Student Replication for "Money Illusion"*

Terry Tu, Jingyi Shen, Yaning Jin

February 12, 2024

Money illusion as the tendency to overlook the impact of inflation which focusing on nominal values identified by Shafir, Diamond, and Tversky (1997). This study reproduce four scenarios from research where participants face financial decisions influenced by money illusion in various situations such as earnings, transactions, and contracts,under the background of Brazilian context, where in various situations such as transactions, transactions and earnings that participants face financial decisions influenced by money illusion. The cross-sectional and pre-registered research is based on 372 Brazilian participants in mobile phones or computers by using chi-square tests assessed money illusion. The results indicate that participants' tend to choose financially advantages opportunities which influenced by the framing of terms (real, nominal, or neutral). After we replicate across all four scenarios, the findings suggest that the money illusion effect transcend cultural boundaries, supported by replication within a different background of cultural context.

Table of contents

1 Introduction

Money illusion refers to a cognitive bias where individuals tend to assess the value of money solely based on its nominal value. The real value of money is the nominal value of money plus

*Code and data supporting this analysis are available at https://github.com/TEJMaster/Student-Replication-For-Money-Illusion.git the inlation rate. thereby overlooking the impact of inflation. This bias can lead to various consequences, such as reluctance to sell assets due to perceived nominal losses, misunderstanding wage increases, and more.

The influential 1997 study by Shafir and colleagues(Shafir, Diamond, and Tversky 1997) has significantly impacted on economic psychology and behavioral economics which introduced the concept of money illusion. The authors argued that money illusion could explain phenomena like inflexible wages and contracts which contrary to traditional economic theories assuming rationality in decision-making.

When shopping, people often ignore information that is clearly distorted by inflation and impulsively raise the psychological price above the actual price, which is the money illusion. Money illusions can lead potential buyers to believe that house prices will always rise, and thus that real estate is a good investment. Robert J. Shiller, a professor of economics at Yale University in the United States, believes that it is the false logic caused by the monetary illusion that led to the real estate bubble, "people mostly only remember the price of a few years ago when they bought a house, but often forget the price of other goods, andmistakenly believe that house prices have risen more than other prices." Thus exaggerating the investment potential of real estate"(Shiller, n.d.).

For decades, economists have debated whether the money illusion is real or, more generally, whether there are irrational influences in economic transactions. Milton Friedman, the famous monetary theorist, assumed that employers and consumers were rational, paying wages or buying goods with inflation in mind. In other words, they can accurately judge the true value of a commodity(Friedman 2010).

Recognizing the importance of testing theories in different contexts for generalizability, our study aims to investigate the presence of the money illusion effect in a Brazilian cultural setting. Specifically, we aim to replicate four problems proposed by Shafir and colleagues (Shafir, Diamond, and Tversky 1997)and examine if Brazilians exhibit money illusion biases.

In this paper, our hypothesis are across all four problems: in problem 1, individuals inclined to perceive wage increases significantly in real term even if it is small in nominal terms; In problem 2, individuals will evaluate house deals based on nominal gains rather than real gains; In problem 3, participants will be less likely to purchase new items rather than second hand items when prices increase nominally; In problem 4, individuals might prefer riskier contracts in real terms over safer options presented in nominal terms.

2 Data

Reference

Friedman, Milton. 2010. *Milton Friedman on Economics: Selected Papers.* University of Chicago Press.

Shafir, Eldar, Peter Diamond, and Amos Tversky. 1997. "Money Illusion." *The Quarterly Journal of Economics* 112 (2): 341–74.

Shiller, Robert J. n.d. "Speculative Asset Prices." *American Economic Review*. https://www.aeaweb.org/articles?id=10.1257%2Faer.104.6.1486.