Growing household financial instability:

Is income volatility the hidden culprit?

Report on March 9, 2018 Research Symposium

Prosper Canada

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Ray Boshara
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St. Louis Federal Reserve Center for Household Financial Stability

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TD Bank Group

Patrick Ens
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IIROC OCRCVM

INTRODUCTION

On March 9th, 2018, leading American and Canadian researchers and policy makers from all sectors gathered in Toronto to explore the question: *Growing household financial instability: Is income volatility the hidden culprit?*

The policy research symposium was an invitational event co-hosted by the Investment Industry Regulatory Organization of Canada (IIROC) and Prosper Canada. Its purpose was to shine a light on an issue that has gained prominence in US economic and policy circles but was just emerging as a topic for exploration in Canada in the context of growing household financial instability.

Participants included 50 representatives from all sectors with an interest in strengthening household financial health in the United States and Canada – government, central banks, financial service providers, financial regulators, research institutions, think tanks, foundations and non-profit organizations.

The symposium was organized in response to disturbing signs of growing financial instability in Canadian households – notably, historically high household debt and chronically low savings rates.

Experts had identified an overheated housing market as a key contributor to the problem, but evidence from the United States and emerging research in Canada suggested there was another structural driver at work – income volatility. In response, Prosper Canada and IIROC co-hosted a symposium to bring together leading American and Canadian experts to share their insights on income volatility, its impact on household finances, and what we can do about it.

Research leaders from the Federal Reserve Bank of St. Louis, JPMorgan Chase Institute, Center for Financial Services Innovation (now Financial Health Network), and the Aspen Institute shared their research findings on the nature, causes and impact of income volatility, as well as a cross-sector solutions framework developed in the United States to tackle this issue. Statistics Canada, TD Bank Group, and Capital One shared emerging Canadian research on the extent and impact of income volatility in Canada, while the Canadian Council on Social Development, Common Wealth, and the Mowat Centre showcased their work on made-in-Canada solutions.

The symposium concluded with discussion of the potential role of diverse sectors in developing solutions to address income volatility, with an emphasis on concrete next steps participating organizations could take in understanding and addressing the issue.

This report summarizes key insights, conclusions and next steps from the symposium in the hopes that it will inform, catalyse and support further action on this issue. To view the conference agenda and links to all conference presentations, please see Appendix 1. Presentation videos can be found online at: https://www.youtube.com/playlist?list=PLCoJ2kAGoMZZ5gd_6ZaHjqqEcenL2jCtP

What it is and how it's measured

Income volatility is when an individual or household's income varies over time, often in unpredictable ways. Income volatility has traditionally been measured as year-over-year income change but, with the rise of precarious employment, month-to month or intra-year income volatility is increasingly an issue with important impacts on household financial health.

WHAT IT IS AND HOW IT'S MEASURED

In this context, **income volatility is when an individual/household's income varies from month-to-month by a significant amount.** There is currently no single standard indicator to measure intra-year income volatility and who is affected. Current approaches vary with respect to:

Thresholds for determining volatility:
For example, the JPMorgan Chase Institute (JPMCI) reports on those experiencing more than a 30 per cent change in income – up or down – from one month to the next. The US Financial Diaries (USFD) study reported on those whose income fluctuated by more or less than 25 per cent of their average income.[1]

Measures of frequency, magnitude and incidence:
Some researchers count the number of spikes and dips an average household experiences (e.g. USFD); some count the number of families that experience regular spikes or dips of a certain magnitude (e.g. JPMCI); some count the number of families that experience one major drop in income over a certain amount of time (e.g. Urban Institute[2]); and others calculate the 'coefficient of variation' (roughly, the average deviation from individuals' average incomes across an entire population).[3]

Definition of income:
Some researchers count all forms of income. Others exclude tax refunds due to their 'lumpiness,' which can obscure other trends in the data.[4]

Who is affected:
Some researchers ask about overall households, while others focus on individual respondents and their spouse/partner.[5]

In addition, there is no agreed upon approach for gathering data on the nature, extent and sources of income volatility, ranging from:

Population surveys:
For example, the Federal Reserve's *Survey of Household Economics and Decisionmaking (SHED)* or TD Bank Group's *Pervasive and Profound survey* undertaken by Ipsos Reid in Canada.

Observational studies:
The USFD used in-depth and regular interviews with low- and moderate-income families, combined with a review of their financial records.

Review of account data:
JPMCI reviewed de-identified data from 38 million customer chequing accounts to determine the breadth and depth of income volatility.

The causes of income volatility

There is very little research in the Canadian context on the causes of income volatility. Some potential causes discussed at the symposium include:

Precarious work and irregular work schedules:
Based on analysis by JPMCI, employment income accounts for 71 per cent of total household income and 53 per cent of the volatility in income.[6] In the U.S. SHED study, 43 per cent of those experiencing volatility reported that an irregular work schedule was the primary driver of the income volatility they experienced.[7] Twenty-eight per cent of all adults reported that they or their family earned money through informal, occasional activities in the prior month (e.g. babysitting, selling items at garage sales, selling items online) and 42 per cent of these adults engaged in these activities primarily to earn extra money.[8]

THE CAUSES OF INCOME VOLATILITY

Although we do not have the same analysis for Canada, full-time permanent positions with benefits are no longer the norm for Canadians. The percentage of temporary workers in the labour force has risen from 8.6 per cent in 1997 to 13.5 per cent in 2016. Part-time workers were 12.5 per cent of the work force in 1976 and in 2016 made up 19.6 per cent of the work force.[9]

Non-standard or informal work arrangements (often referred to as “gig employment”) has also been on the rise in the U.S. and Canada, but it is unclear if this is in reaction to, or the cause of, irregular work schedules. Unpredictable work schedules for temporary or part-time work can lead to uncertain income from week to week.

Public benefit policies:
Public benefit policies can also contribute to income volatility, in positive or negative ways. Tax refunds, for example, lead to a spike in income whereas changes to the timing of social assistance payments can result in an income dip.[10] In the same analysis by JPMCI, income from government and tax refunds accounted for five per cent of income but nine per cent of volatility.[11]

Changes in household make-up:
Households sometimes experience sudden changes in their make-up, sometimes planned (e.g., birth of a child) but often not (e.g., death or divorce). These changes also affect household income flows.[12]

Size of the problem and who is affected

Analysis of the size of the problem and who is most affected is more robust in the U.S. than in Canada, but some surveys carried out by TD and Capital One in advance of the symposium start to help us describe the problem.

SIZE OF THE PROBLEM AND WHO IS AFFECTED

In the U.S., depending on the methodology used, between 32 and 98 per cent of Americans experience some level of income volatility.[13] Those more likely to experience income volatility included those who were Black or Hispanic, or whose educational level was an associates degree or less.[14] Analysis by JPMCI on respondents' participation in online gig employment found that "non-employed, young, lower-income, and men were more likely to participate in labour platforms" and this participation offset dips in other labour income.[15]

TD, in a nationally representative survey of 3,000 Canadians, found that nearly 40 per cent – or 10 million – of Canadians experience "moderate to high levels of income volatility" and over 10 per cent – 3.3 million – saw their monthly income fluctuate by 25 per cent or more.[16] Those more likely to experience income volatility were self-employed, seasonal, or part-time workers, students, those living in large cities or Alberta, those earning low to modest incomes, millennials (18-34; and particularly women in this age category) and men aged 45-54.[17]

Capital One surveyed 1,000 of their customers and found that 50 per cent experienced some monthly income volatility and 20 per cent experienced "quite a bit" or a "great deal" of volatility.[18]

Impact on household financial health

Expenses can also be volatile.[19] Similarly to income, expense volatility occurs when there are variations in household expenses on a month-to-month basis. Income volatility itself will not necessarily lead to negative financial health outcomes.[20] However, when an expense or spending spike is not accompanied by an income spike, this can lead to negative financial and non-financial outcomes.

IMPACT ON HOUSEHOLD FINANCIAL HEALTH

Financial stress:
More Canadians who experience income volatility have financial stress, but this is especially true for those earning less than $50,000 a year. Almost half (45 per cent) of Canadians who experience income volatility and are earning below the low-income cut-off (LICO) and 39 per cent of those earning less than $50,000 (but not below LICO) experience "a lot of stress" regarding their finances compared to 19 per cent of those earning $100,000 or more.[21]

Decreased ability to make necessary expenditures:
In TD's survey of Canadians, a larger proportion of those with high or very high income volatility delayed necessary expenses compared to those with very low or low income volatility:

- Thirty-nine per cent of those with very high volatility and 38 per cent of those with high volatility had delayed buying groceries or food, compared to 16 per cent and 22 per cent of those with very low or low income volatility respectively.
- Thirty-eight per cent of those with very high volatility and 31 per cent of those with high volatility had delayed paying something on their credit card bill, compared to 14 per cent and 23 per cent of those with very low or low income volatility respectively.
- Thirty-four per cent of those with very high volatility and 27 per cent of those with high volatility had delayed paying a monthly bill (other than credit card), compared to 11 per cent and 18 per cent of those with very low or low income volatility respectively.
- Twenty-three per cent of those with very high volatility and 18 per cent of those with high volatility had delayed a rent or mortgage payment, compared to five per cent and nine per cent of those with very low or low income volatility respectively.
- Thirteen per cent of those with very high volatility and 11 per cent of those with high volatility had delayed a student loan payment, compared to one per cent and six per cent of those with very low or low income volatility respectively.[22]

Although income volatility is experienced across all income levels, more Canadians living on low incomes and experiencing income volatility delayed necessary expenditures compared to higher income Canadians:

- Forty-nine per cent of Canadians below the LICO and 39 per cent of those earning less than $50,000 (but not below LICO) delayed buying groceries compared to 13 per cent of those earning $100,000 or more.
- Forty-one per cent of Canadians below the LICO and 32 per cent of those earning less than $50,000 (but not below LICO) delayed paying utilities compared to 12 per cent of those earning $100,000 or more.[23]

Lower savings:
TD's survey found that 39 per cent of those with high income volatility and 48 per cent of those with high volatility scored low on a saving sub-index compared to 27 per cent and 30 per cent for those with very low or low volatility respectively.[24]

Potential solutions

Participants from the U.S. and Canada identified potential solutions to the issue of income volatility and its impacts, highlighting the roles of diverse societal stakeholders:

Employers

As income volatility is largely, if not uniquely, driven by employment income, solutions at the employer level have the potential for high impact. Potential solutions discussed included stabilizing work schedules, using payroll innovations such as paying weekly or daily, and providing wage insurance products.[25]

POTENTIAL SOLUTIONS

Government:
Governments have multiple avenues they can pursue to address income volatility and mitigate its negative impacts on workers. Currently, data and research on household balance sheets in Canada is insufficient to understand who is experiencing income volatility, why, and the impact on their financial health.

The federal government can establish more comprehensive monitoring of household financial health and undertake research to better understand the drivers of income volatility and its impacts.

Federal and provincial/territorial governments can also modernize employment standards and income security programs to address the rise of non-standard work and better mitigate its negative impacts on workers – including income volatility. This includes scheduling standards for employers, making income programs more accessible to non-standard workers and more nimble in providing timely income support.

Governments can also explore the feasibility of wage insurance to support employers and workers.[26] Governments can also provide matching savings for lower- and moderate-income Canadians who save in registered savings products like Tax Free Savings Accounts, Registered Retirement Savings Plans, and Registered Retirement Pension Plans (similar to the U.S. Saver's Credit). This would incentivize short-term emergency savings to help "smooth" monthly income volatility, as well as foster longer term retirement savings and security.[27]

Financial service providers:
Financial service providers, including fintechs, can play a supportive role in helping Canadians deal with income volatility. Potential solutions include offering portable benefit products (including portable retirement savings plans), wage insurance products (in collaboration with government and employers) and savings and credit products that facilitate people's capacity to effectively manage their money in the face of unpredictable income flows.[28]

Financial literacy educators:
Although financial education alone is of minimal impact in addressing income volatility, some basic information and skills can help individuals to better manage their resources in the face of the challenges it creates. Financial literacy educators can encourage people to:

- Save when income spikes or windfalls are received (e.g., three-paycheque months, bonus payouts, tax time refunds).
- Align inflows of income and outflows of expenses such as specific dates for payments to go out.

Conclusions and next steps

The symposium provided an important opportunity to share data and insights on the nature, causes and extent of income volatility and to explore its impacts on American and Canadian households and potential solutions.

CONCLUSIONS AND NEXT STEPS

Strong consensus emerged from the discussions on the need to tackle the data gap in Canada preventing stakeholders from all sectors from clearly delineating the nature and extent of income volatility in Canada, who it is impacting (including key socio-demographic variables), and the nature of those impacts.

The federal government, including Statistics Canada, was seen as the natural party to lead such efforts recognizing, however, that financial service providers can potentially contribute valuable analysis and insights from their data, similar to JPMCI in the U.S., and that complementary observational studies of household financial dynamics – like the U.S. Financial Diaries – can also generate important insights into how households experience income volatility and the strategies they use to mitigate its negative impacts.

Finally, the federal, provincial and territorial governments can benefit from shared dialogue on this issue and coordinated knowledge sharing as they explore and test potential solutions in their own jurisdictions. Periodic cross-border knowledge sharing should also continue to be fostered to accelerate progress toward effective solutions.

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APPENDIX: SYMPOSIUM AGENDA AND PRESENTATIONS

Policy Research Symposium
Growing household financial instability:
Is income volatility the hidden culprit?
8:00 am – 4:30 pm, Friday, March 9, 2018
The Faculty Club, University of Toronto,
Main dining room

All presentations are available at this link:
https://learninghub.prospercanada.org/knowledge/income-volatility-policy-research-symposium/#toggle-id-3

8:00 am	**Breakfast**
8:30 am	**Welcome -** Andrew J. Kriegler, CEO, Investment Industry Regulatory Organization of Canada (IIROC) **Setting the stage** - Liz Mulholland, CEO, Prosper Canada
8:40 am	**Talking to our neighbours: America's household balance sheets** Presentations followed by question and answer session. **Household financial stability and income volatility: Why they matter to the Fed** Ray Boshara, Director, St. Louis Federal Reserve Center for Household Financial Stability **Income volatility: What banking data can tell us, if we ask** Fiona Grieg, Executive Director, JPMorgan Chase Institute **Up close and personal: Findings from the U.S. Financial Diaries** Rob Levy, Vice President, Financial Health, Center for Financial Services Innovation
9:40 am	**The good, the bad, and the ugly: Canada's household balance sheets** Presentation by Andrew J. Heisz, Assistant Director, Income Statistics, Statistics Canada
10:10 am	**Coffee Break**
10:30 am	**Income volatility and its effects in Canada: What do we know?** Presentations followed by question and answer session. **Pervasive and profound: The Impact of income volatility on Canadians** Derek Burleton, Deputy Chief Economist, TD Bank Group **Income and expense volatility and their impact on consumer borrowing** Patrick Ens, Vice President, Product and Marketing Strategy, Capital One **Making the invisible visible: Canada's new Neighbourhood Financial Health Index** Katherine Scott, Vice President, Policy and Research, Canadian Council on Social Development
11:30 am	**What gets inspected, gets respected: Do we have the data we need to tackle household financial instability?** Moderated panel discussion followed by table discussion: **Catherine Van Rompaey,** Director, National Economic Accounts Division, Statistics Canada **Craig Alexander,** Senior Vice-President and Chief Economist, Conference Board of Canada **Dr. Jennifer Robson,** Assistant Professor, Carleton University
12:30 pm	**Lunch**
1:30 pm	**Emerging solutions** Presentations followed by question and answer session. **Aspen Institute Solutions Framework** David Mitchell, Senior Program Manager, Financial Security Program, Aspen Institute **Building consumer financial health: Role of financial institutions and fintech** Rob Levy, Vice President, Financial Health, Center for Financial Services Innovation **Retooling income security programs for the 21st century** Sunil Johal, Policy Director, Mowat Centre **New retirement saving solutions for modest income workers** Jonathan Weisstub, Founder, Common Wealth
3:30 pm	**Where we go from here: Reflections on key takeaways, questions and next steps** Table discussion
4:25 pm	**Closing remarks** Liz Mulholland and Andrew J. Kriegler

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