

## LITERACY MATTERS:

# *Dollars and Sense: The Urgent Need for Lifelong Financial Literacy*



**Bank Financial Group**

*TD calls for a national strategy that equips Canadians with the necessary information and tools to make sound financial decisions.*



Life is full of choices, and every choice we make has a consequence. Most of the time, the outcome is subtle or brings about a small change.

Some decisions, however, can affect us in very real and measureable ways. For better or worse, the impact on our quality of life can be long-lasting, even transformative. Matters related to personal finance fall into this category.

Unfortunately, in recent years, we have seen bad decisions lead to disastrous results. No single cause is responsible for the collapse of the US housing market, which ultimately led to the worst downturn since the Great Depression. But it is hard to overlook the many millions of people who bought properties they simply could not afford. Many buyers did so because they did not understand the mortgage obligations they were taking on or did not appreciate what would happen to their monthly payments when the teaser interest rates expired. Because many people lacked the financial literacy skills required to make informed decisions, lives have been disrupted and national economies have been destabilized.

In Canada, there are reasons for concern. At a time when the need for financial literacy skills is on the rise, we learn that the majority of Canadians lack the desired numeracy skills for a modern economy. The symptoms are ominous. Canadians are saving too little, taking on too much debt and are not preparing properly for retirement. This threatens to impact their future standard of living.

But even at a young age, before we're making mortgage and credit card payments, there is a need to be better equipped in making sound financial decisions. Research shows young Canadians who forgo a post secondary education do so, in part, because they underestimate the return on investment in a college diploma or university degree. If anything underscores the urgency of financial literacy skills, this surely does. Improving outcomes must be a national priority.

Our federal government gets it. A Task Force on Financial Literacy has been established to advise the Minister of Finance on ways in which skills can be improved across the country. This initiative has sought input from interested Canadians. The following pages represent TD Bank Financial Group's submission.

This report also fits into our series of literacy papers, which our Chief Economist, Craig Alexander, has ably led. This year's focus on numeracy speaks to a growing minority of Canadians who lack the desired level of financial literacy and capability. In my book, that equates trouble. As the author notes: "Individuals have never before been faced with so many financial decisions or with such a high level of complexity in the decisions they make. For Canadians to realize their hopes and dreams for both themselves and their children, sound financial choices are essential."

TD calls for a national strategy that equips Canadians with the necessary information and tools to make sound financial decisions. Efforts must begin in the primary and secondary schools system, with a greater emphasis on numeracy. It then must be carried through the various stages of life when important decisions about consumption/investment and borrowing/saving are made. While all Canadians would benefit, at risk groups deserve special attention. This includes low income Canadians and newcomers.

Our aspiration should stop at nothing short of being the most financial literate nation in the world. This goal is entirely achievable. Most Canadians are prudent when it comes to their financial affairs. But as this report shows more work needs to be done. Indeed, if we are to sustain a high standard of living, all Canadians must be well versed in financial literacy, a language unto its own. Only then can we be truly confident that the choices we make will best serve ourselves and our families.

**Frank McKenna**  
Deputy Chair,  
TD Bank Financial Group

# THE CASE FOR A LIFETIME LEARNING APPROACH TO FINANCIAL LITERACY

*Literacy is a foundational skill set. It is the basis upon which other skills and capabilities are mastered.*

This is true of literacy in languages, numeracy, and its other forms. Financial literacy is no different. It is the basis upon which sound financial decisions are made and then implemented. The challenge for many Canadians is that the requirements of adequate financial literacy have been steadily increasing over time. Individuals have never before been faced with so many financial decisions or with such a high level of complexity in the decisions they make. For Canadians to realize their hopes and dreams for both themselves and their children, sound financial choices are essential.

Governments can help create the right financial environment through appropriate policies and regulations, but the burden of making financial decisions ultimately rests with individuals.

While the majority of Canadians appear able to manage their finances adequately, there is considerable evidence that a significant minority, and perhaps a growing minority, lack the desired level of financial literacy and capability. Data and surveys suggest that Canadians may be saving too little, consuming too much, taking on excessive debt, and investing less than they should in education and skills development. While there is considerable focus on trends like rising personal insolvency and bankruptcy rates, and concern about the high leverage of some households, these outcomes are symptoms of poor financial decision-making that are in many cases exacerbated by inadequate financial literacy skills.

This paper will argue for a national financial literacy strategy, with the goal of creating the most financially literate society possible in order to promote a high standard of living during both the working and retirement lives of Canadians.

A strategy for improving financial literacy begins with the right building blocks in the primary and secondary school system. First, numeracy skills should be given a

greater priority. Second, a primary school program, for example a classroom unit around the time of Grade 8, should be implemented to teach rudimentary financial skills and encourage investment in post-secondary education. A secondary school unit in financial literacy should then be implemented late in the program, around Grade 11, to reinforce the merits of post-secondary education and to foster the financial skills that will be needed upon leaving the school system. This could include budgeting, credit card and debt management.

Beyond the educational system, there are a number of key life events that adults require financial skills to address. These moments provide an ideal opportunity for lifelong learning. A national financial literacy strategy should be designed to enhance the ability to make decisions related to consumption/investment and borrowing/saving at these key decision making points. Although all Canadians would benefit from such a national program, one needs to recognize that specialized financial literacy training is also needed to address the specific requirements of particular at-risk-groups, such as low-income Canadians and newcomers.

Once a national literacy strategy is developed, the implementation is bound to be problematic. There is a need for coordination between federal and provincial governments to achieve the goals. The federal government should play the role of catalyst, coordinator and facilitator, providing resources and educational support. The provinces/territories should be the primary level of government implementing the strategy for youth through the education system, and for youth and adults through government offices or through the voluntary sector (charities and non-profit organizations that have a comparative advantage at dealing with target groups). The Canadian financial services industry should also be engaged in the development and implementation of a national financial literacy strategy. The sector has expert knowledge in financial planning that should be leveraged. The infrastructure of the financial services sector, both in terms of physical locations and internet platforms, could also be instrumental in the delivery of the financial literacy training.

Finally, it should be stressed that heightened financial literacy training is not a silver bullet that will completely solve problems like personal insolvency or inadequate savings. Studies have shown that individuals too often overly discount the future and favor the immediate in a way that leads to inconsistent decisions and under saving. In recognition of this, policymakers need to consider a national financial literacy strategy as complementing other policies aimed at increasing the incentives to save and invest.

### The economic framework

Much of the economic theory around personal finances is based on the idea that individuals prefer to smooth their consumption over their lifetimes, even as their incomes vary. While there are certain caveats, the life-cycle hypothesis of consumption is fairly well established in the economic literature as a “stylized fact” – in other words, it does indeed describe how people actually behave.

In order to smooth consumption over their lifetimes, individuals need access to credit markets while young in order to invest in human capital and to consume at a level above their current income. During their working lives, individuals forgo a certain amount of consumption in order to pay back the consumption of their earlier years and to save for retirement. In addition, individuals take on debt to finance asset purchases (including homes and durable goods), where the total return including appreciation is at least equal to the total cost including interest.

What the theory glosses over is the fact that individuals need financial knowledge and skills to make and implement the decisions to reach their desired outcome. This includes understanding the return on education, how to manage money, the cost of debt, how to minimize taxes or maximize tax benefits, and the advantages of saving (including the risks and tax implications of saving and borrowing vehicles). It requires an ability to balance current economic/financial conditions with future economic/financial needs.

### A life-cycle approach

Over the course of a person’s lifetime, at relatively predictable times, individuals must make these pivotal financial decisions. While the details around the decisions will change, the nature of financial decisions is primarily between consuming and borrowing vis-à-vis saving and investing.

Both borrowing and saving have large potential upsides. Debt allows individuals to invest in human capital through education, to start a new business, and to finance the acquisition of assets. Saving allows assets to accumulate in order to meet future spending needs, especially upon exit from the workforce. At the same time, borrowing and saving are inherently decisions around the future, and necessarily involve uncertainty and risk. Knowledge and understanding of these risks is also essential to good financial decision-making.

[1] Net worth by age group in 2005



Source: Statistics Canada, Bank of Canada

The requirement for individuals to make financial decisions begins even before adulthood. Arguably one of the most important and life altering decisions an individual will make is how much to invest in education. The decision to drop out of high school, or to graduate but not pursue post-secondary education, dramatically shapes the future lives of these students and their future children.

For individuals that choose to enter post-secondary education, the barrage of financial decisions faced at this point in life can be daunting. For many, this will mark the first time that they acquire access to formal credit and are required to actively budget their cash flow. Moreover, the decision to increase human capital often means taking on student loans that require an appreciation of the relative cost of debt against the relative future benefit of education.

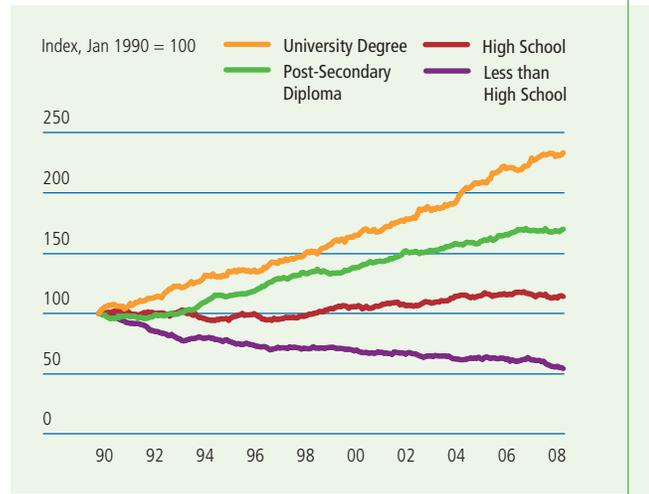
As individuals become part of the labour market, they are faced with more pivotal choices. On entering the workforce, individuals must make employment choices not only on the basis of the compensation being offered but also on the basis of valuing key employment benefits. This means properly assessing the merit of pension and non-pension savings vehicles, and assessing the value of health and life insurance options being provided.

Early in one’s working career, individuals often make key decisions around household formation. Few remain renters over time and eventual home ownership involves the acquisition of significant debt – a decision that needs to be balanced with financial capacity and the possibility of unanticipated future events. Again, financial choices around size/type of debt and insurance are required. Household formation also frequently brings children, which adds to budgeting challenges and the need to save for future education expenses.

Thought must also be given to retirement saving. Although decisions related to employer pensions may have been taken upon starting work, most individuals must strive to save adequately for their future retirement needs beyond any employer pension. This can often be complex and confusing to many Canadians. It requires a significant amount of financial literacy.

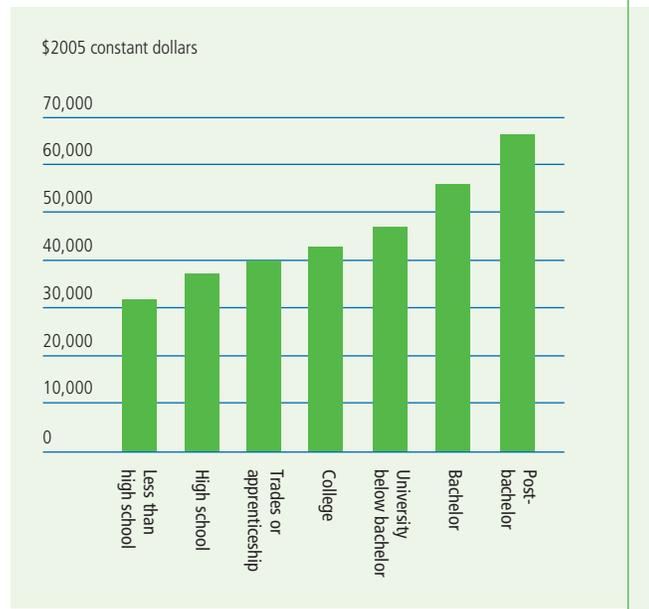
It is also important to stress that the pattern of the Canadian lifecycle has been becoming more compressed over time. The dominant trends have been that people are starting work later, they are retiring earlier, and they are living longer.

[2] Canada – employment indexes\* by educational attainment



\*Index of employment levels; Source: Statistics Canada

[3] Median income by educational attainment\*



\*Earnings for full-year, full-time earners – age group 25 to 64. Source: Census 2006, Statistics Canada

### Financial literacy is more important than ever before

The need to make sound financial decisions has confronted all generations in the past. However, there is strong evidence that the financial literacy and capability requirements have been increasing over time at every stage of life.

### The need for heightened youth literacy

Students approaching the end of secondary school face an increasingly critical decision about whether to pursue a college diploma or a university degree. Since 1990, all of the net new jobs created in Canada have gone to persons with at least a high school diploma. Over the same time frame, job growth among people with a post-secondary diploma or degree has been more than four and half times as great as for those with a high school diploma. At the same time, the median annual income of a person with a bachelor degree was a full \$20,000 greater than that of a high school graduate.

While it is well founded that higher education leads to greater earning potential and higher likelihood of employment, not all individuals choose to pursue it. The high school drop out rate has been declining in Canada, but as of 2008-2009 the rate stood at a still unacceptable 9%. For males, the high school dropout rate was 11%, while for females the rate was 7%.<sup>1</sup>

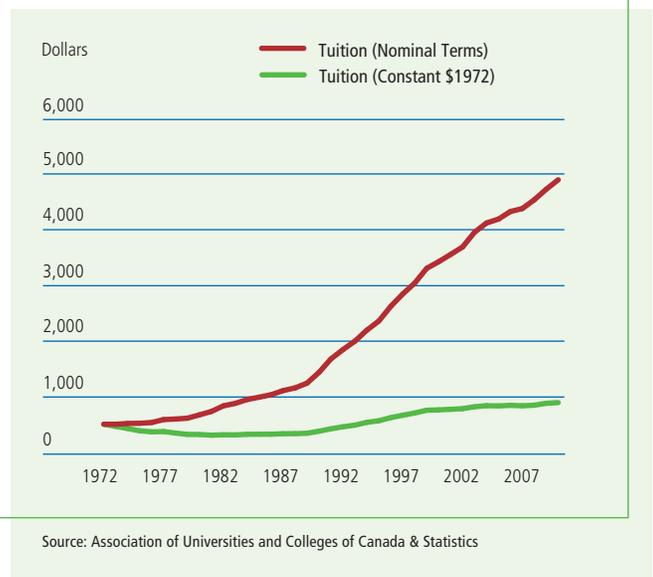
A study by Statistics Canada using data from the Youth in Transition survey shows a participation rate in post-secondary education that has risen from 54% in 1999 to 79% in 2005, which is good news. However, close to one-fifth of those who attended post-secondary education failed to graduate from their program, leaving them little better than high school graduates.

For those who choose to drop out of high school, elect not to continue into post-secondary education, or fail to complete their university or college program, the dramatically lower amount of future earning potential raises the question of whether full information of the long-term costs and benefits of this decision are understood. Informational constraints exist among all socio-economic groups, but are even greater among low-income families. Research by the Canadian Millennium Scholarship Foundation (CMSF) shows that students and parents overestimate the costs and underestimate the returns on post-secondary education, as well as overestimating the

financial support available and these misperceptions are greatest amongst low-income individuals.<sup>2</sup> Ensuring high school students and parents understand the benefit of higher education is an important first step in improving individual financial outcomes as well as building a more equitable society. The sad reality is that parents with low education and low income have tended to have children that share the same fate.

For some students, the question of whether to go on to post-secondary education is shaped by the cost. Over the last two decades, the responsibility of paying for a university education has moved increasingly from governments to individuals. This is seen most dramatically in rising tuition costs. Since 1990, average tuition for a four-year undergraduate program in real inflation-adjusted terms has more than doubled.<sup>3</sup> In order to finance the higher cost, student loans have risen considerably. Between 1995 and 2005, the proportion of university graduates who had borrowed money in order to finance their education rose

[4] Weighted average tuition fee for an undergraduate degree, Canada



<sup>1</sup> The percentage of those aged 20 to 24 in Canada who were not attending school and had not graduated from high school. Human Resources and Skills Development Canada.

<http://www4.hrsdc.gc.ca/3ndic.1t.4r@-eng.jsp?iid=32>

<sup>2</sup> Canadian Millennium Scholarship Foundation. "Closing the Access Gap: Does Information Matter?" Millennium Research Note No. 3.

[http://www.millenniumscholarships.ca/images/Publications/Closing\\_the\\_Access\\_Gap.pdf](http://www.millenniumscholarships.ca/images/Publications/Closing_the_Access_Gap.pdf)

<sup>3</sup> Luong, May. "The Financial Impact of Student Loans." Perspectives on Labour and Income. January 2010. <http://www.statcan.gc.ca/pub/75-001-x/2010101/pdf/11073-eng.pdf>

## [5] Canadian personal savings rate



Source: Statistics Canada



from 49% to 57%. At the same time, the average loan amount rose by 24% from \$14,700 to \$16,600. This is not to say that students should not acquire debt in order to finance the future benefits they will reap from a higher income stream over their lives – the key point is that students must have the financial literacy to be prepared for managing the debt.

By way of an aside, parents also need to be prepared for managing the increased post-secondary education costs of their children. The trend has been towards having children later in life, which means fewer years of net income flow before child rearing costs are incurred and child-related education outlays are often being financed into age 50 and beyond. Moreover, in past decades post-secondary education could be paid out of the regular income of parents and/or from student part-time earnings. A 4-year university degree of a child born today is likely to run almost \$100,000 in today's dollar terms when the child heads off to university in 18 years time. This materially disrupts the ability of parents to save for retirement and creates financial challenges.

In addition to education-related debt, students entering post-secondary studies also tend to begin using credit cards and possibly lines of credit. This can have significant financial repercussions if not managed properly.

### The need for heightened adult financial literacy skills

Moving along the lifepath, the period between entry into the workforce and retirement is also seeing Canadians forced to make increasingly important and complex decisions over consumption, saving and investment.

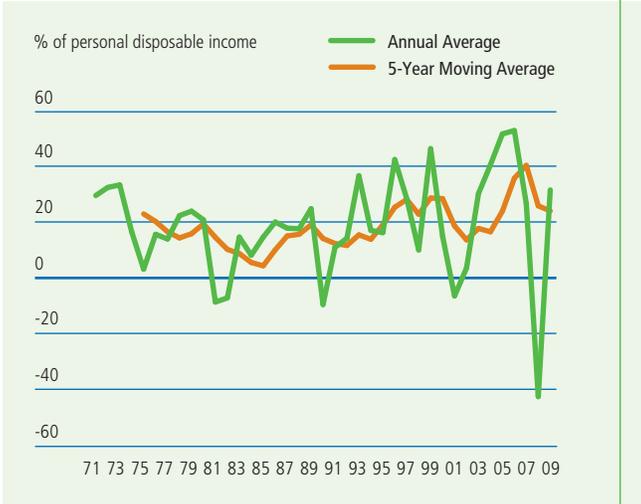
### Individuals are saving too little

There is legitimate concern that Canadians are saving too little. The personal saving rate peaked in 1982 at 21.2% of disposable income. From there it has fallen relatively consistently, reaching a low of 1.7% in 2005, before rising to 4.6 percent in 2009. Some of the drop in the saving rate is explained by the movement to a low and stable inflation environment and changes in the age distribution of the population, as older workers need to save less or not at all. Regardless, it is evident both in the national average statistics and in anecdotal evidence of consumer behaviour that Canada would benefit from an increase in thrift.

There is a counterargument to the declining personal savings rate statistics, because the metric only captures savings from personal income earned in the period being

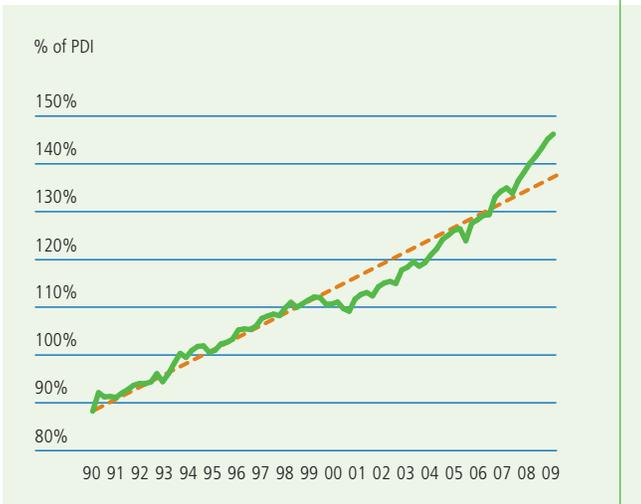
reported. Individuals also accumulate wealth through the appreciation of assets, such as rising home prices and capital gains on investment. The personal sector data included in the National Balance Sheet Accounts (NBSA) can provide a very rough alternative measure of saving that accounts for the change in asset prices. Based on this series, Canadians were saving about 20% of income across all four decades spanning 1970 to 2009. However, the way in which this 20% is achieved has evolved over time. During the 1970s and 1980s, when Canadians saved significantly more out of net income (personal savings rate averaged 13.7%), both inflation and interest rates were very high relative to the 1990s and 2000s. High interest rates not only implied that the return on basic savings vehicles such as deposit accounts and savings bonds was high, but more importantly that the cost of borrowing funds was also high. Thus, the high observed savings rate consisted of both a large net inflow from saving out of income as well as high return on assets.

**[6] Canadian alternate savings rate\***



\*Computed from the national balance sheet accounts; Source: Statistics Canada

**[7] Canadian debt-to-income ratio**



Source: Statistics Canada



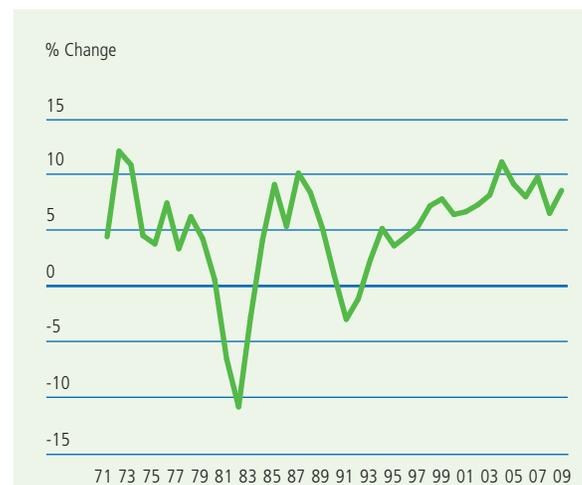
Since 2002, the savings attitudes of Canadians have undergone a marked shift. No longer is putting aside earnings out of current income the standard manner of saving. Instead, the bulk of saving now comes from asset returns. The accumulation of assets, in turn, has become increasingly debt financed. This has resulted in Canadians becoming much more vulnerable to asset price movements and changes to borrowing costs. This can be seen in the volatility in the balance sheet measure of savings, which has averaged 20% of disposable income in the current decade, but has swung wildly since 2000 due to the tech bust and the 2008-09 recession. For example, within just 3 years, the savings rate fell from 53.2% in 2006 down to -42.2% in 2008, reflecting the interplay between asset, liability, and income growth.

The balance sheet savings rate trends also raise an issue over financial literacy and capacity. First, there is a concern that this measure of savings will decline over time because home prices and financial assets will experience a slower rate of increase in the coming decades than in the past. It is very possible that many Canadians are overestimating the future increase in net worth that their assets will provide. As the financial industry is fond of saying, past returns are a poor guide to future returns. Second, the higher balance sheet savings rate largely represents the contribution of savings from financial assets accumulated by individuals during the past when the personal savings rate from current income was much higher. This would suggest that the balance sheet savings rate will again decline over time. Finally, and most importantly, the assets accumulated on the personal balance sheet are being increasingly acquired through debt financing. This increased leverage of households is of concern, as personal debt has now reached 147% of personal disposable income. The rapid growth in debt financing suggests that the pace of net worth accumulation in the future will be less than that of the past generations and may fall short of retirement needs.

### Debt financing has become excessive

Decomposing the expansion of debt, there has been increased access and use of credit cards. According to the Survey of Financial Security (SFS), household credit card debt grew by 8.4% annually between 1999 and 2005,

[8] Canadian real consumer credit growth\*



\*Incl. credit card debt, and both secured and unsecured lines of credit including HELOC's, inflation adjusted; Source: Statistics Canada

above the pace of income growth in the period. The growth in credit card usage has brought a multitude of types of cards with varying benefits and costs that need to be understood by holders. While the majority of Canadians use their credit cards responsibly and they pay the full balance at the end of each month, it is evident that a minority of credit card holders make poor decisions managing their financial obligations and could benefit from greater financial literacy and capability. According to the SFS, roughly 27% of Canadian households with credit card debt fail to pay-off their balances on a monthly basis. Moreover, according to a survey conducted for the Financial Consumer Agency of Canada, some 31% of Canadians did not even know the annual interest rate charged on their credit card.<sup>4</sup>

The dominant growth in personal liabilities has not, however, been in credit cards. The bulk of the increase in borrowing has been driven by debt financed asset accumulation – particularly the purchase of homes. In 2006, the share of homeowners with a mortgage reached its highest level in over two decades. While rising homeownership is a positive trend, it has also fuelled rapid growth in financial liabilities. Since 2002, the level of mortgage debt has risen by close to 9% annually, while the average annual pace of growth in past decades was closer to 5%.

<sup>4</sup> Les Études de Marché Créatec [prepared for the Financial Consumer Agency of Canada (FCAC)]. "General Survey on Consumer's Financial Awareness, Attitudes and Behaviour." December 15, 2006. [http://www.fcac-acfc.gc.ca/eng/publications/SurveyStudy/AttBehav2006/pdf/FCAC\\_GenSurvExec\\_2006-eng.pdf](http://www.fcac-acfc.gc.ca/eng/publications/SurveyStudy/AttBehav2006/pdf/FCAC_GenSurvExec_2006-eng.pdf)  
 Statistics Canada, Pensions and Wealth Surveys Section. "The Wealth of Canadians: An Overview of the Results of the Survey of Financial Security" Catalogue no. 13F0026MIE—No. 001. December 2006. <http://www.statcan.gc.ca/pub/13f0026m/13f0026m2006001-ng.pdf>

## [9] Household mortgage liabilities



Source: Statistics Canada

The rapid growth in secured credit borrowing has been accompanied by considerable changes in the financial vehicles available. During the housing boom many Canadians opted for variable rate mortgage products and many chose to extend the amortization period. There is also much more flexibility in how the debt can be structured. For example, individuals can choose to divvy up their debt between variable and fixed mortgage products. There are also many options in terms of the contract around principal repayments. Over the past decade, the line between mortgage debt and other forms of household debt has also blurred considerably. Consumer credit, which includes home equity lines of credit (HELOCs), has risen by over 10% annually since 2001, outpacing the rise in mortgage debt. There is much to recommend HELOCs in terms of flexibility and terms, and their use has expanded from traditional financing of consumer purchases to being a substitute for traditional mortgages in many cases. Individuals are well served by all of the new secured credit vehicles, but there is no question that the financial decisions are becoming more complicated or more nuanced.

While the debt service costs of Canadian households have fallen along with interest rates, the amount of leverage taken on by Canadians has undeniably risen and this requires more financial skills to manage. Since the start of the decade, the ratio of household assets to liabilities has fallen from over six dollars in assets per dollar of debt to

just over five assets per dollar of debt. The rise in the rate of consumer insolvencies from just over 1 per 1000 in the early 1990s to over 5 per 1000 today shows that even while interest rates are low (and declining), an increasing number of Canadians are having a hard time meeting their financial obligations.

Again, much like in the case of student debt, it is not the use of leverage that is the problem. The key is to ensure that borrowers fully understand their financial options and obligations. They must also appreciate the long-term implications of their actions. In absence of a firm grasp of financial principles, households could be at risk. An example would be historical myopia – assuming low interest rates now mean low rates in perpetuity; or, as in the recent U.S. experience, assuming that because home prices have grown strongly over the last decade that they will continue to do so in the next. In reality, the economic crisis has brought interest rates to abnormally low levels. Risks around the future path of near-term interest rates are now asymmetric – they can only move in one direction. As interest rates rise, the debt service costs of Canadian households will rise along with them. The increased exposure and vulnerability to financial conditions increases the need for strong financial literacy skills going forward.

### Retirement income a concern

The magnitude of the decrease in the personal savings rate and the increased leverage taken on by Canadians leads to the concern that future generations will not have the savings required to retire comfortably. For example, a recent study by former Bank of Canada Governor David Dodge highlighted that many Canadians are likely under saving for retirement. He recommends saving at least 10% of pre-tax earnings each year, but highlights that saving upwards of 21% may be necessary to ensure an adequate replacement rate in retirement.<sup>5</sup> Making the issue even more pressing is that the life expectancy of Canadians at 65 has risen by close to three years since the early 1980s, and is expected to continue to rise going forward.

On the retirement savings front, responsibility has shifted increasingly onto individuals. Employer-sponsored pension coverage has fallen in both the public and private sectors. Since 1992, the percentage of public sector workers covered by an employer-sponsored pension plan has fallen to 91% from 82%. For private sector workers, the ratio has fallen from 34% to just over 27%. There has also been a material shift away from defined benefit (DB) plans

<sup>5</sup> Dodge, David A, Alexandre Laurin and Colin Busby. "The Piggy Bank Index: Matching Canadians' Saving Rates to their Retirement Dreams." CD Howe E-Brief 95. March 18, 2010. [http://www.cdhowe.org/pdf/ebrief\\_95.pdf](http://www.cdhowe.org/pdf/ebrief_95.pdf)

**[10] Private sector employees covered by an employer sponsored pension plan**



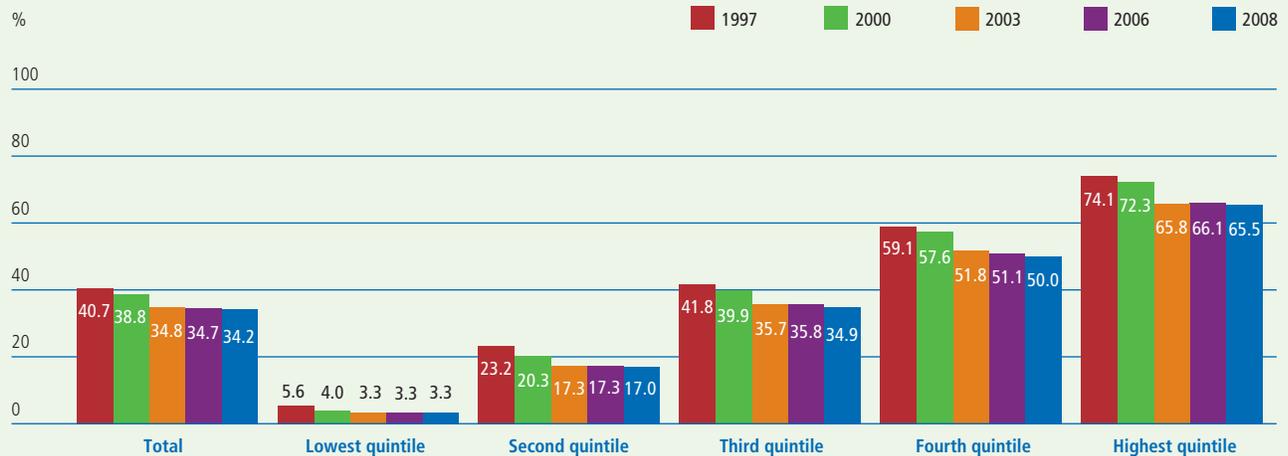
Source: Statistics Canada

and toward defined contribution plans (DC), which transfers financial risk from the employer to the employee and requires the latter to make more financial decisions. There has also been a significant increase in alternatives to employer pension plans, such as group RRSPs, which again require employees to taken on more risk than DB plans and require individuals to make financial decisions about how the funds are invested. Then there are the personal financial savings vehicles (such as personal RRSPs, TFSA, and non-tax sheltered accounts).

The recent RRSP trends are discouraging. The amount of RRSP room available to Canadians has grown significantly, but between 1997 and 2008 overall participation in RRSP plans fell from 41% to 34%.<sup>6</sup> Even more alarming, participation has fallen in every income quintile and across age groups over this time. While there is less of an incentive to save through RRSPs for low income individuals, for middle and high income individuals this is an unfortunate missed opportunity. According to a 2008 report by Statistics Canada, in 2005 the median holdings of Canadians aged 55-65 in RRSPs amounted to a paltry \$55,000.<sup>7</sup>

It is not evident that Canadians fully understand the differences in these savings vehicles, the risks embedded in them, or the tax saving implications of different plans. One

**[11] Rate of participation in RRSP plans by income quintile**

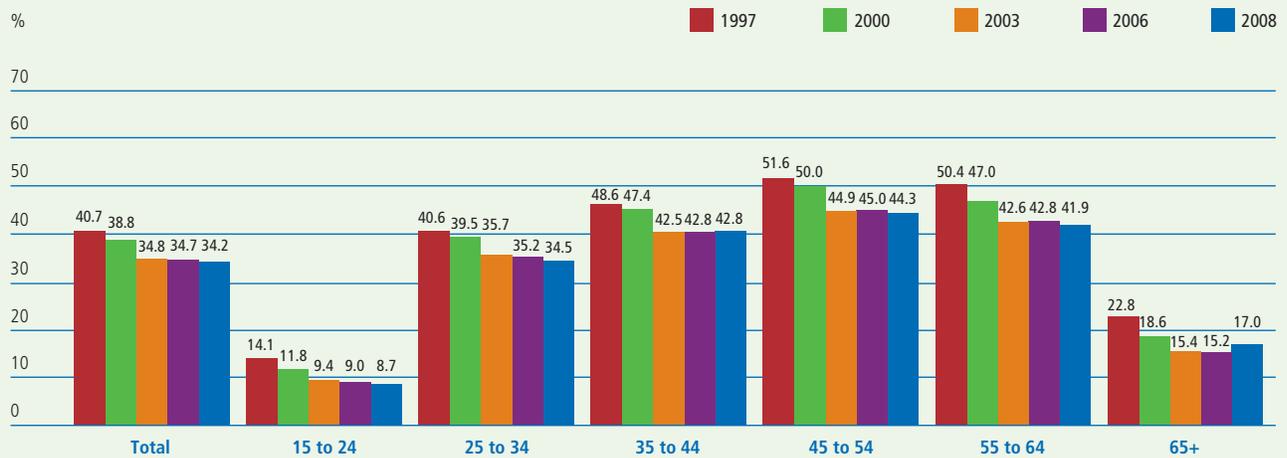


Source: Statistics Canada

<sup>6</sup> Moussaly, Karim. "Participation in Private Retirement Savings Plans, 1997 to 2008" Statistics Canada – Catalogue no. 13F0026M, no. 1. March 2010. <http://www.statcan.gc.ca/pub/13f0026m/13f0026m2010001-eng.pdf>

<sup>7</sup> Pyper, Wendy. "RRSP Investments." Perspectives on Labour and Income, Vol. 9, No. 2. February 2008. Statistics Canada – Catalogue no. 75-001-X. <http://www.statcan.gc.ca/pub/75-001-x/2008102/pdf/10520-eng.pdf>

[12] Rate of participation in RRSP plans by age group



Source: Statistics Canada

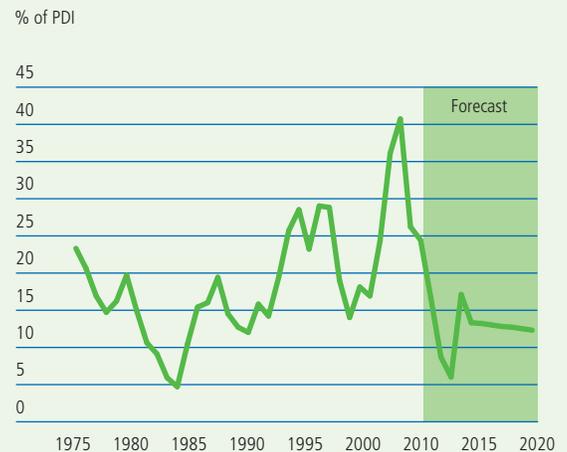
might expect that this would induce individuals to look for financial advice, but fewer than half of Canadians say they have a financial adviser.<sup>8</sup>

There is a risk that the lack of understanding about financial vehicles and investment choices leads to sub-optimal outcomes. The current debate over pension reform illustrates this. Although the majority of Canadians is currently able to replace 60% to 70% of their pre-retirement income in retirement, there is a significant minority – estimated to be about 20% to 25% of retirees – that is falling short of the desired ratio.

Unfortunately, it is not clear as to why these individuals are not meeting an adequate replacement rate. Various studies have been published which indicate that individuals with equal levels of pre-retirement income have varying retirement outcomes due to earnings in retirement, higher levels of pension assets, or higher levels of investment income. The conclusion is that the means of saving are available to all Canadians. However, a significant minority is failing to save adequately and it is not evident why this is occurring within the same income brackets.

The challenge is that while the explanation is not known, the outlook based on the recent trends is troubling. If no change occurs in the limited savings and debt-driven consumption attitudes that characterized the 2000s, the higher indebtedness and future slower rate of

[13] Canadian alternate savings rate\*



\*5-yr moving average, from national balance sheet accounts;  
Source: Statistics Canada, TD Economics

<sup>8</sup> Ipsos Reid, "CSA Investor Index 2009", October 2009, pp. 50-51. Prepared for Canadian Securities Administrators. [http://www.bscsc.bc.ca/uploadedFiles/news/publications/CSA\\_Investor\\_Index\\_2009.pdf](http://www.bscsc.bc.ca/uploadedFiles/news/publications/CSA_Investor_Index_2009.pdf)

asset appreciation is forecast by TD Economics to lead the national balance measure of personal savings to fall from 20% to 10% over the next two decades. Moreover, the prevailing trends suggest that many more Canadians could experience a lower standard of living in retirement. A projection by Statistics Canada through their Lifepaths model indicates that the share of retirees that do not meet the desired income replacement could increase significantly over the next four decades.

Clearly, more investigation is needed to understand at a micro level (i.e., data by age, income and other subsets) why Canadians are saving inadequately, but in the absence of such information, increased investment in financial literacy remains one of the strongest tools with which to improve the fundamental savings behaviour of individuals.

### The current state of financial literacy

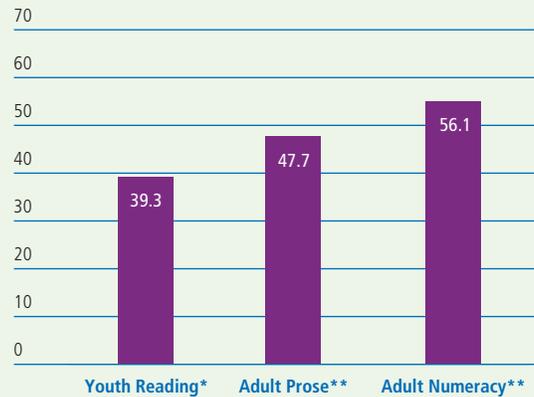
So, the demand for financial literacy and capacity has been rising, but it is less evident that financial literacy and capacity has been keeping pace.

Let's start with the building blocks in terms of basic literacy and numeracy. At the primary school level, language and numeracy skills need to be heightened. The results of the Program for International Student Assessment (PISA) survey in 2006 suggest that perhaps 4 in 10 Canadian youths lack the language literacy and mathematical skills that would be desirable in a knowledge-based economy. And since these skills atrophy with age, the outcome is constraining future financial literacy skills development. Turning to adult financial literacy, almost 5 in 10 adults lack the desired language literacy skills and 6 in 10 lack the desired numeracy skills for a modern economy according to the International Adult Literacy and Skills Survey (IALSS). There is a strong correlation between poor language and numeracy skills and both low income and newcomer status, highlighting the vulnerability of these groups.

However, financial literacy poses some challenges that language literacy and numeracy does not. While it is relatively easy to establish whether an individual has sufficient reading, writing and numeracy skills, it is much more difficult to establish if they fully understand the true cost and benefit of their financial decisions. The assessment is complicated by the fact that financial decision-making is complex. As one economist has put it:

#### [14] Literacy in Canada

% of population with inadequate literacy by category



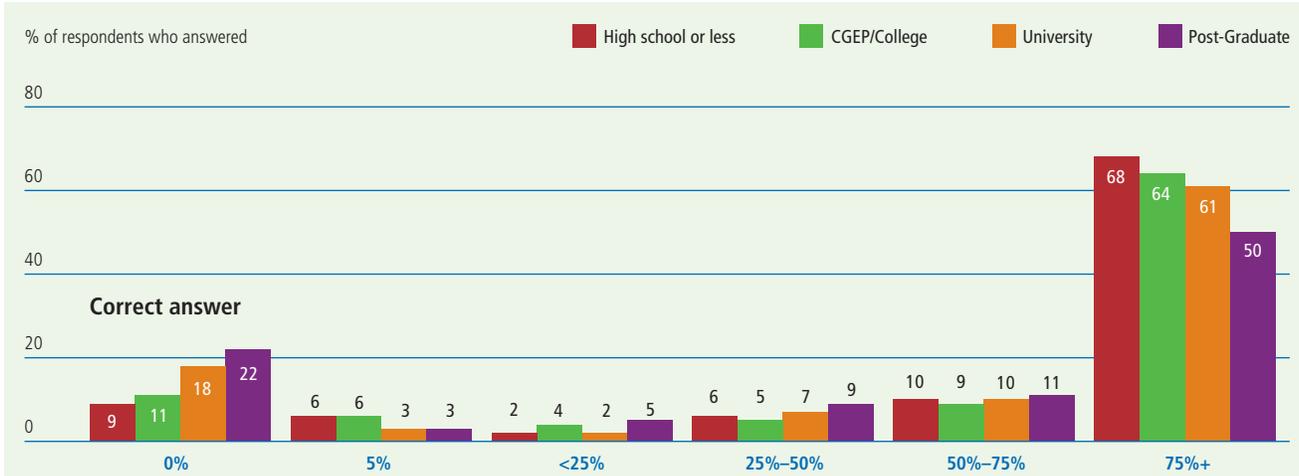
\*Students aged 15 \*\*Adults aged 16 and over  
Source: Statistics Canada, Learning Metrix Inc.

*The problem of developing an appropriate personal financial plan is extraordinarily complex. Ideally, a plan should account for earnings, earnings growth, assets, current and future rates of return, pension benefits, social security benefits, special needs (e.g. college tuition, weddings, down payments on homes), household composition, current and future tax law, mortality probabilities, disability probabilities, insurance rates, risk-return trade-offs, and a host of other factors.<sup>9</sup>*

Given this reality, measuring the level of financial literacy is problematic. The available data and surveys do suggest that while the majority of adult Canadians appear able to manage their finances effectively, a sizable minority of Canadians lacks some of the basic skills and understanding. For example, the Taskforce on Financial Literacy suggests that, "nearly one-quarter of Canadians were found to be weak in three key areas of financial capability; namely, keeping track of their finances, planning ahead, and staying informed about financial matters." This result has been echoed in a number of other surveys of financial capability conducted in Canada over recent years. A survey conducted by the Strategic Counsel on behalf of the Canadian Foundation for Economic Education (CFEE) in 2008 found that 28% of Canadians

<sup>9</sup> Douglas, Bernhaim B. 1994. Quoted in: Martin, Matthew. "A Literature Review on the Effectiveness of Financial Education." Federal Reserve Bank of Richmond Working Paper No. 07-03. June 15, 2007. [http://www.richmondfed.org/publications/research/working\\_papers/2007/pdf/wp07-3.pdf](http://www.richmondfed.org/publications/research/working_papers/2007/pdf/wp07-3.pdf)

[15] Percent of mutual funds insured against losses\*

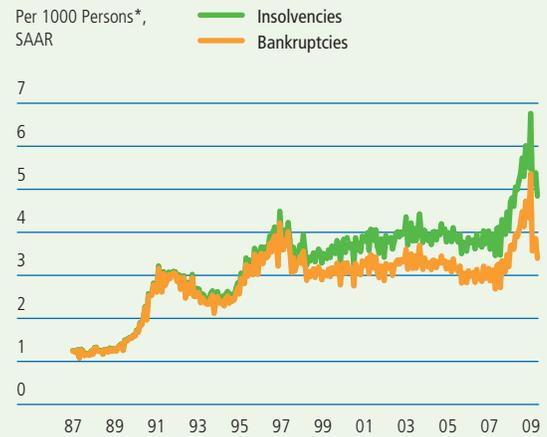


\*What percentage of an investor's mutual fund investments at a financial institution is insured against loss?  
Source: Strategic Council – Canadian National Survey on Economic and Financial Capability 2008

struggle with basic financial knowledge.<sup>10</sup> Similarly, a 2009 survey for the Canadian Securities Administrators found that one-third (35%) of Canadians do not have any savings or investments.<sup>11</sup> Areas of particular concern are knowledge of interest rates, what influences credit scores and access to credit, and the risk characteristics of investments. For example, according to the CFE survey, only 13% of Canadians knew that none of their mutual fund holdings are insured against losses.

The trend in consumer insolvency and bankruptcy also signal that more Canadians are having difficulty meeting their financial obligations. Consumer insolvencies rose from just over 1 per 1000 in the early 1990s to close to 7 per 1000 in late 2009. While the most recent increase is partly a reflection of the cyclical downturn in the economy during late 2008 and early 2009, the clear rising trend prior to the recession makes it clear that there was a structural rise in bankruptcies occurring. It is all the more worrying that this trend took place when interest rates were low (and declining for much of the time). In December 2009, the Financial System Review published by the Bank of Canada conducted a stress test on household balance sheets. The Bank considered what might happen if interest rates were to rise 3 percentage points and what would occur if rates rose 4.25 percentage points. The analysis considered what percentage of households would

[16] Consumer bankruptcies and insolvencies in Canada



\*Persons over 15 years old (from Labour Force Survey);  
Source: Office of the Superintendent of Bankruptcy, Statistics Canada

<sup>10</sup> The Strategic Council, "Canadian National Survey on Economic and Financial Capability", 2008, Prepared for the Canadian Foundation for Economic Education. <http://www.cfee.org/assets/u/Canadian-National-Survey-on-Economic-and-Financial-Capability.pdf>

<sup>11</sup> Ipsos Reid, "CSA Investor Index 2009", October 2009, pp. 50-51. Prepared for Canadian Securities Administrators. [http://www.bcsc.bc.ca/uploadedFiles/news/publications/CSA\\_Investor\\_Index\\_2009.pdf](http://www.bcsc.bc.ca/uploadedFiles/news/publications/CSA_Investor_Index_2009.pdf)

**[17] Household stress test**

	Scenario 1	Scenario 2
2010–2012		
Household Credit Growth (Ann. %)		5%
Household Income Growth (Ann. %)		8%
At Q2/2012		
Overnight Rate (%)	3.20	4.50
Effective Borrowing Rate (%)	4.82	5.41
% of households with DSR>40%	8.5	9.6
% of debt owned by households with DSR>40%	15.9	18.9

Source: Bank of Canada  
 Note: Debt-Service Ratio (DSR) is Monthly Payments on Principal and Interest relative to Household Income

see their debt service ratios exceed 40% of their income – as this would likely put these households at risk of having difficulty meeting their financial obligations. The conclusion was that the lower interest rate increase would put 8.5% of households above the risk threshold, up from 5.9% in late 2008. The higher interest rate scenario is estimated to have 9.6% of households above the 40% debt service ratio. The implication is that most Canadians can cope with higher interest rates, but it is evident that many households may have taken on too much leverage. It is suggestive that stronger financial literacy and capability might have been warranted.

### Policy recommendations based on a life-cycle approach

We have outlined why financial literacy is important and the evidence that heightened skills would be desirable, but what should be done about the challenge? As noted, the specific financial knowledge needed to manage finances will change over the lifetime of Canadians, and will be contingent on their individual circumstances. We recommend a three pronged approach to improving financial literacy that:

- 1) improves foundational knowledge and encourages saving behaviour from youth to adulthood;
- 2) meets the needs of individuals at the specific points in time when they make pivotal financial decisions, and;

- 3) targets the more specialized needs of low-income and newcomers to Canada.

Let's discuss each in turn.

#### 1) Foundational knowledge, motivation and experience

Child and youth financial education should focus on building the foundational skills that are to be applied later in life. As one author put it, "childhood financial education needs to be prescriptive, preventative, developmental, and delivered on a mass scale."<sup>12</sup> Recent studies on the effectiveness of youth financial education programs also point to the risk of waiting until high school to deliver financial education and relying on voluntary financial courses. Financial education should begin early, and continue through to secondary school, so that the concepts and practices introduced earlier in life can be reemphasized and expanded upon. It should also be stressed that motivating youth on the importance of financial education is as important as providing them with the factual information.

As already mentioned, efforts to boost numeracy skills could be supportive to other financial literacy initiatives. Beyond such basic building blocks, the federal and provincial/territorial governments are encouraged to work together in developing a standardized youth financial education curriculum for delivery in primary schools. We would suggest a unit on basic financial skills (this does not need to be a full year course) that also stresses the importance of pursuing post-secondary education (PSE) at the time of around Grade 8.

Most might agree to the basic financial skills development, but it may sound too early to initiate the push for PSE. There is a strong body of literature to suggest that performance in high school and program streaming in grade 9 and thereafter has a powerful influence on the likelihood of going to college or university. Colleges Ontario reports that 72% of students that went on to some form of PSE education pursued college- or university-preparation courses. In other words, the non-academic course route during high school dramatically lowers the odds of future education. Moreover, there is strong evidence that failing even one course in Grade 9 or Grade 10 reduces the odds of pursuing PSE. As a result, students and their parents must be 'sold' on the need for college or university education before Grade 9.

<sup>12</sup> McCormick, Martha Henn. "The Effectiveness of Youth Financial Education." *Journal of Financial Counseling and Planning*, Volume 20, Issue 1, 2009. Available at: [http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/pdf/martha\\_henn\\_mccormick.pdf](http://6aa7f5c4a9901a3e1a1682793cd11f5a6b732d29.gripelements.com/pdf/martha_henn_mccormick.pdf)

The primary school financial literacy program could then be complemented by, and expanded upon by, a course delivered in high school. Our preference would be just before decisions are made around whether to go on to post-secondary education, which would suggest a curriculum aimed at individuals in perhaps grade 11. The course could reinforce basic financial skills, but also provide guidance on whether to attend university, how to finance education, how to do budgeting, how to manage credit card debt and the severe consequences of mismanaging debt.

The youth financial literacy program will need to be developed and adequate resources assigned to training teachers so that they can deliver financial skills courses. Studies in the U.S. have found that teachers, much like the broader population, struggle with certain financial concepts and knowledge.<sup>13</sup> Clearly, someone will need to teach the teachers. There are various groups that could be engaged to help develop the programs. An example would be the Canadian Foundation for Economic Education (CFEE). At the Federal level, a national literacy centre of excellence could prove very beneficial. The federal government could be instrumental in developing a national financial literacy program, but it would obviously need to reflect different provincial/territorial realities, which would call for provincial/territorial government participation in curriculum development. Moreover, the expertise of the voluntary/community sector and financial services sector should be leveraged in course development.

In terms of delivery, one must recognize that education is a provincial mandate and the youth financial literacy program would have to be largely implemented at the provincial level. There could, however, be a key role played in program delivery by the voluntary/community sector and financial services sector either to help train the teachers or participate in the programs at the schools. The voluntary/community sector would also need to be engaged to deliver financial skills training to youths that have exited the education system. The bottom line is that a collaborative approach will be necessary and beneficial for a youth financial literacy strategy to be successful.

## 2) Financial education at teachable moments

Turning to adult financial literacy, there are three key dimensions to a national financial literacy initiative.

First, the content must be developed. It needs to be practical, appropriate and comprehensive. The coverage needs to range from basic financial skills to education about specific financial decisions, options and implications. Again a collaborative approach is called for. A federal centre for excellence in financial literacy could act as the nexus point, collecting core financial literacy information and best practices. However, provincial/territorial governments, voluntary/community groups and the financial services sector should also be engaged in development of the materials to leverage their expertise.

A survey of studies on the effectiveness of adult financial education in the U.S. shows that financial literacy programs work best when highly targeted towards a specific audience and when they are carried out just before a financial decision is made.<sup>14</sup> A significant portion of financial knowledge is highly specialized and people do not in general spend much time thinking about financial decisions until they need to be made. This suggests that the material should be divided into manageable units targeted at the decisions that are being considered: such as, opening a bank account, cashing a paycheck, starting a new job, purchasing life insurance, purchasing an automobile, renting a home, purchasing a home, managing debt, what to ask when taking out a mortgage, understanding credit cards, saving for a child's education, saving for retirement, etc. The material would range from rudimentary to more sophisticated financial skills.



<sup>13</sup> Ibid.

<sup>14</sup> Hatheway, Ian and Sameer Khatiwada. "Do Financial Education Programs Work?" Federal Reserve Bank of Cleveland Working Paper No. 08-03. April 2008. <http://www.clevelandfed.org/research/workpaper/2008/wp0803.pdf>

Second, the financial literacy information must be delivered in an approachable, understandable, and efficient way. This calls for a multipronged approach. Individuals differ in terms of how they learn. Some respond more to visual messages, audio messages or through learning-by-doing. This suggests that the information needs to be available by way of printed materials and electronically through the internet, podcasts, and social media sites. Interactive tools should be developed and the opportunity to sit and meet with teachers/practitioners would be beneficial. The financial literacy material needs to be provided in various languages and in a manner that is engaging to different cultural groups. Hard copy materials should be made available at many locations, including: government offices (such as employment offices, postal offices, etc), financial services locations (bank branches, insurance offices) and at voluntary/community centres.

Finally, the adult literacy program would need to be monitored and evaluated to ensure it is meeting the needs of Canadians. One key area where literacy programs tend to fall down is on dedicating the requisite resources to evaluate the success or weaknesses of the current initiative in order to allow future refinements to be made.

### 3) Focus on vulnerable Canadians

In general, Canadians would benefit from the youth and adult financial literacy programs mentioned above, but there is also a need to target the specific needs of particular at risk groups, specifically low-income Canadian and newcomers. The information and resources requirements for these groups often differ from the needs of the general public.

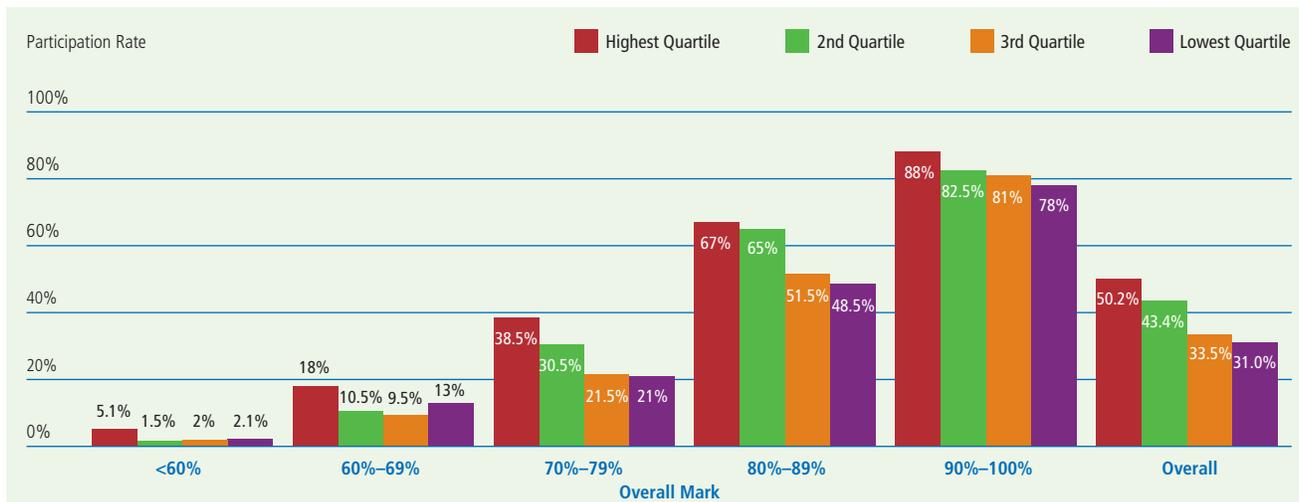
### Low income Canadians

A study by Jerry Buckland for St. Christopher House found that while low income Canadians generally make the most of their financial situations, there is room for improvement in “attitudes about finances and life goals and... knowledge of institutional policies.”<sup>15</sup> Low income individuals need more information about government income supports, funding for education and skills development, and lower cost banking options. In terms of that final point, the cost of accessing “fringe” banking services is in almost all cases significantly more expensive (and in many cases dramatically more expensive) than mainstream sources of cheque clearing and credit such as overdraft protection, lines of credit and credit cards. Research indicates that while payday loans and other relatively costly banking options are not uniquely accessed by low-income individuals, they are often used after an individual has fallen into a cycle of debt where expenses are chronically higher than income. For these individuals, financial intervention must occur before this stage is reached.

Efforts to improve financial literacy among low income Canadians should be made alongside reform of income security programs to create better incentives for saving, especially for individuals requiring social assistance. In particular, efforts should continue to lower the extremely high marginal effective tax rate for very low income Canadians. The ability of low-income Canadians to tax-exempt income earned in a Tax-Free Savings Account (TFSA) is a positive step but could be made much more effective by exempting asset and withdrawals from needs testing. Changing the incentives to promote greater savings and participation in the work force are just as important as increasing education.

<sup>15</sup> Buckland, Jerry. “Learning To Stretch a Dollar: Evidence of Financial Literacy Among Low-income Canadians.” Paper prepared for the Reaching Higher Conference workshop 1, Measuring Personal Financial Literacy – Canadian Experience, Montreal, 9 September 2008.

### [18] University participation rate\* by overall high school mark and parental income quartiles



\*By age 19; Source: Statistics Canada

Another area of focus should be on removing barriers to post-secondary education for the children of low-income families. According to a study by the Canadian Millennium Scholarship Foundation, motivational and information barriers are the largest obstacles to post-secondary education with financial barriers as the second largest. Surveys of Canadians show a general over-estimation of the cost of post-secondary education along with an underestimation of the benefits in terms of higher earnings potential. The fact that participation in post-secondary education falls by a full 10 percentage points from the highest to the lowest income quintile even amongst high school students with grades between 90% and 100%, is an indictment of the status-quo. There is a strong need to increase both information and financial support for low-income individuals in order to insure access to higher educational opportunities.

The voluntary sector has a key role to play in delivering financial resources to vulnerable communities. Community-based financial literacy programs have already been set up through SEDI's Canadian Centre for Financial Literacy (CCFL) and these should be expanded. We are in full agreement with SEDI's taskforce recommendation to "work with voluntary sector leaders to build the capacity of at least 3,000 community organizations across the country so that they can provide financial literacy support to their clients."<sup>16</sup>

### Newcomers to Canada

Newcomers to Canada also face special circumstances that warrant special attention. In addition of the need to enhance their French or English skills, newcomers to Canada must also often deal with a foreign financial system and rules that are very different from those back home.

For the most part, newcomers will face the same challenges as native-born Canadians – saving for their children's education, purchasing a home, saving for retirement, etc. However, they will also face challenges that native Canadians will not, such as building good credit history and sending remittances back home. As SEDI points out, "many newcomers are unaware of how overdue payments on utilities and other services can affect future credit ratings, as many come from countries where such systems of credit tracking do not exist."<sup>17</sup> Moreover, a lack of credit history can push newcomers to Canada to rely on higher cost banking options. Efforts to educate newcomers on the best way to build credit should be made alongside better accommodations to the specific circumstances of newcomers.

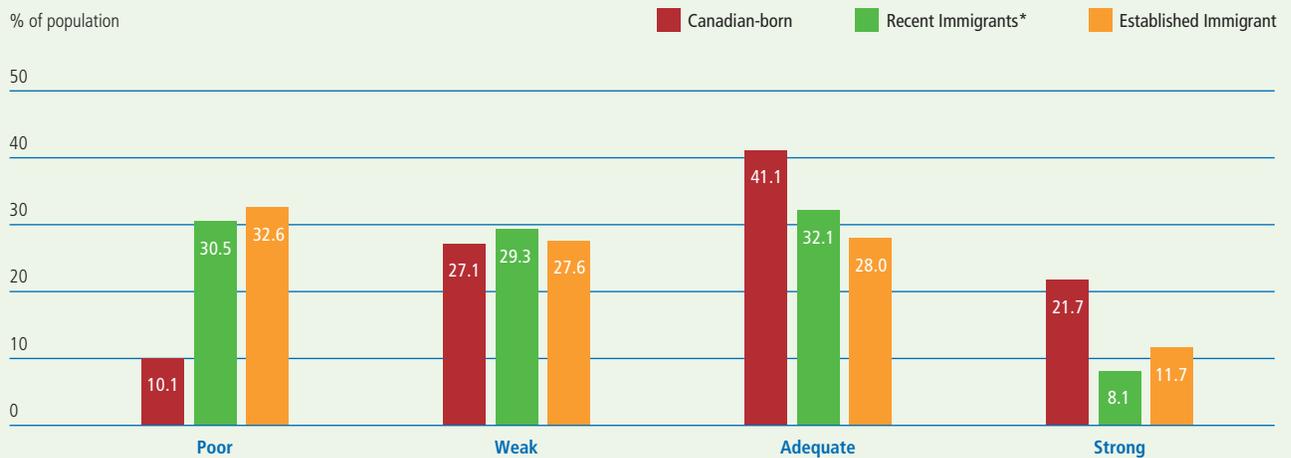
<sup>16</sup> SEDI. "SEDI Submission to the Taskforce on Financial Literacy" April 13, 2010.

[http://www.sedi.org/DataRegV2-unifi ed/sedi-Other/SEDI%20Submission%20to%20the%20Task%20Force%20on%20Financial%20Literacy.pdf](http://www.sedi.org/DataRegV2-unifi%20ed/sedi-Other/SEDI%20Submission%20to%20the%20Task%20Force%20on%20Financial%20Literacy.pdf)

<sup>17</sup> SEDI. "Financial Literacy: Resources for Newcomers to Canada." Spring 2008.

[http://www.sedi.org/DataRegV2-unifi ed/sedi-Reports/FINAL%20newcomers%20English.pdf](http://www.sedi.org/DataRegV2-unifi%20ed/sedi-Reports/FINAL%20newcomers%20English.pdf)

## [19] Prose literacy of immigrants &amp; native-born Canadians



\*Recent and established immigrants are those who have been in Canada less and more than 10 years;  
Source: Statistics Canada

In terms of meeting the needs of newcomers to Canada, there are multiple delivery points that could be used to increase access to financial information and educational opportunities. While many of the resources delivered to newcomers are offered by the voluntary sector, many of them are also funded by government. Settlement services, employability training and English as a second language (ESL) courses are key points at which financial education could be delivered. Once again the, coordination between the voluntary, public and private sectors should be a key component of the newcomer financial strategy.



Much like the Canadian population at large, there is considerable diversity within the newcomer community. Using Statistics Canada data, SEDI makes the observation that “more than 85% of refugees have no savings upon arrival in Canada, while 50% of immigrants in the skilled economic immigrant category have savings that exceed \$15,000 and 50% in the business economic category have savings that exceed \$100,000.”<sup>18</sup> Understanding this diversity means offering programs that utilize key access points, but individualize the resources to the specific needs of participants. Moreover, efforts should be made from an early stage to integrate newcomers into mainstream financial services so that they can be offered the same supports at key life stages available to native born Canadians.

### Beyond education

A clear goal of improving financial literacy is giving individuals the knowledge, skills and information to avoid mistakes and pitfalls in financial decision-making. However, there is also broad based evidence that education alone will not change cultural and behavioral impediments to sound financial decision-making. One of the trends to come out of behavioural economics (as well as implicit in surveys of financial capability) is that people

<sup>18</sup> Ibid.

exhibit strong status-quo bias, tend to be over-confident and are often myopic with respect to saving and risk evaluation. The main point is that policymakers must be pragmatic and understand that a national financial literacy strategy is not a silver bullet that will prevent Canadians from making poor financial decisions. It can better prepare Canadians if they take advantage of the opportunities provided. Nevertheless, they cannot be forced to act on the information provided. This is where complementary public policy and regulations have a role to play in curtailing the 'market failure' that cannot be eliminated. We would support additional incentives to encourage saving and investment over consumption at the societal level. At the same time, the policy and regulatory response should not be too heavy handed. After all, the onus in a free society is to allow individuals to make decisions for themselves.

### Conclusion

To wrap up, Canada needs the development and then implementation of a national financial literacy strategy. While the focus of financial literacy is on individuals, the promise of better financial outcomes leads to a stronger more efficient Canadian economy that is better able to deal with the many challenges facing it. Improving financial literacy should be a life-long process that begins in childhood and continues through to old age. Raising financial capability means giving people the tools they need when they need them. It also means providing individuals with clear information about the costs and benefits of their financial choices. While all Canadians would benefit, particular at risk groups warrant special attention.

For low income Canadians, improving access to government income supports, as well as incentives towards better decisions on saving and investment in education are important first steps towards a more equitable and inclusive Canadian society. Similarly, as a nation reliant on immigrants, we cannot afford to have newcomers alienated or excluded from full participation in the Canadian economy because of weak financial literacy or capability. A broad-based collaborative literacy strategy is called for. There is a role for the Federal government as a catalyst for change, a centre of excellence for literacy program development, and a coordinator of the national strategy. The provinces/territories should be engaged in program development, but they would play a core role in the implementation of the strategy, particularly at the youth level. The voluntary/community sector and the private sector should also be engaged. Their expertise could be instrumental in helping to develop the information that individuals require. They could also provide support in the delivery of the financial literacy initiative. After all, their day-to-day activities are often the first contact with people making or considering financial decisions. Ultimately, Canadians want to be healthy, wealthy and wise – and adequate financial literacy is instrumental to achieving this goal.

*Craig Alexander, Senior Vice President & Chief Economist,  
TD Bank Financial Group*

*James Marple, Senior Economist,  
TD Bank Financial Group*

