

When too much is not enough:
Inherited wealth and the psychological meaning of money

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“Wealth is not without its advantages, and the case to the contrary, although it has often been made, has never proved widely persuasive.”

--John Kenneth Galbraith

Can money buy happiness?

Numerous philosophers and thinkers through the ages have argued that it can't, and the general public appears to agree: when people are asked to rate factors they believe will lead to greater happiness, money appears rather low on the list (Furnham and Cheng 2000). Less scientifically, the quote “money can't buy happiness” returns seven times as many references from Google as the quote “money can buy happiness.”

On the other hand, our everyday experience offers ample evidence that most people expend tremendous effort in the pursuit of money. Since economists generally assume that individuals rationally pursue their self-interest, they argue that the choices that people make accurately reflect their *true* preferences: that we should focus, in other words, more on what people do than on what they say. If people are constantly trying to make more money, it can only be because that is truly what they want.

These advocates of “revealed preference” call into question the validity of people's (and pendants') beliefs about what will bring happiness, or, alternatively, imply that if people *do* know what will make them happier, but do not act accordingly, then their behavior's underlying aim is something other than greater happiness. From a practical perspective, however, theories based on revealed preference are unsatisfying: while the pursuit of happiness may not be the only worthy goal in life, for most of us it is undeniably an important one. If having more money fails to increase our subjective sense of well-being, it is worth examining why so many people spend so much time pursuing money.

This essay will attempt to reconcile these contradictory perspectives by arguing that money can contribute to happiness, but not for the reasons that are commonly supposed. To motivate my analysis, I begin by asking a slightly different question: does inheriting large sums of money increase happiness? Why is this relevant? Consider the most fundamental precept underlying economic theory: individuals respond to incentives by trying to maximize benefits and minimize costs. If, as economists generally assume, money is the primary economic benefit and effort (or work) is the primary economic cost, then inheritance should be the happiest possible economic event (after all, even winning the lottery requires that you exert the effort to buy a ticket!), so that those blessed with large inherited fortunes should be among the happiest members of society.

But are they? Research data is sparse. Diener, Horwitz, and Emmons (1985) surveyed 49 members of the Forbes 400 and found them to be generally very happy, but the study's relevance is limited by its small sample size, low response rate, and failure to distinguish between those who made their own money and those who inherited it. Pittman (1985) presented clinical data from 50 wealthy families he had treated and concluded that although the incidence of serious pathology is no greater (or less) among the wealthy, “wealth is not good for children.” This conclusion is supported by Gardner

and Oswald (2001), who found that small inheritances increased reported well-being, but larger ones did not. Finally, plenty of anecdotal evidence suggests that many inheritors are not happy with the experience. Consider, for example, the title of a book by a psychotherapist who is herself an inheritor: “Navigating the Dark Side of Wealth” (Willis 2003).

One possible explanation for the dark side of wealth is that the unhappiness of inheritors is not the result of the money itself, but rather of other issues associated with wealthy families. For example, parents who leave large bequests may be likelier to be more demanding, remote or unavailable than other parents (Bronfman 1987; Luthar 2003). Moreover, in order to inherit money, a close relative must die. Levav and McGraw (2005) conducted a study making this connection explicit and found that people reported associating both positive and negative emotions with money thus received.

While such non-financial considerations may explain part of the difficulty many inheritors have in “navigating the dark side of wealth,” this essay will argue that the purely financial aspects of inheritance are also less conducive to happiness than standard economic theory would predict. I believe that understanding why this is so not only clarifies the connection between money and happiness but also helps to illuminate the deeper meaning of money in our society.

Money as a means of consumption

What is money? To an economist, the answer is simple: money is a medium of exchange and a store of value. Money has no inherent value in and of itself; rather, its only value lies in its ability to be exchanged for other goods and services which do have inherent value. In other words, money is simply the means to the end of consumption. From this perspective, the failure of money to increase happiness is really the failure of consumption to increase happiness.

Economists have long assumed that more consumption is better than less: two apples are better than one apple and two yachts are better than one yacht. This assumption seems quite reasonable, but note that it clearly implies that consumption is evaluated on an absolute scale – if two yachts are better than one, then a person who goes from having three yachts to having two yachts should be happier than a person who goes from having no yachts to having one.

A considerable body of evidence, however, shows that people actually evaluate consumption on a *relative* rather than an absolute basis. That is, people evaluate satisfaction with an outcome by comparing it to some imagined alternative outcome, or reference point. While there is still relatively little research on how individuals select among various possible reference points, the status quo is clearly influential. Thus, the person who had three yachts and now only has two may be *less* happy than the person who had none but now has one.

Brickman and Campbell (1971) took this concept to its natural conclusion with their “hedonic treadmill” hypothesis, which proposes that improvements in our circumstances bring only temporary increases in happiness; over time we adapt our reference points to incorporate the improvements and eventually evaluate our circumstance in relationship to the new status quo. Their theory suggests that a person acquiring his first yacht experiences an unusual amount of happiness only until he becomes used to possessing it; thereafter, he is no happier than he was before he owned it.

Troubling though this theory may be for traditional notions of the benefits of material progress, researchers have found substantial evidence in its support. Diener and Biswas-Diener (2002) review results from numerous large-scale surveys conducted in a variety of countries across many years and find that, despite considerable economic growth, the studied populations consistently report barely any increase in their average level of happiness over time. Brickman, Coates and Janoff-Bulman (1978) found that although winning the lottery was a highly satisfying experience, past lottery winners’ overall satisfaction with their lives was no higher than that of a control group of non-winners.

While we know little about how quickly people assimilate changes into their reference levels, and can reasonably assume that people adapt more quickly to some types of consumption than to others, the evidence seems compelling that adaptation to improved material circumstances is a principal reason why higher levels of consumption do not lead to greater happiness.

Though people appear to underestimate the extent of their own adaptations (Gilbert 2006), they also do seem to have an intuitive understanding that it occurs. If asked to choose between two income streams, they prefer an increasing one to an equal but decreasing one, even though the ability to earn interest means that the latter actually enables greater total consumption (Loewenstein and Sicherman 1991). Fortunately, this preference matches the typical state of affairs: labor income generally increases over time as workers accumulate experience and seniority, resulting in a steady diet of pleasure for the worker. Those who derive their income from inheritance, by contrast, are more likely to experience a static level of income over the course of their lives, robbing them of the ability to derive enjoyment from gradual increases in their material circumstances.

Still, one’s own past is not the only possible reference point for evaluating consumption. Inheritors of large fortunes are typically envied because they have so much compared to the rest of society. Shouldn’t this kind of comparison affect their happiness too?

Money as a way of keeping up with the Joneses

The fact that the standard economic model assumes that consumption is evaluated on an absolute basis is somewhat surprising given an alternative tradition that goes as far back as economics’ origin as a social science. In *The Wealth of Nations* (1776), Adam Smith noted the importance of social norms in determining economic preferences: “[for] the greater part of rich people, the chief enjoyment of riches consists in... possess[ing] those decisive marks of opulence which nobody can possess but themselves.”

John Stuart Mill (1907) likewise thought that “men do not desire to be rich, but to be richer than other men.” Thorsten Veblen developed the idea further in *The Theory of the Leisure Class* (1899), which proposed that the “conspicuous consumption” of the wealthy was specifically intended to demonstrate their relative position in society. Other notable economic thinkers who have endorsed the idea that social comparison matters include Max Weber (1926), John Maynard Keynes (1928), James Duesenberry (1949), John Kenneth Galbraith (1958), and Robert Frank (1985).

That people compare their situations with others’ and often view life as a competition is an observation so obvious that it hardly needs scientific evidence to support it. Less clear, however, is the extent to which these comparisons influence behavior. Would people really prefer to live in a world where they make \$50,000 but others make \$25,000 rather than one where they make \$100,000 and others make \$200,000?

Solnick and Hemenway (1998) asked 257 survey participants this exact question (making sure to emphasize that the purchasing power of money was the same in both worlds) and found that half of the participants did indeed prefer the former. That is, they preferred to make more than others even at the cost of having only half the absolute purchasing power.

Numerous studies using a variety of data sources provide evidence that those who assert a preference for higher relative incomes are correctly predicting what will make them happier (Easterlin 1974, Clark & Oswald 1996, Blanchflower & Oswald 2004, Luttmer 2005, Firebaugh & Tach 2005). Diener and Biswas-Diener (2002) summarize results from many such studies and conclude that within any particular group, those with higher incomes are slightly likelier to be happier. Since, as previously noted, increases in incomes from economic growth over time do not appear to raise the level of happiness in societies as a whole, their conclusion is that the wealthier people within a given society are happier not because they have greater absolute levels of wealth, but because they have greater relative levels.

Further evidence that people care about relative wealth comes from experiments using the “ultimatum game.” In this game, two participants are given the chance to split some amount of money provided by the experimenter (e.g. \$10). The first participant, the proposer, offers some portion of the total sum to the second participant, the responder (e.g. \$4). If the responder accepts, he receives the amount the proposer offers (\$4) and the proposer receives the rest (\$6). If the responder does not accept, both participants receive nothing.

The standard economic assumption offers a simple prediction: since the responder has a choice between getting zero and getting whatever the proposer offers, he should accept any amount greater than zero. But dozens of experiments in which this game is actually played show a consistent pattern: responders reject offers of less than 20% about half the time (Camerer 2003). This pattern persists even when the experiments are performed in developing countries using amounts equal to the average monthly wage.

This behavior, though inconsistent with the standard economic assumption of absolute preferences, fits perfectly well with a focus on relative outcomes: a responder refuses \$2 because she derives less satisfaction from the fact that this is greater than zero than the dissatisfaction she feels because it is so much less than the \$8 the proposer stands to gain. Such “inequality aversion” has been observed in numerous other studies (Fehr and Schmidt 1999).

Just as we know very little about how quickly and under what circumstances people adapt to past changes in consumption, we know relatively little about the process by which people decide with whom to compare themselves. Firebaugh & Tach (2005) found that people were happier when they made more money than others of a similar age, while Luttmer (2005) found that people were happier when they made more money than their geographic neighbors. Luttmer also found that this effect was stronger after controlling for other demographic characteristics such as a college education. In short, the evidence suggests that the more “like me” someone is, the more influential comparison with that person will be on my subjective happiness.

What does this mean for inheritors? If happiness is linked to consumption relative to society as a whole, we would logically predict that they would be very content with their privileged position in society. But if instead it results from comparison with people “like themselves,” we can sense why inheritors may not be any happier than the average person. After all, the American dream is often conceptualized as the desire to live better than one’s parents. But as the old adage “shirtsleeves to shirtsleeves in three generations” reminds us, inheritors are more likely to live *less* well than their parents as estate taxes, multiple heirs, and, frequently, financial mismanagement and overspending erode accumulated wealth.

Even if parents are not the key point of comparison, those who inherit wealth are likely to see as their peers other wealthy people: their relatives, schoolmates, and neighbors. In short, just as their static incomes, compared with the increasing incomes of wage earners, mean that inheritors may be less satisfied with their financial situation than average people, comparison with others is also of less benefit than it might first appear.

Money and fairness

Nothing discussed thus far challenges the standard economic conception of money simply as a means to the end of consumption. Whether we evaluate consumption on an absolute or relative basis, more is better than less. But if money is solely a means to the consumption end, how can we explain the behavior of *proposers* in the ultimatum game? Under the standard economic assumption, the responder should accept any offer greater than zero, so the proposer should offer the smallest amount possible. Yet proposer offers usually average 30-40% with the most common offers 40-50% (Camerer 2003).

To be clear, it is not very puzzling that proposers don’t make very low offers if they can predict human behavior better than economic theory does: given that responders reject low offers, which they often do, proposers rationally should not make them. What *is*

puzzling is that proposers offer so much; offers of 40% are rarely rejected, and even offers of 30% stand a good chance of being accepted. Why, then, do the majority offer 40% or more? If responders refuse low offers because they don't like getting too much less than proposers, shouldn't proposers proffer low offers because they like getting much more?

One possibility is that proposers aren't sure whether a low offer will be accepted and thus offer high amounts in order to avoid the risk of rejection. But such strategic motivation cannot explain behavior observed in a simple variant of the ultimatum game known as the dictator game. Here, the responder *must* accept whatever the proposer offers, even if the "offer" is zero. Proposers in this game need not worry about low offers being turned down. Nevertheless, while dictator game offers are typically lower, they still average 20% and are rarely zero.

The most common explanation for this behavior is that proposers are influenced by a social norm of fairness, a hypothesis supported by an experiment by Hoffman and Spitzer (1985). Instead of assigning the roles of proposer and responder randomly, they assigned roles on the basis of how well subjects did on a trivia test, and found that this lowered average ultimatum game offers by 10% and dictator game offers by 20%. Their interpretation of this finding was that when proposers "earned" their role, they felt it was fair that they get a larger share of the total pie.

To be sure, self-interest unquestionably biases perceptions of fairness; Hoffman and Spitzer also found that the reduction in offers resulted in an increase in rejections by responders, presumably because they did not agree with the proposers' notion of fairness. Nevertheless, people are sufficiently sensitive to objective measures and social norms that they sometimes prefer to receive less rather than more. People feel *worse* when they receive more than someone else with whom they have a positive relationship (Loewenstein, Bazerman & Thompson 1989) and are willing to pay real money to punish someone else who they think has behaved unfairly or selfishly (Kahneman, Knetsch, and Thaler 1986; Fehr and Gächter 2002).

In short, people can be unhappy with unequal outcomes if they result from unfair processes even if they themselves benefit from the inequality. Equity theory (Adams 1963) proposes that people want outcomes to be commensurate with contributions, including their own, and are motivated to change either outcome or contribution when they are not. In several studies, Adams and colleagues showed that individuals who were "overpaid" for a task increased both the quantity and quality of their work.

Note how far we have moved from the notion that money is simply a proxy for consumption. The importance of fairness concerns, unexplainable within any traditional economic model, highlights the critical symbolic and psychological roles that money plays in our society.

Money as a way of keeping score

Howard Hunt, then one of the richest men in the world, once observed that “money is just a way of keeping score.” This observation is often invoked to explain why many extremely rich people work obsessively to accumulate more money even when they are unable to consume what they already have (in part because they spend so much time making more).

Thorsten Veblen argued that the extravagant and very public display of wasteful spending is the means by which accumulated wealth is converted into status. Max Weber, conversely, argued that the Protestant Ethic focused the competition for status on the accumulation of capital and not its expenditure. From my perspective, neither model quite gets at the heart of the matter, which is that the ultimate goal is neither expenditure nor accumulation but status itself.

According to the Random House Dictionary, status is “the position of an individual in relation to another or others.” From a biological perspective, the key relationship defined by status is one’s position in a dominance hierarchy, a common feature of social species. Higher status individuals in a variety of species have preferential access to food, sexual partners, and other resources that are in short supply (Cheney & Seyfarth 1990), and as a result enjoy a reproductive advantage (Silk 1987). Humans similarly give preferential treatment to high status individuals in a variety of games and market settings (Ball & Eckel 1998; Ball, Eckel, Grossman & Zame 2001).

Money likewise provides preferential access to scarce resources; in fact, that is precisely its purpose. Thus it is hardly surprising that money and status are so closely associated. While there are non-monetary routes to high status, such as intellectual, athletic, and aesthetic achievement, there can be little doubt that the strongest single predictor of an American’s social status is income.

But though money and status are closely associated, they are not the same. A central element of the traditional economic view of money as a means to consumption is that it is “fungible,” or interchangeable. The \$100 you receive as a gift from your grandmother is the same as the \$100 you win in a craps game, which is the same as the \$100 you earn from your job.

From a psychological perspective, however, money is not fungible because people care about the process by which it was acquired. Thaler (1999) provides evidence that people assign money to different “mental accounts” depending on its origin and purpose. Zelizer (1994) reports that a study of Norwegian prostitutes found that they carefully budgeted welfare money and other legal income for rent and bills, but blithely squandered greater sums of money earned from prostitution on “going out.” Zelizer quotes a Philadelphia gang member explaining why he would donate money he received from his mother to the church, but not money he got from robberies: “that is bad money”. Similarly, numerous prominent universities have declined donations because of concerns over the funds’ origin; they too believe that some money is too tainted to use even for admirable ends.

Money that has been acquired in a manner that is subjectively viewed as unfair or immoral is thus symbolically tainted. I assert that a key consequence is that “bad” money fails to fulfill its usual symbolic role as a status marker. If money were solely valued for its ability to fund consumption, this would not matter. But if people also value money for its role in determining status, the human desire to have outcomes commensurate with contributions can actually invert traditional economic assumptions. In this case, people do not want to minimize effort, because effort is what justifies outcomes, and they do not necessarily want to maximize outcomes, because only justifiable outcomes generate the status that is the behavior’s underlying goal.

Society thus views inherited wealth in two contradictory ways. On the one hand, the widely accepted belief that our market system fairly rewards those who contribute the most to society results in society accepting the inherent fairness of accumulated wealth, whether inherited or not. On the other hand, the belief that reward should be commensurate with effort makes society wary of the wealth that inheritors receive without any effort on their own part. Society accepts the legitimacy of the inheritor’s wealth, but questions the status that normally accompanies that wealth.

Consider the current debate about the elimination of the estate tax in the U.S. Opponents of this tax have been able to generate considerable support for their position by focusing on the givers of the wealth, renaming the estate tax a “death tax” and arguing that it is unfair to penalize those who have accumulated large amounts of capital through their own productive efforts. Advocates of the tax, by contrast, have focused instead on the receivers of the wealth, arguing that it is unfair to disproportionately benefit people who have not themselves done anything to create this wealth. Both sides emphasize the importance of the fairness of the outcome, but focus attention on different people to measure the contributions that lead to that outcome.

I believe that this ambivalence lies at the heart of the difficulties inheritors often have in finding satisfaction in their inheritance. For the inheritor is hardly immune to the power of social norms; society’s ambivalence becomes his own. He must either find a way to justify his wealth or take actions to rectify his unfair advantage.

What is to be done?

In *The Affluent Society* (1958), John Kenneth Galbraith noted that “the ideas by which people interpret their existence, and guide their behavior, were the product of a world in which poverty had always been man’s normal lot.” In a world of poverty, money clearly represents a means to alleviate what Galbraith calls “the unedifying mortification of the flesh... hunger, sickness, and cold,” and the evidence is clear that where these conditions continue to haunt human existence, more money, enabling more consumption, brings a greater sense of well-being.

But in a wealthy world, where more people die from overindulgence than from hunger and cold, the logic that equates more money with more consumption and thus greater happiness no longer seems to work. Rather than becoming more and more content as we

can afford greater and greater luxuries, we instead find that today's luxury becomes tomorrow's necessity.

Still, since the rich of any given society are happier than the poor (Diener and Biswas-Diener 2002), from the perspective of any individual it is perfectly rational to pursue greater wealth in order to change one's relative position. The problem is that this strategy cannot work for everybody. Relative position is a zero-sum game; for every person who becomes happier by improving their lot, there must be someone who becomes less happy because someone has passed them by.

Moreover, I assert that the rich are happier not because they consume (or accumulate) more than others, but rather because consuming (or accumulating) more than others is one way to affirm or demonstrate their superior status. As Adam Smith (1759) observed, "it is chiefly from this regard to the sentiments of mankind that we pursue riches... The rich man glories in his riches, because he feels that they naturally draw upon him the attention of the world." Yet we do not seek this spotlight for its own sake, but rather because it reflects the audience's approval of our performance; without such approval, being the center of attention is awkward and unrewarding.

Admittedly, for the majority of people this distinction might not be particularly meaningful. Though adaptation may limit the satisfaction they derive from improved material circumstance, it is by no means irrational for them to expend great effort in the pursuit of greater wealth, both because increased consumption is at least temporarily a positive and because greater wealth offers the opportunity to improve one's relative position. Still, one critical lesson we can derive from a more informed view of the underlying dynamic is that increased consumption is best pursued at a measured pace, so as to regularly experience increases in consumption and never experience decreases. Fortunately, traditional employment structures facilitate this process.

The situation is different for inheritors. For them, a gradual increase in consumption over time requires a conscious effort to live *below* their means for a large part of their early lives. Given that their standard of living is initially formed by their parents' lifestyle, this may be a particularly difficult, if not impossible, task.

Equally difficult, if not more so, is the task of justifying their wealth to themselves and to others. Equity theory suggests two possible paths -- the inheritor can reduce his outcome or increase his contributions. At one extreme, some inheritors reduce their outcome by giving away their wealth entirely. At the other, some implicitly change the metrics defining contributions by adopting conservative ideologies justifying the fairness of the overall system (e.g. Social Darwinism during the Gilded Age). Though there is no definitive research on the topic, anecdotal observation suggests that the happiest inheritors have focused on increasing their individual contribution to society, whether via efforts to augment the family fortune, succeed in a different (i.e. non-business) area of endeavor, or contribute to society via philanthropy.

The least happy inheritors, by contrast, are most often those who conform to standard economic theory by maximizing consumption while minimizing effort. Layard (2005) reports that for the average person, becoming unemployed has as large a negative impact on reported happiness as any other life event, including divorce. Critically, unemployment is painful not solely due to the loss of income, but because it “destroy[s] the self-respect and social relationships created by work.” The inheritor who fails to pursue employment because of a mistaken belief that the value of work lies solely in the consumption that work enables likewise misses out on a critical source of self-respect and social relationships.

Equity theory implies one further ironic twist highlighting the difference between the traditional view of money and the view offered in this essay. For the creator of wealth, more money is better because of the presumed link between wealth and contribution. For the inheritor, however, more money is more problematic because the more money one inherits, the harder will be the task of justification. In the absence of mitigating factors, then, the more money one inherits, the less happy one might be.

This paradox ought to disturb wealthy individuals concerned about their offspring’s long-term well-being. Bill Gates and Warren Buffet, the two richest men in the United States, have said that they do not intend to leave more than a small portion of their vast wealth to their children (they will give them, in Buffet’s phrase, “enough to do anything, but not enough to do nothing”). This approach is not without its own problems since the children may already have developed a reference point for consumption based on their parents’ lifestyles (though Buffet’s famously middle-class existence may make his case an unusual exception). Yet this approach, if clearly and consistently communicated to the children so that they adapt their expectations early, may be a good one.

Of course, Gates’ and Buffet’s attitude remains uncommon, as evidenced by strong opposition among the wealthy to the estate tax. From this paper’s perspective, if their goal is to improve the lives of their children, such opposition is misguided. Inherited money can buy creature comforts, but such joys are fleeting at best. Earned money, on the other hand, also buys the respect of others, which is a far more lasting source of satisfaction.

References

- Adams, J.S. (1965). Inequity in Social Exchange. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 2. New York: Academic Press.
- Ball, Sheryl and Catherine C. Eckel, (1998). The Economic Value of Status. *Journal of Socio-Economics*, 27 (4), 495-514.
- Ball, Sheryl, Catherine Eckel, Philip J. Grossman and William Zame, (2001). Status in Markets. *Quarterly Journal of Economics*, 116 (1), 161-88.
- Blanchflower & Oswald (2004), Well-being Over Time in Britain and the USA. *Journal of Public Economics*, 88, 1359-1386.
- Brickman, P. and D. T. Campbell (1971). Hedonic Relativism and Planning the Good Society. In M. H. Apley (ed), *Adaptation-level Theory: A Symposium*, New York: Academic Press.
- Brickman, P., D. Coates and R. Janoff-Bulman (1978). Lottery Winners and Accident Victims: Is Happiness Relative? *Journal of Personality and Social Psychology* 36, 917-927.
- Bronfman, Joanie (1987). The Experience of Inherited Wealth: A Social-Psychological Perspective. PhD Dissertation, Brandeis University.
- Camerer, Colin (2003). *Behavioral Game Theory: Experiments in Strategic Interaction*. Princeton: Princeton University Press.
- Cheney, Dorothy L. and Robert M Seyfarth (1990). *How Monkeys See the World*. Chicago: University of Chicago Press.
- Clark, Andrew E. and Andrew J. Oswald (1996). Satisfaction and Comparison Income. *Journal of Public Economics* 61, 359-381.
- Diener, Ed, Jeff Horwitz, and Robert A. Emmons (1985). Happiness of the very wealthy. *Social Indicators Research*, 16(3), 263-274.
- Diener, Ed, and R. Biswas-Diener (2002). Will money increase subjective well-being? A literature review and guide to needed research. *Social Indicators Research*, 57, 119-16.
- Duesenberry, James (1949). *Income, Savings, and the Theory of Consumer Behavior*. Cambridge: Harvard University Press.

- Easterlin, Richard A. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence, in P.A. David and M.W. Reder (eds.), Nations and Households in Economic Growth (Academic Press, New York), 89-125.
- Fehr, Ernst and Simon Gächter (2002). Altruistic Punishment in Humans. *Nature*, 415: 137-140.
- Fehr, Ernst and Klaus M. Schmidt (1999). A Theory of Fairness, Competition and Cooperation. *Quarterly Journal of Economics*, 114 (3), 817-868.
- Firebaugh, Glenn and Laura Tach (2005). Relative Income and Happiness: Are Americans on a Hedonic Treadmill? Working Paper, Pennsylvania State University.
- Frank, Robert H. (1985). *Choosing the Right Pond*. New York: Oxford University Press.
- Furnham, Adrian and Helen Cheng (2000). Lay Theories of Happiness. *Journal of Happiness Studies* (1), 227-246.
- Galbraith, John Kenneth (1958). *The Affluent Society*. New York: Houghton Mifflin.
- Gardner, Jonathan and Andrew Oswald (2001). Does Money Buy Happiness? A Longitudinal Study Using Data on Windfalls. Working Paper, University of Warwick.
- Gilbert, Daniel (2006). *Stumbling on Happiness*. New York: Knopf.
- Hoffman, E. and M.L. Spitzer (1985). Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice. *Journal of Legal Studies*, 14, 259-297.
- Kahneman, Daniel, J.L. Knetsch, and Richard Thaler (1986). Fairness as a Constraint on Profit-Seeking: Entitlements in the Market. *American Economic Review*, 76, 728-741.
- Keynes, John Maynard (1928/1972). "Economic Possibilities for Our Grandchildren" in *Essays in Persuasion. In Volume IX of the Collected Writing of John Maynard Keynes*. 1972 edition. MacMillan, St. Martin's Press.
- Layard, Richard (2005). *Happiness: Lessons from a New Science*. New York: The Penguin Press.
- Levav, Jonathan, and A. Peter McGraw. Emotional Accounting: Feelings About Money and Consumer Choice. Working Paper, Columbia University, 2005.

- Loewenstein, George, Max H. Bazerman, and Leigh Thompson (1989). Social Utility and Decision Making in Interpersonal Contexts. *Journal of Personality and Social Psychology*, 57 (3), 426-441.
- Loewenstein, George and Nachum Sicherman (1991). Do Workers Prefer Increasing Wage Profiles? *Journal of Labor Economics*, 9 (1), 67-84.
- Luthar, Suniya (2003). The Culture of Affluence: Psychological Costs of Material Wealth. *Child Development* 74, 1581-1593.
- Luttmer, Erzo (2005). Neighbors as Negatives: Relative Earnings and Well-Being. *Quarterly Journal of Economics*, 120(3), 963-1002.
- Mill, John Stuart (1907). Posthumous Essay on Social Freedom, Oxford and Cambridge Review, January.
- Pingle, Mark and Mike Mitchell (2002). What motivates positional concerns for income? *Journal of Economic Psychology*, 23, 127-148.
- Pittman, Frank S. (1985). Children of the Rich. *Family Processes* (24), 461-472.
- Silk, J. B. (1987). Social Behavior in Evolutionary Perspective. In *Primate Societies*, ed. B.B. Smuts, D.L. Cheney, R.W. Wrangham, and T.T. Struhsaker. Chicago: University of Chicago Press.
- Smith, Adam (1759/1969). *The Theory of Moral Sentiments*. New Rochelle, NY: Arlington House.
- Smith, Adam (1776/1910). *The Wealth of Nations*. New York: Everyman's Library.
- Solnick, Sara J. and David Hemenway (1998). Is more always better?: A survey on positional concerns. *Journal of Economic Behavior & Organization*, 37, 373-383.
- Thaler, Richard H. (1999). Mental Accounting Matters. *Journal of Behavioral Decision Making*, 12, 183-206.
- Veblen, Thorstein (1899/1992), *The Theory of the Leisure Class*. New Brunswick: Transaction Publishers.
- Weber, Max (1926/2000). *Protestant ethic and the spirit of capitalism*, Los Angeles, CA: Roxbury Pub. Co.
- Willis, Thayer Cheatham (2003). *Navigating the Dark Side of Wealth: A Life Guide for Inheritors*. Portland, Oregon: New Concord Press.
- Zelizer, Viviana A. (1994). *The Social Meaning of Money*. New York: Basic Books.