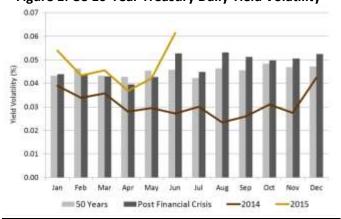


With the onset of summer, the bond market typically enters a guieter-than-normal period with fewer investors at their screens, a seasonal lull in new issuance and monetary policy that tends to move to the sidelines. Bond market liquidity, in a state of secular decline, is a particularly hot topic today and could become even bigger throughout the summer, given the distinct seasonal patterns that have emerged since the Credit Crisis, Grexit worries, and the potential for Fed action in the fall. We have already seen substantial yield volatility in June and we would expect to see it continue in July and August. Although some of the important factors driving market illiquidity are specific to the US bond market, there are still many significant factors that are similarly impacting the Canadian market. Consequently, Canadian yield movements should also be volatile, but perhaps with less amplitude.

Figure 1: US 10-Year Treasury Daily Yield Volatility



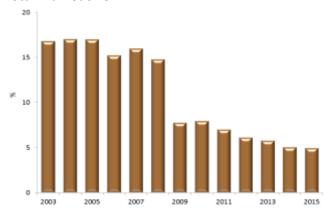
Source: Bloomberg & Lorica Investment Counsel Inc.; June 2015.

An excellent indicator of deteriorating market liquidity has been the recent increase in daily yield volatility in the Treasury market. Although, yield volatility since the Financial Crisis has generally been below what we have experienced historically (last 50 years), we have noted a significant uptick this year, particularly in June. (See Figure 1.) We would

## What We Think......

attribute the reduced volatility for most of the post-Financial Crisis period, to predictable monetary policy resulting in relatively stable and consistent investment strategies. (There were periods of heightened volatility associated with Greece's ongoing financing woes and the *Taper Tantrum*.) However, as the Fed has guided the market towards its first rate increase in 9 years, investors have become more anxious and less uniform, which is translating into more volatility. Magnifying this volatility is the bond markets diminished capacity to handle trading activity.

Figure 2: US Treasury Daily Trading Volumes as % of Total Market Size



Source: SIFMA, Federal Reserve Board & Lorica Investment Counsel Inc.; May 2015.

The US Treasury market is generally considered the most liquid bond market in the world (and has had the trading volumes to prove it). However, in recent years, Treasury trading volumes have not kept up with the growth in the Treasury market – they have in fact declined (See Figure 2), implying that traders can no longer rely on the Treasury market to provide the same kind of liquidity as in the past. There are a variety of factors contributing to the diminished activity of the Treasury market including:

 Quantitative easing which has resulted in a large number of Treasuries lying dormant on the Fed's



- balance sheet, thereby reducing the float of active Treasuries.
- ii. Large foreign holdings of Treasuries that are principally static.
- iii. Tighter regulation of financial institutions in response to Basel III and Dodd-Frank which has forced primary dealers to increase their holdings of low risk-weighted Treasuries in place of higher yielding credit product.
- iv. Proliferation of passive strategies such as indexed funds, ETF's and ALM portfolios with large positions in Treasuries.
- v. Growth in so-called *Dark Pools* where trading is executed outside the purview of the over-thecounter Treasury market, such as those executed on fund-to-fund platforms and by ETF providers.
- vi. Growth of individual bond portfolios due to industry expansion and concentration, making active trading more difficult.

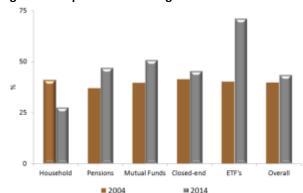
In general, bond markets have become less liquid for many investors and one can reasonably surmise that investors will, as a result, become less active than in the past. Obviously, less activity will be true for

## Corporate Liquidity - Risk or Opportunity

Investor's began to pay more attention to corporate bonds after the Financial Crisis, given the excessive widening of yield spreads and easy monetary policy. "Cross-over" Equity investors sought the yield advantage of corporate bonds over dividend paying equities, particularly in the high yield space, and were confident that central bank support for the credit markets would be prolonged. Of course, no-one would have guessed when the Fed introduced its version of QE (further crowding investors into the corporate bond market) that its support for risky assets would have lasted for so long. Corporate issuers also did their part by increasing the level of financings by 22% versus the pre-crisis peak by 2014.

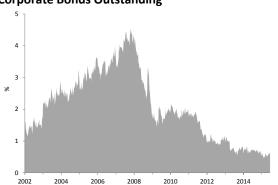
A direct corollary to being driven into the corporate bond market has been the accumulation of more credit risk while having to surrender portfolio liquidity. Although active holdings of corporates (not including those held by the Fed, deposit taking institutions and foreigners) have grown proportionately more than Treasuries (See Figure A.) trading volumes of corporates are still insignificant when compared with Treasuries. Furthermore, primary dealers have become less willing (and able) to hold corporate bond positions, thus impairing their ability to act as intermediaries in the corporate bond market. (See Figure B.) Anecdotally, many primary dealers are relying primarily on agency trading (matching buyers and sellers) to facilitate corporate

Figure A: Corporate Bond Weights in Investor Portfolios



Note: Includes only "investor" class categories Source: Federal Reserve & Lorica Investment Counsel Inc.; June 2015.

Figure B: US Primary Dealer Corporate Bonds as % of Corporate Bonds Outstanding



Source: New York Feds, Federal Reserve & Lorica Investment Counsel Inc.; June 2015.



passive investment strategies, but it will also be true for portfolios that are too large to be liquid or portfolios that have insufficiently liquid investments.

While flows into passive investment strategies have, in recent years, generally been consistent with the direction of the bond market, this may not continue to be the case if investment flows are no longer mostly one direction. We do expect Treasuries and the overall US bond market to continue to be supported by a variety of underlying factors including:

 Demographics that will continue to support fixed income.

- ii. A world that favours the US dollar and Treasuries as the safest store of value.
- iii. Excess global capacity that will contain an increase in inflation.
- iv. That need for government and consumer deleveraging that should reduce the supply of debt.
- v. Low yields globally.

As the recovery in the US economy becomes more entrenched – our most probable scenario – we expect the Fed to raise interest rates by at least a couple of percent, albeit only gradually. We have already seen ETF fixed income outflows increase in June, in anticipation of higher rates, and see the potential for

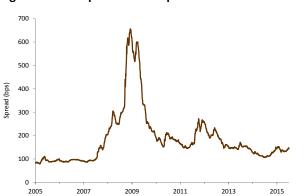
## Corporate Liquidity – Risk or Opportunity (con't)

bond trades rather than market-making. Not surprisingly, bid-offer spreads have widened, thus acting as an additional disincentive to more active corporate trading.

Although the US economy has struggled to gain traction since 2009, corporate bond investors have been rewarded with tighter yield spreads and a lower number of bond defaults. After skyrocketing to historically wide levels in 2008, yield spreads reversed sharply in 2009 and then trended further downward until reaching their lows in June 2014. While concern over the state of the US economy prompted yield spreads to widen temporarily in the fall of 2011, Operation Twist managed to bolster investor confidence in the corporate bond market and yield spreads resumed their narrowing until Taper Tantrums sent them wider in June of last year. Although yield spreads have risen over the last 12 months, they have generally traded within a fairly narrow range. (See Figure C.)

The decline in liquidity that has been evident in sovereign yield volatility has not been as apparent in corporate yield spread volatility. (See Figure D) We believe that a big part of the difference in volatilities has been the implicit backstop on riskier assets thus far by the Fed – investors have felt comfortable carrying corporate overweight positions. However, we believe that yield spread volatility is one of the most significant risks and opportunities as we head into this period of changing monetary policy.

**Figure C: US Corporate Bond Spreads** 



Note: Option adjusted spreads of BAML Corporate Master Index Source: BAML, St. Louis Fed & Lorica Investment Counsel Inc.; June 2015.

Figure D: Mid-Corporate Spread Change vs 10 Year Yield Changes

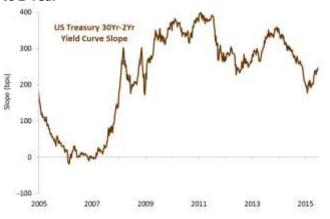


Note: Corporate Spreads based on BAML Corp Master 7-10 Year Bonds Source: St. Louis Fed, BAML & Lorica Investment Counsel Inc.; June 2015.



outflows to persist throughout the summer with market impact exaggerated because of poor liquidity.

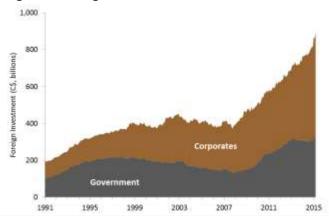
Figure 3: Slope of US Treasury Yield Curve – 30-Year vs 2-Year



Source: Bloomberg & Lorica Investment Counsel Inc.; June 2015.

We have been anticipating an upward move in Treasury yields for some time, but with a concurrent flattening of the yield curve. But, this past December and January we experienced more bull flattening of the yield curve (stable short rates, falling longer-tem yields), to add to the flattening that had had already taken place through much of last year. Short term yields have been much stickier than we had anticipated due to the Fed's reluctance to raise rates amidst unconvincing economic data. However, from January 29<sup>th</sup> (date of the market lows on Treasuries) onwards, we have seen significant steepening of the Treasury curve. (See Figure 3.) We think that we will see further reversal of last year's flattening, as the bond market struggles to deal with illiquidity and slow unwinding of ZIRP. Two-year yields, which are now at the levels they began the year at, will eventually move higher and flatten the yield curve as the Fed unfurls more rate increases, but not likely before a period of greater long-end volatility.

**Figure 4: Foreign Purchases of Canadian Bonds** 



Note: Excludes money market, includes foreign currency bonds using end of month FX rate.

Source: Statistics Canada & Lorica Investment Counsel Inc.; June 2015.

The Canadian bond market has also experienced the effects of less bond market liquidity, despite the fact that the Bank of Canada has not implemented a QE program. Dodd-Frank and the Volcker Rule have impacted many Canadian institutions through their US subsidiaries. And, although Canada's do not have anywhere near the safe haven status of Treasuries, foreigners have been enamoured of late with Canadian bonds (see Figure 4), which are more likely to end up as static positions. Most important are two developments that have also taken place in Canada: the proliferation of passive bond investments and the diminished capability of intermediaries to transact.

Historically, the Canadian bond market has traded with less volatility than the US bond market, and this should be the case going forward. We expect the Bank of Canada to remain on the sidelines while the Fed raises rates, which will stabilise the short end of the Canadian yield curve and mute movements in the long end.