The best Canadian state to live, based on the individual income statistics

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1/26/2019

Background

This is an example of Shiny web app with associated supporting documentation, aiming to answer to the following question:

What is the best Canadian state to live, according to the desired salary?

User can **Enter the desired salary**, and after hitting **Submit**, the dashboard will show number of tax filers per each province which obtained the User inserted salary. In addition, user can see other important information: **Income per Source**, **Income per Range**, as well as three Key Performance Indicator (KPI), namely **Top Income Range**, **Total Number of Tax Filers**, top **Predicted Income** per source.

Both ui.R and server.R are available in the github repository: https://github.com/lilianabraescu/Developing-Data-Products-The-best-Canadian-state-to-live

Data

For this web app, data representing *Individual statistics by tax filing method for all returns filed, economic characteristics, 2014 tax year, Canada Revenue Agency* - recorded by the *Open Data Government of Canada* and released at 2018-06-27 (downloaded on January 25, 2019): https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110004601 were sorted, cleaned and manipulated.

The finalized data file used for this app has 16,635 observations and 5 variables:

- **State** has 12 categories: *AB, BC, MB, NB, NL, NS, NT, ON, PE, QC, SK, YT*.
- **Source.Income** has 7 categories: *Employment, Investment, Pension, Self-employment, Other sourses of income, Multiple sources of income, No income*.

More about variables

- **Income.Range** has 4 categories: *Less than $25,000; Between $25,000 and $49,999; Between $50,000 and $99,999; $100,000 and Above*.
- **Number.Tax.Filler** for 2014 tax year.
- **Average.Income** was used for building reactive output, in order to have a numeric value for income, which can be compared with salary inserted by the user.

```
income <- read.csv("Income_Canada_2014.csv")
str(income)
```

```
## 'data.frame':    16635 obs. of  5 variables:
##  $ State              : Factor w/ 12 levels "AB","BC","MB
##  $ Source.Income      : Factor w/ 7 levels "Employment","
##  $ Income.Range       : Factor w/ 4 levels "$100,000 and
##  $ Number.Tax.Fillers: int  3310 410 2920 800 2760 990 8
##  $ Average.Income     : int  20000 20000 37000 37000 7500
```

App Overview

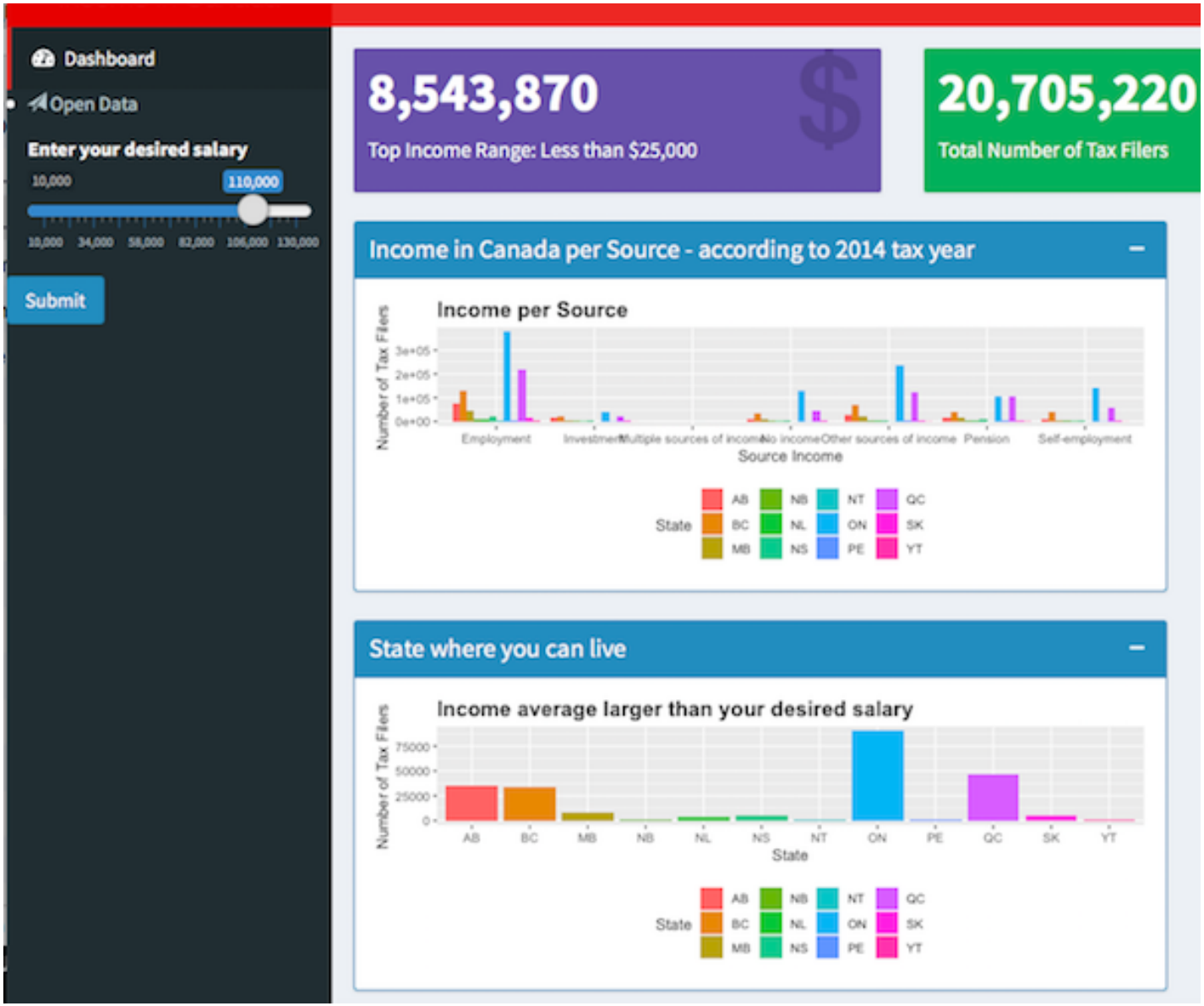

Figure 1: Top 3 Canadian states with income average larger than $110,000