Equity capital markets update

A review of rate cycle drivers and subsequent market performance

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Introduction

The intricate relationship between interest rates and the broader macro environment, including stock market performance, is complicated. As the Federal Reserve (the Fed) attempts to reduce inflation from its 40-year high, commentary and decisions reverberate across markets, shaping corporate policy and investment strategies, lending practices and economic growth.

This paper explores three prior rate cycles, delving into the factors that propelled the Fed to hike, cut or maintain its target benchmark rate. Additionally, we examine market performance through these cycles – from the initial interest rate peak to the onset of rate cuts, and beyond. Our analysis aims to provide insight into the complex relationship between rates and market behavior, fostering a better understanding of the potential outcomes for what may lie ahead.

We understand that progressing through a rate cycle directly impacts cost of capital and how businesses finance and fund growth. As such, it is our top priority to help management teams navigate the evolving landscape by preparing them for all scenarios, including higher rates for a longer period. Precedent is not predictive, but prior cycles do provide some context as companies adapt to current markets and beyond. We hope the information provided herein is informative and leverageable as market participants prepare for "what comes next."

Situation overview

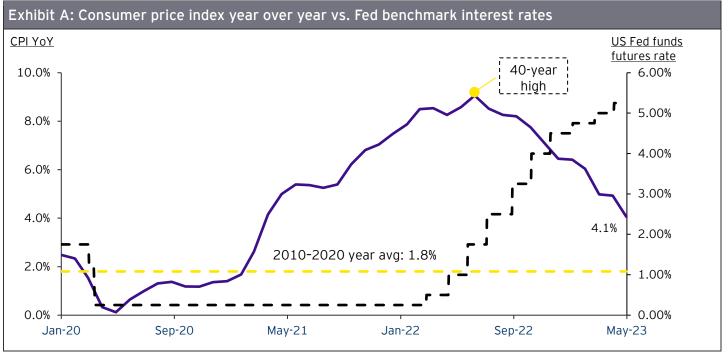
Over the past several years, volatile conditions have plagued the global economy, making the art of predicting macro trends and market performance a challenging exercise. A confluence of interrelated factors severely impacted economies and markets alike, including:

- COVID-19 restrictions and corresponding economic uncertainty
- Supply chain disruptions
- Elevated commodity prices
- Geopolitical situations ranging from Russia/Ukraine to European elections with divergent outcomes

In response to heightened uncertainty at the onset of COVID-19, the Fed cut its benchmark federal funds rate to near-zero and kept it there for an extended window. While this aggressive position helped drive growth amidst the uncertain backdrop, it contributed to tangentially triggering unintended challenges including near-record inflation levels. The Fed ascribed initial spikes in inflation to temporary factors, stating that elevated levels would be "transitory" in nature. However, large fiscal stimulus packages coupled with rapid economic growth made inflation more persistent. In March 2022 year-over-year CPI data increased ~9%, a level not experienced since November 1981.

In response, the Fed shifted course and began consistently increasing rates in an unwavering effort to tamp down inflation. Over a 14-month period from March 2022 to May 2023 the Fed raised rates by more than 500 basis points (i.e., 5%). These increases unfolded over 10 consecutive meetings and were comprised of four 75bp hikes, two 50bp hikes and four 25bp hikes. Perspectives differed on whether the Fed had gone too far and too fast, a debate that intensified with the collapse of Silicon Valley Bank and the onset of the broader regional banking crisis. In May 2023, Fed Chairman Jerome Powell cited the need for additional data to learn whether recent policy decisions were restrictive enough (i.e., sufficient to curb inflation); the Fed also shifted to a more balanced tone, suggesting that future rate hikes would be data dependent.

With the benchmark rate at 5.25% and inflation at its lowest level since April 2021, the Fed was at a crucial point in determining whether to pause rate increases, continue hiking or begin cutting rates. On June 14 the decision was made to pause rate increases, making June's Fed meeting the first time that the benchmark rate was not raised since March 2022. The decision to pause came as inflation showed signs of moderating over an extended period, albeit significantly above target rates.



Source: S&P Capital IQ as of June 15, 2023.

The CPI readout in June (May's data) was +4% year over year, which was the lowest level of inflation since March 2021 and down substantially from over ~9% experienced only one year earlier. In a statement following the recent decision to not increase rates, Powell expressed that he and his colleagues are "acutely aware" of the risks posed by inflation, will closely monitor the evolving economic outlook and data, and "act as appropriate" to ensure that inflation returns to its ~2% target over time. He added, "Nearly all committee participants view it as likely that some further rate increases will be appropriate this year," effectively signaling that rates have not peaked. The decision to leave interest rates unchanged in June suggests that the Fed is taking a cautious approach with further tightening as the risk of a recession continues to weigh on market sentiment.

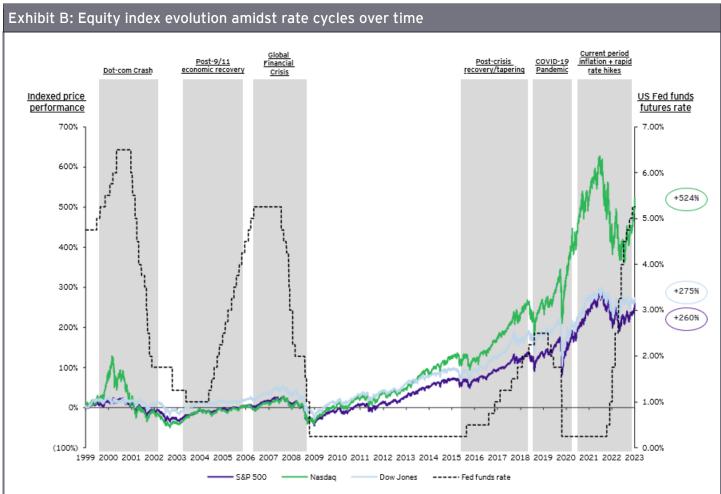
Examining precedent rate cycles and outcomes

As opinions differ on where rates will peak and when, market participants have speculated for some time on "what comes next," for both rates and market performance. While we acknowledge that history is not necessarily predictive, observing past cycles provides precedent, context and perhaps a loose framework for what policy makers are considering.

In this paper, we review the three prominent rate cycles of the past ~25 years prior to current. Our analysis examines how/when rates adjusted, and how markets performed in anticipation of and in reaction to rate moves. The precedent periods include:

- Dot-Com Bubble Crash, the 2001/2002 recession and 9/11 terrorist attacks
- Global Financial Crisis of 2007-2009
- COVID-19 pandemic preceded by US/China tariff/trade disputes of late 2019

Initial observations suggest that markets, as measured by major US equity index performance, generally trade constructively across rate cycles until an extraordinary and, in many cases, unprecedented macro event occurs (see: Exhibit B).



Source: S&P Capital IQ as of June 15, 2023.

Note: The average benchmark rate since 2000 is 1.78%; the average CPI is 2.54% over the same period.

Historically, markets have traded up through cycles. Low levels of unemployment, wage growth, strong housing markets and growth in asset prices drive market valuations and stock market performance, allowing the Fed to raise rates and control inflation until conditions dictate a pause, as appropriate. Peak levels in these three scenarios lasted between ~7 and 14 months before rate cuts were initiated for specific reasons.

In all three examined scenarios, acute, negative macroeconomic conditions required the Fed to mitigate economic fallout through rate cuts. In each of these scenarios, the Fed was reactive and took an aggressive approach vs. slowly cutting rates over time.

Exhibit C includes calendar data for past rate cycles, highlighting "peaks" and "troughs" over time.

Exhibit C: Rate cycle data and timing													
	Rate cycle "peak"			-	Rate cycle "trough"			Rate cut onset					
Scenario	Onset	Rate	Length (years)	Onset of rate cuts	Onset	Rate	Length (years)	to trough onset (years)					
Cycle 1: Dot-com Bubble Crash	5/16/2000	6.50%	0.6	1/3/2001	6/25/2003	1.00%	1.0	2.5					
Cycle 2: Global Financial Crisis	6/29/2006	5.25%	1.2	9/18/2007	12/16/2008	0.25%	7.0	1.2					
Cycle 3: COVID-19 Pandemic	12/19/2018	2.50%	0.6	7/31/2019	3/16/2020	0.25%	2.0	0.6					

Source: S&P Capital IQ. Note: Dot-com Bubble Crash peak onset to trough onset (i.e., ~2.5 years) may be construed as deceivingly long, given quick massive cut to rates followed by subsequent, smaller rate cuts over an extended period.

As noted, this analysis is not intended to be predictive around future Fed rate moves; each scenario is highly unique and comes with its own distinct set of economic conditions and considerations. The data and parameters prompting the Fed to act in one cycle are not analogous to those measured in a subsequent cycle. That said, it was an interesting observation that one-time/exogenous factors often take these intricate decisions effectively out of the hands of key policy- and decision-makers as they react to immediate conditions.

Considering market performance as rate cycles transition

Similar to rate cycle timing, there is no comprehensive explanation for how markets trade amidst monetary policy shifts. Market performance is typically dependent on a confluence of fundamental factors including the overall health of the economy, jobs/macro data, inflation, commodity prices, and corporate earnings, complemented by prevailing investor risk appetite, sentiment, and market momentum. "Visibility" and "predictability" also weigh on corporate/market valuations. As the Fed's path and other macro influences become more predictable, sentiment can shift positively or negatively depending on the expectation. On the contrary, if increased uncertainty enters the investment arena and opinions diverge on "what comes next," markets may trend weaker on the "unknown."

Along these lines a good rule of thumb in markets is when there are three potential outcomes: positive, negative, and unknown; "unknown" often trades at a discount to even the negative scenario. In other words, markets value predictability and, in turn, do not price "uncertainty" particularly efficiently.

Another issue to consider is the potentially counterintuitive relationship between macroeconomic strength and market performance. In the simplest of terms, if the economy is strong and indicators are positive, conventional wisdom suggests markets would move higher. However, as we have seen at times in previous cycles, the market can read "macro strength" as a leading indicator for nearterm rate hikes, which generally are not positively correlated to market performance.

As noted earlier, each cycle has its own set of circumstances and catalysts. Observing market performance post rate cycle peaks, across our three scenarios:

- ▶ Dot-com Bubble Crash: S&P 500 traded down (~12%) over the following 12 months.
- Global Financial Crisis and COVID-19 pandemic: S&P 500 traded up 18% and 28%, respectively, over the following 12 months.

Exhibit D includes additional market performance data across rate cycle peaks and troughs.

Exhibit D: Rate cycle market performance

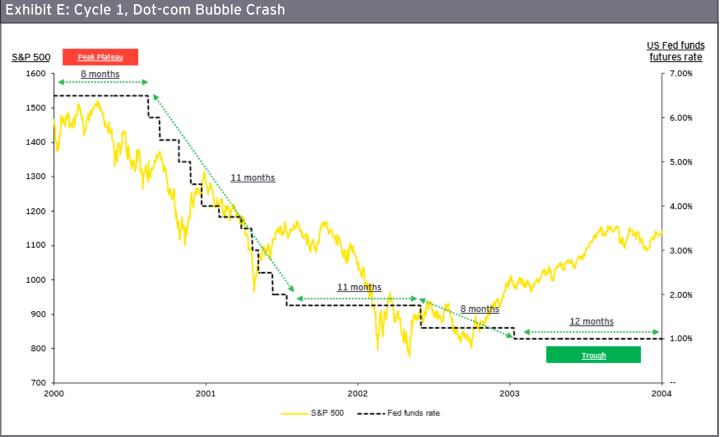
	S&P 500 price performance									
	Post-peak onset				Post-rate cut onset					
Rate cycle	1-Yr.	2-Yr.	3-Yr.	3-Yr. CAGR	1-Yr.	2-Yr.	3-Yr.	<u>3-Yr. CAGR</u>		
Cycle 1: Dot-com Bubble Crash	(12%)	(25%)	(36%)	(14%)	(10%)	(29%)	(14%)	(5%)		
Cycle 2: Global Financial Crisis	18%	1%	(27%)	(10%)	(21%)	(30%)	(25%)	(9%)		
Cycle 3: COVID-19 Pandemic	28%	47%	82%	22%	10%	47%	38%	11%		

Source: S&P Capital IQ.

Case studies

Given the unique attributes of each rate cycle and scenario, we have included additional color on the circumstances and challenges confronted in each.

Dot-com Bubble Crash



Source: S&P Capital IQ.

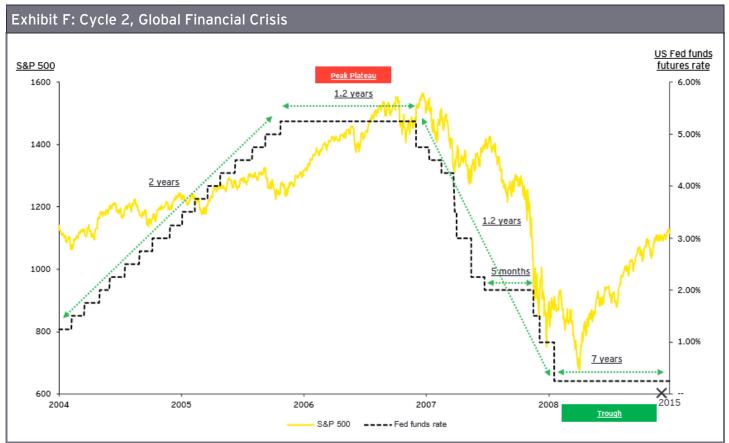
Preceding the Dot-com Bubble Crash, the Fed benchmark rate was 6.50% and had held at that level for approximately eight months.

The "crash" was preceded and effectively stoked by massive capital inflows into technology and internet-based startups, many of which ultimately did not have viable public market business models. When these businesses began to falter, stock prices and the broader market sold off significantly. GDP contracted and the unemployment level rose, driving the economy into a recession. In response the Fed lowered interest rates from 6.50% to 1.75% over 11 months (from January to December 2001).

Despite this swift and significant adjustment to monetary policy, consumer confidence continued to decline, and a substantial economic recovery failed to materialize. The 9/11 terrorist attacks and deflationary pressures contributed to an extended economic downturn. Given the effects of the continuing recession, monetary policy did not impact the markets in a way that it may have in other scenarios. Eleven months after the previous rate cut and subsequent pause, the Fed cut rates further, reducing the benchmark rate from 1.75% to 1.00% over the next eight months, reaching its lowest level in ~45 years. From the onset of rate cuts, it took markets about two years to settle, a period during which the S&P 500 traded down ~29%.

Markets eventually responded to the 1.00% rate level and an improving economic backdrop, rallying from a low in October 2002 to return 33% over the next 12 months.

Global Financial Crisis



Source: S&P Capital IQ.

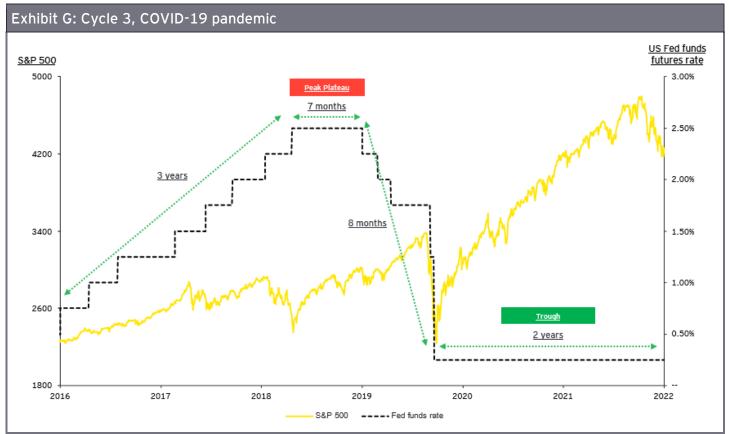
Aided by aggressive monetary policy, the US economy grew fast following the 2001/2002 recession, driven by low unemployment and inflation, and a strong housing market. As a result, rates were raised incrementally and consistently from 1.00% to 5.25% over a two-year period (mid 2004-mid 2006) and held at the 5.25% level for over a year.

Then, in September 2007, in response to the subprime lending and banking rout, the bursting housing bubble, and instability in global financial markets, the Fed cut rates aggressively from 5.25% to 2.00% over seven months. After a six-month pause and a deepening crisis, rates were lowered to 1.50% in October and then to 0.00%-0.25% in December 2008. With few options left, the Fed began an additional form of monetary policy known as "quantitative easing."

The aggressive rate cuts plus the purchasing of trillions of dollars of bonds through quantitative easing ultimately helped stimulate the economy and alleviated broader systemic risk to the global financial system. Markets responded with the S&P 500 rallying off March 2009 lows, returning ~70% over the following 12 months.

In this case study, markets began to respond approximately 18 months after rate cuts initially began, and approximately five months after the second set of aggressive cuts plus quantitative easing were implemented.

COVID-19 pandemic



Source: S&P Capital IQ.

Across a prolonged economic recovery and bull market, asset valuations, including stock prices, consistently hit record highs. Beginning in December 2015, rates were raised incrementally from 0.25% to 2.50% over a three-year period, at which time the Fed then paused for seven months. In reaction to the US/China trade disputes, the Fed began cutting rates in late July 2019, taking the benchmark rate from 2.50% to 1.75% over three months and holding it there through early 2020 as the economy trended positively. The S&P 500 rallied 14% from the onset of these cuts in late July 2019 through late February 2020.

As we are all aware, the COVID-19 pandemic surfaced in February/March 2020 and changed the equation. To combat the economic impact of an unprecedented situation, the Fed held two emergency meetings in March 2000 and cut rates from 1.75% to 0.00%-0.25%. This aggressive policy shift helped stabilize the financial system and ultimately resulted in a "V-shaped" recovery. From that point forward, the S&P 500 gained ~66% over the next 12 months and ~83% over the next two years.

What comes next?

As noted, we are now amidst what effectively is the "next" rate cycle, which, perhaps coincidentally, carries characteristics from each of the prior three scenarios included in this analysis. From March 2022 through May 2023, the Fed raised rates by over 500 basis points (5%) over the course of 10 consecutive meetings, with speculation now centering on what may come next. While market participants are mixed, consensus is that we are close to a peak; thus, talk has begun to center on what would be required and when the Fed would shift sentiment toward a bias to cut.

Elevated interest rates are necessary during certain cycles to maintain economic balance, but as demonstrated they can impact the overall health of the business community. The erosion of purchasing power, increased borrowing costs and challenged profit margins, plus slower economic growth, require companies to shift and adapt quickly to a new economic paradigm. Financing growth, and even working capital, can be challenging particularly when refinancing balance sheets in a completely different capital markets environment from when existing facilities and securities were initially put in place approximately three to eight years ago.

When can we expect change? Prior rate cycles suggest that, even if we have reached a peak rate level, cuts may not be on the way for some time. Interestingly, two of the last three rate cycles required exogenous, one-time, unpredictable events to instigate aggressive rate cuts over accelerated periods. As such, it may be an extended period before monetary policy relief can be leveraged, absent the unexpected.

In the current rate cycle, historically high inflation and its impact on the timing and aggressiveness of future rate cuts is an incremental unknown variable, further distinguishing the current situation from the cycles examined earlier. This adds an additional complicating factor influencing Fed policy, which could impact the timing, scale, and rate of cuts if inflation remains above target levels.

As higher rates may persist, it is prudent for management teams and boards to prepare to operate in an elevated rate environment for the foreseeable future. Businesses need to adapt operating and cost frameworks to drive efficiencies. Beyond investing in costsaving initiatives, corporations can consider utilizing other levers to weather the storm. Reassessing the various capital markets, access to funding, costs and fees, covenants, etc., across securities in the current market and rate environment is a process that all companies will ultimately go through. For private companies aspiring to list on a public exchange, re-evaluating the business model, predictability of projections, and growth prospects in a different economic climate is essential for preparation and the ability to move fast when markets become more accommodative.

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