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How do Canadians perceive access to cash?

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Abstract

This paper introduces a subjective measure of cash accessibility in Canada, complementing existing distance-based metrics developed by Chen, O'Habib and Xiao (2023). Analyzing data from the 2023 Methods-of-Payment Survey, this study explores how Canadians perceive their ease of accessing cash from automated banking machines (ABMs) and financial institution branches. The results reveal strong alignment between subjective perceptions and distance-based metrics, with most Canadians reporting easy access to cash sources. Those who reported lower perceived cash accessibility need to travel longer distances and tend to be young, university-educated, low-income, unemployed or cashless.

Topics: Financial services; Regional economic developments; Bank notes
JEL codes: O1, J15, R51

Résumé

Dans la présente étude, nous proposons une mesure subjective de l'accessibilité de l'argent comptant au Canada, en complément de la mesure fondée sur la distance que nous avons déjà présentée (Chen, O'Habib et Xiao; 2023). À partir de l'analyse des données provenant de l'enquête sur les modes de paiement de 2023, nous étudions dans quelle mesure les gens estiment qu'il est facile d'accéder à de l'argent comptant aux guichets automatiques bancaires et aux succursales des institutions financières. Les résultats obtenus au moyen de la mesure subjective concordent largement avec ceux de la mesure fondée sur la distance – la plupart des personnes interrogées disent avoir facilement accès à des sources d'argent comptant. Les participants pour qui cet accès semble moins facile doivent parcourir de plus longues distances que les autres et sont généralement des personnes jeunes, diplômées universitaires, à faible revenu ou sans emploi, ou ont cessé d'utiliser l'argent comptant.

Sujets : Services financiers ; Évolution économique régionale ; Billets de banque
Codes JEL : O1, J15, R51

1. Introduction

Making adequate arrangements for the supply of bank notes for circulation in Canada is one of the Bank of Canada's obligations under the *Bank of Canada Act*. To help fulfill this mandate, Bank staff do research to understand how Canadians access cash. For example, Chen, O'Habib and Xiao (2023) measure Canadians' access to cash by computing the distance from household locations to the nearest automated banking machines (ABMs) and bank[1] branches.

The concept of access to cash, however, involves more than just physical distance. This paper introduces a subjective dimension to our understanding of cash access. We analyze survey data where respondents rate how easy or difficult it is to access cash via ABMs or bank branches. Analyzing data using this subjective measure offers a complementary view of cash access beyond physical proximity. It captures:

- the perceived ease or difficulty of accessing cash across different demographic groups
- individuals' preferences around using cash, based on their cash-use behaviour

Our analysis begins by providing a summary of the distance-based measurements used by Chen, O'Habib and Xiao (2023). We then discuss the dataset used for our subjective measure. Next, to provide context for our subjective findings, we compare our subjective measure with the travel distances developed in our previous paper. Finally, we examine various demographic and cash use groups for any differences in how they perceive cash accessibility.

2. Distance-based measure of cash accessibility: Proximity to cash source

Chen, O'Habib and Xiao (2023) develop a distance-based metric to measure Canadians' access to cash from their home locations to ABMs and bank branches. They find the following:

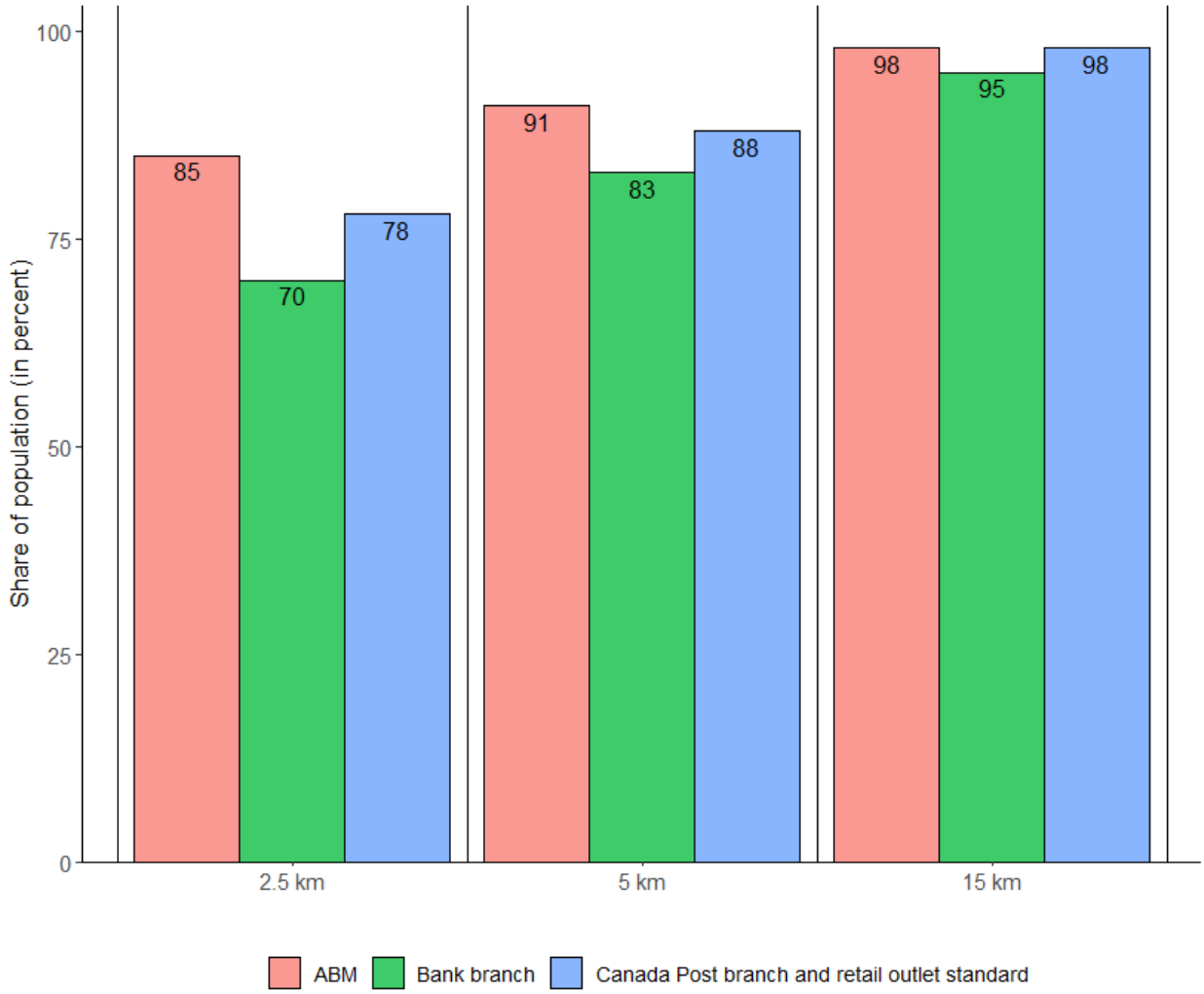
- In 2022, Canadians, on average, needed to travel about 2.0 kilometres (km) to reach the nearest ABM and 4.5 km to access a bank branch.
- For urban residents, the average travel distance to the nearest ABM was less than 1.0 km and to the nearest branch was within 2.0 km.
- For rural Canadians, the average travel distance to the nearest ABM was 4.0 km and to the nearest branch was 9.6 km.

To provide a benchmark, we compare these distances with distances to post offices. The *Canadian Postal Service Charter* for 2022 (Canada Post 2022) requires that 78% of consumers have a postal outlet within 2.5 km, 88% within 5.0 km and 98% within 15.0 km. **Chart 1** shows that cash accessibility performs well against this standard, which suggests that cash is readily accessible to most Canadians.

[1] We use "bank" throughout this paper as a term that includes all depository institutions, including commercial banks, credit unions/caisses populaires and trusts.

Chart 1: Accessibility to nearest automated banking machine and bank branch is comparable to Canada Post's standards for accessibility to postal outlets

Share of population within each distance threshold



Note: ABM is automated banking machine. "Chen, O'Habib and Xiao (2023)" refers to H. Chen, D. O'Habib and H. Xiao, "How Far Do Canadians Need to Travel to Access Cash?", Bank of Canada Staff Discussion Paper No. 2023-28 (November 2023).
Sources: Chen, O'Habib and Xiao (2023) and Bank of Canada calculations

3. Subjective measure of cash accessibility: Perceived ease or difficulty getting to a cash source

To develop a subjective measure of accessibility, we use the 2023 Methods-of-Payment (MOP) Survey (Henry, Shimoda and Rusu 2024) to capture Canadians' perceptions of their access to cash. The survey asked participants two separate questions:

- "When you need to withdraw cash, how easy or difficult is it for you to get to an ABM?"
- "When you need to withdraw cash, how easy or difficult is it for you to get to a bank?"

The responses were based on a five-point Likert scale, with 1 being "very difficult," 2 "difficult," 3 "neither difficult nor easy," [2] 4 "easy" and 5 "very easy."

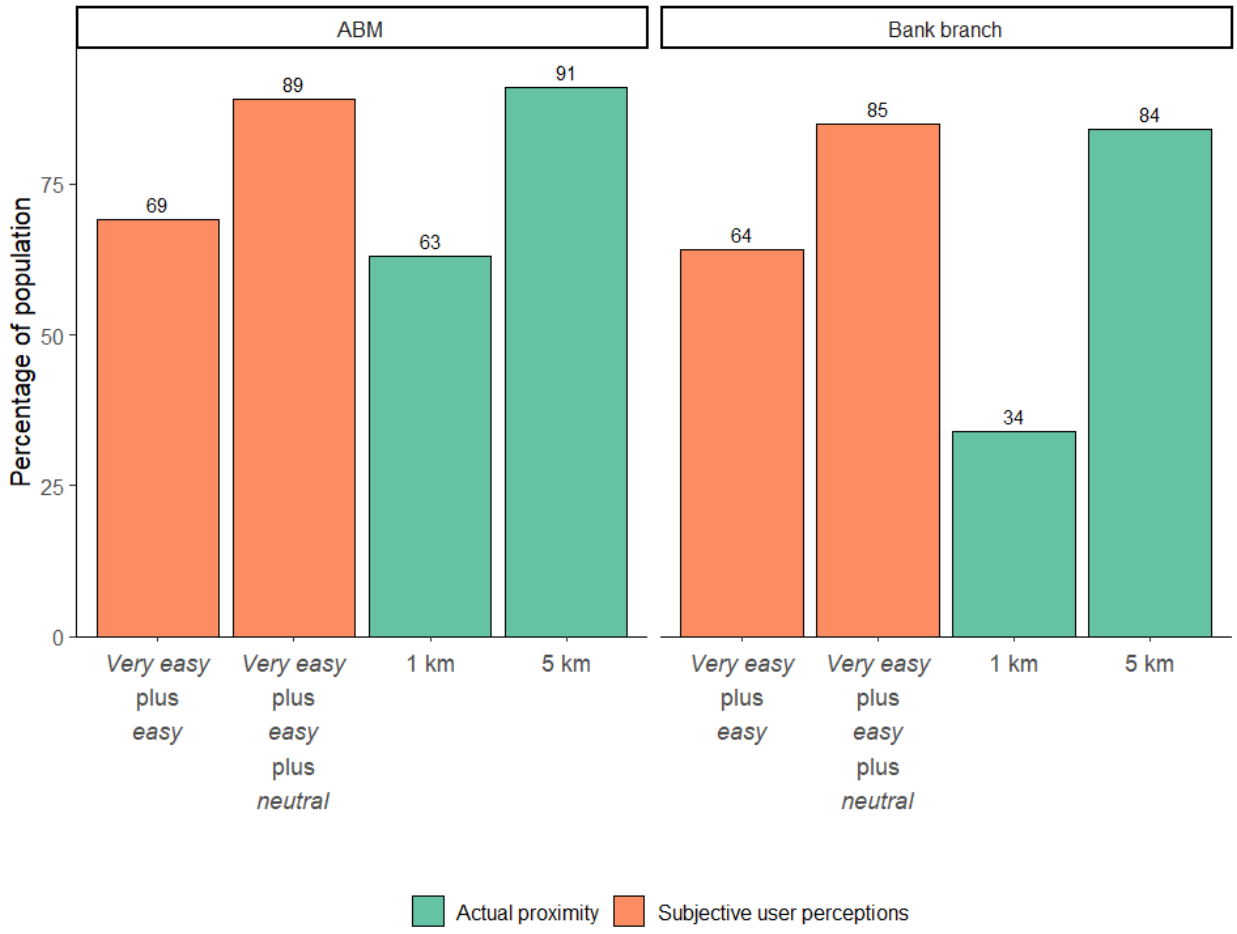
Chart 2 compares the travel-based measurements from Chen, O'Habib and Xiao (2023) with the subjective perceptions of cash accessibility described above. It shows that these two measures are well aligned:

- 91% of Canadians live within 5 km of an ABM, and 89% of survey respondents rate their access to ABMs as "very easy," "easy" or "neutral" (see footnote 2). This suggests that, for most Canadians, their proximity to ABMs lets them perceive an ease of access.
- 84% of Canadians are within 5 km of a bank branch, and 85% of respondents rate their access to a bank branch as "very easy," "easy" or "neutral." Again, this indicates that their physical proximity to bank branches leads most Canadians to perceive them as accessible.

We can draw similar conclusions when we compare the shares of population within 1 km threshold against the combined ratings of "very easy" and "easy." In sum, these comparisons suggest that a large majority of Canadians find it easy to access both ABMs and bank branches, consistent with the measured travel distance.

[2] While one response option uses the phrase "neither difficult nor easy," we refer to this response as "neutral." Participants also had the option to answer "unsure" to both the ABM and bank access questions. These respondents represent less than 1% of the sample and are filtered out from the analysis.

Chart 2: Travel distance and subjective perceptions of access to cash appear to align



Note: ABM is automated banking machine. Chart compares users' perceived access to cash though ABMs or bank branches with actual distance measures, using distance thresholds of 1 km and 5 km. "Chen, O'Habib and Xiao (2023)" refers to H. Chen, D. O'Habib and H. Xiao, "How Far Do Canadians Need to Travel to Access Cash?", Bank of Canada Staff Discussion Paper No. 2023-28 (November 2023).
Sources: Chen, O'Habib and Xiao (2023) and Bank of Canada calculations

4. Drivers of subjective perceptions of cash accessibility

4.1 Breakdown of subjective perceptions by demographics and cash usage

Table 1 and **Table 2** show the demographic breakdowns of subjective perceptions of cash access for ABMs and bank branches, respectively. To calculate the net positive score, we add the percentage of respondents who find access "very easy" or "easy" and subtract from it the percentage of those who find it "very difficult" or "difficult." Across the entire MOP sample, the average net positive score for accessing ABMs is 58% and for accessing branches is 49%.

Age

Age is a significant factor in shaping perceptions of cash access. Older respondents (aged 55 years and older) had the highest net positive scores for perceived ease of access to both ABMs and bank branches. Both tables show that the youngest (18–34 years) and middle-age (35–54 years) groups perceive a lower ease of access compared with the oldest group (55 years and older).

Education

Respondents with a university education showed the lowest net positive scores for perceived ease of access for both ABMs and bank branches. Those with lower levels of education, such as high school, had higher scores. This trend is more pronounced for bank branch access, where the net positive score for university-educated respondents is 42%, significantly lower than the score of 55% for those with only a high school education.

Urban or rural

We find no difference between rural and urban[3] respondents in how they perceive ABM access. But a clear difference emerged for branch access, with net positive scores of 41% for rural residents and 51% for urban residents.

Income and labour force participation

Low-income respondents reported having more difficulty accessing cash, with those earning less than $45,000 annually attaining a net positive score of 53% in perceived access to ABMs, and 47% in perceived access to bank branches. Both are lower than the sample average. Moreover, respondents who are unemployed reported the lowest perceived ease of access for both ABMs and bank branches, with net positive scores of 45% and 34%, respectively.

Cash use

In the 2023 MOP, respondents were asked: "Do you currently have any plans to stop using cash in the future?" We classify respondents into two groups according to their answers: one is "already cashless," where respondents have already stopped using cash, and the other is "still use cash," where respondents are still using cash. **Table 1** and **Table 2** show that among those still using cash, the net positive score for perceived cash access is 61% for ABMs and 53% for branches. The already cashless group has a net positive score of only 29% for ABMs and 15% for branches—much lower than any other demographic group.

[3] The urban versus rural variable is determined based on the forward sortation area from the first three characters in a Canadian postal code. When the second character is zero, this indicates a wide-area rural region. All other digits indicate urban areas.

Table 1: Subjective perceptions of access to automated banking machines, by demographic factor

Demographic factor	Respondents reporting access is *very easy* or *easy* (total, in %)	Respondents reporting access is *very difficult* or *difficult* (total, in %)	Respondents reporting access is *neutral** (total, in %)	Net positive score (column 2 minus column 3)
Age				
18–34	62	14	24	48
35–54	68	12	20	56
55 and older	75	8	17	67
Gender				
Male	69	10	21	59
Female	69	12	19	57
Education				
High school	70	10	20	60
College	71	11	18	60
University	66	12	22	54
Urban or rural				
Rural	69	12	19	57
Urban	69	11	20	58
Income				
Less than 45,000	66	13	21	53
45,000 to 84,999	70	9	21	61
85,000 and more	70	11	19	59
Labour force participation				
Employed	69	11	20	58
Unemployed	62	17	21	45
Not in labour force	71	10	19	61
Cash use				
Already cashless	51	22	27	29
Still use cash	71	10	19	61

* Neutral refers to the response option of *neither difficult nor easy*.

Note: All numbers are weighted estimates based on the 2023 Methods-of-Payment Survey weights.

Table 2: Subjective perceptions of bank branch access, by demographic factor

Demographic factor	Respondents reporting access is *very easy* or *easy* (total, in %)	Respondents reporting access is *very difficult* or *difficult* (total, in %)	Respondents reporting access is *neutral** (total, in %)	Net positive score (column 2 minus column 3)
Age				
18–34	59	17	24	42
35–54	59	19	22	40
55 and older	72	10	18	62
Gender				
Male	64	14	19	50
Female	64	15	21	49
Education				
High school	68	13	19	55
College	63	16	21	47
University	59	17	24	42
Urban or rural				
Rural	60	19	21	41
Urban	65	14	21	51
Income				
Less than 45,000	63	16	21	47
45,000 to 84,999	68	12	20	56
85,000 and more	63	16	21	47
Labour force participation				
Employed	61	16	23	45
Unemployed	55	21	24	34
Not in labour force	70	12	18	58
Cash use				
Already cashless	45	30	25	15
Still use cash	66	13	21	53

* Neutral refers to the response option of *neither difficult nor easy*.
Note: All numbers are weighted estimates based on the 2023 Methods-of-Payment Survey weights.

4.2. Regression analysis

Along with the one-way breakdowns shown in tables 1 and 2, we also conduct a regression analysis of the perceived ease of access to cash sources based on a five-point Likert scale: 1 "very difficult", 2 "difficult", 3 "neither difficult nor easy" (see footnote 2), 4 "easy" and 5 "very easy." The explanatory variables are distance measures, demographics and cash usage:

- **Distance to ABM** and **distance to bank branch**: We calculate these distances at the forward sortation area (FSA) level and assign them to survey respondents. More specifically, Chen, O'Habib and Xiao (2023) use the Canada Pseudo-Household Demographic Distribution dataset provided by Statistics Canada to proxy for Canadians' home locations and measure the travel distance from each household to the nearest ABM or bank branch. We then spatially join these pseudo-households

with the 2021 Census Boundary File to calculate the average distance to the nearest cash source at the FSA level. These average distances are then assigned to respondents in the 2023 MOP Survey based on their reported FSAs.

- **A range of demographic measures**: These consist of age, gender, education, urban versus rural, income and labour force participation.
- **Cash use**: We define this based on respondents' answers to whether they have already stopped using cash.[4]

Distance

Table 3 presents the coefficients from our regression analysis. We find that:

- a 1 km increase in mean distance to an ABM is associated with a 0.036-point decrease in the perceived ease of accessing an ABM
- a 1 km increase in mean distance to a bank branch is associated with a 0.014-point decrease in perceived ease of accessing a branch

These results suggest that supply-side constraints—such as distance to the nearest ABM or branch—may play a role in how difficult people feel it is to access cash. This is consistent with the findings of Chen, Strathearn and Voia (2021) that significant shoe-leather costs exist for Canadians to access cash.

Demographics

Education, income and employment status are also associated with perceptions of cash access:

- University-educated individuals perceive greater difficulty in ABM and branch access, with coefficients of -0.173 for ABMs and -0.265 for branches—both significant at the $p < 0.001$ level.
- Lower-income respondents (less than $45,000) perceive greater difficulty in accessing ABMs, with a coefficient of -0.084 for ABM access ($p < 0.1$) and -0.168 ($p < 0.001$) for branch access.
- Unemployed individuals perceive greater difficulty in accessing both ABMs and bank branches, with a coefficient of -0.150 ($p < 0.1$) and -0.174 ($p < 0.1$), respectively.

Overall, these regression coefficients are consistent with the demographic breakdowns in tables 1 and 2.

Cash use

Notably, the coefficient for already cashless individuals is -0.452 for ABM access and -0.480 for branch access. These are both highly significant, with *p*-values less than 0.001. This indicates that already cashless individuals have a significantly worse perception of their ability to access cash compared with individuals who still use cash, even after controlling for distances to the nearest ABM or branch and a range of demographic variables.

The significance of this result suggests that being already cashless could potentially reflect personal preference, since not using cash may predispose people to feel that accessing cash is difficult. But this result could also reflect that the regression does not consider all factors that could constrain cashless individuals'

[4] An alternative definition of cash use can be found in Henry, Shimoda and Zhu (2022), where "cashless" are respondents who say they have already stopped using cash and who report holding $0 in cash on hand. When we use this alternative cash usage variable in the regression, we find very similar results.

access to cash. For example, limited mobility due to disability, or not owning or having access to a vehicle could be significant constraints that make access to cash seem more difficult than it otherwise would be. Further research is needed to examine such potential factors more closely.[5]

Table 3: Regression results for perceived ease of access to automated bank machines (ABM) or bank branches

Variable	Perception of access to ABM	Perception of access to branch
Intercept	3.809***	3.902***
Mean distance to ABM	-0.036**	
Mean distance to branch		-0.014**
Age	0.019***	0.008+
Age^2	1.503e-04	1.674e-05
Female	-0.090**	-0.051
Education: college	-0.138**	-0.236***
Education: university	-0.173***	-0.265***
Income: less than 45,000	-0.084*	-0.168***
Income: 85,000 or more	0.02	-0.069
Rural forward sortation area	-0.017	-0.104
Unemployed	-0.150*	-0.174*
Not in labour force	-0.043	-0.052
Already cashless	-0.452***	-0.480***
Number of observations	3,456	3,467
R^2	0.054	0.055

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Note: ABM is automated banking machine. The reference group for categorical variables includes respondents who are male, have a high school education or less, earn between $45,000 and $85,000, are employed, still use cash, and live in urban forward sortation areas. Other categories are compared against this reference group. The intercept in the regression model represents the mean perceived ease of access to cash for this reference group, holding all other variables constant. Specifically, it suggests that the average perceived ease of accessing an ABM or bank branch for individuals in the reference group is 3.809 and 3.902, respectively, on a five-point Likert scale.

[5] Previous research indicates that supply-side constraints, such as distance to the nearest cash access point, affect households' decisions to withdraw cash (Chen, Strathearn and Voia 2021). Other studies have shown that demand-side factors impact the location choices of bank branches (Chen and Strathearn 2020), with cultural preferences potentially affecting household choices of financial institutions (Carbo-Valverde, Pérez-Saiz and Xiao 2023). In addition, household preferences significantly influence market acceptance of various payment methods due to network externalities (Huynh, Nicholls and Shcherbakov 2022), indirectly affecting households' decisions to obtain cash.

Conclusion

The concept of cash accessibility involves more than just physical distance to a cash source. This note introduces a subjective dimension to understanding cash accessibility. We analyze survey data where respondents rate the ease or difficulty of getting to an ABM or bank branch to withdraw cash.

In comparing the subjective measure of access to cash with the distance measure, we find the two measures are aligned and lead to similar conclusions about cash accessibility in Canada. Our distance-based measure shows that a very high percentage of Canadians live near an ABM or bank branch. And our subjective measure of access to cash correspondingly shows that most Canadians perceive that getting to an ABM or a bank to take out cash is relatively easy.

We also find that those who find it less easy to access cash tend to live away from cash sources, be young, university-educated, low-income, unemployed or already cashless. However, our current analysis could potentially omit other important factors affecting people's subjective perception of their access to cash, such as limited mobility. People might also be affected by the cost of fees to withdraw cash from non-affiliated banks, limited operating hours of ABMs or bank branches, or trip-chaining behaviour—where individuals combine multiple errands into one trip (Chen and Xiao, forthcoming). Future research could explore these factors to disentangle people's preferences from constraints.

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