► BNY MELLON | INVESTMENT MANAGEMENT



March 2022

Fed Thoughts: War & Peace & Central Banking

Vincent Reinhart | Chief Economist & Macro Strategist



Russian President Vladimir Putin's attempt to redraw the political map of Europe does not lift the responsibility of central bankers to make monetary policy. They must act in both war and peace. The direct economic effects of the Russian invasion of Ukraine will likely be limited, as they have a combined footprint of about 2 percent of global GDP. But the indirect effects may cascade through commodity markets, global trade and finance, and the perceptions of aversion toward risk of households and firms.

In the bloodless terminology of economics, the invasion poses shocks both to aggregate supply and aggregate demand. The supply shock, as it takes key commodities off the market and further impairs already damaged global supply chains, is probably large and long tailed. The demand shock is about lost confidence, income and wealth. Central banks are impotent against the former shock, as their actions do not create extra output to fill in lost supply. As for the latter, they can support aggregate demand by making financial conditions easier, but that may not be appropriate given the joint consequences of the two shocks. A more significant hit to aggregate supply than to aggregate demand adds to cost pressures, posing opposing threats to their goals of maximum employment and price stability. (True, among the major central banks only the Federal Reserve (Fed) has an explicit dual mandate, but even those with a sole inflation goal weigh output effects in the balance.) Offsetting a blow to employment completely comes at the cost of losing ground on the inflation objective.

In weighing that balance given such shocks, policymakers usually follow the advice of Ben Bernanke and Mark Watson offered in an academic paper written in 1997—to stick to their pre-existing plan for the nominal policy rate. This internalizes the tradeoff of goals by allowing some overage from the inflation target because of the supply shock to reduce the path of the real policy rate (or the nominal rate less inflation) to cushion the hit to aggregate demand. We expect the Fed chair and his colleagues to hew to the advice of Bernanke and Watson to keep calm and carry on at the upcoming meeting of the Federal Open Market Committee (FOMC) on March 15 and 16. Where were they before the world turned even more ominous? In a heap of trouble.

Inflation is phenomenally above the Fed's goal of 2 percent with no avenue of escape by relying on flexible averaging of outcomes relative to that goal. The labor market is bent out of shape but printing levels of resource utilization that might fairly be described as near capacity. In excess of one of its dual objectives (price stability) and near another (maximum employment), the Fed, without doubt, will decide to withdraw policy accommodation at this FOMC meeting.

More difficult to assess is the future path of the funds rate they will guide us to, both by the size of their first hike and guidance through their to-be-published Summary of Economic Projections (SEP), the words of their joint statement, and the chair's comments at his press conference following the meeting.

As of this writing, market participants expect a 25-basis-point firming at the upcoming meeting, at least as judged by fed funds futures (as in the chart on the following page). The mass of the probability for the end of the year peaks at 1-1/2 percent, consistent with six 1/4-point hikes at the seven scheduled FOMC meetings remaining this year. This strikes us as in alignment with current Fed thinking and predictive of upcoming official action and guidance. It also strikes us as inadequate to the task of returning inflation to the Fed's 2-percent goal within the next few years.

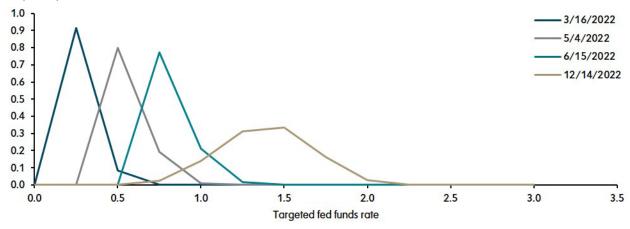
We believe that implicit in the Fed's inadequate guidance will be too much wishful thinking that inflation will fall on its own, given the widespread nature of cost and price pressures and unhealthy dynamics of the cost-price spiral. We also believe that the likely upcoming policy mistake comes from a combination of this wish fulfilment, the long-held preference of the Fed to move only gradually, and the likelihood that the cohort of new policymakers coming on board later this year will push for even more gradual action.



There is a lot to unpack in this assertion. The rest of this note will review the rationale for policy inertia, placing particular emphasis on the group dynamics that are, in our view, an under-appreciated governing mechanism on the process. Yes, Chair Powell is forcefully in charge of his committee, but part of his job as chair is to get a sometimes-disputatious group to come to common terms. We think his job is going to get harder.

Potential Outcomes of FOMC Meetings





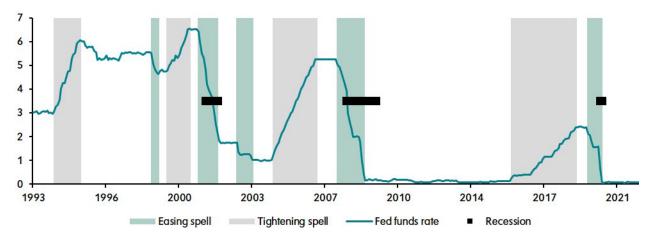
Source: CME FedWatchTool, at https://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html#, updated 2/28/22.

Gradualism and Asymmetry in Historical Perspective

To get a sense of where monetary policy is going, consider where it has been. The chart below plots the fed funds rate in the modern era of Fed policymaking, which began with the immediate announcement of policy decisions on February 4, 1994.² Policy spells of tightening and easing are shaded in grey and green, respectively. The dating is a matter of judgement but matches most narratives of Fed policymaking over the past 30 years.

Federal Funds Rate, Policy Spells, and Recession

Percent and indicator



Source: Federal Reserve, accessed via FRED (2/27/22) and firm analysis.



A few generalizations may be surmised from the following table.

Average Attributes of Easing and Tightening Spells

1/1/1994 – 1/1/2022

	Easing	Tightening	Unchanged
Number	5	4	8
Length (months)	10.4	23.5	23.0
Change per month (basis points)	-31.9	13.1	-

Source: Federal Reserve, accessed via FRED (2/27/22) and firm analysis.

Policy spells are infrequent and protracted. There were five episodes of easing, four of tightening, and eight stretches of tranquility in between. While lengthy, they were also asymmetric in two dimensions. First, easing spells averaged 10 months while tightening spells and being on hold were twice as long. Second, the average easing action was more than twice as large as tightening per month over their respective durations.

Rounding these results to the eight-times-a-year FOMC cycle simplifies matters. The FOMC eased over seven meetings at about a 50-basis-point clip. Tightening spells are spread over 16 meetings, or two years, with 25-basis-point actions at each and a pause or two. Sustained policy pauses consumed another 16 meetings, although this average is stretched out by the long pause after the Great Financial Crisis.

The Fed's proclivity to move its policy rate gradually seems to follow Newton's first law of physics—a body in motion stays in motion, and a body at rest stays at rest. At first blush, this is hard to square with the intuition that the objective of monetary policy is to set the policy instrument, which would seem costless to adjust, to the level that best balances perceived risks at each meeting. If they do their best at one meeting, they would only change the stance of policy at the next on the receipt of news. In our view, because news is unforecastable from one meeting to the next, the policy rate should similarly be unforecastable. Except, it has not been, as seen from the long predictable spells of action and inaction.

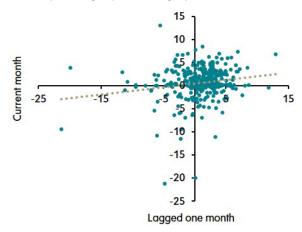
A severe comparison is with equity prices, as investors in that asset class similarly react to news period by period. The left panel in the pair of charts on the following page plots the lagged monthly change in the Wilshire 5000 price index (in percent terms along the horizontal axis) with its subsequent change (along the vertical axis). Knowing what happened last month with equity prices does not help much in knowing what happens this month—the correlation is only 0.18 and is why the disclaimer to this published note includes "Past performance is not necessarily indicative of future performance."

Not so in the right panel that plots monthly changes (in percentage points) in the fed funds rate in a similar manner. The prior month's movement in the policy rate has a correlation of 0.64 with its subsequent movement—past performance, in this case, was indicative of future performance. The asymmetry is obvious, too, in that the lower left quadrant of easing spans a much wider range than the upper right quadrant of firming. Evidently, policymakers attach a cost to changing the funds rate. But what cost, why, and does that also explain the asymmetry?



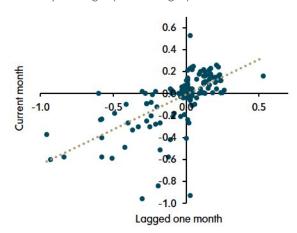
Wilshire 5000 Equity Price Index

Monthly change, percentage points



Fed Funds Rate

Monthly change, percentage points



Source: Federal Reserve and Wilshire Associates, accessed via FRED, 2/27/22.

Two explanations are offered in the policy literature and we will add a third based on personal experience.

Glenn Rudebusch, of the Federal Reserve Bank of San Francisco, emphasized that the Fed's control of the overnight rate has to be transmitted through the term structure of interest rates to the long-term yields mattering for economic decision making.³ If a change in the overnight rate predicts future changes (gradualism), then it is more likely to move yields on longer-duration instruments. That is, the cost that officials associate with changing the funds rate is to purchase its predictability.

Jeremy Stein, of Harvard and a former Fed governor, argued that officialdom places an outsized importance on financial stability.⁴ They move the policy rate gradually so as not to roil financial markets (thereby setting up a complicated expectation-based dynamic as investors see through that gradualism in pricing longer-term assets).

A third possibility, not addressed in the academic literature, takes note of the fact that the "C" in FOMC stands for "Committee." When Congress legislated its creation in 1933, it chose twelve members, akin to that of a trial jury, rather than an odd number that characterizes judicial panels. The former is expected to reach consensus, while the latter decides by simple majority. Fed officials historically heed to that intent, as the FOMC typically acts with unanimity, or near unanimity.⁵ Gradualism is a mechanism to get to yes on an immediate decision among a group disagreeing as to the full extent of necessary policy action. For example, the most recently published interest rate expectations of FOMC participants in the December SEP showed a range of 2 to 3 percent among them for the longer-term, or neutral, nominal policy rate. They can all agree to start the process of firming in gradual increments to get to their expected target and reserve different opinions as to the duration of the policy spell. Those differences of opinion can be litigated at future meetings when more information is at hand.

Officials might also reasonably believe that such an approach will make it easier for investors to price in their expectations of policy action and limit financial volatility, especially at short durations. While the media often reports about the "market view" on monetary policy, anyone who has held more than one meeting in a day with market participants understands that Fed views are divided in the private sector, just as views are divided within the Fed. To simplify matters, suppose that the FOMC is split between inflation pessimists and inflation optimists, and investors are similarly divided between bond market vigilantes and equity evangelists. The two FOMC

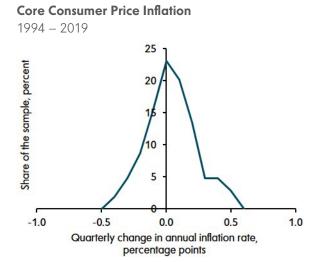


coalitions could agree to start hiking gradually, with the proviso each thinks the other will be proved wrong about how long the journey takes. The two market camps similarly can place their chips on the end date of action, implying that uncertainty about rates over time opens like a fan. Uncertainty about the ultimate level of the policy rate still gets embedded into the price of longer-term assets, but shorter-horizon funding is more predictable.

Group dynamics also do a better job resolving the other mystery about the policy rate: Why do rates go down so much faster than they go up?

Part of the answer about policy traces back to features of the business cycle. The two frequency distributions below summarize the quarterly changes in the unemployment rate and core consumer price inflation in the modern era of modern monetary policy. Shocks to economic activity (as proxied by the unemployment rate) are skewed similarly to the policy rate, with bad events larger and infrequent and good ones small and common. Changes in inflation are more symmetrically distributed about zero. The core difference in the ups and downs of Fed policymaking in the modern era is that easings were triggered by unexpected adverse shocks and tightenings were planned in response to incipient inflation pressures rather than the emergence of high inflation.

Unemployment Rate 1994 – 2019 35 30 25 -1.0 -0.5 0.0 0.5 1.0 Quarterly change in the unemployment rate, percentage points



Source: Bureau of Labor Statistics, accessed via FRED, 2/27/22.

Academic explanations have some trouble in rationalizing policy asymmetry from this asymmetry in the business cycle. If inertia is explained as an attempt to lever the Fed's influence on longer-term yields, the path of rates does not have to be more inclined on the way down as long as the path is understood. Limiting financial volatility would not obviously call for a bigger and more market-moving cut on bad news than a hike on good news. (To be fair, if financial stability nakedly translates into supporting equity prices, an asymmetry in the business cycle could translate into an asymmetry in the policy rate.)

As for group dynamics, an emergent threat to economic activity probably implies individual assessments of the appropriate rate move down more in unison, as opposed to more diffuse expectations of some future inflation potential. That is, the group agrees to more on the way down because the group fears the same adverse forces.



Theory into Practice

This discourse has practical implications for the front and back ends of the expected path of Fed policy.

As for the front end, the description of the asymmetries in policy rates and the business cycle always included the proviso "in the modern era." Inflation for the prior 30 years seemed anchored at 2 percent, and policy firming was always about nipping incipient pressures in the bud. A forecast-based firming could elicit considerable differences of opinion within the committee, requiring a measured-pace solution. We believe the current upside surprise of inflation is as dramatic as the downside shocks that prompt easing. That is, they all must understand the need for a significant policy reset, perhaps making them more willing to front-load some of that adjustment.

For that reason, we suspect that more weight should be placed on a 50-basis-point move at the upcoming meeting, subject to subsequent guidance from the Fed. Another law of physics, however, also applies to monetary policy. Just as nature abhors a vacuum, the Fed abhors any uncertainty about its upcoming policy decision. Expect officials to fill any vacuum of doubt, either explicitly when Chair Powell testifies or through back-channel conversations with reporters, so that expectations mass on either a ¼-point or ½-point hike. In our view, the latter would be more appropriate, but that is likely a road not taken.

As for the back end of the expectations curve, the group dynamics view is that the group can be corralled into raising rates 1-1/2 percentage points this year and a likewise amount next. But this set of deciders will change by the end of the year, given the pending changes at two Reserve Banks and three nominations to the Board of Governors. As Chair Powell builds the case for extending the firming cycle at the turn of the year, he will have fewer fellow travelers. Policy will have tightened a bit by then, financial conditions will have followed up, the unemployment rate will be moving sideways, and inflation will have fallen off its peak. The case for an extended pause will be compelling and shared by many policymakers, even though it would be a mistake for the Newtonian reason that a body at rest stays at rest.

7





Vincent Reinhart

Chief Economist & Macro Strategist

Vincent is the firm's Chief Economist and Macro Strategist. In this role, he is responsible for developing views on the global economy and making relative value recommendations across global bond markets, currencies and sectors.

Previously, Vincent served as the Chief US Economist and a managing director at Morgan Stanley. For the prior four years, he was a resident scholar at the American Enterprise Institute (AEI). Vincent also worked in several roles at the Federal Reserve over 24 years, including Director of the Division of Monetary Affairs and Secretary and Economist of the Federal Open Market Committee (FOMC). His responsibilities at the Federal Reserve included directing research and analysis of monetary policy strategies and the conduct of policy through open market operations, discount window lending and reserve requirements. Prior to these roles, he was the principal liaison with the domestic desk at the Federal Reserve Bank of New York and was responsible for preparing a document outlining policy alternatives for each FOMC meeting. He was Deputy Director in the Division of International Finance and Associate Economist of the FOMC and spent five years at the Federal Reserve Bank of New York in both the domestic and international research departments.

His academic publications primarily concern the conduct of policy and issues related to the monetary transmission mechanism as well as an analysis of alternative auction techniques and Treasury debt management. After an undergraduate training at Fordham University, he received graduate degrees in economics at Columbia University.



Endnotes

- ¹ Ben Bernanke and Mark Watson, "Systematic monetary policy and the effects of oil price Shocks," Brookings Papers on Economic Analysis, 1997.
- ² Here is a trip back in time. Prior to 1994, FOMC decisions were signaled after the fact through open market operations, unless they were paired with Board decisions to change the discount rate that required public notice.
- ^{3.} Glenn Rudebusch, "Term structure evidence on interest rate smoothing and monetary policy inertia." Journal of Monetary Economics, 2002.
- ^{4.} Jeremy Stein and Adi Sunderam, "The fed, the bond market, and gradualism in monetary policy." The Journal of Finance, 2018.
- 5. For support, consider the lop-sided voting of the FOMC to the frequent split-decisions of the Supreme Court.

Disclosure

All investments involve risk, including the possible loss of principal. Certain investments have specific or unique risks. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Past performance is no indication of future performance.

This material has been provided for informational purposes only and should not be construed as investment advice or a recommendation of any particular investment product, strategy, investment manager or account arrangement, and should not serve as a primary basis for investment decisions. Prospective investors should consult a legal, tax or financial professional in order to determine whether any investment product, strategy or service is appropriate for their particular circumstances. This document may not be used for the purpose of an offer or solicitation in any jurisdiction or in any circumstances in which such offer or solicitation is unlawful or not authorized. Views expressed are those of the author stated and do not reflect views of other managers or the firm overall. Views are current as of the date of this publication and subject to change. This information may contain projections or other forward-looking statements regarding future events, targets or expectations, and is only current as of the date indicated. There is no assurance that such events or expectations will be achieved, and actual results may be significantly different from that shown here. The information is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or other reasons. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be, and should not be, interpreted as recommendations. Some information contained herein has been obtained from third party sources that are believed to be reliable, but the information has not been independently verified. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission.

Indices referred to herein are used for comparative and informational purposes only and have been selected because they are generally considered to be representative of certain markets. Comparisons to indices as benchmarks have limitations because indices have volatility and other material characteristics that may differ from the portfolio, investment or hedge to which they are compared. The providers of the indices referred to herein are not affiliated with Mellon Investments Corporation (MIC), do not endorse, sponsor, sell or promote the investment strategies or products mentioned herein and they make no representation regarding the advisability of investing in the products and strategies described herein.

Recent market risks include pandemic risks related to COVID-19. The effects of COVID-19 have contributed to increased volatility in global markets and will likely affect certain countries, companies, industries and market sectors more dramatically than others.

BNY Mellon Investment Management is one of the world's leading investment management organizations encompassing BNY Mellon's affiliated investment management firms and global distribution companies. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may also be used as a generic term to reference the Corporation as a whole or its various subsidiaries generally.

Mellon is a division of Mellon Investments Corporation (MIC). Mellon is a global leader in index management dedicated to precision and partnership. MIC is a registered investment advisor and a subsidiary of The Bank of New York Mellon Corporation.

Dreyfus Cash Investment Strategies (Dreyfus) is a division of BNY Mellon Investment Adviser, Inc. and Mellon Investments Corporation (MIC), each a registered investment adviser. Dreyfus is one of the industry's leading institutional managers of liquidity solutions. BNY Mellon Investment Adviser, Inc., and MIC are subsidiaries of The Bank of New York Mellon Corporation.

Personnel of certain of our BNY Mellon affiliates may act as: (i) registered representatives of BNY Mellon Securities Corporation (in its capacity as a registered broker-dealer) to offer securities and certain bank-maintained collective investment funds, (ii) officers of The Bank of New York Mellon (a New York chartered bank) to offer bank-maintained collective investment funds, and (iii) Associated Persons of BNY Mellon Securities Corporation (in its capacity as a registered investment adviser) to offer separately managed accounts managed by BNY Mellon Investment Management firms.

For more market perspectives and insights from our teams, please visit <u>www.dreyfus.com</u>.

MIC-252318-2022-03-03 9

Preyfus BNY MELLON | INVESTMENT MANAGEMENT