



Focus on **FINANCE**

PAGE ONE Economics®

Money and Missed Opportunities

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GLOSSARY

Consumers: People who buy goods and services to satisfy their wants.

Opportunity cost: The value of the next-best alternative when a decision is made; it's what is given up.

Scarcity: The condition that exists because there are not enough resources to produce everyone's wants.

"The way we *should* think about the opportunity cost of money is that when we spend money on one thing, it's money that we cannot spend on something else, neither right now, nor any time later."

—Dan Ariely, author of *Dollars and Sense*

Imagine you're at the mall and deciding between two different smoothie flavors—mango or strawberry-banana. Both cost \$7. If you're like most people, you think simply about whether you want the drink; if yes, you are likely to pay the \$7. Now imagine you put on a unique pair of "economist glasses" that allow you to see the world from an economic perspective. In this scenario, you are likely to ask yourself a series of questions: "How much do I value this smoothie?" "What am I giving up now to have a smoothie?" "What am I giving up in the future to have this smoothie now?" The critical difference is that you are more likely to consider the **opportunity cost** of your decision when looking at your options from an economic perspective.

Money and Opportunity Cost

We have many choices in life and must decide among them because we can't have everything we want. You can blame good 'ol **scarcity** (unlimited wants going after limited goods, services, time, money, and opportunities) as the reason we must make choices that involve costs and trade-offs. These costs are not limited to just money; they can also be social and emotional. But money is a way to access some of those wants.

It can be challenging to think of every possible use for the money you spend because there are so many possibilities. Opportunity costs make these choices even more complicated. Opportunity cost is the value of the next-best alternative when a decision is made; it's what is given up. Unfortunately, opportunity costs tend to be neglected. For example, rather than thinking of a smoothie transaction as costing \$7, think of it as costing a ticket for that movie you've been wanting to see or perhaps \$7 from your college fund. Too often, people fail to consider all the options when faced with a decision.

We all face opportunity costs. For example, professional athletes often sign very lucrative contracts with major league teams at a young age. In

these cases, they receive large incomes at a relatively young age and in many cases before they even graduate college. Their lack of knowledge about how to handle and allocate large amounts of money often results in many high-priced impulse purchases. They do not visualize or consider the opportunity costs of some of their financial decisions. Their lack of awareness regarding how, on what, and the rate they spend their earnings during their professional careers (which are not lifetime careers) leads to almost 80 percent of professional athletes declaring bankruptcy or experiencing financial stress within five years of retirement.¹ Had they taken the time to think about the opportunity costs of their financial decisions, they may not have had to face the consequences of their impulse spending.

Opportunity Costs and Not Going Broke

Studies have shown that opportunity costs are neglected even more so when making high-priced purchases, such as a home or car. Let's say, for example, you're purchasing a pre-construction home with a base price of \$200,000. Buying a pre-construction home allows you to customize the house by choosing paint colors, flooring, cabinets, doorknobs, hinges, and other accessories and finishes. Notice that the price stated is a "base price"—that is, the price before the added costs of any customizable options. You go down the list of options, and you see one for satin nickel doorknobs and hinges that cost \$1,300 (it could be a house with 16 doors). It's an upgrade from the standard brass hardware, which does not cost extra. You say to yourself, "Well, what's another \$1,300 relative to the \$200,000 I'm willing to spend?" This way of comparing the price of doorknobs to the cost of the house is known as relative value, the value of one item relative to the value of another item.² Do you know what the real value of those doorknobs and hinges are? Like most people, you may not, so you look for a different way to assess the value. It is easier in our minds to compare one item to another or, in this case, the price of the doorknobs to the price of the house. The \$1,300 seems relatively inexpensive when compared to the \$200,000; it is less than 1 percent (0.65 percent) of the total price.

Is this way of thinking considering opportunity costs? The real value of the \$1,300 lies not in comparing it to the \$200,000, but in considering that if you spent it, you would have \$1,300 less in your bank account and have given up the opportunity to purchase \$1,300 worth of

other goods and services. Think for a minute about how much those doorknobs and hinges really mean to you. If you bought an older house that has brass doorknobs and hinges, without the option to customize before you move in, would you really pay \$1,300 for someone to switch them all out? It is really about evaluating the value of that \$1,300 by thinking more about the implicit alternatives—"unseen" opportunity costs—and not basing your decision solely on explicit alternatives—the information, alternatives, and opportunity costs present at the time of making a decision. It's about thinking beyond the present and assessing alternative uses for the money—that is, not being shortsighted.

The "Unseen" Costs

One of the authors of *Dollars and Sense*, Dan Ariely, and his research assistant visited car dealerships to test how shortsighted **consumers** can be when purchasing cars. They surveyed people at a Toyota dealership and asked what they thought the opportunity cost would be if they purchased the Toyota. The hope was that people would include in their answers both the explicit and implicit alternatives for the amount they were willing to spend. Surprisingly, most people did not have a comprehensive answer. When Ariely posed the question differently by asking what other goods and services they could not purchase if they bought the Toyota, most consumers answered by stating they could not buy another brand of vehicle (e.g., a Honda) or other simple alternatives. Consumers were spending a large sum of money, and they did not seem to think about all the other financial opportunities they had with that money.³

Consumers shopping for cars tend to focus on the explicit alternatives, not the implicit alternatives. Car dealerships do not post signs that say "You can buy a car today for \$24,000, or pay for college tuition!" They are more likely to advertise that their brand is better and a better value compared with other car brands, models, and prices, which focuses on only one use for the money—a car. Dealerships also throw in what they consider mind-blowing deals and decorate their showrooms with balloons. It's like welcoming you to a car-buying party.⁴

Impatience

"No opportunity cost, I want it *now*!" ...may be something you'll say to yourself while you shop and start

An Opportunity Cost Nudge

Behavioral economics is a field that blends features of psychology and economics to explain consumer behavior. For example, one study examined whether mentioning the opportunity cost of a purchase influenced consumers. One hundred fifty students at Arizona State University were given two different versions of the survey question pictured below. Version 1 of the survey included Option A as it is shown below and Option B as just “Not buy this entertaining video” (implying that since they were not buying it, they kept the money for other purchases). Version 2 included Option A as it is shown below and Option B as “Keep the \$14.99 for other purchases.” The results of the study show that if the opportunity cost is explicit (Version 2), when compared with leaving the opportunity cost implicit (Version 1), the willingness to purchase the entertaining video decreased from 75 percent to 55 percent. The authors of the study state that these manipulations should not have any effect if consumers were to think of every opportunity cost (explicit and implicit) before making their decision. The results conclude that this is not the case. “Such manipulations should have no effect if participants spontaneously considered outside goods before rendering their decisions, and thus this provided some evidence that they do not.” (Frederick et al., 2009. See footnote 4.) Therefore, we need to be nudged.

Imagine that you have been saving some extra money on the side to make some purchases, and on your most recent visit to the video store you come across a special sale on a new video. This video is one with your favorite actor or actress, and your favorite type of movie (such as a comedy, drama, thriller, etc.). This particular video that you are considering is one you have been thinking about buying a long time. It is available at a special price of \$14.99.

What would you do in this situation? Please circle one of the options below.

- (A) Buy this entertaining video
- (B) Not buy this entertaining video **[Keep the \$14.99 for other purchases]**

thinking of the opportunity costs of your decisions. Most of our decisionmaking that involves money is based on immediate or sooner-than-later consumption.⁵ One opportunity cost that people may think of when spending money is not having that amount to save. The benefits of saving are not realized until sometime in the future, while the costs of saving are felt now. Saving is setting money aside, so you may have less to spend now but hopefully more money in the future.

The excitement of consuming today is valued significantly more than the thought of consuming in the future. The various forms of payments involving borrowing money (also referred to as “charging it”) allow people to enjoy goods today and pay them off later, blurring the future effects of our spending decisions. Some of these various forms of payment are credit cards, rent-to-own purchases, and car loans.⁶ In these cases, consumers enjoy the benefits today, while the costs are pushed off to the future. Considering choices carefully and not neglecting opportunity costs are both significant when making decisions about what and why you purchase anything using credit. There are times when individual decisions offer more incentives if we wait—that is, saving up money and

paying with cash versus borrowing money and committing future income toward a monthly payment plus interest. Borrowing is negative saving, and some people borrow to spend more money than they earn (imagine someone purchasing items totaling \$40,000 when they earn only \$30,000 a year). People will have to save more money in the future, and thus consume less in the future, if they borrow funds for consumption today.

Some professional athletes have shared their stories about how they overspent and incurred a significant amount of debt. They claim to have had plenty of cash, but their access to more money through credit was very enticing. The explicit alternatives between which house and which car(s) to buy were made more accessible to them through the buy-now, pay-later model of using credit. It seems that just like people in other careers, professional athletes need a little nudge to spend wisely. (See boxed insert.) As these athletes claimed, they wish they would have thought of the opportunity costs of their careless spending during their careers. For example, instead of spending \$150,000 on a third fancy car, they could have saved or invested it for future income once their professional careers ended.⁷

Conclusion

While it may not sound like a lot of fun to think about the opportunity costs of every financial decision, we need to be careful and not get too caught up in an “autopilot” mode of decisionmaking. Thinking about everything we could do with our money is hard. At the time you make a purchase, remember that you can spend the money only once. More costs exist, so you may miss future opportunities such as a more significant purchase, interest earned on savings, bill payments, or other possibilities. The difficulty of considering several options leads us to revert to mental shortcuts during our decisionmaking.

Think of as many alternative uses for your money as you can. If you haven’t done this often, begin doing it little by little, even for small purchases such as a pack of gum or can of soda. Thinking of opportunity costs may go quicker the more you do it. You probably won’t think of every single opportunity cost all at once, because that would be exhausting. However, keep in mind that your future well-being depends on the financial decisions you make today. Remember that our most common money mistakes are failing to consider opportunity costs altogether or not considering them enough.⁸ ■

Notes

¹ Holmes, L. “ESPN’s ‘Broke’ Looks At the Many Ways Athletes Lose Their Money.” National Public Radio, October 2012; <https://www.npr.org/series/pop-culture-happy-hour/2012/10/02/162162226/espns-broke-looks-at-the-many-ways-athletes-lose-their-money>. Accessed July 18, 2019.

² Ariely, D. and Kreisler, J. *Dollars and Sense*. New York, NY: HarperCollins, 2017.

³ Ariely and Kreisler, 2017. See footnote 2.

⁴ Frederick, S.; Novemsky, N.; Wang, J.; Dhar, R. and Nowlis, S. “Opportunity Cost Neglect.” *Journal of Consumer Research*, 2009, 36(4), pp. 553-61; <http://faculty.som.yale.edu/ravidhar/documents/OpportunityCostNeglect.pdf>. Accessed July 19, 2019.

⁵ Thaler, R.H. *Misbehaving: The Making of Behavioral Economics*. New York, NY: W.W. Norton & Company, 2015.

⁶ Ariely and Kreisler, 2017. See footnote 2.

⁷ Holmes, 2012. See footnote 1.

⁸ Ariely and Kreisler, 2017. See footnote 2.

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Name _____ Period _____

Federal Reserve Bank of St. Louis *Page One Economics*®:**“Money and Missed Opportunities”****After reading the article, answer each of the following questions:**

1. The reason people cannot have everything they want is because of
 - a. scarcity.
 - b. explicit alternatives.
 - c. shortages.
 - d. credit.

2. AJ is buying a new car and chooses to pay \$250 for upgraded floor mats because he is already spending \$24,000; the \$250 is only about 1 percent of the purchase price. This describes an example of
 - a. taking into account the opportunity costs of buying the car and making the best choice.
 - b. relative value because he is comparing the value of the floor mats relative to the value of the car.
 - c. the best way AJ can spend his money because he is thinking of everything he could do with his money.
 - d. the unseen alternatives of his decision, such as saving money or paying for college.

3. Tati made an impulse purchase by buying a \$1,000 handbag. An impulse purchase means that she most likely did not think of the _____ alternatives for the \$1,000.
 - a. best
 - b. explicit
 - c. implicit
 - d. worst

4. Opportunity cost is
 - a. all of the alternatives we have in making a decision.
 - b. the condition that exists when there are limited wants and unlimited resources.
 - c. the value of the next-best alternative when a decision is made; it's what is given up.
 - d. the price that is paid when purchasing something you do not really want.

5. Which of the following best describes why people are impatient to make a purchase?
 - a. Many items are not available for purchase in the future.
 - b. People consider their opportunity costs carefully when making a decision.
 - c. Consumption today is valued more than consumption in the future.
 - d. There is nothing else that money can be spent on in the future.

6. One of the reasons people may find it difficult to save is because
 - a. the benefits of saving are experienced immediately.
 - b. interest is earned when you save.
 - c. they have less money to spend now.
 - d. they have more money to spend in the future.
7. The information, alternatives, and opportunity costs present at the time of making a decision are known as
 - a. benefits of making a decision.
 - b. implicit alternatives.
 - c. trade-offs.
 - d. explicit alternatives.
8. How is it possible for someone to spend more money than they make?
 - a. They can make a purchase using credit.
 - b. They can save enough to make a purchase.
 - c. They can make a purchase using saved money.
 - d. They can wait until their next paycheck to make the purchase.