SUMMER 2013

William Blair

Client Focus

The Rising Rate Environment

PLANNING SPOTLIGHT

What Rising Interest Rates Mean for Your Portfolio, the Economy, and the Housing Market

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Rising Rates and the Big Picture

Without a doubt, the biggest financial story this summer has been rising interest rates. In May, Federal Reserve Chairman Ben Bernanke told Congress that the Fed might begin reducing its extraordinary efforts to keep interest rates low sometime in the second half of 2013. Between May 3 and July 5, 10-year U.S. Treasury bond yields rose from about 1.6% to 2.7%.

The shift from an extended period of record-low interest rates to an environment of rising rates certainly qualifies as big news. The prospect of the Fed winding down its stimulus caused equity markets to dip in June and caused some to question whether higher mortgage rates would undermine the housing recovery. The impact of interest-rate volatility is particularly acute for people who are looking to purchase a home or investors who have a large portion of their portfolios invested in bonds.

At William Blair, we believe that successful investing requires understanding today's headlines in the context of the bigger picture. Although rising interest rates have added a new element of uncertainty this summer, interest rates are just one piece of an economic environment that has been improving over the past several quarters. In fact, the strengthening U.S. economy is the reason why interest rates are rising.

The pace of the economic recovery is far from brisk, but the Fed expects the U.S. economy to continue seeing steady improvements in unemployment and GDP growth. Equity markets reflect the improving outlook for the U.S. economy. Despite the volatility in June, the S&P 500 (+12.6%) and the Dow Jones Industrial Average (+13.8%) posted their largest first-half gains since the late 1990s, and the two major U.S. indexes were near all-time highs when we went to print on July 31.

Interest rates will continue to be a major story over the next several quarters. We know that every word said or left unsaid by the Federal Reserve chairman will cause markets to move on Wall Street. But we also know that interest rates are just part of the bigger story.

> Rising interest rates are just one piece of an economic environment that has been improving over the past several quarters.

Our goal is to deliver financial strategies that are responsive to dynamic market conditions while remaining focused on the big picture—in terms of economic fundamentals and our clients' financial objectives.

Thank you for the trust you have placed in our people and our investment philosophy. I hope you are having a great summer.

Sincerely,

John Ettelson

PRESIDENT AND CEO

Preparing Your Portfolio For Rising Interest Rates

The surge in interest rates in May and June might have signaled the end of the post-recession era of historically low interest rates. As investors brace for a rising-rate environment, William Blair & Company hosted a webinar on July 18 to look at what rising interest rates mean for the economy, the housing market, and your portfolio.

How did we get here?

On May 1, the yield on the 10-year U.S. Treasury bond closed at 1.63%, near the 40-year lows set in 2012. By July 5, the benchmark Treasury bond yield had shot up to 2.74%, before receding slightly over the next few weeks.

Why did the bond market suddenly turn so bearish (remember: bond prices go down as interest rates go up)? In a word: anticipation.

"The bond market, just like the stock market, is a discounting mechanism. It looks ahead," said Chris Vincent, the head of William Blair's fixed-income team in Investment Management.

What the market was looking ahead to was a potential end to the Federal Reserve's extraordinary efforts to keep interest rates low through a bond-buying program known as "quantitative easing."

In early May investors began fearing—based on strengthening economic fundamentals—that the Federal Reserve's decision to wind down its bond-buying program might be drawing near. Statements made by Federal Reserve Chairman Ben Bernanke over the next two months did not alleviate these fears.

"I think the Fed might have wanted to see rates move up a bit to begin preparing markets and investors for the fact that we cannot continue this atypical policy for an extended period," Vincent said.

Since the financial crisis of 2008, the U.S. central bank has used two primary tools for stimulating the economy. Keeping the fed funds rate—the rate at which banks can borrow from each other overnight—in a range of 0.00% to 0.25% for the past five years allowed the Fed to control short-term rates.

But to bring down long-term rates—and encourage investors to put money in riskier assets like stocks and real estate—the Fed took the atypical step of buying huge amounts of bonds and mortgage-backed securities.

Investors know that quantitative easing cannot last forever and that the Fed will begin tapering its bond purchases once the U.S. economic recovery shows that it has enough momentum to withstand an increase in interest rates.

No one knows for sure when that will be, but the rate increases over the past few months are evidence that the bond market believes the answer might come sooner rather than later.

Where do we go from here?

During his testimony to Congress in July, Bernanke emphasized that the Fed has no "preset course" for winding down its bond purchases. Rather, Bernanke ➤➤

said, the Fed's response would be dictated by the strength of upcoming reports on economic indicators such as unemployment, GDP growth, and inflation.

Vincent, who is the manager of the William Blair Income Fund and co-manager of the William Blair Bond Fund, said the current pace of job growth is headed in the right direction but still is not sufficient for a self-sustaining recovery.

The Fed expects unemployment, currently at 7.6%, to be between 7.2% and 7.3% by the end of 2013 and between 6.5% and 6.8% by the end of 2014. Regarding economic expansion, the Fed expects U.S. GDP growth to be between 2.3% and 2.6% in 2013 and then accelerate to between 3.0% and 3.5% in 2014.

Because of upward pressure from improved economic activity, Vincent said he expects interest rates to increase between 0.25 percentage points and 0.75 percentage points over the next 12 months.

Can the housing recovery survive higher rates?

Yes, according to William Blair equity research analyst Brandon Dobell. But like most questions about the U.S. economy, the answer is dependent on job growth.

"Rising interest rates will have a negative impact on housing affordability," said Dobell, who heads William Blair's coverage of the business services sector, which includes real estate. "But improvements in the labor market and consumer incomes are likely to have a much larger and more sustained positive impact on the housing recovery."

Despite recent increases in mortgage rates and home values, buying a home remains very affordable by historical standards. This is especially true when considering the high cost of renting.

> "There is upward pressure on interest rates because of improved economic activity. The economy is healing over time. But we are still at sub-trend growth."
>
> Chris Vincent, *William Blair & Company*

Dobell said rental occupancy rates are at historical highs in most metropolitan areas, leading to rent increases of between 3% and 4% a year in these areas. Cities with extremely tight rental supplies, such as San Francisco, Seattle, and Denver, have seen rent increases of up to 10% a year over the past several years.

"Buying a home continues to be a better idea than renting in most markets," Dobell said.

Rates for the 30-year fixed mortgage were near historical lows of 3.50% on May 1 but jumped nearly a full percentage point over the next two months. Dobell said

Shutting Off the Spigot?

Five years of keeping the fed funds rate near 0% and multiple rounds of quantitative easing pushed interest rates to historical lows. But starting in May, concerns that the Federal Reserve would soon begin winding down its bond-buying program caused interest rates to increase significantly.

Source: Bloomberg

he expects mortgage rates to be around 5.00% to 5.25% by the summer of 2014.

"Those rates would still be relatively cheap from a historical perspective," he said. "If the job market continues to improve at a decent clip, I suspect the housing market could sustain some decent momentum in terms of price and volume, even if mortgage rates approach 5% or a bit higher."

How should bond investors respond to rising rates?
Don't panic; stay diversified; and maintain a laddered portfolio that meets your liquidity needs and reduces your interest-rate exposure. That's the advice from Clancy Burson, the manager of retail marketing for William Blair's taxable fixed-income trading desk in Debt Capital Markets.

"One of the great things about bonds, even in this rising rate environment, is the ability to structure future cash flows in a way that aligns with your upcoming liquidity needs," Burson said.

> "The vast majority of housing markets would still be affordable at mortgage rates that are far above where we are now."
> Brandon Dobell, *William Blair & Company*

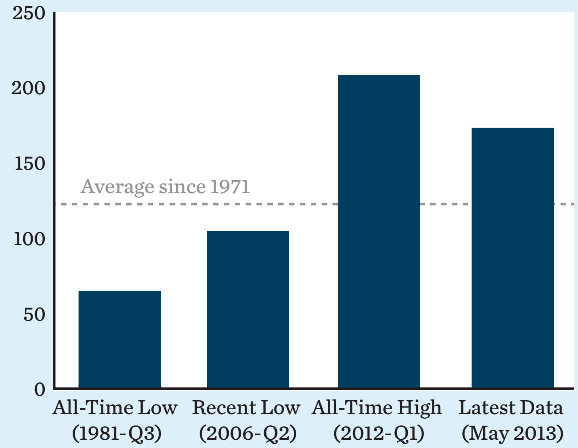
A laddered portfolio—one made up of bonds of varying maturities—can be designed to meet an investor's income needs while still providing protection against rising interest rates. A laddered portfolio's long-term bonds generate enhanced yield, and the short-term bonds reduce interest-rate risk because once they mature, the proceeds can be reinvested at the prevailing rates.

Burson said the first step when structuring a bond portfolio is to establish an outlook for where you believe interest rates and other economic conditions are headed.

The next step is to create a timeline for upcoming major events in your life, such as retirement or paying for a child's college education. Your William Blair advisor can work with you to develop an economic outlook and then create a portfolio that is designed to generate sufficient liquidity to fund those major life events.

Burson and Vincent agreed that high-yield bonds are an area currently providing attractive opportunities for investors who can tolerate higher investment risk. Vincent said that investors looking for enhanced yield should consider the higher-quality portion of the high-yield bond universe.

NAR Housing Affordability Index
Despite recent increases in mortgage rates and housing values, housing affordability remains well above its historical averages.



Source: National Association of Realtors

High-yield bond prices took a large hit as interest rates spiked and institutional funds flowed out of the space earlier this summer. Many of these companies, however—especially those with credit ratings in the BB and B range—are in good financial condition because they were able to refinance much of their debt at extremely low interest rates over the past several years.

"The ability of borrowers—corporations, governments, and homeowners—to have locked in low rates is immensely bullish for economic activity in the long run," Vincent said.

Hear the full conversation
To listen to a replay of the July 18 webinar, "Preparing Your Portfolio for Rising Interest Rates," visit **williamblair.com/webinars**

Winds of Change for CTA's Open Fare Collection System

Public–private partnership brings state-of-the-art fare collection system to Chicago mass transit

Since 1947, the Chicago Transit Authority (CTA) has been in the business of getting Chicagoans where they need to go. Since 1997, when the CTA introduced its existing fare card system, the CTA has also been in the business of creating those cards, maintaining the equipment used to read the cards, and processing the payments.

Starting in August 2013, the CTA is getting out of those other businesses thanks to a public–private partnership that William Blair & Company helped structure.

Through a partnership with Cubic Transportation Systems, the CTA is implementing an open fare collection system that makes it more convenient for riders to pay their fares and easier for the CTA to manage the second-largest mass transit system in the United States.

Challenges create partnership opportunity

With the CTA's existing fare card equipment scheduled to become obsolete over the next several years, the CTA faced the expensive proposition of having to raise more than $200 million to replace card scanners for more than 4,000 buses and train turnstiles.

"Upgrading the equipment created several big challenges for the CTA," said Nathan Flynn of William Blair's public finance group. "In addition to raising the capital, the CTA would have to take on the enormous operational and technological risk of installing the new equipment. Once the equipment was installed, the CTA would still have the burden of maintaining the equipment and processing all of the payments."

For a project that presented multifaceted challenges, a public–private partnership provided a solution that worked on multiple levels.

By partnering with Cubic, the CTA was able to upgrade to a state-of-the-art fare collection system while reducing the cost of the project and transferring much of the financial, operational, and technological risk to a private vendor.

As part of the $509 million, 10-year service contract, Cubic is responsible for purchasing and installing the new fare collection equipment, maintaining the equipment, and processing all the payments. The CTA will maintain full control of setting fare prices.

"Being able to shift the upfront capital outlays and operational risk to the private sector is an enormous benefit to the CTA and Chicago taxpayers," Flynn said.

Added convenience, reduced risk

The CTA's new fare collection system, called Ventra, will launch later this year and will be completely implemented in 2014. With Ventra, the CTA will be the first major U.S. city to have an "open fare" collection system for its mass transit system.

Riders will be able to pay with a transit card or any personal credit or debit card that is equipped with contactless radio wave technology. Riders will also eventually be able to pay using their smartphones.

While riders will certainly enjoy the added convenience of the multiple payment options, taxpayers will benefit from the cost savings generated by the public–private partnership. By placing the responsibility of installing the equipment, maintaining the equipment, and processing the payments with Cubic, the partnership is expected to generate $50 million of operational savings for the CTA over the next 10 years.

"The CTA originally got into the business of manufacturing the fare cards and processing the payments out of necessity," Flynn said. "This public–private partnership allows the CTA to focus on its core business of transporting people around the city."

Open Fare Technology

The CTA's new open fare collection system enables riders to pay using any credit or debit card equipped with contactless technology. Watch for the contactless symbol on your new credit or debit cards.

A vigorous, transparent selection process

Cubic was chosen as the CTA's partner through a vigorous two-year process in which the CTA evaluated proposals from some of the world's leading payment technology companies. As the CTA's financial advisor on the project, William Blair analyzed the cost savings and risk-transfer benefits of each proposal and worked closely with CTA officials to determine whether each proposal would meet the CTA's stringent criteria for the new fare collection system.

One important criterion was the need for the new fare collection system to serve the needs of the CTA's "unbanked" riders. Many CTA riders do not have credit cards or bank accounts, so the CTA required that the new system greatly expand the number of locations where riders could purchase prepaid transit cards using cash.

Once the new system is fully implemented, riders will be able to purchase these prepaid cards at more than 2,000 retailers throughout the Chicago area—up from 700 locations with the existing system. In addition, riders who purchase these prepaid cards can use them as debit cards outside the CTA system.

"Protecting the interests of the 'unbanked' was a huge priority for the CTA," Flynn said.

Aligning financial incentives

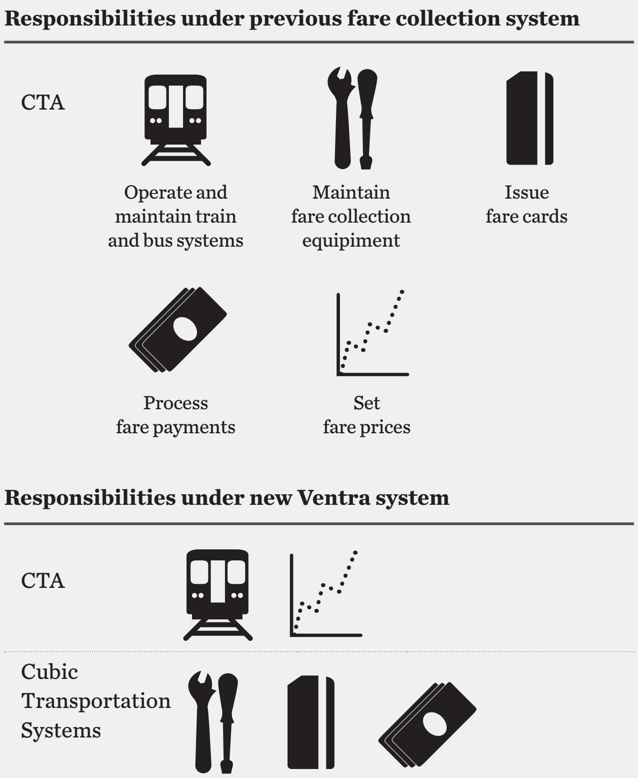
Other major cities, including Washington, D.C. and Philadelphia, are pursuing open fare collection systems through public–private partnerships, or "P3" transactions.

Tom Lanctot, who heads William Blair's Debt Capital Markets group, said municipalities increasingly view P3 transactions as the most effective way to complete capital-intensive infrastructure projects.

In addition to eliminating the municipality's need to borrow funds for the initial capital outlay, P3 structures can also significantly reduce the total lifecycle cost of the project. By putting performance measures in the contract and by making the private vendor responsible for maintaining and operating the infrastructure, a P3 can effectively align the private vendor's financial interests with the municipality's objectives.

Public–Private Partnership

Partnering with Cubic Transportation Systems for the new open fare collection systems enables the CTA to focus on its core business of transporting Chicagoans.



With the CTA's Ventra system, part of Cubic's compensation will be determined by performance measures for areas such as customer service and equipment downtime.

"It creates a huge financial incentive for the private vendor to build the project correctly in the first place and then operate it as efficiently as possible," Lanctot said.

William Blair has served as financial advisor to some of the most innovative P3 transactions in the United States. To learn more about William Blair's P3 advisory capabilities, visit ***williamblair.com/P3***

One should not assume that the listed client approves or disapproves of William Blair & Company or the advisory services provided.

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EQUITY RESEARCH

Taking Stock of the Real Estate Recovery

The recovery of the real estate market is creating new opportunities for aspiring home sellers and buyers who have been waiting on the sidelines since the housing crash. It is also creating opportunities for equity investors.

"From an equity perspective, the outlook for both residential and commercial real estate stocks is quite bright for the next few years," said William Blair & Company equity research analyst Brandon Dobell. "But the earnings upside potential is clearly higher for residential than it is for commercial."

Dobell, who heads William Blair's equity research coverage of the global services industry, has twice been named to the *Financial Times/*StarMine "World's Top Analysts" list.

On the residential side, Dobell said that the confluence of pent-up demand for homeownership, improved personal balance sheets, decreases in sales of distressed homes, and continued low interest rates should lead to strong, steady increases in home values and sales volumes over the next five to seven years. (See pages 3–4 for Dobell's thoughts on housing affordability and rising mortgage rates.)

Over the past decade, U.S. homeownership rates have fallen, as increased uncertainty about jobs and the housing market pushed many would-be homeowners into the rental market. "At some point most markets will see a regression to the mean, and we think that's going to occur with homeownership trends," Dobell said.

This should create a good investment backdrop, particularly for stocks of real estate brokers and companies that are closely tied to existing-home sales, he said.

With commercial real estate, prices and volume typically trail the residential market by 12 to 18 months. Dobell said that this lag could be elongated slightly in the current cycle, given the slow pace of job growth.

Stocks of companies involved in originating debt or equity capital for office buildings or refinancing existing debt should provide attractive opportunities for investors over the next three years, Dobell said.

"There is a lot of debt related to commercial real estate that has to be figured out over the next several years, and that is going to create a lot of work for the firms that help line up this financing," Dobell said.

To receive Dobell's research on the real estate industry, please contact your William Blair representative. Visit **williamblair.com/ResearchCoverage** *for important disclosure information and a full list of the more than 550 growth companies covered by William Blair's equity research analysts.*

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