Article

The financial well-being of the self-employed

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Highlights

In this issue

The financial well-being of the self-employed

- The median household income of the self-employed as a group was 81% that of paid employees in 2009. However, income levels varied across self-employment categories. By most measures, the self-employed owners of incorporated businesses reported a larger household income than paid employees, while the unincorporated had a lower median income.
- Because the personal finances of the self-employed often interact with business finances, it is important to examine other indicators of financial well-being, including wealth accumulation.
- The self-employed were wealthier than paid employees. At \$520,000, the median net worth of the self-employed—the difference between household assets and liabilities—was 2.7 times that of paid employees (\$195,000). The self-employed not only reported higher levels of business assets, but also higher tangible assets.
- With greater wealth to manage, the self-employed were more likely to be knowledgeable about finances, having had more correct answers, on average, to a series of questions used to gauge financial capability.
- Although fewer of the self-employed reported that they were financially preparing for retirement, the majority (about 75%) were fairly or very confident that their retirement income would be sufficient to maintain their living standards. This compared to a figure of 69% among paid employees.
- At equal income levels, household spending differed little between paid workers and the self-employed.

Perspectives

The financial well-being of the self-employed

Sébastien LaRochelle-Côté and Sharanjit Uppal

n 2010, about 2.7 million Canadians were selfemployed in their main job, accounting for 16% of the workforce.^{1,2} The self-employed range from working owners of large, incorporated businesses to part-time service providers.

The diversity of this group reflects various motivations for entering self-employment. Some will carefully evaluate their asset-building potential, retirement preparation, access to credit, taxes, and so on, before becoming entrepreneurs (Verheul et al. 2001). Others may be attracted to the independence or flexibility of self-employment, while some will be motivated by the lack of paid employment opportunities (Hou and Wang 2011). Indeed, self-employment tends to increase during economic downturns (LaRochelle-Côté 2010). As a result of these differing circumstances and motivations, the financial rewards of self-employment are likely to vary widely.

A comprehensive look at the financial situation of the self-employed remains a gap in Canadian research. This gap is due in part to data constraints, since there are relatively few sources of comprehensive information on household finances. Conceptual difficulties also exist as many of the self-employed have sources of work-related income that are not typically collected for paid jobs.

This paper examines how the income, wealth and spending of the self-employed differ from that of paid employees. It focuses on those who are in their prime working years, beginning with a look at household income differences between the self-employed and paid employees using 2009 data from the Survey of Labour and Income Dynamics (SLID). Next it focuses on differences in household wealth and retirement preparation, based on the 2009 Canadian

Financial Capability Survey (CFCS). It also compares differences in household consumption patterns by using the 2008 Survey of Household Spending (SHS) (see *Data sources and definitions*).

Income

Individual income is not necessarily the optimal indicator of the financial well-being of individuals. Rather, household or family income is typically regarded as a better indicator of financial well-being, since the benefits of financial resources are most often shared among household or family members.

Overall, average household income differed little between self-employed and paid employees (since SLID includes information from all household members, households were classified on the basis of the working status of their major income earner). In 2009, both averaged just over \$85,000 in household income (Table 1). The median income of the self-employed, however, was about 19% lower than the household income of paid employees.

One major distinction among the self-employed is between those who own incorporated businesses, and those who do not. Incorporated businesses are separate legal entities from their owners—comprising enterprises such as retail stores, restaurants, or manufacturing operations—which may be large or small. Unincorporated businesses are typically small (85% have no other employees) and are often referred to as 'own account' self-employed.

According to income measures, incorporated owners had higher household incomes than paid employees, who in turn had higher incomes than the non-incorporated self-employed. Looking at market income (total household income excluding government

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Data sources and definitions

Data are drawn from three surveys: the 2009 Survey of Labour and Income Dynamics (SLID), the 2008 Survey of Household Spending (SHS), and the 2009 Canadian Financial Capability Survey (CFCS). Although these surveys differ in scope and content, in each the self-employed are defined as those who reported that they were self-employed in their main job or said that self-employment constituted their main source of income during the survey reference period. All three surveys provide similar estimates for the number and proportionate size of the self-employed population. Among those age 25 to 59, the self-employed comprised 16.0% of the workforce in the SHS, 15.8% in SLID and 14.1% in the CFCS.

The **Survey of Labour and Income Dynamics** (SLID) is a longitudinal survey composed of six-year panels with a cross-sectional component. Cross-sectional data from 2009 are used in this study.

- Average hours worked are the total paid hours in all jobs during the reference year.
- Average weeks worked are the total number of weeks individuals were employed during the reference year.
- Capital gains are total capital gains, excluding losses.
- Investment income includes the actual amount of dividends (not just the taxable amount), interest and other investment income (for example, net partnership income and net rental income).
- Paid employee is a paid worker working for wages, salary, tips or commission.
- Self-employed includes individuals who had a job in the reference week and belonged to one of the following categories: self-employed without paid help, incorporated; self-employed with paid help, incorporated; selfemployed without paid help, not incorporated; or self-employed with paid help, not incorporated.
- Self-employment income is net income (including both farm and non-farm) from self-employment.
- **Total annual income** is the sum of income before taxes from all sources. It consists of two main components: market income and government transfers.
- Total government transfers include all federal and provincial government transfers.

Wages and salaries are from all jobs, before deductions, including tips and commissions.

The Canadian Financial Capability Survey (CFCS) is a cross-sectional survey conducted between February and May 2009. The target population consisted of Canadians age 18 and over in the 10 provinces. The survey collected information on assets and liabilities and on Canadians' knowledge, abilities and behaviour concerning financial decision-making. The information on assets and liabilities is self-reported.

- Business assets include agricultural property, machinery and equipment; wholly or partially owned business property and assets; and copyrights, patents and royalties.
- Confidence in retirement income is based on the question "Taking all of the various sources of retirement income into account for your household (including government sources as well as personal and occupational pensions and provisions), how confident are you that your household income in retirement will give you the standard of living you hope for?"
- Other financial assets include cash savings; investments (stocks, bonds, term deposits, GICs, non-RRSP mutual funds); registered disability savings plans; taxfree savings plans; and private pensions.
- RESPs are Registered Education Saving Plans.
- RRSPs are Registered Retirement Savings Plans.
- **Tangible assets** include house or property (in or out of Canada, including principal residence), vehicles; collections, antiques, jewels, and other valuables; and home furnishings.
- **Total debt and liabilities** include mortgages (including principal residence and other mortgages); student loans; payday loans; and outstanding balances on credit cards and lines of credit.

The **Survey of Household Spending** (SHS) is carried out annually in the 10 provinces. Data for the territories are available for 1998, 1999 and every second year thereafter. Data from 2008 are used in this study. The main purpose of the survey is to obtain detailed information about household spending during the reference year (the previous calendar year). Information is also collected on dwelling characteristics and household equipment.

transfers), the median household income of the incorporated was \$75,600, that of the unincorporated was \$37,900, while that of paid employees was \$67,000. The sources of income also differ between the incorporated and non-incorporated self-employed (see *Individual income of the self-employed*.).

Since the self-employed may reap varying rewards based on their inherent competencies as entrepreneurs and changing business conditions, their income may be more dispersed than that of paid workers. Several measures of dispersion can be applied to test this hypothesis. The P75/P25 is the ratio of the income of a household at the 75th percentile divided by the income

Table 1 Household income - self-employed and paid employees, age 25 to 59

	D : 1		Self-employed		
	Paid employees	Total	Incorporated	Unincorporated	
			\$		
Total household income					
Average	86,600	87,700	107,800*	73,900*	
Median	72,600	58,800*	78,900	46,100*	
Household market income					
Average	80,900	81,500	103,100*	66,700*	
Median	67,000	54,500*	75,600*	37,900*	
Dispersion measures ¹			ratio		
P90/P50	2.0	3.2	2.6	3.9	
P75/P25	2.2	3.8	3.0	3.7	
P50/P25	1.5	1.9	1.9	1.8	

^{*} significantly different from paid employees at the 5% level

of a household at the 25th percentile. A P75/P25 ratio of 2.0, for instance, would indicate that a household at the 75th income percentile had twice the income of a household at the 25th percentile. Similarly, the P90/P50 is the ratio of income at the 90th percentile

compared to the median income, and is therefore a measure of dispersion in the top half of the distribution. Conversely, the P50/P25 can provide a sense of the dispersion between the middle and the lower part of the distribution. Higher scores for each statistic

Imputing consumption flows for housing and automobile expenditures

Because purchases of durable items are infrequent and housing expenditures can vary over the life cycle, a measure of consumption is considered more accurate if it can be estimated to account for the flow of service over time that is provided by durables and housing expenditures. This paper followed the approach used in Lafrance and LaRochelle-Côté (2011).

Housina

One commonly used approach is to compute 'imputed rents' for homeowners. This can be done by estimating a semilog equation with measures of location and quality for the dwelling (for instance, number of rooms) as independent variables, much in the spirit of Brown and Lafrance (2010) where rent is the value of annual serviced rental payments incurred by the renter, including utilities (e.g., water, electricity and fuel). The right-hand side variables measure the quality of the dwelling (i.e., the number of rooms—including a quadratic term—and bathrooms in the dwelling and the type of dwelling), while p takes the province in which the dwelling is located into account. The predicted values from each model are used to calculate imputed rents for owner-occupied housing. These values include utilities (e.g., water, fuel and electricity) that would normally be associated with renters, which may not necessarily accord with

the utility expenditures of homeowners. The share of utilities as a proportion of rent is calculated for tenants by dwelling type, as expenditures on utilities vary by dwelling type.

These shares are then applied to the predicted rents for owner-occupied housing to determine the proportion of imputed rents that is accounted for by expenditures on utilities. The difference between these expenditures and actual expenditures on utilities is subtracted from the predicted rental values to obtain total shelter costs for homeowners.

Vehicles

This paper uses the method suggested in Pendakur (1998) to derive an imputed consumption flow for purchased transportation vehicles. The first step is to estimate a probit model among families with car operation expenses in excess of \$100. In this model, the probability of purchasing a car is modelled as a function of variables indicative of a household's financial capacity: family size, net income, net income squared and province. The predicted probabilities are then multiplied by predicted purchase prices obtained from another model of car purchases. The total consumption flow from transportation is then equal to the imputed car purchase consumption flow, plus automobile operation expenses (e.g., gas, batteries and tires) and public transportation expenses.

^{1.} Based on average adult equivalent (AEA) income measures.

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2009.

indicate greater dispersion. Fundamentally, these three measures highlight the dispersion among middle-, upper- and lower-income earners.³ According to all three measures, income dispersion was greater among self-employed, particularly the unincorporated. The P75/P25 ratio was 2.2 for paid employees, 3.0 for the incorporated self-employed, and 3.7 for the unincorporated. The P90/P50 ratio was also higher for the self-employed: 2.6 for the incorporated and 3.9 for the unincorporated compared to 2.0 for paid employees. At the lower end, the dispersion was not as large among the self-employed, but was still larger than among paid employees.

Wealth

Since the income stream varies more among the selfemployed, and since they are less likely than paid workers to have pensions or supplemental health insurance, wealth accumulation is particularly important for this group (Verheul et al. 2001). Wealth could act as a buffer against income fluctuations due to business or personal circumstances, finance further business opportunities, or play a part in planning for retirement, among other uses.

The information in this section is from the 2009 Canadian Financial Capability Survey (CFCS). Although not primarily a wealth survey, the CFCS did collect

Table 2 Average and median wealth measures – self-employed versus paid employees, age 25 to 59

	Paid employees	Self- employed
	′000 (\$)	
Tangible assets	317.3	589.4*
Financial assets	122.5	217.8*
RRSP	56.0	93.6*
RESP	3.5	5.0*
Other	63.0	119.2*
Business assets	44.2	373.0*
Average total assets	484.0	1,180.3*
Assessed total debts and linkilities	100.0	154.4*
Average total debts and liabilities Average total net worth	109.2 374.8	156.6* 1,023.7*
Median net worth	195.0	520.0*
Medidii ilei wolill	175.0	320.0

^{*} significantly different at the 5% level

Note: Income figures are rounded to the nearest 100. Source: Statistics Canada, Canadian Financial Capability Survey, 2009. self-reported information on the main categories of assets and debts at the household level.⁴ While it is possible to classify survey respondents based on their working status, the CFCS did not distinguish the incorporated self-employed from the unincorporated.^{5,6} Results are therefore shown for all of the self-employed.

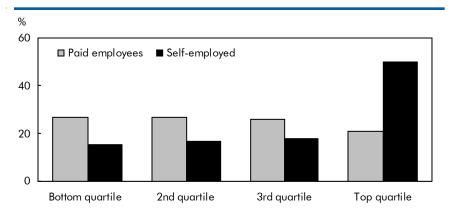
The self-employed were wealthier than paid employees. In 2009, the average net worth of the self-employed was 2.7 times that of paid employees (Table 2). Household assets averaged about \$1.2 million for the self-employed and their debts about \$157,000. In comparison, paid employees reported an average of \$480,000 in assets and \$110,000 in debts.

Most of the difference in average assets was due to differences in tangible and business assets. Tangible assets are non-financial assets that are not normally used for business and include housing, furniture, vehicles and other valuables. For the vast majority of individuals, tangible assets consist mainly of housing-related items and vehicles.⁷ The self-employed reported an average of \$589,000 in tangible assets. The corresponding figure for paid employees was \$317,000. Not surprisingly, business assets⁸ were significantly higher among the self-employed (\$373,000) than among paid employees (\$44,000).⁹

The self-employed also had higher average financial assets—\$218,000 versus \$123,000 for paid employees. Operating a business often requires more money to facilitate transactions, but some of that difference could also be linked to differences in retirement preparation as the self-employed reported higher RRSP values. Use the self-employed reported higher RRSP values.

Looking at median values is often instructive since averages can be influenced by a small number of very wealthy individuals. However, at \$520,000, the median household net worth of the self-employed was 2.7 times that of paid employees (\$195,000)—the same ratio as average wealth between these groups. This means the difference between self-employed individuals and paid employees was not due to a higher concentration of wealth among the self-employed. Since they had higher median wealth, many more of the selfemployed were concentrated near the top of the overall net worth distribution. More than one-half of the selfemployed compared to 1 in 5 paid employees were located in the top quartile of the overall net worth distribution, roughly corresponding to those who had at least half a million dollars in net worth (Chart A).

Chart A Distribution across quartiles of household net worth



Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

Conversely, about 15% of the selfemployed and 27% of paid employees were in the bottom wealth quartile, which includes those who had a household net worth of about \$50,000 or less. This implies that entrepreneurs are an important source of wealth creation in Canada, a fact also noted by several U.S. studies (Quadrini 1999 and 2000).

The higher median wealth of the self-employed was unaffected by adjustments for age differences between paid employees and the self-employed, and by the removal of workers in primary industries to account for the fact that agriculture workers may have relatively high farm assets.

Such results might appear counterintuitive, because the median household income of the self-employed was slightly lower than that of paid employees. However, such findings—which mirror results obtained in other U.S. studies would be explained by the fact that many self-employed people leave funds within their companies, for reinvestment purposes, for debt servicing, or as a contingency fund (De Nardi et al. 2007). Hence, funds reinvested in their businesses can contribute to the wealth of the self-employed without increasing their income stream.

Retirement preparation

The 2009 CFCS also asked about retirement preparation. Preparing for retirement is an asset-building process to ensure that living standards can be maintained during the senior years, and is therefore an important aspect of long-term financial well-being. Since most of the self-employed are not covered by a pension plan, their retirement preparations are likely to differ from those of paid employees.

Paid employees were more likely than the self-employed to be preparing for retirement. About 85% of paid employees and 74% of the self-employed stated that they were financially preparing for retirement, either on their own or through an employer pension plan (Table 3). However, the lower percentage of self-employed individuals preparing for retirement may be linked to the fact that many of them keep working later in life.¹²

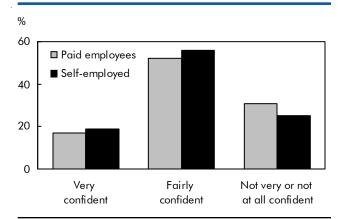
Table 3 Financial preparation for retirement – self-employed versus paid employees, age 25 to 59

	Paid employees	Self- employed
		%
Financially preparing	85.2	74.3*
Expected primary retirement income source	100.0	100.0
Public pension	14.7	11.8*
Occupational or workplace pension	35.4	5.6*
Personal retirement savings plan benefits	26.3	36.4*
Business	1.6	13.6*
Employment	3.5	6.1*
Personal assets or other sources	6.1	17.2*
Don't know	12.3	9.3*

^{*} significantly different at the 5% level

Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

Chart B Confidence in retirement income



Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

More than one-third of paid employees expected that workplace pensions would be their primary source of retirement income. Because they are less likely to be covered by an employer-based registered pension plan, the self-employed were more likely to report that personal retirement savings, like RRSPs, would be their main source of retirement income. Another 30% of

the self-employed reported that they would get retirement money from the sale of their business¹³ or via personal assets and other sources. The greater reliance on their own resources for retirement planning may influence the self-employed to become more knowledgeable about finances in general (see *Financial capability scores*).

Despite the fact that they expect to rely more on their own funds to maintain their living standards in retirement, fewer of the self-employed were pessimistic about their retirement income than paid employees. About one-quarter of the self-employed and one-third of paid employees were not confident that their retirement income would give them the standard of living they desired (Chart B).

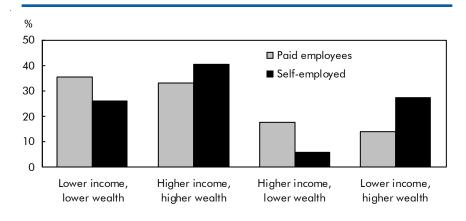
Relationship between wealth and income

Since the self-employed have greater income dispersion but also higher wealth than paid workers, the relationship between income and wealth is likely to differ between these groups. One strategy to identify these differences is to classify respondents into four categories:

- those with a household income and net worth below the population median (lower income, lower wealth)
- those with a household income and net worth above the population median (higher income, higher wealth)
- those with a household income higher than the population median, but a household net worth below the median (higher income, lower wealth)
- those with a household income lower than the population median, but a household net worth above the median (lower income, higher wealth).¹⁴

The distribution of paid employees and the self-employed across these four categories was quite different (Chart C). First, the self-employed were less likely than paid employees to be in the lower-income, lower-wealth category (26% for the self-employed versus 36% for paid employees) and less likely to be in the higher-income, lower-wealth category (6% for the self-employed versus 18% for paid employees).

Chart C Distribution across income and wealth categories



 $Source: \ Statistics \ Canada, \ Canadian \ Financial \ Capability \ Survey, \ 2009.$

Conversely, 41% of all selfemployed people were in the higher-income, higher-wealth category compared with one-third of all paid employees. Moreover, 27% of the self-employed were in the lower-income, higher-wealth group—nearly twice (14%) the percentage of paid employees. These results also held with controls in place for industry, occupation and personal characteristics.¹⁵ This suggests that annual household income is not necessarily representative of the financial well-being of the self-employed. These differences in the distribution of income and wealth also bring up the question as to whether there are corresponding differences in the consumption patterns of the two groups.

Expenditures and consumption

Even though income may be more dispersed for the self-employed than paid employees, periods of high income and/or higher wealth may help maintain consumption levels in lean times. If this is the case, or if the self-employed expect it to be the case, their expenditures may not differ greatly from those of paid workers. In addition, the findings related to wealth indicate that the self-employed are more likely to have substantial financial assets that would enable them to smooth their expenditures across variations in income.

Data in this section come from the Survey of Household Spending (SHS).¹⁶ In the SHS, expenditures include four categories of spending:

 gifts (money transfers to charities and individuals outside the household)

- personal security (including pension contributions, insurance and annuities)
- taxes
- consumption.

Consumption includes all goods and services that are acquired for the benefit of household members. All consumption figures have been adjusted to impute 'consumption flows' for housing and automobile expenditures (see *Imputing consumption flows for housing and automobile expenditures*).¹⁷

Since the distinction between the incorporated and unincorporated self-employed is not available in the SHS, this section focuses on the differences between paid employees and the self-employed as a whole. Households are classified as self-employed or paid workers according to the class of worker of the person who makes most of

the household financial decisions. Income in this section refers to household rather than individual income since households are assumed to pool expenditures.

The households of the selfemployed spent about 15% more than those of paid employees (\$11,600), but their household income was also higher by about 13% (Table 4).18 For both paid employees and the self-employed, consumption represented the largest expenditure group-more than 60% in both cases. The second largest expenditure was taxes, accounting for 23% of the total for paid workers and 22% for the selfemployed. Both groups earned more than they spent-10% for paid employees and 8% for the self-employed—indicating that potential savings were similar for each group.19

Table 4 Average expenditures – self-employed versus paid employees, age 25 to 59

	All		Middle ir	Middle income ¹	
	Paid employees	Self- employed	Paid employees	Self- employed	
	\$				
Average total household expenditures	79,100	90,800*	72,900	72,300	
Consumption	54,100	63,400*	52,200	53,500	
Personal security	5,700	5,700	5,500	5,000	
Gifts	1,400	2,000	1,300	1,200	
Taxes	18,000	19,700	14,000	12,600	
Average total household income	87,600	99,000*	76,500	76,100	

^{*} significantly different at the 5% level

Note: Figures are rounded to the nearest 100.

Source: Statistics Canada, Survey of Household Spending, 2008.

Excluding individuals with before-tax income below 2/3 of the median and above 4/3 of the median.

For a more detailed look at spending, consumption can be disaggregated into four main components: expenditures on residence and properties; transportation; food, clothing and care; and 'other,' which includes items that may be less essential for the safety and security of individuals (see Lafrance and LaRochelle-Côté 2011).

The self-employed spent more than paid employees on all components and sub-components of consumption (Table 5). However, differences were larger in the housing component, where expenses of the self-employed exceeded those of paid employees by \$5,000 (26%). Expenses on food and health care and miscellaneous items were also higher for the self-employed.

The higher spending on housing translated into a slightly higher proportion of total consumption spent on residence and properties by the self-employed—38% versus 35% for paid employees. As a share of the total, the self-employed also spent proportionately less on transportation—17% versus 20%. Spending differed little for the other items and each group spent about the same proportion of their overall income on consumption.

Conclusion

The self-employed represent 16% of the total Canadian workforce. Despite the necessity for the self-employed to manage fluctuations in income and, in most cases, finance their retirement without an employer pension plan, studies examining the financial well-being of the self-employed are relatively rare. Using a variety of data sources, this study examined differences between paid employees and the self-employed across a number of income, wealth, and spending indicators to provide a more comprehensive view of their financial well-being.

In 2009, both paid employees and the self-employed averaged more than \$85,000 in total household income. However, this masked differences across self-employment categories. The average household income of the incorporated self-employed was 24% higher than that of paid employees. Conversely, the average household income of the unincorporated self-employed was 15% lower than that of paid employees. The household income of the self-employed was also more dispersed.

Table 5 Detailed consumption patterns – self-employed versus paid employees, age 25 to 59

	Paid employees	Self- employed
		\$
Residence and properties Shelter Other accommodation Household operations Furnishings and equipment	19,100 11,800 1,200 3,800 2,200	24,100* 15,100* 1,800 4,500* 2,600
Transportation Purchased automobiles Automobile operations Public transportation	10,600 3,800 5,600 1,200	10,900 4,000 5,700 1,200
Food, clothing and care Food Clothing Personal care Health	14,800 8,200 3,400 1,400 1,800	16,800* 9,200* 3,700 1,400 2,600*
Others Recreation Reading and printed material Tobacco and alcohol Miscellaneous	9,600 4,700 200 1,700 2,900	11,600* 5,800* 300* 1,800 3,600
As a percentage of total Residence Transportation Essentials Others	100.0 35.3 19.5 27.4 17.7	% 100.0 38.0 17.2 26.6 18.3

^{*} significantly different at the 5% level

Note: Figures are rounded to the nearest 100.

Source: Statistics Canada, Survey of Household Spending, 2008.

However, the self-employed were wealthier than paid employees. In 2009, the median net worth of the self-employed was 2.7 times that of paid employees. The self-employed were also relatively confident that their retirement income would suffice to maintain their living standards, even though they planned to rely more on private sources to finance their retirement than paid workers.

The joint distribution of income and wealth indicated that the lower-income self-employed generally had greater wealth at their disposal than paid workers with similar annual income. Fully 27% of the self-employed were classified as having household income below the

Individual income of the self-employed

Because owners of incorporated businesses are legally separate from their business entities, they can earn income in a variety of ways—by drawing a salary, by collecting dividends accruing to shareholders, through capital gains or through net self-employment income if they maintain a non-incorporated registered business along with their corporations.

In contrast, the unincorporated self-employed have fewer options. These businesses are not legally separate from their owners, who must report proceeds as net self-employment income. ²⁰ Consequently, self-employment income is usually their main source of market income, although some may also report earnings from another paid job.

Overall, average individual income was slightly higher among paid employees (Table 6). In 2009, paid employees averaged \$52,400 in total income, compared to \$46,200 among the self-employed. As might be expected, most of the income of paid employees was from wages and salaries. The sources of income for the self-employed were more varied as they reported about \$17,500 in wages and salaries, \$20,600 in self-employment income, \$4,400 in investment income (including dividends) and \$1,100 in capital gains.

Just like household income, individual income varied significantly between the incorporated and the unincorporated.

As a result, the unincorporated had 26% lower income than paid employees. At \$57,800, the income of incorporated self-employed was similar to that of paid employees.²¹

The differences in total income were largely due to differences in market income, with little variation in government transfers across groups. The market income of the incorporated self-employed and of paid employees was about the same, while the market income of the unincorporated was \$13,100 lower. The majority (73%) of market income earned by the unincorporated came from self-employment income, but another 16% came from wages and salaries. Income was more diffuse across sources among the incorporated, with two-thirds coming from wages and salaries, 16% from investment and capital gains (including dividends), and 18% from net self-employment income. More than 95% of the market income of paid employees came from wages and salaries.

The incorporated self-employed worked an average of 2,350 hours in 2009, compared to 1,930 hours for the unincorporated and 1,770 hours for paid employees. ²² This translated into an average hourly rate of about \$24 per hour for the incorporated and just over \$28 per hour for paid employees. The unincorporated self-employed earned, on average, significantly less—\$20 per hour.

Table 6 Individual income sources - self-employed and paid employees, age 25 to 59

	D:-J		d	
	Paid employees	Total	Incorporated	Unincorporated
		\$		
Average total annual income	52,400	46,200*	57,800	38,900*
Average total market income	50,000	44,400*	56,600	36,900*
Wages and salaries	47,900	17,500 *	36,300*	5,800*
Self-employment income	400	20,600 *	10,000*	27,100*
Investment income	700	4,400 *	8,600*	1,800*
Capital gains	300	1,100 *	700*	1,300*
Other income	800	900	1,000	900
Average total government transfers	2,300	1,700*	1,200*	2,000*
Employment insurance and social assistance	1,300	500 *	400*	500*
Other'	1,000	1,200 *	800*	1,500*
Median annual income (total)	43,100	27,900	39,300	21,400
Annual work hours		ho	ours	
Average hours worked	1,770	2,090 *	2,350*	1,930*
Median hours worked	1,960	2,090 *	2,230*	2,090*

^{*} significantly different from paid employees at the 5% level

Note: Income figures are rounded to the nearest 100. Hours are rounded to the nearest 10.

Source: Statistics Canada, Survey of Labour and Income Dynamics, 2009.

Financial capability scores

A unique feature of the Canadian Financial Capability Survey is a series of 14 questions designed to test respondents' knowledge of financial principles and practices. Although there is broad recognition that financial literacy should be a component of an entrepreneur's skill set, there is little empirical evidence on the subject. Keown (2011) found differences in test scores between the self-employed and paid workers that are statistically significant at the lower and higher end of the distribution but not in the middle. Corresponding differences were found across the population of interest (Table 7). On average, the selfemployed answered 9.1 questions correctly compared to 8.7 for paid workers. The difference at the mean reflected a larger proportion of self-employed at the top of the distribution: 37.6% of the self-employed answered 11 or more questions correctly compared to 31.1% of paid workers.

A multivariate analysis (data not shown) indicated that the mean financial capability score for the self-employed remained significantly higher than the score for paid workers after controlling for age, education, region, immigration status and occupation.

Table 7 Financial capability scores – selfemployed versus paid employees, age 25 to 59

	Paid employees	Self- employed
Questions correctly answered		%
0	6.0	5.6
1	0.4	0.5
2	0.7	0.5
3	1.1	0.7
4 5	1.8	1.7
5	2.8	2.8
6	6.1	4.7
7	9.7	7.9
8	11.8	10.6
9	13.8	12.7
10	14.8	14.7
11	13.3	14.4
12	9.7	11.2
13	5.9	8.5
14	2.2	3.5
Mean	8.7	9.1

Source: Statistics Canada, Canadian Financial Capability Survey, 2009.

population median *and* net worth above the population median. This compared to 14% of paid employees in the same situation. The self-employed were also more likely to have the combination of higher income and higher wealth than paid employees. The apparent discrepancy between household income and wealth, also noted in the United States, could be due to the fact that many self-employed people leave money in their businesses for investment purposes, for debt-servicing, or simply to build up a reserve fund.

The overall expenditures of the self-employed and paid-worker households accounted for a similar proportion of their incomes, although the self-employed spent proportionately more on housing and less on transportation.

Perspectives

■ Notes

- 1. Source: Labour Force Survey, CANSIM Table 282-0011.
- According to the Survey of Labour and Income Dynamics (SLID), about one-tenth of paid employees in their main job had at least one other job at the same time.
 Most were also paid employees in their second job, but

- a significant number were self-employed in their second job. As a proportion of the total workforce, however, multiple jobholders with a business on the side represent a small portion of the overall workforce.
- 3. To avoid the concentration of unattached individuals among low-income families, all dispersion measures are based on household income values that have been adjusted for the size of the family. These 'adult-equivalent adjusted' (AEA) household income figures can be obtained by dividing total household income by the square root of the household size.
- 4. A limitation of the Canadian Financial Capability Survey is that information on assets is missing for approximately 50% of survey respondents. However, both the self-employed and paid employees had a similar degree of non-response. Also, the characteristics of those who did not answer the assets part of the survey did not differ between the self-employed and paid employees, thereby minimizing sample bias error.
- 5. The reference person is representative of the household's major source of employment income as they earned at least 50% of the total household income in at least two-thirds of all households. Restricting the sample to self-employed people earning at least 50% of total household income did not change the main conclusions.

- 6. Because the CFCS had a higher rate of non-response and 2009 was a downturn year, the results were verified against Statistics Canada's two most recent editions of the Survey of Financial Security (SFS), conducted in 1999 and 2005. A proxy variable based on income information and business ownership had to be derived to identify survey respondents who were most likely to be self-employed because the SFS does not have a job status indicator. In all cases, the average wealth of the self-employed was at least twice the average wealth of paid employees.
- 7. For the self-employed, however, tangible assets could include properties, machines and materials that are also used to conduct business, but not necessarily included or declared a 'business asset,' for example, a farm, a car used for business and personal reasons, or an office located within the house.
- 8. Assets that are used to conduct business include agricultural property, machinery and equipment, wholly or partially owned business property and assets, and copyrights, patents and royalties.
- 9. The CFCS enquired about personal household wealth, not the company's wealth. As a result, some of the self-employed—particularly the incorporated—might not have reported the full value of their corporations.
- 10. The CFCS question on financial assets asked respondents to consider the value of their employer pension plans in their estimates. In contrast, the SFS used plan descriptions to calculate the value of employer pensions. Thus, the CFCS may under-represent the value of employer pensions relative to the SFS. Nevertheless, the ratio between the median wealth of the self-employed and paid workers is similar in both surveys.
- 11. The vast majority of the self-employed are not covered by private pension plans.
- 12. In 2006, 44% of employed men age 65 and over were selfemployed compared with 24% and 15% of those age 55 to 64 and 25 to 54, respectively (Uppal 2011). There was a similar pattern among women.
- 13. The first \$750,000 in capital gains from the sale of a qualifying corporation can be tax-free. This particular feature of the tax system, called the Lifetime Capital Gains Exemption, is seen by many entrepreneurs as an important source of retirement income.
- 14. Individuals were classified on the basis of their AEA (adult-equivalent adjusted) income and net worth. The AEA is a 'per adult' equivalent that takes the number of people living in the household into account. It can be obtained by dividing total household and net worth figures by the square root of family size and is considered more closely aligned with an individual's true financial well-being.

- 15. Since the combination of low wealth and high income may be due to factors other than self-employment, a model was estimated that controlled for industry, occupation and a number of socio-economic characteristics. The self-employed were still significantly more likely to have lower incomes and higher wealth than paid workers.
- 16. In the SHS, the household reference person is the one taking care of the family's finances. Because the SHS does not provide information about the class of worker of survey respondents, self-employment was proxied by identifying those who said that their major source of income was from self-employment or those claiming property taxes or rents against business income.
- 17. A consumption flow is an estimate of consumption services that are obtained on an annual basis from durable goods and can be roughly interpreted as the amount that would have to be paid to 'rent' them.
- 18. All consumption, expenditure and income items are reported at the household level in the SHS. Survey respondents are those responsible for maintaining the family's finances. This means that other members of the household could influence household income and spending as paid employees.
- 19. The differences were also quite small when the comparisons were restricted to households in the middle of the income distribution.
- 20. Net self-employment income can be reported in the T1 file as business income, professional income, commission income, farming income or fishing income. Self-employment income is defined as the sum of the net income reported in all of these five reporting options.
- 21. Given that the self-employed are typically older than paid employees, age-adjusted incomes were also calculated. This did not significantly alter the results. Furthermore, longitudinal data from 2005 to 2008 were also used to check for the robustness of these results. Individuals who were self-employed (or paid employees) throughout the period were included in the sample. The conclusions remained largely unchanged.
- 22. Hours worked are defined as total hours paid in all jobs during the reference year.

■ References

Brown, W. Mark and Amélie Lafrance. 2010. *Incomes from Owner-Occupied Housing for Working-Age and Retirement-Age Canadians, 1969 to 2006.* Statistics Canada Catalogue no. 11F0027M — No. 066. Economic Analysis Research Paper Series. Ottawa. 30 p.

http://www.statcan.gc.ca/pub/11f0027m/ 11f0027m2010066-eng.pdf (accessed July 19, 2011). De Nardi, Mariacristina, Phil Doctor and Spencer D. Krane. 2007. "Evidence on entrepreneurs in the United States: Data from the 1989–2004 Survey of Consumer Finances." *Economic Perspectives*. Fourth Quarter 2007 Edition. Federal Reserve Bank of Chicago. p. 18-36.

http://www.nber.org/~denardim/research/denardidoctorkrane.pdf (accessed September 2, 2011).

Hou, Feng and Shunji Wang. 2011. "Immigrants in self-employment." *Perspectives on Labour and Income*. Vol. 23, no. 3. Autumn. Statistics Canada catalogue no. 75-001-X.

http://www.statcan.gc.ca/pub/75-001-x/2011003/article/11500-eng.htm (accessed July 19, 2011).

Keown, Leslie-Anne. 2011. "The financial knowledge of Canadians." *Canadian Social Trends*. Vol. 91. Summer. Statistics Canada catalogue no. 11-008-X.

http://www.statcan.gc.ca/pub/11-008-x/2011001/article/11413-eng.htm (accessed July 19, 2011).

Lafrance, Amélie and Sébastien LaRochelle-Côté. 2011. "Consumption patterns among aging Canadians." *Perspectives on Labour and Income.* Vol. 23, no. 2. Summer. Statistics Canada catalogue no. 75-001-X. p. 3-12. http://www.statcan.gc.ca/pub/75-001-x/2011002/pdf/11417-eng.pdf (accessed July 19, 2011).

LaRochelle-Côté, Sébastien. 2010. "Self-employment in the downturn." *Perspectives on Labour and Income.* Vol. 11, no. 3. March. Statistics Canada Catalogue no. 75-001-X.

http://www.statcan.gc.ca/pub/75-001-x/2010103/article/11138-eng.htm (accessed July 19, 2011).

Pendakur, Krishna. 1998. "Changes in Canadian family income and family consumption inequality between 1978 and 1992." *The Review of Income and Wealth*. Vol. 44, no. 2. June. p. 259-283.

http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4991.1998.tb00272.x/pdf (accessed July 19, 2011).

Quadrini, Vincenzo. 2000. "Entrepreneurship, saving, and social mobility." Review of Economic Dynamics. Vol. 3, no. 1. January. p. 1-40.

http://www.roiw.org/1999/1.pdf (accessed September 2, 2011).

Quadrini, Vincenzo. 1999. "The importance of entrepreneurship for wealth concentration and mobility." *The Review of Income and Wealth*. Vol. 45, no. 1. March. p.1-19.

http://www.roiw.org/1999/1.pdf (accessed September 2, 2011).

Uppal, Sharanjit. 2011. "Seniors' self-employment." *Perspectives on Labour and Income.* Vol. 23, no. 1. Spring. Statistics Canada Catalogue no. 75-001-X.

http://www.statcan.gc.ca/pub/75-001-x/2011001/article/11400-eng.htm (accessed July 19, 2011).

Verheul, Ingrid, Sander Wennekers, David Audretsch and Roy Thurik. 2001. An Eclectic Theory of Entrepreneurship. Tinbergen Institute Discussion Paper TI 2001-030/3. Amsterdam, The Netherlands. Tinbergen Institute. 50 p.

http://www.tinbergen.nl/uvatin/01030.pdf (accessed July 19, 2011).