

MARKET Recap

The Economy: “Excess Money ≠ Excess Growth”

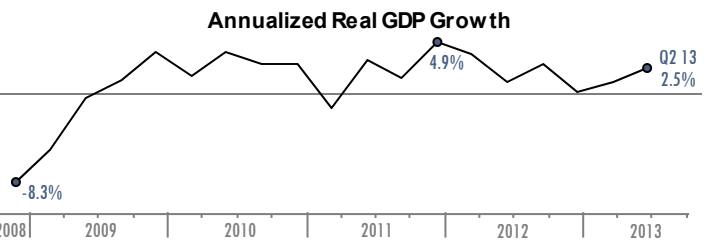
Economic growth accelerated in the second quarter, driven again by increases in residential fixed investment and, to a lesser extent, personal consumption expenditures. Government spending continued to contract, although at a slower pace than in Q1. Leading economic indicators remain mixed with a slightly positive skew.

Consumers, the classic drivers of economic recoveries, remain quite confident according to surveys – but actual growth in spending behavior is somewhat muted. Combined with positive overall trends in energy prices, inflation in consumer prices remains historically low. Producer prices are also growing at a very subdued pace. From these measures alone, it is difficult to believe record levels of monetary stimulus have been and continue to be applied.

Fed watchers were again blind-sided in September when the Open Market Committee did not elect to begin tapering off quantitative easing. There are a host of reasons, political and apolitical, why announcing a taper in September would have proven poorly timed. Consider the looming government shutdown, in effect at the time of this writing – and the more ominous debate on the debt ceiling looming just ahead. But the overarching reason is simpler: the Federal Reserve is loath to take actions which deflate financial assets unless rising consumer prices or some other shock forces their hand.

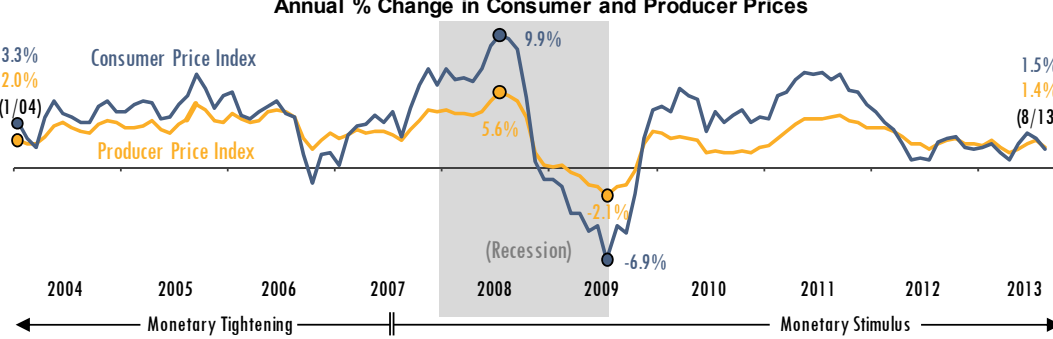
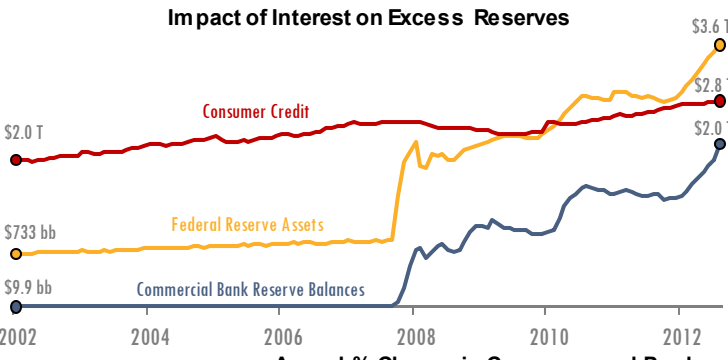
Indeed, the Fed’s asset purchase programs have never been designed to stimulate consumer spending or business activity, at least not directly. The immense increase in Federal Reserve assets now amounting to some \$3.6 trillion are housed away in virtual bank vaults, glued there by the Fed’s moral persuasion and an unprecedented policy of paying interest of 0.25% to banks on excess reserves.

Generally people (yes, including bankers) do what they’re paid to do; if they are paid to let money lay fallow, that’s the expected result. The object of this policy was, first and foremost, to loudly and publicly recapitalize damaged bank balance sheets, creating confidence in the underpinnings of the financial system.



As a principle side effect asset prices were reflat, or at least the plunge in nominal prices for real estate, stocks, and credit instruments was arrested; desirable outcomes during a credit crisis. If jobs were saved and economic activity picked up as a further side effect so much the better, but that was not the objective.

Unemployment and economic growth are the stated triggers to initiate withdrawal of excess money, but we sense a working theory that rising future earnings will replace low interest rates as a value driver for assets, and a “soft landing” for stocks and credit will result. That thesis failed upon the hint of tightening in May, and the Fed noticed. Don’t be surprised if each step in the lengthy tightening process is smaller and more tentative than expected.



The US Bond Market

After bond markets sold off in Q2, broadly interpreting the Federal Reserve's comments as a signal of impending pullback in quantitative easing, the September 18th Federal Open Market Committee announcement of no change to its quantitative easing program surprised investors. Treasuries advanced, posting the biggest weekly gain in over one year (as the 10-year yield dropped 0.16% to 2.735%) and extending gains the following week on further voiced support by several Fed officials, including New York Fed President William Dudley.

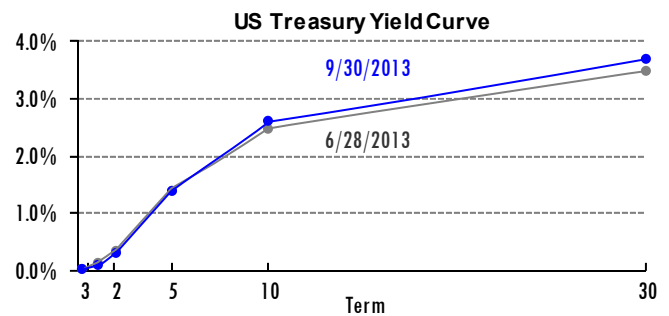
| Bond Indices - Total Returns | |
|------------------------------|--------|
| 3Q13 | |
| Bar Cap Aggregate | 0.57% |
| Bar Cap Interm. Gov't | 0.40% |
| Bar Cap Long Gov't | -2.12% |
| Bar Cap Interm. Credit | 1.01% |
| Bar Cap Long Credit | -0.03% |
| Bar Cap High Yield | 2.28% |

At the very end of the quarter, market attention shifted away from the Fed's monetary policy toward the looming debt-ceiling battle in Washington and the fiscal policy required to avoid a federal government shutdown on October 1st. From a market standpoint the main concern, however, was avoiding a first-in-history default on US government obligations that could take effect between October and November if Congress failed to lift the \$16.7 trillion federal debt ceiling. While default is extremely unlikely (and not clearly possible on Constitutional grounds),

we know from experience that a debt ceiling crisis can send shock waves through global financial markets. Such posturing helped boost Treasuries further as a safe-haven bid that overpowered credit concerns regarding the continuing budget deficit; ironic, as these are the very securities that might "default" if the ceiling is not raised.

As a welcome change for bond investors, Q3 returns came in positive across most US fixed income sectors. Exceptions included of longer maturity investment grade, Treasury, and high yield bonds, as well as the riskiest high-yield securities, local-authority government-related issues, asset-backed utility securities, and certain classes of hybrid adjustable-rate Freddie Mac and Ginnie Mae mortgage securities. The yield curve steepened slightly in the quarter versus Q2 with yields dropping marginally on the shorter end of the curve and rising incrementally for 7-year and longer maturities. Treasuries gained amid the chorus of Fed doves, while after rallying on the Fed's news, investment grade corporate spreads landed at about the middle of the calendar year-to-date range.

High grade bond issuance was boosted by the largest ever corporate-bond deal, a \$49 billion sale by Verizon Communications in mid-September. Per *The Wall Street Journal*, more highly rated corporate debt was sold in September than in any other month in 18 years of recorded history, and without Verizon September would have still been the 19th largest investment-grade issuance month on record, underscoring an ongoing healthy appetite for credit in the fixed-income market. After several years of ultra-low interest rates, income-thirsty investors had rushed to put more money to work in bonds since rates began rising last spring. At the same time, corporations were scrambling to issue bonds before expected rate hikes made borrowing a more expensive proposition. According to *Barron's* September alone produced a record of \$217 billion in US corporate bond issuance, which per *Forbes* included a record high yield bond issuance of \$47.65 billion. This new-issue frenzy took place prior to the Fed's September announcement that then caused interest rates to fall and signaled that rates are not likely to rise dramatically for some time, thus lessening the perceived urgency in issuance. This bond buying also occurred prior to the budget wrangling in Washington which also typically creates uncertainty and curbs new issuance in its own right. However, demand for spread in a low-interest rate environment propped up credit with some defensive positioning sought by investors in shorter maturity bonds with lower duration and interest rate sensitivity, or those with a floating-rate component.



Source: Bloomberg

Per Freddie Mac, the average 30-year fixed mortgage rate was 4.49% for September, up from 3.35% in May when the Fed initially set off concerns about a reduction in its rate of asset purchases. The average 15-year fixed rate also rose to 3.52% in September from 3.17% in June and 2.76% in March. The National Association of Home Builders' Housing Market (Sentiment) Index in September indicated that home builders were as confident in major opportunities in the housing market as they were in 2005, despite rising mortgage rates and weak actual new home sales in the month. Less affluent buyers tended to be hardest hit with higher powered buyers relying increasingly on cash versus debt for new purchases.

The US Stock Market

With advances in nearly all industry sectors and across all market capitalizations, investors looked to add risk amid accommodative Fed policy that continues to be guided by economic data with emphasis on unimpressive jobs numbers. Corporate profits were mixed. While companies in the S&P 500 reported earnings growth of 2.1%, second quarter earnings growth would have been negative but for a 28.1% gain in the financial sector (FactSet). Furthermore, within the S&P 500, a record high 90 companies lowered Q3 EPS guidance since FactSet began recording data in 2006, underscoring the

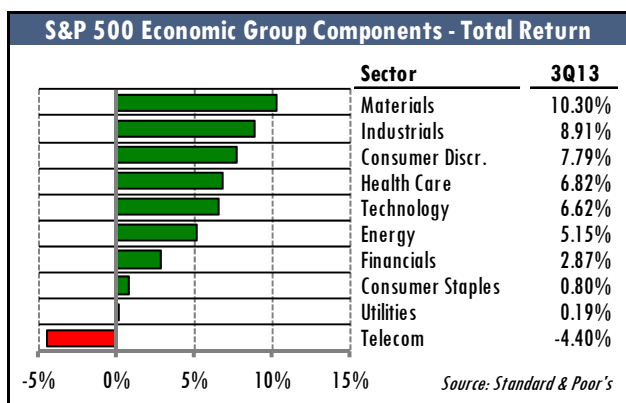
challenging business environment corporate leaders see going forward. Between mixed economic data, the S&P 500 still returned 5.2% for the quarter and 19.8% year-to-date, highlighting the significant impact Fed actions are having on driving stock market performance. The risk-on trade was in full swing during Q3 as investors preferred small-cap stocks over large-cap, and growth stocks over value.

Cyclical companies in materials and industrials outperformed the defensive consumer staples, utility and telecom sectors. Chemical companies benefited from low natural gas prices, a key input cost for production. Steel companies also performed well on increasing automotive demand from North America

| Stock Indices - Total Returns | | | |
|-------------------------------|-------------|------------------------|-------------|
| Largecap Stocks | 3Q13 | Midcap Stocks | 3Q13 |
| S&P 500 | 5.24% | S&P Midcap 400 | 7.54% |
| Russell 1000 | 6.02% | Russell Midcap | 7.70% |
| Growth | 8.11% | Growth | 9.34% |
| Value | 3.94% | Value | 5.89% |
| Broad Markets | | Smallcap Stocks | |
| Russell 3000 | 6.35% | S&P Smallcap 600 | 10.73% |
| Growth | 8.48% | Russell 2000 | 10.21% |
| Value | 4.23% | Growth | 12.80% |
| | | Value | 7.59% |

and European markets, as well as China's continued commitment to infrastructure spending. Within industrials, defense contractors gained on escalating global geopolitical tensions, most notably between the US and Syria. Lockheed Martin, Boeing and Raytheon gained 18.7%, 15.2% and 18.2% respectively. Highly impactful on technology sector performance, Apple's stock bounced back 21.0% on strong iPhone5 sales and a potential deal with China Mobil that would open up an untapped market of 750 million subscribers. Interestingly, while financial sector EPS growth surged in Q2 2013 compared to Q2 2012, high valuations, interest rate uncertainty and falling trading volumes kept sector returns below market.

The defensive sectors with stable cash flows, higher dividend yields and more mature market segments, underperformed during the third quarter. Tobacco stocks fell after announcements of potential new industry regulations. E-cigarettes, electronic inhalers meant to simulate and substitute tobacco smoking, are coming under fire at the FDA, who is considering banning the online sale of the products to keep them out of the hands of America's youth. The FDA also conducted a study that concluded the removal of menthol cigarettes from the market would broadly benefit public health. After a



strong first 4 months of the year, interest rate sensitive utilities stocks have also faced a challenging environment. Cheap natural gas has pressured wholesale power prices lower and electricity demand remains stagnant in most parts of the country. Finally, the telecom giants sold off amid blockbuster acquisitions by Verizon, AT&T and T-Mobile as mergers tend to sacrifice shorter-term performance of the acquirer for longer-term payoffs.

While the "Great Rotation" from bonds to stocks has been on investors' minds based on the specter of higher interest rates, the move out of bond funds has divided into two camps. More aggressive investors added \$30.9 billion to stock funds globally over Q3 as of September 25 according to the Investment Company Institute (ICI), believing the Fed will continue to support asset prices to

make Americans feel wealthier. On the contrary, other investors fear that rising rates will pressure the exact asset bubbles that the former group is riding higher. Through September 25, the more conservative group moved \$94.5 billion into money market funds, a 3.6% increase in total holdings compared to the prior quarter.

All investors agree the Federal Reserve's ultra-low interest rate policy has benefited businesses, governments and consumers alike as debt servicing costs have come down to record low levels. The question remains how to quantify the effect low cost of capital is having on corporations. Based on interest expense savings, Robbert van Batenburg of Newedge estimates that cheap borrowing costs have accounted for about 47% of S&P 500 earnings growth since 2009. Indeed, investors must watch how rising rates could attract investments away from stocks and how rising rates will eventually start increasing interest expenses, pressuring corporate bottom line growth.

Overseas Markets

Equity markets rebounded solidly as Europe steadied and began to show signs of accelerating growth and confidence. In the Far East, Japan positively revised Q2 GDP, and China showed some signs of a turnaround. Emerging market performance was also positive, although many sectors remain in negative territory year-to-date. Export-oriented developing economies continue to struggle with the impact of possible QE tapering on currency and current account volatility.

Eurozone recovery appeared to be building momentum in September, as the region's preliminary composite PMI rose to its highest level in 27 months boosted by activity in the service sector, according to data from Markit. The index rose to 52.1 from 51.5 in August, the largest increase in business activity since June 2011. Analysts expected a reading of 51.9. Other economic data also started turning positive. Unemployment marked its first decline in more than 2 years and consumer confidence rose to its highest level since the summer of 2011, according to the European Commission. Even the

peripherals have shown signs of improvement. Spain nearly pulled out of recession during the second quarter with a 0.1% decline in GDP on stronger export growth and France experienced GDP growth of 0.5%. According to ECB President Mario Draghi, rates will remain at or below current levels for an extended period.

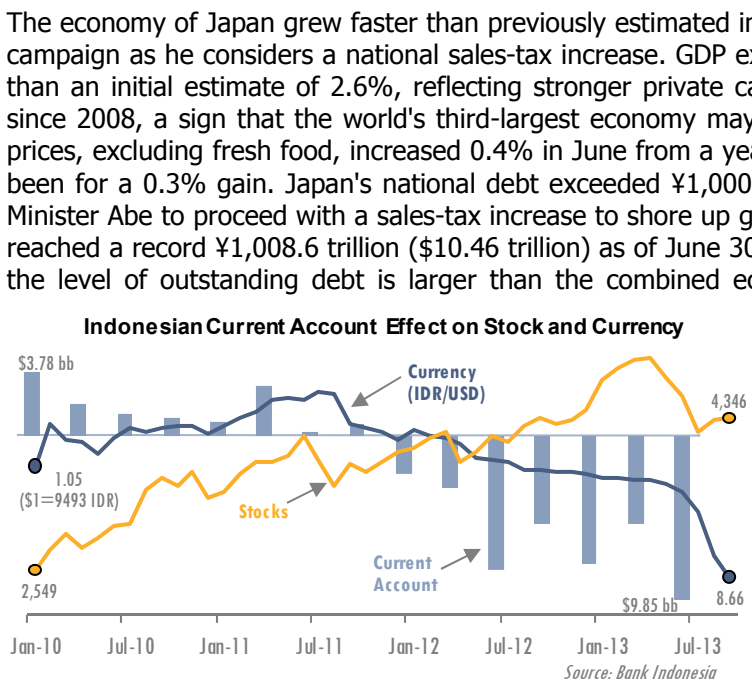
Amid the good news there were still some regional concerns. Greece appeared to be heading toward its third sip from the bailout faucet with plunging retail sales, falling wages and contracting disposable income. It is unclear how much the country will need (preliminary estimates range between \$8 - \$11 billion), yet the so-called Greek Troika – the

EU, IMF, and ECB – is expected to have a deal in place in November to provide additional aid to the struggling economy. Europe's largest economy, Germany, expanded 0.7% in the second quarter, helping the 17-nation Eurozone begin to emerge from its longest-ever recession. Manufacturing expanded and business confidence rose to a 16-month high in August, indicating that the recovery was gaining strength ahead of its Parliamentary elections. On August 22, Chancellor Angela Merkel was re-elected and will likely maintain calls for austerity.

News was mixed in China. Exports and imports rebounded by more than estimated early in the quarter, adding to signs that the economy is beginning to stabilize after a two-quarter slowdown. Shipments abroad rose 5.1% from a year earlier, surprising to the upside, and considerably higher than the 2% analyst estimate. Imports gained 10.9%, leaving a trade surplus of \$17.8 billion. Exports to the US and EU, China's biggest trading partners, increased for the first time in five months. However, all was not rosy as sustained GDP growth appeared to be elusive. According to Barclay's, China's potential rate of growth is down to 8% and it is widely believed that the government will drop its GDP growth rate projection to 7% (from 7.5%) at the National People's Congress meeting early in 2014. The central government ordered companies in 19 industries to cut excess production capacity this year as they try to manage a shift to a slower, more-sustainable economic growth model. A number of industries were impacted including steel, ferroalloys, aluminum, copper smelting, cement and paper. Excess production capacity needed to be idled by September with the goal of elimination by year-end, as it has helped drive down industrial-goods prices and placed companies' profits at risk. Along with slower growth, a number of other fundamental issues still confront the economy, including a potential property bubble and financial risk (shadow banking). The latest driver of economic growth was an increase in infrastructure spending – fixed asset investment growth rose to 20.3% in the first 8 months of the year while investment in transport infrastructure (mostly railroads) jumped to 35%. Some concerns around these drivers of growth persist as global investors worry about growing asset bubbles financed through non-traditional credit sources. At the upcoming Central Committee Meeting in November it is expected that senior leaders will discuss reforms in a number of areas including: administration, the fiscal system, land tenure, the household registration system, the social security system, resource pricing, and the financial sector. The heady days of double-digit growth in China may be over as the central government attempts to implement structural reforms and step away from intervention in economic activity.

The economy of Japan grew faster than previously estimated in the second quarter, helping Prime Minister Abe's reflation campaign as he considers a national sales-tax increase. GDP expanded an annualized 3.8% from the first quarter, higher than an initial estimate of 2.6%, reflecting stronger private capital investment. In June consumer prices rose the most since 2008, a sign that the world's third-largest economy may be starting to shake off 15 years of deflation. Consumer prices, excluding fresh food, increased 0.4% in June from a year earlier, while the median estimate of 29 economists had been for a 0.3% gain. Japan's national debt exceeded ¥1,000 trillion for the first time, underscoring the case for Prime Minister Abe to proceed with a sales-tax increase to shore up government finances. The country's outstanding public debt reached a record ¥1,008.6 trillion (\$10.46 trillion) as of June 30, up 1.7% from three months earlier. Put into perspective, the level of outstanding debt is larger than the combined economies of Germany, France and the U.K. and includes ¥830.5 trillion in government bonds.

| Foreign Stock & Bond Indices - Total Returns | | | |
|--|--------|------------------------|-------|
| MSCI Broad Indices | 3Q13 | Barcap Global Indices* | 3Q13 |
| World Index | 8.18% | Global Aggregate | 2.80% |
| EAFE (Developed) | 11.56% | Pan-Euro | 5.63% |
| Emerging Markets | 5.77% | Asian-Pacific | 2.69% |
| | | Eurodollar | 1.33% |
| | | Euro-Yen | 2.23% |
| | | Other Currencies | 0.88% |
| MSCI Regions | | | |
| Europe | 13.61% | * <i>Unhedged</i> | |
| Japan | 6.66% | | |
| Pacific ex-Japan | 10.33% | | |
| Latin America | 4.12% | | |



Indonesian stocks plunged 24.0% during the third quarter as foreign investors stampeded to exit the country's equity and currency markets amid concerns around a widening current account deficit, which hit a record - \$9.8 billion in Q2. Indonesia became another emerging market victim of Federal Reserve monetary policy, as fear of rising US interest rates prompted investors to scale back risky investments and hot money flowed out of Indonesia's capital markets. When foreign investors sell Indonesian stocks, they receive the Indonesian cur-

rency (rupiah) which they must then sell to purchase back their home country currency. These flows have put pressure on Indonesian's currency, further motivating other foreign investors to unwind their Indonesian asset investments. Additionally, Indonesia's central bank disappointed investors when it failed to raise interest rates during its mid-August meeting, leading to capital outflows and a 4-day equity slide of over 11%. In response, Bank Indonesia raised rates by 50 basis points to stem capital outflows and support its plummeting currency.

In Brazil, economists raised their 2013 growth forecast while simultaneously cutting next year's estimate as growth struggles to gain traction. Brazil's GDP is expected to expand 2.4% this year, according to the September 13 central bank survey of about 100 analysts. However, growth is expected to slow to 2.2% next year, down from prior estimates of around 2.3%. President Dilma Rousseff's administration is working to overcome headwinds as officials seek to spur expansion. While July retail sales and second quarter growth were stronger than economists' forecasts, the central bank lifted interest rates to near the top of its target range to fight inflation.

According to central bank President Alexandre Tombini, Brazil's monetary policy is aimed at limiting the effect of a weaker real on consumer prices. Near the end of August, the central bank raised the Selic rate by 0.50% to 9% and has already increased it by 1.75% for the year. Concerns remain around Argentina's true GDP growth and inflation rates. The government had predicted strong growth of over 6% with inflation of just over 10% and the peso dropping 10% versus the dollar. However, independent economists have indicated that the stats are inaccurate and misleading, with inflation running as much as double "official" estimates and with poor economic growth prospects. Four consulting firms were accused of criminal "speculation" for publishing inflation data contradictory to official reports. Official inflation estimates have been in doubt for the last few years after former Argentine president Nestor Kirchner had political appointees change the methodology that INDEC, the official statistics agency, uses to calculate the numbers.

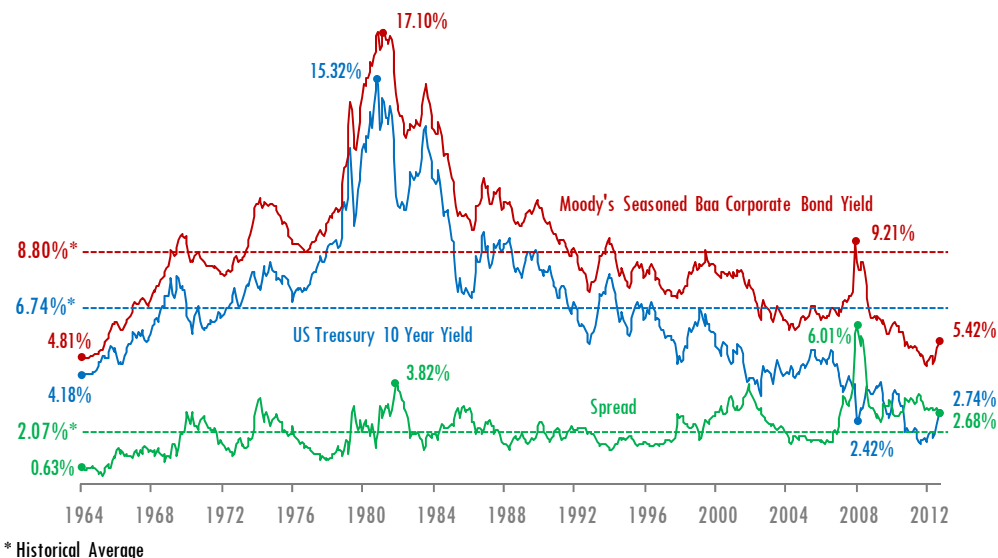
Focus On: *Bond Investments and Rising Rates*

Concerns over future rising interest rates are nothing new, as rates have been at historical lows for quite some time. Recent increases in rates have, however, amplified such fears and the threat of long-term rising rates is growing rapidly. This has sparked much conversation among fixed income managers, investors, and consultants as they are left questioning the possible effects on their current portfolios and the best ways to be positioned going forward.

The last period of significant, sustained rising interest rates in the US was between 1971 and 1982. One major similarity between now and then was heavy Federal Reserve influence on the economy. In 1971, President Nixon appointed Arthur Burns as Chairman of the Federal Reserve, and the two continued Nixon's campaign of "easy money" to offset recessionary pressures following the conflict in Vietnam. Money creation, measured by significant increases in the M1 and M2 money supply, and an oil shock drove severe consumer price inflation which would plague the country through the end of the decade. It was not until Paul Volcker was appointed Chairman of the Fed in 1979 and aggressively increased the federal funds rate that inflation and longer-term interest rates eventually reverted back to normal levels.

At the moment the Federal Reserve continues to make unprecedented monthly bond purchases in order to hold interest rates at artificially low levels across the yield curve. Low interest rates help inflate assets, increase business and household spending and investing, and hopefully boost overall economic conditions. Whether or not this will be successful in the long run has yet to be seen, however it has clearly increased the likelihood of a long-term rise in interest rates, as an end to quantitative easing will allow rates to normalize.

Since the Fed's late-May meeting minutes hinted towards the possibility of a tapering in quantitative easing, interest rates began to experience sharp increases. From May 22nd through September 30th, Treasury yields rose significantly across all maturity dates beyond 1 year. For maturities less than 1 year, rates actually fell, most likely due to the sell-off in longer-dated bonds and increasing demand for shorter maturity issues. As many investors today have never experienced a pro-



longed period of rising rates, we thought it would be interesting to explore the effects of interest rate movements on different types of bonds and fixed income strategies.

Interest Rate Risk in Various Bond Types

In general, rising rates are bad for bonds – but depending on circumstances, rising rates may be bad for other asset classes as well. So it seems unlikely people will abandon fixed income in its entirety, even if they believe with 100% certainty that rates are rising (a mistake many a professional has made, only to be burned by falling rates). However not all bonds are created equal; the response of bond prices to changes in interest rates depends on many factors, and some bonds are much less sensitive to rising rates than others. A skilled investor can craft a portfolio which is very sensitive to rates (beneficial in falling-rate environments) or hardly sensitive at all.

The core of rate sensitivity is the cashflow structure of bonds. At the most basic level, bonds can either make coupon (interest) payments or not. In a rising interest rate environment, an investor will likely be able to reinvest coupon payments in a higher-yielding bond to their benefit. This inherently means that bonds which do not make coupon payments have a higher exposure to interest rate risk, as investors cannot take advantage of investing additional income at better yields. In a falling interest rate environment, the opposite is true; an investor would actually benefit from holding zero coupon bonds as there would be no income to reinvest at a lower yield. The threat of reinvesting income at a lower rate is called reinvestment risk.

For any given bond, the level of the coupon rate can vary drastically. Different types of bonds such as corporates, mortgage-backed securities (MBS), or asset-backed securities (ABS) pay higher yields than like-maturity Treasury bonds due to increased credit risk. This extra yield is called a “spread” or risk premium. While there can be instances when bond spreads rise in a rising interest rate environment, this is not always the case. In a rising rate environment where the outlook for business activity is positive (as opposed to a credit crisis), it is possible for yields on Treasuries to rise and spread levels to fall, in effect negating some or all of their exposure to interest rate risk and helping preserve their principal.

There are also different types of coupon-paying bonds. Due to the recent concerns over increasing rates, investor demand for “floating-rate” bonds has been significant. These securities’ coupon payments are directly linked to a specified interest rate or index. For “straight” floaters, the coupon payment is based on a rate or index to which it is linked so when rates are rising, investors receive larger coupon payments.

Bonds with embedded options have a more complex price-yield relationship. For example, mortgage-backed securities, or bonds created from pools of mortgages, are directly affected by movements in interest rates as mortgage payments represent the cash flows to the bondholders. In periods of falling interest rates, the mortgage debtors will likely make monthly payments beyond the required amount, largely due to refinancing. This increase in bondholder cash flows is called prepayment risk. In a falling rate environment, rising coupon payments are reinvested at a lower yield, which we referred to earlier as reinvestment risk. With today’s anticipation of longer-term rising rates, investors are now in a position to benefit from reinvesting the prepayments at a higher market rate, but the likelihood of prepayments falls. CMOs, or collateralized mortgage obligations, are MBS broken up into different tranches, each of which has a different claim to the cash flows of the mortgage pool. For example, the second tranche will receive interest payments from the beginning, but will only start receiving principal payments after the first tranche has been paid off. In the case of increasing interest rates, demand for the first tranche will be the greatest as bondholders want to reinvest income in higher yielding securities and will be the lowest for the last tranche to receive the principal payments.

The cashflow structure of bonds gives rise to two important risk measurements: duration and convexity. Duration is a direct measure of a bond’s exposure to interest rate movements (measured as the change in price for a given change in yield). Because the current market value of a bond is the present value of its future cashflows, bonds that have maturities or coupon payments that are far in the future are more sensitive to changes in interest rates than are bonds with shorter cashflows. Duration is expressed as a measure of time, and represents the amount of time required to receive the average dollar of future cashflow (not to be confused with “maturity”, which is the time required to receive all future cashflows). In the case of a bond with duration of 20 years, a one percent rise in interest rates will translate into roughly a 20% loss on the principal value of the bond.

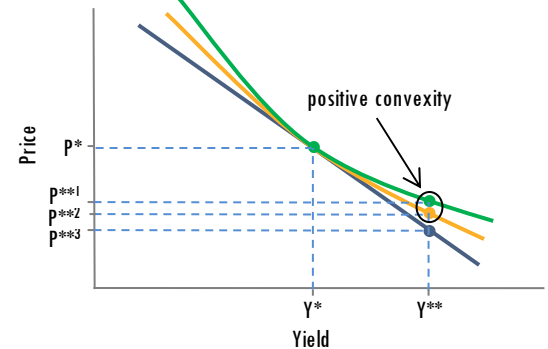
At least that’s a simple approximation, but most bonds are more complicated than that. Bonds that pay coupons have many different cashflows that are spread out through time, and the present value of each cashflow changes by a different amount when interest rates change. That causes duration itself to change as interest rates change. Bond “convexity” is a measure of its duration-to-yield relationship. Conventional coupon bonds tend to exhibit “positive convexity”, which means duration tends to fall as interest rates rise. Positive convexity mitigates the damage done by rising rates by dampening the impact of duration. However, bonds with embedded options may exhibit the opposite effect. Prepayment options in mortgage-backed securities cause the maturity and duration of a bond to shorten when interest rates fall

(because people refinance their houses) and lengthen when interest rates rise (because refinancing ends and people avoid transacting into higher-rate loans for new houses). The result is “negative convexity”, which makes these bonds more vulnerable to losses as rates rise. Callable bonds are even more complex, as they may have positive convexity at some yield levels and negative convexity at others.

Convexity gets its name from the effect it has on graphs of bond prices to interest rate changes. The amount of curvature in the graph line indicates the degree of convexity for a given bond. Bonds with negative convexity have graph lines that curve the other way. Why the effect is called “negative convexity” instead of “concavity” is one of life’s little mysteries.

Core Strategies

The most common fixed income strategy used by investors today is a “core” strategy. Typical core bond funds offer similar duration exposure to the Barclays Aggregate Bond Index, while often underweighting positions in Treasuries and overweighting spread securities in order to offer investors higher returns. Much of the reason for such a significant amount of assets in these strategies today is due to defined contribution retirement plans. DC plans have historically offered a core fixed income option in their investment lineups and many participants in the plans also have the option to use target-date funds which allocate to underlying core bond strategies. They are also the easiest choice to make for investors, and advisors, who do not understand the complexities of the bond market. For retail investors, a bond fund or portfolio is often an afterthought, used to dampen the volatility of a risky stock portfolio which is the object of nearly all the investor’s attention. Losses under rising rate conditions often come as a surprise.



Many investors feel comfortable in strategies where the investment manager is held accountable to and limited by a well-known benchmark like the Barclays Aggregate, but there are a number of disadvantages. The index is designed to represent the bond market broadly, which is ultimately driven by issuance. An explosion in mortgage-backed and other securitized issues in the prior decade has changed the character of the bond market, making negative convexity more commonplace. The US government also continues to run deficits and borrow increasingly through treasury issuance sums, crowding out corporate issuers in the process. Treasury bonds do not benefit from spread compression as rates rise, while MBS suffers from negative convexity.

Over the long run, issuance affects the overall duration of the bond market itself. When rates are high, borrowers are incented to issue shorter-maturity paper or floaters; when rates are low, they are incented to issue long-maturity paper. “Century bonds” with maturities of 100 years have become popular with universities and other institutions with very high credit quality, and even lower-quality corporate issuers have gotten into the act with rates at historic lows. As longer-dated issuance occurs, the duration of the index grows; investors constrained to follow the index are essentially forced to act in the best interest of issuers.

Constraints limit managers’ ability to help offset the effects of rising rates. They are, more or less, forced to maintain duration similar to the index (currently 5.5 years) with similar convexity. They are also forced to hold treasuries and MBS in lieu of sectors with more favorable characteristics under rising rates. Additionally, the funds have limited non-US exposure, missing out on diversification benefits and higher yields as investments in issues outside of the US help to reduce the concentration of sovereign risk and can provide higher yields due to more attractive growth rates.

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Alternative Strategies

As investors begin to question their current exposure to bonds and how they can better position themselves against the threat of rising rates beyond core strategies, the first action they are likely to take is reducing their duration. The most obvious choice in this case is a low duration, or short-term strategy. These bond strategies allow investors to maintain exposure to the asset class, earn income, and reduce interest rate risk through a lower duration. While many think of these strategies as conservative due to their short-term focus, this is not usually the case. Most active short-term strategies have high exposures to credit risk in corporate, MBS, and ABS issues. This provides investors with diversification from the short-term benchmark and access to higher yields through increased credit risk, with a lower sensitivity to interest rate movements.

An alternative consideration for a fixed income investor could be a floating-rate, or bank loan, fund. When below investment-grade companies need capital, they often apply for loans from banks which are then securitized by the bank and sold into the bond markets. Floating-rate funds purchase these securities whose coupon payments are directly linked to an index or rate. Rising rates will lead to increased coupon payments for “straight” floaters, while “inverse” floater coupon payments will fall. Increases in coupon payments, or income, in a rising interest rate environment will help offset losses

on principal, reducing interest rate risk. While demand has been very high for these types of bond strategies recently, many investors are unaware of the underlying risks. Bank loans are considered high-risk and the quality of floating-rate portfolios is similar to that of high yield funds. So while investors may be shedding some interest rate risk with an adjusting coupon, they are increasing credit risk at the same time.

More specialized strategies have also been gaining a significant foothold in the fixed income space. Bond managers have always managed assets beyond typical core mandates; however access to these strategies has been limited to large, institutional investors through separate accounts or other private vehicles like hedge funds. As substantial developments into more accessible products occurred and investor understanding of the strategies grew, the strategies gained considerable size, amplified greatly by the concerns of future interest rate behavior.

“Unconstrained” strategies have become a large part of the conversation between investment managers, consultants, and institutional investors. These strategies offer unique fixed income management where the portfolio managers are not limited by any benchmark and focus on providing positive absolute returns, greater risk management, and investing among a global universe. A typical unconstrained portfolio will include exposure beyond core investments, providing greater opportunities for diversification and alpha. These may include international sovereign and corporate bonds in both developed and emerging markets, global high yield, floating-rate bonds, convertible bonds, international securitized bonds, and foreign currencies. Managers are also able to make tactical decisions, as opposed to only strategic positioning with a longer-term focus.

In benchmarked strategies, portfolio managers may be unable to ignore different areas of the bond market, while unconstrained portfolios can allocate the portfolio freely based on their conviction. Many will use shorting and leverage to emphasize high conviction ideas, but usually at very conservative levels compared to those in private vehicles. Portfolio managers in this space also have a wide range of discretion over duration, with exposures typically ranging anywhere from negative single-digits to the positive teens. By giving managers more control over portfolio construction, they are better able to manage risk. With respect to rising rates, investors may benefit significantly from an active, well-rounded approach to mitigating rate risk.

| Cumulative Total Returns During Periods of Interest Rate Changes | | | | | |
|--|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| 2/29/96 - 10/31/98 | 10/31/98 - 1/31/00 | 1/31/00 - 6/30/03 | 6/30/03 - 6/30/07 | 6/30/07 - 7/31/12 | 7/31/12 - 8/31/13 |
| 5.81% → 4.53% | 4.53% → 6.66% | 6.66% → 3.33% | 3.33% → 5.10% | 5.10% → 1.53% | 1.53% → 2.78% |
| Unconstrained 31.49% | Private 16.44% | Core 33.50% | Floating-Rate 26.00% | Core 33.95% | Floating-Rate 7.35% |
| Floating-Rate 19.83% | Unconstrained 10.72% | Private 27.60% | Private 23.82% | Short-Term 15.31% | Private 6.43% |
| Core 18.83% | Floating-Rate 7.94% | Short-Term 24.43% | Unconstrained 23.11% | Private 13.67% | Unconstrained 1.77% |
| Short-Term 16.79% | Short-Term 2.79% | Unconstrained 18.50% | Core 11.36% | Floating-Rate 13.34% | Short-Term 0.66% |
| Private 11.12% | Core -0.66% | Floating-Rate 15.27% | Short-Term 9.55% | Unconstrained 10.40% | Core -0.98% |

Chart shows cumulative total returns during periods of rising and falling 10 year Treasury rates. Sources: Federal Reserve, Morningstar, and Credit Suisse.

There has been some development of specialized strategies in more common investment products, but many are still only available through private vehicles like hedge funds. Strategies used in this space are long/short credit, distressed credit, and pure private debt funds. While some funds may differ by strategy type, they all can provide diversification and risk management benefits beyond traditional fixed income funds. Just as with unconstrained strategies, this is possible through lack of benchmark constraints, however these funds can use significantly higher levels of shorting, leverage, and hedging. These strategies will approach interest risk similarly to unconstrained funds, but have even less restriction in mitigating the risk, all while providing better opportunities for greater returns through higher yielding securities.

Positioning for the Future

If investors did not already know it, the Fed’s decision to continue the Federal Reserve’s \$85 billion in bond purchases on September 18th certainly made it clear that no one outside (or inside) the Fed can predict the future of interest rates. However, this does not mean that it makes sense to ignore interest rate risk as well as the likelihood that rates will normalize at some point. When evaluating interest rate risk among fixed income exposure, it is important to assess the general effects of rate behavior on the different types of strategies used and the underlying managers’ risk management ability. Having a diversified portfolio of strategies will not only help mitigate this interest rate risk, but also manager risk when using more dynamic, higher-conviction strategies.