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IlLUminate Blog Transcript: Fabio Gómez-Rodríguez on Inflation Expectations

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ANNOUNCER: 00:02	This podcast is brought to you by IlLUminate, the Lehigh Business Blog. To learn more, please visit us at business.lehigh.edu/news.
JACK CROFT: 00:13	Welcome. I'm Jack Croft, host of the IlLUminate Podcast for Lehigh University's College of Business. Today is May 26th, 2023, and we're talking with Fabio Gómez-Rodríguez about why inflation expectations are so important. Dr. Gómez-Rodríguez is an assistant professor in economics in Lehigh's College of Business. His research interests are time series econometrics, monetary and fiscal policy, and data science. Welcome to the Illuminate podcast, Fabio.
FABIO GÓMEZ-RODRÍGUEZ: 00:46	Thank you. Thank you for having me.
CROFT: 00:48	Let's begin by talking about inflation generally. And as a refresher, what does the inflation rate measure and what does it tell us?
GÓMEZ-RODRÍGUEZ: 01:00	I've been trying to find a way of explaining inflation in an intuitive matter or in an intuitive way, to say it in a story. I like to tell stories. Even when I'm teaching, I try to find stories that help people remember the concepts. And for inflation, I've been thinking about the following example: Imagine I give you right now a $100 bill. I think you'll be very happy that I'm giving you money. And I also tell you, you can spend that $100 bill whenever you want. It can be today, it can be tomorrow, or it can be in 10 or 20 years. Even if I tell you and give you that flexibility, I'm pretty sure you will not wait until 10 or 20 years have passed in order to spend this $100 bill. And one of the reasons you won't do it, or you won't wait that long, is because you know that what you can buy today without that $100 is much more-- what you can buy today is much more than what you will be able to buy in maybe 10 or 20 years. And one of the reasons that happens is because of inflation. So I like to always try to do the warning, inflation is—to use an analogy—inflation is not a distance. It's more like a speed. How quickly does my $100 bill are losing their value? How quickly is my $100 bill losing the ability to get me stuff? And that's basically why, when inflation is very high, we want to avoid it. We want to avoid very high inflation because salaries and money, in general, are losing their value. So what I'm trying to say with this is that inflation is that concept. It's making us trying to spend the money right away, as soon as possible.
GÓMEZ-RODRÍGUEZ: 03:03	So in a way, it's the opposite of interest rate. Interest rate is why you want to save money and spend it later because you get more and more money every time. So this relationship between inflation and interest rate is what-- all in life, there's an equilibrium. And if interest rate is in one side, I will definitely say inflation is that other part of the story, that other side of the coin that wants you or makes you want to spend your money as soon as possible in the fear or trying to avoid for it to lose value. So we want inflation, for once, to be not too high because we don't want inflation to-- we don't want our money to lose value. But there's also reasons why don't want inflation to be low or even negative. Because, yeah, it sounds good. If my money does not lose value, that's a good thing. But actually, inflation, it's also good because it makes us spend more money, which makes businesses, for example, sell

more. And if businesses sell more, they grow, and they hire more help in order to get more wages. I mean, that will get employees more wages. And these wages, again, is what makes us improve or thrive as an economy. So inflation is not all bad. What is important is that we keep inflation at a good rate, not too high, not low. So when we say something like inflation is 10%, it means, in a way, we are being able to buy 10% less stuff every year. And that's why the Fed is-- or the Fed is institution that is in responsible for watching our inflation that it doesn't get too high. And the fact that they are going to do, they're going to try to keep inflation at 2%. That's what they decided to be their target. And that's the rate that is not too big but also not too small and keeps the economy moving, but also does not make us lose the value of our money too quickly.

CROFT: 05:21

Now, you've already touched on the idea of expectations, that people have expectations of you know inflation going up their money becoming less valuable. So what is the role that inflation expectations play in the economy? But let's start with the definition of inflation expectations.

GÓMEZ-RODRÍGUEZ: 05:43

Inflation expectations, as the name says, is what we expect inflation to be. It turns out that even if we have followed what inflation has been, what's more important for our decisions, the decisions that we are-- for example, to buy a car or buy a house, what really will matter is what do we expect to happen with inflation in the future? And that becomes inflation expectations. So if you think, for example, that your money is going to lose weight in a very, very rapid way, then you will want to spend that money. And if many people think like you, a lot of people are going to spend money in whatever they want to buy. And eventually, that's going to make businesses say, "Well, I'm selling a lot. So I'm going to increase my prices to improve my revenue." So what happens is that whenever inflation expectations are on the rise or are high inflation expectations, inflation today turns out to increase. And the same thing happens in the other case, which would be if inflation expectations are controlled or even low for some reason, well, that makes us keep our money a little bit longer. And therefore, also, prices will not respond as fast, and that makes prices not to increase as quickly, and therefore inflation will be lower. So the role of inflation expectations is that it works almost like a time machine. Whatever you think is going to happen, somehow ends up happening if the collective, the whole economy together, thinks the same way. So as long as inflation expectations are controlled, we can control the inflation. If inflation expectations are high, inflation is going to go up. If inflation expectations are low, then the inflation is going to go down. So that's why the Federal Reserve, or any central bank for that matter, will pay a lot of attention to what's happening with inflation expectations, trying to keep it not too high, not too low. Usually, they try to make their inflation target-- which for the Fed is 2%. For other banks, it could be some other number. They try to keep inflation expectations as close as possible to the whatever the inflation target-- to whatever inflation target they have.

CROFT: 08:16

I think most of us are used to reading about expected inflation rates for the coming months or year or hearing about them on the news. I don't know that a lot of us have given much thought to where exactly do those expectations come from? Who is setting those expectations?

GÓMEZ-RODRÍGUEZ: 08:36

That's a very interesting question. Well, obviously, every person pays attention to what's happening around them. So sometimes you might hear in the news that

something is happening. For example, the war in Europe or maybe COVID is a good example of things that are happening outside or around the world that will make you think, "Oh, I think prices are going to go up," or, "Prices that are maybe not going to go up as quickly or even go down," if that's the case. But it's always difficult to pin down exactly what inflation expectations are. So that's where your question becomes very important. How do we calculate them? How do we measure them? And in general, we can separate two types of ways in which you can calculate or obtain inflation expectations. One of them is-- I call it a little bit more sophisticated, which is market-based inflation expectations. Market-based inflation expectations are inflation expectations that can be inferred or derived from the difference in the price of financial instruments that are protected against inflation versus those that are not protected. So for example, if I invest $1,000 somewhere and they tell me, "Well, I'm going to give you-- in a year, I'm going to give you $100 on top of your $1,000 and as many dollars or a little bit more, depending on how much inflation was during this year," so that kind of instrument or that kind of investment is protected against inflation. So how much I will get for my $1,000 will be a little bit less because this type of product or instrument is protected against inflation. Now, if I want to do the same investment somewhere else, and they tell me, "I'll just give you this money. And whatever inflation is, it's your risk," so whenever I'm taking the risk and inflation might make it less worthy for me to invest my money in this other option, that's going to influence the price and how much I will get back from my money in this other alternative.

GÓMEZ-RODRÍGUEZ: 11:03

So it turns out that there are mathematical methods and economic models, econometric models as well, that will measure what the implicit inflation expectations of their market are based on the difference in prices of these two alternatives. Some sort of instruments or products that are protected against inflation, versus some of them that are not protected against inflation, and the difference we say is because of inflation expectations, and then we use that as a number to-- or as a measure of what inflation expectations are. There's a little bit of-- well, there's an important thing here, and it is basically that it's not easy for people, economic agents-- not everyone will be able or even participate in these markets. So what's going to happen is that inflation expectations that are measured this way are not necessarily the expectations of the whole population, but it's more inflation expectations of a very selected group of people. And what happens is that everyone is part of the economy, not just people who invest their money in this type of-- with this type of alternatives. So if you want to try to have a better understanding of inflation expectations for the whole economy, you have to rely on the second type of inflation expectation measurements, which is through surveys. For example, the University of Michigan has a very well-known survey of consumers. They ask many questions about different things. And one of the things they ask is-- or one of the questions is, "What do you think inflation is-- or how do you think prices are going to change over the next 12 months?" And then they also ask, "What do you think prices are going-- or how do you think prices are going to change from 5 to 10 years ahead?"

GÓMEZ-RODRÍGUEZ: 13:04

Because it turns out that inflation expectations is not necessarily just a matter of what you expect in the near future; also what you think is going to happen in the long run matters. So these two types of questions are answered in the survey. And this obviously, because it's much easier to just ask people what their opinion is on inflation expectations, it also covers a much bigger portion of the population. And

therefore, maybe in that sense, a little bit more reliable to try to capture the opinion of all the economy and not just a selected group of people.

CROFT: 13:46

It seems like there might be, and you'd made reference to this earlier on too, almost a self-fulfilling prophecy that if you survey a bunch of people and they say, "Well, the inflation is going to be high in the next year," well, when the results of that survey come out, other people who weren't part of it hear it, and other people who take the next survey, it almost would seem like it feeds on itself, that when people keep hearing, well, it's going to be high, then they start thinking it's going to be high and--

GÓMEZ-RODRÍGUEZ: 14:20

That's correct.

CROFT: 14:22

I wonder, and this gets into a bit more about your research, but we always hear the mean or median averages for expected inflation. So let's say the latest information comes out, and they're saying in a survey that it's 3%, and it's been 3% in the previous two times. Does that mean there's been no change in the inflation rate?

GÓMEZ-RODRÍGUEZ: 14:47

No. That's a very good question because it sets me up to talk about my research, as you mentioned. What happens is that as we learn in research, it tries to understand better the economy and especially in macroeconomics that deals with the accumulation of what the whole population is doing in the economy, the methods that we use to try to understand the economy are slowly becoming more and more capable of being able to represent even more phenomena that are sometimes more complex. One of the things that happened is that whenever we started thinking about the fact that inflation expectations are important for the economy, at that moment, maybe we didn't have computers that are as fast as the ones that we have today or as much memory as they have today. And even some of the statistical methods that we had at that point were not sophisticated enough to deal with the fact that we all have different inflation expectations. So at that moment, the easiest thing to do was, well, I'm going to ask, I don't know, 300 people whether inflation expectations are, and I'm just going to take the average. And that's going to be the inflation expectation. 3%, as you said, for example. And then it turns out that it is possible that in the last three months or three last periods that we observe inflation expectations, the average keeps giving me 3%. So it might seem like inflation expectations are not changing. But what might have changed is what's called the distribution of inflation expectations.

GÓMEZ-RODRÍGUEZ: 16:36

We don't know if that average of 3% is everyone saying it's 3%, or maybe if some of them say-- half of them say 2% and the other half say 4%. That's also an average of 3%. Or what if some of them think inflation expectations-- or their inflation expectations is 10% and some of them say that their inflation expectation is 2% and then some say 3%, and maybe when we put all of them together in an average, it becomes 3% again. So what I'm trying to say is that the fact that we observe an average of 3% or maybe a medium of 3%, that does not mean that everyone thinks it is 3%. And that's what my research does. My most recent paper is about how inflation expectations being treated as a whole set of different inflation expectations can give us a new light on how expected inflation influences inflation itself. So for example, one of the things that I measured there is, first of all, how decisions of the government, like, for example, the Fed changing the interest rates or maybe the government deciding to spend money in, I don't know, building a new highway or something like that, or even taxes, how this kind of decisions by the government changes the distribution of inflation expectations. Once I established that, I can then,

in this-- that's what my research is going to go on with, is going to be what happens now that I realized that the decisions of the government can change the distribution of inflation expectations? We can also then realize, okay, what implications does it have to actual inflation? And that way we establish what is called a channel in which policy is affecting the whatever variable they want to affect.

GÓMEZ-RODRÍGUEZ: 18:38

So for example, let me summarize a little bit what I'm trying to say. The Fed changes interest rates to try to fight inflation. They increase interest rate to sort of get back to the inflation that they want to have. There are many ways in which the increase in interest rates is going to affect the economy. And I'm arguing that one of these channels is inflation expectations. With an increase in interest rate, probably there will be changes in what inflation expectations are. People are going to interpret, for example, the news that interest rates are up in a way, or maybe just the fact that it would be more expensive for them to buy a house or it would be more difficult for them to get a loan or just the fact that maybe you have to pay your own mortgage, so you have less money available every month. All that is going to affect your inflation expectations. So my research is trying to figure out how the fact that not just one number but a whole set of different inflation expectations is going to affect inflation after looking at some changes in policy, like for example, I just mentioned monetary policy.

CROFT: 19:54

Okay. I think that takes us to our main question for today, which is, why are inflation expectations important?

GÓMEZ-RODRÍGUEZ: 20:03

Monetary policy is the first reason, the main reason I would mention. That's the one that I also do the most research on, how monetary policy is influenced by inflation expectations. It turns out that, for example, the Fed decides to increase or decrease interest rates based on what they think inflation expectations are and, therefore, what they think inflation is going to be in the future. So the main reason I would say is monetary policy, but also it's important for us as consumers in our decisions whether or not to use our money right now or maybe save it or invest it for the future. If we think inflation expectations are high, we might decide to use our money right now. But if we think that there's some sort of stability in inflation expectations, together with maybe good interest rates, that will make us maybe decide to spend our money later. So whether to buy a house or a car today or not can be influenced by inflation expectations. The third reason is whenever, for example, you're about to get a job and you are interviewing for it and they ask you about what your salary should be, in a way, you consider the fact that probably that wedge is not going to change that quickly over the next couple of months or even years. So you want to make sure that whatever you ask for includes your expectations about what you will be able to buy with your salary over the next few months or years. So in which negotiation, inflation expectations become a very important factor in order to decide-- when deciding what number you're going to ask for when they ask you about your salary.

GÓMEZ-RODRÍGUEZ: 21:57

Also, bonds and investments. As I mentioned before, when we were trying to explain how inflation expectations can be determined, sometimes the decision to invest in one or other type of financial instruments or doing one or another type of investment will depend on whether or not this instrument or product is inflation protected or not, or also if the investment, what you're going to get as a return, will make up for the fact of what your inflation expectations are. You don't want to-- I mean, even if you get, say, 10% back, but if you think inflation expectations-- your inflation

expectations is 12%, you are going to be able to buy less goods with the money you get after the investment, then before the investment. So obviously, you would decide against it. So basically, inflation expectations matter for our decision to invest or to buy on a specific bond. As you might heard, bonds, for example, are from the U.S. government and considered very low risk or practically no risk, in the sense that you will get your money back. That also comes with a price. You don't get as much money as with other risky assets. So if you want to decide whether you should buy a bond or maybe invest in the stock market, sometimes what you expect inflation to be is going to make the decision easier or not, whether to go a little bit more risky and get more money back or maybe something more safe. And again, inflation expectations are important factor in making that decision.

GÓMEZ-RODRÍGUEZ: 23:46

In general, as long as inflation is stable, financial markets are going to remain stable as well. If at some point, for example, if you face an economy-- or if the economy and the financial markets face hyperinflation, which is what we call when inflation is way too high, on the two digits, 10, 20, even some economies have faced 1,000% inflation. Imagine what that is. So you basically wake up with some money, and you go to bed, and that money is worth 10,000 less. So whenever you have hyperinflation, obviously, the financial markets lose their stability because investments are just not-- you don't want to invest your money at all if you cannot buy anything which whatever returns you will get. So as long as inflation expectations are stable, that's how the financial markets are going to remain stable. And finally, in general, for example, again, in terms of monetary policy, policy anchoring, that's what we call whenever we have inflation expectations all close to whatever value you want to have. For example, the Fed wants all of us to expect inflation to be 2% because that's their target. So in a way of measuring, if your policy is being effective, it's by paying attention to what inflation expectations are doing. So if the Fed decisions are making more and more people believe that inflation expectations is closer to 2%, we call that an increase or an improvement in policy anchoring. So the more anchored inflation expectations are, the easier it's going to be the job of the Fed in maintaining inflation and therefore inflation expectations as well as stable.

CROFT: 25:48

Now, to summarize, I'd like to ask you to talk about what the key takeaways are that people listening today or the people in general should know and keep in mind when they hear the latest news about inflation expectations.

GÓMEZ-RODRÍGUEZ: 26:07

I'm going to try to talk one minute on what's happening lately. Since COVID and especially the war in Europe, a few things that happened has made inflation to go up. Actually, even a year ago, we were not even sure if this hike in inflation was going to be-- and this is an important question, if it's going to be permanent or transitory. And what they meant with that is if it's permanent, that sort of would require the Fed to actively do something about it to get it down again. But if it was going to remain transitory, it sort of meant that eventually, on its own, it would go down. What happened is that it didn't go down as they expected at the beginning. So what has been happening is that with a persistent inflation, inflation expectations had also increased. Lately, with this increase in inflation, inflation expectations have more and more often been just above the target of the Fed. So what the Fed is going to focus on right now is trying to be aggressive at increasing interest rates as much as possible for them without-- trying as much as possible not to hurt the economy. And by doing that, what we're going to try to achieve is to lower inflation expectations. So the bottom line of all this conversation, I would say, is that we should not only care about

inflation; we should care about inflation expectations. And actually, some of the arguments that the Fed has been using lately is that they feel that inflation expectations are finally stabilizing and maybe even starting to go down a little bit. So what you want to understand from that is that they might stop being as aggressive and increasing interest rates. But that's a matter in inflation-- and inflation expectations have these characteristics that are very-- not persistent. Say, it's low in changing. It changes just little by little. So we need to be patient at this point and just wait and see if the what the Fed has done and what the economy is doing in the last couple of months is going to-- the results of that. We're going to start seeing it little by little over the next couple of months and, hopefully in, I don't know, maybe for the next year, approximately to have finally stabilized inflation.

CROFT: 29:03

With that, Fabio, I'd like to thank you for being with us today on the IlLUminate Podcast.

GÓMEZ-RODRÍGUEZ: 29:08

Thank you, Jack. I enjoyed this conversation a lot. It was a lot of fun. And yeah, I mean, if anyone listening to this podcast ever wants to talk about inflation, inflation expectations, well, my doors are open, and I'll be more than happy to discuss because, as you could hear from all our conversation, is that inflation is not a simple topic. It can be very complicated, and all I try to do is make it simpler to understand, but as you know, or as you could hear, it generates a lot of passion trying to understand this interesting topic.

CROFT: 29:53

And I think you've done a very nice job of that today, I will say.

GÓMEZ-RODRÍGUEZ: 29:56

Thank you, Jack. Thank you so much.

CROFT: 29:59

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