 50	60 70	80 90 100
Financial resilience scores between **0 and 30** represent individuals and households that are most vulnerable and unable to survive financial stressors or shocks. These people report financially resilient outcomes across none of the nine indicators.	Financial resilience scores between **30.01 and 50** represent individuals and households that are financially vulnerable to large financial stressors or shocks yet subsisting under normal conditions. These people report financially resilient outcomes across few of the nine indicators.	Financial resilience scores between **50.01 and 70** represent individuals and households building their financial resilience in the absence of financial shocks. These people report financially resilient outcomes across some of the nine indicators.	Financial resilience scores between **70.01 and 100** represent individuals and households that can endure financial shocks with little effect to their overall financial resilience. These people report financially resilient outcomes across nearly all (or all) of the nine indicators.
0 - 30	30.01 - 50	50.01 - 70	70.01 - 100

Financial Resilience Score

'Extremely Vulnerable' households have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50; 'Approaching Resilience' a score of 50.01 to 70, and 'Financially Resilient' a score of 70.01 to 100.

Index Development Methodology

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- The Index was developed over more than five years based on an iterative process to regressing and evaluating over 35 potential indicators against self-reported "financial resilience" or "financial stress" measures, using the multiple linear regression technique.
- In the end, nine variables were determined to account for 62 percent of the variance in the financial resilience construct as of June 2022 and 64 per cent of the variance in the financial resilience construct as of February 2021. The regression model's indicators (independent variables) are significant at a 95% confidence interval, with p-values less than 0.05.
- The regression model has been validated against all years of Financial Well-being studies data between 2017 and 2022. This has revealed consistency in results, represented by a strong R-squared as well and similar weights of the independent variables as predictors of financial resilience. Note: weightings for the model are based on their overall contribution to the dependent variable in the model and are not equal.
- Based on 2017 and 2018 data, six of the nine index model independent variables were available, and in the 2019 data, seven of the independent variables were available. All nine variables are available based on the February 2020 Index baseline data. In July 2022, one of the two variables within the debt composite indicator was replaced.
- There were five stages of index development and validation:
  1. Identification of potential indicators
  2. Data collection for Index development
  3. Regression model development with different combinations of potential indicators
  4. Indicator selection and
  5. Model validation.
- Index indicators and data are part of longitudinal financial health, resilience and stress longitudinal data from the 2017-2022 Financial Well-Being studies. This is a 15 to 20-minute longitudinal online survey conducted with 5,000 adult Canadians from a representative sample of the population by province, age, gender, and household income, with respondents recruited through the Angus Reid Forum, Canada's most engaged and respected online panel.
- The Financial Well-Being studies and Index build on the proprietary Financial Well-Being Framework developed by Seymour Consulting in 2016.
  The development of this Framework took one year and build on analysis of the 'best of the best' financial health, capability and financial well-being studies from around the world along with multiple consultations with leading academics, FIs, organizations like FCAC, the Financial Health Network and others. The Financial Well-Being study is also based on nuances of the Canadian consumer and financial services ecosystem [1]

[1] More information on the Index development methodology, scoring model and/or Index applications, or our multiple Index reports published for the ecosystem are available at http://finresilienceinstitute.org

Households from all income demographics are represented across all financial resilience segments

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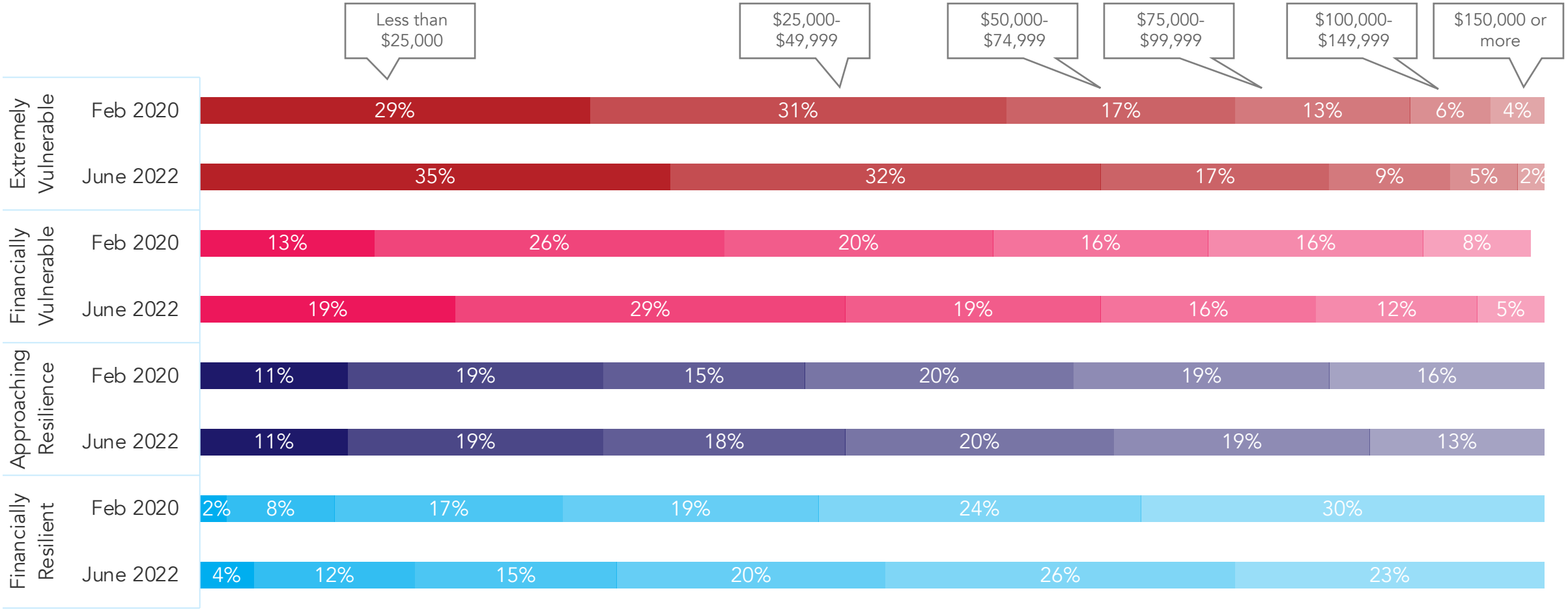
Data analytics for June 2022 compared to the February 2020 pre-pandemic Index baseline shows an increase in the proportion of low-income households that are 'Extremely Vulnerable' and less households with household income over $150k that are 'Financially Resilient' in June 2022 compared to February 2020.



'Extremely Vulnerable' households have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50; 'Approaching Resilience' a score of 50.01 to 70, and 'Financially Resilient' a score of 70.01 to 100.

Source: Seymour Financial Resilience Index ™. Seymour Financial Resilience Index ™ is a trademark used under license.

Canada has a national mean financial resilience score of 50.52 as of June 2022.

77.8% of the population are not 'Financially Resilient' representing 19.99 MM households.

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Canada Mean Financial Resilience Score

June 2022 Index

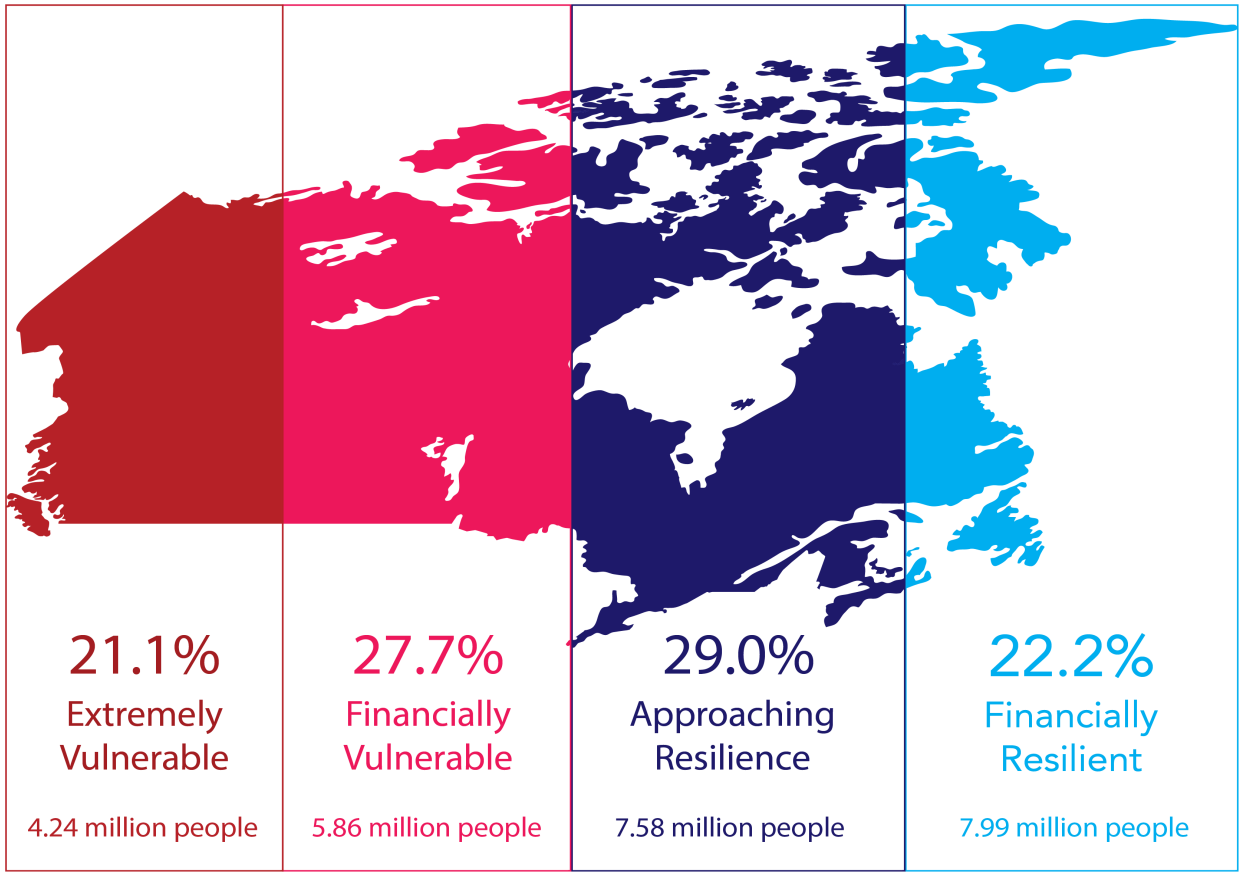
55.67
June 2021 Index

55.69
February 2021 Index

54.53
October 2020 Index

55.58
June 2020 Index

49.58
February 2020 Baseline



'Segment sizes are based on a total population of 25.70 million adult Canadians aged 18 to 70 years old as of July 2021 (Statistics Canada)
'Extremely Vulnerable' households have a financial resilience score of 0-30; 'Financially Vulnerable' a score of 30.01 to 50; 'Approaching Resilience' a score of 50..01 to 70, and 'Financially Resilient' a score of 70.01 to 100.
Source: Seymour Financial Resilience Index TM. Seymour Financial Resilience Index TM is a trademark used under license.

10.1 million households are 'Extremely Vulnerable' or 'Financially Vulnerable' based on the June 2022 Index: a significant increase over 2021.

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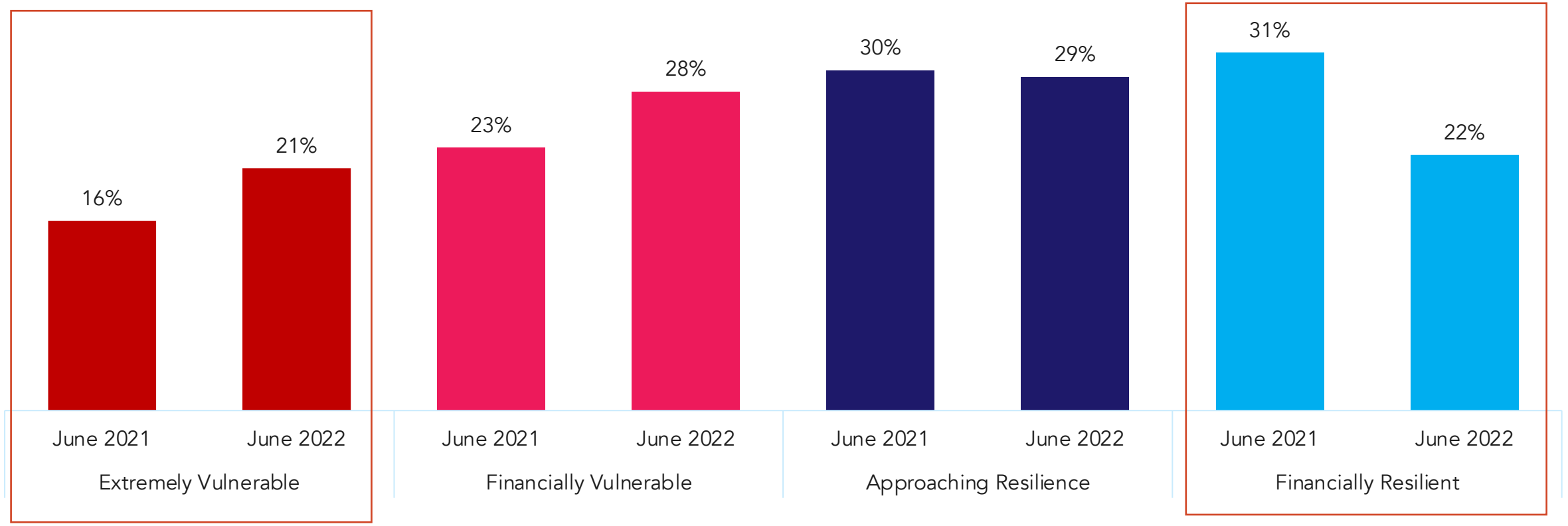
The proportion of 'Financially Resilient' households has dropped from 31.1% in June 2021 to 22.1% in June 2022 [1].

Change in households represented across the four financial resilience segments: June 2022 compared to June 2021



[1] 'Extremely Vulnerable' households have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50; 'Approaching Resilience' a score of 50.01 to 70, and 'Financially Resilient' a score of 70.01 to 100.
Source: Seymour Financial Resilience Index ™ Seymour Financial Resilience Index ™ is a trademark used under license.

The Index shines a light on many financial and debt stressors facing households, with cost-of-living challenges and rising interest rates causing strain for many.

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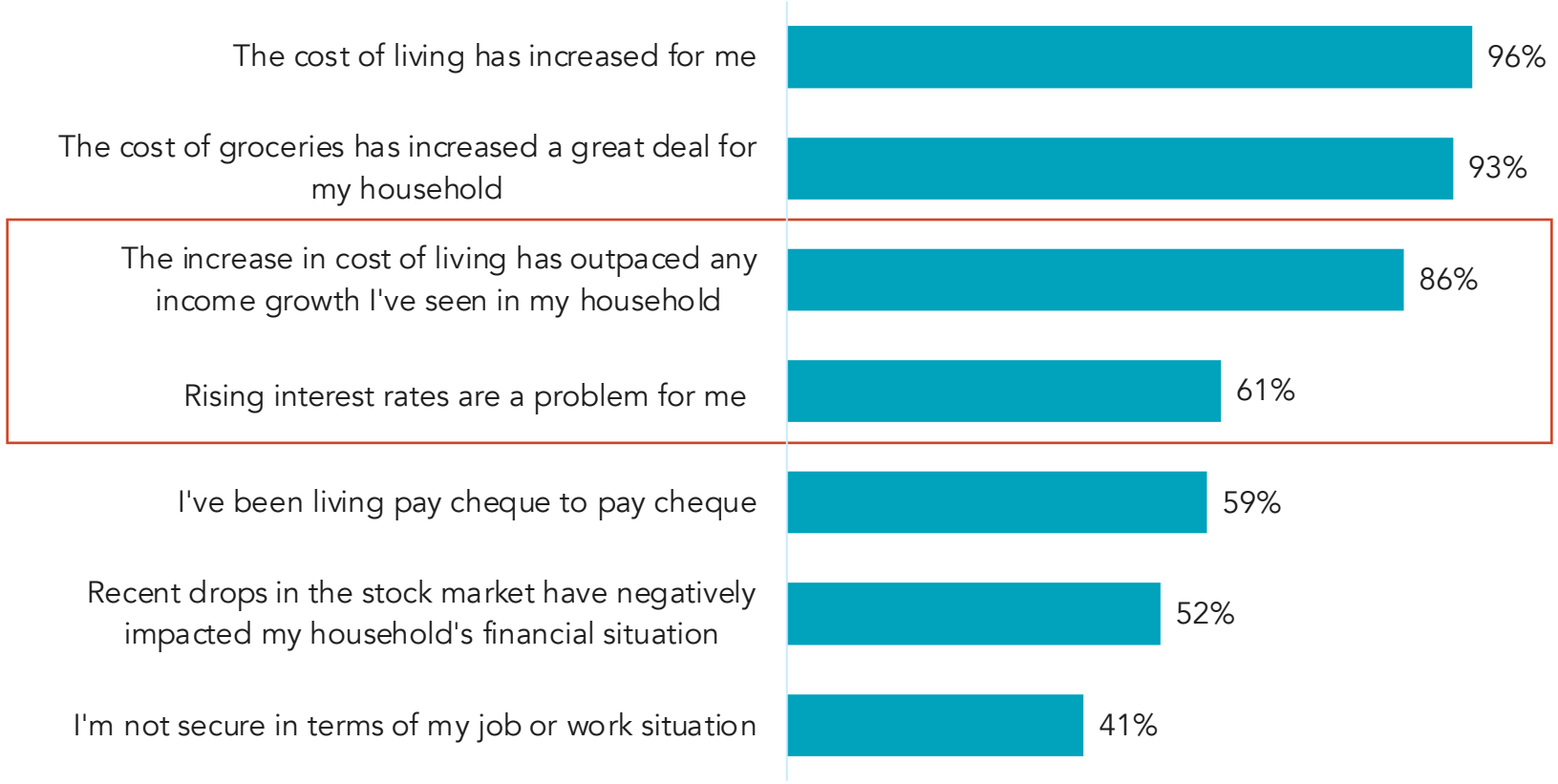
86% of households report that their cost of living has outpaced any income growth they've seen in their household and 61% of households report that rising interest rates are a problem for them. Challenges are exacerbated for Canadians with lower financial resilience scores.

Proportion of households experiencing financial stressors (June 2022)



Source: June 2022 Index Release (September 2022)

The mean financial resilience score for Mortgage Holders has dropped from 58.8 in June 2021 to 52.94 in June 2022 [1]

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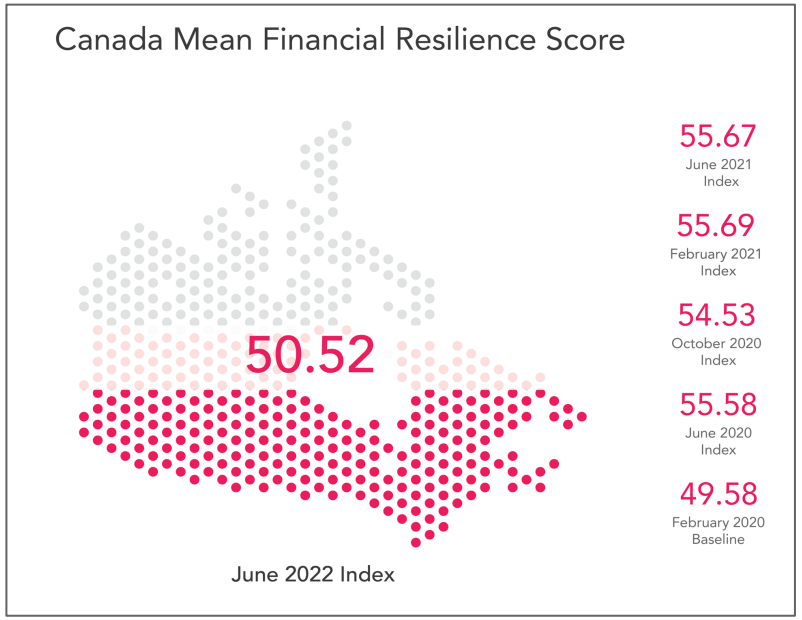
Mortgage holders' mean financial resilience score is two points higher than for Canadians at the national level, with increased levels of household financial vulnerability for mortgage holders overall.

Mean financial resilience score of homeowners in 2022 and 2021



[1] This includes mortgage holders with both fixed and variable interest rate mortgages.

Source: Seymour Financial Resilience Index TM. and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.

Sample size of 2001 mortgage holders from a total size of 5061 adult Canadians from a representative sample of the population by household income age gender and province. 10.5% of respondents did not know or preferred not to answer this question.

As of June 2022, 22% of Mortgage Holders are 'Financially Resilient', down from 33% a year earlier. There has been an increase in those that are 'Extremely Vulnerable' or 'Financially Vulnerable' at the national level [1]

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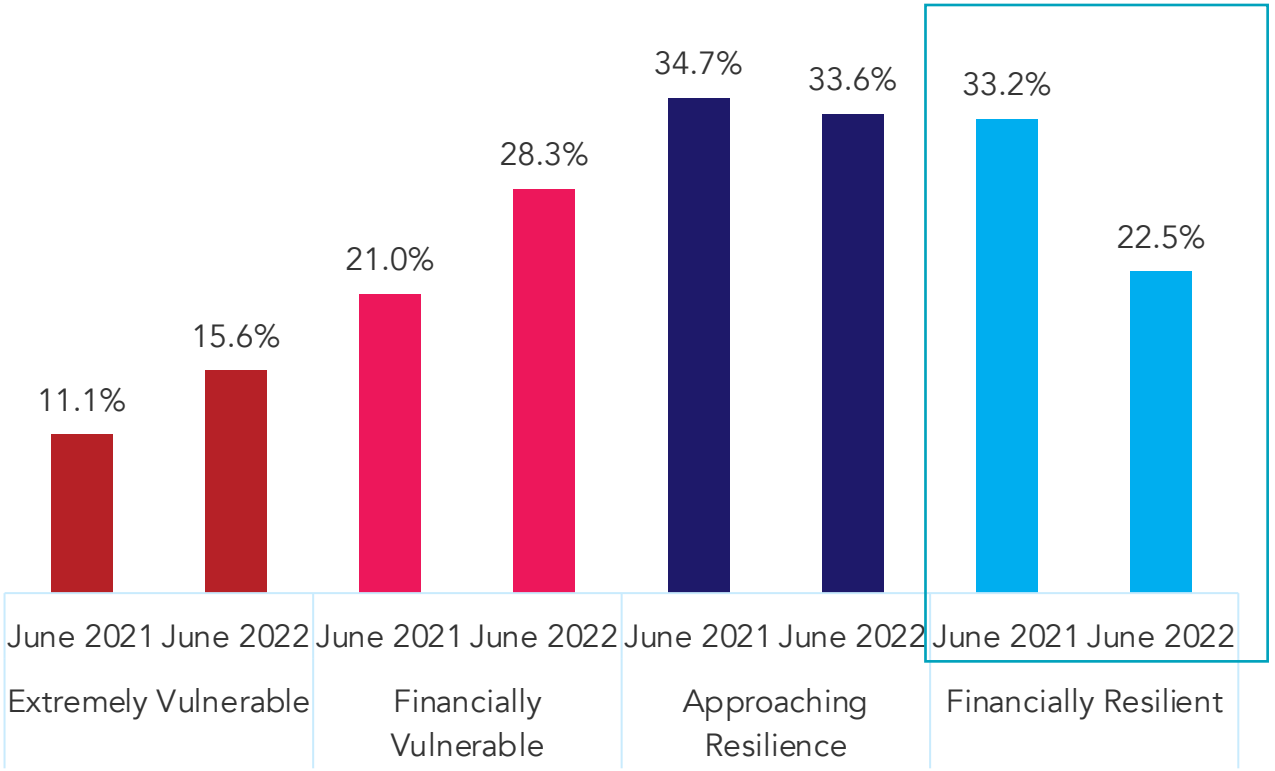
Distribution of mortgage holders across the financial resilience segments in June 2022 compared to June 2021



'Extremely Vulnerable' households have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50; 'Approaching Resilience' a score of 50.01 to 70, and 'Financially Resilient' a score of 70.01 to 100.
[1] There are differences in the mean financial resilience scores of mortgage holders by province and for tier-one banks.
Source: Seymour Financial Resilience Index TM. and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.
Sample size of 2001 mortgage holders from a total size of 5061 adult Canadians from a representative sample of the population by household income age gender and province. 10.5% of respondents did not know or preferred not to answer this question.

Bank of Canada recently reported that variable rate mortgages represent about one third of total outstanding mortgage debt.

About half of all variable-rate mortgages with fixed payments reached their trigger rate in October 2022.

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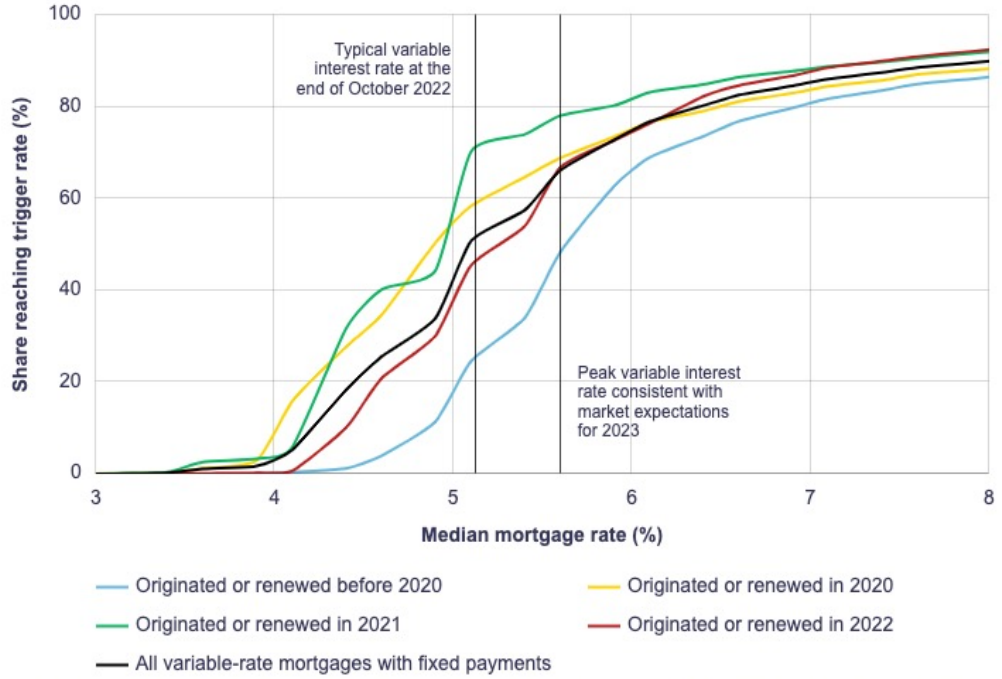
Chart 2: About half of all variable-rate mortgages with fixed payments reached their trigger rate by October 2022

Cumulative share of variable-rate, fixed-payment mortgages that reach their trigger rate at various interest rates, by year of origination or renewal



Note: Calculations include variable-rate, fixed-payment mortgages that originated or were renewed at federally regulated financial institutions. The sample includes only mortgages that have not yet reached the end of their contractual loan term. To determine whether a mortgage has reached its trigger rate at current interest rates, we update the initial interest rate to October 2022 by applying changes in the prime lending rate.
Sources: Regulatory filings of Canadian banks and Bank of Canada calculations

[1] In Canada, about three-quarters of variable-rate mortgages have fixed payments. For these specific mortgages, when interest rates move, the amount of the mortgage payment does not change, but the portion going toward interest (rather than principal) is adjusted. But if interest rates increase substantially, these mortgage borrowers may reach a point where their fixed payments cover only interest and not any principal. The interest rate at which this happens is known as the ***trigger rate.*** If rates rise above the trigger rate, borrowers may then need to increase their mortgage payment to cover the additional amount of interest. For some households, this payment increase may be unexpected.

As highlighted by Bank of Canada, as of the end of October 2022, financial markets anticipate variable mortgage rates will increase by another 50 basis points by mid-2023. In this case, an additional 15% of variable-rate mortgages with fixed payments could reach their trigger rate, with the total thereby reaching 65% (or around 17% of all mortgages).

Certain mortgages will reach their trigger rates sooner. Those that were originated or renewed in 2021, for instance, will tend to reach their trigger rates earlier, mainly because they were issued at extremely low interest rates and often with amortization periods longer than 25 years.

Source: Bank of Canada, Staff Analytical Note, Stephen Murchison and Maria teNyenhuis, November 22, 2022

Risks around financial stability are reported to be elevated by Bank of Canada because of high levels of household debt and rising interest rates.

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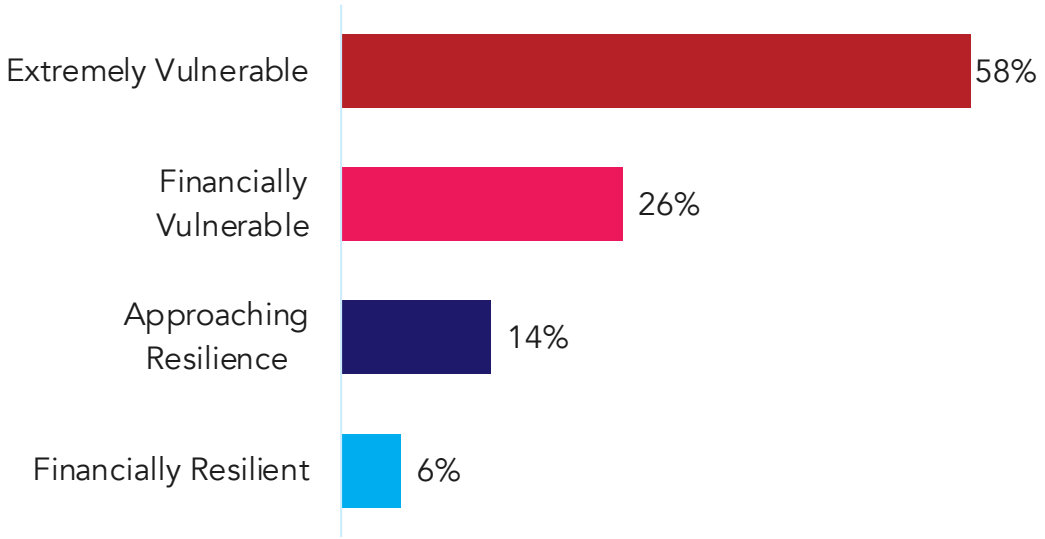
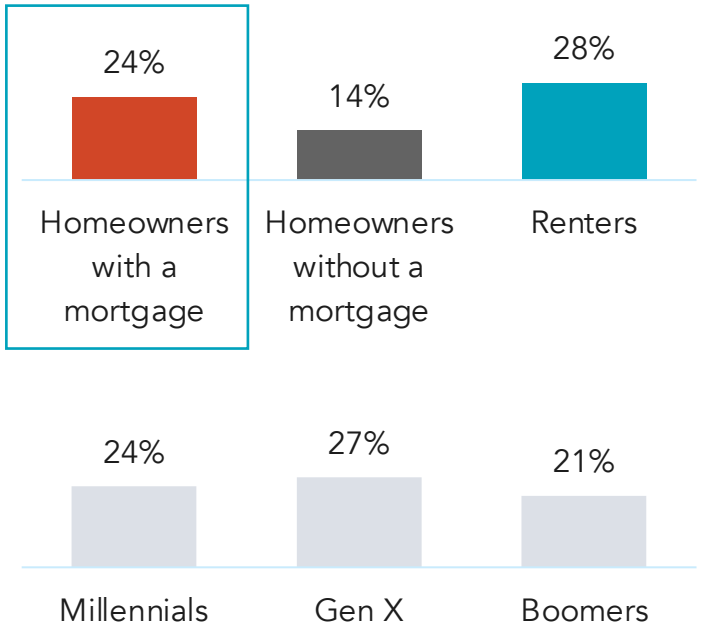
24% of mortgage holders overall reported that their household debt levels felt somewhat or very unmanageable in June 2022, with 22.5% of these same mortgage holders 'Financially Resilient' [1].

Percentage of households overall and by type of household that agree that their household's debt levels felt somewhat or very unmanageable: June 2022





[1] 'Extremely Vulnerable' have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50, 'Approaching Resilience' a score of 50.01 to 70 and 'Financially Resilient' a score of 70.01 to 100.
Source: Seymour Financial Resilience Index TM. and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.

51% of mortgage holders reported that the loan-to-value on their primary residence was 41% or more in June 2022, according to Financial Resilience Institute, with 28% reporting a LTV of more than 61%.

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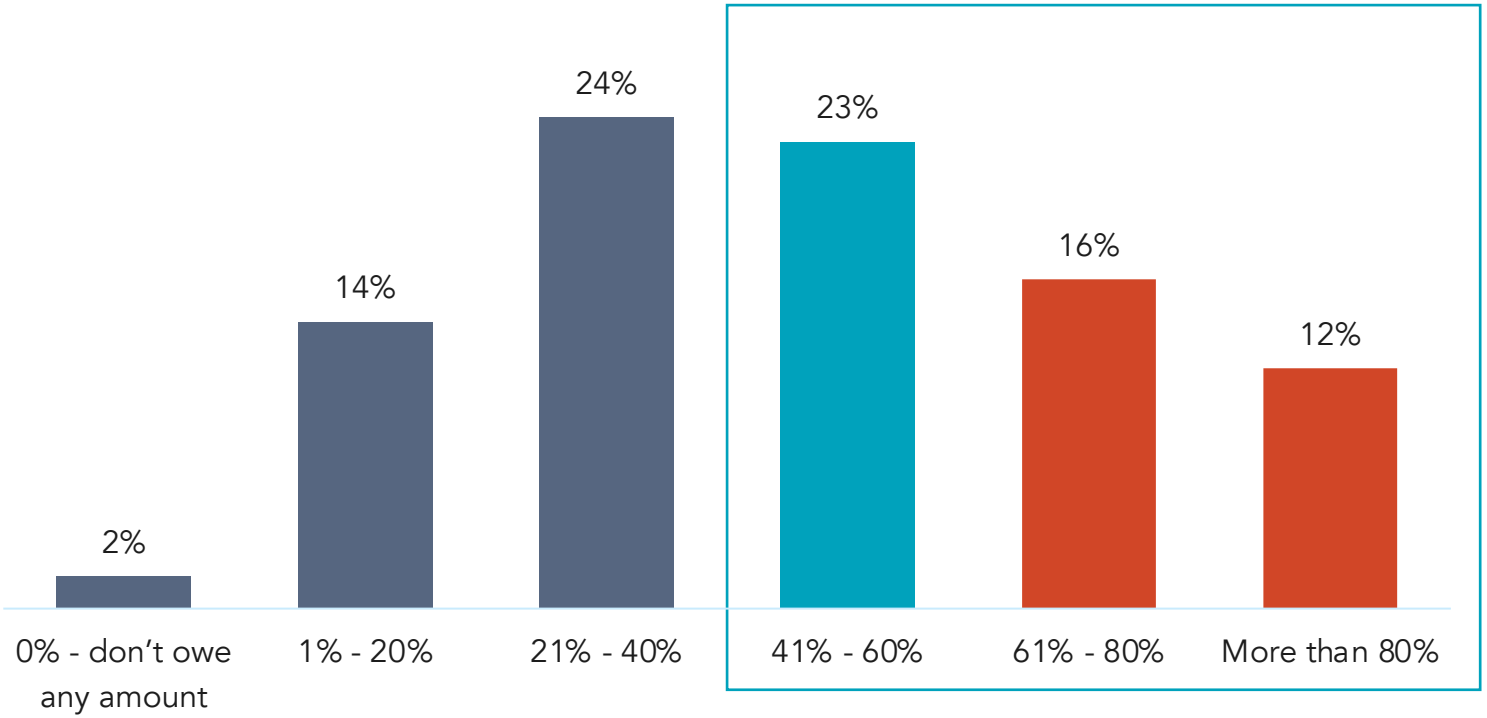
Percentage of Mortgage Holders' with different Loan-To-Values on their primary residence: June 2022 [1]



Based on a sample size of 2001 mortgage holders from a total size of 5061 adult Canadians through the June 2022 Financial Well-Being study. This is conducted with a representative sample of the population by household income age gender and province. Note: 10.5% of mortgage-holder respondents did not know or preferred not to answer the Loan-to-Value question.

[1] Loan to Value question: What is the percentage value of your mortgage on your primary residence in relation to the value of your home? For example, if your home is valued at $500,000 and you still owe $200,000 on it, then your mortgage is 40% of the value of your home?

Source: Seymour Financial Resilience Index TM and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.

74% of mortgage holders with a loan-to-value of 41% or more agree that interest rates are a problem for them as of June 2022.

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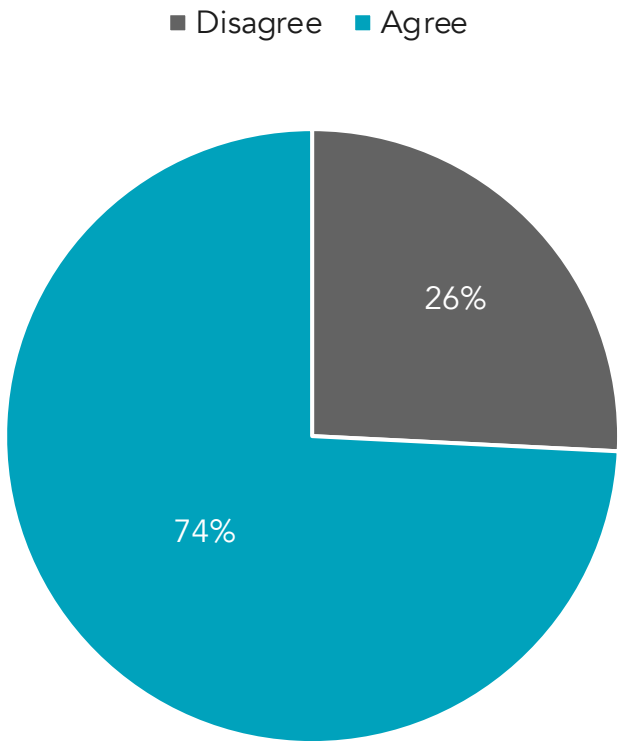
Percentage of mortgage holders owing more than 41% on their home that report that rising interest rates are a problem for them as of June 2022



Based on a sample size of 2001 mortgage holders from a total size of 5061 adult Canadians through the June 2022 Financial Well-Being study. This is conducted with a representative sample of the population by household income age gender and province. Note: 10.5% of mortgage-holder respondents did not know or preferred not to answer the Loan-to-Value question.
Source: Seymour Financial Resilience Index TM and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.

43% of Mortgage Holders with a loan-to-value (LTV) of 41% to 60% are 'Extremely Vulnerable' or 'Financially Vulnerable' based on the June 2022 Seymour Financial Resilience Index TM.

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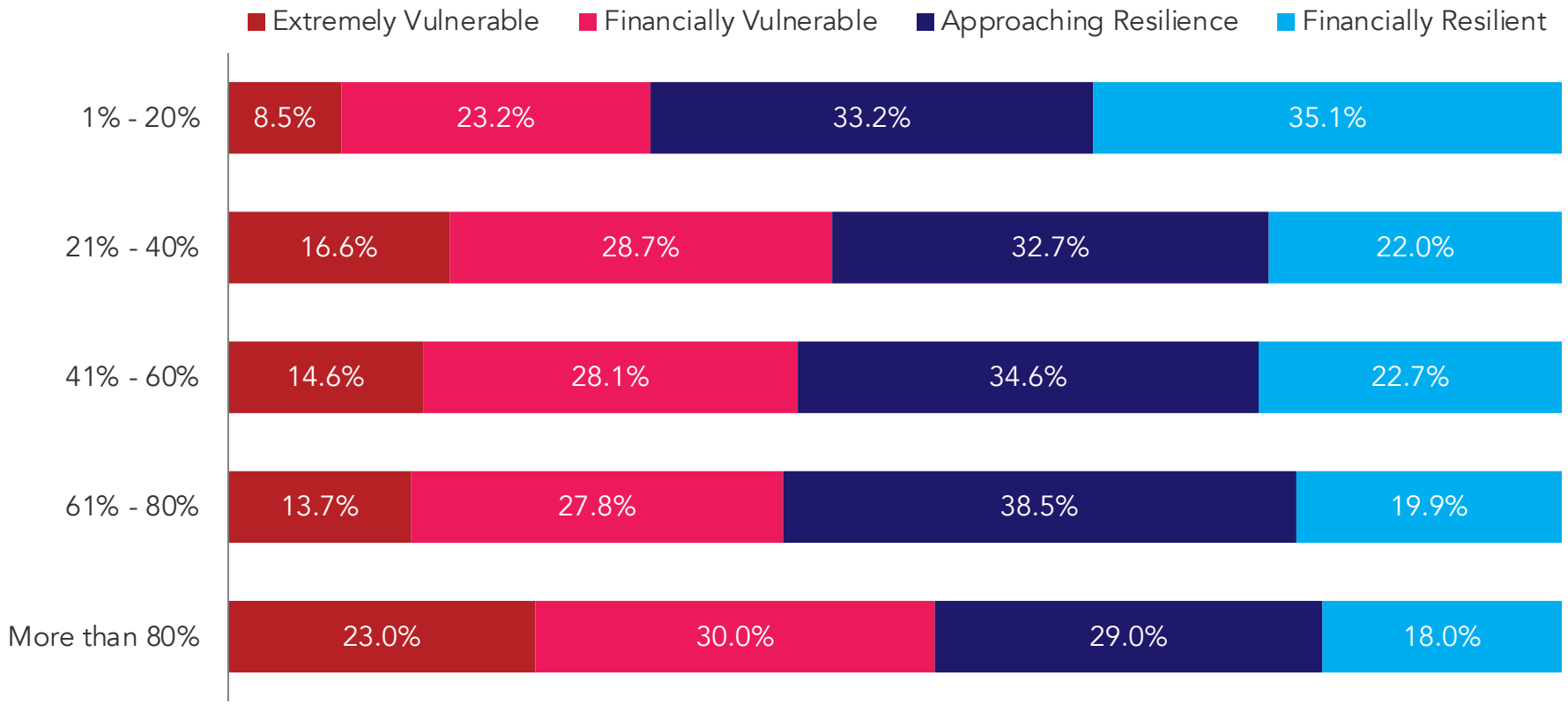
This is also the case for 41% of Mortgage Holders with a LTV of 61% to 80% and 53% for those with a LTV of more than 80%.

Proportion of mortgage holders that are 'Extremely Vulnerable' 'Financially Vulnerable' as a share of the total number of mortgage holders within within each Loan-to-Value Segment: as of June 2022 [1]



[1] 'Extremely Vulnerable' have a financial resilience score of 0 to 30; 'Financially Vulnerable' a score of 30.01 to 50, 'Approaching Resilience' a score of 50.01 to 70 and 'Financially Resilient' a score of 70.01 to 100. Based on a sample size of 2001 mortgage holders from a total size of 5061 adult Canadians through the June 2022 Financial Well-Being study. This is conducted with a representative sample of the population by household income age gender and province. Note: 10.5% of mortgage-holder respondents did not know or preferred not to answer the Loan-to-Value question.

Source: Seymour Financial Resilience Index TM and June 2022 Financial Well-Being study. Seymour Financial Resilience Index TM is a trademark used under license.

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Appendices

Index Development Roadmap

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OCTOBER 2017

First Financial Well-Being Study Launched

First national Financial Well-Being study for Canada launched by Seymour Consulting for longitudinal measurement of the financial health, stress, resilience and well-being of Canadians.

Annual studies were conducted in 2017, 2018 and 2019.

In 2020 and 2021, three studies were conducted per year: in February, June and October.

FEBRUARY 2020

1 Index Baseline

Seymour Financial Resilience Index™ baseline created based on February 2020 pre-pandemic environment, building on four years of longitudinal data.

Canada Mean Financial Resilience Score: 49:58 as of February 2020, with households at the national level "Approaching Resilience."

MARCH - MAY 2020

COVID-19 Pandemic and Index Launch

Global pandemic reaches Canada as Goverment shuts down borders, travel and businesses.

Swift Canadian Goverment and FI Covid-19 financial relief starting in April 2020.

Official launch of the Seymour Financial Resilience Index™ and original release report in May 2020.

JUNE 2020

2 Second Index Release

Second Index release based on June 2020 data. Canada Mean Financial Resilience Score: 55:58, up six points.

Improvements in households' financial resilience at the national level due to changed consumer and financial behaviours by Canadians plus swift and significant Government and FI financial relief.

OCTOBER 2020

3 Third Index Release

Canada Mean Financial Resilience Score: 54:53

Longitudinal analysis with over 1500 individual households validates that changed behaviours and/or unplanned life events cause individual households' financial resilience scores to increase or decrease within a few months.

FEB 2021

4 Fourth Index Release

Canada Mean Financial Resilience Score: 55.69

Continued nuances and changing behaviours, including for key segments such as Millennial Women

Index is peer-reviewed by Statistics Canada, with Statistics Canada and Seymour Consulting using government and Index data for research and measurement.

JUNE 2021

5 Fifth Index Release

Canada Mean Financial Resilience Score: 55.67

Joint Statistics Canada-Seymour Consulting Report on the Financial Resilience and Financial Well-Being of Canadians during the Covid-19 Pandemic published in October 2021.

C.D. Howe publishes Intelligence Memo authored by Eloise Duncan on opportunities for targeted policy support levering Index data in October 2021.

JUNE 2022

6 Sixth Index Release

Canada Mean Financial Resilience Score: 50.52

June 2022 Index measures changes in households' financial resilience (and financial vulnerability) in the new post-pandemic, inflationary environment.

FIs and organizations start to use the Index for multi-year impact measurement.

[1] Seymour Financial Resilience Index ™ is a trademark used under license. For more details on the Index development methodology: https://www.finresilienceinstitute.org/why-we-created-the-index/

Seymour Financial Resilience Index TM Distribution

From February 2020 (pre-pandemic) to June 2022

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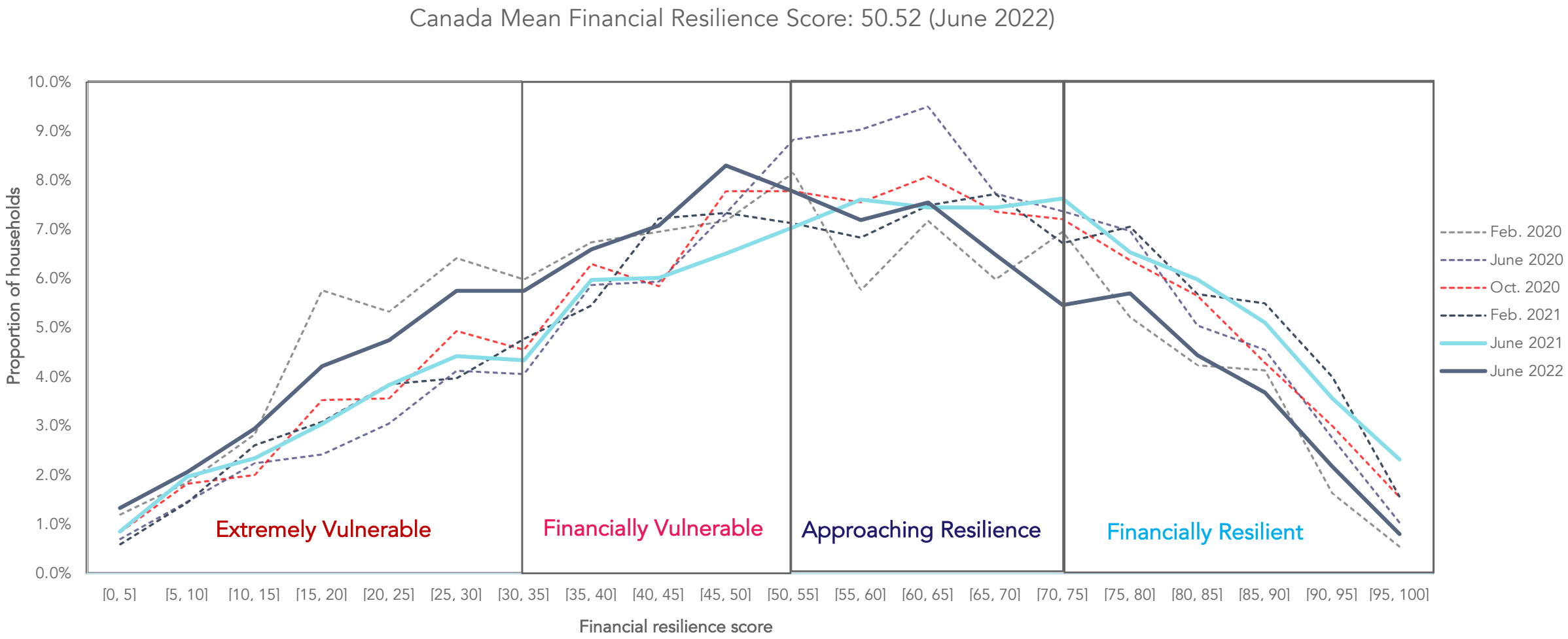

'Source: Seymour Financial Resilience Index TM. Seymour Financial Resilience Index ™ is a trademark used under license.
June 2022 Financial Well-Being study has a sample size of 5061 households with 4505 households scored through the Index. MOE of +/- 1.4% and 95% confidence interval across all provinces.
June 2021 Financial Well-Being study has a sample size of 5028 households with 4504 households scored through the Index. MOE of +/- 1.38% and 95% confidence interval across all provinces.
June 2020 Financial Well-Being study has a sample size of 4989 households with 4462 households scored through the Index. MOE of +/- 1.4% and 95% confidence interval across all provinces.
February 2020 Financial Well-Being study has a sample size of 1013 households aged 18-70 and an Index sample of 919 households scored through the Index. MOE of +/- 3.1% and 95% confidence interval across all provinces.
Data is weighted to be representative of Canadian population based on household income, gender, age and province, with survey respondents recruited through the Angus Reid Forum. All survey design and analytics conducted by Financial Resilience Institute.

The Index and longitudinal Financial Well-Being studies are complementary instruments that bring rich insights and impact measurement for Canada's ecosystem.

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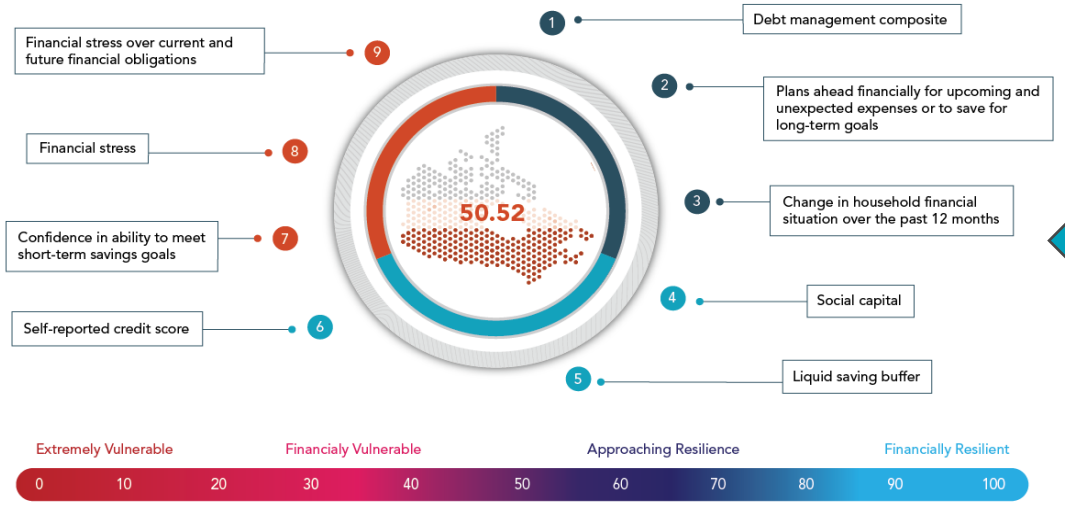
This enable robust longitudinal research, analytics and impact measurement on the financial resilience, financial health and financial well-being of key populations, tier-one bank clients and our clients' and partners' target customers, employees and communities [1]

1

Seymour Financial Resilience Index ™



2

Longitudinal Financial Well-Being study

(2017 to 2022 and beyond)

[1] Bespoke questions can be added to the Financial Well-Being studies to compare against the Index and benchmark data for Institute clients and partners.
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Longitudinal Financial Well-Being Studies (2017 to date)

Canada's robust national longitudinal study of Canadians' financial health, wellness and resilience and the role Financial Institutions can play to support their customers' financial wellness.

- Canada's most robust national, independent investigation into consumer financial well-being, and the linkage between financial health and overall personal well-being. The study typically has a sample size of 3000 to 5000 adult Canadians.
- The study measures the extent to which primary FI customers rate their bank, credit union or other organization for helping to improve the financial wellness, plus many reported consumer and financial behaviours, challenges in access to support and more.
- The Financial Well-Being study includes indicators from the Seymour Financial Resilience Index TM and can have customized questions added to it by clients.

Developed based on the Financial Well-Being Framework. The online study has been conducted annually from 2017 to 2018, 3x a year between February 2020 and June 2020 and annually in June 2021 and June 2022. The next studies will be in February and June 2023.

Online survey with a large representative sample of the population of between c. 3000 and 5000 Canadians by household income, age, province and gender. The June 2022 survey had a boost sample of lower-income Canadians.

Primary or joint financial decision makers, aged 18 to 70 years old.

Recruited through the Angus Reid Forum, Canada's most respected and engaged online panel, all study design and analysis is led by Financial Resilience Institute.

Sample sizes for the longitudinal Financial Well-Being Studies (2017- 2022)

Canada's longitudinal study on Canadians' financial well-being, complementing the Seymour Financial Resilience Index TM

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Financial Well-Being Study	Total Sample Size	Survey Respondents scored through the Index [1]	MOE
June 2022 study [2]	5061	4505	1.38%
June 2021 study	5028	4504	1.38%
Feb. 2021 study	3018	2710	1.78%
Oct. 2020 study	3016	2635	1.78%
June 2020 study	4989	4462	1.39%
Feb. 2020 study	1013	919	3.08%
June 2018 study	5067	N/A	1.38%
June 2017 study	5218	N/A	1.36%

[1] The Seymour Financial Resilience Index TM has a pre-pandemic baseline of February 2020 and builds on over six years of longitudinal financial well-being studies data for Canada.
[2] The Financial Well-Being studies data is based on online survey data with survey respondent recruitment through the Angus Reid Forum, Canada's most engaged and respected online panel. There is a representative sample of the population by household income, age, province and gender. The sample incudes 1148 respondents from Quebec.

59% of households report their credit score to be 'good' or 'excellent as of June 2022. However only 36% of these same borrowers are 'Financially Resilient' underneath their credit score when scored against the Seymour Financial Resilience Index TM

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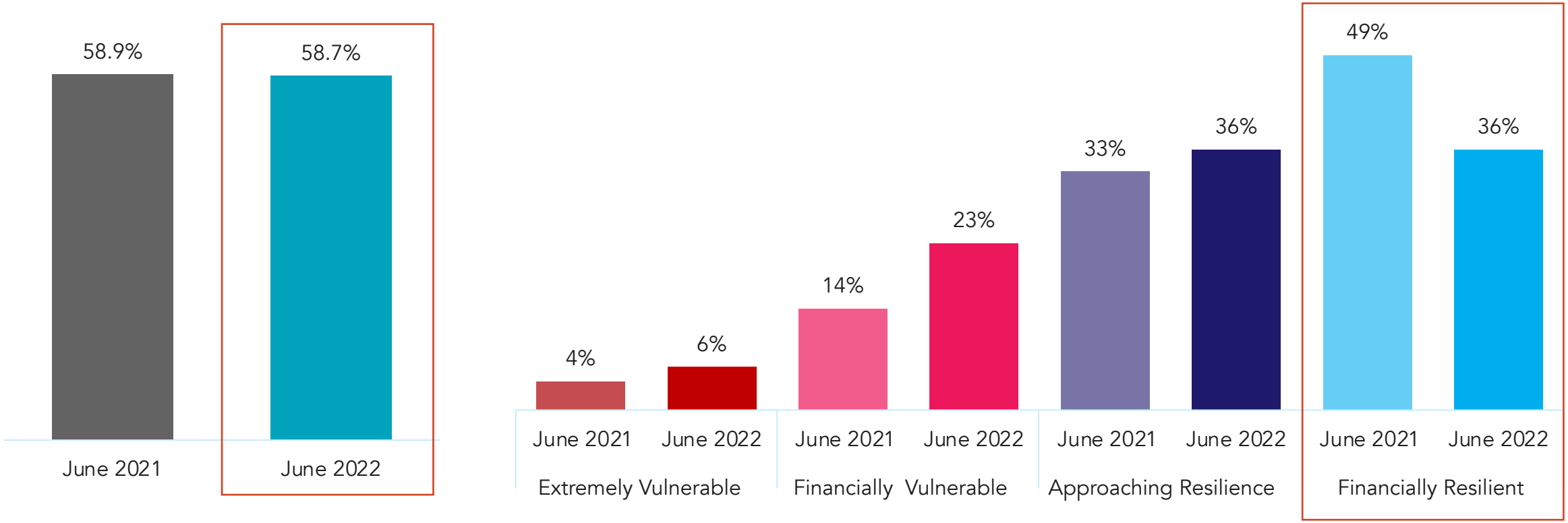
This is a significant reduction compared to 49% of borrowers being 'Financially Resilient' a year earlier based on the June 2021 Index [1]

Analytics by financial resilience segment of Canadian households that self-report having good or excellent credit scores: as of June 2022



[1] Data from studies such as the DUCA Impact Lab 'State of Fair Banking Borrower and Lender Study' (2021) highlight that households tend to report their credit scores accurately. https://ducaimpactlab.com/assets/pdf/DUCAImpactLab-ARG-Fair-Banking-Perspectives-Study-2019.pdf. In this study 78% of survey respondents knew their credit score or had some sense of it. Of the 71% of borrowers that those reporting having an excellent or good score, 70% actually had an good or excellent credit score based on Equifax data. See slide 22 of this report for details.

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