# Money buys happiness in constant payments 

## El dinero compra la felicidad en pagos constantes

Alejandro López-Rousseau<br>Madrid - Spain<br>Cristián Córtes Silva<br>Pontificia Universidad Católica de Chile


#### Abstract

Nobody doubts that money buys at least some happiness. The question is how and why. This study answers that question. Some university students were asked to imagine they would win a one million dollars prize payable in five yearly payments, and to choose what plan -an increasing, constant, or decreasing payments plan- would make them happier. They were also asked why, and what would they spend the money on. The findings suggest that money buys happiness in constant payments because of better expense management on basic goods. And they provide converging evidence that money promotes happiness when spent on others.


## Resumen

Nadie duda que el dinero compra al menos algo de felicidad. La pregunta es cómo y por qué. Este estudio responde esa pregunta. Se pidió a algunos estudiantes universitarios que imaginaran ganar un premio de un millón de dólares pagable en cinco pagos anuales y que eligieran qué plan -un plan de pagos crecientes, constantes o decrecientes- los haría más feliz. También se les preguntó por qué y en qué gastarían el dinero. Los hallazgos sugieren que el dinero compra la felicidad en pagos constantes por una mejor gestión de gastos en bienes básicos. Y proveen evidencia convergente de que el dinero promueve la felicidad cuando se gasta en otros.

Fecha recepción: 14/07/10 - Fecha aceptación: 17/11/10
Correspondencia: Alejandro López-Rousseau
Madrid - Spain
e-mail: lopezrousseau@yahoo.com

Key words: Happiness, Money, Rationality, Adaptiveness Palabras clave: Felicidad, Dinero, Racionalidad, Adaptatividad

## Money Buys Happiness in Constant Payments

Money buys happiness. To some, as people get richer, they also get happier (Frey, 2008; Stevenson \& Wolfers, 2008). To others, only to a point beyond which people do not get happier as they get richer (Easterlin, 2005; Kahneman, Krueger, Schkade, Schwarz, \& Stone, 2006). But to all, money buys some happiness. The question is how and why. The present report answers this question.

The prevalent view on the money-happiness relationship is the so-called Easterlin paradox (Easterlin, 2005), according to which as people get richer, they also get happier but just to a point beyond which people do not get happier as they get richer. Easterlin found that as the countries' gross domestic income (GDI) per capita increases, the average life satisfaction of its people increases as well. But beyond a certain GDI, life satisfaction does not increase anymore. That is, poor countries' people get happier as they get richer, but once they get rich, poor countries' people do not get even happier as they get even richer.

Japan is an example of the Easterlin paradox. Twenty years later, its people's income was far bigger than right after the war. However, its people's satisfaction was not more but less than before. And although now Stevenson and Wolvers (2008) claim to have found that there is no GDI limit to life satisfaction increases, this conclusion would only add to the premise of this report, that is, money buys happiness.

Recently, Baucells and Sarin (2008) proposed a model that explains the Easterlin paradox. That is, why beyond a point, more money does not buy more happiness. And as importantly, how it would. The model relies on three factors, namely, individual adaptation, social comparison and biased projection. Briefly, according to the model, people do not get happier as they get richer because they rapidly adapt to new riches, suddenly compare to other richies and wrongly project their present riches. Consequently and unknowingly, people overrate happiness bought by money, overspend money at the beginning of their planning, and do so on luxury goods. However, if people would consider those factors, spending money not at decreasing but increasing rates and not on luxury but basic goods, more money would indeed
buy them more happiness. The expected utility of expanding consumption would be maximized, according to the model.

A lottery winner is an example. At first, going from fairly poor to fairly rich makes her very happy. So she starts buying expensive stuff she could not afford before, which also makes her very happy. However, soon enough buying yet another Gucci does not make her very happy but just happy. Being rich and buying expensive is now not extraordinary but ordinary. This is individual adaptation. In fact, she goes back to being as happy as always. Or even less, as now she does not compare to her old fairly poor neighbors but to her new fairly rich neighbors. Whereas before her old Fiat seemed as good as their Ladas, now her new Ferrari seems not as good as their Lamborghinis. This is social comparison (see Boyce, Brown, \& Moore, 2010). And finally, having spent most money on luxury and at first, at last she is not as rich nor as happy as she anticipated. This is biased projection.

Baucells and Sarin's (2008) is a prescriptive analytical model of what people should optimally do to buy happiness with money. What is missing is a descriptive empirical test of what people would actually do to buy happiness with money. In fact, would people spend money at decreasing rates as the model predicts? Or would people spend money at increasing rates as the model prescribes? Or otherwise, would people spend money at constant rates as the model does neither predict nor prescribe? And be it as it may, why?

The following study addresses the previous issues by asking people whether spending money at increasing, decreasing or constant rates would make them happier. As in most studies, the scenario is counterfactual (see Swann, Gómez, Dovidio, Hart, \& Jetten, in press). But there is no reason to expect that people would use other spending strategies in reality. People tend to say what they mean and to do what they say. In fact, preferences and choices are equated in economics, as preferences are regarded as hypothetical choices, and choices as revealed preferences. As surveys consistently show, stated preferences are valid indicators of actual choices. Elections are an example.

## Method

Sixty-nine volunteers ( 51 women and 18 men, $\mathrm{M}_{\text {age }}=20$, range $=17$ to 23 ), properly informed and protected undergraduate students at the Pontificia

Universidad Católica in Santiago de Chile, participated in this study conducted in Spanish. A typewritten page contained the instructions and items for the participants, who responded on it individually but all together in a classroom during a class hour.

Participants were asked to imagine they would win a one million dollars prize payable in five yearly payments, and to choose which of three payment plans would make them happier. Each plan corresponds to one of the spending strategies above, namely, increasing as the model prescibes, decreasing as the model predicts, and constant as the model does not prescribe nor predict. Choosing the increasing or decreasing plan would respectively confirm the model's prescription or prediction, whereas choosing the constant plan would disconfirm both of them.

Figure 1. Yearly payments by payment plan


Figure 1 illustrates the yearly payments by payment plan. The Increasing Payments plan would pay them 100, 150, 200, 250, and 300 thousand dollars yearly. The Constant Payments plan would pay them 200, 200, 200, 200, and 200 thousand dollars yearly. And the Decreasing Payments plan would pay them $300,250,200,150$, and 100 thousand dollars yearly. The three payment plans were presented in a table, and their order was counterbalanced across
participants to avoid primacy or recency effects. The plans were also labeled $\mathrm{A}, \mathrm{B}$ and C from first to last to avoid positive or negative semantic effects.

In addition, participants were asked why the chosen payment plan would make them happier in order to gain some insight into the motives and reasons of their choice. And participants were also asked what would they spend the money on in order to gain some insight into the nature of their spending.

## The questionnaire read as follows:

The purpose of this questionnaire is to explore the relationship between money and happiness. To this end, briefly answer the three following questions, please. Thanks.

Imagine you would win a 1 million dollars prize payable in five yearly payments.

1. What payment plan would make you happier? Please answer by checking plan $\mathrm{A}, \mathrm{B}$ or C in the table below, which shows the yearly payments in thousands of dollars that you would be paid in each case.

|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan A | 100 | 150 | 200 | 250 | 300 | 1,000 |
| Plan B | 200 | 200 | 200 | 200 | 200 | 1,000 |
| Plan C | 300 | 250 | 200 | 150 | 100 | 1,000 |

2. Why? Please answer below.
3. What would you spend the money on? Plaese answer below.

After all participants answered the questionnaire, they were properly debriefed about the study.

## Results and Discussion

About two thirds of the participants (64\%) chose the Constant Payments plan, and one third either the Increasing Payments ( $17 \%$ ) or Decreasing Payments (19\%) plan, $\chi^{2}(2, \mathrm{~N}=69)=28.23, \mathrm{p}<0.001$. That is, they chose constant
over increasing and decreasing payments in a proportion of three to one, respectively. These results disconfirm both the model's decreasing payments prediction and increasing payments prescription. Alternatively, these results indeed indicate that money makes people happier when paid in constant payments.

As for why, about nine in ten of the participants (88\%) who chose constant payments said they would make it easier for them to organize their spendings, versus about one in ten of the participants ( $12 \%$ ) who chose either increasing or decreasing payments, $\chi^{2}(1, \mathrm{~N}=69)=19.56, \mathrm{p}<0.001$. Therefore, these results also indicate that money makes people happier when paid in constant payments because of a better expense management.

And as for what they would spend the money on, given their first unique answer, about eight in ten of all participants (84\%) would spend money on basic goods, mostly on family and education, whereas only about two in ten participants ( $16 \%$ ) would spend money on luxury goods, mostly on travelling, $\chi^{2}(1, \mathrm{~N}=69)=32.01, \mathrm{p}<0.001$. Moreover, given their other answers, almost half of all participants ( $46 \%$ ) would also spend money on charity. These results thus indicate that money makes people happier when spent on basic goods.

In sum, these findings indicate that money buys happiness in constant payments because of better expense management on basic goods. Baucell and Sarin's model (2008) does not predict nor prescribe these findings. Contrarily, the model predicts that money apparently buys happiness in decreasing spending on luxury goods, prescribes that money actually buys happiness in increasing spending on basic goods, and both because of individual adaptation, social comparison and biased projection.

It could be argued that these findings only falsify the model's prediction but not the model's prescription as what people should do cannot be falsified by what people indeed do. However, both rely on the same factors. Therefore, how could the prediction be wrong and the prescription right for the same reasons? Moreover, constant payments and expense management may not be optimal or rational to Baucells and Sarin (2008), but as shown by these findings, constant payments and expense management are really satisfacing and adaptive to people.

Finally, a recent study shows that spending money on others promotes happiness (Dunn, Aknin, \& Norton, 2008). The present findings provide converging evidence that money makes people happier when spent on
relatives and strangers. As one participant literally said, "I would only use the necessary to give my family what is needed to live comfortably, but without luxury nor in excess, and I would use the rest to finance opportunities for people who need it, that is, people who for some reason or other did not or do not have my same opportunities; for example, I would pay for the education of poor people." This is happy news for hard times.

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