OCP CAPITAL REVIEW
100 Park Avenue, Suite 2800, New York, NY, 10017
Phone 646-201-4886

On the Bright Side: An Interview with Stephen C. Sexauer

By Laurence B. Siegel

Senior Advisor, OCP Capital, LLC
and the Gary P. Brinson Director of Research, Research Foundation of CFA Institute

lbsiegel@uchicago.edu

December 2013

Stephen C. Sexauer

The last two issues of our* *Review* have been concerned with inflation and the bond market. In particular, I've expressed the concern that the 31-year (1981-2012) bond bull market is over and that investors should expect more inflation, higher interest rates, and deteriorating bond portfolio values for quite a long time, basically until the U.S. gets its fiscal – not monetary, fiscal – house in order. The argument is that governments like to pay off large debts in cheaper dollars and that they control the value of the dollar.

I am not alone in expressing this concern. The market has acted as though the concern is widespread, with 10-year Treasury bonds selling off from an all-time low yield of 1.40% on July 24, 2012 to a more reasonable-sounding, but still low, 3.03% today (December 31, 2013).

Stephen Sexauer is the chief investment officer, U.S. multi-asset, of Allianz Global Investors, part of Allianz SE, the world's fifth largest investment management firm with €1.4 trillion (about 1.9 trillion U.S. dollars) in third party assets under management. PIMCO is a unit of Allianz SE. Steve has argued, very persuasively, that bonds may become an attractive investment again if yields rise only moderately, to, say, the trend rate of growth in nominal GDP (around 5%). This view, which serves

**OCP Capital LLC is a registered broker dealer with FINRA, SEC and SIPC. It was previously Ounavarra Capital Partners (OCP)* as a counterpoint to my bearish outlook set forth in the two previous *Ounavarra Reviews*, deserves serious consideration and is the topic of this interview.

Larry Siegel, Senior Advisor, OCP Capital LLC: Steve, thank you for agreeing to be interviewed today. As I understand your position, you believe long-term U.S. Treasury bonds will become an attractive investment if their yields rise to (or above) the trend rate of growth of nominal GDP. How high is that number?

Stephen C. Sexauer, CIO U.S. Multi-Asset, Allianz Global Investors: Around 5%. This consists of real growth of around 3% plus inflation of 2%.

Larry: Is there a new law saying that bond yields can't rise to 15%, where they peaked in 1981?

Steve: No. Anything can happen, and the next bond bear market could result in an even higher yield, but I will make the case that it will not. Your reference to the 15% yield in 1981 is "anchoring," and anchoring on something quite memorable.

Anchoring

Larry: What is that?

Steve: Behavioral economics, as originally set forth by Amos Tversky and Daniel Kahneman and elaborated by John Payne, Richard Thaler, and others, proposes that investors consistently make certain basic mistakes when contemplating the future. One, we overemphasize specific past events that are very memorable and we will anchor on that event to measure or value current decisions. Two, there is typically a big *recency bias* in choosing an event to anchor on and in deciding more generally what we think is important. Three, we are overwhelmingly susceptible to a *small sample bias*.

Larry: I brought up the possibility of a 15% rate – although I don't seriously think it will get that bad – because that was the interest rate it took to eliminate public tolerance of inflation in the 1970s and early 1980s and allow Paul Volcker to drive inflation down by causing two recessions. Inflation at that time was around 13%.

Steve: I understand that's the event that defines your frame of reference. I would argue that it is a mistake to anchor on that event, although, there are three reasons why you might do so. One, it was a big deal. It was very, very bad. High interest rates drove companies out of business that had existed for generations, and high inflation rates decimated the real value of portfolios. It was very emotional, so if you lived through it, it's hard not to forget it. Two, even though 1981 is a long time ago, it plays into the recency bias. It's the last big bad thing that happened with interest rates. Three, there is also a small-sample bias at work – it never happened before in U.S. history.

Why interest rates and GDP growth rates have to be related

Larry: Let's come back to the central focus of this interview, your view that an interest rate equal to the trend rate of nominal GDP growth, around 5%, makes bonds attractive once again. How did you form that perspective?

Steve: The best place to start is with theory. There's a wonderfully written essay by Fischer Black in which he discusses the difficulty of using data to prove things.[1] You only have one sample of the past, the data are full of noise, and other factors are at work making it difficult to prove anything. So you have to rely on theory: What does the theory tell you and do the data tend to support that? In the end, you need to make informed judgments.

So let's try Fischer Black's approach with your bond question. Is there a theory of where interest rates will go? Yes, there is. We know that an economy can't sustain nominal rates higher than the GDP growth rate for very long.

Larry: How do we know that?

Steve: If the interest rate is higher than the nominal growth rate of the economy, the amount of debt becomes explosive. It is like a credit card balance that grows every month due to interest, without charging any new purchases. Over time, debt-service cost takes all the resources from the rest of the economy, so eventually the economy implodes on itself.

Larry: That's fascinating. There is a Wall Street rule of thumb that the nominal interest rate tracks the nominal GDP growth rate but I thought that was just an accident of scaling, basically a coincidence. I'm intrigued to see that there's a theory behind it, based on government finance. But the theory only applies if the government debt is large, doesn't it? If the government doesn't have a lot of debt, which was the case for most of our history, it doesn't matter what the interest rate is, within reason – does it?

Steve: That's right. If the government debt is really small, or a fiscal surplus is sustained, you can get away with high interest rates for a while. But in an economy the size and structure of ours, with the debt profile we have, you can't maintain nominal interest rates higher than nominal GDP growth.

Larry: Has anybody written that up?

---

[1] Black, Fischer. 1993. "Estimating expected return." *Financial Analysts Journal* (September/October). Reprinted in *Financial Analysts Journal*, January/February 1995, http://www.cfapubs.org/doi/pdf/10.2469/faj.v51.n1.1873.

Steve: Two good sources are Greenlaw *et al.* (2013), and Cecchetti, Mohanty, and Zampolli (2010).[2]

A macro forecast of interest rates

Larry: Well, that argument sets a theoretical maximum for the interest rate that can be sustained over long periods of time. Is there a theoretical minimum?

Steve: Rates can be extraordinary low for a long time. It's harder to find an easy-to-specify constraint there – but we find that sustained periods of very low rates are typically associated with two states of the world: (1) financial repression by governments to keep government borrowing costs low and to tax savers in ways that are hard to escape or (2) low returns to capital and the associated situation in the real economy, which is low real GDP growth.

In a world of high government debt-to-GDP we do know there's a behavioral bias on the part of governments to debase the currency in which their debts are owed. This isn't just a modern tendency. There is a fabulous historical tour through this issue in Reinhart and Rogoff's book, *This Time is Different* – Chapter 11 is titled "Default through debasement: An 'old world favorite'."[3] Debasement methods are everything from clipping gold coins in days long ago to the modern equivalent wherein central banks help to arrange a reduction in the purchasing power of the currency via inflation or, as recently occurred in Argentina, the government just seizes the savings of private citizens to pay its bills, replacing the savings with government IOUs.

This incentive for governments to debase the currency has limits, because it's like a virus in the body. The virus wants to extract nutrients from the body, but not so much as to kill it. So there will be a bias to have inflation to debase the debt – but, as we've learned, once everybody knows that is happening it will get priced into contracts, including bond contracts. So the real issue will be high and unexpected inflation. A widely spread and hard-to-avoid tax, along with modest debasement, is a route out of the crisis. It is currently the route favored by central banks in the U.S., the Eurozone, the U.K., and Japan.

Larry: What is the bottom line in this process?

---

[2] Greenlaw, David, James D. Hamilton, Peter Hooper, and Frederic S. Mishkin. 2013. "Crunch Time: Fiscal Crises and the Role of Monetary Policy," UCSD working paper (February 22), http://dss.ucsd.edu/~jhamilto/USMPF13_final.pdf. Cecchetti, Stephen C., M. S. Mohanty, and Fabrizio Zampolli. 2010. "The Future of Public Debt: Prospects and Implications," BIS Working Paper No 300. Bank for International Settlements, Basel.

[3] Reinhart, Carmen M., and Kenneth S. Rogoff. 2009. *This Time Is Different: Eight Centuries of Financial Folly*. Princeton University Press, Princeton, NJ.

Steve: We need to answer the question, which situation are we in? Sustained low real and nominal growth, and lower rates for that reason? Or, a world of financial repression on the way back to trend growth, say 5% nominal growth?

Larry: But nominal GDP growth depends on the inflation rate, doesn't it? If real GDP grows at 2½% and inflation is whatever it is, nominal GDP, the sum of those two numbers, could be 5 or 9. There's no fundamental analysis on which to base the inflation part of the nominal GDP forecast. That's my objection.

Steve: The current U.S. data are telling us that real GDP growth is 2½% or 3%. That's close to the long term trend. As the Reinhart and Rogoff work showed, after a financial crisis, growth can be below trend for a fairly long period. That's where we've been from 2009 to today. So a good forecast would be to return to trend around the present time, six years into the recovery.

Now, let's turn to the inflation rate. The U.S. Federal Reserve has said we will get 2% inflation no matter what it takes. Even the inflation hawks – Charles Plosser, the president of the Philadelphia Fed, and Richard Fisher, the president of the Dallas Fed, have said they're concerned that inflation is below the target. So we have the central bank system, which has its hand on the nuclear button in terms of creating money, saying we're going to get to 2% inflation (from a number that is currently lower). We should take them at face value – they're going to get to 2%. So we can add the real GDP growth rate and the inflation rate and we're between 4½% and 5½%. Current interest rates are 3% so we probably have another 100 or 150 basis points to go.

<u>Somewhere in between?</u>

Larry: OK, you've talked me out of 15%. Could we get to 10%? From a bond investor's point of view, that's a disaster too. For that matter, so is 7% or 8%. Remember that the starting point is not today's 3%, but the 1½% level in the summer of 2012, so we are looking at massive capital losses for long-term bond investors if interest rates rise only to high single digits.

Steve: You're right, that's disaster-level stuff if you own bonds. The practical question is: could the Treasury yield creep up to 7% or 8% because the Fed let the inflation genie out of the bottle with, say, inflation on the high side of 5% with an additional real rate of 2%? This is a scenario that bond holders should be concerned with: a capital spending boom as businesses spend their pent-up cash and catch up on delayed capital investment. Add to that a consumer durables purchasing boom, amplified by cheap credit; people see prices going up and hear others saying, "I have to buy a home now"—car, a house, a dishwasher, a TV… you get the idea. All the pent up demand and excess reserves take off at the same time, with the process then feeding on itself.

For now auto sales continue to be strong but are only approaching historical sales levels. Housing is recovering but below trend. Overall, we do not see the boom in spending and spike in inflation.

Larry: Let's go to the other side. What would it take to get rates to plummet? Like 1½% on the 10-year bond, or 1¼? It has happened in other places, particularly Japan. What would it take?

Steve: It would take really slow GDP growth. Japan's real GDP growth has averaged just under 1% per year since their financial crisis in 1990. How did they achieve such slow growth? Limited productivity growth. No working population growth. They had a monetary policy that was at best neutral to slightly restrictive. Fiscal policy was short-term in structure, eroding tax revenues while increasing spending. Such a policy mix would get us there. Fortunately the U.S. doesn't look like this.

U.S. real GDP growth in the last century was about 2% per capita. Working-population growth has been just under 1%. So we've had trend real growth of around 3% for 100 years, 50 years, and 30 years.

Larry: That's fantastic. What do those numbers look like going forward?

Steve: We don't know where productivity is going to be. That is the question, and the one that matters most for long-term growth and prosperity. We are below trend right now. The key question is, will the U.S. return to its long-term trend of 2%? In 2011 at the Milliman lectures at Washington University in St. Louis (subsequently written about by Daniel Henninger in the *Wall Street Journal*), Robert Lucas raised the question of the U.S. being pushed off its long-term trend growth by a combination of the financial crisis of 2007-2008 and the policy responses of more government and more regulation. Could this be happening? Yes, it could be. It too early to tell, and the data we have is mixed.

I tend to be an optimist about the U.S. and the creative ingenuity of its people. I like an observation that Gary Becker made: Why are we limited to 2% productivity growth? With the improvements in medical and information technology, expanded international trade, better health, and longer life expectancy, why can't we grow productivity even faster than in the past? I think both observations are spot on, Lucas and Becker: we certainly can create terrible growth incentives with bad policy, yet good policy could unleash higher growth and a much higher standard of living for everyone. We will see this over the next few election cycles as the epic post-crisis battle over a bigger role for government in our economic lives versus a good and responsible but limited government plays out.

As far as the growth rate of the working population, the U.S. is a fabulous country. We draw in the best people. We should bring in more, especially the highly talented. We're the one place in the world that absorbs them effectively. The big increase in the last third of the 20th century came from women joining the work force, and that is played out, so if we want more people working in the U.S. they will have to come from a different source. We are currently dealing with an unemployment rate that is seen as too high, but, oddly, there are labor shortages in autos, auto parts, and even in some parts of the housing markets. We don't know all the causes of this, but we do know that unemployment is now falling at a rate of about 0.5% per year.

Larry: So longer term, the effect of women joining the paid work force was huge, wasn't it? How does this play out going forward?

Steve: There was a huge gain in human capital and productivity and output. Half the population being mobilized to create value whether they work as engineers, doctors, lawyers, or airplane pilots…

Larry: They may have created value before, but it wasn't counted in the national income and product accounts.

Steve: That's right. Some people find the gains since 1970 hard to see…

Larry: Because they're looking in the wrong place. They see that union wages for men have declined in real terms, forgetting that those were administered prices that made us globally uncompetitive, and that tens of millions of new jobs were created in job categories that simply did not exist before. Many of these new jobs are high paying.

We've also had a startling increase in the standard of living. My parents' house in 1970 was a concrete-slab, asphalt-shingle house with 1100 square feet, no attic, no basement, no garage, no air conditioning. We weren't poor; we were middle class, as were our neighbors with similar (actually identical) houses. There was even a young doctor on our block, although he moved to a nicer area. Today, a poor person would consider this housing substandard and, in fact, nobody lives in the house. I think it is slated to be torn down even though it is only 60 years old.

Steve: That's a good observation, and I'd add one more. The environment got cleaned up. The Clean Air and Water Acts of 1970 and 1972 forced all of us—corporations, municipalities, and consumers—to pay the very large costs needed to get a cleaner, and healthier, environment. Corporations didn't make as much money in the 1970s, municipalities built fewer parks and probably used older police cars, and households consumed fewer "things" than they might have otherwise, but we got a clean environment. That isn't a bad trade.

Larry: I hadn't thought of that before. That's a remarkable achievement.

Contemplating slower growth

Steve: Given our past, we might just want to forecast real GDP growth of 3% forward forever, but it could be risky to do so. We've decomposed the 3% number from the past into 2% productivity growth and 1% working-population growth. What's the evidence that we're going to be at 1% growth in the working population? It's not happening now and it's hard to see us getting there. Productivity growth is running around 1½% or so.

Productivity growth could improve but there's no guarantee of it. I'm not quite sure what's happening now. Older people are working longer. Younger people are having hard times. There have been some labor market distortions, including the labor shortages we just talked about. Let's say the worst-case growth rate would consist of 1½% productivity growth, which is well below historical norms – it would be a real disappointment but it could happen. We get to 75 basis points in labor force growth.

Larry: These add to 2¼% real GDP growth.

Steve: Let's add the Fed's inflation target of 2% to that - that's a 4¼% nominal GDP growth rate.

Larry: Do you see any risk of an even lower outcome?

Steve: If we're going to be lower, then we'll start to get data that are more Japan-like. So far, the U.S. data are going the other way.

Larry: Can you be specific?

Steve: We'd see a really dramatic and sustained fall in productivity. We'd see a further dramatic fall in the working population. And we'd see the inverse of our current Fed policy. So far, our current Fed policy is *not* to let a deflationary trend in the economy, if there is one, to continue.

As Ben Bernanke famously said to, among others, my friends Victor Canto and Bob Doede at Milton Friedman's 90th birthday party at the University of Chicago, and I'm paraphrasing, "Milton, you taught us well. We won't let the 1930s happen again. In fact if we have to, we can helicopter money down on the economy."

My take is that the Fed said, "Look – there are two kinds of mistakes or problems - one is a deflationary low growth spiral, and the other is a little bit of inflation and maybe even some difficulty containing moderate inflation. They said "we'll choose the latter," thinking they have the tools to fix inflation if it gets a little bit too aggressive. So, there is this path of economic death and destruction from a debt-deflation spiral and they just know not to go near there. I think this observation explains their aversion to stopping expansionary policies early because they looked over the abyss and said, "If we go there, we have no plan B." In fact, I've asked some of the senior people at the Fed and they've said, "There's no plan B."

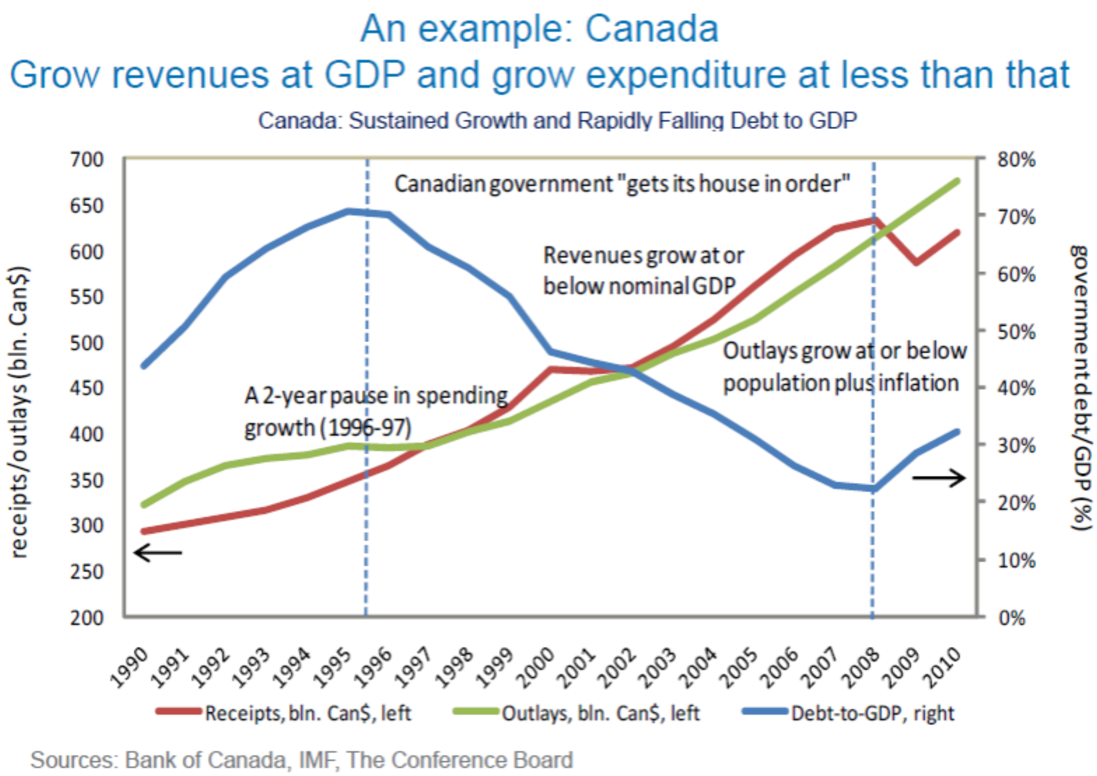
The Canadian solution

Larry: You did some work with Bart van Ark of the Conference Board on a country growing its way out of a debt problem. If I remember it correctly, you cited Canada as an example for other countries to follow. Can you expand on this?

Steve: Canada was facing a potential debt-to-GDP crisis that looked and felt like ours and they got out of it, and in a fairly short time. How? Let's go through the numbers of what they were faced with.

Look at Exhibit 1. Canada's debt-to-GDP ratio rose in a few short years from about 45% in 1990 to over 70% in 1995. It just really shot just up, like ours did a few years ago. And, 14 or 15 years later, it dropped to 22% of GDP. That's what I call a dramatic improvement.

Exhibit 1
Canadian GDP, government revenues, and government expenditures, 1990-2010



How did they do it? First, with their federal budget policy goals. In their 1995 annual budget statement, the Canadian policy stated that the first thing Canada needed to do was for the government "get its own house in order." They also set forth policy principles including frugality, fairness, and cutting spending and not raising taxes.

Here is what they did. For a couple of years, they kept nominal spending flat. They didn't cut it; they just kept it flat. Then, going forward, they grew everything. They grew nominal GDP, they grew tax revenues, and they grew expenditures, but they were subject to one and only one rule: they grew expenditures less than GDP and less than revenues.

So in this period 1995-2006, nominal GDP grew at 5.4% per year, and tax revenues grew at 4.9%. But, here's the kicker: they grew expenditures at only a 3.2% nominal rate, materially below the growth rate of revenues. This difference, the seemingly small 1.7% annual difference between the revenue and expenditure growth rates, had a fabulous effect on the overall fiscal health of the country over an 11-year period. The problem melted away. It's compound interest, which Albert Einstein was reputed to have said was the most powerful force in the universe.

Reining in entitlements: The Herbert Stein rule

Larry: That's an outstanding story, although I have to wonder whether it can be exported. Here in the U.S., we have a lot of planned entitlement spending going out decades. The recipients vote. Eventually the baby boomers will die off, the country will be young again, and the problem will go away, but I won't care because I am also a baby boomer and I, too, will have died. What happens in the interim?

Steve: The one rule that will prevail is the Herbert Stein rule, "If something cannot go on forever, it will stop." We have lots of evidence that that is so. When you make these spending forecasts based on compounding out for ten or twenty years, the results don't make sense. They show destruction of the economy. The outlays to which you assign the high growth rates eventually eat the entire budget, and then the entire economy. It won't happen.

Let's look at the recent evidence. By the end of 2009, pretty soon after the crisis hit, something like 38 of 50 state governments had already passed laws to change their pension promises. How did they do it? They changed the rules for increases in benefits. Some states linked pension benefit payments to funding status. Just this year, the State of Illinois – a heavily Democratic state – changed its pension promises. Among changes they made: cost of living increases were reduced. Already retired workers have had their cost of living increases reduced, and many current workers will work longer to get the these reduced benefits.

I think you're going to see the same thing at the Federal level. Here are some of the things you'll see. Already on the table is to change the way we compute the index for price increases to chain-weighted, which generally gives a lower number than the old method. The single biggest thing we'll see is means testing—benefits will be conditional: those who can demonstrate need will get them and those with means will get less. Not very complicated. The third thing is that the Affordable Care Act, as problematic as it is, has brought one great benefit: it has made health insurance and health care costs—two connected but very different things--the center of discussion in almost every American household. The rate of growth of health care costs is already slowing. There is more to come, especially if we make the incentive systems much more rational for everyone—patients, doctors, employers, and insurers.

Larry: So you believe we're going to act like Americans, we're going to fix the problem but only "just in time"?

Steve: If you look at the long sweep of American history, we're pretty innovative at fixing problems. So, when someone shows me a forecast that goes out 10 or 20 years based on compounding very small differentials that exist due to current policy, I view that person more as making a political case for how they want the money spent rather than actually trying to solve a problem. To go back to our prior conversation, if you want any evidence of how powerful these small differences in growth rates are, look at the Canada example.

Let me give you the latest U.S. data, which may surprise you. The deficit in 2009 and 2010 was close to 10% of GDP, a huge number, and the debt-to-GDP ratio had popped up just like Canada's, well past 70% counting just net debt (debt held by the public and not by the Fed or another governmental body). You don't have to project that kind of deficit out for very long to get in serious trouble.

But where are we today? We look like Canada. In fiscal 2012 and fiscal 2013, nominal spending in the U.S. at the federal level was what? Flat. What will it be next year? Up, but less than GDP growth Why? The "sequester" and the echo effect of the landslide 2010 election in the House of Representatives. Add to this the fact that GDP is growing. Tax revenue is in a cyclical rebound and currently growing faster than GDP.

So what's our deficit? It was 4.1% of GDP in fiscal 2013. It's expected to be 3.2% in fiscal 2014. Now we're seeing projections in the twos.

It's not inconceivable that, when Obama leaves office, we'll have a balanced budget or a surplus. We might also get twin surpluses because the energy boom between the Ohio and Missouri rivers could produce a trade surplus, that is, a surplus in our current account. There will be intense debates on where and how much to spend, and who should "pay their fair share," but for now the larger die is already cast: limited growth in government, limited tax-rate increases, and a falling debt-to-GDP ratio as the economy marches along compounding these small differential growth rates.

Fiscal prudence and the bond market

Larry: Steve, can you begin to tie these observations back to the bond market, to the outlook for inflation and interest rates?

Steve: Yes. Once revenues are growing faster than expenditures it's only a matter of time before you get debt-to-GDP under control. The bond markets know that. Interest rates will reflect that. They won't skyrocket.

Here's a fantastic piece of evidence. In the spring of 2012, borrowing rates in Italy were spiraling out of control. The expectation was that Italy and Spain weren't going to be able to pay the interest on their debt. There were bank runs. The markets thought they were heading for default. Then, on July 26, 2012, European Central Bank president Mario Draghi said, in July 2012, that the ECB stood behind all the sovereigns and all the banks. And he said in the news, much like a Clint Eastwood movie, "Make my day… the ECB is ready to do whatever it takes to preserve the euro…believe me, it will be enough." It was enough. It was stunning. Interest rates have collapsed. Italian and Spanish notes are around 4%, down from 7%.

This is evidence that the minute the bond market thinks you have a sensible solution, interest rates fall. Now the borrowing costs in Italy and Spain are much closer to sustainable. Spain's unit labor costs have dramatically improved. Exports are growing. It now has a current account surplus. Italy already has a primary surplus and is following Spain on the long road of structural reform. The Eurozone still has many large challenges, but so did the U.S. in 1981, your anchor to "bad times." Once the bond market sees a solution that could work, interest rates rapidly reflect the new outlook.

So when should I buy bonds?

Larry: I have one more question. I sold all my long-term U.S. Treasury bonds and TIPS in the spring of 2013 after the bond market fell sharply and looked like it might continue to crash. I was afraid I was going to give back all of my gains in the bond market since late in the last century. That money is now in cash. What yield should I be looking for to get back in?

Steve: I would look for two things. One is that the yield on the 10-year Treasury bond reaches the growth rate of nominal GDP. And, two, it stabilizes there. You just want to make sure the economy itself, the global economy, is stabilized.

At that point I think we can rely on basic bond math – how total returns work. There was a fabulous presentation at the Q Group by Marty Leibowitz of Morgan Stanley and Stan Kogelman of APM Capital. [4] As we all know, they're the deans of bond market math from Salomon Brothers' research department a generation ago. They show that, for a constant-duration bond portfolio, the total return converges toward (rather than diverging away from) the initial yield over a surprisingly long holding period, a period in fact double the duration of the portfolio. (After that the total return does diverge.)

The logic of the Leibowitz and Kogelman finding is as follows. In periods of modest interest rate increases, you reinvest your cash flows at higher coupon rates, but you lose some principal; and then in periods of falling rates you have to invest the cash flows at lower coupon rates but you get an increase in principal value; it kind of equals out. Mathematically, it equals out over a period equal to double the portfolio's duration. Over a shorter period you prefer falling rates, because the capital gain dominates, and over a longer period you prefer rising rates because coupon reinvestment dominates.

So when rates get in line with nominal GDP growth and the economy looks stable you can fairly compare bond and stock opportunities, instead of just avoiding bonds. If you can get 5% in the bond market with limited counterparty risk and predictable inflation policy, maybe you should. If the P/E ratio of the stock market is 10, 11, or 12 and the economy's growing, stocks will look pretty good. But if P/Es are 16, 17, or 18 and the economy's growth is slowing as it typically does late in the cycle, then bonds could look pretty attractive.

Larry: Thank you.

---

[4] Leibowitz, Martin L., and Stanley Kogelman. 2013. "Duration Targeting: A New Look at Bond Portfolios." Presentation at the Q Group, Palm Beach, FL (May 8), summary at http://www.q-group.org/summaries_folder/2013-Spring.pdf, pp. 21-22. Based on a Morgan Stanley research report by Leibowitz and Anthony Bova, http://www.q-group.org/pdf/2013sp-Leibowitz%20Bova%20Duration%20Targeting%20121812.pdf.

Disclaimer

The information contained in this report (including any estimates or projections) have been obtained from sources we believe to be reliable. However, no representation is made that it is accurate or complete. This report is not an offering of any security in any jurisdiction and has been prepared solely for information purposes. Its contents are confidential and may not be reproduced or distributed without prior written consent of the authors.

The information and opinions contained in this report are for background purposes only and do not purport to be full or complete. No representation, warranty, or undertaking, express or implied, is given as to the accuracy or completeness of the information or opinions contained in this document by the broker dealer or the consultant and no liability is accepted by the broker dealer or the consultant for the accuracy or completeness of any such information or opinions.

OCP Capital is an independent marketing broker/dealer registered with the Securities and Exchange Commission (SEC), The Financial Industry Regulatory Authority (FINRA), and the Securities Investor Protection Corporation (SIPC).