

Lessons from the Origins of the Great Inflation for Today

WHAT THE MID-1960s CAN TEACH US ABOUT TRADING CURRENT MARKETS

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Trend strategies can share option-like, convex characteristics, similar to owning certain long volatility positions.

Lessons from The Origins of The Great Inflation for Today

A couple weeks ago I was at a dinner for hedge fund managers. The discussion was lively about Emerging Markets, Italy, and US politics until a dinner guest posed a question: "What do you think could cause 10-year Treasury yields to break decisively above 3%?" The table fell silent. I was confused. Didn't 10s close at 2.97% that afternoon? We were only a few basis points below 3% yet not one trader at the table was willing to argue in favor of yields cracking that level. Within a week of that night, 10s were above 3%. Now, two weeks on, 10s are breaking to multi-year highs. Sometimes the catalyst for an event is the uniform belief that it can't happen -- a widely held assumption that something is impossible shifts behaviors in ways that all but manifest the impossible outcome.

One of the most fundamental characteristics of well-functioning markets (and good portfolio construction) is diversification. Bad trades happen every day and when those losses are well diversified their impact is limited. However, sometimes there are collective mistakes, mistakes that are highly correlated, mistakes of assumption made by most market participants at the same time. These are the bad trades that cause recessions and market collapses. Because we just passed the 10-year anniversary of the Lehman bankruptcy, there's been a lot of focus on that collective error. I'm going to focus on a different collective error, the underestimating of inflation risk in the late 1960s, which I think is a more relevant analogue.

Look at the two most notable signs of complacency in the markets today: very low risk priced in the developed bond markets as seen in negative term premia and very low realized volatility. The last time either measure was as anomalously low as they are today was the mid-1960s. What caused the markets to be priced to such a high level of complacency and does it offer any lessons for thinking about how the market is priced today?

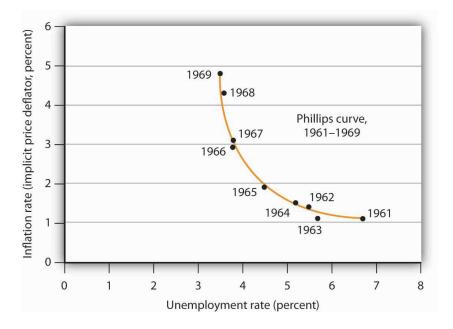
I can call the 1960s bond market pricing complacent only with the benefit of hindsight. In the context of the rapid increase in inflation, bond yields, and bond volatility starting at the end of that decade, negative term premium was clearly underpricing future risks. But, almost definitionally, what I call complacency would have been called rational pricing of market risks by most people in the moment. Muted inflation risk pricing in the bond market in the late 1960s was arguably for good reason. The Federal Reserve had crushed inflation at the end of the Korean War and, after a brief period of deflation, inflation settled into an incredibly stable, low range between 0% and 2%. Like today, the recent past was one of abnormally contained inflation relative to history; and markets started to price that abnormally low, stable inflation would continue indefinitely.

But starting in the mid-1960s, there were several significant policy changes, made in the context of a belief that inflation wasn't a concern, that all but caused the outcome that was considered impossible. The first proximate catalyst to the great inflation was the Tax Reduction Act of 1964. At the time, it was the largest tax cut in the nation's history. The Tax Reduction Act slashed income taxes, especially on higher income households, by reducing income taxes by 20% across the board in addition to reducing corporate taxes. The expectation was that the tax cut would ultimately increase total tax revenue by lowering unemployment, increasing consumption, and increasing the incentive for companies to invest and modernize their capital stock.¹ The tax cut did increase growth, but it also pushed unemployment very low, to one of the only sustained periods of unemployment below 4% in the post war period.

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¹ https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=6503&context=penn_law_review

The second policy change was how employment was considered. In the mid-1960s, there was concern about a cultural divide. The US social critic Michael Harrington spoke about "The Other America": the unskilled Americans in mostly rural areas who had a "culture of poverty" and were being left behind by the post war economic boom of the 1950s.² In that context the drop in the unemployment rate after the tax cut was welcome. The belief was that pushing the unemployment rate to very low levels would help transfer wealth from the prosperous urban and suburban areas to "The Other America." They thought that, while very low unemployment might increase inflation, the increase would only be modest, and the social benefits of modestly higher inflation and lower unemployment, so when inflation started to increase with very low unemployment rates it wasn't a concern. The subsequent understanding that inflation might have a non-linear relationship to unemployment at very low levels was only really understood because of this era. The Phillips Curve was only popularized to try to understand why inflation increased rapidly when the unemployment rate pushed below 4% starting in 1966. Until the unemployment rate got below 4%, inflation remained very low, and the first increases in inflation from 2% to 3% when unemployment got to 3.8% were viewed as minor deviations on a linear trend. Only after the point that unemployment hit 3.5% and inflation rose above 4% did people come to appreciate that the trade-offs were non-linear.



A third proximate cause of The Great Inflation that followed the 1960s was the failure to appreciate a significant, structural decline in productivity. Capital deepening for WWII and the Korean War had boosted productivity in the following years. However, much lower peacetime capital spending levels had caused productivity growth to slow. Despite the relative lack of capital spending, the declines in productivity were generally dismissed:

² https://socialwelfare.library.vcu.edu/eras/american-social-policy-in-the-60s-and-70s/

Productivity growth slowed in the late 1960s or early 1970s, but policymakers continued to expect a return to the higher productivity growth of earlier postwar years.³

Like then, since 2008 there has been a significant decline in capital investment that has led to very low productivity growth over the last several years. There is a technological boom narrative that is obscuring how low productivity is. There is also a belief that the recent very large tax cut will increase capital spending to pre-collapse levels, which may happen, but it's important to note that the starting point is one of very low productivity.



Also, then like today, the period of very low stable inflation left monetary officials confused. The contemporary Federal Reserve is very open about not having a unified, fundamental framework for thinking about inflation. ⁴⁵⁶ That was also true in the 1960s. Allan Meltzer, in his analysis of The Great Inflation, places significant blame on the lack of a fundamental framework for inflation from The Federal Reserve:

[N]either Martin, nor his colleagues in the FOMC, nor the staff had a valid theory of inflation or much of a theory at all. Nor did they have a common set of beliefs about how the economy worked. And some of their main ideas were wrong⁷

The additional problem of not having a unified view of how to set policy is it makes the Federal Reserve vulnerable to external pressures. The types of criticisms President Trump has directed towards the Federal Reserve over rate increases are perhaps unusual in recent history but were very common in the 1960s. President Johnson was also

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³ https://files.stlouisfed.org/files/htdocs/publications/review/05/03/part2/Meltzer.pdf

⁴ https://www.brookings.edu/research/monetary-policy-without-a-working-theory-of-inflation/

⁵ https://www.federalreserve.gov/newsevents/speech/yellen20170926a.htm

⁶ https://www.reuters.com/article/us-usa-fed-bullard-inflation/bullard-says-feds-inflation-framework-warrants-review-idUSKCN1IH34G

⁷ https://files.stlouisfed.org/files/htdocs/publications/review/05/03/part2/Meltzer.pdf

very critical of the Fed for increasing rates, including taking Fed Chair Martin to his Texas ranch to pressure him to reverse rate increases.⁸

The problem with not having a framework for thinking about inflation is it makes it almost impossible to recognize early signs of trend shifts. And waiting to address inflation can serve to create even more inflation. It became clear at the end of the 1960s into the early 1970s that inflation has a self-reinforcing trend. Stability in inflation can reinforce stability, but acceleration also reinforces acceleration. As inflation increases, all else equal, it lowers real interest rates which is stimulative for growth, and which then creates higher inflation. It's part of why anchored inflation expectations are so critical to inflation staying low, but also why expectations of higher inflation can be hard to fight when they take hold. As the decade shifted into the 1970s, when inflation expectations were already becoming untethered, oil shocks (which might have been inconsequential if inflation expectations were still well anchored) served to make the untethering of inflation expectations all but complete, allowing inflation to reach levels over the following decade that had previously been unimaginable.

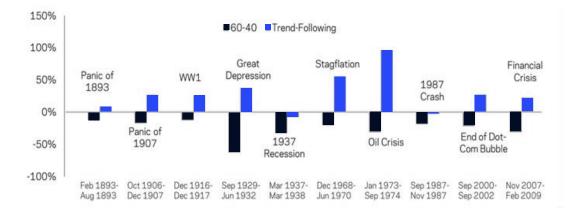
During the first half of the 1960s, 10-year Treasury yields were in a very stable, narrow band around 4%. As inflation increased in the second half of the decade, first yield volatility increased. Then yields moved steadily higher and closed just under 8% at the end of 1969. Inflation persisted throughout the 1970s and bond yields followed inflation higher. 10-year Treasury yields ultimately peaked just under 16%, when the Volker Fed increased the Federal Funds Rate to 19% to finally crush inflation. Inflation in the 1960s also increased equity market volatility. The equity market made successive record highs during the decade only to be followed by meaningful corrections. The 1965 market high was followed by a non-recessionary 20% correction in 1966. Then the new market high in 1968 was followed by a 30% correction, caused in part by aggressive Fed tightening, that led to the recession in 1970. But the rate hikes at the end of the 1960s didn't fully contain inflation and as a result equity markets suffered. Over the next decade, as the Fed struggled to contain inflation, the stock market languished. At the end of the 1970s the S&P 500 was still only at the 1968 peak level. Adjusted for inflation, in early 1980, equity prices were less than half the 1968 peak level. The equity market didn't recover the inflation adjusted losses to surpass that 1968 peak until 1993, 25-years later.

Like at the dinner a few weeks ago, I was recently at an inflation event where no one was willing to make an argument that inflation might meaningfully exceed 2% over any time horizon. This was striking to me given that inflation is already at or above 2% on almost all measures. There are certainly reasons to think that the experience of the late 1960s is unlikely to repeat, but there are also many striking parallels. And dismissing something as impossible, especially when that is the consensus view, leaves one open to significant market risk.

⁸ https://www.ft.com/content/0a1d71d0-8e46-11e8-bb8f-a6a2f7bca546

Appendix 1:

Total Returns of US 60/40 Stock/Bond Portfolio and Time Series Momentum in Worst Drawdowns for 60/40 between 1880 and 2013



Source: AQR

Appendix 2:

PRIVATE AND CONFIDENTIAL

	Dec 2018 Return	YTD Return (31 Dec 2018)	Annualized NetReturn	Annualized Monthly Volatility	SharpeRatio
One River Systematic Trend Strategy	3.70%	-8.43%	3.68%	16.19%	0.23
SG Trend Index (NEIXCTAT Index)	0.95%	-8.11%	-2.48%	10.88%	-0.23
HFRI Macro Systematic Diversified Index (HFRIMTI Index)	1.74%	-6.02%	-1.64%	7.32%	-0.22
AQR Managed Futures (AQMIX US Equity)	0.12%	-8.88%	-3.46%	9.18%	-0.38
Graham Tactical Trend (GRAHTTA VI Equity)	-4.72%	-13.31%	-3.25%	11.32%	-0.29
Man AHL Diversified (EDFDGLI ID Equity)	5.82%	-3.22%	-1.51%	13.62%	-0.11
Aspect Diversified (ASPDIVF KY Equity)	-0.88%	-14.62%	-1.62%	15.20%	-0.11
ISAM Systematic Trend (ISSYSCQ KY Equity)	2.83%	-18.26%	-1.59%	19.44%	-0.08

0.30 0.20 0.10 0.00 -0.10 -0.20 -0.30 -0.40 -0.50 SG Trend Index HFRI Macro AQR Managed Graham Tactical Man AHL Aspect Diversified ISAM Systematic One River Systematic Trend Systematic Futures Trend Diversified Trend **Diversified Index** Strategy

Sharpe Ratio

Comparison return data incorporate different expense profiles. Please refer to the individual security offering documents for incorporated expense and fee information. See Disclaimer.

Source: One River & Bloomberg.

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7

Period: 30 Nov 2014 to 31 Dec 2018

About the Author

Lindsay Politi began her career at Wellington Management in Boston where she was head of Global Inflation-linked Investments. In that role she was one of the top TIPS managers by assets, managing over \$10 billion in dedicated assets, with a top quintile track record for excess returns and information ratio in her peer group. She then joined Tudor Investment Corporation in Greenwich as a discretionary macro investor, translating her inflation strategy onto a macro hedge fund platform. At the start of 2018 Lindsay joined One River Asset Management, where she leads a subsidiary dedicated to inflation strategies and solutions. In her nearly 20-years as an inflation investor, Lindsay has come to believe both in the need for good inflation solutions for client portfolios and that the current offerings in the space are inadequate to meet those needs. Lindsay's new One River Inflation Fund and customized inflation solutions are engineered to address this.

About One River Asset Management

One River is an innovative investment manager dedicated to delivering high-conviction absolute-return strategies that help our clients build superior portfolios. We see the world in a period of major economic and political transition, with the investment landscape shifting in ways that will make the coming five years look profoundly different from the past five. Our strategies are built to profit from this dynamic environment while providing strong diversification benefits to traditional investment portfolios. Each is developed and managed in-house by our diverse team of investment professionals with deep expertise in volatility, thematic macro, systematic, and inflation trading/investing.

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