Federal Reserve Bank of San Francisco

Unreserved Opportunity

Steering Toward Sustainable Growth

Mary C. Daly, President and Chief Executive Officer

Federal Reserve Bank of San Francisco

University of Nevada, Las Vegas

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Good morning.

I am thrilled to be back in Las Vegas. But even more than that, I'm thrilled to see that Las Vegas is back. I saw this at the airport and driving around town yesterday. And I also heard it from the civic, business, and community leaders we met. Nevada is thriving, growing, and moving enthusiastically toward a post-pandemic world.

And this is true for the economy as a whole. After two years of pandemic-related economic challenges, signs of health are everywhere. The job market is robust, household and business balance sheets are strong, and consumer and business sentiments are solid, despite the war in Ukraine and rising prices at the gas pump.

Of course, everyone agrees that inflation is too high. Across the country, Americans are waking up and going to bed worried about whether their incomes will keep up with the rising cost of rent, food, and fuel. Businesses are also worried, some thinking twice about committing to long-term contracts that may become too costly to fulfill if prices continue to rise. Put simply, households and businesses are feeling the pain and asking when things will get better.

So today, I will spend my time discussing inflation and how monetary policy has and will adjust to bring it down and put the economy back on a sustainable path. But before I get started, let me remind you that the views I will share today are my own and do not necessarily reflect those of anyone else within the Federal Reserve System.

Focusing on Inflation

As many of you know, the Federal Reserve has two Congressionally mandated goals: full employment and price stability. Although there is no fixed number for full employment, we define it as a broad and inclusive goal that considers all those who want to work.[1] Right now, by almost any measure, this goal has been achieved. Anyone who wants to a job has not just one but many opportunities to choose from, and workers of all types are benefiting, including those often left behind in expansions.[2]

In contrast, we are far away from our price stability goal. The Federal Open Market Committee (FOMC) defines price stability as average inflation of 2 percent. The high readings we have seen over the past year, breaching 8 percent last month, clearly exceed that target.[3] This means policy must adjust. One of our goals is not being met.

The key insight of the dual mandate is that both sides matter. It was critical to assist the economy in recovering the job losses that occurred early in the pandemic, and it is now critical to stem what has been a longer-than-expected run of high inflation.

The question is how to do that smoothly. And to determine that, we have to understand how we got here.

The simple answer is COVID. Lockdowns early in the pandemic, transportation issues, and labor shortages constrained the supply of many goods. And these supply disruptions fell largely outside the scope of policy. After all, policymakers can do little to get more cars to the lot or more appliances into stores.

In contrast, we have a range of tools to help people buy what they need. And these tools were deployed to help households sustain while we fought the pandemic. For those who lost their incomes, fiscal policy provided a lifeline. To bolster growth and employment, monetary policy

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[1] In August 2020, the FOMC revised its long-run statement that defines full employment and price stability goals. See Board of Governors (2022).

[2] Powell (2022) discusses employment gains across ethnicities as well as the record number of job openings per unemployed persons. Expansions tend to pull down the unemployment rate for all demographic groups. However, this process is faster for groups with higher unemployment rates during recessions; see Aaronson et al. (2019) and Duzhak (2021).

[3] The 12-month change in headline consumer price index (CPI) inflation was 8.5 percent and core CPI inflation was 6.5 percent in March.

turned accommodative. These measures helped sustain consumer spending and get people through the worst of the crisis.

Unfortunately, as the pandemic persisted, this policy-supported demand collided, again and again, with COVID-disrupted supply. And as we would expect, as demand outstripped supply, inflation rose.[4]

Since high inflation was initially caused by the pandemic and our responses to it, the expectation has been that it will recede as COVID does. The problem is that, while COVID has abated, it has not disappeared. We can more easily do things like go out for dinner, travel, and see a movie. But countries and firms managing new variants and rising caseloads have not been able to return to full production. So, supply chain disruptions have lingered. And the war in Ukraine has further pressured supply, especially for energy, food, and other critical commodities.

All of this has added up to persistently high inflation readings. And that presents a different problem. Long periods of high inflation, even if it is projected to come down, can seep into expectations, leading people to anticipate further price increases. This is especially salient now, with prices for food and gas making headlines. Research tells us that these prices heavily influence consumers' beliefs about future inflation.[5] We already see this in surveys of short-run inflation expectations, which show that consumers and businesses are reacting to high inflation readings.[6]

Fortunately, longer-run expectations have remained steady. Moreover, consumer and business surveys, as well as market-based measures of inflation compensation, foresee an easing of inflation pressures in coming years, moving to levels more consistent with the FOMC's average 2 percent goal.[7]

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[4] As a consequence of more spending being redirected from services towards goods, inflation rates across these two sectors have diverged. CPI inflation for services hit 5.1 percent in March, while goods CPI inflation is running at 14.2 percent. In February, PCE inflation reached 4.6 percent for services and 9.6 percent for goods.

[5] D'Acunto et al. (2021) show that consumers particularly rely on grocery prices in their consumption bundle. Coibion and Gorodnichenko (2015) link households' inflation expectations to food and gas prices.

[6] Armantier et al. (2022) find that short-term inflation expectations have moved up with higher inflation readings. However, they also point out that medium- to longer-term inflation expectations are less responsive now compared with before the pandemic.

[7] The breakeven inflation rate, computed as the difference between nominal and real yields, is 4.33 percent annually over the next two years, as of April 13, 2022. Also as of this date, the annual breakeven inflation rate over the five-year period starting five years from now is 2.35 percent. According to the ATSIX data developed in Aruoba (2016), the expected one-year inflation rate nine years out stands at 2.29 percent (updated data available at https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/atsix).

But we can't be complacent. The longer realized inflation remains high, the more risk there is that rising prices will become part of public psychology.[8] And once psychology shifts, it is hard to bring it back.

We learned this lesson the hard way. The last time we experienced this kind of elevated inflation was in the 1970s—some of us remember that time. Americans faced a steady drumbeat of rising prices that lasted for over a decade. By the early 1980s, high inflation had become firmly entrenched in the public's psyche. To get things under control, the Fed had to implement a series of steep interest rate hikes. They worked, but the correction was painful.[9]

This is a history no one wants to repeat. And it's why the Fed is taking actions today, far earlier than in the 1970s, to tighten policy, rebalance demand and supply, and ensure that both of our dual mandate goals are achieved.

The obvious next question is, how will we get there?

How We Get There Matters

The truth is, there is a hard way and an easier way.

To see what I mean, imagine you're in a car. You're driving along the highway and you spot a hazard up ahead. At this point, you know you need to slow down. One way to do it is to slam hard on the brakes. You'll achieve your goal, but you and your passengers will probably suffer in the process. You might jerk forward in your seat or spill coffee on your lap. That's the hard way. The better way is to purposefully and smoothly decelerate. You avoid the danger, and you spare yourself and others the whiplash. Most importantly, you get to continue your trip.

I think we can all agree that this is good driving. But it is also good policymaking. If we slam the brakes on the economy by adjusting rates too quickly or too much, we risk forcing unnecessary adjustments by businesses and households, potentially tipping the economy into recession. If we ease on the brakes by methodically removing accommodation and regularly assessing how much more is needed, we have a good chance of transitioning smoothly and gliding the economy to its long-run sustainable path.

Now some are nervous—or even skeptical—about whether this can be achieved. They fear that monetary policy is behind the curve and only a rapid and aggressive tightening can prevent an

[8] Malmendier and Nagel (2016) show that individuals form inflation expectations based on realized inflation during their lifetime.

[9] Goodfriend and King (2005) document the depth of the two recessions in the early 1980s that followed interest rate hikes to rein in inflation. For an extensive record of the Volcker disinflation, see Silber (2012).

unbridled increase in inflationary pressure.[10] Of course, for those who hold this view, memories of the 1970s inflation and the painful correction it required loom large.

For many reasons, this is not my modal outlook. First, the conditions we face today are very different from the 1970s. For one thing, current high inflation readings have a clear catalyst—the pandemic. Moreover, the duration of rising prices has been far shorter—a year, rather than a decade. And in stark contrast to the 1970s, longer-run inflation expectations have remained stable.

Second, the Fed is different than it was in the 1970s. We are far more attuned to the importance of inflation psychology and the transparency it demands. So we regularly share post-FOMC statements, summaries of economic projections, and other forms of forward guidance that tell households, businesses, and market participants what we are thinking and where policy is heading.[11]

These communications provide clarity. But they also affect financial conditions, often long before we adjust rates. You can see this in the recent data. Although the FOMC has only raised the funds rate 25 basis points so far this year, our forward guidance has resulted in higher interest rates for Treasuries across the yield curve.[12] This has in turn moved rates in other financial markets. Mortgage rates, for example, have gone up to their highest levels since the start of the pandemic. This highlights an important point—communication is itself a tool and can tap the brakes on the economy long before actual adjustments to policy occur.

Third, history suggests that smooth, rather than abrupt, transitions are the norm. In fact, a recent study by Princeton professor and former Fed Vice Chair Alan Blinder shows that, out of the last eleven tightening cycles, when the Fed raised interest rates after a period of accommodative policy, seven were followed by a mild recession or none at all—basically a smooth landing.[13]

There are, of course, no guarantees when it comes to a highly uncertain and fast-moving economy. But for now, most economic agents also expect a smooth transition. Financial market data put very little probability on a near-term recession.[14] And consumers continue to see unemployment falling in coming quarters, even as the Fed adjusts rates.[15] My business contacts

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[10] See, for example, Summers (2022).
[11] For a complete discussion about how the current moment differs from the 1970s, see Daly (2022).
[12] Over the past six months, the 1-year Treasury yield moved up about 170 basis points while the 10-year Treasury yield moved up about 125 basis points.
[13] See Blinder (2022).
[14] Bauer and Mertens (2018a) document that the slope of the yield curve, which is the difference between long- and short-term interest rates, can be used to predict recessions. Bauer and Mertens (2018b) argue that the difference between 10-year and 3-month interest rates performs best among several alternatives. By this metric, the yield curve is far from an inversion and implied recession probabilities are low.
[15] See the preliminary results for the April edition of the Michigan Survey of Consumers, available at https://data.sca.isr.umich.edu/fetchdoc.php?docid=69819.

are equally optimistic, preparing to move past the pandemic and take advantage of opportunities for growth and expansion.

This bullishness likely reflects the strong underlying momentum in the U.S. economy, as well as the public's confidence that, even as rates rise and the economy slows, growth and the labor market will remain solid.

But this will take work. And let me turn to that next.

Navigating Policy Out of the Pandemic

As I have noted, the inflation outlook combined with a strong labor market leave no doubt that further policy tightening is appropriate. The question is, how much and how quickly?

Let's start with how much. The first step is to remove the accommodation that we provided during the pandemic. That means raising the federal funds rate to its neutral level, which most forecasters put at around 2.5 percent in nominal terms. We started that journey in March with a 25-basis-point rate increase, so we still have significant work to do. Moving purposefully to a more neutral stance that does not stimulate the economy is the top priority.

And this is where the question of timing comes in. How quickly should we get there? Accounting for the risks of being too fast or too slow, I see an expeditious march to neutral by the end of the year as a prudent path. We will continue to evaluate the data and the risks, but today I see little indication that the economy needs policy accommodation.

Once accommodation is removed, we need to evaluate the effects—observe how financial conditions adjust, how much inflation recedes, and what more remains to be done to ensure a sustained expansion. This watchful deliberation is always important, but it's critical when the level of uncertainty is high, as it is today.[16]

There is the uncertainty about COVID. While it feels like our recovery from the pandemic is gaining traction here in the United States, China and other global producers are in the midst of another wave of lockdowns to manage outbreaks. This makes it hard to declare victory on the pandemic or to be comfortable about the projected recovery of supply chains.

There is also uncertainty about the impact of the war in Ukraine. So far, the U.S. economy is weathering the disruption to supplies of oil and other commodities, but energy shocks have

[16] Leduc and Liu (2016) show that increases in uncertainty decrease demand and lower economic activity. Bok, Mertens, and Williams (2022) show that financial market pricing is consistent with this view when the lower bound on interest rates is a salient concern.

historically led to periods of economic contraction, domestically and globally. And that's a risk that bears close watching.[17]

All of this means that it's hard to fully know what next year will look like. Will we be in a world where supply chains have healed, inflation has come down, and policy can remain close to neutral? Or will we be in a world where disruptions remain, inflation persists, and monetary policy must further adjust to restrain the economy, balance supply and demand, and return inflation to our price stability objective? The data will tell us over the course of this year, and we will be prepared to respond when it does.

But no matter what happens next year, that will not be the end of our work. The Fed's overarching job is to foster a long and durable expansion that delivers both full employment and price stability. We need to calibrate policy to get back on that path. We need to manage the economic headwinds immediately in front of us. But we also need to lay the groundwork for the economy we want in the future. A truly smooth transition does both.

Go Smooth to Go Far

Let me leave you with a story that illustrates my approach to policymaking and how I will navigate the challenges ahead. As a teenager, I worked at a donut shop. Part of my job was to drive a delivery truck. I drove the long-distance route at night, when traffic was sparse. As you might expect, I sometimes went a little too fast. And as you also might expect, that didn't turn out too well. I wound up losing my license for three weeks—which, to me, felt like a lifetime.

That youthful mistake taught me a valuable lesson. Getting there is important. But so is the journey. In my attempt to get there quickly, I actually didn't get there at all. Though I didn't know it at the time, I had taken the hard way.

But we don't have to. A smooth and methodical approach to policy will alert us to hazards along the way, prepare us for unexpected bumps in the road, and ultimately keep us moving forward—not just to our immediate destination, but to all of the destinations that follow.

Thank you.

[17] The impact on domestic growth may be different this time. According to data from the U.S. Energy Information Administration, the United States has been a net exporter of petroleum since 2019.

References

Aaronson, Stephanie R., Mary C. Daly, William Wascher, and David W. Wilcox. 2019. "Okun Revisited: Who Benefits Most from a Strong Economy?" *Brookings Papers on Economic Activity* (Spring), pp. 333–404.

Armantier, Olivier, Leo Goldman, Gizem Koşar, Giorgio Topa, Wilbert van der Klaauw, and John C. Williams. 2022. "What Are Consumers' Inflation Expectations Telling Us Today?" *Liberty Street Economics*, Federal Reserve Bank of New York blog, February 14.

Aruoba, S. Borağan. 2016. "Term Structures of Inflation Expectations and Real Interest Rates." Federal Reserve Bank of Philadelphia Working Paper 16-09/R. September.

Bauer, Michael D., and Thomas M. Mertens. 2018a. "Economic Forecasts with the Yield Curve." *FRBSF Economic Letter* 2018-07 (March 5).

Bauer, Michael D., and Thomas M. Mertens. 2018b. "Information in the Yield Curve about Future Recessions." *FRBSF Economic Letter* 2018-20 (August 27).

Blinder, Alan. 2022. "Landings Hard and Soft: The Fed, 1965–2020." Slides from presentation to Markus' Academy, Bendheim Center for Finance, Princeton University, Princeton, NJ, February 11.

Board of Governors of the Federal Reserve System. 2022. "Statement on Longer-Run Goals and Monetary Policy Strategy." Adopted effective January 24, 2012; as reaffirmed effective January 25, 2022.

Bok, Brandyn, Thomas M. Mertens, and John C. Williams. 2022. "Macroeconomic Drivers and Pricing of Uncertainty, Inflation, and Bonds." Federal Reserve Bank of San Francisco Working Paper 2022-06.

Coibion, Olivier, and Yuriy Gorodnichenko. 2015. "Is the Phillips Curve Alive and Well After All? Inflation Expectations and the Missing Disinflation." *American Economic Journal: Macroeconomics* 7(1), pp. 197–232.

D'Acunto, Francesco, Ulrike Malmendier, Juan Ospina, and Michael Weber. 2021. "Exposure to Grocery Prices and Inflation Expectations." *Journal of Political Economy* 129(5), pp. 1,615–1,639.

Daly, Mary C. 2022. "This Time Is Different…Because We Are." *FRBSF Economic Letter* 2022-05 (February 28).

Duzhak, Evgeniya A. 2021. "How Do Business Cycles Affect Worker Groups Differently?" *FRBSF Economic Letter* 2021-25 (September 7).

Goodfriend, Marvin, and Robert G. King. 2005. "The Incredible Volcker Disinflation." *Journal of Monetary Economics* 52(5), pp. 981–1,015.

Leduc, Sylvain, and Zheng Liu. 2016. "Uncertainty Shocks Are Aggregate Demand Shocks." *Journal of Monetary Economics* 82, pp. 20–35.

Malmendier, Ulrike, and Stefan Nagel. 2016. “Learning from Inflation Experiences.” *Quarterly Journal of Economics* 131(1), pp. 53–87.

Powell, Jerome H. 2022. “Restoring Price Stability.” Speech at "Policy Options for Sustainable and Inclusive Growth," 38th Annual Economic Policy Conference, National Association for Business Economics, Washington, DC, March 21.

Silber, William L. 2012. *Volcker: The Triumph of Persistence*. New York: Bloomsbury Press.

Summers, Lawrence H. 2022. “Opinion: My Inflation Warnings Have Spurred Questions. Here Are My Answers.” *Washington Post*, April 5.