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Investments in Registered Education Savings Plans and Postsecondary Attendance

by Marc Frenette, Social Analysis and Modelling Division

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. not available for any reference period
.. not available for a specific reference period
... not applicable
0 true zero or a value rounded to zero
0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p} preliminary
^{r} revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E} use with caution
F too unreliable to be published
* significantly different from reference category ($p < 0.05$)

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Investments in Registered Education Savings Plans and Postsecondary Attendance

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This *Economic Insights* article documents the characteristics of families with children under the age of 18 who hold registered education savings plan (RESP) investments. The article also examines the relationship between holding an RESP account at age 15 and postsecondary enrolment between the ages of 19 and 27. The data are drawn from the 1999 and 2012 Survey of Financial Security and from the Youth in Transition Survey, Cohort A, linked to the T1 Family File. Postsecondary enrolment is derived from education deductions and tuition credits in the tax data.

Introduction

Despite the estimated benefits associated with a postsecondary education (Frenette 2014), youth from lower-income families are considerably less likely to attend university than their peers in more affluent families. An earlier study (Frenette 2007) found that among 19-year-old high school graduates, about half (50.2%) of those in the top quartile of family income had attended university, compared with about one-third (31.0%) of those in the bottom quartile. Although most of this gap was explained by differences in academic performance, parental education and other home-based factors, 12% of the gap was attributable to a higher incidence of self-reported financial constraints among youth in the bottom income quartile.

Students who are considering pursuing a postsecondary education may seek financial assistance from the federal or provincial governments by applying for grants or loans. The federal government also offers savings incentives through the registered education savings plan (RESP) vehicle. RESPs allow for tax-sheltered earnings on contributions and include additional government contributions though the Canada Education Savings Grant, the Additional Canada Education Savings Grant and the Canada Learning Bond.[1]

This article has two objectives. First, the characteristics of families with RESPs are compared with those of families with no RESPs. This provides a much-needed update, considering that the last detailed study on this topic was based on 1999 data (Milligan 2004). Second, the article examines the relationship between RESP use and postsecondary enrolment. To date, only one study has examined this relationship (Finnie and Wismer 2012), but it did not estimate the relationship by family income category.

This study uses the 1999 and 2012 Survey of Financial Security to document the socioeconomic characteristics of families with children under the age of 18 who do or do not have an RESP account. Several family characteristics are included in the analysis, but the primary focus is on family income, net worth and parental education. Economic families are sorted by equivalent after-tax family income and grouped into quintiles (groups of 20%). Differences in RESP holding rates and dollar amounts held are examined across the income distribution.

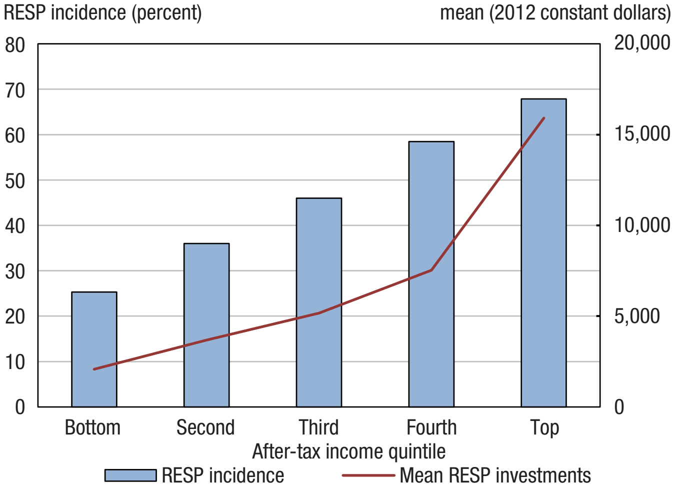
The second part of the study examines whether the probability of someone pursuing postsecondary education between the ages of 19 and 27 is correlated with whether or not their family had an RESP when they were 15.[2] This portion of the study uses the Youth in Transition Survey, Cohort A, linked to the T1 Family File (T1FF). Postsecondary enrolment is derived from tuition, education, and textbook tax credits in the T1FF. A section on data sources, methodology and definitions is included at the end of this study.

Registered education savings plan investments concentrated among families with higher income, higher net worth and higher levels of parental education

Among families with at least one child under age 18, investments in RESPs were positively associated with family income, net worth (wealth) and parental education. In 2012, about one-quarter (25.3%) of families in the bottom after-tax income quintile had an RESP account (Chart 1). In contrast, about two-thirds (67.9%) of families in the top income quintile had an account. Throughout the distribution, families in higher income groups were more likely to hold an RESP than those in lower income groups.

1. Frenette (2017) discusses the RESP savings vehicle and associated benefits in far more detail.
2. Finnie and Wismer (2012) concluded that for postsecondary attendance, whether the family saved at all matters far more than the amount saved.

Chart 1
RESP incidence and mean investments, by after-tax income quintile

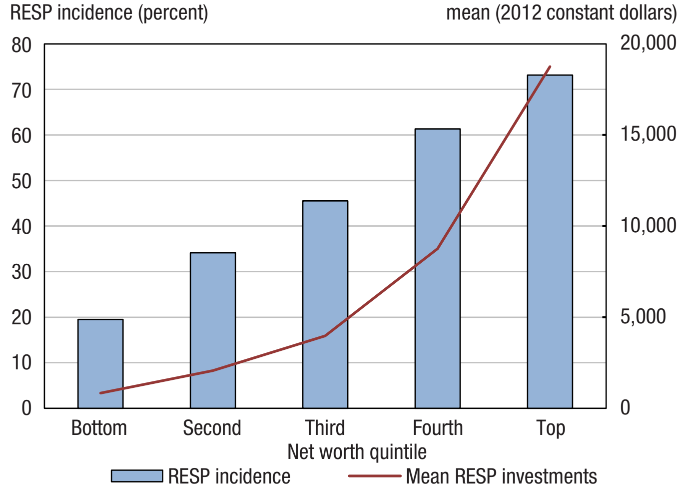


Notes: RESP: registered education savings plan. The sample consists of economic families with at least one child under the age of 18. All variables are measured at the economic family level. After-tax income is measured in equivalent dollars, obtained by dividing by the square root of the number of individuals in the economic family.
Source: Statistics Canada, 2012 Survey of Financial Security.

The average dollar value of RESPs held by families in each income quintile is also shown in Chart 1. These figures include families with no RESPs. The positive correlation with income is again evident, as the average values of RESP investments ranged from $2,072 in the bottom income quintile to $15,915 in the top income quintile.

A wider disparity in RESP use exists across quintiles of net worth, which exclude the value of RESPs themselves.[3] Specifically, about one-fifth (19.5%) of families in the bottom net worth quintile had an RESP in 2012, compared with almost three-quarters (73.2%) of families in the top quintile (Chart 2). The average values of RESP investments ranged from $831 in the bottom net worth quintile to $18,752 in the top quintile.

Chart 2
RESP incidence and mean investments, by net worth quintile

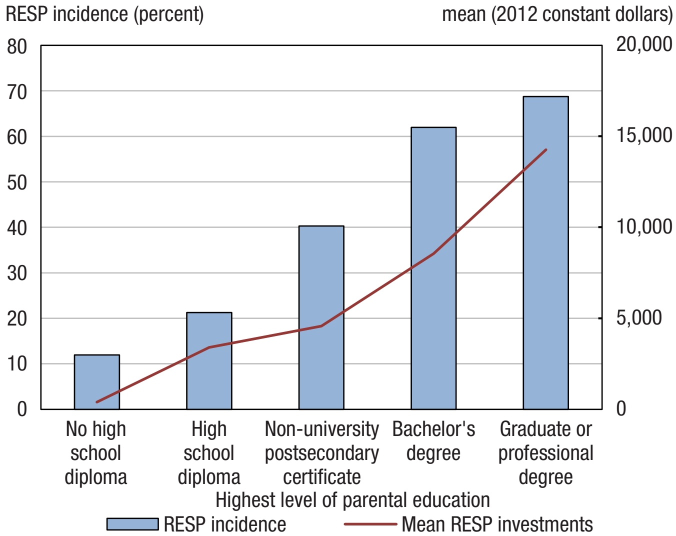


Notes: RESP: registered education savings plan. The sample consists of economic families with at least one child under the age of 18. All variables are measured at the economic family level. After-tax income is measured in equivalent dollars, obtained by dividing by the square root of the number of individuals in the economic family.
Source: Statistics Canada, 2012 Survey of Financial Security.

Across levels of parental education, RESP use ranged from 12.0% among families in which neither parent had a high school diploma to 68.8% among families in which at least one parent had a graduate or professional degree (Chart 3). For the same educational categories, average RESP investments ranged from $389 to $14,266.

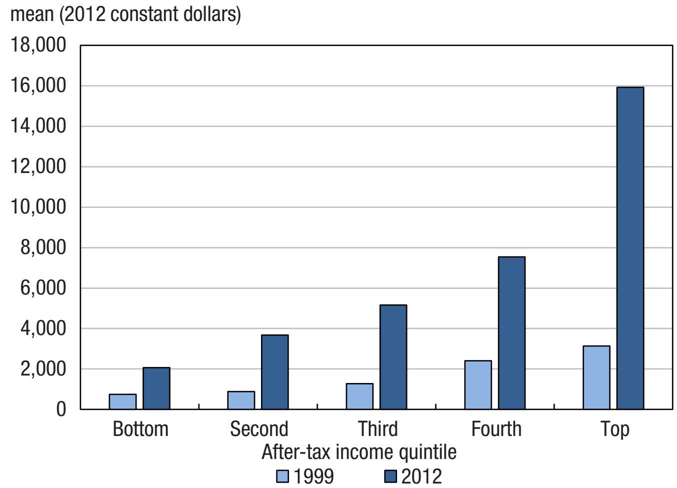
3. Net worth may be determined in part by RESP holdings. It is also possible that families invest in RESPs by simply moving assets, rather than by investing new money. However, results were similar when RESPs were included. See Frenette (2017) for results with RESPs included in and excluded from the definition of net worth.

Chart 3
RESP incidence and mean investments, by parental education



Notes: RESP: registered education savings plan. The sample consists of economic families with at least one child under the age of 18. All variables are measured at the economic family level.
Source: Statistics Canada, 2012 Survey of Financial Security.

Chart 4
Mean RESP investments, by after-tax income quintile and year



Notes: RESP: registered education savings plan. The sample consists of economic families with at least one child under the age of 18. All variables are measured at the economic family level. After-tax income is measured in equivalent dollars, obtained by dividing by the square root of the number of individuals in the economic family. Quintile thresholds from 2012 are applied to both years.
Source: Statistics Canada, 1999 and 2012 Survey of Financial Security.

The gap in RESP use and average dollar holdings between families in the top and bottom income quintiles was largely related to differences in net worth and parental education. For example, the gap in RESP use between these two income groups was 42.6 percentage points (67.9% less 25.3%). Of this gap, 43.3% was accounted for by higher net worth among families in the top income quintile, while 24.2% was related to higher levels of parental education at the top of the income distribution.

Registered education savings plan investments rose across income and wealth distribution, especially at top

Average RESP investments rose considerably across the income and wealth distributions between 1999 and 2012.[4] However, the largest gains were registered among families at the top of both distributions.

Results in Chart 4 indicate that average RESP investments rose from $746 in 1999 to $2,072 in 2012 among families in the bottom income quintile (a 178% increase). Gains were larger among families in the top income quintile during the same time period, going from $3,134 to $15,915 (a 408% increase).

Larger gains were also registered at the top of the wealth distribution. Families in the bottom 20% of the distribution in 2012 had RESP investments that were 110% higher than those of their counterparts in 1999. Among families in the top wealth quintile, RESP investments in 2012 were 284% higher than those of their 1999 counterparts.

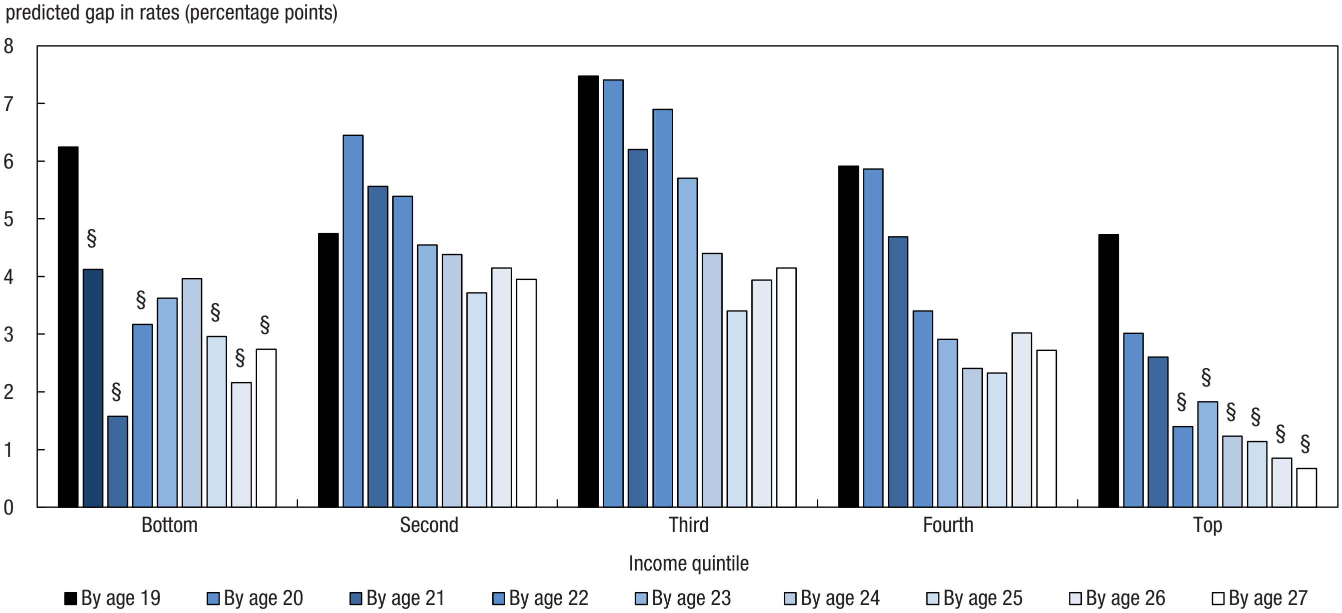
Registered education savings plans associated with higher postsecondary enrolment

Youth who, at age 15, resided in a family with an RESP were more likely to subsequently attend a postsecondary institution. Indeed, 75.4% of these youth attended a postsecondary institution by age 19, compared with 59.7% of youth who, at age 15, resided in a family with no RESPs. The gap in attendance rates (15.8 percentage points) was partly related to the fact that youth who had access to an RESP had stronger academic performance and more highly educated parents. These factors have been shown to be positively associated with postsecondary enrolment (Frenette 2007).

After differences in academic performance, parental education and other factors were accounted for,[5] the "predicted gap" in postsecondary enrolment rates at age 19 between individuals with and without RESPs was 5.9 percentage points. The predicted gap declined gradually, reaching 2.7 percentage points by age 27. Similar trends were registered across the income distribution, although the predicted gap was no longer statistically significant by age 27 among families at the top and bottom of the income distribution (Chart 5).

4. Frenette (2017) describes the changes to RESP rules and incentives that occurred since the late 1990s. Note that this included an increase in lifetime contributions that may have previously imposed a limit on wealthier families.
5. See Frenette (2017) for a detailed description of the approach used and the factors included in the analysis.

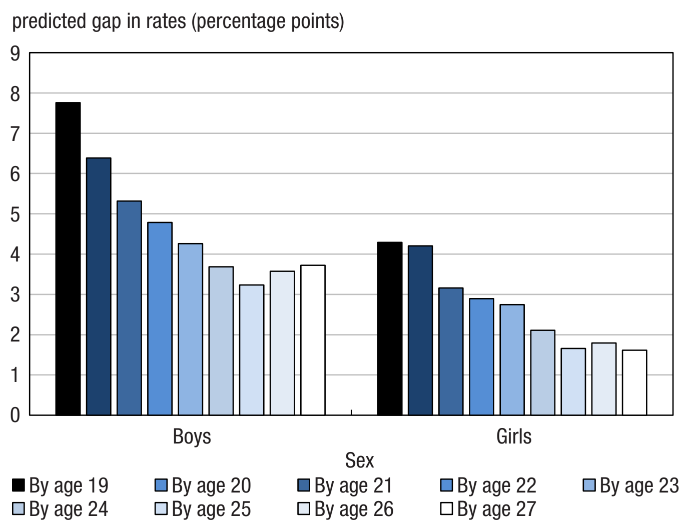
Chart 5
Predicted gap in postsecondary enrolment rates between RESP holders and non-holders, by income quintile and age



§ not statistically significant at 10%
Notes: RESP: registered education savings plan. The sample consists of youth born in 1984.
Sources: Statistics Canada, Youth in Transition Survey, Cohort A, cycle 1, and T1 Family File, 2001 to 2011; Organisation for Economic Co-operation and Development, Programme for International Student Assessment.

In general, having an RESP was more strongly associated with postsecondary attendance among young men than among young women (Chart 6). In fact, the association was about twice as strong among young men. After differences in academic achievement and other relevant factors were accounted for, the predicted gap in postsecondary attendance rates between young male RESP holders and non-holders was 7.8 percentage points at age 19 and 3.7 percentage points at age 27. The predicted gap between young women with and without RESPs were 4.3 and 1.6 percentage points at these ages.

Chart 6
Predicted gap in postsecondary enrolment rates between RESP holders and non-holders, by sex and age



Notes: RESP: registered education savings plan. The sample consists of youth born in 1984.
Sources: Statistics Canada, Youth in Transition Survey, Cohort A, cycle 1, and T1 Family File, 2001 to 2011; Organisation for Economic Co-operation and Development, Programme for International Student Assessment.

Conclusion

This study compared registered education savings plan (RESP) investments over time across family characteristics such as after-tax income, net worth (wealth) and parental education. The study also examined the association between access to an RESP account and postsecondary enrolment.

Several key findings emerge from this study. In general, RESP investments were concentrated in families with higher levels of income or net worth, and higher levels of parental education. The higher incidence and dollar value of RESP investments among families at the top of the income distribution, compared with those among families at the bottom, were largely associated with higher wealth and levels of parental education among families at the top.

Although the average value of RESP investments has increased across the income and wealth distributions in recent years, the increases have been notably larger among families in the top 20%.

Finally, youth who had access to an RESP account were more likely to pursue postsecondary education later on (particularly by age 19, although a strong association generally persisted up to age 27). This was generally the case across the income distribution and for both sexes. However, the association was about twice as strong for young men as for young women.

Data and definitions

Data sources

The first part of the study highlights trends in registered education savings plan (RESP) use over time and is based on data from the 1999 and 2012 Survey of Financial Security. The sample includes economic families with at least one child under the age of 18. In total there were 5,218 families in the 1999 sample and 3,027 families in the 2012 sample.

In the second part, the association between RESPs and postsecondary enrolment is examined. This part is based on the Youth in Transition Survey, Cohort A (YITS-A), linked to the T1 Family File (T1FF). The sample consists of youth in cycle 1 of the YITS-A (when most were 15 years old, but some were 16) who were successfully linked to the T1FF in all years from age 19 to 27. In total, 95.9% of the YITS-A sample was linked, resulting in a total sample size of 20,084.

Methodology

The percentage of economic families who have opened an RESP account and the average (mean) dollar value of RESP investments (including zero values) were calculated for various family characteristics. These include equivalent after-tax family income, equivalent net worth or wealth (including and excluding RESPs), and parental education. Equivalent values were obtained by dividing total family estimates by the square root of the number of members in the family. Fixed thresholds from 2012 were applied to both years (1999 and 2012) to divide families into income and wealth quintiles. The gap in RESP participation rates was decomposed through the standard Blinder–Oaxaca approach. The gap in average dollar investments in RESPs between the top and bottom income quintiles was examined through a stepwise tobit regression model.

The gap in the postsecondary enrolment rate between youth who did and did not have access to an RESP at age 15 was examined through a linear probability model. Separate models were estimated for enrolment up to a given age (ranging between 19 and 27 years-old). Results were generated by total family income quintile and by sex.

Data and definitions (end)

Definitions

Economic family: A group of two or more persons related by blood, marriage, common law or adoption, and sharing the same dwelling.

Net worth: The current dollar value of all assets (financial or otherwise) minus debts.

Postsecondary enrolment: Individuals are classified as having been enrolled in postsecondary program if they claimed a positive amount of tuition, education, and textbook credits in Schedule 11 of their personal income tax form (*T1 General tax form*). A positive amount for any of these credits signals attendance. Postsecondary students at qualifying institutions receive a T2202A form (*Tuition, Education, and Textbook Amounts Certificate form*) for the tuition amount, and a T2202 form (Education and Textbook Amounts Certificate form) for the education and textbook amounts. Students may use this information to claim these amounts as non-refundable tax credits (i.e., the amounts can be used to reduce taxes owing but are non-refundable beyond the amount of taxes owing). If students cannot apply all of their credits towards their taxes in a given year, they may opt to transfer some or all of their credits to their spouse or common-law partner, or to a parent or grandparent, or to a parent or grandparent of their spouse or common-law partner. Alternatively, they may carry forward some or all of the credit amounts to a future tax year. In any of these cases, a Schedule 11 form must be filled out, which allows for the identification of students who are enrolled in a postsecondary program during the appropriate tax year. However, no distinction can be made between different forms of postsecondary schooling in the tax data.

RESP: A registered education savings plan (RESP) is a tax-sheltered savings vehicle designed to encourage parents to save early for their children's postsecondary education. Earnings in the account accumulate tax-free, and contributions are partially matched by the government through the Canada Education Savings Grant, with a higher matching rate for families with lower levels of income (through the Additional Canada Education Savings Grant). Lower-income families also qualify for the Canada Learning Bond, as long as they open an RESP account (with or without making contributions).

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