

Challenges to Canada's Retirement Income System



Understanding Gender Differences in Retirement Saving Decisions

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Introduction

One of the most fundamental changes in the Canadian economy in recent years has been women's growing participation in the labour market. In the mid 1970s, less than 50 per cent of women between the age of 20 and 65 who were either married or living in a common-law relationship participated in the labour market. Today, this percentage is over 75 per cent. The majority of women now have their own incomes, and have control over these incomes. This means that while the majority of today's senior women have had intermittent labour market attachment, the majority of today's 40 and 50 year-old women – tomorrow's female retirees – will have spent the bulk of their adult years in the labour force. From a policy point of view, these changes mean that the present is an inadequate guide to what the future will hold.

As women's roles within the paid labour market have altered, so too have women's home lives. Marriage and divorce rates have changed, with serious implications for women's retirement incomes, as has been documented elsewhere (MacDonald and Robb, 2004). The focus in this paper is on how the economic empowerment of married or cohabiting women changes the outcome of households' financial decision-making, including retirement saving decision-making.

While there is a vast literature that has explored gender differences in earnings, education and employment, we know very little about how gender affects the accumulation of wealth. There are some studies of gender and wealth that have focused on single individuals, as we describe in the literature survey section below. While the gender differences found by these studies are of interest and policy relevance, they beg the question: do changing gender roles matter for married and cohabiting couples too? As yet very little is known about how the economic empowerment of Canadian women is affecting couples' asset accumulation.

A better understanding of the ways men and women, as individuals, make savings choices is particularly needed at this point in time. The responsibility for the provision of retirement income is gradually being transferred from governments and employers to individuals. This is partly the result of demographic trends that have put increased financial pressure on the public retirement income-security system, and partly reflects declining coverage of workers through employer-sponsored pension plans. In this paper we argue that gender matters: gender dynamics have a significant impact on the accumulation of savings.

This paper uses data from the 2009 Canadian Financial Capability Survey (CFCS) to assess the responsiveness of savings levels to gender dynamics within households. More specifically, this paper provides empirical evidence on three major factors thought of as being determinants of gender differences in savings:

- the role that the intra-household distribution of responsibilities for financial management and the intra-household distribution of income play in explaining saving behaviours and gender differences in saving decisions;
- the extent to which knowledge of financial matters – measured by subjective and objective measures of financial literacy as well as indicators such as the use of credit cards or the use of a household budget – plays a role in explaining saving decisions and gender differences in saving decisions;
- the extent to which participation in an employer-provided pension plan crowds out contributions to savings in private retirement saving vehicles, and whether this crowding out effect is the same for men and women.

Conceptual framework and review of the literature

Standard economic theory suggests that people save to smooth their consumption over time, aiming to equalize their pre-retirement and post-retirement levels of consumption. People can achieve consumption smoothing by spending less than they earn during their peak earning years, and spending more than they earn during lower earning years. Therefore, people tend to be net (financial) dissavers during their younger years, borrowing from the future to boost current consumption and invest in human capital. Middle-aged individuals, particularly those who have reached their peak earning years, and who are not supporting children, prepare for their retirement by becoming net savers and purchasers of financial assets.

Gender differences in incentives to save

This standard economic theory, together with socio-economic and demographic observations, provides a theoretical basis to expect men and women to make different saving choices. Gender differences in asset accumulation and saving patterns arise from a number of factors: demographic factors, earnings, the interactions between earnings and the structure of incentives within the public pensions and personal income taxes savings, children, and other reasons.

Women might be predicted to save more than men because of demographic differences between the sexes. In Canada, a typical woman can expect to live four and a half years longer than a typical man: life expectancy at birth is now 83 years for women and 78.4 years for men¹. Women therefore need to finance a longer period of retirement. Canadian women also tend to experience higher rates of disability than men in the same cohort². These higher rates of disability, together with the fact that women are less likely to have a spouse able to provide care, mean that women need to save to finance the cost of any late-life long term care needs. US studies find that women are considerably more likely than men to enter nursing homes and, upon entering, stay longer (Brown and Finkelstein, 2009).

On the other hand, some economic differences between men and women would be expected to cause men to save more than women. The greatest difference between men's and women's economic circumstances is that men, on average, earn more than women do. Even if there were no underlying differences between male and female behaviour, we would expect men to have a higher level of savings than women simply because they earn more.

Canada's tax and transfer system may reinforce differences in male and female saving levels. The income tax and benefit system generally provides higher income Canadians with much stronger incentives to save than low-income Canadians. The Old Age Security (OAS) and the Guaranteed Income Supplement (GIS) programs – often referred to as the first pillar of Canada's Retirement Income System (RIS) – are designed to ensure the basic financial security of seniors, whether or not they had been involved in paid employment during their working lives. When an individual's pre-retirement income is low, OAS, GIS and the Canada/Quebec Pension Plan replace a relatively high proportion of that income.

¹ Statistics Canada, <http://www40.statcan.gc.ca/l01/cst01/health72a-eng.htm>, accessed 7 June 2010.

² Statistics Canada, <http://www40.statcan.gc.ca/l01/cst01/health71a-eng.htm>, accessed 7 June 2010.

In Canada, therefore, low-income individuals have relatively little need for private retirement savings. For high-income individuals, however, OAS, GIS and the Canada/Quebec Pension Plan replace only a fraction of pre-retirement incomes³. Because women, on average, have lower incomes than men do, the design of Canada's public retirement system means that women, on average, need less private savings than men do to achieve an acceptable "replacement rate": a post-retirement standard of living that is comparable to their pre-retirement living standard.

The presence of children within the household and the division of responsibilities for child-related expenses is another potential factor that can explain gender differences in saving behaviour. If women are responsible for paying for the cost of child care, children's clothing, groceries, and other child-related expenses, mothers will have less funds available for savings than fathers at any given income level. Conley and Ryvicker (2005) found evidence for the United States that female-headed families – mostly families headed by a female single parent – have lower savings than male-headed families – mostly couple households – even after controlling for household income and number of children. They attribute this difference to the greater expenses, such as child care, faced by female-headed households. Similarly, Chang (2010), in a study of singles, finds that being female and having children has a strong negative impact on wealth holdings.

In theory, however, the number and age of children have an unclear effect on saving. The presence of children increases the value of current consumption, leaving less income available for saving. To the extent that children may look after parents in their old age, "investing in children" by, for example, paying for a child's education or helping with a down payment on a home, can be seen as an alternative means of savings. Since women are more likely than men to be dependent upon their children for care in old age, they have greater motivation than men do to save through investments in children, leading to lower levels of financial asset accumulation. On the other hand, the desire to make bequests may increase saving levels.

So far we have used standard economic theories to explain why men and women have different savings incentives. Recent research, however, suggests another, more controversial, reason why men's and women's savings might differ. A number of studies have argued that there is an economic reality behind the Cinderella myth – a man marries for beauty and charm, a woman marries a rich prince – and that this reality has a real impact on savings levels. Grossbard and Pereira (2010), for example, argue that in societies where men are expected to support a partner financially, whereas women expect to be financially supported in marriage, single men will tend to save more than single women. In a widely cited paper, Wei and Zhang (2009) argue that one reason for China's high savings rate is that, due to the shortage of marriageable women, families with sons save so that their son can attract a spouse.

³ The basic OAS provides a modest complement to income from other sources. To ensure that the incomes of seniors do not fall below a given threshold, the GIS supplements the basic OAS pension when individuals have little or no other income. The Canadian and Quebec Pension Plans (CPP/QPP) – the second pillar – are mandatory contributory public pension systems that provide employment earnings-related benefits. The CPP/QPPs contribute to achieving both the "minimum income guarantee" and the "income replacement" goals. For more detailed analyses of how government-provided benefits and the tax system interact to create incentives or disincentives to save, see for instance Kesselman and Poschmann (2001), Shillington (2003), Marier and Skinner (2008) and Horner (2009) for Canada and Gibson, Le and Scobie (2006) for similar arguments applicable to New Zealand.

In sum, there are numerous reasons to expect men and women to make different savings choices. Yet many men and women live much of their adult lives in households. Household savings decisions are the outcome of the interaction between the desires and aspirations of the individual household members. When men and women have different preferences and face different constraints, they will tend to differ on average in the options that they prefer. In the next section, we examine bargaining models of the household. The purpose of these models is to examine the outcome of household decision making: when two people who are living together want different things, who ends up getting what they want?

Household bargaining framework

The overwhelming majority of research on saving treats couple-households as a single unit; Browning, 1995, Lundberg Ward-Batts, 2006 and Phipps and Woolley, 2008 are a few of the rare exceptions. The presumption in most research is that household savings is determined by household income – who earns the income, or other aspects of gender roles and gender dynamics are factors that are generally not taken into account. Yet, as the previous section argues, men and women have very different saving incentives. If two people within a household have different desired levels of saving, an intra-household conflict arises.

There are numerous theories as to how intra-household conflicts are resolved. Bargaining power refers to an individual's ability to influence household decisions. Within the household, a person's bargaining power stems from his or her alternatives, or lack thereof. What options are available to me if I cannot agree with my partner on how to spend money? The alternatives might be non-cooperation within marriage ("we'll each spend our money as we choose") (Chen and Woolley, 2001) or separation. A person's alternatives determine his or her bargaining position. These in turn depend upon both material and less tangible factors.

There are two conceptually different approaches that can be used to apply the insights of household bargaining theory to real-world savings decisions. The first approach focuses on factors that would be predicted to influence each spouse's bargaining position. For example, a person's resources within marriage – his or her earnings, or income received through child benefits of similar programs – are key determinants of how much say he or she has on household spending, because more resources improve a person's alternatives both within and outside marriage⁴. A person's potential resources outside of marriage – that is, in the event of divorce – are also predicted to influence his or her bargaining position. Age (as a measure of the probability of remarriage after divorce), education (as a measure of potential earnings) as well as laws regarding asset division and spousal support might be expected to influence a person's well-being in the event of divorce.

Bargaining models predict that when the male partner has a strong bargaining position, household decisions will tend to reflect his preferences, but when the female partner has a strong bargaining position, household decisions will reflect her preferences. Lundberg and Ward-Batts (2006), using this approach, argue that an increase in a wife's bargaining position is associated with higher levels of saving, but it is one of the few papers that has examined this issue directly. In this paper, as is described

⁴ See for instance, Basu (2006), Qian (2008), Bobonis (2009) and Gummerson and Schneider (2010).

below, we measure female empowerment using the woman's share of income, and explore its impact on savings. We also explore the effect of labour force participation, the impact of having an own-account employer pensions and also the effect of the male-female age difference, as some researchers have hypothesized that the greater the male-female age difference, the greater the wife's bargaining power. Browning, Bourguignon, Chiappori and Lechene (1994), for example, find that younger spouses command a greater share of household resources.

A second approach to applying household bargaining theory is to look at manifestations of household bargaining power. Sociologists and, to a lesser extent, economists have used information about who makes household decisions as an indicator of how much influence, voice, or say each partner has over household decision-making. For example, suppose a household says that the husband is responsible for making decisions about long-term financial planning. One possible interpretation of this statement is that the husband has more control over financial planning, and this greater decision-making power is a manifestation or reflection of the fact that he has more bargaining power – and thus the household's savings decisions reflect his preferences.

It is important to note that the interpretation of control over the family's finances is not straightforward. While control over financial decision-making may be a source of power, day-to-day money management can be time-consuming, and even tedious. Sociologists, such as Safilios-Rothschild (1976), use the terms "orchestration power" and "implementation power" to distinguish between control, management, financial planning, orchestration type decision making and day-to-day, shopping for milk, implementation types of financial decisions. In this study, we will be focusing on the orchestration-type financial decisions, specifically responsibility for financial investments and planning.

Behavioural economics, psychology and finance frameworks

The fields of psychology, behavioural economics and finance take an empirically driven approach to saving, asking "what choices do people actually make in real world circumstances?" Behavioural economics finds that seemingly small and unimportant details can make a large difference to individual savings decisions. For example, employer-sponsored saving programs that automatically enrol employees have much higher participation rates than programs that people have to opt into (Task Force on Financial Literacy, 2010). The idea that small, low-cost changes like automatic enrolment in savings plans can produce large changes in savings has attracted extensive attention from policy-makers, as manifested by, for example, Canada's Task Force on Financial Literacy.

Behavioural economists and economic psychologists have empirically documented differences in men's and women's average attitudes and behaviours. First, there are gender differences in attitudes towards risk, particularly financial risk. Croson and Greezy (2009) summarize the results of numerous studies that find women exhibit greater risk aversion. Women tend to react to the possibility of a loss with fear or nervousness; men are more likely to react with anger. The impact of risk aversion on asset accumulation is ambiguous. If women are more fearful of experiencing negative outcomes, such as poverty in old age, it makes sense that they might be expected to save at a higher rate than men do. At the same time numerous studies have found real differences in men's and women's investment choices. Women invest their assets more conservatively than men, are less confident, and less likely to buy

common stock, which has implications for the rate of return that they can expect from their investments. Croson and Greezy (2009) and Sierminska, Frick and Grabka (2010) document the considerable differences that exist between the type and the value of assets held by men and women: women are typically more conservative in their investment choices, tend to exhibit greater risk aversion, and are less confident than men in making these decisions.

Yet the differences between men's and women's investment choices can be explained by factors other than risk aversion. Using US data, Lusardi and Mitchell (2008) document differences between men's and women's levels of financial knowledge, and find that women over 50 have low levels of financial knowledge. They also find a close relationship between financial knowledge and financial planning: women with lower levels of financial knowledge are less likely to plan for their retirement through savings. In another recent paper Fonseca, Mullen, Zamarro, and Zissimopoulos (2010) again document the presence of gender differences in financial knowledge. They find that factors such as the responsibility for paying the bills were not able to explain gender differences in financial literacy, and conclude, "men and women seem to have very different production processes for financial literacy." There is, as yet, little Canadian evidence on gender differences in financial literacy. Moreover, we know little about how the relationship between financial knowledge and asset accumulation differs according to gender.

Gender differences in risk aversion and financial literacy can be mitigated or reinforced by financial institutions – in their advertising campaigns, the educational materials they provide, the investment advice they give, and the products they produce and market. If, on average, men have higher incomes than women, thus are more likely to be in a position to save, it makes sense for investment firms to target their advertising towards men. Yet this may reinforce gender differences in financial knowledge. If women are, on average, more risk averse than men, the availability of safe investment options could determine women's willingness to save and invest. According to Graham, Stendar, Myers and Graham (2002), "Many investment industry professionals have recently come to the conclusion that the investment traits that are characteristic of female investors should lead to the treatment of women investors as a separate market niche, possessing their own needs and therefore requiring new and different marketing strategies." The extent to which financial companies are successful in delivering instruments that reach both male and female investors could influence male and female propensities to save.

The insights of behavioural economics are particularly valuable in understanding the impacts of changing levels of employer pension coverage. The standard economic models, that view individuals as rational decision-makers, predict that an employer pension would crowd out private savings. If Anna has assets of \$200,000 in defined contribution employer pension plan, and Bing has no employer pension, then Bing needs to set aside \$200,000 more than Anna does to achieve the same saving goal. Yet, empirically, studies have found that employer pensions crowd out private savings much less than the theory predicts. What is not known, however, is whether a wife's employer pension plan has the same effect on household savings levels as a husband's employer pension. If people share their assets and wealth, and make savings decisions rationally, there is little reason to expect women's pensions and men's pensions to have different impacts on household savings levels – but the lesson of the behavioural economics literature is that small, unimportant-seeming details can have a large impact on people's behaviour.

Empirical evidence on gender differences in saving

The empirical literature shows no clear evidence on how gender and savings are related – with almost no Canadian evidence on the subject – and there is no clear evidence on the role household bargaining play in explaining saving behaviour and gender differences in saving behaviour. Some studies have found evidence of a positive relationship between female control and savings, others a negative one.

Based on survey data for 300 couples with children in the Ottawa-Gatineau region, where both husband and wives were interviewed separately about their asset holdings and well as how they manage their finance, Phipps and Woolley (2008) find that women do not seem to take control of family finances to save for themselves. Their results contrast with those of Lundberg and Ward-Batts (2006) who suggest that the wife's long-run relative power over household decisions does positively affect household net worth and that the wife's share of current income does not appear to increase household net worth. Phipps and Woolley find a negative relationship between women's control over family finances and both the probability of holding a Registered Retirement Saving Plan (RRSP) and the level of assets held in an RRSP, and this result is robust to alternative model specifications and alternative measures of control⁵.

Gibson, Le and Scobie (2006) find that greater female bargaining power is associated with lower household savings while Lee and Pocock (2007) find that the wife's bargaining power increases total household savings. Seguino and Floro (2003) find that as some measures of women's relative income and bargaining power increase, gross domestic saving rates rise. Ashraf (2009), however, suggests that what initially looks like differences in response by gender appears to be driven by underlying perceptions of household control over financial decisions.

⁵ The authors control for variable such as income, education levels and age.

Data sources and methodology

The 2009 Canadian Financial Capability Survey (CFCS) represents a unique dataset that allows us to measure the responsiveness of private savings to gender dynamics within households. The CFCS was conducted by telephone between February and May 2009 to collect information on Canadians' wealth and income, as well as their degree of knowledge, abilities and behaviour concerning financial decision-making. Statistics Canada applied a stratified sampling method called "random digit dialing" to call households. In each household, one adult 18 years of age or over was randomly selected to be interviewed. The target population was all adults living in Canada who were not residents of Yukon, Northwest Territories and Nunavut, or full-time residents of institutions.

The master file in Statistics Canada's Research Data Centre contains 15,519 observations. Each observation has an individual sampling weight such that the weighted sample statistics reflect the characteristics of the Canadian adult population. Since this study compared households based on who was in charge of the household financial decisions, most estimations in this study used a household sampling weight derived from the individual weight.

Households that were not in the position of making retirement saving decisions were not suitable for this analysis, so only respondents who were 25 to 65 years of age were used to construct the research sample. Retired individuals were excluded. The research sample also excluded same or unknown sex couples⁶. The full research sample of 9,899 observations was used to estimate the summary statistics of individuals in the sample. There were 3,370 households in the research sample of singles (1,975 women and 1,395 men) and 6,252 couples in the research sample.

Measures of wealth in the CFCS

The aim of this paper is to examine and explain Canadians' accumulation of retirement wealth through a gendered lens. The CFCS collected information on five separate categories of assets – tangible assets, Registered Retirement saving Plans (RRSPs), Registered Education Saving Plans (RESPs), non-RRSP financial assets, and business assets – as well as on liabilities. For each of these five asset categories, information on the incidence of asset ownership (Do you own any of...?) and the value of the assets owned was collected. The estimated values of the five types of assets were used, along with the information on liabilities held, to estimate the respondent's family's net worth.

In this paper, we focus on both assets that are traditionally considered retirement assets – pension plans and RRSPs – as well as wealth that is not specifically tied to retirement – tangible assets, non-RRSP financial assets, and business assets. Because RRSP contribution room is limited, people do save for retirement outside of RRSPs, and business assets such as rental properties can act as a nest egg.

⁶ The existing literature suggests that, in the US, gay couples have higher levels of investment income than lesbian or heterosexual couples (Black, Sanders and Taylor, 2007). This suggests that, in order to provide a meaningful analysis of savings behaviour, we would have needed to break out gay couples, lesbian couples, and heterosexual couples. The CFCS does not provide a sufficiently large sample size to do so.

Even though a home is not “retirement wealth,” owning a home provides security in retirement. Hence we model the holdings of all of the main categories of assets included in the CFCS.

The CFCS categorizes assets somewhat differently from other Statistics Canada surveys, such as the Survey of Financial Security. In order to interpret the results of this paper, therefore, it is necessary to understand what types of assets were included in each asset category, and how the wealth information was gathered.

Tangible assets: Respondents were asked (question AD_Q01) if “you or anyone in your family” owned any or all of: House or property (in or out of Canada, including your principal residence); Vehicles (i.e. cars, trucks, watercrafts, RVs, trailers, snowmobiles, ATVs, etc); Collections (antiques, jewels, and other valuables); Other tangible assets. A value was placed on the assets through the question (AD_Q02): “How much do you think they could be sold for today?” Because the CFCS asks respondents to provide a measure of the total value of all tangible assets, we do not have a precise estimate of individual housing wealth, although we would expect housing to account for a substantial proportion of tangible asset holdings.

RRSPs: Respondents were asked (AD_Q03): “Do you or anyone in your family currently have any Registered Retirement Savings Plans (RRSPs)?” (AD_Q04) “In your estimation, what is the current total value of these RRSPs?” Note that we have no information on whether RRSPs are held by husbands, wives or other family members. Respondents are told that “By family we mean all related members of your family who usually reside in your household” therefore a 25 year old living with parents should answer “yes” to this question if a parent holds an RRSP.

RESPs: Information on RESPs was gathered through the straightforward question (AD_Q05): “Do you or anyone in your family currently have any Registered Education Saving Plans (RESPs)?” Information on the aggregate value of RESP holdings was collected (question AD_Q06).

Non-RRSP financial assets: Information on holdings of financial assets outside of RRSPs was generated by the question (AD_Q07) “Excluding any Registered Retirement Saving Plans (RRSPs), do you or anyone in your family own any of the following financial assets?: Cash savings (from savings or chequing accounts); Investments (stocks, bonds, term deposits, GICs, Non-RRSP Mutual funds); Registered disability savings plan; Tax free savings plan; Private pensions; Other financial assets.”

Unfortunately we do not know how consistently respondents included information about their own and their spouses’ occupational pensions in response to the non-RRSP financial assets question, AD_Q07. For defined benefit plans, respondent would not be expected to know or think about this information. For defined contribution plans, however, respondents may be very aware of the balance of funds in their pension account. Moreover, other than this financial assets question, there is no overall estimated value for the employer pension. We considered the possibility of inferring a value for the pension from questions that ask about the type of pension and also about the individual’s current income, but concluded that such estimation was beyond the scope of this analysis. Instead, we used a dummy variable to control for the presence of employer pensions when explaining total household savings.

We cannot net out private pensions when discussing the financial asset information, as respondents were not asked about the value of individual financial assets. Instead, the value of financial assets is generated by responses to the question (AD_Q08) “In your estimation, what is the total value of these

financial assets?...If you have more than one of these assets, please estimate the current value of all of them combined.”

Business assets: Information on business assets was gathered through the question (AD_Q09) “Do you or anyone in your family own any of the following business assets or properties?: Agricultural property, machinery and equipment; Wholly or partially owned business property and assets; Copyrights, patents or royalties; Other business assets or property (properties) – Specify.” Respondents were then asked to estimate the total value of these “business assets or properties”, combining them if they had more than one (question AD_Q10). Unfortunately it appears that the business assets question, combined with the tangible assets questions, generates some possibility of double-counting or inconsistently classifying assets. Consider, for example, a respondent who owns, say, a rental property, or a truck that she uses in her landscaping business. Some people might list that property as “property” as part of their “tangible assets.” Other people might list it as a business property under business assets, and some respondents might list the property in both categories.

Debts and liabilities: Information on respondents’ debts and liabilities were generated through the following question (AD_Q11) “Do you or anyone in your family currently have any of the following types of debts or liabilities?: Mortgages (include principal residence and other mortgages); Student loans; Payday loans; Other loans (other than student loans or pay day loans); Outstanding credit card balances; Outstanding balances on lines of credit; Other debts or liabilities” Information on the total amount owing was collected (AD_Q12). However we have no breakdown of amount owed between what might be called good debt, that is, mortgage debt incurred to purchase a tangible asset, and bad debt, that is, outstanding credit card balances. Moreover, since information on liabilities is collected at a family level, we do not know which family member holds the debt. A financially secure couple in their 50s might report a high level of indebtedness because they have children with student loans who are living at home.

Employer pensions: Employer pensions are one of the three pillars of retirement savings, and the proportion of the population covered through workplace pensions has changed substantially, hence accurate data in workplace pensions is particularly crucial. Information on workplace pensions was gathered in stages. First, respondents were asked (RP_Q01): “Are you financially preparing for your retirement either on your own or through an employer pension plan?” Those who answered yes to this question were then asked (RP_Q02) “Which of the following sources of revenue are included in your financial plan for retirement? Government pension benefits (CPP, QPP, OAS, GIS), Occupational or workplace pension plan benefits...” Those who mentioned occupational or workplace pension plan benefits were then asked (RP_Q03) “You just said that part of your financial planning for retirement includes a workplace pension. When you retire, you are entitled to receive income from how many of these workplace pensions?” and (RP_Q05) “Up to now, how many years have you contributed to an occupational or workplace pension?”

Ideally, for couples, we would like to know whether or not each partner has a workplace pension, as this would give us the most complete possible picture of the resources likely to be available upon retirement. Failing that, we would like to know whether or not the individual respondent has a workplace pension. The questions asked should pick up all respondents who are actually covered by employer pensions. The question is: will they pick up any respondents whose spouse is covered by a

workplace pension, but do not have a pension of their own? The emphasis on “you” as opposed to “you or your family” and also the use of the word “entitled” suggests that respondents will answer this question with reference to their own personal pension entitlement, and we assume throughout the analysis that this is the case.

Net worth: Statistics Canada has aggregated the answers to responses to questions on holdings of tangible assets, financial assets, RESPs, RRSPs, business property and liabilities to get a measure of net wealth:

$$\begin{aligned} \text{Net worth} &= \text{Total Assets} - \text{Total Debts and Liabilities} \\ &= (\text{Tangible Assets} + \text{non-RRSP financial assets} + \text{RRSPs} + \text{RESPs} + \text{Business Assets}) \\ &\quad - \text{Total Debts and Liabilities} \end{aligned}$$

The discussion so far has pointed to some reasons to be careful about this measure: the possibility of double-counting between tangible and business assets, and lack of information about the division of assets between family members. For example, responses may include assets or liabilities of elderly parents or adult children living with the respondent, neither of which may be relevant for that individual’s retirement planning decision.

It should be noted that care needs to be taken in making the inference from the stock of savings observed in the data to the flow, that is, individual respondent’s rate of savings. Consider for example a 60 year old person with \$60,000 in assets: this person may have acquired these assets by saving \$164 per month for 20 years and earning an average rate of return of 4 per cent, by saving \$118 per month and getting a rate of return of 7 per cent or by inheriting assets last week. A high stock of savings may reflect a high rate of savings, a high rate of return on savings, or external unobserved circumstances. Throughout this paper, we report information about individuals’ stocks of savings, yet bear in mind that we have only a limited ability to draw conclusions about people’s savings choices from these observations.

Descriptive analysis

Household wealth

Our descriptive statistics confirm what is known about Canadians savings patterns: most wealth is held in the form of tangible assets, and although a typical Canadian is setting aside something for retirement, a significant minority have no retirement savings at all. Business assets are important for a relatively small proportion of the population. These findings are consistent with those of other studies using data from the Statistics Canada's Survey of Financial Security (SFS). Although the SFS may provide more accurate measures of household wealth, we find that any limitations that the CFCS has in this matter are offset by the advantages it offers in terms of the richness of its information on financial knowledge, behaviour and decision-making.

Tables 1 and 2 provide basic descriptive statistics for Canadian Financial Capability Survey (CFCS) households with a respondent between 25 and 65, the age range used in our analysis. Within the sample of couples, the average respondent is in his or her early 40s, and 82.8 per cent are married (Table 2, column (4)). Most have more than a high school diploma, with 33.4 per cent having a university degree (Table 1, column (4)). Three quarters (75.6 per cent) were born in Canada, and 58 per cent have English as a first language, with the remainder being evenly split between those with French as a first language, and those with another first language (Table 1, column (4)). With regards to labour force status of the man in the household compared to the woman, 87.4 of the married or cohabiting males were either employed or self-employed, compared to 76.5 per cent of women (Table 2, column (4)). The majority (64.7 per cent) of couple-households in the sample did not contain a young child (Table 2, column (4)). The average household income of the CFCS couples was \$107,039 with, on average, 37 per cent of that income coming from the woman's earnings (Table 2, column (4)).

The portrait of couples' financial situations derived from the CFCS is similar to that generated by other surveys, including the SFS. A minority of the population – but a sizeable one – have no retirement savings. Among those with retirement savings, the most widely held asset is RRSPs. In comparison, the 2005 SFS found that 60 per cent of families with a respondent between 25 and 69 (including unattached individuals, Pyper, 2008) had some RRSP assets. This coverage level is comparable to the 65.4 per cent of the CFCS respondents with an RRSP in our entire sample (Table 2, column (1)), given that the surveys were conducted at slightly different points in time, and we excluded the 66-69 age group, which has a relatively low level of coverage.

Employer pension plans are only available to a minority of the population. As Table 2 shows (column (1)), 18.5 per cent of CFCS respondents reported pension plan coverage including singles and partnered; employed, self-employed, not employed. Table 2 also shows that couple households in the CFCS (column (4))– the focus of the analysis in this paper – more often have RRSPs (68.7 per cent) than the overall sample, and are slightly, at 19.3 per cent, more likely to have some private pensions. In comparison, Moussaly (2010), using data from the SFS, finds that 32 per cent of employed tax filers participated in an employer-sponsored pension plan in 2008.

The most widely held form of asset holdings is non-financial or tangible assets: 93.7 per cent of CFCS respondents held some tangible assets, as shown in Table 2 (column (1)), and this is in line with figures

from the SFS. Tangible assets account for on average \$376,219 of average CFCS respondent's \$500,052 net worth (column (1))⁷. The median level of tangible asset holdings (\$270,000), however, was actually greater than the median net worth (\$220,000) for the sample as a whole (column (1)), as mortgages owing are subtracted from the value of tangible assets when calculating net worth. Married and cohabiting individuals reported slightly higher holdings of tangible assets in the CFCS, with average tangible asset holdings of \$408,961, and median tangible assets of \$300,000 compared to an average net worth of \$552,146 and median net worth of \$270,000 (column (4)).

The next most widely held form of assets after tangible assets is non-RRSP financial assets. Interestingly, the CFCS reports a much lower incidence of non-RRSP financial assets, 62.0 per cent for all 25-65 respondents, 63.8 per cent for married or cohabiting 25-65 year old respondents, as shown in Table 2 (column (1) compared to column (4)). This compares to 89.4 per cent of respondents in the 2005 SFS (Statistics Canada, 2006)⁸. The value of non-RRSP financial assets in the CFCS, a mean of \$74,792 for all 25-65 year old respondents, \$82,073 for couples (Table 2 (column (1) compared to column (4))) is much higher than the average non-pension financial assets in the 2005 SFS, \$49,000, which may reflect the inclusion of non-RRSP pension assets in the CFCS financial asset concept. Mean financial asset holdings greatly out-strip median holdings of non-RRSP financial assets, which are \$5,000 for all respondents, \$7,000 for couples.

Business assets are the least commonly held form of assets, held by 12.5 per cent of all 25-65 year old CFCS respondents, and 13.6 per cent of married or cohabiting CFCS respondents (see Table 2), compared to 16.6 per cent of 2005 SFS respondents (Statistics Canada, 2006). It should be noted, however, that the business asset concept on the CFCS and the SFS differs slightly, as the SFS asks about equity in business, while the CFCS asks about a wide range of types of business assets, including machinery and equipment, and includes copyrights and royalties under business assets rather than financial assets.

One somewhat surprising feature of the CFCS is that there is a statistically significant difference in the incidence of asset holdings, as well as the estimated value of assets, according to respondent gender. (Figures by gender and age group are not shown in Table 1, but are available from the authors.) For example, 69.6 per cent of male respondents between the age of 25 and 44 report holding an RRSP, as do 73.9 per cent of men between 45 and 65. For women, however, the proportion reporting an RRSP is significantly lower – just 64.8 per cent of women reported positive RRSPs, a fraction that did not vary between the younger and older cohorts. There are also large differences in the average values of RRSPs, for example, men between the age of 45 and 65 report \$105,309 in RRSP assets on average, while

⁷ These CFCS estimates are slightly higher than the \$211,000 average non-financial asset holdings reported in the 2005 SFS, which can be explained in part by the age restrictions we placed on the respondents in our sample, and the growth of housing prices between 2005 and 2009.

⁸ The most likely reason for the disparity is the way that the questions are phrased. The SFS asks specifically about "deposits in financial institutions" whereas the CFCS asks about "cash savings." Respondents in the SFS may be more likely to include amounts held in a chequing account that they use for day-to-day expenses as "savings" since they are directly asked about deposits in financial institutions whereas CFCS respondents might omit similar chequing account holdings since they are only asked about cash savings.

women in the same age group report \$76,218. A similar pattern occurs for every category of assets except for tangible assets, with men being more likely to report holding asset and/or reporting higher asset values.

As the wealth questions ask about family asset holdings, and the choice of respondent was randomized, there is little reason to expect to see any systematic difference between male and female respondents in the incidence or value of asset holdings⁹. One possible explanation of the respondent difference is that the extent of interviewer response bias varies by gender. For example, male respondents might wish to impress interviewers with the size of their asset holdings, or female respondents might be conditioned to be modest and understate their wealth. Alternatively, it could be that women are not aware of the actual values of the family's asset holdings, either because women have little interest so do not care to find out about the family's wealth position, or because men do not inform women of asset holdings. The possibility that respondent gender matters suggests that the choice of respondent, and the decision to collect information from just one household member, merits further investigation from Statistics Canada. For the purposes of this study, however, we document this difference, and bear it in mind throughout the analysis.

Household bargaining

Women have greater earnings than in the past, and are assuming responsibility for providing for themselves and their families financially. As described above, economic and sociological models of the family predict that family members with a better fall-back position, and members who are perceived to make a greater contribution to the family, will have greater say over how the family's resources are allocated. In this paper, we consider four measures to explore the effect of the economic empowerment of women within households.

The first is the woman's share of household income. The income information in the CFCS was gathered from the following question: IN_Q04 "What is your best estimate of your total personal income, before taxes and deductions, from all sources during the year ending December 31, 2008?" The question followed a series of questions asking respondents if they received any income from sources such as employment insurance benefits, child support, pensions, employment income, and so on, hence we would expect respondents to include all of these income sources in their answer. The question on personal income was followed directly by a question asking about household income: IN_Q05 "What is your best estimate of the total income of all household members (including yourself) before taxes and deductions from all sources during the year ending December 31, 2008?"

Unfortunately, there is no question that asks directly about spousal income; hence we estimate spousal income as the difference between household income and the respondent's personal income. This

⁹ Some differences will arise as a result of the fact that women are, on average, married to men who are older than they are. So, for example, 19.8 per cent of men between 45 and 65 report having an RESP, while just 11.5 per cent of women do, because fewer women in that age group have school age children. But there is no reason to expect men between 25 and 44 to report more RESPs (32.8 per cent) than women in that age group (31.4 per cent), since a significant number of men between 25 and 44 will not yet have had children.

measure will overstate spousal income if the household income measure includes income from, say, teenage children's part-time jobs. Spousal income will be understated if the respondent includes, say, income from jointly-owned rental properties as part of the respondent's personal income. We do, however, have information on each spouse's labour force status, and control for this in our analysis.

The income estimates coming from the CFCS are comparable to those derived from other data sources. For example, the CFCS sample of couples used in this paper have an average household income of \$107,039 (see Table 2, column (4)), compared to 2008 Survey of Labour and Income Dynamics family income estimates of \$86,000 for childless couples, \$100,200 for couples with children, and \$127,800 for families with children over 18 or other relatives living at home (Statistics Canada, 2010).

The second measure of women's bargaining power used in this analysis is responsibility for family financial decision-making, specifically the answers to the question (FM_Q01) "Who is mainly responsible for making financial investment and planning decisions on behalf of the family?"

Previous Canadian studies and studies from the United States and the United Kingdom typically find that about half of respondents report that responsibility is shared (Phipps and Woolley, 2008). A similar pattern is reported in the CFCS, as shown in Table 2: 52.9 per cent of couples reported that the financial planning was shared by the respondent and his/her partner. In those couples where one partner specialized in financial management, most commonly that partner was the man: 30.4 per cent of married or cohabiting respondents reported male responsibility for financial management and planning, as compared to 13.5 per cent reporting female responsibility.

Table 4 shows that there is a strong correlation between responsibility for financial management and a family's overall wealth position. When the male partner was in charge, the household's holdings of tangible assets, RESPs, financial assets, business assets, and liabilities were statistically significantly higher than when a couple shared responsibility. Households where the female partner was responsible for financial management had the lowest average holdings of these assets.

In other words, there was a significant association between responsibility and wealth holdings for every asset class except for tangible assets. However given that over 90 per cent of our sample claimed ownership of some tangible assets, that there is no statistically significant difference in this probability between male-responsibility, shared-responsibility and female-responsibility households can be attributed to the lack of variation in tangible asset holdings across household types. Table 4 reports other differences between households where the male is responsible for household financial decision-making, as compared to households with female or shared control. Male responsibility for household financial decision making is positively related to the male share of household income in households of couples – in other words, men's incomes are a higher share of the household income when they control the money.

Another difference is the age of respondents. (Figures by gender and age group are not shown in Table 4.) For example, among respondents of 60 to 65 years of age, 30 per cent of the households had responsibility for financial management in the hands of the man while 13 per cent of the households had responsibility for financial management in the hands of the woman. In comparison, among those 30 to 34 years of age, 29 per cent of households had the male financial management responsibility and 17 per cent female responsibility.

A final point worth noting is that male and female respondents gave different average responses to the “who is responsible” question. On average, 36 per cent of male respondents reported being responsible for financial management and planning, a fraction that did not vary with the respondent’s age. However only one quarter of women reported that their partners were responsible for financial management, with a slightly higher fraction of 45-65 year old women (25.7 per cent) reporting male management than 25-44 year olds (23.5 per cent). Similar differences appeared in the proportion reporting female management: just ten per cent of male respondents reported that their partner was responsible for financial management, whereas 18.8 per cent of 25-44 year old women and 16.4 per cent of 45-65 year old women claimed responsibility for financial management.

Because of the relationship between responsibility for financial management and other household characteristics, the raw correlation between financial management and asset holdings shown in Table 4 may overstate the actual strength of the relationship between management and savings. The solution is to use a multivariate regression analysis, to find the effect of differences in financial management across household types, holding all other household characteristics constant, which we do in the multivariate analysis section below.

The third variable we used to explore intra-household dynamics is the participation to an employer-sponsored pension plan. If households are acting as a single unit, making decisions collectively and pooling all income, it should not matter whether employer pension income is received by the husband or the wife. Whoever is named to be the pension recipient, it should have the same impact on the household’s financial decisions. Therefore, by comparing the responsiveness of household savings to men’s and women’s pension coverage, we can test the theory that households act as a single unit.

A finding that households respond differently to wife’s pensions and husband’s pensions would have important policy implications. Over the past 30 years, there has been a substantial change in the gender distribution of employer pension plan coverage. In 1980, women accounted for 30.8 per cent of those covered by registered pension plans, but by 2009, there was parity in employer pension plan coverage. Women accounted for 49.1 per cent of all registered pension plan members, and 51.3 per cent of members in defined benefit plans (numbers calculated from Statistics Canada, 2010, p. 26). It is important to know: is that change in the gender distribution of coverage expected to have a positive, negative or no impact on households’ savings decisions?

A final measure of family’s gender dynamics is the age difference between the spouses. We are, however, agnostic about what this measure is capturing: it might capture, as others have hypothesized, each spouse’s relative bargaining position. Alternatively, if relationships with a large male-female age difference are more likely to be second or third marriages, we might be picking up the effects of divorce.

Financial literacy

The Canadian Task Force on Financial Literacy defined financial literacy as: “having the knowledge, skills and confidence to make responsible financial decisions.” (Task Force on Financial Literacy, 2010) As noted earlier, studies carried out in other countries have found gender differences in financial literacy, and documented a relationship between financial literacy levels and asset holdings. The CFCS provides a multi-dimensional measure of financial literacy, with rich information on respondents’

financial knowledge, as well as their financial decision-making practices. In our research, we focus on four aspects of financial literacy: financial knowledge, financial practices, budgeting, and usage of credit cards.

Financial knowledge. The CFCS provides two types of financial knowledge measures: a self-assessment and an objective measure. An indicator of self-assessed financial management abilities and knowledge is constructed from respondents' responses to question such as "How would you rate your level of financial knowledge?" or "How would you rate yourself on ... keeping track of money?" Five questions (SA_Q01 to SA_Q05) were used to construct psychometric scale with values ranging from 1 to 4 based using the average of respondents' answers to those 5 questions. A value of 2.5 is considered "neutral" in that it represents a situation where a person's self-assessed financial management abilities and knowledge are neither good nor bad; respondents who scored 2.5 or less were considered to have good self-assessed financial management abilities and knowledge. Financial knowledge was based on a 14-question objective assessment; one example of question is "By using unit pricing at the grocery store, you can easily compare the cost of any brand and any package size" where the respondent could answer "true" or "false". The five self-assessment questions and the 14 financial knowledge questions are reproduced in Appendix A.

Table 1 provides summaries of the results of the financial knowledge questions. Strikingly, in both the objective and the subjective measures of financial knowledge, men receive higher scores on average than women do. For example, 35.3 per cent of married or cohabiting male respondents scored "very high" on the objective financial knowledge measure, as compared to just 24 per cent of married or cohabiting women. There are similar, though smaller, gender differences in individuals' assessment of their financial behaviour. Financial literacy and financial knowledge are, in fact, correlated with asset holdings. The average net worth of couple-households in the 2009 CFCS with a respondent with a very high level of financial knowledge was \$725,756, compared to \$301,771 for couple-households where the respondent had a very low score on the financial knowledge objective assessment.

In general, people rated their financial knowledge and financial practices highly, but there was a substantial divergence between respondent's self-assessed financial management skills and financial literacy as measured using the 14-question financial knowledge scale. Although 66 per cent rated their knowledge and abilities good on average and 84 per cent thought that they could deal with financial management, when it came to the objective measure of financial knowledge, only 55 per cent scored 9 out of 14 or better, less than 28 per cent scored 11 out of 14 or more. This disparity was found regardless of gender and marital status of the respondent¹⁰. To some extent, the divergence reflects the fact that the two scales are measuring different aspects of financial literacy. The financial knowledge questions are, to some extent, picking up cognitive ability and familiarity with financial terms, while

¹⁰ The 14-item questionnaire on financial literacy only assessed the respondent's knowledge. Scores might be higher if those questions were assessing knowledge within the household. At the same time, a respondent might have confidence in his or her abilities of making financial decisions because help was available from his or her spouse. If this was the case, the larger gap between self-assessed knowledge and objective financial literacy of couples could not be interpreted as more overconfidence. Further research is needed to understand the observed difference. However, this is out of the scope of the current study.

keeping track of money is more a measure of conscientiousness. The CFCS, like other studies, found that male respondents received higher average financial knowledge scores than women.

Financial practices. Another element of financial literacy is having the skills necessary to make responsible financial decisions. The CFCS included eight yes-no questions that asked respondents whether they kept track of their financial affairs, consulted friends, families and professionals and engage in some level of research before making financial decisions. Those who had used four or more of these financial practices were considered to have good financial management skills. We control for financial management skills in the multivariate analysis below.

Budgeting. Budgeting is often taken to be a key indicator of financial literacy. For example, the Task Force on Financial Literacy (2010) takes “basic budgeting techniques and the difference between ‘needs’ and ‘wants’” as the “natural starting point” for teaching the skills dimension of financial literacy.

Yet budgeting is a gendered concept. For generations, financial advice aimed towards women has centered on having a household budget (Walker, 2000). For example, consider this quote from Canadian Living magazine:¹¹

*... the real trick to saving more is to create a budget and stick to it. Laurie Campbell, a program manager with the nonprofit Credit Counselling Service of Toronto, compares budgeting not to sorcery **but to dieting**. It requires careful planning, can feel restrictive at times and may take a while before you see results, she says. But just as when you drop a dress size, when you lighten your debt load, you feel great. (Emphasis added.)*

Having a household budget is indeed like dieting. Just as overweight people are more likely go to on a diet, financially stretched households are more likely to go on a budget.

The CFCS data reports that households using a budget had lower household and personal income than households not using one (statistically significant in the sample of couples but insignificant in the sample of singles (see Table 3). In general, households using a household budget had less tangible, financial and business assets (the difference values were statistically significant in the sample of couples but not in the sample of singles). Budgeting households were also more likely to have debts and, on average, the amount of liabilities they had was larger. Taken together, these findings suggest that the use of a household budget may reflect the presence of financial strains on the household. And, like diets, budgets are more of a female thing. In the sample of couples, households where the male is responsible for financial decision-making are less likely to report using a budget.

The crucial question with both budgets and diets is: do they work? In the multivariate analysis below we show both the effect of having a budget, and the effect of sticking to a budget, on a family’s financial position. It turns out that having a budget and not sticking to it is associated with lower levels of asset holdings; only those who have a budget and able to stick to it are able to accumulate higher levels of assets.

¹¹ See http://www.canadianliving.com/life/money/create_a_budget_that_really_works.php.

Usage of credit cards. Credit cards, while beneficial if used wisely, can be seriously harmful to an individual's financial health. Credit card balances are usually subjected to very high interest rates and credit cards are usually used for consumable goods, therefore carrying a credit card balance can be seen as an indicator of poor financial management skills. At the same time, individuals who are not able to obtain credit cards are generally those with extremely low credit ratings. Therefore the presence of a credit card is an indicator of an individual's credit worthiness, suggesting individuals who have credit cards are more likely to hold some assets.

Credit card debt is a gender issue. Among the sample of couples, there are statistically significant differences in the proportion of respondents reporting having an outstanding credit card balance by the age and sex of the respondent. (Figures by gender and age group are not shown.) Among younger (25-44) females, 47.9 per cent reported carrying an outstanding credit balance, compared to 41.1 per cent of younger males, and 36.0 and 35.4 per cent of 45-64 year old male and female respondents respectively. Also, male responsibility for financial decision-making is associated with a lower probability of carrying a credit card balance, while couples where the female partner is employed or self-employed are more likely to have credit card debt. In the multivariate analysis below, we document just how harmful carrying a credit card balance can be to the accumulation of assets.

Findings from multivariate analysis

Drawing upon the theory of household decision-making, the standard theories of savings, and the insights of behavioural economics, we hypothesize that savings are determined by the following equation:

$$\begin{aligned}
 Y_i = & \text{Intercept} \\
 & + s_1 \text{ (woman's share of household income)} \quad \blacksquare \text{ Household bargaining variables} \\
 & + s_2 \text{ (vector of control of household finance)} \\
 & + s_3 \text{ (controls for male-female age difference)} \\
 & + p \text{ employer pension} \quad \blacksquare \text{ Control for employer pension} \\
 & + b_1 \ln \text{ (household income)} \quad \blacksquare \text{ Lifecycle variables} \\
 & + b_2 \text{ (male age)} \\
 & + b_3 \text{ (male age squared)} \\
 & + e \text{ (vector of employment status)} \\
 & + f \text{ (vector of demographic characteristics)} \\
 & + g_1 \text{ (good self-assessed financial knowledge)} \quad \blacksquare \text{ Financial behaviour variables} \\
 & + g_2 \text{ (vector of financial literacy)} \\
 & + g_3 \text{ (use of household budget)} \\
 & + g_4 \text{ (good financial practices)} \\
 & + g_5 \text{ (vector of credit card usage)} \quad \blacksquare \text{ Additional financial behaviour measures} \\
 & + g_6 \text{ (presence of a mortgage)} \\
 & + h^* \text{ female*[pension, financial behaviour variables]} \quad \blacksquare \text{ Interaction terms to capture gender differences} \\
 & \quad \text{in financial behaviour.} \\
 & + \text{error term}
 \end{aligned}$$

Dependent and independent variables

The dependent variable, Y_i , is a measure of household i 's level of asset accumulation. The simplest measurement we use is the value of net worth of the household. However, savings can take many different forms including investment in financial assets (outside of RRSPs), RRSPs, RESPs, tangible assets (e.g. properties, household goods, etc.), business assets, and liability reductions (e.g. paying down the mortgage). The evolution of these various forms of asset holdings over the life cycle is very different. Some assets such as tangible assets are relatively important for lower income households, while financial assets are relatively more important a high income levels. Hence it is important to understand the determinants of holdings of each category of asset.

There are three broad categories of explanatory variables: the first category reflects intra-household bargaining considerations through measures of female economic empowerment; the second category

includes lifecycle variables, including coverage by employer-provided pension plan; the final category of variables expands the analysis to take into account financial behaviour. We discuss each in turn:

Female economic empowerment. First, the woman's share of household income is used to measure intra-household bargaining and capture the impact of female economic empowerment. The household bargaining literature summarized earlier finds that who earns the income matters; the woman's share of household income is an indicator of her influence over household expenditure decisions. We hypothesize the household savings decision will be closer to what the woman wants if she earns more. If there are gender differences in savings rates or investment choices, these may be reflected in the difference between the asset position of households with low and high female earnings shares. We also control for women's and men's employment status. While we list this as a life-cycle variable, employment can also be taken as a measure of female economic empowerment.

Second, the responsibility for financial management variable measures the extent to which financial investment and planning decisions are the responsibility of the male, the female, or are shared. We used shared management as a base case, and three dummy variables representing male management, female management and management by someone else/other.

The third measure that we use to explore the effect of female economic empowerment is the presence of an employer pension. The estimated coefficient on the respondent's employer pension captures the marginal displacement effect of an employer-provided pension after controlling for income and other variables. Estimates with and without a control for the presence of an employer pension (available from the authors upon request) were compared in order to ensure that endogeneity of employer's pension is not seriously affecting the estimates.

Finally, as discussed above, another measure of family's gender dynamics is the age difference between the spouses. In our analysis, we include two dummy variables to capture the effect of the age difference between spouses: a dummy that is equal to one if the woman is older than the man, and a dummy equal to one if the man is more than five years older than the women

Lifecycle variables. The next set of explanatory variables includes standard lifecycle variables such as marital status, age, number of children, household income and employment status. With regards to the marital status, it is worth noting that common law relationships are, on average, of shorter duration than marital relationships, especially outside Quebec. The older respondents we observe in common law marriages may, therefore, be individuals with previously dissolved unions. Since divorce can be costly because of asset splitting, previously divorced couples may have less assets and net worth than their traditionally married counterparts, hence common law status may predict wealth holdings.

Financial behaviour. As noted earlier, the CFCS asked about the use of a household budget, self-assessed financial knowledge and abilities, usual financial practices, financial knowledge, and credit card balances. These variables made up the financial behaviour vector that adds behavioural considerations to the standard economic model of household savings.

The focus of this paper is on gender differences in savings behaviour. We include, therefore, interaction terms, which allow us to determine whether or not there are significant gender differences in the impact of financial behaviour on saving. For example, do couples in which the wife is highly financially literate save more than couples where the husband achieves a high financial literacy score?

One concern with these behavioural measures is that they are potentially endogenous. Having a credit card represents deemed creditworthiness and it usually is correlated with household wealth. On the other hand, the interest rates charged by credit card companies on carrying a balance are usually much higher than other types of credits. Carrying a balance may signal the existence of liquidity constraints, that is, a lack of access to other credit. At the same time, faced with identical financial constraints, some individuals will carry larger credit card balances than others. Once a balance is acquired, high interest charges make the balance difficult to pay off, and compromise other forms of debt reduction or saving. Hence, despite these endogeneity concerns, we include an individual's credit card balance as an explanatory variable, as a measure of poor financial management skills, and carry out robustness checks to verify that the inclusion of these variables does not change our estimates of the key variables of interest, that is, financial management. The second financial behaviour measure is the presence of a mortgage. It is expected that some allocate less income to other assets when they have mortgage to pay. Mortgage debt is incurred to purchase a tangible asset; hence there will be a correlation between mortgage debt and tangible asset ownership.

We do not include an instrumental variable that would allow us to eliminate the problem of endogeneity. Instead, we address the issue of endogeneity in two ways. First, we performed numerous step-wise regressions and robustness tests, which are available from the authors upon request. The results that we report here appear consistently across specifications. Second, we exercise extreme caution when making policy inferences from our regression findings. The presence of a strong relationship between, say, financial knowledge and levels of wealth does not imply that increasing financial knowledge will necessarily lead to higher levels of wealth.

Specifications and estimation techniques

In the multivariate analysis, we are concerned with both the incidence of asset holdings, and the level of asset holdings, conditional upon incidence. A number of different specifications were estimated in this study, two of which are reported here. First, nine probit regressions were applied to estimate each explanatory variable's contribution to the probability of a household holding RRSPs, non-RRSP financial assets, and so on. In these regressions the dependent variable is a categorical variable set equal to one if the respondent reports positive asset holdings. We call these "incidence regressions" because they measure the increase in the probability of reporting positive asset holdings as a function of a set of observable characteristics.

Probit analysis is particularly informative for more narrowly held assets such as business property, where we are interested in who holds such types of assets, as well as the value of those assets. Probit analysis is also valuable for the analysis of programs such as RESPs, where our primary concern is with incidence. RESPs are designed to be attractive to low-income parents, as the Canada Learning Bond program makes it possible to start an RESP with no cash payment. Regardless of the actual amount held in an RESP, we would hope that every eligible parent would take advantage of this financial opportunity.

For other categories of assets, our focus is on the value of assets held. The overwhelming majority of individuals in our sample, for example, hold some tangible assets. The interesting question from a policy perspective is how much do people hold in tangible assets. As Table 2 shows, median asset

holdings are less than average asset holdings, which implies that the distribution of asset holdings is skewed, with a relatively small number of people holding a relatively large amount of assets. In this second set of regression analyses, therefore, the dependent variable is the inverse hyperbolic sine of assets held (Burbidge, Magee and Robb, 1988):

$$\log(y_i + (y_i^2 + 1)^{1/2})$$

The major advantage of the inverse sine transformation over the more commonly used log transformation is that the inverse sine of zero is well-defined. By way of contrast, with a log transformation it is necessary to drop observations where the dependent variable is equal to zero. Except for very small values of y , the inverse sine is approximately equal to $\log(2yi)$, and so it can be interpreted in exactly the same way as a standard logarithmic dependent variable.

As information on asset values was only collected for individuals who reported holding a particular asset, we must deal with some selection issues. The values of non-RRSP financial assets, RRSPs, RESPs, tangible assets, business assets and liabilities were estimated by six Tobit regressions, estimated using Stata's standard maximum likelihood Tobit procedure¹². Since the choice of one type asset might depend on the holding of other assets and liabilities, the estimations corrected the standard errors for the correlations between residuals of the nine equations¹³. The Tobit coefficient on, say, male financial responsibility captures two effects: the impact of male control on the probability of having any assets, and the impact of male control on the amount of assets held.

Findings on incidence

Table 5 shows the results of the first set of multivariate regressions, which used probit analysis¹⁴. The estimated coefficients are marginal effects, that is, they show the effect of each explanatory variable on the probability of holding any of a particular type of asset. As noted above, probit analysis is useful when we are interested in the take-up of particular financial instruments, as opposed to the total amount held. Another advantage of the probit estimates is that, because they consider only the incidence of holding a particular asset, but not the total amount held, they are unaffected by any skewedness in the wealth distribution.

Female economic empowerment. Table 5 shows that families' financial management strategies have a significant impact on the types of assets held. Compared to households with shared responsibility for financial decisions, households with the male responsibility were more likely to have a positive level of total asset holdings, and were more likely to hold RRSPs. Those with the woman in control were more likely to have debt and non-positive net worth. They were also more likely to have positive total asset holdings. However, since 97.7 per cent of couples report positive asset holdings, the variation in total

¹² Since all asset and liability values were non-negative, Tobit model was used to maintain consistency of estimates to adjust for the left censoring. Most of estimated coefficients are qualitatively similar to ordinary least square estimates without adjusting for the left censoring.

¹³ The Stata command "suest" corrects for any pair-wise correlations of residuals from different equations.

¹⁴ Multiple model specifications were estimated and results that are sensitive to the choice of model specification are noted. These specifications were not reported due to space constraints, but are available from the authors upon request.

asset incidence only affects a small proportion of the population. The financial control results are consistent with the hypothesis that male decision makers choose to save more and borrow less. It could be argued that, in fact, we are picking up reverse causality: women got to make the decisions if the households were in debt while men got to be in charge when the households had accumulated assets. However the effect of the financial control variables remains significant even with the inclusion of numerous indicators of financial stress: household income, immigrant status, living in one of Canada's high cost cities, employment/unemployment, carrying a credit card balance, and so on. This consideration argues against the idea that we are simply picking up the endogeneity of financial management.

Our second key indicator is woman's share of household income. Table 5 shows that, in the sample of couples, a woman's share of household income was negatively related to the incidence of non-RRSP financial assets. The literature on gender and savings suggests that women tend to be more risk averse than men, and might explain the lesser investments in financial assets. On the other hand, female employment is positively related to the likelihood of having assets in an RRSP. It is, therefore, possible that the inverse relationship between woman's income share and non-RRSP financial assets partially reflects a lack of RRSP room for couples with a low female-income share.

Table 5 also shows that women's share of household income is strongly, positively related to the probability of owning business assets. There may be some endogeneity of women's income with respect to the owning of business assets, because households with self-employment income can practice "income sprinkling", that is, employing a spouse in a business or paying the spouse dividend income in order to minimize tax liabilities. Yet these results are also consistent with the growth of female entrepreneurship and the importance of family in starting a business. We controlled for both female- and male- self-employment status in predicting the presence of business assets. Although both were significant predictors of business asset ownership, male self-employment mattered much more than female self-employment. Households where the male was self-employed were 128 per cent more likely than other households to have business assets; households with a self-employed female were 45 per cent more likely. We hypothesize that this difference reflects differences between male and female self-employment, with self-employed males being more likely to be in businesses that require some kind of capital investment, for example, a truck, tools, or machinery.

The third measure of gender empowerment is the difference between the impact of male- and female-employer pensions. For the sample as a whole, having an employer pension has a positive impact on the incidence of non-RRSP financial assets, and total assets, and little impact on other variables. We estimated the difference between the impact of male- and female- employer pensions by including an interaction variable (female*employer pension), and we did not obtain any statistically significant results. For the variable that appears most sensitive to gender dynamics, non-RRSP financial assets, the estimated coefficient on the gender-pension interaction variable is small, as well as statistically insignificant. For tangible assets there is some suggestion of a greater impact of female pensions, but it does not achieve statistical significance.

Spouses with a male-female age difference of more than five years were significantly more likely to have liabilities, less likely to have RRSPs, and more likely to have RESPs. Although, as noted earlier, some have argued that a larger male-female age difference enhances female bargaining power, we

consider it equally likely that these age-differential effects could be generated by life-cycle factors, such as divorce.

Lifecycle variables. Table 5 shows that lifecycle factors have the predicted effects. Income increases the probability of holding all types of assets. Recent immigrants are less likely to have positive total asset holdings, and are less likely to hold debt and registered assets, such as RRSPs, and RESPs. This is a particular issue with RESPs which provide substantial financial assistance to parents of young children. It would be interesting to know what language or other barriers prevent take-up of such programs. The presence of an employer pension plan increased the incidence of owning non-RRSP financial assets, presumably because individuals with employer pensions typically have little RRSP contribution room.

Financial behaviour. Table 5 shows that the usage of a household budget was positively associated with a higher incidence of liabilities and tangible assets, which is consistent with the idea that budgeting is a manifestation of financial strain caused by mortgages (hence the correlation with tangible asset holdings) and liabilities in general. On the other hand, those who always stayed on budget negated the higher incidence of liabilities, and they had higher incidences of non-RRSP financial asset holdings, suggesting a pattern of asset accumulation and debt avoidance among those who have financial discipline. Having a credit card, interestingly, is a good predictor of asset holdings, presumably because credit card ownership is so widespread that only those considered very poor risks have no card at all. Carrying a balance on a credit card, however, was financially destructive, reducing the probability of owning most types of assets. (We dropped this variable from the liabilities regression because of by definition anyone carrying credit card debt will have liabilities).

A good average level of self assessed financial knowledge was associated with a higher incidence of positive net worth, non-RRSP financial assets, and business assets, and a lower incidence of liabilities. “Good financial practices” had a positive impact on holdings of non-RRSP financial assets and, interestingly, on liabilities, possibly picking up some reverse causality.

All types of assets, liabilities and net worth were positively related to the objective measure of financial knowledge. Those with a very low objective financial knowledge score were 46 per cent less likely to have an RRSP or an RESP than respondents with a high financial knowledge score, suggesting that lack of knowledge is a significant barrier to program take-up. Recall that RESPs essentially provide “free money” to low income families, and so these literacy effects should not be picking up income effects.

Finally, having a mortgage is significantly negatively associated with having non-RRSP financial assets or RESPs, although positively associated with having positive net worth, tangible and total assets.

Findings on levels

Table 6 reports the results of our analysis of the level, as opposed to the incidence, of asset holdings. The coefficients reported in Table 6 are marginal effects. They should be interpreted as the percentage change in the predicted asset holdings. So, for example, the coefficient of 0.672 on male control in the “Non-RRSP Financial Assets” regression means that, relative to shared control households, those with male control have, on average, 67.2 per cent more non-RRSP financial assets. This marginal effect takes into account both the effect of, say, male financial management on the probability of having a positive

level of assets and the effect of male control on the size of asset holdings. Again, robust standard errors were used.

Female economic empowerment. Table 6 shows that, relative to households where the responsibility for financial management was shared, those with male responsibility had accumulated significantly more RRSP and non-RRSP financial assets. These results are consistent with both a higher male preference for saving, and higher returns associated with greater male willingness to take financial risks. Female control, however, is associated with lower levels of non-RRSP financial assets, higher levels of liabilities and lower levels of net worth. There is, however, no statistically significant relationship between male or female control and the expected holdings of business assets, tangible assets and RESPs.

The second measure of female economic empowerment is the female income share. Table 6 reports a significant negative relationship between this share and the amount of RRSP and non-RRSP financial assets held, while the size of business assets are positively related to women's share. It is tempting to ascribe this to the fact that younger households have both a higher female income share and a lower level of financial asset holdings. However the inclusion of controls for both men's age and the male-female age difference should pick up age-related effects on asset holdings. The results are consistent with a lower female preference for financial assets. At the same time, however, couples in which the wife is employed have much higher – on average, 179 per cent higher – levels of RRSP assets. Hence some of the income share findings might be reflecting differences in couples' RRSP contribution room, at a given level of household income, or the complex dynamics of family decision-making.

The third measure that we use to explore the effect of female economic empowerment is the gender difference in the impact of having an employer pension. The control for an employer pension plan was included to capture the potential crowding out of personal savings by employer pensions. In general, the results in Table 6 suggest that, once household income and other factors are controlled for, being a member of an employer pension plan has a positive impact on holdings of just one asset class, non-RRSP financial assets. The coefficients on the gender-employer pension interaction variable are not statistically significant but, in general, tend to counteract the overall effect of pensions on assets. For example, the presence of an employer pension is, overall, associated with 140 per cent higher non-RRSP asset holdings, but if the pension holder is a woman, that impact is reduced by 23 percentage points. The hypothesis that there might be less crowding out of private savings by female-held employer pensions is not supported by the data.

An age difference between the spouses of more than five years is associated with lower levels of every type of asset except for business assets and RESPs, possibly reflecting the outcome of household bargaining but also possibly reflecting the spouses' marital histories and life cycles.

Lifecycle variables. Table 6 confirms that household income and age have the predicted positive effect on asset holdings, with the impact of age on asset holdings being strongest for RESPs, RRSPs and business assets. Couples in common law relationships also have lower RRSP holdings and lower levels of tangible assets. Children, not surprisingly, are positively associated with the value of RESPs, and having a young child or two of more children is positively associated with the magnitude of tangible asset holdings, possibly reflecting the greater housing needs of people with children. Table 6 shows that immigrants typically owned fewer assets and had lower net worth, with the effects being

particularly pronounced for recent immigrants in general, and for recent immigrants' holdings of registered assets in particular. Interestingly, immigrants had significantly lower levels of business assets. There are, however, some issues with the representativeness of the recent immigrant sample in the CFCS. The overall response rate for the CFCS was 56.3 per cent¹⁵, and one would expect recent immigrants who are not fluent in English or French to be particularly unlikely to respond to the survey. Hence non-response may be a particular issue for the recent immigrant group.

Financial behaviour. Table 6 confirms the association between financial knowledge, financial management abilities, good financial practices, and asset accumulation. As in Table 5, the use of a household budget is associated with higher levels of liabilities. As the use of a household budget is also associated with higher levels of tangible assets, some of these liabilities may reflect mortgage debt. Those who have a budget and always stay on it experience benefits in the form of lower liabilities, and are able to accumulate significantly higher levels of non-RRSP financial assets. Carrying a balance on a credit card had a negative impact on asset holdings, with the effect being negative and significant on RRSPs, and non-RRSP financial assets.

Analysis by respondent gender

As noted earlier, and reported in Table 1, married and cohabiting women have lower financial literacy than married/cohabiting men. Our regression results so far have found positive relationships between financial literacy and savings levels. Taken together, these results suggest that women will tend to have lower savings – unless there is some difference in the relationship between financial literacy and savings for men and women.

Indeed, to the extent that men and women have different gender roles, for example, woman may be more likely to do the grocery shopping, the impact of our financial behaviour variables may differ by gender. The female respondent having poor financial knowledge might, for example, have a different impact on the family's finances than the male having poor financial knowledge. In Tables 5 and 6 we interact all of our financial behaviour variables with respondent gender, allowing us to identify any significant differences in the impact of male and female financial behaviours.

In Table 5, we find few statistically significant gender differences in the impact of financial literacy variables – financial practices, self-assessed financial knowledge, and objective measures of financial knowledge – on the presence of savings. The male-female difference terms are, for the most part, statistically insignificant. The same is true of Table 6.

One interesting male-female difference shown in Table 5 is that, for women, carrying a credit card is strongly associated with the presence of non-RRSP financial assets. Table 6 shows that having a credit card is also positively associated with the level of non-RRSP financial assets. Given that traditional gender roles assign women responsibility for shopping, those without credit cards are, we hypothesize, particularly likely to be credit constrained. Not having a credit card is, therefore, a proxy for being in a difficult financial situation. Table 6 shows a gender difference in the level of liabilities associated with

¹⁵ http://www.statcan.gc.ca/imdb-bmdi/document/5159_D2_T1_V1-eng.pdf, p. 23.

carrying a credit card balance. Carrying a credit card balance seems to be more harmful, in terms of its impact on liabilities owed, for women than for men.

There are also interesting gender differences in the impact of having a household budget. For the sample as a whole, having a budget is strongly positively related to the presence and the level of tangible assets. When we break this effect down using the gender interaction terms, however, we find that it is entirely driven by male respondents. The female-budget interaction term in the tangible asset regression is strongly negative meaning that, for female respondents, budgeting has no impact on the level of tangible assets held. This does not mean that those who are currently using budgets would be better off if they stopped. But for our sample, women who use a budget and women who do not use a budget have similar levels and patterns of asset holdings.

Summary and discussion

This paper uses data from the 2009 Canadian Financial Capability Survey (CFCS) to assess the responsiveness of savings levels to gender dynamics within households. In particular, the paper addresses four research questions:

1. Are households where the husband is the person in the household responsible for long-term financial management more or less likely to have RRSP savings?
2. How does the value of these savings compare to the value in households where the wife is responsible for long-term financial management?
3. Comparing households with the same total income level, are households where more of the income comes from the wife's earnings more likely to save, or less likely to save, than households where more of the income comes from the husband's earnings?
4. To what extent does the presence of a private pension crowd out contributions to RRSPs, and is that crowding out effect the same for men and for women?

We find that while Canadian couples typically have shared responsibility for financial investments and planning, in a significant minority of those couples (30.4 per cent in our sample) the male partner assumes responsibility for financial management, while a smaller number (13.5 per cent in our sample) are characterized by female responsibility. These patterns are consistent with those found in previous studies.

We find evidence of a positive relationship between male financial management and holdings of non-RRSP financial assets in particular. Families where the respondent reports that financial management is the male's responsibility are more likely to hold RRSPs and have positive total assets, whereas those with female financial control are more likely to have liabilities, and less likely to have positive net worth. The values of assets are higher also, particularly values of non-RRSP financial assets, RRSP assets and business assets. The relationship between male control and holdings of tangible assets and RESPs is weaker, but still positive in some of our regressions.

Respondents that report male financial management do, however, differ in other ways: they have higher average household incomes, and the female partner is less likely to be in the labour force. As we control for these other characteristics in the regression analysis, we do not believe that the impact of male management is simply coming from such intra-household differences, although we cannot entirely eliminate the possibility of endogeneity in the form of higher asset holdings leading to greater male responsibility.

Yet, even if responsibility for financial management is partially endogenous, the relationship between financial management and wealth accumulation is still of policy relevance. In particular, our findings have implications for the targeting of policy interventions.

First, because couples with shared and especially those with female responsibility for financial planning are more likely to have low levels of financial asset accumulation, targeting such couples is one way of reaching those who are disproportionately likely to have lower levels of savings.

Second, relationships do not last forever. Eventually at least half of the people in our couple sample will find themselves, once more, as singles. The coincidence between male responsibility for financial planning and high levels of asset holdings suggests that there is a group of women who are at risk of finding themselves with no experience of financial planning and responsibility for large asset holdings. This is particularly worrying given our findings that women have lower levels of financial knowledge than men do.

Finally, the association of male responsibility with higher levels of asset accumulation has implications for the future financial well-being of Canadians. One way in which tomorrow's retirees may differ from today's retirees is that fewer younger couples currently adopt a male financial management model. To the extent that there is a positive relationship between male financial responsibility and savings, greater sharing of responsibility may translate into lower savings rates. It should be noted, however, that we should not automatically infer that lower savings rates are a bad thing. It could be, for example, that households with shared control have lower levels of financial assets because they devote more resources to investments in children.

Some of the same patterns are found when we measure female economic empowerment through the share of household income, rather than through responsibility for financial management. Female income share is inversely related to the amount of RRSP and non-RRSP financial assets held, although because couples in which the wife is employed have much higher levels of RRSP assets, our income share findings might be reflecting differences in couples' RRSP contribution room, at a given level of household income, or the complex dynamics of family decision-making. We do, however, find evidence of a positive relationship between female income share and the value of business assets.

Our third measure related to female economic empowerment was participation in an employer-sponsored pension plan. We argued that coverage through an employer-provided pension plan would be expected to crowd out other forms of savings, and explored the possibility that the extent of the crowding out might differ between men and women. Despite our extensive controls, we cannot rule out the possibility that the employer pension variable is associated with other characteristics, such as job tenure, that differ between male and female pension holders, hence we might be measuring something other than the pure impact of having an employer pension. Yet the results offer no support for the hypothesis that households have different attitudes towards or awareness of male and female pension coverage.

The strong impact of male responsibility for financial planning and, to some extent, female share of household income upon savings levels suggests that policy makers need to be aware of gender dynamics when planning policy interventions. Our results on the impact of financial literacy measures reinforce that message.

Financial literacy interventions often stress the importance of budgeting. However, as we argue in this paper, household budgeting is a gendered activity – for generations women's magazines have urged homemakers to budget. Male respondents who report using a household budget also report considerably lower levels of asset holdings – although this negative impact of budgeting is ameliorated for those who are able to stick to their budget. For women, budgeting has much less of a negative impact. The gendered nature of budgeting needs to be taken into account when designing policy interventions.

The use of credit cards is another gendered aspect of financial management. Carrying a credit card balance is harmful to the financial health of both sexes. However, not having a credit card at all appears to be a particularly strong indicator of financial stress for women.

When it comes to financial knowledge, low knowledge levels are associated with lower levels of non-RRSP financial assets, RRSPs and RESPs, and with lower probabilities of having non-RRSP financial assets, RRSPs and RESPs, for both men and women. While the effectiveness of interventions to increase financial knowledge is, as yet, unproven, these findings suggest that higher levels of financial knowledge are associated with higher levels of wealth, regardless of the respondent's gender.

In the literature surveyed in this paper, we found several authors who argued that women were more likely to save than men. Lee and Pocock (2007) argued that "The wife's bargaining power increases total household savings", Seguino and Floro (2003) suggested that, "As some measures of women's relative income and bargaining power increase, gross domestic saving rates rise," while Lundberg and Ward-Batts (2006) found that increased female bargaining power was associated with higher levels of saving. We generally do not find this in our data. Male decision-making is associated with higher incidences of financial asset holdings, and higher levels of financial wealth. Female economic empowerment as measured by female income share is not associated with higher levels of financial asset holdings, although there is more evidence of a positive relationship between female income share and holdings of tangible assets, and between female employment and holdings of RRSPs. Although there are many good reasons why, from a life cycle point of view, women would have more interest in saving than men do, we found little association between increased female influence on household decision-making and increased savings.

We increasingly live in a world of targeted advertising, where each person's Facebook page opens to age-appropriate male- or female-oriented advertisements, whether they are "Canadian mom lost 27 pounds in four weeks without dieting" slogans or video-game pitches. To some extent, our results suggest that policy interventions need to be sensitive to considerations of gender. The gender of the financial planner and the female share of income are significant predictors of a household's level of assets, particularly financial assets. Often recommended policy interventions such as budgeting have quite different impacts on males and females. Yet, at the same time, low levels of financial knowledge are associated with lower levels of asset holdings regardless of gender, and we failed to find the expected difference in the impact of female and male pensions on households' asset holdings. So while interventions need to be gender-aware, many interventions, such as ones that successfully increase financial knowledge, would be expected to provide comparable benefits for men and women.

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Table 1 Characteristics of respondents

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Sample size	9,899	1,975	1,395	6,252	3,291	2,961
Gender of the respondent (%)						
Female	49.8	100.0		49.1	100.0	
Male	50.2		100.0	50.9		100.0
Age of the respondent (%)						
25 to 29 years old	12.4	16.0	25.3	9.5	10.8	8.3
30 to 34 years old	12.9	12.3	14.1	12.7	13.1	12.3
35 to 39 years old	13.5	11.0	11.5	14.3	14.2	14.4
40 to 44 years old	14.4	12.9	11.6	15.1	15.0	15.2
45 to 49 years old	15.9	15.1	16.1	16.1	16.4	15.9
50 to 54 years old	14.3	13.7	10.6	14.9	14.5	15.3
55 to 59 years old	10.2	11.4	6.9	10.7	10.4	10.9
60 to 65 years old	6.4	7.6	3.8	6.6	5.6	7.7
<i>Average age (years)</i>	43.2	43.0	39.7	43.8	43.2	44.4
<i>Median age (years)</i>	43.0	44.0	39.0	44.0	44.0	44.0
Marital status (%)						
Married	60.4			81.5	82.1	80.8
Common-law	13.9			18.5	17.9	19.2
<i>Common-law & outside Quebec</i>	7.0			9.2	9.3	9.1
<i>Presence of a spouse</i>	74.3			100.0	100.0	100.0
Educational attainment (%)						
Less than high school diploma	10.7	10.7	15.6	10.1	9.4	10.7
High school diploma	29.7	30.3	34.1	28.8	28.4	29.2

Table 1 Characteristics of respondents

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Non-university college, vocational or trade certificate and diploma	27.6	28.4	26.3	27.8	28.6	27.0
University degree (BA or above)	32.0	30.7	24.0	33.4	33.5	33.2
Immigrant status (%)						
Canadian born	76.7	78.8	85.3	75.6	76.0	75.2
Immigrant (before 2005)	20.4	19.5	12.9	21.3	20.8	21.7
Immigrant (2005 or after)	2.8	1.5	1.5	3.0	3.1	2.9
First language (%)						
English	58.6	60.3	62.1	58.1	58.3	57.9
French	22.3	23.8	25.6	21.6	21.4	21.8
Others	19.9	17.0	13.4	21.0	21.0	21.0
Number of respondent's young children (%)						
0	69.4	84.6	95.6	61.5	62.8	60.2
1	15.3	9.5	3.2	18.7	18.6	18.8
2 or more	15.3	5.9	1.2	19.8	18.6	20.9
Labour force status of the respondent (%)						
Employed / Self-employed	82.9	78.0	77.3	84.8	78.6	90.8
Unemployed	7.3	9.4	14.0	5.7	5.1	6.4
Out of the labour force / Other	9.7	12.6	8.8	9.5	16.3	2.8
Labour force status of the respondent's spouse (%)						
Employed / Self-employed	58.8			79.5	84.7	74.5

Table 1 **Characteristics of respondents**

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Unemployed	3.3			4.4	4.5	4.3
Retired	3.3			4.5	6.3	2.7
Out of the labour force / Other	34.6			11.6	4.5	18.5
Province (%)						
Newfoundland and Labrador	1.6	1.4	1.1	1.7	1.7	1.7
Prince Edward Island	0.4	0.4	0.3	0.4	0.4	0.4
Nova Scotia	2.8	2.6	3.2	2.7	3.0	2.5
New Brunswick	2.2	1.7	2.0	2.3	2.5	2.2
Quebec	22.8	24.9	24.7	22.2	22.1	22.3
Ontario	39.2	40.1	35.8	39.5	39.5	39.4
Manitoba	3.5	3.2	3.1	3.7	3.6	3.8
Saskatchewan	2.9	2.7	2.9	3.0	3.0	3.0
Alberta	11.1	9.7	11.7	11.3	11.1	11.6
British Columbia	13.6	13.2	15.2	13.2	13.3	13.0
Census metropolitan area (%)						
In a CMA	70.7	76.4	70.0	69.4	68.5	70.3
Montreal	11.3	14.8	12.8	10.5	10.4	10.6
Toronto	17.8	19.6	15.8	17.5	16.3	18.7
Vancouver	7.4	6.9	8.6	7.1	7.1	7.0
Respondent's personal income (%)						
Less than \$20,000	18.8	25.7	19.5	17.4	27.9	7.3
\$20,000 to \$39,999	25.9	30.5	29.2	24.5	29.4	19.8
\$40,000 to \$59,999	23.0	23.8	25.3	22.5	21.1	23.9
\$60,000 to \$79,999	14.6	10.9	14.3	15.4	11.7	19.0

Table 1 **Characteristics of respondents**

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
\$80,000 to \$99,999	8.0	5.1	5.1	9.1	5.3	12.7
\$100,000 or more	9.6	4.1	6.6	11.1	4.6	17.3
Average amount (\$)	53,707	43,892	49,495	56,199	39,255	72,563
Median amount (\$)	42,000	35,000	40,000	45,000	33,000	57,000
Self assessment of financial knowledge (1-4, the lower the better) (%)						
High (1 - 2.5)	65.0	57.2	60.6	67.2	63.9	70.4
Low (2.5 - 4)	35.0	42.8	39.4	32.8	36.1	29.6
Mean score (1-4)	2.3	2.4	2.3	2.2	2.3	2.2
Median score (1-4)	2.2	2.4	2.2	2.2	2.2	2.2
Assessment of financial practice (1-2, the lower the better) (%)						
High (1 - 1.5)	83.6	78.6	78.2	85.5	83.5	87.5
Low (1.5 - 2)	16.4	21.4	21.8	14.5	16.5	12.5
Mean score (1-2)	1.4	1.4	1.4	1.3	1.4	1.3
Median score (1-2)	1.4	1.4	1.4	1.3	1.4	1.3
Objective assessment of financial knowledge (0-14, the higher the better) (%)						
Scored 0-6 (very low)	23.0	26.6	23.9	22.0	24.7	19.3
Scored 7-8 (low)	22.3	24.0	24.9	21.5	24.3	18.7
Scored 9-10 (high)	26.8	27.3	27.0	26.8	27.0	26.6
Scored 11-14 (very high)	27.9	22.1	24.2	29.8	24.0	35.3
Mean Score (0-14)	8.4	8.0	8.2	8.5	8.1	8.8
Median Score (0-14)	9.0	8.0	9.0	9.0	9.0	9.0
Sample size	9,899	1,975	1,395	6,252	3,291	2,961
Retirement planning (%)						
Financially preparing for	77.7	69.0	66.0	81.5	78.9	84.0

Table 1 **Characteristics of respondents**

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
retirement						
Using government pension benefits	64.1	57.9	50.6	67.8	66.5	69.1
Using employer pension plan benefits	45.8	43.8	35.1	48.1	46.2	50.0
Using personal retirement saving plan benefits	64.6	53.2	52.9	68.8	66.4	71.1
Obtaining a reverse mortgage	2.8	2.0	3.0	2.9	2.1	3.7
Selling the financial assets	19.8	13.3	16.3	21.6	18.0	25.1
Selling the non-financial assets	12.6	10.0	10.5	13.3	11.4	15.2
Using an inheritance	13.1	9.6	10.8	14.2	13.6	14.8
Relying on financial support from family	11.1	4.7	7.3	13.0	16.5	9.7
Drawing an income from own business	14.7	7.8	14.5	16.1	13.9	18.2
Using earnings from employment in retirement	33.4	28.0	28.7	35.2	31.6	38.6
Using other retirement income source	1.7	1.5	1.3	1.9	1.5	2.2

Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Note: All statistics of means, proportions and medians were estimated using individual sampling weights provided by Statistics Canada. The sample size of individual variable varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and not retired or studying full time were used. Same sex couples were not included.

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Sample size	9,899	1,975	1,395	6,252	3,291	2,961
Marital status (%)						
Married	64.6			82.8	83.5	82.1
Common-law	13.5			17.2	16.5	17.9
Common-law & outside Quebec	7.0			8.8	8.8	8.7
Presence of a spouse	78.2			100.0	100.0	100.0
Number of people in household (%)						
1	4.9	19.6	21.3	0.0	0.0	0.0
2	26.3	23.1	20.7	27.5	28.7	26.4
3	22.6	23.1	29.1	21.6	21.0	22.3
4 or more	46.3	34.2	28.9	50.8	50.3	51.3
Number of respondent's young children (%)						
0	71.1	87.6	96.7	64.7	65.6	63.7
1	14.6	8.3	2.3	17.5	17.5	17.4
2 or more	14.3	4.2	1.0	17.9	16.8	18.9
Province (%)						
Newfoundland and Labrador	1.5	1.3	1.1	1.6	1.6	1.7
Prince Edward Island	0.4	0.4	0.3	0.4	0.4	0.4
Nova Scotia	2.6	2.1	2.7	2.6	2.9	2.4
New Brunswick	2.1	1.5	1.8	2.3	2.3	2.2
Quebec	21.3	22.5	21.8	21.2	21.2	21.2
Ontario	41.1	44.9	39.4	40.8	41.0	40.5
Manitoba	3.4	2.6	2.9	3.6	3.6	3.7

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Saskatchewan	2.8	2.4	2.7	2.9	2.8	2.9
Alberta	11.2	9.5	12.9	11.1	10.7	11.5
British Columbia	13.6	12.8	14.2	13.6	13.6	13.5
Census metropolitan area (%)						
In a CMA	72.2	78.5	72.9	70.8	70.2	71.4
Montreal	10.8	14.3	12.3	10.1	10.0	10.2
Toronto	19.9	25.0	19.6	19.0	18.1	20.0
Vancouver	8.0	7.3	8.8	7.8	7.9	7.7
Use of household budget (%)						
Had a household budget	54.2	57.4	41.2	55.7	57.8	53.7
Stayed within the budget	17.3	19.6	14.4	17.5	16.2	18.7
Household income (%)						
Less than \$25,000	7.2	20.6	14.2	4.3	5.2	3.3
\$25,000 to \$49,999	15.5	28.3	24.1	12.3	13.4	11.3
\$50,000 to \$74,999	20.6	17.9	21.3	20.6	21.2	20.0
\$75,000 to \$99,999	16.0	10.6	14.7	17.1	16.9	17.4
\$100,000 to \$124,999	16.0	10.0	12.0	17.6	17.4	17.7
\$125,000 to \$149,999	7.5	2.7	3.9	8.7	8.1	9.4
\$150,000 or more	17.2	9.9	9.9	19.3	17.7	20.9
Average amount (\$)	99,153	71,619	74,587	107,039	101,240	112,671
Median amount (\$)	80,000	50,000	60,000	90,000	85,000	90,000
Derived personal income of the man in the household (%)						
Less than \$20,000 / Not present	22.0		19.9	11.2	14.7	7.9
\$20,000 to \$39,999	20.1		31.9	21.2	22.5	19.9

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
\$40,000 to \$59,999	20.9		25.2	23.2	22.7	23.6
\$60,000 to \$79,999	14.7		14.4	16.8	14.9	18.7
\$80,000 to \$99,999	9.1		3.2	11.3	9.8	12.7
\$100,000 or more	13.2		5.3	16.3	15.4	17.2
Average amount (\$)	57,710		46,630	67,557	62,381	72,585
Median amount (\$)	45,000		38,000	52,000	50,000	55,000
Average share of household income	56.5		69.0	62.1	59.4	64.7
Derived personal income of the woman in the household (%)						
Less than \$20,000 / Not present	37.5	26.2		30.2	28.7	31.7
\$20,000 to \$39,999	25.0	30.5		27.6	29.2	26.1
\$40,000 to \$59,999	18.4	25.9		20.0	20.5	19.4
\$60,000 to \$79,999	10.0	9.9		11.4	11.5	11.3
\$80,000 to \$99,999	4.6	4.5		5.2	5.6	4.9
\$100,000 or more	4.6	3.0		5.5	4.5	6.5
Average amount (\$)	35,459	42,490		39,482	38,860	40,086
Median amount (\$)	28,000	33,000		32,000	32,000	30,000
Average share of household income	38.4	71.5		38.0	40.8	35.3
The person most responsible for the financial management of the household (%)						
The man in the couple	29.9		53.0	30.4	24.7	0.0
The woman in the couple	17.4	61.4		13.5	17.6	9.6
Shared	44.3	14.8	18.3	52.9	54.3	51.5
Someone else	8.4	23.8	28.7	3.2	3.4	2.9

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Labour force status of the man in the household (%)						
Employed / Self-employed	76.5		76.6	87.4	84.0	90.6
Unemployed	6.2		15.6	5.7	4.8	6.5
Retired	2.5			3.2	6.6	0.0
Out of the labour force / Other	14.8		7.8	3.7	4.5	2.9
Labour force status of the woman in the household (%)						
Employed / Self-employed	68.2	78.0		76.5	78.1	74.9
Unemployed	5.0	10.8		4.9	5.4	4.4
Retired	1.0			1.3	0.0	2.6
Out of the labour force / Other	25.7	11.2		17.3	16.5	18.1
Positive values of assets and liabilities (%)						
Tangible assets	93.7	82.4	85.1	96.5	96.5	96.6
RRSPs	65.4	55.3	51.7	68.7	64.9	71.9
RESPs	19.4	9.0	5.1	23.3	20.8	25.7
Financial assets	62.0	53.8	57.1	63.8	61.9	65.3
Business assets	12.5	5.6	11.6	13.6	11.5	15.5
Total assets	95.6	87.4	89.6	97.7	97.1	98.1
Total liabilities	80.0	72.3	68.8	82.8	80.0	85.2
Mean values of assets and liabilities (\$)						
Tangible assets	376,219	258,118	266,960	408,961	395,835	420,258
RRSPs	59,216	35,938	23,377	64,748	54,572	73,327
RESPs	2,933	883	1,266	3,514	2,983	4,027

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Financial assets	74,792	39,864	52,154	82,073	67,107	94,070
Business assets	85,964	16,225	78,469	97,226	64,020	128,158
Total assets	598,839	285,155	487,126	657,095	571,560	715,819
Total liabilities	104,940	64,367	78,045	114,391	107,390	120,520
Net worth	500,052	217,486	398,092	552,146	469,259	607,581
Median values of assets and liabilities (\$)						
Tangible assets	270,000	175,000	100,000	300,000	300,000	300,000
RRSPs	10,000	3,100	150	15,000	10,000	20,000
RESPs	0	0	0	0	0	0
Financial assets	5,000	1,000	2,000	7,000	5,000	10,000
Business assets	0	0	0	0	0	0
Total assets	340,800	174,000	115,000	400,000	367,500	413,000
Total liabilities	40,000	15,000	9,000	60,000	50,000	60,000
Net worth	220,000	75,000	58,000	270,000	254,700	281,200
Other assets and liabilities (%)						
Own the principal residence	78.7	64.2	65.4	82.8	84.2	81.4
Have mortgage(s) (principal residence only)	54.2	41.1	36.9	58.5	58.2	58.8
Own a house or property	81.6	66.4	66.0	85.9	87.2	84.7
Own a car	90.7	79.5	81.7	93.7	94.0	93.5
Have valuables (collections, art, jewels)	33.7	30.7	31.1	34.6	34.8	34.5
Have home furnishings	5.7	7.7	5.4	5.4	4.5	6.3
Have other tangible assets	2.0	0.5	1.8	2.3	1.6	3.0

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
Have cash savings	61.1	56.9	60.5	61.9	62.8	60.9
Have investments	42.8	38.2	38.3	44.2	45.5	43.0
Have registered disability savings plan	3.7	3.2	2.8	3.9	4.2	3.6
Have tax free savings plan	13.7	12.6	12.0	14.1	13.0	15.2
Have private pensions	18.5	18.0	14.0	19.3	19.9	18.8
Have other financial assets	1.8	1.1	1.6	1.9	2.1	1.8
Own agri property, machinery and equipment	7.3	3.7	7.8	7.9	7.8	8.0
Own wholly/partially owned business	12.0	7.6	8.5	13.1	12.4	13.9
Own copyrights, patents or royalties	1.8	2.2	1.1	1.9	1.6	2.1
Own other business assets/properties	0.7	0.3	0.3	0.8	0.4	1.2
Have mortgages (principal residence/other)	59.6	46.1	43.0	64.0	63.2	64.7
Student loans	15.0	24.7	12.5	14.0	13.4	14.6
Payday loans	0.7	0.8	0.9	0.6	0.5	0.8
Other loans	26.9	20.0	29.1	27.6	27.3	28.0
Outstanding credit card balances	40.2	43.9	39.2	39.9	41.5	38.4
Outstanding balances on lines of credit	35.4	29.7	25.0	37.6	38.3	36.9
Other debts or liabilities	2.0	2.7	2.9	1.7	1.2	2.2

Table 2 Household characteristics

	Combined sample (1)	Single women (2)	Single men (3)	Married or cohabiting men or women (4)	Married or cohabiting women (5)	Married or cohabiting men (6)
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Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Note: All statistics of means, proportions and medians were estimated using household sampling weights derived from information provided by Statistics Canada. The sample size of individual variable varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and not retired or studying full time were used. Same sex couples were not included.

Table 3 Sample characteristics by presence of household budget

	Do not have a household budget (0)	Have a household budget (1)	Statistical significance (F-test)	Sample size
Household income (%)				
Less than \$25,000	3.9	4.5		6,219
\$25,000 to \$49,999	13.3	11.6		6,219
\$50,000 to \$74,999	18.5	22.3	***	6,219
\$75,000 to \$99,999	17.2	17.1		6,219
\$100,000 to \$124,999	16.9	18.1		6,219
\$125,000 to \$149,999	8.8	8.8		6,219
\$150,000 or more	21.4	17.7	***	6,219
Average Amount (\$)	113,196	102,054	***	6,219
The person most responsible for the financial management of the household (%)				
The man in the couple	33.1	28.4	***	6,209
The woman in the couple	12.3	14.5	*	6,209
Shared	50.7	54.5	**	6,209
Someone else	3.9	2.6		6,209
Derived personal income of the man in the household (%)				
Less than \$20,000	10.8	11.5		6,219
\$20,000 to \$39,999	20.0	22.1		6,219
\$40,000 to \$59,999	23.2	23.1		6,219
\$60,000 to \$79,999	16.6	17.1		6,219
\$80,000 to \$99,999	10.5	11.9		6,219
\$100,000 or more	18.8	14.3	***	6,219
Average Amount (\$)	72,628	63,378	***	6,219
Average Share of the Household Income	62.9	61.4	*	6,219
Derived personal income of the woman in the household (%)				
Less than \$20,000	31.0	29.6		6,219

Table 3 Sample characteristics by presence of household budget

	Do not have a household budget (0)	Have a household budget (1)	Statistical significance (F-test)	Sample size
\$20,000 to \$39,999	26.4	28.7		6,219
\$40,000 to \$59,999	19.8	20.1		6,219
\$60,000 to \$79,999	11.8	11.0		6,219
\$80,000 to \$99,999	4.5	5.8	*	6,219
\$100,000 or more	6.5	4.8	**	6,219
Average amount (\$)	40,567	38,676		6,219
Average share of the household income	37.3	38.6	*	6,219
Positive values of assets and liabilities (%)				
Tangible assets	96.3	96.9		4,925
RRSPs	67.8	69.6		4,495
RESPs	23.0	23.6		5,511
Financial assets	62.1	65.3		4,240
Business assets	16.7	11.2	***	5,642
Total assets	97.2	98.0		3,241
Total liabilities	80.4	84.7	***	5,135
Mean values of assets and liabilities (\$)				
Tangible assets	454,747	375,341	**	4,925
RRSPs	70,679	60,336		4,495
RESPs	3,720	3,370		5,511
Financial assets	110,722	60,758	***	4,240
Business assets	152,567	55,250	***	5,642
Total assets	813,766	543,694	***	3,241
Total liabilities	117,180	112,423		5,135
Net worth	711,735	437,604	***	3,152

Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Table 3 Sample characteristics by presence of household budget

	Do not have a household budget (0)	Have a household budget (1)	Statistical significance (F-test)	Sample size
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Note: All statistics of means, proportions and medians were estimated using household sampling weights derived from information provided by Statistics Canada. The sample size of individual variable varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and not retired or studying full time were used. Same sex couples were not included.

Table 4 Sample characteristics by who is controlling the household finance

	Others in control (0)	Man in control (1)	Woman in control (2)	Sharing control (3)	Statistical significance (F-test)	Sample size
Household income (%)						
Less than \$25,000	11.6	4.3	4.7	3.7		6,241
\$25,000 to \$49,999	32.8	10.6	16.0	11.2	***	6,241
\$50,000 to \$74,999	12.9	18.9	24.3	21.1	***	6,241
\$75,000 to \$99,999	16.4	17.4	17.4	16.9		6,241
\$100,000 to \$124,999	10.4	17.7	16.4	18.2		6,241
\$125,000 to \$149,999	5.4	9.2	7.7	8.9		6,241
\$150,000 or more	10.5	22.0	13.5	19.9	***	6,241
Average amount (\$)	72,271	113,833	91,762	109,227	***	6,241
Derived personal income of the man in the household (%)						
Less than \$20,000	27.7	8.8	16.9	10.2	***	6,241
\$20,000 to \$39,999	26.8	17.5	28.1	21.1	***	6,241
\$40,000 to \$59,999	16.5	20.7	23.6	24.9	**	6,241
\$60,000 to \$79,999	9.3	18.4	13.2	17.4	***	6,241
\$80,000 to \$99,999	11.7	12.5	8.9	11.2		6,241
\$100,000 or more	8.0	22.1	9.3	15.3	***	6,241
Average amount (\$)	44,761	77,175	51,884	67,494	***	6,241
Average share of the household income	60.5	67.4	55.8	60.7	***	6,241
Derived personal income of the woman in the household (%)						
Less than \$20,000	49.2	36.0	27.8	26.3	***	6,241
\$20,000 to \$39,999	21.1	27.4	29.9	27.7		6,241
\$40,000 to \$59,999	19.2	16.6	20.5	21.8	***	6,241
\$60,000 to \$79,999	6.4	10.0	11.9	12.4	**	6,241
\$80,000 to \$99,999	3.0	4.2	3.9	6.4	**	6,241
\$100,000 or more		5.8	6.0	5.5	***	6,241

Table 4 Sample characteristics by who is controlling the household finance

	Others in control (0)	Man in control (1)	Woman in control (2)	Sharing control (3)	Statistical significance (F-test)	Sample size
Average amount (\$)	27,510	36,658	39,878	41,733	***	6,241
Average share of the household income	39.8	32.6	44.2	39.4	***	6,241
Positive values of assets and liabilities (%)						
Tangible assets	92.5	97.2	95.6	96.6		4,937
RRSPs	25.0	74.2	62.2	70.3	***	4,504
RESPs	9.7	26.2	23.0	22.7	***	5,518
Financial assets	32.2	67.9	55.5	65.9	***	4,247
Business assets	8.1	15.2	12.6	13.2	**	5,658
Total assets	88.7	98.6	97.3	97.7		3,247
Total liabilities	85.5	80.6	87.3	82.8	***	5,142
Mean values of assets and liabilities (\$)						
Tangible assets	267,172	490,038	382,508	376,205	***	4,937
RRSPs	16,625	79,318	56,041	62,068	***	4,504
RESPs	1,025	4,320	2,139	3,570	***	5,518
Financial assets	12,946	123,434	44,602	73,051	***	4,247
Business assets	27,773	162,428	58,631	73,071	***	5,658
Total assets	326,726	844,856	497,492	601,994	***	3,247
Total liabilities	88,302	119,862	104,752	115,310	*	5,142
Net worth	229,594	732,638	403,480	496,884	***	3,158

Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Note: All statistics of means, proportions and medians were estimated using household sampling weights derived from information provided by Statistics Canada. The sample size of individual variable varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and not retired or studying full time were used. Same sex couples were not included.

Table 5 Incidences of assets and liabilities - estimates of probit regressions

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets	Pension
Intercept	-8.931 (1.261)***	-9.960 (1.984)***	1.989 (0.829)**	-4.155 (0.862)***	-8.172 (1.058)***	-7.109 (0.889)***	-6.366 (1.355)***	-5.770 (0.859)***	-5.177 (0.669)***
Control of money (ref: shared control): Men in control	0.008 (0.107)	0.383 (0.209)*	-0.012 (0.069)	0.101 (0.068)	0.169 (0.077)**	0.037 (0.067)	0.077 (0.138)	0.088 (0.071)	-0.036 (0.060)
Control of money (ref: shared control): Woman in control	-0.333 (0.129)***	0.413 (0.234)*	0.327 (0.096)***	-0.135 (0.084)	-0.068 (0.094)	0.128 (0.097)	0.100 (0.175)	0.046 (0.093)	-0.042 (0.078)
Control of money (ref: shared control): Others in control	-0.317 (0.232)	0.136 (0.336)	0.220 (0.218)	-0.269 (0.194)	-0.751 (0.167)***	-0.331 (0.185)*	0.311 (0.299)	-0.072 (0.180)	-0.266 (0.185)
Woman's share of household income	0.122 (0.216)	-0.337 (0.337)	0.227 (0.142)	-0.300 (0.149)**	-0.261 (0.166)	-0.112 (0.151)	-0.435 (0.276)	0.306 (0.174)*	0.080 (0.131)
The respondent is a woman	-0.205 (0.363)	-0.341 (0.533)	-0.279 (0.270)	-0.114 (0.274)	-0.492 (0.292)*	-0.133 (0.346)	-0.208 (0.416)	-0.537 (0.326)*	0.009 (0.271)
Man-woman age difference < 0	-0.131 (0.112)	-0.438 (0.204)**	-0.016 (0.079)	0.043 (0.075)	0.111 (0.081)	-0.016 (0.076)	0.156 (0.140)	0.104 (0.080)	0.046 (0.066)
Man-woman age difference > 5 years	-0.262 (0.117)**	-0.343 (0.218)	0.290 (0.081)***	-0.112 (0.077)	-0.148 (0.080)*	0.270 (0.081)***	-0.136 (0.143)	0.081 (0.084)	-0.094 (0.070)
Employer pension plan (ref: no)	0.224 (0.128)*	0.934 (0.488)*	0.000 (0.088)	0.267 (0.081)***	0.158 (0.097)	0.100 (0.088)	0.030 (0.164)	-0.110 (0.089)	

Table 5 Incidences of assets and liabilities - estimates of probit regressions

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets	Pension
Log household income	0.657 (0.086)***	0.962 (0.140)***	0.048 (0.056)	0.426 (0.060)***	0.561 (0.079)***	0.106 (0.056)*	0.722 (0.096)***	0.236 (0.057)***	0.318 (0.048)***
Man's age	0.107 (0.033)***	0.014 (0.053)	-0.076 (0.025)***	-0.053 (0.024)**	0.044 (0.027)	0.173 (0.030)***	-0.041 (0.039)	0.055 (0.027)**	0.037 (0.021)*
Man's age squared	-0.001 (0.000)***	0.000 (0.001)	0.000 (0.000)*	0.001 (0.000)**	0.000 (0.000)	-0.002 (0.000)***	0.001 (0.000)	-0.001 (0.000)*	0.000 (0.000)*
Common law couple (ref: married)	-0.059 (0.184)	0.280 (0.332)	-0.057 (0.121)	0.035 (0.111)	0.172 (0.123)	0.101 (0.123)	0.258 (0.212)	0.101 (0.120)	-0.230 (0.112)**
Common law couple outside Quebec	0.070 (0.228)	0.135 (0.383)	-0.179 (0.157)	0.068 (0.142)	-0.238 (0.150)	-0.161 (0.158)	-0.231 (0.262)	-0.204 (0.178)	0.241 (0.145)*
The man was self-employed (ref: employed)	0.216 (0.140)	0.043 (0.267)	0.108 (0.085)	0.072 (0.084)	-0.008 (0.087)	0.047 (0.089)	0.531 (0.210)**	1.276 (0.078)***	-0.365 (0.079)***
The man was employed (ref: unemployed/out of the labour force)	0.097	0.066	0.206	0.008	0.175	0.357	0.047	0.090	-0.080
The man was retired (ref: unemployed/out of the labour force)	0.109 (0.328)	0.609 (0.550)	-0.420 (0.178)**	-0.148 (0.224)	-0.023 (0.218)	0.146 (0.317)	0.624 (0.364)*	-0.263 (0.214)	0.231 (0.158)
The woman was self-employed (ref: employed)	0.179 (0.177)	0.376 (0.307)	0.045 (0.100)	0.106 (0.110)	0.053 (0.126)	-0.109 (0.116)	0.039 (0.245)	0.453 (0.101)***	-0.155 (0.110)
The woman was employed	0.038	-0.052	0.188	0.033	0.407	0.020	0.070	-0.041	-0.091

Table 5 Incidences of assets and liabilities - estimates of probit regressions

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets	Pension
(ref: unemployed/out of the labour force)	(0.128)	(0.199)	(0.083)**	(0.082)	(0.087)***	(0.088)	(0.138)	(0.095)	(0.070)
The woman was retired (ref: unemployed/out of the labour force)	0.764 (0.421)*	0.149 (0.596)	0.462 (0.184)**	0.850 (0.250)***	-0.089 (0.230)	-0.186 (0.356)	0.358 (0.416)	0.132 (0.245)	0.489 (0.191)**
Used household budget (ref: no)	0.064 (0.136)	0.699 (0.284)**	0.343 (0.103)***	-0.040 (0.085)	0.011 (0.102)	-0.033 (0.092)	0.584 (0.196)***	-0.181 (0.098)*	-0.103 (0.084)
Always stayed on budget (ref: no)	0.208 (0.184)	-0.022 (0.389)	-0.316 (0.116)***	0.279 (0.115)**	0.098 (0.137)	0.007 (0.129)	-0.465 (0.212)**	0.193 (0.129)	0.071 (0.109)
Had a credit card	0.248 (0.204)	0.575 (0.285)**	0.667 (0.158)***	0.233 (0.158)	0.749 (0.188)***	0.423 (0.208)**	0.707 (0.209)***	0.059 (0.181)	-0.228 (0.162)
Carried a balance on a credit card		0.150 (0.239)		-0.133 (0.079)*	-0.271 (0.093)***	-0.036 (0.087)	-0.275 (0.166)*	0.001 (0.095)	-0.003 (0.076)
Self assessed financial knowledge: Good	0.276 (0.133)**	0.244 (0.233)	-0.274 (0.105)***	0.367 (0.089)***	0.059 (0.095)	0.104 (0.103)	-0.062 (0.172)	0.355 (0.101)***	0.208 (0.081)**
Assessment of financial practice: Good	0.014 (0.216)	0.069 (0.285)	0.238 (0.138)*	0.262 (0.116)**	0.090 (0.124)	0.031 (0.142)	0.151 (0.199)	-0.026 (0.134)	0.198 (0.130)
Objective assessment of financial knowledge: Score - very low (ref: high)	-0.287 (0.194)	-0.847 (0.316)***	-0.256 (0.141)*	-0.426 (0.129)***	-0.462 (0.137)***	-0.464 (0.154)***	-0.563 (0.254)**	-0.328 (0.155)**	-0.281 (0.131)**
Objective assessment of	-0.181	0.254	-0.247	-0.026	-0.215	-0.194	0.093	-0.007	0.032

Table 5 Incidences of assets and liabilities - estimates of probit regressions

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets	Pension
financial knowledge:	(0.178)	(0.466)	(0.120)**	(0.109)	(0.122)*	(0.130)	(0.256)	(0.127)	(0.103)
Score - low (ref: high)									
Objective assessment of financial knowledge:	0.141	-0.643	-0.090	0.246	0.183	0.088	-0.001	0.186	0.233
Score - very high (ref: high)	(0.158)	(0.335)*	(0.105)	(0.098)**	(0.125)	(0.100)	(0.204)	(0.102)*	(0.087)***
Women-men difference in effects of:									
Employer pension plan (ref: No)	-0.184 (0.179)	-0.824 (0.542)	0.085 (0.123)	-0.028 (0.115)	-0.098 (0.127)	0.007 (0.118)	0.264 (0.237)	-0.172 (0.122)	
Used household budget (ref: No)	0.109 (0.189)	-0.416 (0.364)	-0.048 (0.137)	0.094 (0.124)	0.021 (0.134)	0.015 (0.127)	-0.626 (0.262)**	0.105 (0.134)	0.177 (0.113)
Always stayed on budget (ref: No)	-0.191 (0.265)	0.086 (0.509)	-0.152 (0.165)	-0.228 (0.176)	-0.035 (0.191)	-0.084 (0.172)	0.456 (0.299)	-0.316 (0.187)*	-0.114 (0.148)
Had a credit card	0.250 (0.289)	0.541 (0.374)	0.178 (0.216)	0.493 (0.223)**	0.299 (0.241)	0.140 (0.299)	0.253 (0.287)	0.326 (0.271)	0.258 (0.216)
Carried a balance on a credit card		-0.217 (0.315)		-0.066 (0.117)	0.117 (0.129)	-0.124 (0.118)	0.415 (0.223)*	0.058 (0.125)	0.036 (0.105)
Self assessed financial knowledge: Good	-0.110 (0.192)	-0.354 (0.333)	0.228 (0.145)	0.029 (0.130)	0.056 (0.137)	0.067 (0.139)	-0.048 (0.250)	-0.121 (0.139)	0.023 (0.113)
Assessment of financial practice: Good	0.070 (0.272)	-0.195 (0.425)	-0.322 (0.190)*	-0.163 (0.170)	0.058 (0.179)	-0.185 (0.185)	-0.060 (0.292)	0.211 (0.180)	-0.269 (0.168)
Objective assessment of	-0.003	0.383	-0.103	-0.081	0.039	0.133	0.138	0.235	0.050

Table 5 Incidences of assets and liabilities - estimates of probit regressions

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets	Pension
financial knowledge:	(0.266)	(0.414)	(0.187)	(0.175)	(0.186)	(0.205)	(0.322)	(0.205)	(0.177)
Score - very low (ref: high)									
Objective assessment of financial knowledge:	0.035	-0.207	0.224	-0.087	0.128	0.133	0.085	0.027	0.077
Score - low (ref: high)	(0.236)	(0.521)	(0.164)	(0.158)	(0.164)	(0.168)	(0.317)	(0.171)	(0.138)
Objective assessment of financial knowledge:	0.077	0.984	0.075	-0.058	0.137	0.052	0.203	0.119	-0.104
Score - very high (ref: high)	(0.229)	(0.475)**	(0.151)	(0.143)	(0.162)	(0.141)	(0.283)	(0.150)	(0.124)
Number of observations	3,082	3,162	4,958	4,098	4,337	5,263	4,753	5,379	5,737

Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Note: All statistics were estimated using household sampling weights. The sample size of individual equation varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and were married or living common law were used.. Same sex couples were not included. Standard errors are in parenthesis. Student t-tests were used to test the statistical significance of each right hand side variable. * - significant at 10%; ** - significant at 5%; *** - significant at 1%.

Table 6 Estimated tobit coefficients - inverse sine transformed values of assets and liabilities

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets
Intercept	-32.630 (4.272)***	-4.683 (1.429)***	0.765 (2.612)	-27.900 (4.494)***	-41.440 (4.215)***	-69.120 (8.068)***	-4.470 (1.475)***	-85.880 (11.980)***
Control of money: The man in control (ref: sharing control)	0.108 (0.290)	0.131 (0.084)	0.010 (0.223)	0.672 (0.337)**	0.667 (0.275)**	0.413 (0.598)	0.123 (0.102)	1.333 (0.983)
Control of money: The woman in control (ref: sharing control)	-1.622 (0.582)***	0.043 (0.151)	0.888 (0.263)***	-0.900 (0.465)*	-0.417 (0.404)	1.202 (0.886)	-0.044 (0.188)	0.596 (1.326)
Control of money: Others in control (ref: Sharing control)	-1.373 (1.196)	-0.593 (0.644)	0.082 (0.642)	-2.168 (1.238)*	-4.188 (0.963)***	-3.180 (1.757)*	-0.220 (0.446)	-0.980 (2.550)
Woman's share of household income	0.782 (0.771)	-0.197 (0.319)	0.318 (0.478)	-1.452 (0.817)*	-1.202 (0.709)*	-0.994 (1.381)	-0.158 (0.321)	3.820 (2.257)*
The respondent is a woman	-1.178 (1.882)	-1.839 (0.790)**	-1.508 (1.080)	-1.656 (1.773)	-2.911 (1.590)*	-1.118 (3.319)	-1.234 (0.737)*	-7.235 (4.649)
Man-woman age difference < 0	-0.337 (0.359)	-0.161 (0.109)	-0.214 (0.228)	0.263 (0.375)	0.453 (0.305)	-0.164 (0.681)	-0.078 (0.112)	1.683 (1.150)
Man-woman age difference > 5 years	-1.017 (0.375)***	-0.465 (0.138)***	0.913 (0.263)***	-0.724 (0.418)*	-0.846 (0.337)**	2.404 (0.711)***	-0.361 (0.148)**	1.182 (1.151)
Employer pension plan (ref: no)	0.708 (0.368)*	0.095 (0.099)	-0.162 (0.257)	1.402 (0.417)***	0.365 (0.355)	1.017 (0.783)	0.071 (0.136)	-1.597 (1.264)
Log household income	2.591	1.349	0.774	2.841	2.907	1.130	1.342	3.580

Table 6 Estimated tobit coefficients - inverse sine transformed values of assets and liabilities

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets
	(0.273)***	(0.112)***	(0.191)***	(0.303)***	(0.290)***	(0.514)**	(0.110)***	(0.758)***
Man's age	0.468 (0.119)***	-0.006 (0.039)	-0.090 (0.082)	-0.196 (0.122)	0.295 (0.117)**	1.681 (0.280)***	-0.050 (0.038)	0.779 (0.384)**
Man's age squared	-0.004 (0.001)***	0.000 (0.000)	0.000 (0.001)	0.003 (0.001)**	-0.002 (0.001)	-0.021 (0.003)***	0.001 (0.000)**	-0.007 (0.004)*
Common law couple (ref: married)	-0.035 (0.493)	0.236 (0.155)	-0.158 (0.358)	0.268 (0.586)	0.782 (0.469)*	0.867 (1.132)	0.193 (0.155)	1.505 (1.702)
Common law couple outside Quebec	-0.121 (0.754)	-0.336 (0.230)	-0.742 (0.492)	0.199 (0.747)	-1.024 (0.605)*	-1.462 (1.457)	-0.523 (0.243)**	-2.997 (2.544)
The man was self-employed (ref: employed)	1.276 (0.356)***	0.679 (0.112)***	0.479 (0.255)*	0.693 (0.430)	0.109 (0.341)	0.593 (0.795)	0.626 (0.115)***	18.150 (0.937)***
The man was employed (ref: unemployed/out of the labour force)	0.363 (0.629)	0.272 (0.220)	0.749 (0.378)**	-0.081 (0.620)	1.221 (0.541)**	3.478 (1.096)***	0.191 (0.257)	1.619 (1.913)
The man was retired (ref: unemployed/out of the labour force)	0.060 (1.320)	-0.056 (0.445)	-2.222 (0.877)**	-0.663 (1.215)	0.220 (1.058)	0.942 (3.170)	0.278 (0.368)	-4.304 (3.174)
The woman was self-employed (ref: employed)	0.606 (0.408)	0.389 (0.123)***	0.317 (0.308)	0.681 (0.534)	0.207 (0.403)	-0.963 (1.027)	0.255 (0.132)*	5.896 (1.278)***
The woman was employed (ref: Unemployed/out of the labour force)	0.204 (0.497)	0.163 (0.152)	0.557 (0.283)**	0.166 (0.451)	1.790 (0.398)***	0.157 (0.788)	0.111 (0.165)	-0.340 (1.285)

Table 6 Estimated tobit coefficients - inverse sine transformed values of assets and liabilities

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets
labour force)								
The woman was retired (ref: Unemployed/out of the labour force)	1.238 (0.548)**	0.217 (0.249)	1.798 (0.727)**	2.947 (0.784)***	0.194 (0.972)	-2.146 (3.573)	0.414 (0.256)	2.131 (3.397)
Used household budget (ref: no)	0.477 (0.404)	0.187 (0.110)*	0.874 (0.276)***	-0.420 (0.439)	0.186 (0.371)	-0.387 (0.798)	0.412 (0.153)***	-2.622 (1.374)*
Always stayed on budget (ref: no)	0.265 (0.519)	0.039 (0.166)	-0.453 (0.340)	1.524 (0.542)***	0.302 (0.488)	0.347 (1.163)	-0.231 (0.194)	2.702 (1.791)
Had a credit card	2.888 (1.333)**	1.201 (0.476)**	1.574 (0.679)**	1.543 (1.038)	4.675 (1.120)***	4.051 (1.926)**	1.718 (0.490)***	1.148 (2.626)
Carried a balance on a credit card	-1.839 (0.405)***	-0.187 (0.122)	2.576 (0.223)***	-0.698 (0.413)*	-1.133 (0.341)***	-0.356 (0.765)	-0.221 (0.166)	-0.198 (1.302)
Self assessed financial knowledge: Good	0.636 (0.505)	0.218 (0.140)	-0.435 (0.292)	2.020 (0.534)***	0.329 (0.396)	1.005 (0.941)	0.098 (0.181)	5.176 (1.443)***
Assessment of financial practice: Good	-0.207 (0.595)	0.070 (0.166)	0.704 (0.438)	1.495 (0.708)**	0.368 (0.518)	0.217 (1.304)	-0.100 (0.189)	-0.369 (1.939)
Objective assessment of financial knowledge: Score - very low (ref: high)	-1.628 (0.814)**	-0.851 (0.277)***	-0.917 (0.443)**	-2.915 (0.827)***	-2.385 (0.672)***	-4.429 (1.447)***	-0.814 (0.352)**	-4.747 (2.266)**
Objective assessment of financial knowledge:	-0.804 (0.639)	-0.250 (0.148)*	-0.970 (0.348)***	-0.282 (0.601)	-0.854 (0.524)	-1.784 (1.188)	-0.233 (0.200)	-0.234 (1.797)

Table 6 Estimated tobit coefficients - inverse sine transformed values of assets and liabilities

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets
Score - low (ref: high)								
Objective assessment of financial knowledge: Score - very high (ref: high)	0.243 (0.385)	-0.098 (0.095)	-0.204 (0.280)	1.001 (0.474)**	0.451 (0.389)	0.737 (0.865)	0.041 (0.150)	2.500 (1.427)*
Women-men difference in effects of:								
Employer pension plan (ref: no)	-0.474 (0.538)	0.057 (0.173)	0.244 (0.378)	-0.230 (0.597)	-0.046 (0.497)	-0.091 (1.061)	0.101 (0.195)	-2.611 (1.713)
Used household budget (ref: no)	-0.067 (0.576)	-0.290 (0.177)	-0.287 (0.398)	0.438 (0.645)	-0.126 (0.515)	0.105 (1.129)	-0.519 (0.197)***	1.414 (1.878)
Always stayed on budget (ref: no)	0.152 (0.736)	0.174 (0.257)	-0.721 (0.549)	-0.920 (0.888)	0.193 (0.750)	-1.079 (1.558)	0.260 (0.281)	-4.602 (2.625)*
Had a credit card	0.618 (1.826)	1.843 (0.801)**	1.088 (0.950)	3.598 (1.520)**	2.192 (1.443)	1.360 (2.893)	1.161 (0.715)	4.486 (3.862)
Carried a balance on a credit card	0.459 (0.577)	0.013 (0.183)	0.857 (0.327)***	-0.516 (0.608)	0.378 (0.499)	-1.261 (1.055)	0.104 (0.201)	0.849 (1.747)
Self assessed financial knowledge: Good	0.168 (0.727)	-0.083 (0.217)	0.608 (0.445)	0.450 (0.759)	0.266 (0.589)	0.680 (1.287)	0.017 (0.241)	-1.846 (1.980)
Assessment of financial practice: Good	0.584 (0.863)	0.101 (0.248)	-0.855 (0.631)	-1.018 (1.017)	0.260 (0.793)	-1.619 (1.713)	0.349 (0.263)	2.960 (2.604)
Objective assessment of	0.405	-0.139	-0.504	-0.217	-0.142	1.227	0.225	3.444

Table 6 Estimated tobit coefficients - inverse sine transformed values of assets and liabilities

	Net worth	Total assets	Liabilities	Non-RRSP financial assets	RRSPs	RESPs	Tangible assets	Business assets
financial knowledge: Score - very low (ref: high)	(1.147)	(0.424)	(0.663)	(1.122)	(0.946)	(1.943)	(0.439)	(2.985)
Objective assessment of financial knowledge: Score - low (ref: high)	0.562 (0.823)	0.323 (0.224)	0.674 (0.492)	-0.290 (0.856)	0.221 (0.716)	1.197 (1.540)	0.443 (0.247)*	0.530 (2.420)
Objective assessment of financial knowledge: Score - very high (ref: high)	0.501 (0.564)	0.254 (0.155)	0.072 (0.433)	-0.152 (0.659)	0.501 (0.517)	0.369 (1.254)	0.116 (0.194)	1.708 (2.093)
Number of observations	3,082	3,162	4,958	4,098	4,337	5,263	4,753	5,379

Source: Calculations based on micro data from the 2008 Canadian Financial Capability Survey.

Note: All statistics were estimated using household sampling weights. The sample size of individual equation varies due to item non-response. Only observations collected from respondents who were 25 to 65 years of age and were married or living common law were used.. Same sex couples were not included. Standard errors are in parenthesis. Student t-tests were used to test the statistical significance of each right hand side variable. * - significant at 10%; ** - significant at 5%; *** - significant at 1%.

Appendix A: Relevant questions in the CFCS

Subjective personal assessment (SA)

SA_Q01 How would you rate your level of financial knowledge?

1. Very knowledgeable.
2. Knowledgeable.
3. Fairly knowledgeable.
4. Not very knowledgeable.

SA_Q02 How would you rate yourself on each of the following areas of financial management:

... keeping track of money?

1. Very good.
2. Good.
3. Fairly good.
4. Not very good.

The following questions all had the same format as SA_A02:

SA_Q03 ...making ends meet?

SA_Q04 ... shop around to get the best financial product such as loans or insurance rates?

SA_Q05 ... staying informed on financial issues?

Objective (assessment) measure of financial knowledge (OA)

OA_Q01 If the inflation rate is 5% and the interest rate you get on your savings is 3%, will your savings have at least as much buying power in a year's time?

1. Yes.
2. No.

OA_Q02 A credit report is...?

1. A list of your financial assets and liabilities.
2. A monthly credit card statement.
3. A loan and bill payment history.
4. A credit line with a financial institution.

OA_Q03 Who insures your stocks in the stock market?

1. The National Deposit Insurance Corporation.
2. The Securities and Exchange Commission.
3. The Bank of Canada.
4. No one.

OA_Q04 True or false: By using unit pricing at the grocery store, you can easily compare the cost of any brand and any package size.

1. True.
2. False.

OA_Q05 If each of the following persons had the same amount of take home pay, who would need the greatest amount of life insurance?

1. A young single woman with two young children.
2. A young single woman without children.
3. An elderly retired man, with a wife who is also retired.
4. A young married man without children.

OA_Q06 If you had a savings account at a bank, which of the following statements would be correct concerning the interest that you would earn on this account?

1. Sales tax may be charged on the interest that you earn.
2. You cannot earn interest until you pass your 18th birthday.
3. Earnings from savings account interest may not be taxed.
4. Income tax may be charged on the interest if your income is high enough.

OA_Q07 Inflation can cause difficulty in many ways. Which group would have the greatest problem during periods of high inflation that lasts several years?

1. Young working couples with no children.
2. Young working couples with children.
3. Older, working couples saving for retirement.
4. Older people living on fixed retirement income.

OA_Q08 Lindsay has saved \$12,000 for her university expenses by working parttime. Her plan is to start university next year and she needs all of the money she saved. Which of the following is the safest place for her university money?

1. Corporate bonds.
2. Mutual funds.

3. A bank savings account.
4. Locked in a safe at home.
5. Stocks.

OA_Q09 Which of the following types of investment would best protect the purchasing power of a family's savings in the event of a sudden increase in inflation?

1. A twenty-five year corporate bond.
2. A house financed with a fixed-rate mortgage.
3. A 10-year bond issued by a corporation.
4. A certificate of deposit at a bank.

OA_Q10 Under which of the following circumstances would it be financially beneficial to borrow money to buy something now and repay it with future income?

1. When something goes on sale.
2. When the interest on the loan is greater than the interest obtained from a savings account.
3. When buying something on credit allows someone to get a much better paying job.
4. It is always more beneficial to borrow money to buy something now and repay it with future income.

OA_Q11 Which of the following statements is not correct about most ATM (Automated Teller Machine) cards?

1. You can get cash anywhere in the world with no fee.
2. You must have a bank account to have an ATM card.
3. You can generally get cash 24 hours-a-day.
4. You can generally obtain information concerning your bank balance at an ATM machine.

OA_Q12 Which of the following can hurt your credit rating?

1. Making late payments on loans and debts.
2. Staying in one job too long.
3. Living in the same location too long.
4. Using your credit card frequently for purchases.

OA_Q13 What can affect the amount of interest that you would pay on a loan?

1. Your credit rating.
2. How much you borrow.
3. How long you take to repay the loan.

4. All of the above.

OA_Q14 Which of the following will help lower the cost of a house?

1. Paying off the mortgage over a long period of time.
2. Agreeing to pay the current rate of interest on the mortgage for as many years as possible.
3. Making a larger down payment at the time of purchase.
4. Making a smaller down payment at the time of purchase.