Hi. Welcome to economics. This is Kate. This tutorial is on economic profit. As always, my key terms are in red in and my examples are in green.

So in this tutorial, we'll be talking about the difference between accounting and economic costs. And I'll show you how to calculate both accounting and economic profits.

So if we're thinking like a business or investor, the point of both of these things-- owning a business or investing in some business or investing in general-- for most people, it's to make a profit. And for a business, a profit equals their revenues or sales minus their costs, whatever it took to produce their product. So investors and firms have to make decisions all the time. Let's start by talking about business decisions.

Businesses have to figure out, well, what should we focus our production on? Should we produce, let's say, good a or good b? If they decide to go with good a, then their sacrifice is good b. They're giving up the opportunity to get returns from the production of good b. They have to make the same decisions and sacrifices with what technology they're going to use. The key idea again is when they make a decision, they're giving up something, which is what we call in economics an opportunity cost.

Investors are also making decisions. If you're looking at changing your investments, let's say, you are going to give up the opportunity to earn a return on the other or the next best investment. Maybe you're a very safe investor, but you're deciding to take some money out of that safe investment and make a riskier investment in hopes of yielding a higher return. It's really important that we keep in mind what we're sacrificing or what we're giving up, because these opportunity costs are going to help give us an idea as to whether we made a profitable decision.

OK. So I want to talk about the difference between an accounting and an economic profit. Starting with an accounting profit, it's very straightforward. It's just your total revenue, which is price times quantity minus our total cost, which is the cost per unit times however many units. But what's important to keep in mind about accounting profit is that when we're talking about the costs here, these are explicit costs. They're just straightforward, out of pocket costs. What exactly did it cost to produce this product.

So here's an example for you. Let's say that's Sue decides to open a diner and she wants to know if she made an accounting profit in her first year. She gives her accountant this information. She sold 15,000 meals at $10 each that first year, and she figures out that her overall cost per meal-- after factoring in those explicit costs, the food, labor, overhead costs, et cetera-- was $8 per meal.

Well, it's not real hard to know that she is going to make an accounting profit. But let's take a look at how we would calculate it. Total revenue side here. The $10 meals times 15,000 of them makes her sales $150,000. Her cost side. She claims that her cost per meal was $8, and she sold, again, 15,000-- or produced 15,000 of them, making her costs $120,000. An accountant looks at this and says, yes. Your accounting profit is $30,000.

But what would an economist say about this? An economist would say something's missing. That really did not account for all of her true costs. It didn't account for her opportunity costs. So an economist would ask Sue, well, what did you give up the opportunity to do when you opened your diner?

Well, it turns out that she quit teaching and she was earning $40,000 per year. She also had invested $100,000 of her savings to open the restaurant. And before she put it into the restaurant, she was earning a guaranteed 5% interest on it, so $5,000. So her total costs, then, would be the $120,000 explicit costs that we calculated in the accounting costs plus the $40,000 she gives up from teaching plus the $5,000 that she gives up in guaranteed interest on that $100,000. So really, her total costs, including opportunity cost, would be $165,000. And these are what we would call all of her economic costs.

So that brings us to what an economic profit is. And it's total revenue minus total cost where total cost includes implicit or opportunity costs. So what does her economic profit look like? Well, nothing changes here on the revenue side. It's still price times quantity, so $150,000 in sales. But on her total cost side-- I noted the changes here in pink-- that again, we do the explicit or out of pocket costs here. That's your $120,000.

But we're adding in both what she gave up. She gave up both her previous job and the guaranteed interest, bringing her total cost to $165,000. So we would actually call this an economic loss of $15,000 in her first year of operations.

OK. So economic profit then, as a reminder, equals total revenue minus total cost where total costs include our opportunity or implicit costs. And some examples that I've used here are what return could you be earning in another investment. So if we're looking at this investment versus that one, you're looking at what you gave up in the other investment. Or in Sue's example, did you give up quitting your job with a salary to start a business. OK. There are many other opportunity costs that could be included here, but those are the two that I'm talking about in this example.

So a firm-- it's very possible for a firm to earn zero economic profit. And people always think that that's a terrible situation. But really, zero economic profit just means that you've just covered all of your opportunity costs. So in Sue's example, she would've made enough that she made what she used to make in her teaching job and she made enough that it would have covered her previous interest she had earned. That would be a positive accounting profit. Zero economic profit actually would just be enough to keep Sue in that business.

So an accounting profit minus our economic profit will give us our opportunity cost. And that opportunity cost here represents the return you're expecting. OK. It's the foregone return, what you gave up on your next best alternative. So if I earn higher returns by changing investments-- if Sue earns more than zero economic profit-- then that's when we can say I've made an economic profit.

So in this tutorial, we talked about how accounting profit and economic profit are really the same formula, except that economists consider all costs which are implicit or opportunity cost when evaluating whether a decision has been profitable. And the opportunity cost is really this fixed cost that represents what was sacrificed in order to make a decision. So for example, the return on another investment or a business decision. Thanks so much for listening. Have a great day.