

A “three-minute” lecture on opportunity cost

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Put too simply, given your constraints, opportunity cost is your second choice (what you would have experienced if your first choice had not been available).

You gave up an experience: what you would have chosen to experience if the experience you chose had not been available.

Opportunity cost seems like a simple concept, but it is not. Many people don't quite understand, including some graduate students. Hopefully, I and the T.A.s understand it.

Assume that on the table are 4 **packages** of stuff (*A, B, C, D*)

I will often call them *bundles*.

In the real world, bundles contain many goods /commodities (they represent consumption sets) but in class, to start, we will limit the bundles to a few commodities.

For example,

- bundle *A* might be your current bundle plus a used computer and a bottle of wine;
- *B*, your current bundle plus a used Rolex watch and a green shirt;
- *C*, your current bundle plus dinner at McDonalds with Justin Bieber and Miley Cyrus;
- and *D*, your current bundle plus dinner for two at Frasca, a fancy restaurant here in Boulder, wine included, with a guest, plus a chess board.

Another item is “none of the above”, *na*, which implies the status quo—your current bundle. So, picture four bundles, plus your current bundle, the status quo, so five bundles.

You can have one and only one of these five bundles, but you must choose one of these alternatives.

Write down your first choice

Which alternative/bundle would rank second: this is the bundle you would have chosen if your first choice had not been available.

Which alternative/bundle would you rank last?

What is the opportunity cost of your choice?

The opportunity cost of your choice is the bundle you ranked second

By taking your first choice, you gave up your second choice—you gave up the “opportunity” of having it/experiencing it, so the bundle you ranked second is the opportunity cost to you of having the bundle you ranked first.

For example, my first choice would have been McDonalds with the kids, my second, the used Rolex and green shirt—I think I look good in green.

So, for me, the opportunity cost of acquiring the Big-Mac “Special,” is the watch and shirt – I gave up the watch and shirt to get the Big-Mac Special.

Note that when I made my choice I also gave up my third, fourth, and fifth choice, but all of these are ranked lower than #2, so don't fully reflect what I sacrificed to get #1

(I would not have experienced my third, fourth, or fifth choice if my first choice was not available.)

Note that there is an opportunity cost even if all of the items have a zero monetary-cost. (but often different bundles will cost different amounts of money)

Also note that most bundles include some stuff you like, and some stuff you don't like.

If you ranked the bundles,

D, A, na, C, B

The opportunity cost of acquiring D , is bundle A (your second choice)

Note that even though you prefer A over the status-quo, you would be “worse off” with A than with D because you choose D over A .

The concept of opportunity remains the same no matter what the alternatives in the choice set represent, no matter the number of alternatives in the choice set, and no matter how you feel about the alternatives relative to the current state.

For example, the concept remains the same even if you do not like some of the components of your first and second choice.¹

The **choice** set, is simply the set of things from which you must choose. It represents your constraints.

In the first lecture, the partner set and budget set were both examples of *choice sets*.

¹ For example, both alternatives might have a monetary cost, or one of the bundles might have involved eating dog poop, and you don't enjoy eating dog poop.

If your ranking was

na, C, B, A, D?

You prefer none of the bundles to *na*. So, they all would make you worse off (you prefer your current bundle to all of them), in increasing degrees of worseness.

The opportunity cost of choosing none of the above is *C*, the least of the bads.

Changing the example, *C, B, A* and *D* might be increasingly bad dates. By staying home, choosing none of the above, you gave up going out with *C*. But if *na* (staying home dateless) was not available, you would go out with *C*.

Explaining: going out with *C* is better than going out with *B*, and if staying home is not an option, you have to go out with someone.

If your ranking was

D, na, C, B, A?

The opportunity cost of choosing *D* is “none of the above”

What does that mean?

Think it through in terms of dates: you prefer staying home alone to going out with *C, B*, or *A*.

So, by choosing *D*, you have given up the opportunity to stay home alone.

When determining opportunity cost, need to consider **all of the aspects and implications** of what you would have chosen if your first choice had not been available.²

Assume you ranked the computer/wine first and the Rolex/shirt second, knowing that if you came home with the watch your girlfriend would immediately dump you because she hates “posers”, and wearing the Rolex would prove to her that you are a poser. (Economists assume you know the implications of what you do.)

But you rank the Rolex over the Frasca dinner with a chess board.

For you, the opportunity cost of taking the computer/wine is a world with the Rolex and a green shirt, but no girlfriend. (Your second choice implies no girlfriend.)

We have to be very careful here in how we say this. One of the things you gave up when you chose the computer/wine bundle is **not** having your current girlfriend (your second choice includes her walking)

In addition, you prefer a world with a Rolex and a green shirt, but no girlfriend, to taking her to dinner at Frasca.

So, if your first choice had not been available you would have chosen the alternative with a Rolex and no girlfriend. The opportunity cost of going with the Rolex and no girlfriend, is dinner at Frasca and you having a girlfriend. So, in this situation, you would have given up the experience of having your current girlfriend.

² The implications will not be the same for everyone.

Is the opportunity cost of blatantly cheating on your rich wife simply yelling, screaming, and less money?

[John Edwards](#) was a leading Democratic contender for President a few years back until.

He got caught having an affair, and a kid, with the women below left, all while his wife was suffering from cancer.



What is included in the opportunity cost to John Edwards of pulling a “John Edwards”?

It is the life he would be living if he had not pulled a “John Edwards”. This includes stuff he would have bought that he cannot buy now because of child and affair-related expenses, plus the chance to ever be President. He also gave up not having an extra son name Quinn.

Does it include other stuff as well? He got arrested for breaking campaign-finance laws (some “donations” from rich friends were funneled to the “new family”). So, the opportunity cost includes **not** being arrested for a violation of campaign laws. (He was found not guilty on one count and a mistrial was declared on the other [counts](#).)

The opportunity cost is the life he would have had if he had not had the affair.

Mark (the former governor of S.C.), with wife, before



Mark after hiking the [Appalachian trail](#) with Maria





Maria Belen Shapur

Maybe part of the opportunity costs of choosing Maria, is being President of the U.S. That is, he might have been our next President if he had not done what he did.³

³ Since all that happened he got himself elected to the House of Representatives, but it not going to be re-elected because he lost the Republican primary to someone more Trumpish.

Why do star male football and male basketball players often drop out of college?

Or, graduate but with a low GPA.

Or, in the case of some basketball players, not even start college.

Part of the opportunity cost of you going to college is what you would have bought with the money going towards your tuition (assuming it is your money). Is that part of the opportunity cost of staying in college for the said athletes? Probably not because they are likely on scholarship

The opportunity cost for the star athlete of going to college includes the possibility of playing pro sooner and making zillions of dollars sooner, and also the possibility of being a low-skilled worker sooner

By staying in college, some male athletes give up the possibility of a rich lifestyle, now.

The textbook uses the example of Tiger Woods, who went to Stanford for a while, but did not graduate.

How about elite female college field-hockey players? Are they giving up zillions to by staying in college?

Why are elite male basketball players more likely to drop out of college than elite female players?

Why are male football players more likely to fail this class than female soccer players? For these males, the perceived opportunity cost (as perceived by them) of coming to class and studying for the exams is higher.

The only kind of “cost” important to economists is opportunity cost

The same should be true for you.

Note that opportunity cost and monetary cost are often very different.

What if John Edward had made his decision to cheat on his dying wife thinking only in terms of the monetary costs? (Was he really thinking?)

He would have grossly underestimated the cost if he had only considered the monetary costs.

So, I just searched the old exams on the course web page using the word “opportunity” assuming it would pull up all the questions I have asked about opportunity cost. It pulled up many questions. You should now find and study those questions, to make sure you understand the concept for the quizzes and for the first midterm. The T.A. will go over some of these questions in recitation. You will soon have a quiz with Edward-type opportunity-cost questions.

Two questions:

I have a debit card with \$20 left in the account, and for some reason the \$20 will disappear from the account by tomorrow morning if it is not spent today. My first choice is to hit the bars tonight and spend the \$20 on drinks. My second choice is to stay home, veg, and buy nothing.

The money cost of hitting the bars is \$20.

Is that \$20 part of the opportunity cost? That is, does the opportunity cost include goods or services that could have been purchased with the \$20?

NO. Because I would not have bought anything with the \$20 if I did not hit the bars.

And

An alternative scenario: I have \$20 in my pocket and it will still be there in the morning if I do not spend it tonight. My first choice is to spend the \$20 tonight at the movies (ticket and snack). I know if I go to the movies, I will not get in a fist fight with my roommate. I know we will fight if I stay home. My second choice is to stay home, spend the \$20 on pizza and some music downloads, and fight my roommate.

What is the opportunity cost of my going to the movies?

Pizza, some music downloads, and the fight with my roommate. (I am be inclined to say the pizza was part of the opportunity cost rather than saying the \$20 was part of the opportunity cost, because the pizza was what was specifically given up.)

One more thought: consider the opportunity cost of taking a stressful job rather than your second choice, a relaxed-life of poverty. How would you describe the **stress component**? It would be **incorrect** to say that “stress is part of the opportunity cost.” It would be correct to say that “**relaxation** (no stress) is part of the opportunity cost of taking the stressful job. Don’t say it backwards.

Or, if alternatively, you chosen a relaxed life of poverty over the stressful job, part what you are giving up is stress, it is part of the opportunity cost of your decision to have a relaxed life of poverty.