ABBINGTON INVESTMENT GROUP, LLC

Abbington Investment Group, LLC
Quarterly Market Commentary
Central Bank Policy: The Implications of Negative Interest Rates
April 2016

Dear Clients, Friends and Family:

The role of central bankers and the profile of people like Janet Yellen (Federal Reserve), Haruhiko Kuroda (Bank of Japan) and Mario Draghi (European Central Bank) have seldom been more significant. They now invoke a cult-like following among the financial press, the financial community and more recently, among the public at large.

It is hard not to see why. Since the 2008 financial crisis, central banks have been tasked with repairing the economic devastation that followed the "Great Recession". With policy initiatives such as record low interest rates, quantitative easing (QE), interest rate curve flattening operations (Operation Twist) and now negative interest rate policy (NIRP), investors are left wondering how central banks will respond when global debt levels once again start to suffocate economic growth.

In this note, we will look specifically at central bankers' latest initiative: negative interest rate policy (NIRP) and its impact on investor sentiment and behavior.

Some Necessary Background: The Impact of 35 Years of Falling Yields

Over the past 35 years, we have seen a progression of lower interest rate cycles (see Chart 1), that in turn have provided a series of incentives for investors to take more risk in an effort to receive higher returns.

Chart 1: US 2-Year Treasury Yield (proxy for U.S. deposit rates)

Source: FullerTreacyMoney.com

With more accommodative central bank policy and our pass-the-parcel-like investment cycle, investors took more risk, exchanging low-risk assets, such as bank deposits, for bonds, then

bonds for credit, followed by credit for equities. Finally, when incentivized by higher interest rates or falling stock markets, investors moved back to cash to start the cycle again.

In addition to this dynamic, we had the leveraged investors who used margin and "carry trades" to amplify investment returns. These market participants became more active as borrowing costs fell and their collateral increased in price. Consequently, these leveraged investors exacerbated the volatility of the investment cycle as their leverage increased in line with it.

Central banks' monetary policy is important for the economy and for markets. It acts as a spigot, boosting or contracting the economic system and driving people forward and back on the risk curve.

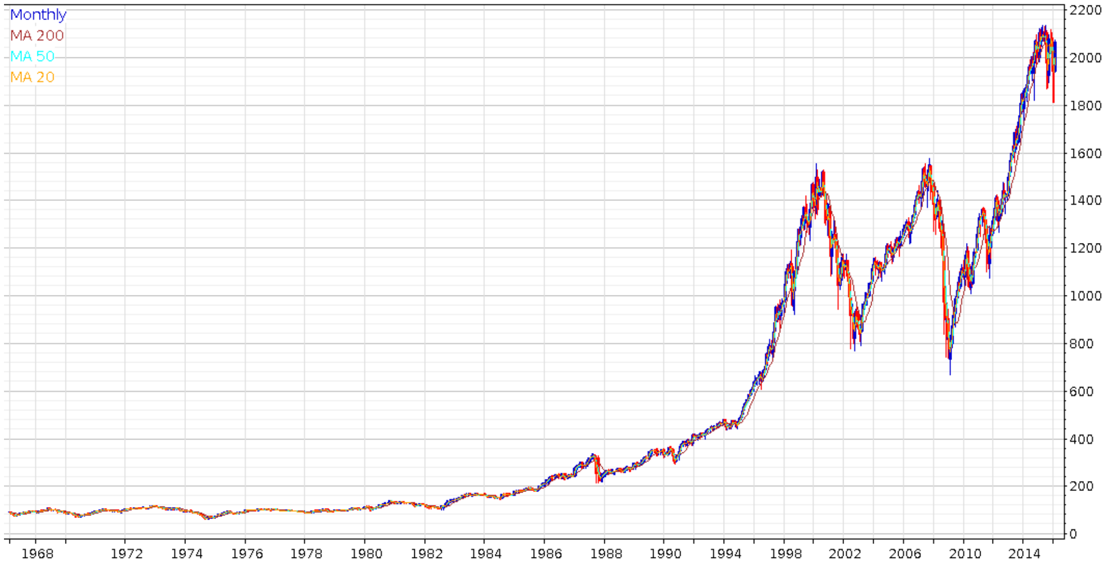
Not surprisingly, our more recent 35-year period of falling interest rates has created parallel bull markets in bonds and equities (see Chart 2 and Chart 3) as the virtual circle of lower official interest rates stimulated savers to become less risk adverse. This trend, coupled with the Baby Boomer generation's saving and investing their peak earnings, pushed markets to excess, leading to the large corrections we saw in the early 2000's and again in 2008.

With this backdrop in mind, we get a sense of why, with interest rates approaching zero, investors have become so concerned about policy makers' ability to maintain a 35-year investment super-cycle. In an effort to counter those concerns, central banks have recently opened up a debate about the limits of monetary policy and, in particular, about the use of negative interest rates (NIRP) as a tool to boost economic growth and support investment.

Chart 2: US 30-Year Treasury Prices (continuous futures price)

Source: FullerTreacyMoney.com

Chart 3: S&P 500 Monthly Prices

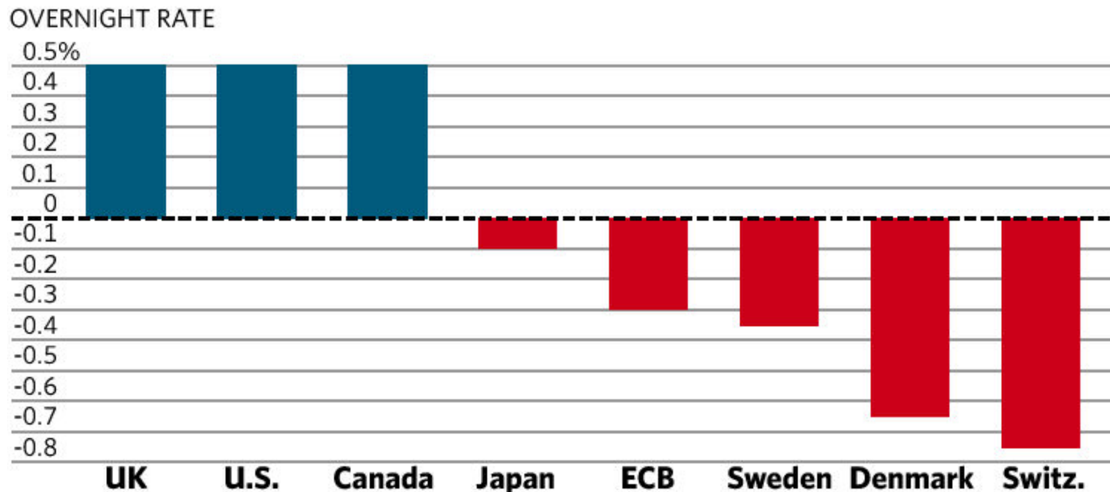


Source: FullerTreacyMoney.com

The New Normal: The World of Negative Interest Rates (NIRP)

In the following table (Table 1), we can see that we now have a number of central banks applying negative interest rates in an effort to combat deflation and boost economic growth.

Table 1: The Spread of Negative Interest Rate Policies



The consequences of these negative interest rate policies are as yet unknown, but they have the potential to be profound. Remarkably, investors can now use instruments that guarantee a negative nominal return. Furthermore, issuers such as highly rated sovereigns and large corporates are today getting paid to issue debt.

Above, we have the immediate effects of NIRP. As a result of these market dynamics, a more significant debate has now started to surface about the meaning of cash and about what differentiates its physical form from that of a cash deposit at a bank.

First, let's look at the meaning of money in the form of a banknote. According to one definition, "a banknote constitutes a central bank's promissory note to pay a stated sum to the bearer on demand". According to another, money is considered to be an "unencumbered means of exchange and a store of value". Put simply, a bank note in your wallet is yours to spend or keep as you wish.

However, money held in a cash account at a bank is very different. It is not money, as defined above, but rather a loan to a bank for use at its discretion. A depositor in such a bank account or money market fund can count their cash-like asset as an investment, but not as money. In other words, a bank cash deposit is not risk free. It is not unencumbered money.

And so, via the law of unintended consequences, the keepers of the fractional-reserve-banking model have created a systemic Achilles heel in the form of NIRP. Through a series of negative inducements brought about by extreme central bank policy actions, many large and sophisticated investors are now asking why they are assuming counterparty risk and a guaranteed negative return by holding cash at a bank, when there is an option to hold unencumbered notes for less cost.

In the following table (Table 2), courtesy of Bridgewater Associates, LP, we get a sense of what the incentives are for holders of large cash deposits to exchange these for physical cash. The table is comprised of a series of cost estimates for storing the largest denominations of notes based on the storage costs of gold in those countries. As acknowledged by Bridgewater, Table 2 is not perfect, but it does provide some insight into why we are hearing debates about the role of cash in society. It is also an indication of why gold, another form of money and a store of value, has just had one of its best quarterly performances—a trend that we believe is in its early stages.

Table 2: Continuous Commodity Index (CCI: 60-year chart)

Estimated Negative Rate Threshold Based on Cost of Cash Storage

	Largest Denomination	Value of 1 unit of currency in USD	Estimated Cash Storage Cost	Implied Minimum Rate
Switzerland	1000	1.03	0.2%	-0.5%
Euroland (DEU)	500	1.11	0.4%	-0.7%
Denmark	1000	0.15	1.2%	-1.5%
Sweden	1000	0.12	1.3%	-1.6%
United States	100	1	1.6%	-1.9%

Rates in Switzerland are already below theoretical limit implied by cash storage estimate

Source: Bridgewater Associates, LP

NIRP Produces Skewed Risk Incentives

In a world with negative interest rates, there is no longer a positive expectation of nominal return; as a result, investor expectations change. These changes first appear in the globally inter-connected world of foreign exchange, where currencies with negative risk-free rates are avoided, while remaining positive-yielding currencies need lower nominal rates to maintain their value (global yield levels fall as a result). More importantly, savers in those negative yield

environments are forced to take risk in an effort to maintain the nominal value of their assets. The net effects of these dynamics are volatile currency markets and progressively more expensive asset markets.

With NIRP and other forms of aggressive monetary policy measures, we can expect continued market volatility as an increasingly wider group of investors are required to take on more risk in an effort to match previously expected nominal returns.

Current Market Opportunities

As mentioned above, we have become very bullish of gold. NIRP has set a precedent, negating the "zero return" argument used against precious metal investment. When combined with the current backdrop of global debt imbalances, we believe gold and gold miners (see Chart 4) play an essential role in a well-diversified portfolio.

Chart 4: Gold Mining Stocks

Source: FullerTreacyMoney.com

European stock markets, currency-hedged, also offer a relatively decent long-term investment opportunity. With corporate earnings bottoming, the risk incentive of negative interest rates and index multiples that are far from overstretched. Over time, we expect a mid to high single-digit return from a diversified basket of European equities. Furthermore, the European market is currently pricing continued earnings underperformance at the very time that average margins remain and top-line growth is depressed. With European equity prices at a near record level of underperformance relative to the US, we believe there is a significant catch-up opportunity in European markets.

Chart 5: Euro Stoxx 50 (decent upside potential)

Source: FullerTreacyMoney.com

Additionally, the Japanese equity market, currency-hedged, also remains of interest to us. With its low multiples, negative interest rates and the country's proximity to the higher Asia growth environment, we remain bullish of its stocks over the medium to longer term.

Chart 6: Nikkei 225

Source: FullerTreacyMoney.com

Emerging market (EM) equities remain a deep value play (see Chart 7). With USD$ strength abating, commodity markets improving and diminished worries about China, we continue to accumulate assets in EM during periods of market weakness. We expect 2016 to be a year of EM outperformance.

Chart 7: MSCI Emerging Markets Index (EEM)

Source: FullerTreacyMoney.com

Wrapping Up

After 35 years of continuously lower interest rate cycles, we think central bank policy is at the limit of its capacity to boost economic growth. Recent central banking initiatives, such as NIRP, may help economic momentum somewhat, but their real purpose is to act as an incentive for governments to use their fiscal levers and to initiate material infrastructure spending. In that event, we will not be surprised to hear talk of debt monetization, with countries like Japan being at the forefront.

History is rich with precedent of countries reaching the limit of their borrowing capacity. Past efforts to deal with indebtedness may have been cruder, but the end goal, to de-lever the economy without material economic impact, was the same in the past as it is today. Savers, being on the front line of this deleveraging process, will need to be conscious of the risks to any investment, while at the same time being mindful of the principle of "reckless prudence" in a world where authorities cannot countenance a deflationary outcome.

We will leave you with what Keynes said on the subject of inflation and deflation:

> "Inflation is unjust and deflation is inexpedient. Of the two perhaps deflation is, if we rule out exaggerated inflations such as that of Germany, the worse."

Today's central bankers hold the same opinion; they will consider any option in an effort to combat deflation.

Thank you for taking the time to read this piece. We look forward to sharing our next one with you.

Grace Y. Toh
Chief Executive Officer and Co-Founder

Peter Van Dessel
Chief Investment Officer and Co-Founder

www.abbingtongroup.com

Please remember that past performance may not be indicative of future results. Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product (including the investments and/or investment strategies recommended or undertaken by Abbington Investment Group, LLC), or any non-investment related content, made reference to directly or indirectly in this article will be profitable, equal any corresponding indicated historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Due to various factors, including changing market conditions and/or applicable laws, the content may no longer be reflective of current opinions or positions. Moreover, you should not assume that any discussion or information contained in this article serves as the receipt of, or as a substitute for, personalized investment advice from Abbington Investment Group, LLC. To the extent that a reader has any questions regarding the applicability of any specific issue discussed above to his/her individual situation, he/she is encouraged to consult with the professional advisor of his/her choosing. Abbington Investment Group, LLC is neither a law firm nor a certified public accounting firm and no portion of the website content should be construed as legal or accounting advice. A copy of the Abbington Investment Group, LLC's current written disclosure statement discussing our advisory services and fees is available upon request.

The chart(s)/graph(s) shown is(are) for informational purposes only and should not be considered as a suggestion of any investment recommendation, investment strategy, or as an offer of advice to buy, sell, or exchange any investment product or investment vehicle. Past performance may not be indicative of future results. While the sources of information, including any forward looking statements and estimates, included in this(these) chart(s)/graph(s) was deemed reliable, Abbington Investment Group, LLC, and its affiliates do not guarantee its accuracy