

False Assumptions and Inconvenient Truths

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I think investing is something you learn from other investors. Nothing I learned in school comes close to matching what I've learned from the people I've worked with. I'm sure I think that in part because I've been lucky to have worked with so many amazing people over the years, including my first boss. He was famous for saying, among other things, "nothing is ever different this time." Like many of the investing maxims I've collected over the years, there's more truth and application to this than there might seem on the surface. It's also an investment philosophy that served him very well over the course of his career. He began as a fixed income investor in the late 1970s, the very beginning of a tremendous 40-year bull market in the fixed income markets, and retired in 2005, missing the great recession. Over the course of his career it truly never was different and those who, like him, never lost sight of the grand trend they were riding, prospered greatly. For the rest of us, The Great Recession did change everything, and it is different this time.

Specifically, hitting the zero bound in rates brought an abrupt end to the long, unrelenting bond bull market that had been the great market trend of our time. And, with respect to my former mentor, things are now profoundly different. There's no way they couldn't be. Intuitively most investors understand this truth. Publicly and privately great investors of the previous decades talk about how different the markets seem. There's the long profitable strategy that no longer works, the correlation that broke down, or the returns that didn't fit the back test. Something seems off. The structure of financial markets has broken from the past and that break is creating the biggest opportunity in the financial markets in decades.

But if we're at one of the most dramatic changes in financial markets in decades, why aren't we discussing it more openly? There are many reasons. A main one is how we approach questions like this. Take for example a recent economic note¹ from The San Francisco Fed that concludes central bank negative rate policy improves growth and increases inflation. It starts with a plan to quantify the economic impact of negative rate policies. Although there are multiple countries with negative rate policies, they decide against using that empirical data because it's not robust enough to build an econometric model. Instead they build a model based on US data from 1987 to 2017. Since the paper is about interest rates, I highlighted the period he's drawing from in the graph below. Although it's certainly a broad timeframe, it's also only one very specific environment for interest rates, a sample that doesn't represent the broader data set well, and one that does not include negative rates. The paper then reviewed the model output with some graphs and specific estimates. And before the conclusions there's a disclaimer. First, the estimates are only as good as the model and second, "the analysis assumes that the effects on the economy from interest rate changes are largely unchanged in the event of a negative rate." So, when asserting that negative rates are as effective a policy tool as positive rates, they presupposed the conclusion. A model is constructed that assumes negative rates impact the economy similarly as positive rates, the model then tells us the only thing it could tell us - that the economic impact of negative rates is like the impact of positive rates has been for the previous 30 years, and then the conclusion that negative rates will behave like positive rates is published. I see this kind of analysis everywhere but rarely pointed out for the reader so explicitly.

https://www.frbsf.org/economic-research/publications/economic-letter/2019/february/how-much-could-negative-rates-have-helped-recovery/



The question of the moment seems to be "What is the bond market telling us?" This is exactly the question we should be asking, but we keep trying to answer the question using old methods and obsolete models that presuppose an answer that is incredibly unlikely to be true. We observe that the yield curve inverted but seem to forget novel policies like yield curve control or the revival of big central bank balance sheet policies when discussing it. I think because we love our models so much, we sometimes forget the limits of what they can do. There's the renewed popularity of a single factor model² the New York Fed constructed in 2006 that uses the spread between 3-month bill and 10-year Treasury yields to estimate recession risk. Never mind the model is from an era when central bank policy was exclusively exerted on short rates. And let's not discuss how \$10 Trillion or so in negative yielding debt (up from \$0 in 2006), G4 Central Bank balance sheets exceeding \$14 Trillion/36% of GDP, or international policies pegging 10-year yields might change the nature of the signal. Instead we take the results of a single factor model based on a time period that when the factors influencing that single input used were materially different from today and proclaim, with a misleading sense of precision, that there's a 30% chance of recession. We're asking the right questions but looking for answers in all the wrong places, using all the wrong tools.

All this makes me think of a class I took in college on cartography. There have been maps about as long as there have been markets but maps were transformed during the Age of Enlightenment. Scientific methods around calculating distances, and tools for measuring them, meant land masses started to be represented much more accurately and with greater precision. Although elements of these maps were much more accurate, they also lost a tremendous amount of detail and in another way became much less informative. The exterior borders became much more detailed and correct but the much of the interior detail was lost. Topographical features, cities, or land masses that were known to exist from centuries of trade routes were eliminated from maps because there weren't enough data to represent them in accordance with the new standards. While a tremendous amount of valuable knowledge and data was gained, the rigidity around what information was used also meant much knowledge was lost. When I see so many economists and investors relying on models that can't possibly be very useful just to use a model, I wonder if we're in a similar moment. Where we're so enamored with our tools that we don't question enough if our tools are adding to or detracting from our greater knowledge. I think in many cases when talking about interest rates the models detract more than they add and a general understanding of rates markets plus a little logical inference gets much better results.

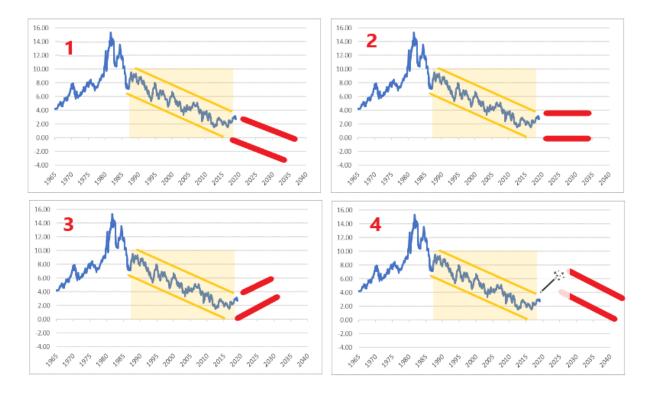
² https://www.newyorkfed.org/research/capital_markets/vcfaq.html



If we pull back a bit and cast the old models aside, I think the message from rates is more straight forward than we make it out to be. Forgetting where rates will be tomorrow or next week but thinking on a longer time horizon, there is a relatively limited set of possible paths. What's interesting about the future paths is how much they're transformed by the zero bound. The zero bound means there are fewer options than we like to imagine, and those options are rarely what are assumed. The options for the path of rates are: lower/a bull market, higher/a bear market, or sideways, plus a fourth imaginary path that we often plug into our econometric model.

- Scenario 1/"Bull" Market: Rates maintain their declining trend through the zero bound. I put bull in quotation
 marks because through the zero bound we get negative yields which mean negative returns, and it's hard to call
 negative returns a bull market.
- Scenario 2/Sideways Market: A sideways trend in rates close to the zero-bound resulting in stable returns that
 are close to zero for a prolonged period.
- Scenario 3/Bear Market: Rates trend higher.
- Scenario 4/Bull Market Continues: We pretend we're in a world where the zero bound doesn't exist, we never hit it, and the old bond bull market can continue indefinitely. Yields are magically higher, but without the negative economic or financial impacts of yields rising. From this new, magically higher starting point, the old 40-year bull market can continue forever without ever having to recon with the harsh realities that come with the zero bound.

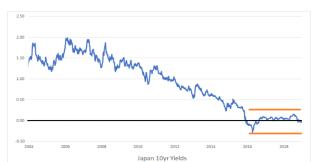
And since I like pictures, the four scenarios graphically:



When assigning probabilities to the scenarios, I think Scenario 4, that the future can resemble the past, should receive close to zero weight. Yet it is overwhelmingly the implicit default assumption. But realizing Scenario 4 isn't a possible outcome requires coming to terms with so many inconvenient truths. It cuts off a significant range of historical return paths. It places a cap on future bond returns that drags down future risk adjusted returns for all assets. And that cap on future bond returns also means they can no longer meaningfully diversify equity risk. It means central banks are limited in how much they can encourage further increases in leverage with lower interest costs. It places a limit on the wealth effect that central banks can generate to stimulate the economy. In so many ways big and small it means it is impossible for the present or future financial markets to resemble the past.

Scenario One is not a real option either because the zero bound creates a barrier to the continuation of the bond bull market. Mostly because, as I said above, negative yields mean negative returns which means lower yields are no longer associated with a bull market. At the zero bound something odd happens, where lower yields and higher yields are both bear markets. So, there are really only two options: bear market or sideways. And the empirical evidence we have reflects this. The reality of the pushes into negative rates that we've seen so far is that they don't, in practice, look like Scenario One.





Actual experience with negative rates looks much more like Scenario Two. Because, despite many assumptions otherwise, negative rates are fundamentally different from positive rates. It means a negative yielding bond behaves like a different security type than a positive yielding bond. Because of these differences attempts with negative rate policy thus far have hit practical limits to pushing yields persistently lower. Ultimately, this all means there are only two real future paths: a sideways trend/secular stagnation or a higher rate /reflationary market.

A binary outcome isn't new for market participants, but this isn't the binary outcome we're used to considering. I've worked with many investors who see the world in a risk on/risk off, sell vol/buy vol, growth/recession framework. What is profoundly different at the zero bound is that the two options are not the same as they have been. The options are to exist in a world where growth is too low or to take steps to increase growth and suffer the consequences that come from rising rates. Either we continue to endure nominal growth rates that are too low or have higher growth and accept the impact of rising rates and inflation that will come with that.

The main reason the options in front of us aren't growth vs. recession but too low growth vs. reflation is how the zero bound has changed the Central Bank reaction function. Quantitative Easing, Negative Rates, Yield Curve targeting, and other novel programs are very different from previous policy actions. Richard Koo has been talking about the "QE Trap" since 2014³. But, as is the nature of any good trap, you don't recognize you're caught until you try to get out. The trap being that Central Banks can't tighten policy the way they used to. The Fed has most dramatically stopped their exit of QE in recent weeks, which follows retracement back to QE from the ECB, and the Bank of England acknowledging that Brexit also forces them into inaction. Recently both the Fed and the ECB have also liberalized the upside of their inflation targets to make it clear that their 2% target is not a cap and they're tolerant of modestly higher inflation. In the old recessionary framework, the reason is that growth metrics look weak. I think the true reason is that Central Banks have finally realized how deeply entwined their actions are in the global financial markets and that the impacts of winding down their balance sheet are more far reaching than they originally realized.

As Koo and others have been pointing out for years, the exit from QE was always going to come with costs so high as to make it almost impossible. Artificially depressing discount rates to inflate present values of financial assets seemed like a good idea at the time but it means that monetary policy cannot contract without also unwinding the prices they inflated and causing a financial bear market. Central Banks are stuck. They have only limited and difficult paths forward. And, in their revised guidance around their inflation targets, they've made it clear what they're choosing. They're choosing to stay the course, and will have to stay the course, because they're trapped and there's no easy way not to. They're more tolerant of inflation than they had been for a variety of different reasons, the most important unstated reason being they learned last year they must be. And with monetary policy stuck, the concern for the markets is not the next recession. There will not be a contraction in money or liquidity to convert idiosyncratic problems into systemic problems to cause one, at least not in the way we're used to seeing it. The systemic issue will need to come in other ways.

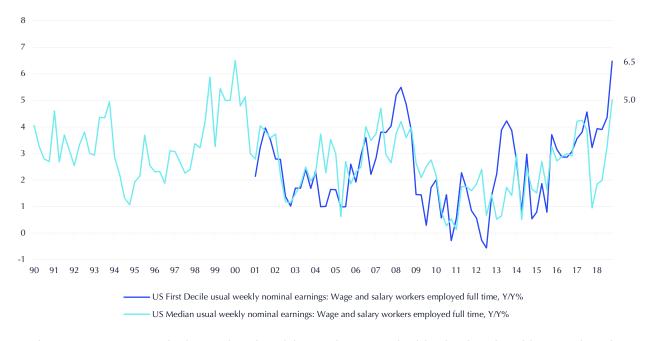
This all means investors are in their own trap as well. The unspoken truth in finance is that, at the zero bound, risk adjusted expected returns are too low to meet return hurdles. The zero bound has eliminated traditional sources of safe income and forced investors to look for returns in riskier places. Investors have extended duration, levered their portfolios, sold volatility, and pushed further into equity risks in various forms. Because, historically, the risk of doing these trades was a recession and central banks are perpetually underwriting recession risks. All trades that work best if the environment continues. It's a trap of its own sort because the only way to get close to required returns are those that leave the investor most exposed to a change in the environment. Remaining in a perpetual

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³ The Escape from Balance Sheet Recession and the QE 'Trap'; Richard Koo; November 2014 http://www.eunews.it/docs/koo.pdf

low rate environment ensures that return targets will never be met, and higher growth means higher returns in the future but capital losses from higher discount rates and higher borrowing costs in the transition.

And if there's a catalyst for transition on the horizon, it's in the trap that many politicians now find themselves. After a decade of stagnant wages, workers globally are revolting figuratively and literally. Around the globe, in different ways, elections have given us a collection of leaders who were chosen to break from the past. The unifying theme seems to be change and, in many cases, that change has come too slowly. But even if the path forward isn't always clear, staying the course has become untenable. Those elected on promises of change are under pressure to deliver and established politicians are feeling pressure from newer rivals. Brexit, with its confusion and dysfunction, is ultimately transformational no matter the conclusion. In Europe austerity has failed, the consequences of rigidity are clear, so quietly budget deficits are being allowed to increase. In the US, every election replaces more of the old guard from either party. The old guard who remain are learning quickly that big government projects are back -- either support billions for infrastructure if they're in one party, billions for a green new deal if they're in the other, or they'll likely find themselves out of office. President Trump is angry The Fed counteracted his attempts at 3% growth, but that won't be a problem next time. Higher growth always needed to involve fiscal spending, and the new wave of politicians seem more intent on delivering it.



Amid recession concerns in the financial markets, labor markets in much of the developed world remain the tightest they've been in decades. And wages, especially at the lowest end, continue to rise. To the extent this was a concern for the Fed or other central banks, that concern has evaporated. A trend has started, and it is now welcomed and supported by monetarists and politicians. Investors need to at least consider that we are in the beginning stages of exiting secular stagnation with all the many implications. The process of exiting secular stagnation will create challenges for investors and require new ways of thinking. Using old models will only lead to bad results but the opportunities from utilizing new methods vast. Many have come to fear inflation but part of why a transition may be occurring is the growing understanding that stagnation is worse. I think of my old mentor, who started his career at the beginning of the last large pivot in interest rates. There were tremendous opportunities for those who identified the new methods, new securities, and the vast new trend. Those same opportunities exist now. Maybe, in that way, it isn't different this time.

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, systematic, and inflation trading/investing.

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