

Can Money Buy Happiness?

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ECON 312H: Microeconomic Theory - Honors Enrichment

INTRODUCTION

- We have all heard of the saying, “Money doesn’t buy happiness.” Even though we tell ourselves this is true, we often find ourselves wanting more money.
- The question being explored here is to what extent can money buy happiness? In other words, at what point does a country reach maximum happiness when considering its income level?
- There is a consensus that happiness greatly increases as income rises but at a diminishing rate. This is what my regression results confirm.

BACKGROUND

- Bruni discusses the freedom effect of wealth on happiness which reflects unsurprising similarities to Maslow’s hierarchy of needs.
- Cuñado and Pérez de Gracia find that education both directly and indirectly affect happiness through increased self-actualization.
- My regression takes an aggregate look at happiness levels of 132 countries to determine how GDP per capita affects average happiness after accounting for standard control variable.

DATA and MODEL

- The main regression model is:

$$HAPPY_i = \beta_1 + \beta_2 GDP_i + \beta_3 GDP^2_i + \beta_4 EDU_i + \beta_5 UE_i + \beta_6 LIFE_i + \beta_7 CO2_i + \beta_8 GINI_i + u_i$$

where:

- HAPPY: Happiness score from the 2018 World Happiness Report. This is the main dependent variable in the regression.
- GDP: 2018 GDP per capita (in thousands of dollars).
- GDP²: This is simply the GDP variable squared, included to capture a potential diminishing effect of GDP on income.
- EDU: 2018 average total years of education for adult population
- UE: 2018 unemployment rate as percentage of labor force
- LIFE: 2018 life expectancy at birth
- CO₂: 2014 (most complete and recent) CO₂ emissions (metric ton/capita)
- GINI: Most recent GINI Index estimate that measures income inequality

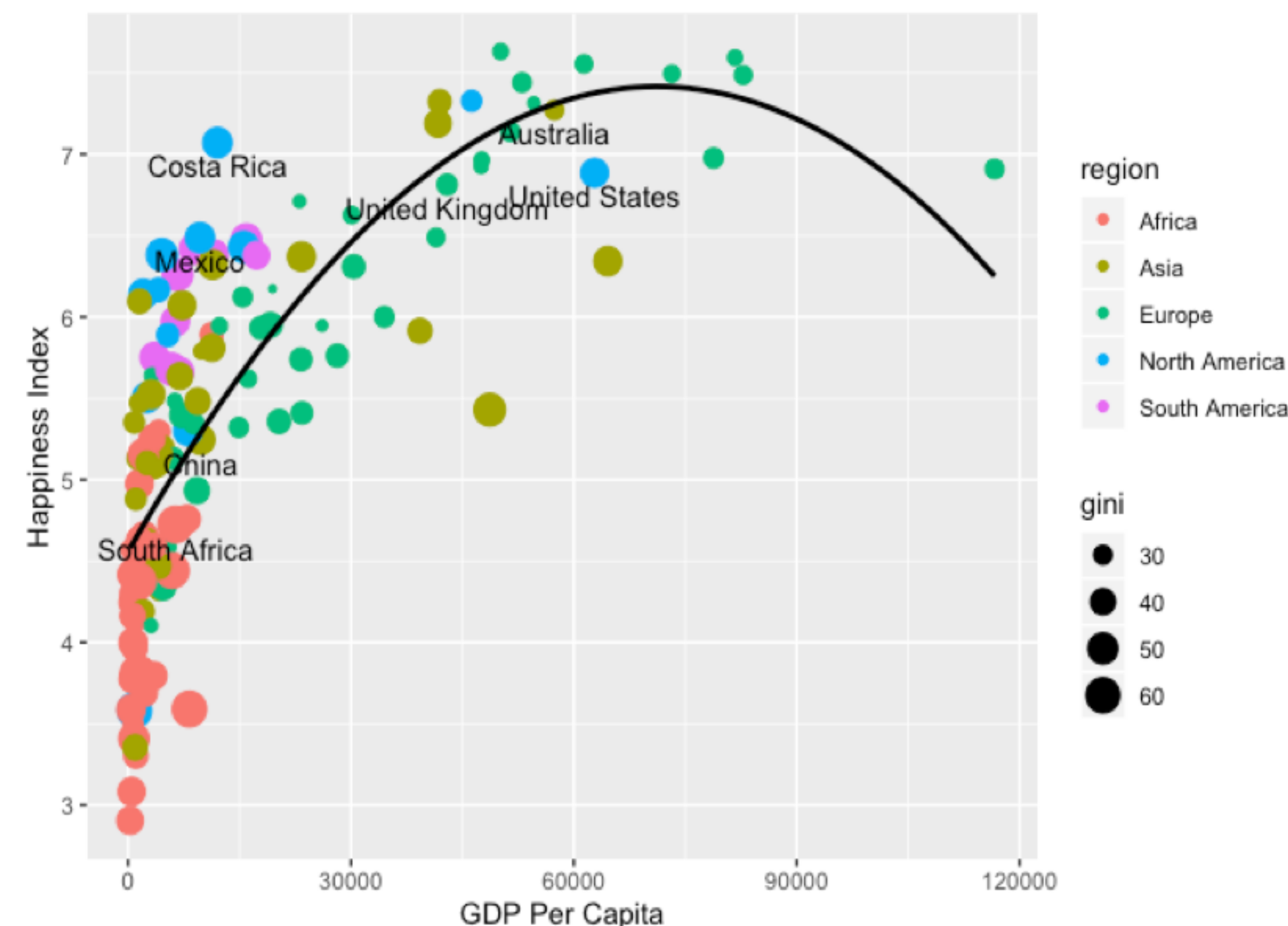


Figure: Impact of GDP Per Capita on Happiness Level

DISCUSSION of RESULTS

Variable	Coefficient	Std. Error
(Intercept)	.3527	.8432
GDP	.0344 ***	.0096
GDP ²	-.0002 **	<.0000
EDU	.0528 *	.0305
UE	-.0305 ***	.0115
LIFE	.0557 ***	.0121
CO ₂	.0132	.0191
GINI	.0076	.007

*: significant at 10%, **: at 5%, ***: at 1%

- Income has a positive but diminishing impact on happiness level; parameter estimate on GDP is positive but estimate on GDP² is negative, both are significant.
- Results suggest that happiness is maximized at income level \$80,298.
- Education attainment and life expectancy are positively related to happiness while unemployment rate is negatively related to happiness, all are significant.

CONCLUSION

- It is evident that money itself does not provide happiness directly, however, money certainly increases happiness at a diminishing rate.
- If continued, I would have liked to perform a similar evaluation using counties of the US as data points.