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Annual wages, salaries and commissions of T1 tax filers, 2017

by Eric Fecteau and Dominique Pinard

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Annual wages, salaries and commissions of T1 tax filers, 2017

By Eric Fecteau and Dominique Pinard

Introduction

In 2017, the largest income source for the majority of tax filers in Canada is "wages, salaries and commissions", which are gained from being an employee (see Data sources, methods and definitions). This income source accounted for approximately two out of three dollars of annual income of tax filers. Understanding the characteristics of wage-earners² and the differences in annual earnings by province, sex, age and industry can help to describe how the Canadian population interacts with the labour market.

Annual wage-earnings is one of many key variables for exploring differences in the economic situation of men and women and different generations within the Canadian workforce. For example, a higher proportion of men are wage-earners, regardless of age group (70.0% of tax filing men, compared with 61.9% of tax filing women), and women had a lower annual median income from wage-earnings than men (\$31,340 and \$43,690, respectively). Comparing annual wage-earnings across industry sectors, as well as between the provinces or territories, also allows for the description of different situations.

This paper uses the version of the T1 Family File (T1FF) for 2017 that is based on the preliminary databases from the T1 Income Tax and Benefit Return and T4 Statement of Remuneration Paid files that Statistics Canada receives from the Canada Revenue Agency.³ It provides an overview of annual income from wage-earnings according to selected characteristics. The target population for the analysis is tax filers with wages, salaries and commissions, corresponding to approximately 17.6 million individuals. This target excludes tax filers below the age of 15 years (as of December 31 of the tax year), tax fillers that are only self-employed, tax filers who died during the tax year and tax filers who provided a mailing address outside Canada. To allow for comparison, the preliminary T1FF data for 2015 and 2016 will also be used.⁴ The intent is to publish data tables on wages, salaries and commission on an annual basis in future years using preliminary T1FF data. Because of the nature of tax information, the analysis focusses on all wage-earnings gained from one or many employers in a calendar year and does not take into account employment characteristics that are often used in other studies. For example, it is not possible to draw conclusions according to hourly wage rates, full-time or part-time status of employees, or full-year or part-year employment.

Year-over-year differences for 2015, 2016 and 2017 were small

The median annual wage-earnings was \$36,980 in 2017, up less than one percent from 2016. Only slight fluctuations in the median annual wage-earnings of individuals were observed over the last three years: \$36,740 for 2015, \$36,630 for 2016 and \$36,980 for 2017.

The median annual wage-earnings of women represented 71.7% of wageearnings of men, the gap being the largest among the age groups from 35 to 54 years

The 2017 median wage-earnings was highest among wage-earners aged 35 to 44 years (\$50,470) and 45 to 54 years (\$52,820). As shown in Chart 1, it was lowest among the youngest and two oldest age groups (\$12,000 for wage-earners aged 15 to 24 years, \$11,500 for those aged 65 to 74 years and \$460 for those aged 75 years and older).

In general, women had lower median wage-earnings than men (\$31,340 and \$43,690, respectively). This gap was largest among the groups aged 35 to 44 years (\$19,030) and 45 to 54 years (\$19,070). It was smallest among the

^{1. &}quot;Wages, salaries and commissions" exclude all types of self-employment income. Individuals that have both wage-earnings and self-employment income are included in the analysis, but only their wages-earnings are considered.

^{2.} This article will refer to wages, salaries and commissions as "wage-earnings" and to individuals with wage-earnings greater than \$0 as "wage-earners".

^{3.} This early T1 file contains approximately 97% of the records compared to the T1 file used to create the final T1FF.

^{4.} All dollar amounts are in 2017 constant dollars.

youngest and two oldest age groups (\$2,450 for wage-earners aged 15 to 24 years, \$1,720 for those aged 65 to 74 years and \$80 for those aged 75 years and older). According to Patterson (2018) and Moyser (2017), women were more likely to work part time, largely as a result of caring for children, especially among women aged 30 to 39 years. Moyser also identified that women were more likely to have more frequent career interruptions and for a longer total length and be underrepresented in leadership positions in the private sector. From 2015 to 2017, in constant dollars, men had nearly no gains in median wage-earnings (from \$43,680 to \$43,690), while women had a slight gain (from \$30,850 to \$31,340).

Men were more likely to have wage-earnings than women (70.0% of tax filing men, compared with 61.9% of tax filing women). This gap was largest among the group aged 65 to 74 years (34.9% of tax filing men, compared with 23.1% of tax filing women) and smallest among the groups aged 15 to 24 years (86.2% of tax filing men, compared with 85.9% of tax filing women) and 45 to 54 years (80.7% of tax filing men, compared with 77.4% of tax filing women).

70,000 60,000 50.000 40,000 30,000 20,000 10,000 0 All ages 15 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 64 years 65 to 74 years 75 years and ■ Both sexes ■ Men ■ Women

Chart 1 Median wage-earnings by sex and age group, 2017

Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family Files 2017, Custom Tabulation.

The territories generally had greater wage distribution than the provinces

Among provinces and territories, the Northwest Territories (\$51,680), Yukon (\$46,220) and Alberta (\$44,470) had the highest median wage-earnings in 2017 (see Chart 2). The Maritime provinces (\$28,870 for Prince Edward Island, \$31,430 for New Brunswick and \$32,110 for Nova Scotia) and Nunavut (\$30,690) had the lowest. The Northwest Territories, Yukon and Alberta also had the highest medians in 2015 and 2016. Alberta had a small rebound from 2016 to 2017 (\$330), after a large drop from 2015 to 2016 (-\$2,030).

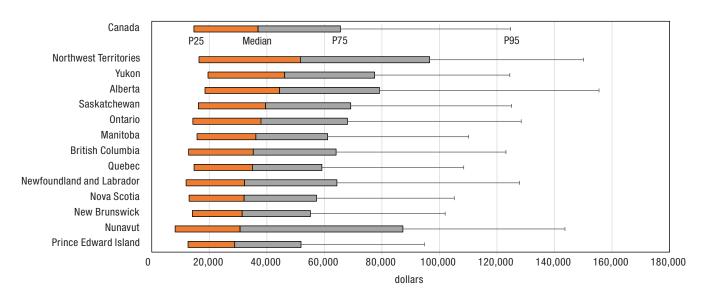
The interquartile range, the difference between the 25th and 75th percentiles of wage-earnings, helps describe the heterogeneity of wage-earnings within regions or industries. While Nunavut was among the provinces and territories with the lowest median wage-earnings in Canada, it had one of the largest interquartile range of wage-earnings, along with the Northwest Territories (the difference being \$79,180 and \$80,190, respectively). Nova Scotia, Prince Edward Island and New Brunswick, which had among the lowest medians, also had the smallest interquartile ranges of wage-earnings (the ranges of differences were between \$39,290 and \$44,320).

^{5.} Among tax filers, there were more women than men (51.8% of tax filers in the 2017 preliminary T1FF were women).

Alberta's wage-earners (\$155,500) had the highest value for the 95th percentile of earnings, followed by Northwest Territories (\$150,100) and Nunavut (\$143,640). Five other provinces and territories (Newfoundland and Labrador, Ontario, Saskatchewan, British Columbia and Yukon) had wage-earning values at the 95th percentile greater than \$120,000.

The territories had the largest proportion of tax filers with wage-earnings during the year (78.0% for Yukon, 80.8% for the Northwest Territories and 81.4% for Nunavut). Nova Scotia (63.2%), Newfoundland and Labrador (63.5%), and New Brunswick (64.3%) had the lowest proportion of tax filers with wage-earnings.

Chart 2 Interquartile range of wage-earnings (including 95th percentile) by province/territory, 2017



Note: The provinces/territories have been sorted, in decending order, by median wage-earnings.

Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family File 2017, Custom Tabulation.

The "mining, quarrying, and oil and gas extraction" and "utilities" industries had the highest wage-earnings

This section focusses on all wage-earnings of T1 tax filers, whether they had one or several employers, according to the industry of their main employer.⁷ Although tax filers may accumulate wage-earnings from multiple employers associated with different industries, all their wage-earnings were assigned to the industry of their main employer.

In 2017, the industry sectors with the highest median wage-earnings were "utilities" (\$97,130) and "mining, quarrying, and oil and gas extraction" (\$94,050). The earnings for the 25th percentile in these two industries (\$65,060 and \$54,320, respectively) were higher than the median wage-earnings for nearly all other industries. The median wage-earnings for these two industries were also higher than the top quartile (P75) of all other industries. According to the Labour Force Survey (LFS), "utilities" and "forestry, fishing, mining, quarrying, oil and gas" had the highest average hourly wages and were also among the highest average for number of actual hours worked.8 Among the subsectors for the "mining, quarrying, and oil and gas extraction" industry, "oil and gas extraction" had the highest median by far, at \$153,860. The vast majority (83.7%) of wage-earners whose main industry subsector was in the "oil and gas extraction" resided in Alberta. In 2017, the industries with the lowest median earnings were

^{6.} Comparing the number of preliminary 2016 tax filers in Nunavut with the population count from the 2016 Census shows a greater proportion of non-filers than in other provinces and territories

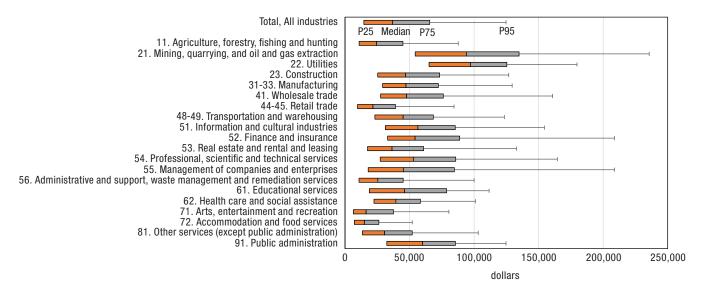
^{7.} See Data sources, methods and definitions for terminology.

^{8.} Caution should be used when comparing the LFS data with the T1FF as some industry sectors are grouped differently. The LFS combines the industries of "mining, quarrying, and oil and gas extraction" (which includes 264,200 people in 2017), "forestry, logging and support activities for forestry" (which includes 48,200 people in 2017) and "fishing, hunting and trapping" (which includes 17,200 people in 2017). See Statistics Canada, Table 14-10-0037 Actual hours worked by industry, annual.

"accommodation and food services" (\$15,000); "arts, entertainment and recreation" (\$16,350); and "retail trade" (\$21,610). According to 2017 LFS data, "utilities" and "forestry, fishing, mining, quarrying, oil and gas" had the lowest rate of part-time workers, while "accommodation and food services" had the highest rate. For unionization, "utilities" had among the highest rate, while "accommodation and food services" had among the lowest. 10

From 2015 to 2017, "health care and social assistance" had the highest growth in the number of wage-earners (from 1,473,200 tax filers to 1,539,100 tax filers) and a small decrease in median (from \$39,670 to \$39,410). "Administrative and support, waste management and remediation services" had the highest decrease in the number of wage-earners (from 895,940 tax filers to 834,800 tax filers) and a small increase in median (from \$25,230 to \$25,450). "Public administration" had the largest increase in median wage-earnings (from \$57,100 in 2015 to \$59,090 in 2016 and \$60,150 in 2017). The territories had by far the largest proportion of wage-earners in the "Public administration" industry (40.2% for Yukon, 40.4% for the Northwest Territories and 47.3% for Nunavut). "Management of companies and enterprises", which is among the industries with the fewest wage-earners, had the highest decrease in median from 2015 to 2017, even though it increased in 2016 (from \$58,600 in 2015 to \$59,610 in 2016 and \$45,170 in 2017). This industry also had the highest fluctuation in number of wage-earners (from 146,650 in 2015 to 125,330 in 2016 and 204,720 in 2017). Caution should be taken as this large fluctuation may be due to changes in reporting or coding methods.

Chart 3 Interquartile range of wage-earnings (including 95th percentile) by industry, 2017



Note: The industries have been sorted in order of NAICS code. The "All industries" category includes wage-earners with unknown NAICS code. Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family File 2017, Custom Tabulation.

Conclusion

This article describes data on annual wage-earnings from the preliminary T1 Family File. Annual median income from wages, salaries and commissions varied considerably by sex, age, province or territory, and industry, but it remained fairly stable from 2015 to 2017. Women had lower median annual wage-earnings than men, and wage-earners in the age groups from 25 to 54 years had higher median wage-earnings than the youngest group of wage-earners. The Northwest Territories, Yukon and Alberta generally had the highest wage-earnings, while the Maritime provinces and Nunavut had the lowest. "Mining, quarrying, and oil and gas extraction", and "utilities" had, by far, not only the highest median wage-earnings, but also the highest 25th and 75th percentile. "Accommodation and food services", "arts, entertainment and recreation", and "retail trade" had the lowest median wage-earnings.

^{9.} Statistics Canada, Table 14-10-0023 Labour force characteristics by industry, annual (x 1,000).

^{10.} Statistics Canada, Table 14-10-0132 Union status by industry.

Data sources, methods and definitions

Data source:

This paper uses the version of the T1 Family File (T1FF) for 2017 that is based on the preliminary databases from the T1 Income Tax and Benefit Return and T4 Statement of Remuneration Paid files. The population in the preliminary version of the T1FF varies slightly from the final T1FF data: it does not capture a certain amount of late tax filers or reassessment. The preliminary T1FF contains approximately 97% of the records used to create the final T1FF. This version of the T1FF also does not include non-filing dependants and non-tax filing spouses of tax filers who may have had earnings during the year.

Because of the nature of tax information, the analysis focusses on all wage-earnings gained in a calendar year and does not take into account employment characteristics that are often used in other studies. For example, it is not possible to draw conclusions according to hourly wage rates, full-time or part-time status of employees, or full-year or part-year employment.

The distribution statistics for wage-earnings change little between the preliminary and final T1FF data. Therefore, preliminary data can help researchers analyze the evolution of market trends in a timelier fashion and can lead to a quicker turnaround in evaluating the labour market effects of policy change. Using the preliminary files does not strongly affect the findings described in this analysis, since the results would vary only slightly if reproduced with the final T1FF data. Many other important variables from the T1FF, such as total and after-tax income of individuals and families, are only available on the final T1FF.

Target population:

The target population is tax filers with wages, salaries and commissions. This target excludes tax filers below the age of 15 years (as of December 31 of the tax year), tax filers that are only self-employed, tax filers who died during the tax year and tax filers who provided a mailing address outside of Canada. The section of this paper that analyzes industries is limited to tax filers with wages, salaries and commissions with an assigned industry (NAICS) based on the employer information on their T4 slip.

Terminology:

Wages, salaries and commissions: This article refers to wages, salaries and commissions as "wage-earnings" and to individuals with wage-earnings greater than \$0 as "wage-earners". Wages, salaries and commissions includes employment pay and commissions as stated on T4 information slips, training allowances, tips, gratuities, and royalties. It also includes tax-exempt employment income earned by registered Indians. All forms of self-employment earnings are excluded. Individuals that have both wage-earnings and self-employment income are included in the analysis, but only their wages-earnings are considered. The components of employment earnings are wages and salaries (line 101 of the T1 form), other employment income (line 104 of the T1 form), and Indian exempt income (derived from the information provided on the Determination of Exemption of an Indian's Employment Income form). Wage, salaries and commissions combines income received from multiple employers.

Median: The median is the value in the centre of a group of values (i.e., 50% of people make above this value and 50% of people make below this value).

Interquartile range: The distance between the 25th and 75th percentile is called the interquartile range. The 25th percentile is the value 25 percentage points below the median, and the 75th percentile is the value 25 percentage points above the median.

P95: The 95th percentile (P95) corresponds to the value below which 95% of the population fall.

Industry: The industries are defined using the North American Industry Classification System (NAICS) for Canada (for more information, see <u>Statistics Canada's industry classification</u>). The term "industry" in this article refers to the two-digit NAICS sector (e.g., sector code 23 refers to construction) and the term "industry subsector" refers to the three-digit NAICS subsector (e.g., subsector code 236 refers to construction of buildings). This article identifies the main industry of wage-earners as the industry on the T4 slip with the

highest wages and salaries (Box 14). The industry can be derived using the employer information on the T4 slip for most wage-earners. The section on industry includes only wage-earners whose T4 slip information was available and sufficient to identify an industry.¹⁰

10. Approximately 5.1% of wage-earners could not be associated with a T4 slip and, therefore, had no industry information. The industry code for an additional 1.3% of wage-earners was not available due to the lack of information.

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Statistics Canada. *Table 14-10-0023 <u>Labour force characteristics by industry, annual (x 1,000)</u>. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301.*

Statistics Canada. *Table 14-10-0132 <u>Union status by industry</u>*. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410013201.

Appendix A

Table 1 Median wage-earnings by age group and sex, 2015 to 2017

Age groups	Sex	2015	2016	2017
All ages	Both sexes	36,740	36,630	36,980
_	Men	43,680	43,210	43,690
	Women	30,850	31,060	31,340
15 to 24 years	Both sexes	11,910	11,790	12,000
25 to 34 years	Men	13,340	13,070	13,380
	Women	10,770	10,760	10,930
25 to 34 years	Both sexes	37,920	37,630	38,130
	Men	44,690	43,990	44,560
	Women	31,750	31,850	32,330
35 to 44 years	Both sexes	50,110	49,970	50,470
	Men	60,730	60,150	60,760
	Women	41,200	41,390	41,730
45 to 54 years	Both sexes	51,970	52,060	52,820
	Men	62,650	62,360	63,370
	Women	43,450	43,820	44,300
55 to 64 years	Both sexes	41,590	41,830	42,080
	Men	49,790	49,770	50,380
	Women	35,140	35,540	35,580
65 to 74 years	Both sexes	10,300	11,310	11,500
-	Men	11,350	12,010	12,270
	Women	9,190	10,580	10,550
75 years and older	Both sexes	450	470	460
	Men	510	510	510
	Women	450	460	430

Note: All amounts are expressed in 2017 constant dollars.

Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family File 2017, Custom Tabulation.

Table 2 Quartiles of wage-earnings by province/territory, 2015 to 2017

		2015			2016			2017			
Province/territory	P25	Median	P75	P25	Median	P75	P25	Median	P75		
Canada	14,300	36,740	65,280	14,420	36,630	64,900	14,630	36,980	65,580		
Newfoundland and Labrador	12,360	33,160	66,920	12,340	32,840	64,910	11,940	32,290	64,350		
Prince Edward Island	12,280	28,410	50,880	12,330	28,510	50,680	12,610	28,870	51,900		
Nova Scotia	12,860	31,960	57,330	13,060	32,000	56,900	12,970	32,110	57,290		
New Brunswick	13,450	30,900	54,770	13,650	31,380	54,790	14,110	31,430	55,140		
Quebec	14,090	34,130	57,780	14,450	34,580	58,480	14,710	34,980	59,130		
Ontario	13,850	37,420	67,410	14,190	37,680	67,320	14,300	37,960	68,020		
Manitoba	15,550	36,050	60,510	15,270	35,750	60,260	15,730	36,190	61,160		
Saskatchewan	16,430	40,240	70,060	15,620	39,030	68,380	16,210	39,580	69,180		
Alberta	19,400	46,170	81,800	18,280	44,140	78,260	18,490	44,470	79,160		
British Columbia	12,360	34,460	63,480	12,510	34,530	63,100	12,810	35,300	64,100		
Yukon	18,290	45,000	76,430	18,780	44,920	76,460	19,570	46,220	77,490		
Northwest Territories	16,080	52,080	99,470	16,620	51,980	97,070	16,410	51,680	96,600		
Nunavut	7,350	29,550	88,850	7,490	30,440	87,610	8,130	30,690	87,310		

Note: All amounts are expressed in 2017 constant dollars.

Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family File 2017, Custom Tabulation.

Table 3 Quartiles of wage-earnings by industry, 2015 to 2017

		2015			2016			2017	
Industry	P25	Median	P75	P25	Median	P75	P25	Median	P75
11. Agriculture, forestry, fishing and hunting	10,370	23,190	43,470	10,620	23,660	43,890	10,920	24,360	44,850
21. Mining, quarrying, and oil and gas extraction	53,640	94,950	137,790	51,460	90,790	131,200	54,320	94,050	134,820
22. Utilities	64,110	95,490	123,990	64,440	96,540	125,150	65,060	97,130	125,330
23. Construction	24,720	46,280	73,770	24,580	45,890	72,540	25,360	46,890	73,270
31-33. Manufacturing	28,580	47,260	72,350	28,740	47,170	72,270	29,110	47,220	72,330
41. Wholesale trade	26,620	46,780	75,140	26,820	47,130	75,750	27,560	47,700	76,150
44-45. Retail trade	9,680	21,480	39,080	9,700	21,540	39,070	9,630	21,610	39,070
48-49. Transportation and warehousing	23,190	45,790	68,920	22,900	44,890	67,890	23,090	45,000	68,440
51. Information and cultural industries	31,440	57,060	86,750	31,600	56,910	86,320	31,190	56,430	85,390
52. Finance and insurance	31,940	53,030	87,220	31,660	52,910	86,490	32,960	54,310	88,710
53. Real estate and rental and leasing	15,590	34,730	58,970	15,990	35,250	59,380	17,390	36,440	60,830
54. Professional, scientific and technical services	25,760	51,530	84,630	26,130	51,580	84,150	27,230	52,920	85,730
55. Management of companies and enterprises	27,640	58,600	106,250	28,780	59,610	107,440	17,980	45,170	84,730
56. Administrative and support, waste management and									
remediation services	10,680	25,230	45,450	10,750	25,240	44,980	10,840	25,450	44,990
61. Educational services	18,860	46,130	78,000	18,590	46,120	78,980	18,810	46,120	78,760
62. Health care and social assistance	22,390	39,670	58,910	22,360	39,590	58,580	22,430	39,410	58,360
71. Arts, entertainment and recreation	6,460	16,410	37,970	6,420	16,410	37,770	6,410	16,350	37,530
72. Accommodation and food services	7,030	14,640	25,670	7,070	14,680	25,660	7,190	15,000	26,210
81. Other services (except public administration)	13,100	29,820	51,110	13,120	30,010	51,070	13,490	30,690	52,110
91. Public administration	27,470	57,100	83,280	33,040	59,090	83,900	32,390	60,150	85,500

Note: All amounts are expressed in 2017 constant dollars.

Source: Statistics Canada, Income Statistics Division, Preliminary T1 Family File 2017, Custom Tabulation.