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Modern Portfolio Theory, RIP

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Executive summary

For investors, the biggest shift over the past quarter was the definitive return by global central banks to easing mode as the U.S. Federal Reserve (Fed) cut its target interest rate for the first time in over a decade, while the European Central Bank (ECB) cut rates to -0.5% and restarted its quantitative easing (QE) program. For now, the highs in interest rates are behind us and we expect them to keep heading lower through 2020. For savers and risk-averse investors this is a massive headache.

It is now clear that the U.S. monetary normalization cycle, which began in 2013/14 with the tapering of QE, is officially over as the Fed cut its target rate twice in the third quarter. Despite six years of tightening, or normalization, the Fed was only able to get interest rates a touch above 2% before beating a retreat. With inflation, broadly speaking, still at about 2%, that implies the absolute best the U.S. could manage was a ZERO real interest rate! (The real interest rate is the posted rate less the rate of inflation, and therefore represents the rate required to protect the purchasing power of the lender).

Meanwhile, the ECB was forced to abandon all talk of normalization as bank President Mario Draghi reopened the monetary taps in September, with a rate cut further into negative territory and the resumption of a 20 billion euro per month QE program. In other words, in the upturn, the ECB never even got their policy rate back to ZERO, let alone above. You pay for the privilege of lending money to the government in Europe.

Negative interest rate policy (including real rates) may seem crazy, and on many levels it is, but that is the reality of the world today. The term “financial repression” is used to describe the situation of negative real interest rates, let alone negative nominal rates which are a more recent phenomenon. They represent an absolute transfer of wealth from savers to borrowers. Great for borrowers, very bad for savers. So why are we here, and as managers of individuals savings, what can we do about it?

Why are we here?

The reason for the recent shift to easing by central banks has been the clear signs of global, and U.S., economic deceleration as the U.S.-led global trade war, assisted by other geopolitical tensions such as Brexit, has already tipped the world into an industrial recession. I expect it will lead to a broader global recession by mid-2020. I outlined my shift to a recessionary outlook in 2020 last June in my third quarter outlook piece, "Winter is Coming: The Geopolitical Recession Begins Now," and I recommend investors revisit the article as it remains the base case.

Since our recession call last June, global economic data, both hard and soft, have continued to soften and lend support and credibility to the call. While I believe the deceleration trend is set, the trajectory, speed and severity will remain extremely policy dependant. Looser monetary policy will soften the downturn, but cannot fully offset it as the principle driver is political and primarily U.S. trade policy, which is shifting the global economy in the direction of rising protectionism and de-globalization. Any escalation in the trade war will aggravate the outcome, while de-escalation will soften the adverse impacts.

While I expect we will be in a recession in 2020, I do not expect a particularly severe downturn, and certainly not a repeat of the 2007/08 financial crisis. We expect to see more of a shallow, garden-variety global and U.S. slowdown/recession, to be respected but not so much feared, and which is likely to provide some attractive investment opportunities during periods of asset price weakness.

If a global slowdown and recession remains the base case, as it does, then it follows that we also expect monetary policy to continue on the recently launched easing path. In other words, U.S. and Canadian rates are heading back toward ZERO! This is a major problem for investors and particularly for the more risk-averse investor looking for a reasonable 4-6% yield from their capital upon which they can live in retirement.

Negative real interest rates are a world of pain for savers

Many of the prescriptive solutions for how to build investment portfolios are based on a simplified two asset (bonds and equities), two factor (risk or volatility vs return) version of Modern Portfolio Theory (MPT) that simplistically boils down to a view that bonds are low risk and equities are high risk. This worked well in the 90s and 2000s when we were living with some of the highest real and nominal interest rates in history, with the U.S. 10-year Treasury bond yielding around 6% in the 90s and 4% in the 2000s prior to the 2008 financial crisis. Today, the 10-year Treasury yields a miserly 1.5%, while CPI inflation remains broadly in the 2% range, resulting in a negative interest rate of -0.5%! In other words, a risk-averse investor investing in a so-called "safe" or risk-free asset would only expect to lose 0.5% each and every year if holding the bond to term! It is risk-free only in the sense that there is almost no risk of an investor making any money after inflation. This is not the definition of risk-free that most risk investors have in mind.

When the current framework for building low-risk portfolios was evolving in the 90s, the risk-free asset yielded a 2%-4% real return, so investors could still earn a sufficiently positive nominal and real return. An individual living on the income from their capital could expect to withdraw around 4% a year and still see their savings increase in line with inflation. Bonds provided both low volatility (the industry's definition of risk, not an individual's definition of risk!) and a yield of roughly 5% (a nice-to-have but secondary benefit, according to industry theory).

What I believe to be the fatal flaw in how MPT is applied is the assumption that risk-averse individuals preferred the low volatility aspect over the positive real yield that they were receiving. If you have been living off the proceeds of a bond portfolio paying interest at a rate of 5% over the past 20 years, then having to "roll your investment" into today's current so-called risk-free rate of 1.5% and being told, "don't worry it's safe" just does not cut it! But that is what the current 10-year government bond is paying! It may offer low volatility, but it also offers a ZERO real yield. Whereas our industry thinks of government bonds as risk-free yield, in reality today they offer yield-free risk! In a zero or negative real rate world, a portfolio skewed to government bonds will force many savers to either drastically cut their spending if they wish to continue to live off their capital or to "eat their capital" and run down their life savings, hoping every day they don't outlive them. This is absolutely not acceptable as a default industry option. Yet it is the natural extension of blindly following a deeply flawed investment thesis (MPT) to its logical extension in a zero-rate world. We need to reject such blind adherence to the clearly erroneous assumptions embedded within the framework. We need to develop innovative solutions to meet the needs of each client in accordance to their definitions of acceptable risks and not to the arbitrary industry use of volatility as an appropriate measure of risk. For long-term investors, day to day volatility is irrelevant, yet we ascribe it near-irreverent status as the definitive risk metric dictating how their savings are invested and ultimately what their financial future and hence, in many cases, what their retirement lifestyle will be! This is absurd! We must be smarter.

Bonds are not risk free

Bonds are not risk free. They are financial instruments that must be properly understood and used in an appropriate manner, not as a perceived risk-free default by uninformed investors in the aftermath of the most anomalous bond market era in history. Bear in mind the warning: past performance is not indicative of future returns. Having fallen from yielding near 20% in 1980 to effectively zero today, bond returns globally definitively cannot resemble past returns. As always, the best indicator of future returns in bonds, remains the starting yield. At a yield of

1.5% on the 10-year Treasury bond, investors can expect to earn 1.5% on a government bond portfolio in the coming decade. Which, so long as inflation remains at roughly 2% (uncertain) would translate into a negative -0.5% return per annum, not a big loss to be sure, but also not a positive return.

Negative real interest rates are not a new phenomenon. In the aftermath of WWII, from the 1940's through to 1980, the real returns on government bonds were also negative as inflation consistently outpaced the interest paid on government debt. Inflation is the potential silent killer of any fixed-income contract and a legitimate risk for retirees who may, in many cases, spend 30 years in retirement.

In today's world, bonds can protect your principle in nominal terms, but they no longer pay you a positive yield and cannot protect you from any potential rise in inflation. So the big question for many investors becomes: how do I generate a 5% cash flow yield for those risk-averse clients who are still hoping to live off of the investment returns from their savings, but not by eating through their savings?

What can investors do in a negative rate world?
There are solutions, but it does require all of us to rethink our concepts of risk and how we construct portfolios. One potential solution is to construct portfolios not on the basis of an expected total return vs volatility efficiency frontier, as is the conventional MPT approach, but rather to optimize the portfolio based on expected cash flow (yield) from the underlying assets vs the risk of a permanent loss of capital. This is very different from only looking at total returns, which rely far more heavily on more uncertain capital gains yet is the sole return metric used by MPT. It is, however, how Signature runs our diversified income portfolios such as Signature High Income Fund and Signature Diversified Yield Fund, both of which I would highly recommend that investors looking for that 5% yield consider. In my opinion, these diversified income funds are a sound decumulation solution.

Finding the 5% solution part one: Investing like the smart money
There are two groups of investors, both unconstrained by the defunct MPT construct, that have figured this out. The first are many of the world's largest and most sophisticated investors in Europe and North America who are managing large long-term pension and insurance assets such as the Canada Pension Plan. Facing long-term liabilities stretching out many decades and often facing actuarial return hurdles that can be expressed in real after-inflation terms (the true benchmark for <u>any</u> long-term savings) such as CPI+3% (which assuming 2% inflation translates into 5% per annum), many of these funds have been reducing exposure to government bonds

that pay 0-2% and have been systematically increasing exposure to real assets such as real estate and infrastructure, ie. long life real assets that generate consistent cash flows that will broadly increase in line with future inflation. Just think about the effect of increasing rents on office properties or increasing tolls on a toll road, for example. These investments are often referred to as alternative assets in that they are outside the conventional definitions of the two asset class MPT framework of only bonds and equities, despite the fact they can also be readily purchased in listed equity vehicles such as REITs or listed infrastructure companies such as Enbridge for pipelines, Sydney Airport, or Ferrovial, (43% owner of the 407 toll road around Toronto).

Finding the 5% solution part two: The Italian Immigrant Personal Pension Plan
Interestingly there is another class of investor from the opposite end of the investment sophistication spectrum that has also figured this out. It is what I have referred to as the Italian Immigrant Pension Plan, drawing on my observations growing up in Montreal with friends whose parents had immigrated from Italy in the post war years. What did many of these newly arrived Canadians do back then?

They found jobs and worked hard. When they could, many bought a duplex. As my wife's Nona used to comment, "buy property cuz they're not making anymore of it!" They would live downstairs and rent the upstairs. The rent would pay down the mortgage. When they retired, they would live downstairs, and live off of the rent from upstairs. They had, in effect, built a real asset-based pension plan! There are a few important lessons we could all learn from their approach. First, they built up a savings pool invested in a cash flow generating asset with the intention of living off that capital in retirement. They also had no intention of selling or "decumulating" the property. Rather, it would be left to the kids, but it also provided peace of mind knowing they had an asset cushion if needed. This is driven by basic human nature! Second, they did not check the "value" of the duplex every day or worry about its volatility. They worried whether the rent check was paid on time. i.e. they focused on the cash flow from their savings, not on the short-term volatility of the balance sheet. It is a different focus that bypasses the dangers to long-term savers from an incessant focus on short-term volatility.

Conclusion
To be successful in achieving or meeting long-term retirement and savings goals we have to change the narrative around those long-term goals and ignore the short-term noise. As an industry, in a low rate world, we need to reset how we think about risk and how we build retirement portfolios. Not everyone can accumulate sufficient capital to generate a sufficient income to live off of their savings as opposed to decumulating their savings. But many can and

many more could if we acknowledge the failures of Modern Portfolio Theory and rethink how we can meet their retirement needs. Investing like institutional pension plans like the CPP and adopting a cashflow-focused approach by targeting asset classes expected to generate cashflows well above existing bond yields is one suggestion. Key building blocks have to include real assets such as REITS and infrastructure that currently offer yields in the 3%-5% range and growth of 3%-5% per annum such that an expected 5%-8% long-term return is not unrealistic. Real assets also offer better protection from potential future inflation than plain government bonds on a 1%-2% yield. Another key building block is credit, or corporate bonds including high-yield bonds where the current market yield is around 6%. While real assets and high-yield credit are often referred to as "alternative assets," in our opinion there is nothing alternative about them. They have been the key building blocks in Signature's income-oriented strategies for over two decades and we continue to be one of the largest managers of such assets in the country.

Caveat

Don't get me wrong in thinking there is an easy solution. There is not. A world of zero rates is massively challenging for savers and there are no easy answers. But we owe it to our clients to have a deeper conversation about the challenges and options for structuring portfolios in a manner more attuned to their needs and goals and less so to slavishly follow a discredited investment theory that can cause extreme hardship in the current economic backdrop.

Sources: Bloomberg Finance L.P., World Bank and Signature Global Asset Management, as at October 8, 2019.

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