On inflation targeting

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35 Years of Flexible Inflation Targeting
- Challenges and Opportunities

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Thank you for inviting me to speak at this conference commemorating 35 years of inflation targeting. My remarks today will be, first, about inflation targeting as a general strategy. I will then draw some lessons from the recent global inflation. I expect to leave plenty of time for discussion, and I look forward to hearing your thoughts and questions.

Given where we are, I would be remiss to begin without crediting New Zealand's critical role in developing the basic elements of inflation targeting. The original motivation was chronically high inflation in the 1970s and 1980s, which can be blamed in part on the policies of a non-independent central bank. To address this problem, in 1986 Minister of Finance Roger Douglas invited officials to consider changes to the monetary framework. The key elements identified over the subsequent four years, as formalized in the Reserve Bank Act of 1989, included operational independence of the central bank, a focus on price stability—prior to this time the central bank's policy goal was ill defined—and, importantly, a transparent approach that would foster public understanding and political accountability. Price stability was defined to be 0 to 2 percent, and there was an expectation that repeated failure to meet that target would cost the governor their job. As with any major disinflation, anchoring the public's inflation expectations at a low level was a key challenge, but within a few years monetary policy succeeded in bringing down inflation—from 19 percent in 1987 to 2 percent by 1991--and establishing a new monetary regime.[1] This success was not without costs: Like the Volcker disinflation in the US in the early 1980s, unemployment rose with the tightening of monetary policy. Given the country's previous record of inflation, the employment effects of the transition, though painful, were not unexpected.

Since its adoption by New Zealand and its successful application here, inflation targeting has become the dominant strategy for monetary policy around the world. With a few differences in the details, it is now the policy framework for essentially all advanced economies, as well as for many middle-income and emerging economies such as Brazil and Mexico. (China, where the central bank must answer to the political leadership, is the principal exception.) Despite this near- universal adoption, I think there remains some confusion, even among economists, about exactly what inflation targeting is and how, in most cases, it leads to better policy. In one of my earliest speeches as a member of the Federal Reserve Board of Governors, in 2003, before inflation targeting was adopted in the United States, I commented that:

> *"….discussions of inflation targeting in the American media remind me of the way some Americans deal with the metric system—they don't really know what it is, but they think of it as foreign, impenetrable, and possibly slightly subversive."*[2]

[1] Haworth, Kostanyan, and Laxton (2019)
[2] Bernanke (2003)

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It took nine years from that speech, but in 2012 inflation targeting became the official framework for US monetary policy, and today the Federal Reserve's 2 percent inflation target is well understood by financial markets, legislators, and other observers.

A few words on what inflation targeting is not. It is not a commitment to achieve a certain level of inflation without regard to other economic objectives. Yes, low and stable inflation is important for healthy growth and market efficiency, and the central bank leads in the battle against inflation, but to varying degrees all central banks care about employment and growth as well. The Federal Reserve has an explicit dual mandate to maintain both price stability and maximum employment, which inevitably implies tradeoffs. The reason the Fed does not have a numerical goal for, say, the unemployment rate as well as inflation is that the sustainable, or so-called "natural" rate of unemployment is neither constant over time nor directly observable. Central banks whose primary mandate is price stability, like the European Central Bank and many others, focus on inflation but are attentive to the economy's real side as well and are open about the fact that they take growth and employment into account in setting policy. Reflecting this reality, a term that is often used is "flexible inflation targeting," meaning basically that the central bank will consider deviations of employment and growth from sustainable levels when determining how quickly or aggressively policymakers act to return inflation to its target.

Another red herring—do you use that term in New Zealand?—is the ongoing debate about the specific choice of target. Why 2 percent, the number (or at least part of the range) used by most inflation targeters? And why choose one measure of inflation rather than another, when all measures are flawed to some degree, for example, in that they include necessarily imperfect quality adjustments and other imputations? The measure of inflation the Fed uses, for example, puts heavy weight on the imputed rent of owner-occupied homes, a price that nobody actually pays. But if you are going to have accountability and transparency for monetary policy, you have to pick a specific index and a specific number. For me, 2 percent seems a good compromise in that it keeps steady-state nominal interest rates a bit higher than a zero target would, giving the central bank more room to cut rates in a recession, while being low enough that households and businesses do not need to think about inflation too much in their economic activities. (We have recently had a good object lesson on how households, and voters, feel about higher levels of inflation.) History also matters; if the central bank has delivered, say, 2 percent inflation for a long time, and inflation expectations are anchored at that level, the cost of changing the target could be large. All that said, central banks have made different choices in their specific target, and I think that's fine, so long as they are transparent about it. I am even open to ideas like nominal GDP targeting, though it is notable that no central bank has experimented with that approach.

So, stripped to the essentials, what is inflation targeting and what is the case for adopting it? As I argued when I was advocating for it in the United States, inflation targeting is both a policy framework and a communications strategy.

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By policy framework I mean the principles by which policymakers decide how to set policy. (I note that the Fed's Federal Open Market Committee has a formal set of policy principles that it discusses and votes on every January.) I see inflation targeting and related approaches as a compromise between two polar approaches to policymaking. At one pole are strict policy rules, like the Taylor rule.[3] In principle, policy rules provide a guide for how to set policy as a function of a few simple variables—in the case of the Taylor rule, for example, the current deviations of inflation and unemployment from target. One benefit of rules is that they provide a benchmark for policy based on actions taken in similar circumstances in the past and whose outcomes we know. According to advocates, though, the main benefit of rules is that they discipline the policy committee and prevent short-sighted behavior. For example, in principle at least, following a rule prevents politically influenced policymakers from juicing the economy, say before an election, knowing that the inflationary effects of over-expansionary policies are not likely to appear until later. The Federal Reserve publishes the recommendations of various policy rules in its semi-annual report to Congress, and those recommendations are often part of the discussion around the table at Fed meetings.

At the other pole from rules-based policy is purely discretionary policy, in which the policy committee evaluates the outlook at each meeting and then decides how to set interest rates. This approach has the advantage of allowing greater scope for the judgment of policymakers. Circumstances change, the economy evolves, there are always many factors to consider. With discretion, policymakers are free to assess and to respond to changing conditions. Also, unlike rules-based policy, which usually ties policy rates to current values of the goal variables, discretionary policy can freely incorporate forecasts of key economic variables into policy decisions. Discretionary policies have weaknesses as well, however. From the outside they can appear arbitrary, undisciplined, and hard to forecast. Moreover, purely discretionary policies are subject to the so-called time inconsistency problem, the incentive to overstimulate the economy in the short term to promote near-term increases in output and employment. As theory and practical experience have shown, that strategy is ultimately self-defeating, since the public will eventually begin to expect high inflation. Indeed, if expectations adjust sufficiently, the central bank may no longer be able to get short-run output gains even as it loses control of inflation. Arguably, as I mentioned, this problem led New Zealand to adopt inflation targeting 35 years ago.

[3] Bernanke (2015)

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Inflation targeting and related regimes occupy the middle region between rules and discretion. In a 1997 article Rick Mishkin and I called inflation targeting a form of "constrained discretion" and argued that this approach strikes a balance between the inflexibility of rules and the lack of discipline inherent in a purely discretionary approach.[4] Under flexible inflation targeting, policymakers can use all available information, including forecasts, to try to stabilize output and employment in the short run (this is the "discretion" part of constrained discretion). On the other hand, even as it reacts to currently available information, an inflation-targeting central bank is constrained by its public commitment to keep inflation low and stable in the intermediate term. An advantage of this approach, beyond the flexibility to react to short-run disturbances, is that a demonstrated record of achieving the inflation target over the medium term will tend to anchor inflation expectations, which makes inflation itself easier to control. Of course, a central bank could announce an inflation target but proceed to ignore it, but in practice that is a rare occurrence when the central bank is operationally independent. Central bankers realize that a reputation for meeting their commitments is a capital good which can depreciate quickly if they don't follow through on their promises.

Inflation targeting is also a communications strategy. As Mishkin and I emphasized in our advocacy of this approach, and as the original New Zealand framework recognized, simply announcing a target for inflation is not enough. A high level of transparency, especially concerning *how* and *by when* the inflation target is to be reached, is essential, for several reasons. First, explaining in detail the central bank's plan for achieving the target, besides reducing uncertainty, makes achieving the target easier. If the public understands and believes the policy plan, then inflation expectations will tend to be well controlled, and prices in financial markets are more likely to evolve in a manner consistent with the plan. Clarity about the strategy—and internal debates about the strategy—also help the public understand and predict how policy is likely to change when, as almost always happens, the world evolves in unexpected ways. Second, transparency fosters accountability. Inflation-targeting central banks are usually operationally independent, and the existence of an official target strengthens that independence by setting a goal that is observable and is not influenced by short-run political considerations. But the opposite face of operational independence is democratic accountability. An inflation-targeting central bank has public objectives; the public and the legislature have a right to be assured that the central bank's plan for achieving those objectives is reasonable and realistic, which requires an open and transparent approach by policymakers.

[4] Bernanke and Mishkin (1997)

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In fact, the adoption of inflation targets has proceeded in parallel with steps away from traditional central bank secrecy toward a much more transparent approach to policy in general. In my own country, before 1994 the Fed did not even make a public announcement when it changed the stance of monetary policy. Today, as at most central banks, the Fed issues a policy statement after each meeting, and the chair holds a press conference to provide context for the decision. The projections of policymakers for macroeconomic variables, including the policy rate, are released at the same time, and minutes of the meeting are released three weeks later. The chair and other policymakers give public testimony and speeches about the outlook for the economy and policy. Most other inflation-targeting central banks do all these things and sometimes more, such as releasing a Monetary Policy Report that includes an official baseline economic forecast. Purportedly, the slogan of Montagu Norman, the governor of the Bank of England in the 1920s and 1930s, was "Never apologize, never explain."[5] Today, there is at times so much communication from central banks that market participants complain about what they call "cacophony."

So how has inflation targeting worked out? It is only a framework, and it does not prevent policy mistakes or eliminate the possibility of major shocks, like the financial crisis or the pandemic. It does not even guarantee low inflation, as the past few years have taught us, although central banks around the world responded strongly to the pandemic inflation shock and seem on the way to restoring price stability. But, compared to the more discretionary and less-focused policies of the 1970s and 1980s, it appears to have increased the predictability of policy, lowered inflation on average, anchored inflation expectations, clarified the goals of the central bank, and increased democratic accountability while strengthening central bank independence. These goals are similar to what the New Zealand government had in mind when it instituted inflation targeting in 1990.

Where does inflation targeting go from here? Certainly, one important objective is to learn what lessons we can from the recent bout of inflation in virtually all major inflation-targeting countries—except for Japan, which faces a different set of challenges arising from its macroeconomic history. Your view on the lessons of the pandemic inflation depends importantly on your view of what caused that bout of inflation in the first place.

[5] Boyle (1967)

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There is plenty of controversy about that question. Some argue that the large fiscal programs put in place to help insulate the public from the effects of the pandemic caused the inflation. It is true that those packages were historically large in many countries. In the United States, the headline numbers suggest that the COVID-era fiscal packages in 2020 and 2021, measured relative to GDP, were nearly five times the size of the fiscal program instituted in 2009 by the Obama administration in its attempt to promote recovery from the financial crisis.[6] That said, I am not persuaded that fiscal policy was the principal culprit for the inflation, at least in most countries. In the US, although the COVID fiscal programs were large, not all the money that Congress allocated was ever actually disbursed, some was spent only with long delays, and much of the money that did reach the public was saved, to be spent slowly over several years. The high rate of saving of the government's aid was perhaps to be expected, since unlike most relief programs, much of the government money went to higher-income people and businesses, whose marginal propensities to consume are presumably lower than those with lower incomes. Retrospective estimates by the U.S. Congressional Budget Office find that the output gap in the United States during the covid period was relatively moderate, and much smaller than in 1967, when the Great Inflation of the 1970s was taking hold.[7] Moreover, the available evidence suggests that the Phillips curve is much flatter today than it was in the 1960s, implying that a given output gap should produce less inflation than it would have sixty years ago.[8]

So, what caused the inflation? Work I have done with Olivier Blanchard finds that, in the United States, the bulk of the inflation either originated on the supply side or had important supply-side components.[9] Energy and food prices, reflecting commodity prices determined in global markets, drove much of the inflation, both in the US and globally, with Europe being hit especially hard by a spike in the price of natural gas. At first, commodity price increases probably reflected a global recovery from the pandemic that was earlier and stronger than expected, but by early 2022 Russia's invasion of Ukraine was clearly also a big factor. Supply-chain issues, together with a pandemic-era shift in final demand from services to goods, also contributed to price increases. Evidence for a large role for supply-side factors is the fact that most economies faced similar levels of inflation, independently of their fiscal choices; and that the inflation appears in the United States and many other countries to be subsiding without the significant increase in unemployment predicted by some. A relatively painless disinflation is what one would expect if the inflation were caused by temporary supply-side factors. True, inflation is not yet at target in many countries, but my paper with Olivier did predict that the "last mile" in the fight against this burst of inflation would be tougher, as demand-side factors at this point would probably be making a relatively larger contribution.

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[6] Dean (2022). My calculation excludes the recapitalization of the banks in 2009 (the TARP program), as that program was aimed at stabilization rather than enhancing spending, and the money was paid back.
[7] FRED series: f1cZ
[8] Blanchard (2016).
[9] Bernanke and Blanchard (2023), forthcoming in AEJ Macro.

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New Zealand appears to have had an inflation experience that, in broad strokes, was similar to the US and other countries, with supply-side and external factors playing important roles and the central bank responding actively. However, it is true that fiscal expansion in New Zealand was greater, relative to GDP, than in most other countries. Replication of the Bernanke-Blanchard model at the Reserve Bank accordingly finds a relatively greater role for aggregate demand growth and labor market overheating in New Zealand's inflation, which in turn could help explain the higher cost of disinflation here, as measured in terms of job losses.

Based on my work with Blanchard, as well as a review I did of forecasting at the Bank of England, my overall conclusion is that, in terms of actual policy choices, most central banks did about as well as they could in the post-pandemic period, given what they knew at the time. Standard monetary policy doctrine holds that policymakers should not try to completely offset supply-shock inflation—doing so would be too costly in terms of output and employment—but should emphasize instead the stabilization of the public's inflation expectations. The Fed and other central banks seem to have been successful in moderating the rise in longer-term inflation expectations despite the inflation surge, and the tightening of policy that did occur likely offset some of the demand-side pressures arising from fiscal stimulus as well.

If there is a lesson from the recent inflation, I think it has more to do with communications. The tendency of the Fed and most central banks is to focus on the modal, or most likely, economic forecast, and the implied policy strategy. In the United States, that tendency is reflected in the so-called Summary of Economic Projections, which features the median projections of FOMC participants for growth, inflation, unemployment, and the policy rate. In other countries, this tendency is reflected in the emphasis typically given to the central or baseline forecast. The problem with this practice is that the economic outlook is always very uncertain; the baseline outlook is just one of many possibilities. I think a key lesson of the recent experience is that central bank communication should put greater weight on the possibility that outcomes can be quite different from the modal expectation; and that, if the reality is different from the forecast, monetary policy will respond appropriately.

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To illustrate, in the United States, although the FOMC acknowledged the uncertainties in the outlook, in 2021 the Fed focused the public's attention on their forecast that inflation would most likely prove "transitory." As already noted, this was especially evident in the projections of the economy and policy rates made by FOMC participants, which focused markets and the public on the median outlook. When the inflation proved not to be transitory, it hurt the Fed's credibility; more seriously, the public was not well informed in advance about what the Fed's response would be once the baseline forecast proved wrong. With hindsight, a better communications strategy might have been for the Fed to say that the baseline forecast envisioned transitory inflation; but to emphasize more strongly that other outcomes were certainly possible, and if they occurred, here (at least in general terms) is the way that policymakers would expect to respond. The same strategy could have been used to illustrate in advance the conditions under which quantitative easing would be ended at about the same time.

The lesson is a general one. During my own tenure at the Fed, for example, being more explicit about providing alternative economic scenarios and clarifying how policy would react in each case, could possibly have helped avert the 2013 taper tantrum. In short, communication could be more effective if policymakers were to put greater emphasis on the inherent uncertainty associated with any economic forecast, supplementing the baseline forecast with more attention to possible alternative scenarios for the economy and policy.

Going forward, the world will face new challenges, and no doubt the monetary policy framework will evolve further. It's a good thing that the Fed, the Bank of Canada, the Bank of Japan, the Reserve Bank of New Zealand, and other major central banks conduct periodic reviews of their frameworks, including their policy frameworks, tools, and communication. I both hope and believe however that the key elements of inflation targeting—clear goals, transparency about policy strategy, and operational independence with democratic accountability—will persist.

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References

Bernanke, Ben. 2003. "A Perspective On Inflation Targeting." Delivered at the Annual Washington Policy Conference of the National Association of Business Economists. https://www.federalreserve.gov/boarddocs/speeches/2003/20030325/default.htm.

———. 2015. "The Taylor Rule: A Benchmark for Monetary Policy?" The Brookings Institution. https://www.brookings.edu/articles/the-taylor-rule-a-benchmark-for-monetary-policy/.

Bernanke, Ben, and Olivier Blanchard. 2023. "What Caused the U.S. Pandemic-Era Inflation?" Hutchins Center Working Paper 86. https://www.brookings.edu/wp-content/uploads/2023/06/WP86-Bernanke-Blanchard_6.13.23-1.pdf.

Bernanke, Ben, and Frederic Mishkin. 1997. "Inflation Targeting: A New Framework for Monetary Policy?" Journal of Economic Perspectives 11 (2): 97–116.

Blanchard, Olivier. 2016. "The Phillips Curve: Back to the '60s?" American Economic Review, 106 (5): 31-34.

Boyle, Andrew. 1967. Montagu Norman: A Biography. Cassell.

Dean, Phil. 2022. "The Unprecedented Federal Fiscal Policy Response to the COVID-19 Pandemic and Its Impact on State Budgets." Kem C. Gardner Policy Institute - University of Utah. https://gardner.utah.edu/news/unprecedented-federal-fiscal-response-to-covid-19-propped-up-economy-but-created-significant-challenges/.

Haworth, Cameron, Asya Kostanyan, and Douglas Laxton. 2019. "Transparent Monetary Policy: A History of Inflation Targeting in New Zealand." LSE Institute of Global Affairs. https://www.lse.ac.uk/iga/assets/documents/research-and-publications/Transparent-Monetary-Policy-a-history-of-inflation-targeting-in-New-Zealand.pdf.

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