

High Canadian Science

Labour, a e c e
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i h he Ma i i e c i h ce

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Standard abbreviations

The following symbols are used in Statistics Canada publications:

- . 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
-
-



Table 2
 Labour market outcomes of Maritime university graduates one year after graduation,
 by cohort and education level, 2006 to 2011

	Cohort					
	2006	2007	2008	2009	2010	2011
	number					
Undergraduate degree (bachelor's degree)	6,110	6,645	6,310	6,280	5,915	6,165

2012 constant dollars

Although most graduates held a job at some point during their first year after graduating, the data do not provide any indication as to whether the job was full time or part time, or whether it was held part of the year or throughout the entire year. The new dataset on Maritime university graduates also does not provide information about the number of hours worked during the year, or whether the job is in the same field of study. However, additional insight can be obtained by examining the distribution of graduates across earnings categories.

Between 2006 and 2011, the proportion of undergraduate degree holders who earned between \$0 and \$10,000 remained relatively stable from one cohort to the next, varying between 11% and 12%.

The proportion of those earning between \$10,001 and \$30,000, however, grew by 4 percentage

points between the 2006 and 2009 cohorts; the largest increase was observed between the 2008 and 2009 cohorts. Conversely, the proportion of those earning between \$30,001 and \$50,000 decreased during the same period, while the proportion earning more than \$50,000 fluctuated between 23% and 26%.

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Similarly, graduates covered by a private pension plan can be approximated by the proportion of graduates who reported contributions to a registered pension plan. This proportion fluctuated from cohort to cohort in the year after graduation, ranging between 32% and 37% for undergraduate degree holders and from 49% to 55% for graduate degree holders.

Did graduates from the 2009 cohort eventually recover from the decline?

Cohorts of undergraduate degree holders were followed over three years to see if those from the 2009 cohort, who had significantly lower earnings than earlier cohorts, eventually recovered.²⁰

Undergraduate degree holders of both sexes from the 2006 and 2007 cohorts followed a similar trajectory over their first three years after graduating (Chart 3). However, the next two cohorts, in 2008 and 2009, generally had lower earnings in all three years of observation compared with the preceding cohorts; the largest decline between cohorts was registered for the 2009 cohort. The gap between the cohorts did not narrow over subsequent years. This

The Postsecondary Student Information System (PSIS) provides detailed annual information on enrolments and graduations from Canadian postsecondary institutions (universities and colleges) by field of study and by certain demographic variables. However, PSIS data do not provide information about graduate outcomes on the labour market, such as labour force participation after graduation or employment earnings. This information can be derived from other administrative data sources such as the tax files.

The Statistics Canada Education Longitudinal Linkage Platform (ELLP) was developed to allow for the combination of information from PSIS, as well as the Registered Apprenticeship Information System (RAIS), with information from other datasets. A pilot study using the ELLP was undertaken to link annual PSIS graduate data for Maritime universities (for reporting years 2006 to 2012) with selected variables from the

(continued)

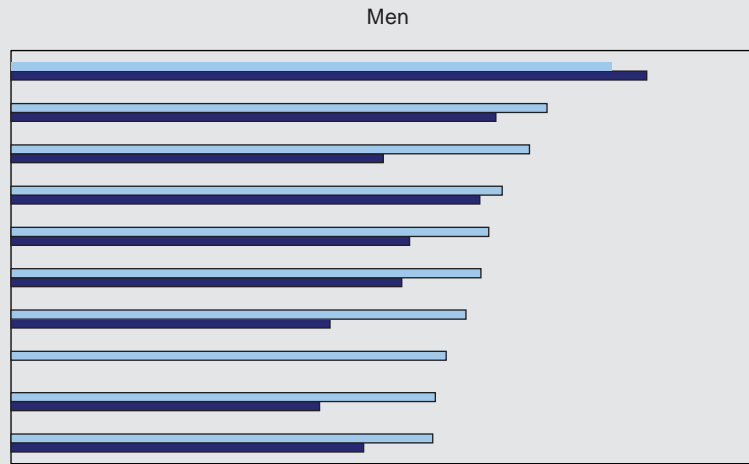
High retention rates may also be linked to the key industries and occupations in a given region, and to economic fluctuations in those industries. Similarly, employment opportunities in specific industries located in other regions of Canada may also explain why some graduates choose to leave.

This partly explains why retention rates also vary by field of study. Graduates from education programs, for example, had the highest retention rates, regardless of gender or education level (Chy 5). Other

(concluded)

Chart 5

Retention rate of Maritime university graduates one year after graduation, by level of education and field of study, all cohorts from 2006 to 2011



Women

retention rate (percent)

x suppressed to meet the confidentiality requirements of the Statistics Act

1. Undergraduate and post-bachelor non-graduate-level degrees in law (LLB, JD, BCL) were removed from the social and behavioural sciences and law groupings.
 2. Undergraduate and post-bachelor non-graduate-level degrees for family doctors (MD), dentists (DDS, DMD) and veterinarians (DVM) were removed from the groupings for this study.

Note: This refers to the proportion of graduates under the age of 35, out of all graduates of the Maritime universities, who were still living in one of the three Maritime provinces one year after graduation.

Sources: Statistics Canada, Postsecondary Student Information System (PSIS), 2005/2006 to 2011/2012; T1 Family File (T1FF), 2006 to 2012.

13. This industry grouping was also used in Morissette (2008). Even if not all jobs in these industries are low skilled, the wages and benefits in these sectors are typically lower than in other industries and the positions are more likely to be low skilled. According to the 2012 Labour Force Survey, the average hourly wage of all employees aged 15 and over was \$23.55, while the average was the lowest in the following industry groupings: food and accommodation (\$13.63), and wholesale and retail trade (\$17.70). Unionization rates were the lowest in wholesale and retail trade (13.9%) and food and accommodation (6.9%), compared with 31.3% for all paid workers.
14. See Frank et al. (2015); Frenette and Frank (2016); Ostrovsky and Frenette (2014).
15. Health excludes family doctors (MDs), dentists and veterinarians. Some fields of study, such as agriculture and arts, have a relatively large proportion of self-employed individuals. In this article, individuals who reported self-employment income are excluded from the calculations.
16. The tax data do not provide occupational information. Graduates who received their degree in some fields of study may be more at risk of skill mismatch, which may explain some of the earnings differences by field of study.
17. The T1FF provides information on the region of residence of graduates, which may differ from the region where they worked the year after graduating.
18. The adjusted wage gaps were based on a linear regression model of the log of annual employment earnings on (A) the year of graduation and demographic characteristics (age, sex, immigrant status and province of graduation); and (B) all the variables in (A) plus the field of study.
19. Other studies (Frank et al. 2015; Finnie et al. 2016) found little or no evidence of a decline in outcomes over the recessionary years. However, neither of those studies focus on Maritime university graduates. In addition, the universe in this study is different from the other two studies—in Frank et al., the universe is not necessarily made up of new graduates, and in Finnie et al., the universe includes graduates from a selection of universities in Ontario, Alberta and British Columbia.
20. The dataset used in this article was specially created using the ELLP, which, at the time of the pilot project, could only link PSIS data to tax data up to 2012. Longitudinal analysis requires that the graduates of each cohort be followed over the same number of years to avoid any bias. The four cohorts that graduated from 2006 to 2009 were chosen as it was possible to follow each of them over three years.
21. See, for example, Oreopoulos et al. (2012).
22. See Statistics Canada (2008); Turcotte and Weeks (2014).
23. Readers should note that international graduates exclude a significant number of graduates who never filed an income tax return in Canada after graduating. The Maritime retention rates for this category must therefore be interpreted with caution.

References

Ferguson, Sarah Jane and Shunji Wang. 2014.

Statistics Canada
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