

# FOMP 10 - Financial Literacy

Note Title

2017-05-06

## Gross and Net Pay

Canada requires businesses to deduct income tax and other deductions such as CPP & EI from workers on each paycheck. Taxpayers are required to self-assess to reconcile the actual amount of payable tax. This is done for every working year and the tax must be reconciled by April 30 of the following year. Heavy penalties are added if this is late and taxes are owing. Fortunately, the way taxes are deducted from paychecks usually puts you in a tax refund position.

From Wikipedia:

Year	Personal Amount	Canadian federal marginal tax rates of taxable income				
2017	\$11,635	\$0 - \$45,916	\$45,916 - \$91,831	\$91,831 - \$142,353	\$142,353 - \$202,800	over \$202,800
	0%	15%	20.5%	26%	29%	33%
2016	\$11,474	\$0 - \$45,282	\$45,282 - \$90,563	\$90,563 - \$140,388	\$140,388 - \$200,000	over \$200,000
	0%	15%	20.5%	26%	29%	33%

British Columbia	\$0 - \$38,898	\$38,898 - \$77,797	\$77,797 - \$89,320	\$89,320 - \$108,460	over \$108,460
	5.06%	7.7%	10.5%	12.29%	14.7%

Contrast with:

Quebec	\$0 - \$42,705	\$42,705 - \$85,405	\$85,405 - \$103,915	over \$103,915
	16%	20%	24%	25.75%
Nunavut	\$0 - \$43,780	\$43,780 - \$87,560	\$87,560 - \$142,353	over \$142,353
	4%	7%	9%	11.5%

So salary should not be your only consideration; how much you get to keep is just as important!

## Canada Pension Plan (CPP)

Currently, the prescribed employee contribution rate was 4.95% of a salaried worker's gross employment income between \$3,500 and \$51,100, up to a maximum contribution of \$2,356.20. The employer matches the employee contribution, effectively doubling the contributions of the employee. Self-employed workers must pay both halves of the contribution, or 9.9% of pensionable income, when filing their income tax return. These rates have been in effect since 2003.

Employment Insurance (EI) - Non-Quebec Employee	2016	2017
Annual Maximum Insurable Earnings	\$50,800.00	\$51,300.00
Employee Contribution Rate	1.88%	1.63%
Employer Contribution Rate	2.632%	2.282%
Annual Maximum Employee Contribution	\$955.04	\$836.19
Annual Maximum Employer Contribution	\$1,337.06	\$1,170.67

CPP and EI are mandatory deductions. Both are social programs that protect workers at old age and loss of employment.

Taxes pay for programs that benefit all citizens and residents of Canada, such as defence, parks, highways, foreign relations, disaster response, legal system, medical care, education, consumer protection, food safety, etc.

<http://civix.ca/wp-content/uploads/2011/11/Federal-Provincial-and-Municipal-Responsibilities-AB.pdf>

The best way to reduce taxable income is using RRSP's (Registered Retirement Savings Plan). You should, if you have the budget, try to save some of your income. Rather than just putting it into a savings account, you put it into a RRSP using term deposits; this will give you a tax refund.

For example: Let's say you have taxable income of \$43,000. You put \$3000 into an RRSP instead of your savings account. The marginal tax rate (BC) @ \$40,000 is .227, so you get a tax refund of

You can use this to pay off bills or invest it in next year's RRSP! Your savings account will not earn you interest.

Let's say you make \$60,000 a year instead. The marginal tax rate is .282, so you get a tax refund of:

- 1) Exercise: Complete the table and create 3 graphs:
- 2) Tax Payable vs Taxable Income
- 3) Marginal Tax Rate vs Taxable Income
- 4) Average Tax Rate vs Taxable Income

Taxable Income is the independent variable  
Choose suitable scales for each graph; they are not the same!

I	P	M	A
Taxable Income	Tax Payable	Marginal Tax Rate	Average Tax Rate
1	0		
2	1639	-75	
3	4639	-75	
4	5639	-256	
5	10639	-1276	
6	11639	-1317	
7	12639	-1316	
8	13639	-1026	
9	14639	-711	
10	15639	-383	
11	18639	622	
12	19639	998	
	20639	1346	
	31639	3944	
	37639	5148	
	38639	5359	
	44639	6721	
	45639	6968	
	75639	15428	
	76639	15715	
	87639	19125	
	88639	19452	
	89639	19780	
	90639	20112	
	105639	25856	
	106639	26241	
	139639	39672	
	140639	40086	
	145639	42271	

$$M_n = \frac{P_n - P_{n-1}}{I_n - I_{n-1}}$$

eg)  $M_2 =$

$$M_{12} =$$

$$A_n = \frac{P_n}{I_n}$$

eg)  $A_2 =$

$$A_{12} =$$

- 5) Determine the tax refund for someone earning \$82,000 who invests \$4,000 into an RESP.
- 6) Determine the tax refund for someone earning \$26,000 who invests \$1,500 into an RESP.

7) How does the average tax rate compare to the marginal tax rate?

8) Would you ever invest using RRSP's? How much?

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Another benefit of RRSP's is that the income generated inside the RRSP is tax deferred until you take it out (usually when you retire). You must pay taxes every year on interest made on your savings account! RRSP's just make cents! (actually dollars)

Note: There are limits to how much you can put into an RRSP every year. If you reach your limit, there are additional tax savings investments: TFSA's and RESP's.