

Dialogue with the Fed

How Will Inflation End? Three Scenarios

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How Will Inflation End? Three Scenarios Inflation is unacceptably high, running at 6-7%.

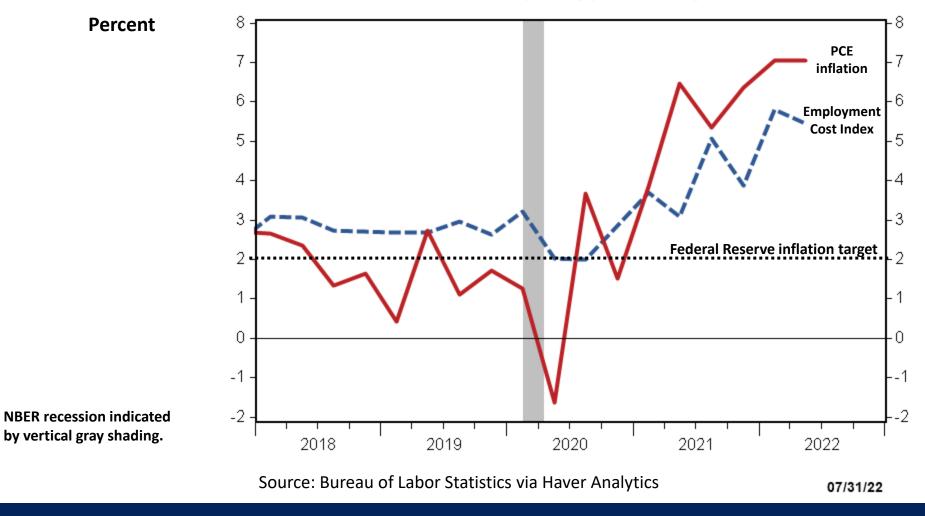
The Federal Reserve is committed to a 2% inflation target.



At 7%, Inflation is Far Above the Fed's 2% Target

Quarterly Change in Chain Price Index: Personal Consumption Expenditures
Annualized quarterly percent change

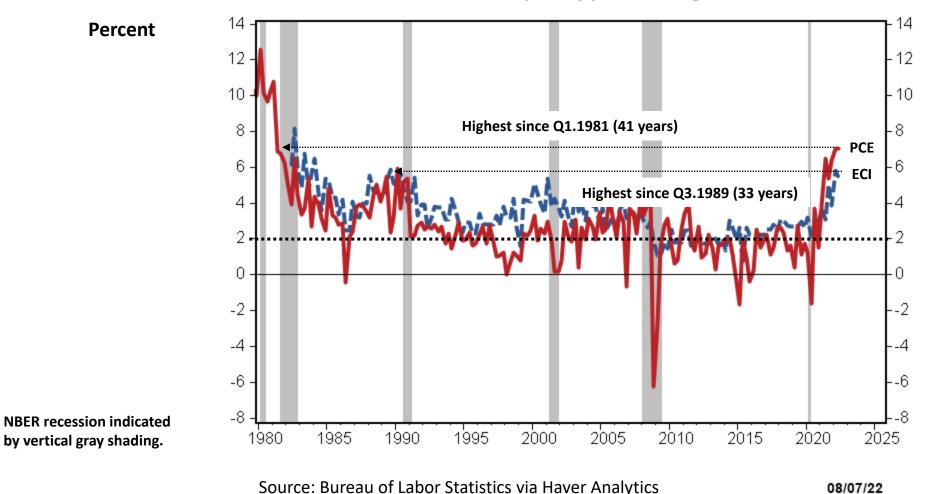
Quarterly Change in Employment Cost Index: Compensation of Civilian Workers
Annualized quarterly percent change



Prices and Wages Haven't Increased this Fast since the 1980s

Quarterly Change in Chain Price Index: Personal Consumption Expenditures
Annualized quarterly percent change

Quarterly Change in Employment Cost Index: Compensation of Civilian Workers
Annualized quarterly percent change



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How Will Inflation End? Three Scenarios

- Inflation is unacceptably high, running at 6-7%.
 - The Federal Reserve is committed to a 2% inflation target.
 - How and when will inflation return to 2%? Consider three scenarios:
 - 1) "Immaculate disinflation"=> back to 2% within 1-2 years.
 - 2) "Paul Volcker returns"=> back to 2% within 2-4 years.
 - 3) "Stagflation"=> back to 2% (or new target) w/in 5-10 yrs.
 - My best guess: Stagflation, unless another Volcker appears.
 - Bottom line: It will require courageous political and economic leadership to avoid a return to 1970s stagflation.

FEDERAL RESERVE BANK OF ST. LOUIS **How Will Inflation End? Scenario 1**

1) "Immaculate disinflation:" Credible central banks

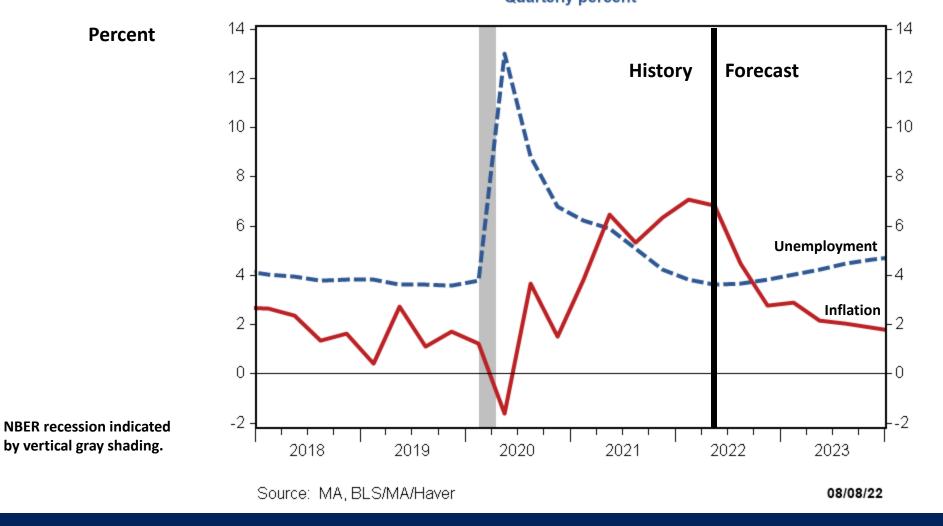


- Inflation falls quickly from 7% to 2% by 2023 or 2024, then stays there in subsequent years.
- It's part of a "soft landing," with economic growth slowing but no recession (or only a mild one).
- Key economic mechanism: Inflation expectations remain anchored at 2% throughout, reinforced by the Fed; this prevents wage-price or price-price spirals from emerging.
- Proponents: the White House; Fed leaders; forecasters; Congressional Budget Office; financial markets; the public.

Consensus Forecast: Rapid Disinflation with Soft Landing

Quarterly Change in Chain Price Index: Personal Consumption Expenditures
Annualized quarterly percent change

Unemployment Rate Quarterly percent



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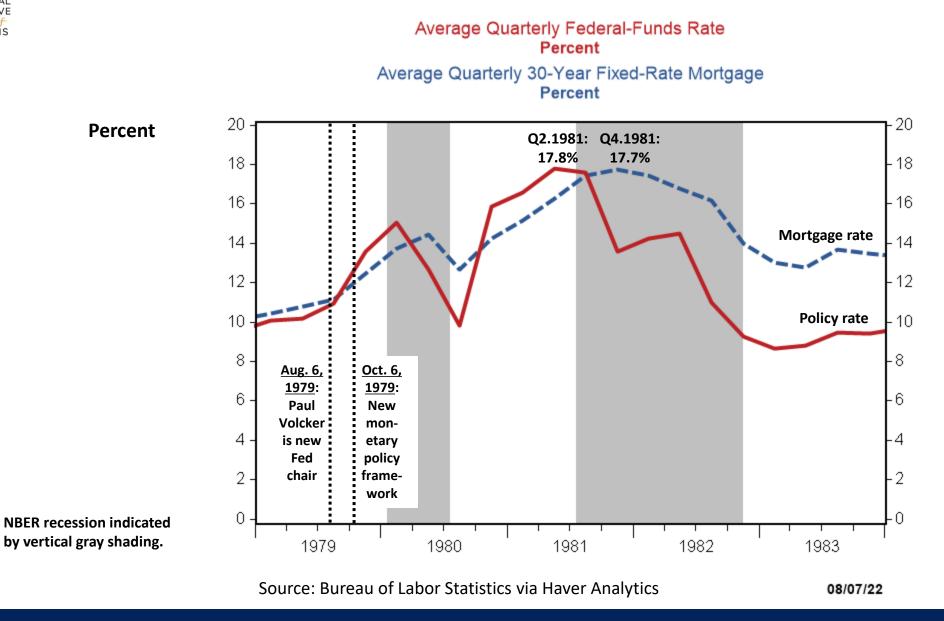
How Will Inflation End? Scenario 2

"Volcker returns:" Root canal without anesthesia



- Inflation falls erratically from 7% to 2% between 2022 and perhaps 2026, then stays there in subsequent years.
- It's part of a "hard landing," with one or more recessions, possibly very deep (unemployment rising above 6%).
- Key economic mechanism: Disinflation occurs due to an extended period of economic slack (high unemployment); Fed willingness to impose economic pain is necessary to change price and wage expectations and behavior.
- Proponents: Almost no one; Volcker was very unpopular.

The Volcker Shock: New Chairman, New Targets, New Resolve

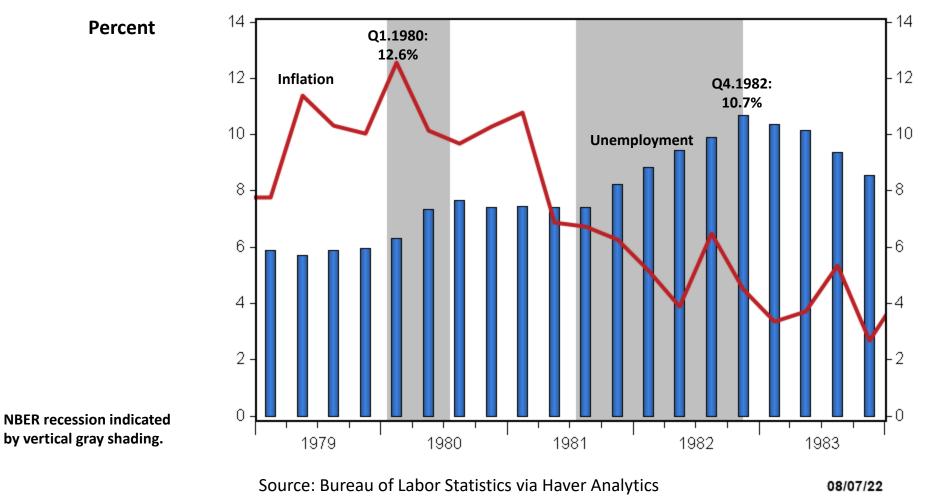


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The Volcker Disinflation: Rapid, But With Huge Human Cost FEDERAL RESERVE BANK of-ST. LOUIS

Quarterly Change in Chain Price Index: Personal Consumption Expenditures Annualized quarterly percent change

Quarterly Level of Civilian Unemployment Percent





How Will Inflation End? Scenario 3

Arthur Burns

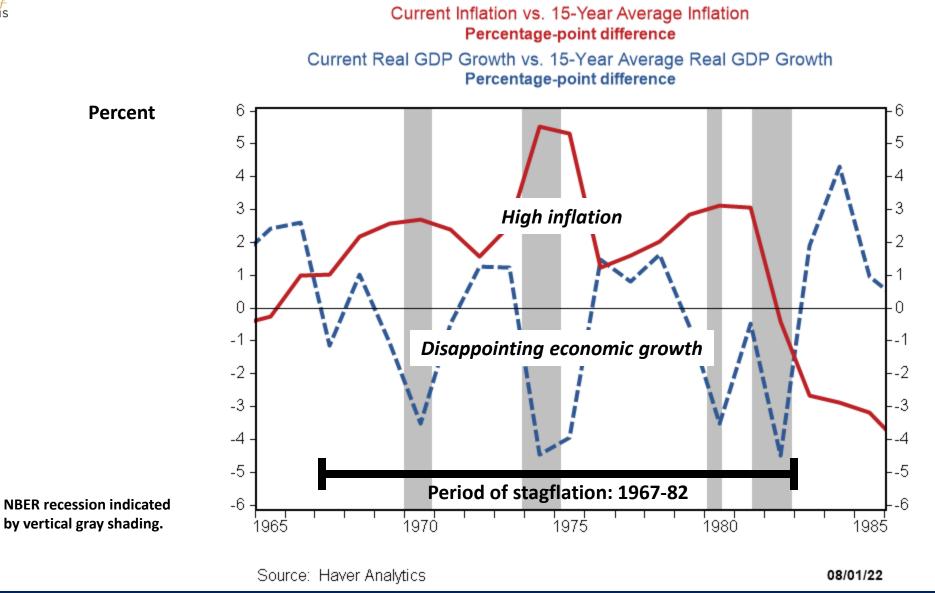
"Stagflation:" Groundhog day with a hangover



- Inflation oscillates but eventually settles at 2% or a new, higher, target level set by the Fed (4% has been mentioned); the process could last a decade or more.
- The 1967-82 stagflation era included four recessions, with average inflation of 6.5% and unemployment of 6% (which lingered another five years after inflation finally fell).
- Key economic mechanism: Inflation is unanchored, pushed up and down by external shocks (energy or food prices) and economic booms and busts.... It's also an orphan.



Stagflation = <u>STAG</u>-nant Economy + High In-<u>FLATION</u>



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We've Already Chosen 1); But Will It Choose Us?

- Scenario 1 (immaculate disinflation) is the obvious choice.
- It's quick, nearly painless and is not politically destabilizing.
 - Almost no one will lose his or her job.
 - No one's 401k or house price will crash.
 - The opposition party won't be able to blame incumbents.
- Only problem: Does this work in the real world or only in economic models?
- The best evidence for immaculate disinflation is:
 - In select cases of hyperinflation...
 - ... when a discrete and credible regime change occurs.



Is Immaculate Disinflation Really Possible?

- Radical and credible political and policy changes may end hyperinflations, such as in Weimar Germany and some Latin American countries in the 1970s and 1980s.
- But that's not us; what kinds of "discrete regime changes" might work in less extreme circumstances like ours?
 - A true end to COVID, boosting labor-force participation.
 - A renewed burst of productivity growth, increasing supply.
 - A new fiscal-policy framework that curbs debt growth.
 - New political and economic leadership.
- The Fed says, "We'll do what it takes;" but is it credible?



Why Talk About Volcker or Stagflation Now?

- No one would choose Volcker or stagflation if immaculate disinflation still seemed possible, but...
- ... how much longer can we explain away high inflation?
 - In 2020, signs of inflation were due to "low base effects."
 - In 2021, inflation was termed "transitory," arising from temporary supply-chain bottlenecks.
 - In 2022, inflation has been dismissed as the result of Russia's invasion, leading to commodity-price shocks.
- But as we approach 2023, inflation is high and broadening to services; wage-price and price-price spirals threaten.

Will Fed-Funds Rate of 4.5 to 5% Be Enough to Tame 6% Inflation?

1-Year Treasury Bill Yield Percent Inflation: Personal Consumption Expenditures Chain Price Index Percent chage from year ago 18 18 Percent 1-year Treasury yield exceeded 16 PCE inflation rate in all of these - 16 successful inflation battles: 14 - 14 12 -- 12 10 - 10 1-year 8 .8 Treasury J vield 6 6 PCE 4 inflation rate 2. 0 -2 2000 2005 2020 2025 1980 1985 1990 1995 2010 2015 1975

Sources: U.S. Treasury, Bureau of Economic Analysis/Haver Analytics 09/22/22



In Sum: Could Stagflation Lead to Volcker (Again)?

- We're now entering stagflation (2022 growth and inflation will be bad), but are we ready for a new Paul Volcker?
- Volcker's policy of punishingly high interest rates was a last resort; more than a decade of stagflation was necessary to make Volcker possible.
- It took far-sighted political courage and economic understanding on the part of Jimmy Carter to appoint Volcker in 1979, and by Ronald Reagan not to undercut Volcker immediately upon taking office in 1981.
- Will current leaders live up to Carter, Reagan and Volcker?