

# **How Effort Changes Subjective Valuation of Money**

## **SHORT ABSTRACT**

Technological advancements have changed the way how people earn money. Workers participating in the gig economy can link their income to specific tasks. This research shows that individuals value money more if it was earned from a cognitively or physically difficult task as compared to an easy task. That is, individuals believe hard-earned money has greater subjective value and greater exchange value compared to easy-earned money. Hard work makes money seem more special, and the perceived specialness of the money is conflated with greater value. The greater subjective valuation of hard-earned money has behavioral consequences: individuals are less likely to spend hard-earned money when other forms of payment are also available. Because hard work magnifies the value function of a reward, wins and losses seem greater, causing greater retention of hard-earned money when facing a risky investment but lower retention when facing an investment with guaranteed returns.

## LONG ABSTRACT

For many workers, disparities between effort and compensation are more salient than ever before. Enabled by online platforms such as Uber, DoorDash, and TaskRabbit, around 1/3 of the American workforce are paid for gigs—discrete, short-term job contracts (Anderson et al., 2021; McFeely & Pendell, 2018). For gig workers, income is clearly linked to a specific origin. For example, money earned from a particularly difficult Uber ride may feel different to the driver than money earned from an easier ride. In this work, we explore whether the way in which money was earned shapes how it is valued. We propose that the perceived magnitude/value of hard-earned money is greater than easy-earned money.

The idea that how money is earned might impact the value of money is consistent with work showing that a source can imbue objects with a special essence or aura (Newman & Dhar, 2014). For example, some objects are special because they were owned by a significant person in the past (Newman & Bloom, 2014). Similar to objects, the history of money can also make it special: people avoid using money with a negative history (Stellar & Willer, 2014; Tasimi & Gelman, 2017) and individuals try to remove this negative “tag” (Imas et al., 2021; Levav & McGraw, 2009; Uhlmann & Zhu, 2013). However, past literature has not definitively explored how effort may change the subjective value of hard-earned money.

Difficult tasks demand more effort from a worker (Brehm & Self, 1989). Though much of the economic literature describes effort as a cost to an individual, effort can be a source of value (Cacioppo & Petty, 1982; Csikszentmihalyi, 1990) and virtue (Inzlicht et al., 2018; Mirels & Garrett, 1971). Effort also changes the way people view the results of work (e.g., a prize). Effort justification and contrast effects propose that a result is viewed more positively after engaging in a negative task (Aronson & Mills, 1959; Stagner & Zentall, 2010) and related work suggests that effort can even increase attachment towards objects (Belk, 1988; Norton et al., 2012; Shu & Peck, 2011; Prahalad & Ramaswamy, 2004).

More recent research suggests that perhaps the perceived value of money earned through hard work may be greater than the value perceived from easy work. For example, spending income from hard work is associated with greater pain of payment (Bagchi & Block, 2011; Soster et al., 2014), earning an object through positive performance makes individuals value it more (Loewenstein & Issacharoff, 1994), and participating in a difficult cause-related task makes individuals donate more to the cause (Olivola & Shafir, 2013). Yet, this work does not examine how they subjective value of money may change with effort.

Our studies show that people value hard-earned money more than easy-earned money because it is perceived as more special. Further, we do not find evidence that results can be explained by greater subjective valuation due to psychological attachment, the perceived virtuousness of how the money was earned, a greater desired compensation, and a contrast between the unpleasantness of hard work and the positiveness of reward, post hoc effort justification, and affective tagging.

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