



The Dilemma of Dirty Money

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Abstract

Money is generally seen as good, but what about when it is morally tainted? Does this affect whether people want money or how they would spend it? In this article, we review a nascent literature on "dirty money" and then organize these findings using a framework that formalizes the idea that dirty money creates a valuation conflict because it is both "good" (the money part) and "bad" (the dirty part). To show how this conflict is adjudicated, we draw on the self-control literature, which provides a way to think about how dueling impulses come into being and wax and wane over time until one prevails. We conclude by outlining promising directions for future research and considering their broader implications for the field.

Keywords

affective science, decision-making, development, individual differences, money, morality, value-based choice

In May 2019, the Metropolitan Museum of Art ("the Met") announced that it would no longer accept gifts from one of the most philanthropic families in modern times: the Sacklers (Harris, 2019). This decision represented a dramatic about-face because for years, the Met had gratefully accepted major contributions from the Sackler family, even as the Sacklers amassed a multibillion-dollar fortune through sales of opioids, which more than 100 Americans overdose on and die from every day.

Here, we suggest that the dilemma of "dirty money" opens a fascinating window onto a real-world problem that can stimulate new, interdisciplinary psychological science. We begin by providing an overview of a nascent literature investigating the conditions under which people and organizations (such as the Met) would want dirty money and how they would spend such money if they had it (perhaps like the Sacklers). Inspired by these findings, we next explore how dirty money represents a valuation conflict and consider how a framework from the literature on self-control provides a way to organize existing research and plan new research. We conclude by outlining promising directions for future work.

A Timeless Issue

The idea that money can be dirty has been with us for thousands of years. For example, in 70 AD, the Roman emperor Vespasian instituted a "urine tax." His son lambasted him for accepting dirty money, to which Vespasian famously demurred, picking up a gold coin and saying, "Pecunia non olet" ("Money doesn't stink").

This adage suggests that the value of money is not tainted by its origins, but decades of research have revealed that an object's value is often influenced by its history (e.g., Bloom, 2010; Friedman, Neary, Defeyter, & Malcolm, 2011; Gelman & Echelbarger, 2019; Nemeroff & Rozin, 1994; Rozin, Grant, Weinberg, & Parker, 2007; Rozin, Millman, & Nemeroff, 1986). For example, Hitler's personal copy of an English dictionary is considered to be more noxious than a copy of *Mein Kampf* (Fedotova & Rozin, 2018), indicating that an object's origins can alter its value. Might money be an exception to this rule? After all, money—unlike anything else in the world—is designed to be fungible (but see Uhlmann & Zhu, 2013).

To address this question, Tasimi and Gelman (2017) asked research participants to imagine how much they would want money offered by different people and acquired in different ways. Participants consistently reported that they would want stolen money the least—even when compared with nonstolen money offered by someone who stole an equivalent (but different) sum of

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money. Moreover, stolen money was considered just as undesirable as money that was sneezed on, and in some cases, it was considered worse (for related evidence, see Flusberg & LaPlace, 2019). Thus, money can be dirty and hence devalued for all sorts of reasons, but what seems to make it especially dirty is when it is morally dirty.

In recent years, a growing number of psychologists have directed their attention to this form of dirty money (i.e., money earned in a manner that directly or indirectly harmed other people) in research investigating (a) whether people would want dirty money and (b) how they would spend it if they had it (for a review, see Gasiorowska, 2019). Prior work has shown that people are less motivated to earn dirty money than clean money and that they believe that dirty money has less purchasing power than clean money (Stellar & Willer, 2014). What is more, new research indicates that brain regions implicated in valuation are less activated when people are receiving dirty money (Crockett, Siegel, Kurth-Nelson, Dayan, & Dolan, 2017). Given these findings, it should come as no surprise that people would spend clean and dirty money differently (e.g., Chen, Chen, & He, 2017; Kardos & Castano, 2012). For example, participants reported that they would spend clean money on something such as dinner at a restaurant but that they would spend dirty money on something such as a donation to charity (Tasimi & Gelman, 2017). This result is consistent with other work showing that money acquired under negative circumstances is more likely to be spent on virtuous than on hedonic causes (e.g., Levav & McGraw, 2009; Zelizer, 1994).

Given this nascent body of work, it seems that people disproportionately devalue dirty money and, if they happen to have it, choose to spend it in virtuous ways—but why? We propose that such responses can be organized into a framework that brings to light the idea that dirty money represents a valuation conflict because it is both good (the money part) and bad (the dirty part). In the next section, we adopt a framework from the literature on self-control that captures this idea of dueling impulses and formalizes how these impulses wax and wane over time until one prevails. We propose that this framework can help illuminate past work on dirty money and inspire future research on it as well.

A Self-Control Framework

Here, we advance a framework for understanding dirty money that is based on the idea that different valuations compete within an individual, that these valuations are guided by good–bad discriminations, and that it is this competition that gives rise to motivated behavior (see Gross, 2015). Dirty money, in this sense, represents an

instance of a valuation conflict because it involves the concurrent activation of two (or more) valuations with conflicting action impulses (e.g., a valuation that cares about materiality may think "good," whereas a valuation that cares about morality may think "bad"). The process model of self-control (Duckworth, Gendler, & Gross, 2014) strikes us as a useful way to think about the psychological processes that may support the resolution of any valuation conflict by considering a *situation-attention-appraisal-response* sequence (cf. Gross, 1998).

To illustrate how the process model of self-control works, imagine that you are trying to lose weight, and after a long workout, you return to your apartment to discover that your roommate has baked brownies. One valuation that cares about hunger may cause you to think "good" (how good they will taste!) while another valuation that cares about health may cause you to think "bad" (how fattening they will be!). This valuation conflict—like any other—may be adjudicated passively (the stronger valuation wins), or a "higher-order" valuation (e.g., one that cares about identity; see Berkman, Livingston, & Kahn, 2017) may be enlisted that enhances or suppresses one or both of these "lower-order" valuations until one wins. The strength of these hierarchically arranged valuations is likely to vary as a function of context, particularly whether a decision is made in private or in public (e.g., caring about being a healthy eater in the case of dietary self-control). Interestingly, existing research on dirty money has typically studied people's decisions in private settings (e.g., Amazon Mechanical Turk, private computer stations or testing rooms). We suspect that concerns about reputation are important when one makes decisions about dirty money, but it is striking that people continue to devalue dirty money even when others are unaware of their

The process model of self-control posits that strengthening one valuation, weakening another, or strengthening one while weakening another can shift the balance between two conflicting valuations. To illustrate, in the case of the brownies, modifying one's situation (e.g., avoiding the kitchen), attention (e.g., avoiding looking at the brownies), appraisal (e.g., thinking about how brownies are fattening), or response (e.g., not eating the brownies) can all shape the adjudication of this conflict. It should be noted that this situation-attention-appraisal-response sequence spirals over time in an iterative process and builds or diminishes in strength until a conflict is resolved.

Turning back to the dilemma of dirty money and how it could benefit from the process model of self-control (see Fig. 1), think back to the Met. Recall that, for decades, the Met accepted money from the Sacklers until they decided they no longer would. What changed?

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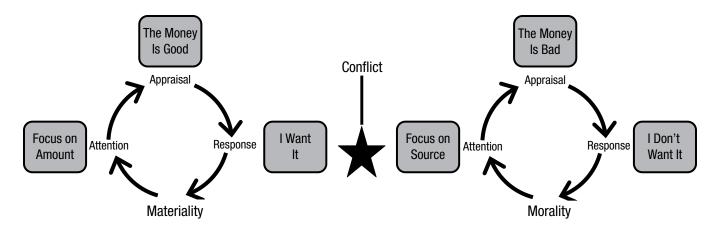


Fig. 1. The process model of self-control as applied to the dilemma of dirty money. In this model, two concurrently activated valuations with conflicting impulses (materiality and morality) develop in an iterative cycle until one valuation wins out.

A precipitous decrease in the value of money is unlikely to be the operative factor here. Instead, people were protesting at institutions that accepted Sackler money (Moynihan, 2019), and other prominent museums announced that they would no longer accept money from the Sacklers (Harris, 2019). It is therefore possible that the Met's attention may have focused on the source of the Sackler family's money rather than the amounts the Sacklers were known to give (the reverse may have been true up until this point). Moreover, their appraisal of the money may have shifted from "good" to "bad," which, in turn, drove their response to reject further gifts from the Sacklers (for an illustration of this potential process, see Fig. 2).

Using this framework, we might predict that the more people attend to the "dirtiness" of money, the more negative their appraisal of it should be. And indeed, research we previously described suggests that the more closely dirty money is implicated in a moral

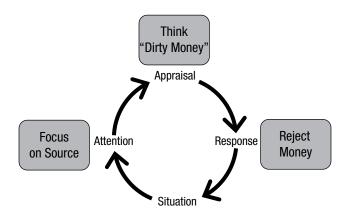


Fig. 2. Examples of strategies that can strengthen a morality valuation in the dilemma of dirty money.

misdeed, the more attention people pay to it and, thus, devalue it (Tasimi & Gelman, 2017). Our framework also makes the prediction that appraisals guide responses. Consistent with this prediction, earlier work shows that the greater the guilt people report they would experience from acquiring dirty money, the less likely they would be to spend such money (Kardos & Castano, 2012). Moreover, existing research supports yet another prediction made by our framework; specifically, that negatively appraised money would be spent in ways that do not make people feel any worse (e.g., people would spend negatively appraised money on virtuous causes; see Levav & McGraw, 2009). Given this preliminary yet promising support, we next consider how our framework offers a principled vision for future research.

Future Directions

Thus far, we have (a) highlighted the timeless issue of dirty money and (b) provided a framework for thinking about the psychological processes that govern the resolution of this kind of dilemma. We turn now to an exploration of how this framework might shed light on the microtemporal (seconds to minutes) and macrotemporal (months to years) dynamics of this valuation conflict and how these dynamics may vary across individuals.

A cognitive perspective

At the heart of our framework is the idea that dirty money creates a valuation conflict. But what distinguishes dirty money from other valuation conflicts that involve the clash between materiality and morality (e.g., behavioral economic tasks such as the ultimatum game)? And how is it that people adjudicate between these two

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valuations (materiality and morality) when they are in conflict? That is, does one valuation (materiality) have to be inhibited (e.g., Buckholtz, 2015), or might the two valuations be integrated into overall subjective value (e.g., Berkman, Hutcherson, Livingston, Kahn, & Inzlicht, 2017)? From our point of view, advances in mouse-tracking methods would be informative in answering these two questions (see Freeman, 2018). These methods, which hold the power to expose the microstructure of real-time decisions, can (a) shed light on whether dirty money represents a special instance of a broader family of valuation conflicts and (b) illuminate the underlying nature of a more general class of valuation conflicts.

A developmental perspective

Our valuation perspective highlights interactions among valuations, and we would expect the strength of any valuation to change over development (for more on what holds value for children, adolescents, and adults, see Davidow, Insel, & Somerville, 2018). In addition, we would expect the hierarchical configuration of valuations to vary as a function of development. For example, the two valuations we are focusing on here (materiality and morality) are present from the earliest months of life (e.g., infants tend to accept larger offerings over smaller ones; see Feigenson, Carey, & Hauser, 2002; infants tend to avoid interactions with wrongdoers; see Hamlin, 2013), lending support to the impression that these valuations may reflect lower-order ones. By contrast, valuations such as identity (e.g., Starmans, 2017) and reputation (e.g., Silver & Shaw, 2018), which we previously referred to as higher-order valuations, do not come online until later in life, raising questions about how typical interactions between lower-order valuations (e.g., materiality and morality) may shape the quality of higher-order valuations (e.g., identity) as they become established over the course of development.

To illustrate how research from a developmental perspective could address this issue, consider the following study (Tasimi & Wynn, 2016). In it, 12- and 13-montholds were introduced to a nice character and a mean character (i.e., a character that either helped or hindered another character open a box with a toy inside). Afterward, each character offered the infant a different number of crackers, with the mean character always offering more than the nice character (for related evidence with older children, see Tasimi, Johnson, & Wynn, 2017). When the nice character offered the infant one cracker while the mean character offered two crackers, 19% of infants accepted the larger offering. But when the nice character offered one cracker while the mean character offered eight crackers, 69% of

infants accepted the larger offering. Given these findings, it becomes interesting to consider how the relative strengths of materiality and morality within a given child may shape who they come to see themselves as. For example, if children tend to "avoid the 'bad guy' at all costs," are they more likely to think that they are good people, at least more so than children who tend to "sell out"?

A personality perspective

Our framework can also be used to analyze the role of individual differences in how people respond to dirty money. Characterizing these individual differences—from what factors may predict them to whether they are stable over time—is likely to be of interest to researchers in personality psychology. For example, if some people are driven purely by self-interests (e.g., Yamagishi, Li, Takagishi, Matsumoto, & Kiyonari, 2014), would these people choose to spend dirty money on hedonic rather than virtuous causes and also experience little to no conflict when accepting dirty money? Moreover, it becomes tempting to ask: Are those infants who do not sell out (as in the Tasimi & Wynn, 2016, work) more likely to devalue dirty money as adults (as in the Crockett et al., 2017, work)?

Conclusion

Even when we try to escape the real world, we cannot seem to escape the issue of dirty money. For example, as we saw in the television series, The Sopranos, the character Carmela Soprano leads a life in which she is no stranger to mink coats, diamonds, and luxury cars. However, this lifestyle is made possible by dirty money from her husband, Tony, who is a mob boss. In one episode, Carmela is in tears as a psychiatrist recommends that she leave Tony immediately. And then the psychiatrist tells her, "I'm not charging you because I won't take blood money, and you can't either." Between its ability to permeate fictional enterprises and influence people's behavior in the real world, dirty money represents a widespread social problem with important implications. We hope that the framework sketched here can help shed new light on this timeless-and timely—issue.

Recommended Reading

Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2014). (See References). An overview of the process model of self-control, which captures how conflicting valuations evolve over time and remain in conflict until one wins out.

Gasiorowska, A. (2019). (See References). A review summarizing the literature on dirty money.

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- Keefe, P. R. (2017, October 23). The family that built an empire of pain. *The New Yorker*. Retrieved from https:// www.newyorker.com/magazine/2017/10/30/the-familythat-built-an-empire-of-pain. A real-world story about dirty money.
- Tasimi, A., & Wynn, K. (2016). (See References). An example of research examining how materiality and morality are weighed and integrated in infants' decision-making.

Action Editor

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The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

References

- Berkman, E. T., Hutcherson, C. A., Livingston, J. L., Kahn, L. E., & Inzlicht, M. (2017). Self-control as value-based choice. Current Directions in Psychological Science, 26, 422–428.
- Berkman, E. T., Livingston, J. L., & Kahn, L. E. (2017). Finding the "self" in self-regulation: The identity-value model. *Psychological Inquiry*, *28*, 77–98.
- Bloom, P. (2010). How pleasure works: The new science of why we like what we like. New York, NY: W.W. Norton.
- Buckholtz, J. W. (2015). Social norms, self-control, and the value of antisocial behavior. *Current Opinion in Behavioral Sciences*, *3*, 122–129.
- Chen, C., Chen, J., & He, G. (2017). Immorally obtained principal increases investors' risk preference. *PLOS ONE*, *12*(5), Article e0175181. doi:10.1371/journal.pone.0175181
- Crockett, M. J., Siegel, J. Z., Kurth-Nelson, Z., Dayan, P., & Dolan, R. J. (2017). Moral transgressions corrupt neural representations of value. *Nature Neuroscience*, 20, 879–885.
- Davidow, J. Y., Insel, C., & Somerville, L. H. (2018). Adolescent development of value-guided goal pursuit. *Trends in Cognitive Sciences*, 22, 725–736.
- Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2014). Self-control in school-age children. *Educational Psychologist*, 49, 199–217.
- Fedotova, N. O., & Rozin, P. (2018). Contamination, association, or social communication: An examination of alternative accounts for contagion effects. *Judgment and Decision Making*, 13, 150–162.
- Feigenson, L., Carey, S., & Hauser, M. (2002). The representations underlying infants' choice of more: Object files

- versus analog magnitudes. *Psychological Science*, *13*, 150–156.
- Flusberg, S., & LaPlace, C. (2019). Agent framing moderates concerns about moral contagion. In A. K. Goel, C. M. Seifert, & C. Freksa (Eds.), Proceedings of the 41st Annual Conference of the Cognitive Science Society (p. 3268). Montreal, Québec, Canada: Cognitive Science Society.
- Freeman, J. B. (2018). Doing psychological science by hand. *Current Directions in Psychological Science*, 27, 315–323
- Friedman, O., Neary, K. R., Defeyter, K. A., & Malcolm, S. L. (2011). Ownership and object history. *New Directions for Child and Adolescent Development*, *132*, 79–89.
- Gasiorowska, A. (2019). Lay people's and children's theories of money. In K. Gangl & E. Kirchler (Ed.), *A research agenda for economic psychology* (pp. 11–25). Northampton, MA: Edward Elgar.
- Gelman, S. A., & Echelbarger, M. (2019). Children and consumer behavior: Insights, questions, and new frontiers. *Journal of Consumer Psychology*, *29*, 344–349.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2, 271–299.
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, *26*, 1–26.
- Hamlin, J. K. (2013). Moral judgment and action in preverbal infants and toddlers: Evidence for an innate moral core. *Current Directions in Psychological Science*, 22, 186–193.
- Harris, E. A. (2019, May 15). The Met will turn down Sackler money amid fury over the opioid crisis. *The New York Times*. Retrieved from https://www.nytimes .com/2019/05/15/arts/design/met-museum-sackler-opi oids.html
- Kardos, P., & Castano, E. (2012). Money doesn't stink, or does it? The effect of immorally acquiring money on its spending. *Current Psychology*, *31*, 381–385.
- Levav, J., & McGraw, A. P. (2009). Emotional accounting: How feelings about money influence consumer choice. *Journal of Marketing Research*, 46, 66–80.
- Moynihan, C. (2019, February 9). Guggenheim targeted by protesters for accepting money from family with OxyContin ties. *The New York Times*. Retrieved from https://www.nytimes.com/2019/02/09/arts/protestersguggenheim-sackler.html
- Nemeroff, C., & Rozin, P. (1994). The contagion concept in adult thinking in the United States: Transmission of germs and interpersonal influence. *Ethos*, *22*, 158–186.
- Rozin, P., Grant, H., Weinberg, S., & Parker, S. (2007). "Head versus heart": Effect of monetary frames on expression of sympathetic magical concerns. *Judgment and Decision Making*, *2*, 217–224.
- Rozin, P., Millman, L., & Nemeroff, C. (1986). Operation of the laws of sympathetic magic in disgust and other domains. *Journal of Personality and Social Psychology*, *50*, 703–712.
- Silver, I. M., & Shaw, A. (2018). Pint-sized public relations: The development of reputation management. *Trends in Cognitive Sciences*, 22, 277–279.

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Starmans, C. (2017). Children's theories of the self. *Child Development*, 88, 1774–1785.

- Stellar, J. E., & Willer, R. (2014). The corruption of value: Negative moral associations diminish the value of money. Social Psychological & Personality Science, 5, 60–66.
- Tasimi, A., & Gelman, S. A. (2017). Dirty money: The role of moral history in economic judgments. *Cognitive Science*, 41, 523–544.
- Tasimi, A., Johnson, M. K., & Wynn, K. (2017). Children's decision making: When self-interest and moral considerations conflict. *Journal of Experimental Child Psychology*, 161, 195–201.
- Tasimi, A., & Wynn, K. (2016). Costly rejection of wrongdoers by infants and children. *Cognition*, *151*, 76–79.
- Uhlmann, E. L., & Zhu, L. K. (2013). Money is essential: Ownership intuitions are linked to physical currency. *Cognition*, *127*, 220–229.
- Yamagishi, T., Li, Y., Takagishi, H., Matsumoto, Y., & Kiyonari, T. (2014). In search of *Homo economicus*. *Psychological Science*, *25*, 1699–1711.
- Zelizer, V. A. (1994). The social meaning of money: Pin money, paychecks, poor relief, and other currencies. New York, NY: Basic Books.