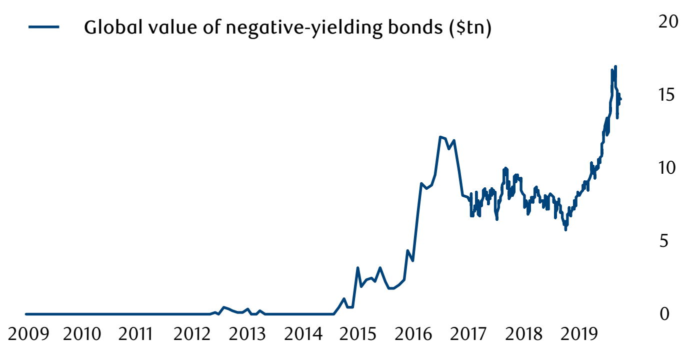
RBC Global Asset Management
PH&N Institutional

Pension fund investing with low and negative bond yields

Here we go again. In 2016, we saw bond yields go negative in Germany, Switzerland and several other countries. In the months and years that followed, most of those bond yields drifted up and out of negative territory. But that trend reversed dramatically this summer, and we're now seeing some extraordinary developments with negative rates; currently, about 30%[1] of the global investment grade bond market has a negative yield, including corporate bonds. Homeowners in Denmark can even get negative rate mortgages, prompting Jyske Bank to add the following to their FAQ page: *Hvordan kan det lade sig gøre*? (How is that possible?) and *Ja, du læste rigtigt* (Yes, you read that right).

Figure 1: Global negative-yielding debt

Sub-zero debt passes $16tn



Source: Bloomberg

Bottoming out?

Until recently, it was taken for granted that interest rates couldn't fall below zero. After all, making an investment that is guaranteed to lose money if held to maturity doesn't seem like an attractive prospect. But as we have now seen in many countries, and as vividly illustrated in the table below, there is no safety net at 0% for interest rates.

How can negative interest rates make any sense? Here are some of the reasons that have been put forth:

- **Obligated holders:** Not all investors are sensitive to the expected return of a bond. Banks are generally obligated to keep much of their capital in safe and liquid investments like government bonds; if the return on these bonds is negative, it is unfortunate but unavoidable. Foreign reserve managers are similarly obliged to hold safe, liquid, and usually short-term debt of foreign nations; in this case, with an eye toward managing their exchange rate, not achieving a positive return.
- **Policy constraints:** Other investors are sensitive to the expected return on a bond but cannot adjust quickly. For example, an institutional investor that is mandated by policy to hold only AAA European securities in their portfolio cannot buy something else unless they change their policy – an involved process. Similarly, a pension fund may be unwilling to tolerate the risk necessary to buy higher-yielding bonds, and so they must accept a negative return.

Figure 2: Nominal sovereign yields in %

	1 Yr	3 Yr	5 Yr	10 Yr	30 Yr
Germany	-0.70	-0.82	-0.77	-0.57	-0.07
Italy	-0.25	-0.12	0.21	0.82	1.91
Switzerland	-0.89	-0.92	-0.91	-0.79	-0.39
Japan	-0.30	-0.35	-0.36	-0.22	0.36
U.K.	0.46	0.29	0.28	0.48	0.97
U.S.	1.76	1.56	1.54	1.67	2.11
Canada	1.71	1.51	1.40	1.36	1.53

Source: Bloomberg, as at September 30, 2019

[1]As of September 30, 2019. Source: Bloomberg

- **Tactical calls:** Some investors fear that other asset classes are overpriced and due for a fall in prices, so prefer the small-known loss of a negative bond yield rather than risk a much larger loss. Some might expect bond yields to fall further, and thus hope to profit from the appreciation of the bond's price to an extent that outweighs the steady drag of a negative coupon.
- **Hedged foreign investors:** Some investors are able to convert a negatively yielding bond in a foreign market into a positive return in domestic terms by hedging out the currency risk under certain conditions. Specifically, one's home market must have the higher short-term interest rate of the two, and the foreign market must have the steeper yield curve of the two. These conditions are presently true for North American investors buying negatively yielding European bonds, meaning that a positive return is still achievable.
- **Too big to hold as cash:** Investors might consider simply keeping their money in cash, or putting it in a chequing account, but those are not risk-free propositions, unlike a sovereign bond. Cash can be lost, destroyed, or stolen. A chequing account is generally quite safe and provides deposit insurance, however, this may not be sufficient for a European corporation with far more money than deposit insurance can cover, especially given the degree of flux in the European banking sector over the past eleven years.

This isn't to say that negative yields are sustainable indefinitely. There is plenty of debate over the effectiveness of negative rates and quantitative easing, and whether negative rates could be counterproductive to achieving central banks' stated growth goals. But there are many reasons why they may be sustainable over the short and medium run.

Could it happen here?

Yes, it could happen here. Negative interest rates tend to stem from negative policy rates set by central banks. For example, the European Central Bank's rate on bank overnight deposits first went below 0% in 2014 (currently -0.50%) and within six months, the German government bond yield curve was negative out to 5-year maturities. In a 2015 speech, Bank of Canada governor Stephen Poloz said that the Bank of Canada might consider moving its benchmark rate below zero in the future if necessary. He emphasized that they didn't expect to use such an unconventional policy approach, but in order to be prepared, the Bank of Canada updated its framework for unconventional monetary policy measures. These included the ability, if necessary, to move its policy rate below zero and to implement quantitative easing via large-scale asset purchases.

Will it happen here? The Bank of Canada overnight rate is currently at 1.75%; at the usual pace of 0.25% per cut, this allows for seven cuts before going negative. In the meantime, it is quite unlikely that we would see negative yields at longer maturities before the Bank of Canada leads the way below zero. So at the very least, it does not appear that negative interest rates in Canada are imminent.

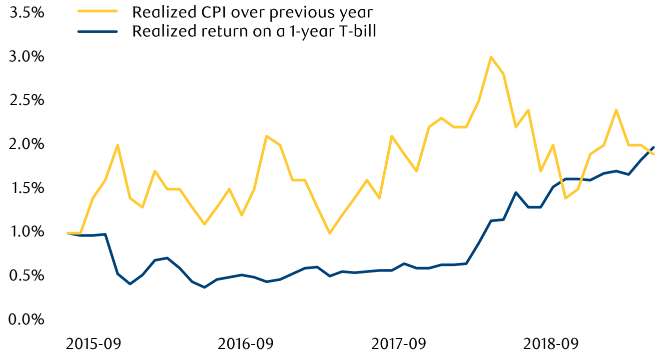
While negative interest rates remain a theoretical concept in Canada, very low interest rates are real. Rates have fallen sharply in 2019, with the nominal yield on Government of Canada 10-year bonds hitting a recent low of 1.12%.[2] While this is unusually low, historically, high rates have been more unusual than low rates. Figure 3 charts the yield on Government of Canada long bonds (10 years+) since the 1930s. It illustrates that there have been prolonged periods of low rates over the past 80 years, and that the spike in rates in the 1980s and 1990s appear to be more of an anomaly than the current era of low rates.

Figure 3: Historical Government of Canada 10-year plus bond yields

Source: RBC GAM, Bank of Canada

[2]August 27, 2019.

Figure 4: Canadian annual inflation vs. return on 1-year T-bills



Source: Bank of Canada

Further, while we don't have negative interest rates in Canada in nominal terms, we have been experiencing negative rates in real (after inflation) terms for some time now. Figure 4 above shows how realized annual inflation has consistently outstripped the yield on 1-year Canadian Treasury bills in recent years.

There are many factors that are driving the current very low interest rate/bond yield environment in Canada, including recent global developments such as:

- renewed efforts by central banks to decrease interest rates to stimulate their economies, and expectations for cuts here in Canada as early as October;
- muted inflation expectations as far as the eye can see;
- a weak economic global growth outlook, not helped by protectionism and Brexit uncertainty; and
- resilient demand for bonds due to the high prices and increased volatility in other asset classes.

Beyond the short-term, there are structural factors that may keep rates low for the medium- and long-term; for example:

- an aging population in Canada, like much of the developed world, with an accompanying increase in demand for income-oriented investments;
- demand for high-quality Canadian bonds, especially provincial bonds for their additional spread, by foreign buyers who are facing even lower rates in their domestic markets; and
- the somewhat ironic impact of the demand from de-risking pension plans themselves, pouncing on any modest uptick in long rates to increase their interest hedge, but thereby preventing a sustained increase in rates.

A recent article in the Financial Times, *Profoundly Low Interest Rates Are Here to Stay*[3] closed on the following sobering note: "The trend towards lower real interest rates has lasted for decades and is as likely to continue as to reverse. With central banks moving to ease, it is time to stop waiting for rates to recover and face the world as we find it."

What does this mean for Canadian pension fund investors?

Investors are rationally questioning why they should buy bonds at these low yields, or whether they should shorten the duration of their fixed income portfolio. Discussions on these questions often seem to presume that a rise in rates is inevitable. Before taking any action, investors should consider a few important related questions. What are the consequences if their forecasted rise in rates is wrong? What will they do with their assets in the meantime? How will these assets perform in a rising rate environment and this point in the business cycle?

Bond yields are derived from bond prices. And bond prices, just like any other assets, reflect an equilibrium where buyers and sellers are willing to transact. Any consensus on the future direction of rates is quickly reflected in current bond prices. Predicting the future direction of interest rates, other than what is reflected in the current yield curve, is difficult. The next move could be up, down, or sideways, especially if there is no zero bound.

As a result, our advice to pension fund investors hasn't changed. We continue to recommend a disciplined approach to managing pension plan risk, and continue to believe that fixed income portfolios form the conservative foundation of pension fund portfolios. They provide consistent cash flows and valuable liquidity in times of market stress, and hedge the interest rate risk in their liabilities. This remains true whether rates are at 1% or 5%.

[3] July 30, 2019.

For additional details, please contact your PH&N Institutional portfolio manager, or call 1-855-408-6111 or email institutions@phn.com.

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