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What is This?

# Banking on the Margin in Canada 

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#### Abstract

This article analyzes the socioeconomic characteristics of the financially excluded in Canada using the 1999 Statistics Canada Survey of Financial Security and two surveys sponsored by the Financial Consumer Agency of Canada in 2001 and 2005. The authors find that financial exclusion is more concentrated among low-income Canadians; low-income, low-level of assets, and single-parent statuses are correlated with being unbanked. A review of banking preferences of low-income people indicates that economically disadvantaged households are more concerned about convenience and not as interested in new banking technologies.


Keywords: financial exclusion; unbanked; poverty; personal finance

Adichotomy exists in the financial market between the rich and poor people in market economies throughout the world. Whereas the former are able to access a wide variety of banking products that are invaluable in managing day-to-day household finances, savings, and investments, barriers exist that exclude the latter from taking advantage of these services. This phenomenon has become commonly known as financial exclusion. It is widely appreciated that financial exclusion enhances the economic vulnerability of the poor, and improving the accessibility of the financial sector is instrumental to overcome poverty. Although financial exclusion is most prevalent in developing countries, studies have emerged recognizing the significance of the problem in industrialized countries (e.g., Devlin, 2005; Dymski, 2003; Hogarth, Anguelov, \& Lee, 2003, 2005). In this article, we analyze the socioeconomic characteristics of the financially excluded in Canada and discuss the implications of recent changes in bank structures and services for low-income Canadians.

A major Canadian government-commissioned study, The Task Force Report on the Future of the Canadian Financial Services Sector (Task Force on the Future of the Canadian Financial Services Sector, 1998) and case studies (Buckland \& Martin, 2005) have reported that rates of financial exclusion are higher among low-income than higher income households. However, there have been no studies reporting on the characteristics of the financially excluded at a national level. This article seeks to address
this gap by drawing on the most relevant data sources available that include indicators of financial exclusion. We particularly rely on data from the 1999 Survey of Financial Security (Statistics Canada, 1999; the last year for which it is available) and national polls on financial service issues commissioned by the Financial Consumer Agency of Canada (FCAC) in 2001 (Ekos Research Associates Inc., 2001) and 2005 (Ipsos-Reid Corporation, 2005). ${ }^{1}$ As far as we know, these data have not been used to analyze financial exclusion elsewhere.

Four sections follow this introduction. The second section discusses the nature of financial exclusion and its scope in Canada. The third section presents a statistical analysis of those who are financially excluded in Canada. In the fourth section, we discuss the implications of some recent changes in bank structure and services to lowincome people. Conclusions are presented in the final section.

[^0]
## The Nature of Financial Exclusion and Its Scope in Canada

## What Is Financial Exclusion?

There is no internationally or nationally accepted definition of financial exclusion. It generally is defined in one of two ways. It sometimes refers to a person who is unbanked, that is, having no "mainstream" bank account. ${ }^{2}$ At other times, financial exclusion refers to both unbanked and underbanked individuals, that is, those having a bank account that is underused, either in terms of frequency (rarely used) or scope (used for only limited purposes). Without a deposit account it is unlikely that this person will have any other mainstream bank-provided financial services such as a credit card, a bank loan, or a mortgage. ${ }^{3,4}$ By definition, financially excluded people rely almost entirely on fringe and informal financial services. Fringe bank refers to a category of financial service providers such as check cashers, pawnshops, rent-to-own shops, and payday lenders that operate on the margins of the financial service system and are semiformal in that they are notwith the imminent exception of payday lenders-regulated or licensed. ${ }^{5}$ By informal financial services, we refer to credit, check cashing, money transfer, and other financial services from friends, family, and corner stores. These services are likely to be important for low-income people, but there is little research on them.

## Is Financial Exclusion a Problem?

A few problems have been identified as rooted in financial exclusion. Financial exclusion implies reliance on fringe banks and informal financial sources, but fringe banks provide only a basic set of "transactional" services. These services meet only immediate financial needs such as very small loans (e.g., Can\$20-Can\$500) or that convert a check into cash or cash into a money order (or bill payment). They do not involve services that address "developmental" services such as improving financial literacy, repairing or building a credit rating, developing a savings habit, and building savings. Without a relationship with a mainstream bank, these developmental needs cannot be met. Complete reliance on fringe banking can act as a barrier for a household's financial improvement, making it difficult for the poor to escape a poverty trap.

Fringe bank service fees are also generally high in comparison to mainstream bank products. For instance, using data on fringe bank fees in Winnipeg, Buckland and Martin (2005) found that annual percentage rates (APRs)
for pawning are higher for lower sum loans, ranging from $240 \%$ to $540 \%$. Cashing a check is sometimes thought of as a 5 -day loan; it was found that the average APR was $210 \%$. APRs for payday loans varied the most, from $260 \%$ for a Can $\$ 300$ loan all the way to $988 \%$ for a smaller loan. Rent-to-own APRs ranged from $120 \%$ to $489 \%$, whereas tax-refund advance loans, the only regulated fringe bank service, charged $286 \%$. Although fringe bank service fees are not large in absolute terms, if these services are used on a regular basis, they can add up. ${ }^{6}$

The often-quoted baseline for financial exclusion in Canada is the MacKay Report (Task Force on the Future of the Canadian Financial Services Sector, 1998), which found that $3 \%$ of Canadian adults (18 years of age and above) and $8 \%$ of Canadian adults with household incomes less than Can $\$ 25,000$ had no bank account. The 1999 Survey on Financial Security (Statistics Canada, 1999) found that $13 \%$ of its respondents were without a bank account with a nonzero balance. More recent surveys have generated varied results, too. The FCAC-sponsored survey in 2005 found that $3 \%$ of the respondents did not have a bank account (Ipsos-Reid Corporation, 2005). However, VISA International and the Commonwealth Business Council (2004) claimed that $15 \%$ of Canadians 15 years old and above are unbanked. ${ }^{7}$

The lower estimates, $3 \%$ for all adults and $8 \%$ for lowincome adults being unbanked, are most likely underestimates because, as shall be demonstrated below, the financially excluded are more likely poor and, therefore, more likely to not have a telephone and, therefore, were likely not fairly represented in the telephone survey used for the MacKay Report survey or FCAC-sponsored poll.

The level of financial exclusion in Canada is close to that found in the United Kingdom, where it stands at between $6 \%$ and $9 \%$ (Her Majesty's Treasury, 2004; Rogaly, Fisher, \& Mayo, 1999) (see Table 1). Estimates of the proportion of underbanked (having no more than one or two mainstream bank products) add an additional $20 \%$ to these figures (Financial Services Authority, 2000 as cited in Devlin, 2005, p. 78). Studies in the United States place the unbanked at double these levels, ranging from $12 \%$ to $13.5 \%$ of the population, but they place financial exclusion as high as $41 \%$ among low-income people (Caskey, 1994). Data on bank account-holding in developing nations are much lower. For instance, the financially excluded represent $54 \%$ of South African adults and $80 \%$ of Indian adults.

The MacKay Report found that low-income adults were 2.7 times more likely than higher income adults to not have a bank account. Data from 2005 found this relationship persisted: The rate of unbanked was double

Table 1
Estimates of Financial Exclusion in Canada and Selected Countries

|  |  |  |  | Percentage <br> of Each |
| :--- | :--- | :--- | :--- | :--- |
| Country <br> (Data year) | Cited Study |  |  |  |

for households that earn less than Can $\$ 30,000$ per year compared to the average. When one onsiders the correlation between income and education level, it is not surprising that the unbanked rate was 2.7 times higher for people without a high school education compared to the average (Ipsos-Reid Corporation, 2005). ${ }^{8}$

By definition, financially excluded people rely on fringe banking or informal banking services. ${ }^{9}$ One cannot buy groceries or pay rent with a check from an employer or a welfare program. Fringe banks such as check cashers or informal providers such as some corner stores cash a check either for a fee (in the case of the check casher) or for the purchase of sizable amount of product from the shop (in the case of some corner stores).

It turns out that fringe banks are not really "on the fringe," at least in terms of the number of people using their services. Let us review the available data on fringe bank use in Canada, subject to the usual qualification
about bias of survey methods. Reported rates of those who "ever use" check cashers have remained at around $7 \%$ to $8 \%$ from 1998 through 2001 and $2005 .{ }^{10}$ In 2002, a survey found that almost $5 \%$ or 1.4 million Canadians had used a service from the fringe financial sector in the last 3 years (Lott \& Grant, 2002). Although there does not appear to be an increase in the rate of persons using check cashers, there is no longitudinal data on the per-person rate of use. Because no follow-up survey has been done, we cannot comment on changes in total use of check casher/payday lenders. We have limited data on the more regular fringe bank client with the exception of their payday loan use. The 2005 survey found that of those people who used payday loan or check-cashing services, $26 \%$ used one of these services at least once a month and that only one eighth of those clients used check cashing. This means that most of these clients are using payday loans and, on average, they had lower incomes than those payday loan clients using
the service less frequently (Buckland, Carter, Simpson, Friesen, \& Osborne, 2007, pp. 32-33).

The Canadian Payday Lenders Association sponsored a survey in 2006, which found that $49 \%$ of their clients had household income of less than Can $\$ 35,000$ (Environics Research Group, 2005). ${ }^{11,12}$ This income level is just a little more than one half of the 2005 Canadian economic family average of Can $\$ 64,800$ and falls between the 3- or 4-member family Low-Income Cut-Off (LICO) for 2005. ${ }^{13,14}$ (Surprisingly, this survey also found that $7 \%$ of the loan clients were unemployed.) The Association of Community Organizations for Reform Now Canada (ACORN Canada, 2004)-sponsored survey of 419 customers exiting payday loan outlets found that $46 \%$ of Vancouver clients and $30 \%$ of the Toronto clients had household incomes below Can $\$ 30,000$, falling between the 2 - or 3 -member family LICO for 2005. This survey also found that almost one half of the chronic payday loan clients (i.e., those with more than 10 payday loans in the last year) have incomes below this figure (Stratcom Strategic Communications, 2005). A 2002 national survey, found average income of pawnshop clients was Can $\$ 31,400$, also falling between 2 - or 3-member family 2005 LICO (Lott \& Grant, 2002, p. 36). ${ }^{15}$ This survey also found that the average income for persons claiming to use any type of fringe bank service was Can $\$ 51,400$ (Lott \& Grant, 2002, p. 36). ${ }^{16}$ These data, in general, demonstrate that fringe bank clients, particularly check cashers and pawnshop clients, have incomes well below average income, and it is likely many clients have incomes close to the LICO.

## Who Are the Financially Excluded in Canada?

## Evidence from the 1999 Survey on Financial Security

In this section, we take a close look at those who are more likely to be deprived of access to basic financial services in Canada using data from the 1999 Survey of Financial Security (Statistics Canada, 1999). This is the most up-to-date survey with a rich collection of information on the financial situations of more than 15,000 Canadian households in $1998 .{ }^{17}$

Based on data availability, three indicators are used to gauge the household's level of financial inclusion. The first indicator is whether a household has a nonzero balance bank account. ${ }^{18}$ Having a bank account is the first step toward building a credit rating, which leads to further access to financial products and services. The second
indicator is whether a household possesses a credit card. Credit cards are one of the most essential means of obtaining consumer credit. Without a credit card, it is difficult to establish a credit rating for bank loans. The last measure is whether a household has ever pawned or sold their belongings to a pawnbroker. The use of fringe banking is a sign that the household does not have easy access to the mainstream financial sector. ${ }^{19}$

Table 2 presents the summary statistics of the three financial exclusion indicators over household characteristics. As seen in that table, the three indicators are strongly correlated. For instance, households in the data set that had no bank account and no credit card were five times more likely to have pawned some of their belongings than households that had at least one of the two products. Moreover, households that did not have credit cards were twice as likely to have no nonzero-balance bank accounts than households that had one. This shows that some households may face barriers to both types (deposit account and credit card) of basic financial services.

Four types of variables are introduced to explain financial market nonparticipation. The first group of variables measures the economic status of a household, which includes income, major source of income, net assets, home ownership status, and registered retirement saving plans (RRSPs, registered by the Canadian government to encourage personal retirement savings involving taxdeductible contributions). ${ }^{20}$ It is hypothesized that households with lower income, fewer net assets, no home ownership, no registered retirement pension, and dependence on government transfers for their livelihood are more likely to be financially excluded. As indicated by evidence presented in the next section, we hypothesize that this is, to a large extent, because economically disadvantaged households are more sensitive to supply-side factors such as bank location and types and restrictions of bank products. The second type of variable consists of household demographic characteristics, such as family structure and household size. ${ }^{21}$ We hypothesize that unattached individuals, who are more likely to be young people, may experience difficulty in acquiring credit cards because of the lack of a positive credit rating. In addition, as we show in the next section, changes in proximity to bank or bank operation schedules may make it more inconvenient for those with more children, indicated by larger family size, and female sole parents, to assess mainstream financial services.

Financial literacy is a third factor that may affect financial market participation. The utilization of financial services requires some basic arithmetic skills, and those who are better informed on the availability and

Table 2
Summary Statistics of Financial Exclusion Indicators

|  | Number | Percentage <br> of Sample | Percentage <br> Without <br> Nonzero <br> Bank Account | Percentage <br> That Have |
| :--- | :---: | :---: | :---: | :---: |
| Variable | 15,933 | 100 | 12.98 | Percentage <br> With No <br> Credit Card |
| Total sample |  | 21.14 | or Sold <br> a Belonging <br> to Pawnbroker |  |
| Have nonzero bank account <br> Yes | 13,865 | 87.02 | NA | 17.84 |
| $\quad$ No | 2,068 | 12.98 |  | 43.33 |

NOTE: NA = not applicable.
benefits of mainstream financial services are more likely to acquire these services. We measure financial literacy by looking at two indicators: educational attainment of the head of a household and whether the household has a budget. Last, we hypothesize that financial exclusion is correlated with social exclusion, and, hence, the fourth determinant of a household's ability to acquire basic financial services is its access to a social network. This social attribute is measured by whether the household could receive assistance from relatives or friends when experiencing a financial crisis. Those who cannot count on assistance from the community are more likely to turn to fringe banking such as pawnshops as a last resort to absorb unexpected income shocks. The positive association between financial and social exclusion means that the financially excluded are among the most vulnerable. To estimate consistently the impact of the aforementioned variables, we control regional variations by using provincial dummy variables.

To obtain a general picture of who does not have a (nonzero balance) bank account or a credit card or who has pawned or sold possessions to pawnbrokers, we derive the distribution of the three financial exclusion indicators over household characteristics (Table 3). It is clear from looking at these statistics that the financially excluded tend to have lower incomes and fewer assets, receive government transfers as their main means of support, do not own their homes, and do not have RRSPs; they are likely to be single parents, less educated, and less likely to be able to receive financial assistance from relatives and friends. Because these socioeconomic and demographic characteristics overlap, the probit regression
analysis is applied to discern the effect of each explanatory variable. ${ }^{22}$

The results of the three regressions are presented in Table 4. We report the effect of a change in a variable on the probability that the household is deprived of basic financial services as indicated by each dependent variable and heteroscedasticity-consistent $z$ scores. As the statistics reported at the bottom of the table indicate, all three regression equations are highly significant, explaining $11 \%$ to $29 \%$ of the variation in the dependent variables.

First, we consider the impact of economic status on financial market participation. The estimates show that households with annual incomes less than Can $\$ 10,000$ are most likely to be excluded from mainstream financial services and rely on fringe banking for credit among all income groups. Compared to those with income of more than Can $\$ 100,000$, the poorest group is $9.7 \%$ more likely to have no bank account, $36.4 \%$ more likely to have no credit card, and $1.7 \%$ more likely to have pawned a belonging. Although the probability of not having a credit card declines significantly over income levels, the behaviors of groups with income higher than Can $\$ 10,000$ with respect to bank account possession and fringe banking are not significantly different from one another. This suggests that financial exclusion is a problem concentrated among the least well-off population.

Also, as expected, net assets have a significant negative effect on the likelihood of being financially excluded. A Can $\$ 10,000$ increase in assets reduces the probability of not having a bank account by $0.5 \%$ and the probability of not having a credit card by $7.1 \%$. Homeowners (especially those with no mortgages) are

Table 3
Distribution of Financial Exclusion Indicators Over Household Characteristics

| Variable | Number | Percentage of Sample | Without <br> Nonzero <br> Bank Account | Percentage With No Credit Card | Percentage <br> That Have Pawned or Sold Belonging a to Pawnbroker |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total sample | 15,933 | 100 | 12.98* | 21.14* | $2.2 *$ |
| Family income |  |  |  |  |  |
| <Can\$10,000 | 1,079 | 6.77 | 28.54 | 58.85 | 7.60 |
| Can\$10,000-Can\$30,000 | 5,803 | 36.42 | 16.42 | 35.21 | 3.27 |
| Can\$30,000-Can\$50,000 | 4,377 | 27.47 | 11.29 | 12.31 | 1.23 |
| Can\$50,000-Can \$100,000 | 3,663 | 22.99 | 7.23 | 3.96 | 0.57 |
| >Can\$100,000 | 1,011 | 6.35 | 4.75 | 0.69 | 0.40 |
| Net assets |  |  |  |  |  |
| <Can\$0 | 804 | 5.19 | 28.48 | 41.42 | 12.31 |
| Can\$0-Can\$25,000 | 2,954 | 19.07 | 25.29 | 52.54 | 5.99 |
| Can\$25,000-Can\$100,000 | 3,278 | 21.16 | 15.19 | 23.00 | 1.19 |
| Can\$100,000-Can\$250,000 | 3,505 | 22.62 | 9.59 | 13.01 | 0.68 |
| Can\$250,000-Can\$500,000 | 2,548 | 16.45 | 5.69 | 7.50 | 0.35 |
| >Can\$500,000 | 2,403 | 15.51 | 4.04 | 3.04 | 0.04 |
| Home ownership |  |  |  |  |  |
| Yes, no mortgage | 5,430 | 34.08 | 6.94 | 14.35 | 0.26 |
| Yes, with mortgage | 5,130 | 32.20 | 12.65 | 8.15 | 0.88 |
| No | 5,373 | 33.72 | 19.39 | 40.42 | 5.43 |
| Have registered retirement savings plan |  |  |  |  |  |
| Yes | 10,382 | 65.16 | 8.20 | 8.32 | 1.00 |
| No | 5,551 | 34.84 | 21.92 | 45.13 | 4.45 |
| Source of income |  |  |  |  |  |
| No income | 5 | 0.03 | 40.00* | 100.00* | 0.00 |
| Wages and salaries | 9,476 | 59.47 | 11.79 | 13.97 | 1.86 |
| Self-employment income | 936 | 5.87 | 10.36 | 12.18 | 0.96 |
| Government transfers | 3,939 | 24.72 | 19.24 | 44.63 | 5.05 |
| Investment income | 456 | 2.86 | 2.41 | 14.25 | 0.04 |
| Retirement pensions | 976 | 6.13 | 5.64 | 7.07 | 0.03 |
| Other income | 145 | 0.92 | 19.31 | 24.14 | 0.00 |
| Family composition |  |  |  |  |  |
| Unattached individuals | 4,420 | 27.74 | 14.16 | 35.66 | 2.65 |
| Couples, no children | 4,180 | 26.23 | 9.35 | 12.70 | 0.89 |
| Couples, with children | 4,733 | 29.71 | 12.74 | 11.30 | 2.13 |
| Lone parent families | 1,142 | 7.17 | 24.52 | 40.81 | 6.57 |
| Other family types | 1,458 | 9.15 | 11.52 | 17.90 | 1.44 |
| Education |  |  |  |  |  |
| Less than high school | 4,526 | 28.65 | 18.34 | 38.05 | 3.14 |
| Graduated high school | 3,479 | 22.03 | 13.54 | 20.84 | 2.44 |
| Post secondary certificate (nonuniversity) | 4,248 | 26.89 | 12.12 | 16.43 | 2.40 |
| University degree | 3,542 | 22.43 | 6.69 | 6.01 | 0.62 |
| Received help from a relative in financial crisis? |  |  |  |  |  |
| Yes | 8,408 | 52.77 | 10.93 | 18.80 | 1.83 |
| No | 5,770 | 36.21 | 18.01 | 26.41 | 3.36 |
| Such crisis wouldn't happen | 1,755 | 11.02 | 6.27 | 15.04 | 0.17 |
| Have budget |  |  |  |  |  |
| Yes | 6,736 | 42.28 | 13.55 | 21.04 | 2.85 |
| No | 9,197 | 57.72 | 12.56 | 21.22 | 1.73 |

Table 3 (continued)

| Variable | Number | Percentage of Sample | Without <br> Nonzero <br> Bank Account | Percentage <br> Percentage With No Credit Card | Percentage <br> That Have Pawned or Sold Belonging a to Pawnbroker |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Province of residence |  |  |  |  |  |
| Atlantic (Newfoundland \& Labrador, New |  |  |  |  |  |
| Brunswick, Nova Scotia, Prince Edward Island) | 2,852 | 17.91 | 20.83 | 25.88 | 1.65 |
| Québec | 2,637 | 16.55 | 10.01 | 23.02 | 1.33 |
| Ontario | 3,753 | 23.55 | 9.86 | 17.24 | 1.79 |
| Prairies (Manitoba, Saskatchewan, \& Alberta) | 4,313 | 27.07 | 13.29 | 21.12 | 2.89 |
| British Columbia | 2,378 | 14.92 | 11.23 | 19.60 | 3.36 |

NOTES: The sum of observations over net assets and education categories is less than 15,933 due to missing values.

* denotes significance at the level of $1 \%$.
less likely to experience financial exclusion. Compared to those who do not own their home, a homeowner with no mortgage is $6.2 \%$ less likely to have no bank account, $7.4 \%$ less likely to have no credit card, and $1.2 \%$ less likely to have pawned possessions. Moreover, RRSP possession has a significant negative impact on financial exclusion, reducing the likelihood of having no bank account, no credit card, and using pawnbrokers by $5.9 \%$, $14.3 \%$, and $0.3 \%$, respectively. Furthermore, those who rely on government transfers for their livelihood are more likely to have no credit cards compared to those with other sources of income. Evidently, those who have limited resources to weather income shocks are hit hardest by financial exclusion.

With respect to demographic characteristics, we note that the degree of financial exclusion is positively correlated with household size. An additional household member raises the likelihood of not having a bank account or a credit card or having pawned a belonging by $1.7 \%, 1.8 \%$, and $0.2 \%$, respectively. In addition, compared to couples with no children, single-parent families experience a greater degree of financial exclusion in all cases ( $4.7 \%$, $11.0 \%$, and $0.6 \%$ ). These results support the claim based on anecdotal evidence that location and operation schedules of banks may create barriers to mainstream banking for low-income households with small children.

We also find evidence that financial literacy matters. The estimates show that the likelihood of financial exclusion decreases at each level of higher education, and, hence, those who have not graduated from high school are most likely to become the financially excluded. However, in terms of acquiring basic financial services, households that have a budget are not statistically different from those
that do not, although the former seem more likely to have pawned their belongings than the latter. Last, we find that the lack of bank accounts, credit cards, and emergency credit is most prevalent among those who cannot turn to relatives for financial assistance. We note that the higher incidence of single-parent households among the financially excluded partially explains this situation. As mentioned above, a higher proportion of respondents without a nonzero bank account, without a credit card, and using a pawnshop are single-parent families.

In summary, from the Survey on Financial Security (Statistics Canada, 1999), we find that the financially excluded are most likely to be households that have lower income, have less net worth, have no RRSPs, do not own a home, have more children, receive government transfers, are sole parents, are less educated, and have no one to turn to to cushion financial crisis.

## Business Structures of Mainstream and Fringe Banks

This section seeks to cast light on the question: To what extent does mainstream and fringe bank behavior foster financial exclusion among low-income people? In the previous section, we hypothesized that economically disadvantaged households are more likely to be excluded from mainstream banking services because they are more sensitive to supply-side factors such as bank location and types and restrictions of bank products. Ideally, to test this hypothesis, we need data on accessibility (both convenience and appropriateness) of bank services for different income groups and changes in this accessibility

Table 4
Probit Estimates of the Determinants of Financial Exclusion

| Dependant Variable | No Nonzero <br> Bank Account |  | No Credit Card |  | Have Pawned or Sold a Belonging to Pawnbroker |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $d F / d x$ | $z$ score | $d F / d x$ | $z$ score | $d F / d x$ | $z$ score |
| Family income |  |  |  |  |  |  |
| <Can\$10,000 | 0.097 | 3.88* | 0.364 | 6.01* | 0.017 | 2.69* |
| Can\$10,000-Can\$30,000 | 0.015 | 0.79 | 0.185 | 4.21* | 0.003 | 0.87 |
| Can\$30,000-Can\$50,000 | -0.006 | -0.34 | 0.132 | 2.96* | -0.002 | -0.83 |
| Can\$50,000-Can \$100,000 | -0.024 | -1.50 | 0.064 | 1.50 | -0.004 | -1.30 |
| Net assets/10,000 | -0.005 | -3.42* | -0.071 | -4.42* | -0.001 | -1.20 |
| Home ownership |  |  |  |  |  |  |
| Yes home, no mortgage | -0.062 | -8.50* | -0.074 | -8.82* | -0.012 | -6.45* |
| Yes home, with mortgage | -0.001 | 0.17 | -0.096 | -12.49* | -0.008 | -6.02* |
| Have RRSP | -0.059 | -9.45* | -0.143 | -19.95* | -0.003 | -2.30** |
| Source of income |  |  |  |  |  |  |
| No income | 0.032 | 0.28 | 0.075 | 0.51 |  |  |
| Self-employment | 0.004 | 0.36 | 0.005 | 0.31 | -0.003 | -1.17 |
| Government transfers | -0.005 | -0.66 | 0.039 | 5.01* | -0.001 | -0.51 |
| Investment income | -0.07 | -3.60* | 0.052 | 2.08** | -0.003 | -0.88 |
| Pensions | -0.013 | -0.94 | -0.032 | -1.99** | -0.001 | -0.13 |
| Other types | 0.053 | 1.94*** | 0.015 | 0.51 |  |  |
| Household size | 0.017 | 4.56* | 0.018 | 3.94* | 0.002 | $3.45^{*}$ |
| Family type |  |  |  |  |  |  |
| Unattached individuals | 0.004 | 0.46 | 0.083 | 8.04 | 0.000 | 0.21 |
| Couples, with children | -0.002 | -0.18 | -0.004 | -0.34 | 0.003 | 1.44 |
| Lone-parent | 0.047 | 4.09* | 0.110 | 7.86* | 0.006 | 2.47 ** |
| Other types | -0.004 | -0.36 | 0.049 | 3.41 | 0.001 | 0.54 |
| Education |  |  |  |  |  |  |
| Graduated high school | -0.017 | -2.52* | -0.059 | -8.52* | -0.002 | -1.36 |
| Postsecondary certificate | -0.029 | -4.50* | -0.074 | -10.83* | 0.000 | -0.28 |
| University degree | -0.049 | -6.44* | -0.124 | -14.90* | -0.006 | -3.84* |
| Have budget | 0.001 | 0.25 | 0.000 | 0.01 | 0.003 | 2.90* |
| No help from relatives in financial crisis | 0.054 | 10.29* | 0.028 | 4.70* | 0.005 | 4.82* |
| Province |  |  |  |  |  |  |
| Newfoundland | 0.025 | 1.78 | -0.011 | -0.75 | -0.004 | -1.79 |
| Prince Edward Island | 0.011 | 0.62 | -0.045 | -2.51 | -0.003 | -0.95 |
| Nova Scotia | 0.047 | 3.59 | -0.023 | -1.70 | -0.002 | -1.05 |
| New Brunswick | 0.021 | 1.57 | -0.039 | -2.91 | -0.001 | -0.26 |
| Quebec | -0.054 | -5.90 | -0.034 | -3.09 | -0.004 | -2.81 |
| Ontario | -0.041 | -4.41 | -0.042 | -3.96 | -0.001 | -0.41 |
| Saskatchewan | -0.029 | -2.56 | -0.022 | -1.58 | 0.005 | 1.80 |
| Alberta | -0.012 | -1.17 | -0.039 | -3.43 | 0.006 | 2.41 |
| British Columbia | -0.031 | -3.22 | -0.029 | -2.54 | 0.005 | 2.24 |
| Observed probability | 0.132 |  | 0.217 |  | 0.023 |  |
| Predicted probability | 0.104 |  | 0.131 |  | 0.006 |  |
| $p$ value of test on zero slope | 0.000 |  | 0.000 |  | 0.000 |  |
| Pseudo $R^{2}$ | 0.114 |  | 0.294 |  | 0.211 |  |
| Observations | 15,387 |  | 15,397 |  | 15,387 |  |

NOTE: The omitted groups are households that have income greater than Can $\$ 100,000$, do not own a house, have no RRSP, have wages or salaries as major source of income, consist of couples with no children, have head of household not graduated from high school, do not have a household budget, have never experienced financial difficulty or received help from relatives or friends in the case of financial crisis, and live in Manitoba.

* denotes significance level of $1 \%$ for a two-tailed test. ${ }^{* *}$ denotes significance level of 5\% for a two-tailed test. *** denotes significance level of $10 \%$ for a two-tailed test.
over time. As far as we are aware, no such data set exists. Instead, we draw insights from financial service preferences of low-income people revealed by the two FCACsponsored surveys (Ekos Research Associates Inc., 2001; Ipsos-Reid Corporation, 2005). We focus on three characteristics: convenience, new financial service technologies, and appropriateness of the services. We will analyze how some important mainstream bank strategies (such as growing reliance on new technologies to deliver services) are likely to have affected financial inclusion among lowincome Canadians.

Turning first to the question of convenience, it is sometimes claimed that closing mainstream bank branches does not affect customer convenience. Customers can shift to another branch or bank, and they can use new financial service technologies like asynchronous transfer modes (ATMs) or telephone and Internet banking. Although this may be the case for some Canadians, is it the case for lowincome people? In a 2001 survey, it was found that lowincome respondents ranked convenience of location and hours of operation more important than did higher income respondents in terms of choosing a financial institution (Ekos Research Associates Inc., 2001, p. 34). On the other hand, low-income households find fringe banks convenient. In 2005, low-income respondents were more likely to use check cashers than were higher income respondents, and $58 \%$ of the respondents claimed they used check cashers for convenience-related reasons: The service was faster and more convenient (Ipsos-Reid Corporation, 2005). This suggests that low-income households have a greater preference than higher income households do for convenient locations and operating hours. Why low-income households prefer this more strongly than higher income households may have to do with access to transportation and new technologies. As demonstrated by the regression estimates presented in the previous section, the unbanked households are concentrated among those with annual income of less than Can $\$ 10,000$ who are most likely to have no vehicle. Having young children or being a single parent would strengthen the concern of the poor about banking convenience and proximity to banks. Low-income persons' preference toward convenience and completing transactions with tellers can reinforce financial exclusion when combined with mainstream bank branch closures and fringe bank openings in inner-cities.

What about the revolution in automated financial services-has this improved access to financial services for low-income people? Canadian banks pride themselves on the extensive automated systems of banking, including ATMs and telephone and Internet access. ${ }^{23}$ But are these
new technologies equally adopted across income groups? In the 2001 survey, low-income respondents reported less likelihood than higher income respondents to use telephone or Internet banking (Ekos Research Associates Inc., 2001, p. 17) and more likely to do most of their banking in person (Ekos Research Associates Inc., 2001, p. 19). Chèron, Boidin, and Daghfous (1999, p. 54) found that low-income customers reported that they are more likely ( $39 \%$ ) compared to higher income customers ( $21 \%$ ) to "never use new [banking] technologies" such as ATMs. This suggests that low-income respondents are less inclined to benefit from the considerable automated infrastructure laid down by the banks. This is again not surprising because the low-income households are more likely to have no access to the Internet.

The next question is whether the services banks provide are appropriate for the needs of low-income people. Even if bank branches were found on every inner-city street corner, they would not get many customers if their services were irrelevant to the area residents. High-end financial services such as mutual funds, RRSPs, and even mortgages do not meet the needs of many lowincome people. Low-income people have more modest finances and to maintain these they need basic bank accounts, bill payment services, money transfers, small amounts of credit, and ways to build small amounts of savings. Financial services that facilitate these types of transactions are needed to assist low-income people and foster financial inclusion.

Bank products are often inappropriate or more restricted for low-income people compared to others. One major obstacle for many low-income people is bank check-cashing policy usually requiring a check to be held for clearance for 3 to 7 business days before cash is given to the customer. For people on a limited budget, waiting for the check to clear can create a major barrier so many people choose to use a check casher that is much costlier and may encourage financial exclusion. In 2001, it was found that low-income respondents were more likely than other groups to find the bank's checkhold policy a problem (Ekos Research Associates Inc., 2001, p. 30). They are more likely to be constrained by the policy because of lack of savings or other financial assets with the bank.

There is also evidence that low-income people have been restricted from basic banking services. In the 2005 survey, the likelihood of the bank's refusing to open an account was 1.5 to 2 times higher for people with lower income, less education, and younger age (Ipsos-Reid Corporation, 2005, p. 7). Low-income customers were
less likely to get a bank loan and more likely to have fewer savings products and fewer savings than were higher income respondents (Chèron et al., 1999, p. 54). ${ }^{24}$ Lowincome respondents were also less likely to have heard about investment and savings products from their financial institution (Ipsos-Reid Corporation, 2005, p. 47).

The banking preferences of low-income people include convenience and in-person provision of services. Immediate check cashing, small-sum savings, and small amounts of credit are important services, but low-income people are more dissatisfied than are higher income people in the way mainstream banks provide some of these services. Having a bank conveniently located and offering a set of basic banking services are complementary factors to improve financial inclusion.

## Conclusion

Drawing on data derived from one Statistics Canada (1999) survey and two FCAC-sponsored surveys (Ekos Research Associates Inc., 2001; Ipsos-Reid Corporation, 2005), this article has examined financial exclusion in Canada. Financial exclusion refers to the situation where an individual has no functioning deposit account at a mainstream bank. At least $3 \%$ of Canadian adults and $8 \%$ of low-income Canadians are financially excluded. Through greater reliance on fringe banks, these people face higher service fees than do higher income people; these services do not meet personal needs such as establishing a credit rating, building savings, and improving financial literacy.

Financial exclusion is a phenomenon particularly affecting low-income Canadians. The financially excluded are more likely to have lower incomes and net worth and no registered savings, to not own a home, to have more children, rely more on government transfer payments, be sole parents, be less educated, and have fewer people to turn to for financial support.

We find that banking preferences of low-income people make them more sensitive to convenience and make them rely more on in-person services compared to higher income people. Low-income households are more likely than higher income households to find mainstream banks relatively inconveniently located and providing less appropriate services or assigning excessive restrictions. Because of such things as greater reliance on public transportation, low-income people are more likely to become financially excluded through mainstream bank branch closures and fringe bank outlet openings in their neighborhoods. Low-income people are also less likely to use ATMs and telephone and Internet banking. This
makes new banking technologies less relevant for them. Restrictions on check-hold policies and a general lack of appropriate financial services for low-income people have meant low-income people are not as well served by mainstream banks as are non-low-income people.

Although this study has been able to identify key financial exclusion correlates, including poverty, it remains quiet on causation. Does financial exclusion cause poverty, does poverty cause financial exclusion, or does some other deeper process cause them both? With the data presented here we cannot answer this question. What we can say is that poverty and financial exclusion are related but not equated and that the banking model in Canada is at least partly to blame for financial exclusion.

## Notes

1. The draft version of this paper was submitted for publication in September 2007; since then, the 2005 version of the Survey of Financial Security was released by Statistics Canada, but that data set was not available for this research.
2. By "mainstream," we mean federally regulated financial institutions such as domestic banks, foreign bank subsidiaries, foreign bank branches, trust companies, mortgage companies, or a provincially regulated credit union and caisse populaire (the equivalent of a credit union in the province of Québec).
3. By deposit account, we refer to a savings, checking, or combination account.
4. Credit cards from other providers such as retailers and subprime lenders (e.g., Citifinancial) may be available to an unbanked person.
5. In October 2006, the federal government introduced an act to amend the criminal rate of interest giving an exemption for payday lending in provinces that introduce regulations on payday lending (Kitching, Starky, \& Bergevin, 2007).
6. Consider an unbanked customer who relies on a check casher to cash two Can $\$ 500$ checks per month at a fee of Can $\$ 2.50$ plus $2.5 \%$ of the check's face value. This amounts to a per-check fee of Can $\$ 15$ and adds up to Can $\$ 360$ in 1 year. Compared to the Can $\$ 5$ per month or Can $\$ 60$ per year fee for a low-fee account at a mainstream bank, this seems high.
7. The MacKay Report survey (Task Force on the Future of the Canadian Financial Services Sector, 1998) was based on adults aged 18 years and above. This could account for some but not all the differences in these two figures. One of the authors of this study contacted VISA International-San Francisco and VISA Canada-Toronto several times to find out the method they used to arrive at this figure. A VISA International representative stated that the data came from VISA Canada, but VISA Canada officials who were contacted could not explain how the figure was generated.
8. Residents of Saskatchewan and Manitoba were 1.7 times more likely to be unbanked compared to the average, whereas people between the ages of 18 and 34 were 1.3 times more likely to be unbanked compared to the average (Ipsos-Reid Corporation, 2005).
9. Of course, financially included people may also use fringe banks. With the rapid rise of payday lenders in Canada now estimated at more than 1,350 outlets, media, government, and nonprofit agencies
have paid them some considerable attention. One controversy relates to who uses payday loans: Some claim it is largely low-income financially excluded people (Stratcom Strategic Communications, 2005), whereas others argue that payday loans are used by "average" Canadians as a supplemental service to their bank account and credit card (Environics Research Group, 2005). We believe the limited evidence available suggests that both low-income and middle-income Canadians use payday loans. Although the focus on payday lenders in the media has raised the issue of financial exclusion, it has also tended to slant the discussion away from the financial service needs of low-income Canadians.
10. The rate of ever having used check cashers in 1998 was $8 \%$ (from the MacKay Report, cited in Lott \& Grant, 2002, p. 33); in 2001, the rate was $8 \%$ (Ekos Research Associates Inc., 2001), and in 2005, the rate of ever using a check casher or payday lender service was $7 \%$ (Ipsos-Reid Corporation, 2005, p. 10).
11. This survey used a national telephone survey of 1,000 randomly selected people and 1,000 recent payday loan clients.
12. Only $27 \%$ of the non-payday loan clients had household incomes of less than Can $\$ 35,000$.
13. Average income for unattached individuals was Can $\$ 27,000$.
14. LICOs, developed by Statistics Canada (2006), are income lines below which households spend a large share of their income on basic necessities.
15. This was a survey of 202 respondents through a randomselection telephone survey.
16. This survey found that only $15 \%$ of the customers using fringe banks fall below the LICO. However, the results show that average income varies considerably, depending on the type of fringe bank service used (Lott \& Grant, 2002, p. 36).
17. Respondents included "economic families" (i.e., households) and unattached individuals.
18. Flowing from our definition of financial exclusion, the ideal indicator would be whether the person had a functional bank account or perhaps whether the respondent had an account that he or she had used in the last month. But the variable available in the survey was whether the person has a bank account with a nonzero balance.
19. Each of the three indicators is measured by a binary variable that is equal to 1 if the household does not have a nonzero balance bank account, does not possess a credit card, or has pawned or sold possessions to pawnbrokers.
20. The income variable is after-tax family income for the 1998 calendar year; the variable for net assets is derived as total household assets minus debts; and source of income, home ownership, and RRSP possession are measured by binary indicators.
21. Five dummy variables are used as indicators for family types including "unattached individuals," "couples with no children," "couples with children," "lone-parent families," and "other." "Household size" is the number of household members.
22. The regression model is a more precise description than summary statistics of who are more likely to be financially excluded. This is not a structural or reduced-form equation because data on supplyside factors are not available.
23. According to the Canadian Bankers Association (2007), there are 15,950 bank-owned ATMs, more than 35,000 nonbank ATMs, and 571,353 INTERAC Direct Payment/Point-of-Sale facilities in Canada.
24. Chèron et al. (1999) found that low-income people were twice as likely not to have obtained a bank loan ( $34 \%$ vs. $18 \%$ ) than were higher income clients. Lower income and less-educated respondents
were less likely to have a personal loan from a bank (Ekos Research Associates Inc., 2001).

## References

ACORN Canada. (2004). Protecting Canadians' interest: Reining in the payday lending industry. Vancouver, Canada: Author.
Buckland, J., Carter, T., Simpson, W., Friesen, A., \& Osborne, J. (2007). Serving or exploiting people facing a short-term credit crunch: A study of consumer aspects of payday lending in Manitoba. Winnipeg, Canada: Public Utilities Board Hearing to Cap Payday Loan Fees.
Buckland, J., \& Martin, T. (2005). Two-tier banking: The rise of fringe banks in Winnipeg's inner-city. Canadian Journal of Urban Research, 14, 158-181.
Canadian Bankers Association. (2007). Canada's ABM/IDP network: Affordable, accessible, convenient, secure. Retrieved April 16, 2008, from http://www.cba.ca/en/section.asp?fl=3\&sl=251\&tl=366
Caskey, J. P. (1994). Fringe banking: Check-cashing outlets, pawnshops, and the poor. New York: Russell Sage.
Chèron, E. J., Boidin, H., \& Daghfous, N. (1999). Basic financial service needs of low-income individuals: A comparative study in Canada. International Journal of Bank Marketing, 17, 49-60.
Devlin, J. F. (2005). A detailed study of financial exclusion in the UK. Journal of Consumer Policy, 28, 75-108.
Dymski, G. A. (2003). Banking on transformation: Financing development, overcoming poverty. Sacramento: University of California Center in Sacramento.
Ekos Research Associates Inc. (2001). Canadians' knowledge and awareness of financial products, services and institutions. Ottawa: Financial Consumer Agency of Canada.
Environics Research Group. (2005). Understanding consumers of Canada's payday loan industry. Toronto, Canada: Author.
Her Majesty's Treasury. (2004). Promoting financial inclusion. London: Author.
Hogarth, J. M., Anguelov, C., \& Lee, J. (2003). Why households don't have checking accounts. Economic Development Quarterly, 17, 75-94.
Hogarth, J. M., Anguelov, C., \& Lee, J. (2005). Who has a bank account? Exploring changes over time, 1989-2001. Journal of Family and Economic Issues, 26, 7-30.
Ipsos-Reid Corporation. (2005). Public experience with financial services and awareness of the FCAC. Ottawa: Financial Consumer Agency of Canada.
Kitching, A., Starky, S., \& Bergevin, P. (2007). Bill C-26: An Act to amend the Criminal Code (Legislative Summaries LS-541E). Ottawa, Canada: Library of Parliament.
Lott, S., \& Grant, M. (2002). Fringe lending and "alternative" banking: The consumer experience. Ottawa, Canada: Public Interest Advocacy Centre.
Rogaly, B., Fisher, T., \& Mayo, E. (1999). Poverty, social exclusion and microfinance in Britain. London: Oxfam.
Statistics Canada, Income Statistics Division. (1999). 1999 Survey of Financial Security. Ottawa, Canada: Author.
Statistics Canada, Income Statistics Division. (2006). Low income cut-offs for 2005 and low income measures for 2004 (Income Research Paper Series). Ottawa, Canada: Author.
Stratcom Strategic Communications. (2005). Survey of payday loan users in Toronto and Vancouver. Vancouver: ACORN Canada.

Task Force on the Future of the Canadian Financial Services Sector (The MacKay Report). (1998). Change, challenge and opportunity. Ottawa: Canadian Department of Finance.
VISA International, \& Commonwealth Business Council. (2004). Payment solutions for modernising economies. Retrieved October 15, 2006, from http://www.yearofmicrocredit.org/docs/Visa_White_ Paper_2004.pdf

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