Comparison of Income and Happiness: Evidence from Canada

Dr. Ehsan Latif

Department of Economics

Thompson Rivers University, BC, Canada

Introduction

- Income inequality in Canada has grown over time.

- From 1976 to 2010, the top 20% of Canadian income earners saw an increase of 28.9% in their average market income, while at the same time the bottom 20% of income earners experienced a decline of 22.5% in their average market income (Parliament of Canada, 2013).

Introduction

- A recent OECD report shows that for the period from 1975 to 2007, about 66% of total income growth went to the top 10% of earners in Canada (OECD, 2014).

- An interesting question to ask then is what is the possible impact of such changes in relative income on the happiness and life satisfaction of the Canadian people overall.

Theoretical Framework

- Tunnel Effect: The Hirschman and Rothschild mechanism known as the 'Tunnel Effect' suggests that a rise in income inequality may signal upward mobility;

- Improved expectations about future income will make people feel happier.

Theoretical Framework

- **Relative Deprivation:** According to this theory, proposed by **Runciman (1966)**, a rise in income inequality will cause an increase in relative deprivation which in turn negatively impacts life satisfaction.

- It becomes important to conduct an empirical study to examine the nature of this relationship more closely.

Literature Survey

- Using a sub -set of large German Panel Data (GOSEP), Ferrer-i-Carbonell (2005) found that the average income of the reference group had a significant negative impact on an individual's happiness.

- McBride (2001), using the U.S General Social Survey (GSS) data, found a significant negative impact of relative income on an individual's happiness.

Literature Survey

- Using data from the U.S. National Survey of Families and Households, Luttmer (2005) found that individuals' self-reported happiness was negatively affected by the earnings of the others in their same neighbourhood.

- Caporale et al. (2010), using data from the European Social Survey, found that for the entire sample of nineteen European countries, reference income negatively correlated with happiness and life satisfaction.

Literature Survey

- However, the study also found that there was a positive impact of reference income on individual well-being for a sample from the East European countries.

- In the context of Canada, Barrington-Leigh and Helliwell (2008) found no evidence of any significant impact of a neighbour's income on one's own happiness at the municipal level, but did find a significant negative effect at higher geographical levels.

Literature Survey

- Using micro level data from the Canadian Community Health Survey (2007 and 2008), Sharpe et al. (2010) found that relative income, measured by the average household income of a health region, had a significant negative income on individual happiness.

Contribution of this Study

- This study uses the Canadian National Population Health Survey (NPHS) which is different from the dataset used by Barrington-Leigh and Helliwell (2008) and Sharpe et al. (2010).

- Further, this study employs reference groups that are different from Barrington-Leigh and Helliwell (2008).

Methodology

- This empirical study is based on Canadian data drawn from the National Population Health Survey (NPHS) and covering a period from 1994 to 2009.

- The dependent variable 'Happiness' has five ordinal categories: 1) so unhappy that life is not worthwhile, 2) very unhappy, 3) somewhat unhappy, 4) somewhat happy, and 5) happy and interested in life.

Methodology

- This research uses two measures of income: Own household income and income of the reference group.

- The present study created a reference group containing all individuals with a similar education level that are inside the same age bracket and residing in the same province.

Methodology

- There are two specifications of the reference group income: Average income of the reference group and the difference between own household income and the average income of the same reference group.

Methodology

- Because of the ordinal nature of the dependent variable 'Happiness (HAP)', an Ordered Probit Method is used to estimate a happiness equation.

- The latent dependent variable happiness (HAP*) is described in the following ways:

➢ $HAP_{it}^* = Xit\beta x + \beta_1 Y_{it} + \lambda t + \delta_j + \varepsilon$

Methodology

- **X** is a vector of observable individual-specific explanatory variables, such as gender, age, marital status, education, housing wealth, health, and employment status.

Results

➢ <u>Average Income of the reference group as measure of comparison income</u>:

- Own household income has a significant positive impact on happiness.

- Average income of the reference group negatively impacts individual happiness.

Results

➢ <u>Difference between own household income and average income of the reference group as a measure of comparison income</u>:

- The coefficient of the difference is positive and significant, suggesting that the larger one's own income in comparison to the income of the reference group, the happier that individual is.

Results

➢ <u>New reference group containing all the individuals with a similar education level, inside the same age bracket, living in the same province and the same gender</u>.

▪ The reference group income has a significant negative effect on individual happiness.

Results

- A difference between own household income and the average income of the reference group positively impacts an individual's happiness.

Conclusion

- Canadian data suggests a continuing shift of income distribution patterns in favour of the top 10% of income earners.

- Such a change in relative income position is expected to have a negative impact on the happiness of the rest of the Canadian population.

Conclusion

- The Canadian government may thus consider using tax and transfer policies to reduce any growing disparity in this income distribution pattern.