EconoFact Chats: Getting to 2%: Lessons from Disinflation Experiences

Peter Blair Henry, Stanford University

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I'm Michael Klein, executive editor of EconoFact, a non-partisan web-based publication of the Fletcher School at Tufts University. At EconoFact, we bring key facts and incisive analysis to the national debate on economic and social policies, publishing work from leading economists across the country. You can learn more about us and see our work at www.econofact.org.

Michael Klein
The Federal Reserve has been aggressively combating inflation since it began raising interest rates in March 2022, and it's seen success in this battle. On the day that we are recording this interview, the Bureau of Labor Statistics has released the latest inflation numbers. Inflation over the 12 months ending in August 2023 was 3.7%. This is much lower than its peak of 9.1% in June 2022. To date, inflation has come down with virtually no rise in unemployment, something that, it's safe to say, very few people predicted. But this newest inflation rate is still above the Fed's target of 2%. Will a so-called soft landing, a reduction in inflation without a recession, continue if the Federal Reserve attempts to bring inflation down to its 2% target?

My guest today, Peter Blair Henry, a Senior Fellow at Stanford's Hoover Institution and Dean Emeritus of New York University's Stern School of Business, has studied the countries that tried to bring down inflation, that is to disinflate, and he draws lessons for the current experience. Peter reported on his research that he did jointly with Anusha Chari of the University of North Carolina at Chapel Hill in an article in Foreign Affairs earlier this year. Peter, welcome to EconoFact Chats, and thanks for joining me today.

Peter Blair Henry
Thank you, Michael. It's really a pleasure to be with you.

Michael Klein
So, to begin with, Peter, can you explain why economists think that a recession is required to bring down inflation, how the central bank of a country can bring about a recession?

Peter Blair Henry
Thanks, Michael. That's an important question. And the thing to remember is that an economy is a supply side and a demand side. And the supply side is basically how many goods and services are produced by the firms, corporations, small businesses, and large businesses in an economy. And the demand side is how much is demanded by households, consumers, and also firms that want to buy things like investment goods and so forth. And so, when the demand for goods and services outstrips the ability of the economy to produce those goods and services, prices tend to rise. And so, economists have sophisticated ways of thinking about these things. We have this term called potential output and actual output. And what that means is when actual output is above potential output and the economy is essentially what we call overheating, right, it's basically producing more than it can produce in a sustainable way, something has to give so that

inflation doesn't continue to rise. Because if inflation continues to rise, that can be very problematic for the economies I'm sure we'll discuss. And so, one way to get rid of inflation is to cool the economy, right, to reduce demand. And central banks do this by raising interest rates. It's the best policy tool that they have. And when you raise interest rates, it raises the cost of borrowing for households and for firms. And that means that firms are likely to invest less. Households are likely to consume less. As households consume less and firms invest less and cut back their production because households are demanding less, then that has knock-on effects in the economy. Unemployment tends to rise as a result of that process because there's less need for the workers to produce that previously unsustainable level of output. And so that's why unemployment tends to rise during periods of trying to get rid of inflation. And that's historically been the pattern in the data. There's a relationship called the Phillips curve, which basically says that the combination of things that need to happen is output needs to fall below potential output for inflation to drop. And in order for that to happen, unemployment needs to rise to a rate above the natural rate of unemployment.

Michael Klein
In the background paper that you and Anusha wrote that presents the research that your Foreign Affairs article is based upon, you talk about two schools of thought concerning how difficult it'll be to bring inflation down to its target rate. One of these you call the "sacrifice ratio school" and the other you call the "this time is different school." What are the views of each of these and how do they differ?

Peter Blair Henry
Well, the "sacrifice ratio school," Michael, really kind of adheres to the process that just described, which is that in order for inflation to come down, output has to go up. Sorry, unemployment has to go up, because in order for basically the central bank to get firms and households to believe that it's serious about reducing the inflation rate, unemployment needs to rise and as a result, output falls and you get this series of cascading effects that lead to a real slowdown in the economy. A different point of view says that, well, actually, if the central bank could just convince everyone that it was really serious about reducing the rate of inflation, then firms would stop raising their prices, workers would stop demanding increases in wages, and inflation could come down really, really rapidly.

The "this time is different school," as we call it, is really attributable to a view that came out of a very famous paper by Tom Sargent in the early 1980s, where he showed that, in fact, in the case of what are called hyperinflations, this is a case where inflation is sometimes as high as 1000% per year. And he looked at the cases of four countries post-World War I in Central and Eastern Europe that were able to get inflation down really, really rapidly simply by committing to a) reducing the size of the fiscal deficits, basically reducing government spending drastically, and at the same time the central bank committing to not print money to finance those deficits, and by doing that, inflation came down really, really rapidly. So this time is different school says, well, if we can just do things, if we just be really credible on fiscal and monetary policy, we can get inflation down really quickly without unemployment going up.

Michael Klein

In your research paper, you talk about the Sacrifice Ratio school. An example of that is a Volcker disinflation that began in the late 1970s and continued into the early 1980s, and we saw a spike in unemployment. So I could ask you which side you come down on, the acrifice Ratio School or the This Time is Different School, or as a spoiler alert, I could just give the title of your Foreign Affairs article. It's called The Long War on Inflation, and the subtitle kind of gives it away. It's: "Don't Expect a Quick Return to Price Stability." So this view is based on the analysis on the research paper that I mentioned by you and Anusha of historical disinflation episodes. Can you, Peter, describe what you looked at and why you looked at those particular episodes?

Peter Blair Henry

Yeah, I'd be happy to. So what we did is we said, looking at the current disinflation episode of the United States trying to bring inflation down from close to 10 percent, and also, frankly, the Bank of England and the ECB trying to bring down double-digit inflation in England and Europe, we said, gee, everyone's thinking about the Volcker episode. I'm from Jamaica, originally, and my co-author, Anusha, is from India, so we're both from developing countries. And so we're kind of very familiar with other countries that had to wrestle with inflationary issues. And in particular, there are countries, people, when people think of developing countries having inflation, they typically think of really high inflation, like Argentina and Brazil having hyperinflations. Kind of like the episodes associated with the This Time is Different School of Thought in Central East and Europe after World War I. But Anusha and I were aware of what are called moderate inflation episodes in developing countries. And we realized there were 56 cases of countries that tried to reduce inflation where the average inflation rate was about 15 percent per year. So not dissimilar from the double-digit inflation that we saw in Europe and in the UK at the peak of their inflation in 2022. And so, we said, gee, there are a lot more episodes than just the one Volcker episode that we can actually look at to learn about what happens when countries try to reduce so-called moderate inflation.

Michael Klein

So, you're taking a pretty wide range of countries, and some people may wonder what the experience of countries like Argentina or Brazil can teach us about what might happen in the United States, which is a rich and a large country where inflation recently peaked not at a thousand percent or 40 percent, but just below 10 percent. What can we learn from that wide range of countries that you and Anusha looked at, Peter, for the United States?

Peter Blair Henry

Well, I think what's really critical, Michael, is to make the distinction between the Argentinians and Brazil's where inflation was really high versus countries like India or, let's say, Colombia or other countries where inflation was much more moderate. And by moderate, we mean double-digit inflation on the order of 15 percent, which is very similar to what we saw in the UK and in Europe. And, you know, in the United States, 9 percent was not far away from double-digit inflation.

Michael Klein
So, one of the things I thought was really interesting in your articles, in fact, that you make that distinction. You split the sample into those countries that initially had inflation greater than 40 percent and those that had inflation below 40 percent. And that tracks somewhat to sort of the distinction you made before, where Tom Sargent looked at the hyperinflations of the 1920s and then other people talked about the Volcker disinflation. And so that kind of maps, I guess, in a way to these two different schools of thought by cutting the sample that way. Is that right?

Peter Blair Henry
That's exactly right. And the 40 percent threshold that you mentioned, Michael, is a well-established threshold. So, Stanley Fisher and Rudy Dornbusch looked at what they called moderate inflation back in the early 1990s. They defined moderate inflation as inflation that was basically double-digit inflation, but below that 40 percent threshold that was identified by Bill Easterly and Michael Bruno in some of their work on high inflation in the 90s.

Michael Klein
That's when you were their student at MIT, right?

Peter Blair Henry
Yes. I remember, infact, reading Stan and Rudy's paper on moderate inflation in our macroeconomics class with Stan Fischer.

Michael Klein
Rudy, is very sorely missed, and Stan is retired now. Another thing that I thought was really interesting was when Sargent's paper came out, the Nobel laureate Paul Samuelson commenting on it said, "you don't really learn a lot about dynamite by studying nuclear explosions." I see that you immediately understand that analogy. Can you describe that a little bit?

Peter Blair Henry
Yes. So, if you want to understand what the disinflation process is likely to be like coming down from 15 percent inflation, trying to get to, say, 2 percent inflation, or 9 percent to 2 percent inflation, it's hard to learn much about that, and this is what I think what the data are telling us, by looking at hyperinflation, and I forget what country it was. There were countries in Eastern Europe.

Michael Klein
Germany, for example, the German hyperinflation, Austria.

Peter Blair Henry
Germany, Austria, Poland and Hungary. But the geography is not what's important. What's important is the level of inflation. And so, I do think that Paul Samuelson has a point that if you want to understand what current disinflation is likely to…how smoothly it's likely to proceed in the United States, in Europe and in the UK, we should be looking at like episodes, regardless of where the geography is. The key thing is what's the what's the what's the level, the nature of inflation. And so when you have inflation rates that are on the order of about 15 percent per year

in these 56 moderate inflation episodes in developing countries, those are data we ought to use and see what we can learn from them.

Michael Klein
And in fact, the sources of inflation were very different in these hyperinflation episodes than in the moderate inflation episodes. And the hyperinflation, it was the war reparations in the wake of World War One. But as you point out, sort of what's going on in the United States today is not so dissimilar from some of these moderate inflation episodes. Can you explain what you meant by that when you wrote that in your paper?

Peter Blair Henry
Yes. So, first of all, start with the level of inflation. So 9 percent inflation in the US at the peak, double digit inflation in the in the UK and in the EU versus in the 56 episodes that we looked at, the median inflation rate was about 15 percent in those 56 cases. And, you know, in the US, one of the keys, one of the key things is that there's monetary policy working to fight to bring inflation down, but monetary policy is working at cross purposes with fiscal policy. As we know, the Congressional Budget Office has forecast deficits for the next decade, decade plus. And so you had similar situations in some of the moderate inflation development countries that we're looking at. You have central banks who are trying to disinflate, or they were trying to disinflate in environments where you had governments that were running fiscal deficits, not fiscal deficits that were so large that they were being monetized necessarily by the central bank, as in Hungary and Poland, and so forth; but large enough that the fiscal deficits were generating excess demand on the demand side of the economy and making it harder to bring actual output in line with potential output. So, I think there really are some similarities there.

Michael Klein
Looking at your paper, I was struck by the the novel approach you took to the analysis. When people think about the cost of disinflation, they study what's called the sacrifice ratio. I guess that's where you got the name for that one school of thought.

Peter Blair Henry
That's right.

Michael Klein
And that's the amount of output foregone in a disinflation episode. But you and Anusha, you look at data from the stock market and you calculate what you call the cumulative abnormal returns. Can you explain what that measure is very briefly, and what it captures, and why you use that in your analysis?

Peter Blair Henry
Yes. So, the Sacrifice Ratio school basically asks if we try to reduce inflation, how much output do we lose? And we thought to ourselves, really, the question you want to know the answer to is if you try to reduce inflation, will the benefits that from reducing inflation that come in the future be greater than the losses that come from trying to reduce inflation that come today? And so we try to think of, well, how would you actually capture future benefits as well as present costs? And the stock market, at least in principle, is forward looking. And so, if reducing inflation is

going to be good for the economy by raising GDP, making easier to do business and increasing future profits and output, that should be reflected in the stock market. And if there are costs to reducing inflation in the short run, well, the stock market is going to look at the costs of reducing inflation relative to the benefits in the future and capture it all in the present value of the stock price in response to – the change in the stock price in response to – the news that a country is going to begin a disinflation program.

So, we thought by looking at basically how much the stock market jumps in response to the news of a disinflation program would be a reasonable way to capture the unexpected benefits of the program.

Michael Klein
So, I just want to emphasize that a little, because for you and me, that's sort of a natural explanation. But for some of our listeners, the basic theory in finance is that the price of a stock reflects the complete future prediction or the complete prediction of the entire future of what's going to happen to a company. And as you say, stock prices move because of what people think is going to happen, not just tomorrow, but in two years or five years or even ten years. So, you're able to capture this and this I thought was a very clever way of looking at ways of getting the sort of net cost versus benefits out of that. Can you describe, Peter, a little bit of what you found with your research, specifically what you found for the moderate versus the high inflation countries and what this might mean for the present situation in the United States?

Peter Blair Henry
Yeah, so there are a few things that really jump out of the data. The headline thing that really jumps out of these data is that trying to reduce moderate inflation is a very different exercise than trying to reduce high inflation. And that theme is kind of reinforced both by the stock market and by what we, as economists would call, kind of the real side of the economy, traditional measures of looking at things like GDP, but also looking at just the speed with which inflation comes down. So let me just enumerate it for you. So number one, when countries try to reduce moderate inflation, there are 56 episodes of this. They almost always fail, right? So, of the 56 episodes that we looked at, almost all of which were done with the help of the IMF, there are only five successful episodes of getting from double-digit inflation to single-digit inflation. So that tells you, just off the bat, it's hard for countries to reduce moderate inflation. In the case of high inflation, we looked at 25 episodes. Now, many of those also failed, but once you strip out kind of the repeated failures in Argentina and Brazil, and Argentina and Brazil account for almost three quarters of those episodes, what we found is that outside of Latin America, reducing high inflation is actually pretty successful. It's kind of a four in five success rate, right? So that's sort of fact number one.

Fact number two is when you actually look at how long it takes to reduce inflation, going from moderate inflation to low inflation, so going from double-digit inflation that's less than 40% to single-digit inflation typically takes about three years. In the high inflation cases that we looked at, you typically get from 40% plus inflation to double-digit inflation within a year's time and no more than 18 months. And then finally, on the stock market because high inflation is just so costly to everybody, what we find is that the stock market responds very positively to announcements of disinflation programs when inflation is high, above 40%. There's about a, as I

recall, about a 40% plus jump in the stock market in the period leading up to the disinflation program, but the stock market actually reacts negatively in the case of disinflation programs announced in the midst of moderate inflation. So, they're just very different animals. Moderate inflation and high inflation are very different, and that's kind of, I would say, in accordance with the Samuelson view of the world.

Michael Klein
Dynamite doesn't teach us a lot about nuclear explosions or vice versa.

Peter Blair Henry
Yeah.

Michael Klein
Well, but Peter, we've seen, in fact, inflation come down quite a bit. As I mentioned in the introduction, from over 9% to its current sub-4%. But I guess what you're describing tells us something about the difficulty, perhaps, of getting to that 2% target. And other people have also commented that the last bit of this disinflation might be really challenging. Do you think that your results speak to that?

Peter Blair Henry
I think in the broadest sense, our results are telling us, yes, moderate inflation is very different than high inflation, and it can be in general a protracted process. And we're seeing some of that difficulty, I think, play itself out now in the data. It's still relatively early days. But the Fed has now been at disinflation for over a year, when they started raising rates. And we've gotten from sort of 9.1% inflation cores down to 4.3%, which is still twice the target rate. And I think the critical question is going to be, how fast does the Fed intend to try to get us to 2%, right? And so if you're looking for, and if you think back to the title of our Foreign Affairs piece, 'The Long War on Inflation,' what we were trying to point out is that the data suggests that this won't be a quick and easy process. And so I think that the data are, at this point, suggesting that that's likely to be the case, right? And think of anybody who's done any construction knows that the last 10% of construction takes, you know, more than 10% of the time. And it may just be that similarly that, you know, there's sort of this really hard bit at the end is going to be tough.

And just one historical example that kind of reinforces that point is the case of Chile. So Chile is the only country in our sample that went from high inflation to moderate inflation, and then moderate inflation to low inflation. And Chile got stuck at moderate inflation for years. And so they had to introduce an inflation target. I think it was in 1992 they introduced a 20% inflation target because they decided they were going to try to gradually reduce moderate inflation to low inflation. And they were able to do that without incurring a very high output cost. But it took them, you know, several years to get down to single digit inflation. And so I think the question that people are not asking is basically how rapidly does the Fed intend to try to get us to 2%. I think the Fed is implicitly taking their time and taking a gradual approach versus what we used to call a cold turkey approach, which is just trying to eliminate inflation overnight. And if the Fed did try to do that, did try to get us down to 2% very rapidly, I suspect that we would start seeing some real output and unemployment costs. But the Fed seems to be taking their time, which is why I think in this period of higher for longer, and they're, I think, wisely seeing

whether inflation will, at the current levels of interest rates, come down gradually over time. But they're certainly prepared to raise rates again if they see signs to the contrary.

Michael Klein
When I think about analyzing policy or analyzing outcomes, I should say, I often ask the question, is this outcome a reflection of good policy or good luck? And so we can see a situation or you can imagine, for example, a situation where, you know, stuff, for example, the war in Ukraine goes one way or the other, which then has an impact on inflation. And that's just to say that, you know, the Fed is trying to bring inflation down, but a lot of what happens is outside of its control.

Peter Blair Henry
Absolutely. And I think one of the really, really important lessons of history, and this is reinforced and underscored and highlighted when you look at the history of developing countries, is that when you have adverse events out of your control that push inflation up, it's very tempting to accommodate those shocks. And doing that usually results in inflation being even higher than you were willing to live with in the first place, and even higher than the inflation that's caused by that initial, whether it's an energy shock or some other shock. And so it's tempting to try to accommodate the shock. But if you're really serious about keeping inflation down and keeping prices stable, which is the job of the central bank, then you often need to tighten. And I think one of the things that the Fed has tried very hard to do is to establish, reestablish or hold on to its credibility. And that's very, very important.

Michael Klein
Yeah, that was the real challenge for Paul Volcker at the end of the 70s, because the Fed had sort of blown its credibility in accommodating oil price shocks then. And Volcker brought back the Fed's credibility, but at a high price, as you say, as you mentioned earlier, high unemployment. Well, I guess it remains to be seen whether this time is different or not. But certainly the work of you and Anusha has helped people understand these ideas more clearly. And I really appreciate once again, Peter, you joining me today for this episode of EconoFact Chats.

Peter Blair Henry
Michael, thank you. It's really been a pleasure.

Michael Klein
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