GMO White Paper

Jul 2015

What Do High-Yield Maturities Tell Us About Timing the Credit Cycle? Another Take on the Wall

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Everybody involved in the credit markets wants to know when the cycle will turn. On the one hand, it feels like we are in the later stages of the current cycle and investors are afraid to overstay their welcome. On the other hand, credit spreads are close to historical averages while many competing asset classes seem overvalued. For those who are currently invested in high-yield bonds and leveraged loans, accurately timing the cycle will be the difference between safely clipping coupons and realizing painful losses. And for those of us who specialize in distressed debt investing, the turn of the cycle should create the next great opportunity.

Most investors base their high-yield outlook on expected defaults. Credit strategists and portfolio managers frequently point to the timing of debt maturities – the so-called "maturity wall" – as a major determinant of near-term default rates. Presumably, with fewer debt maturities, there will be fewer defaults, and therefore higher returns. This assumption makes intuitive sense. After all, the inability to pay debts as they come due is a classic definition of insolvency. The more time companies have until their debts mature, the greater the chances they can find a way to refinance.

Today, many credit strategists point to the relative lack of near-term high-yield maturities as a reason for investors to be constructive on credit. To be sure, after years of easy credit, today only a small portion of the high-yield market matures in the next few years, as shown in Exhibit 1.

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Exhibit 1:

High-Yield Maturity Wall as of March 31, 2015
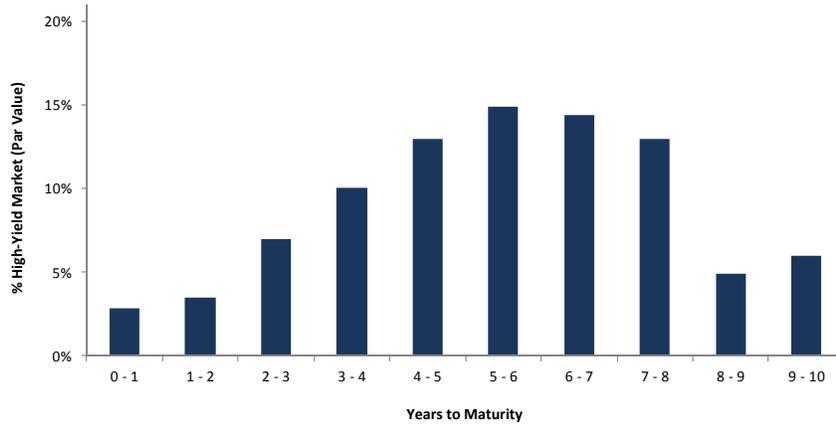
Source: High-yield bonds outstanding by year derived from Barclays and Thompson Reuters. See Addendum for details.

In contrast, in 2009, many pointed to the looming maturities beginning in 2012 as a reason for investors to be cautious.

We decided to take a closer look at history to see if the shape of the maturity wall gave investors any helpful clues about how to time the credit cycle. We began by dividing the history of the U.S. high-yield market into three cycles. Because we are approaching this question from the perspective of an investor who is looking to earn a return, and because the credit spread is a decent proxy for expected returns, we defined a cycle as the period between troughs in credit spreads. Note the three dates indicated by red arrows in Exhibit 2. These are the three dates when credit spreads reached their cyclical tights. If we could go back in time to those dates – October 1988, August 1997, and May 2007 – we could avoid a lot of pain (and make a ton of money) by selling credit (short). If the term structure of high-yield maturities were helpful to timing the asset class, surely it would have given investors a "sell" warning on those dates.

Exhibit 2:

A Tale of Three Credit Cycles

Source: Spread data from Citigroup High-Yield Index (Yield Book).

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Next, we used historical data from Barclays and Thomson Reuters to reconstruct what the high-yield maturity wall likely looked like on those three dates. Ideally, we would have included leveraged loans as well, but we lack adequate data to do so. (Anyone interested in the details of how we reconstructed the maturity wall is encouraged to read the Addendum to this paper.) We found that, contrary to what conventional wisdom would imply, at each of the three dates when the cycle turned, there were relatively modest levels of near-term maturities. To dramatize this point, in Exhibit 3 we superimposed the path of actual high-yield defaults on top of the maturity wall at the market peak to show how an entire default cycle came (and went) years before the peak of the maturity wall would appear to have been much of a concern. So at the three points in recent history when investors most needed a signal to sell credit, the maturity wall was telling investors not to worry.

Exhibit 3:

**Maturity Wall at the Three Market Peaks/Spread Tights**
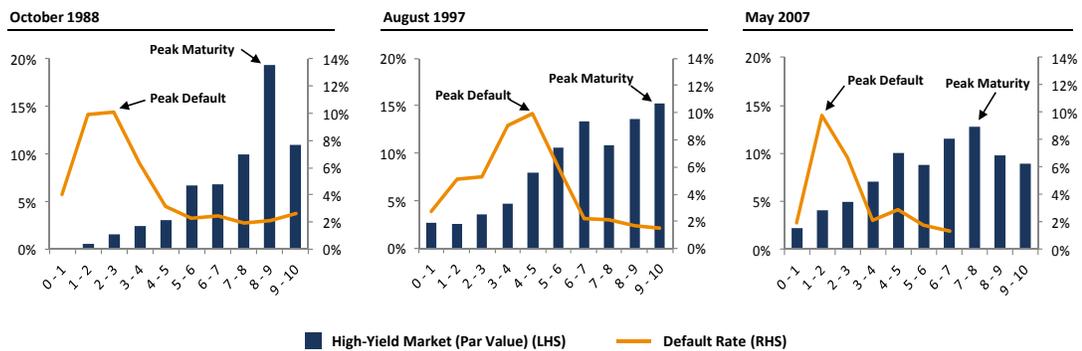
Source: High-yield bonds outstanding by year derived from average of Barclays High-Yield Index and Thompson Reuters EJV data. See Addendum for details. Default rate data from Moody's through 1997 and Bank of America Merrill Lynch thereafter.

We then asked whether the maturity wall gave investors a useful "buy" signal at the cyclical bottoms of the market. To answer this question, we reconstructed the maturity wall on the three dates when credit spreads peaked. These dates – December 1990, October 2002, and November 2008 – are indicated by green arrows in Exhibit 2. If we could go back in time to those dates, we could make an absolute fortune buying credit.

But the maturity wall seemed more imposing on those dates than it did at the market peaks. As shown in Exhibit 4, the portion of debt maturing within three years, a reasonable proxy for near-term, was dramatically higher at the market bottoms than at the market tops.
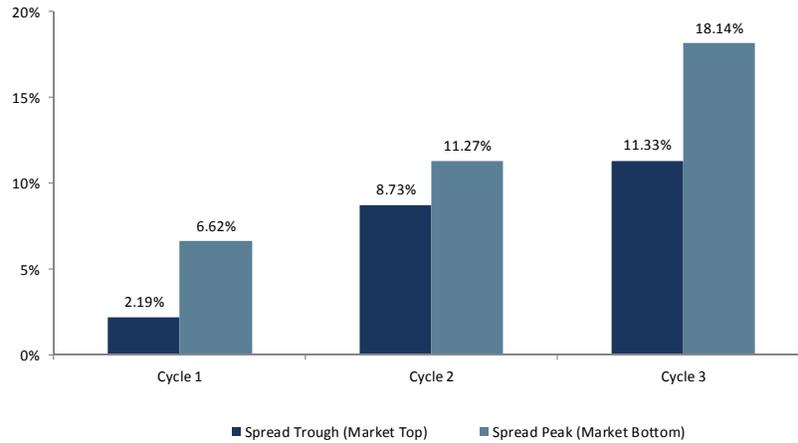
Source: High-yield bonds outstanding by year derived from Barclays and Thompson Reuters. See Addendum for details.

So, not only did the maturity wall tell investors to be complacent right before the market was about to sell off, it told investors to be more cautious just as the market was about to rebound. This historical record should give pause to anyone who leans too heavily on the maturity wall to help formulate his or her high-yield outlook.

Our conclusions might at first seem counterintuitive, but, upon reflection, we think they make sense. Credit cycles typically turn after a long boom. Toward the tail-end of the boom, most companies with access to the capital markets are likely to have refinanced their debts, thereby pushing their maturities far into the future. And while these newly lengthened maturities are surely helpful to individual companies, the mere pushing out of maturities, by itself, does not appear to have stopped the last three cycles from turning. Whether due to a recession, tightening credit conditions, or something else, eventually corporate cash flows are pressured, and debt is downgraded and defaults. Conversely, credit busts eventually stabilize after a painful sell-off. During the sell-off, many companies lose access to the capital markets, and fewer refinancing deals are done. At the tail-end of the market sell-off, because there have been fewer refinancing deals, one would expect relatively more near-term maturities than at the market peak.

The handful of recent bankruptcies in the energy sector in 2015 illustrate this point. These energy companies filed for bankruptcy because the unexpected and dramatic decline in the price of oil pressured their cash flows, not because they were unable to redeem debts as they came due. In fact, one of these companies, American Eagle Energy Company, filed for bankruptcy after missing the first coupon on a bond it issued a mere seven months earlier, making it a recent winner of the credit market's version of the NCAA (as in "No Coupon At All"). While extreme, this example shows that often companies default years before their debts technically mature.

The point is not that debt maturities are irrelevant. As anyone who does credit work knows, at the company level, the presence or absence of a near-term maturity can make a big difference. Similarly, at the market level, a default cycle would surely be more severe if it coincided with a large volume of debt maturities. Our point is simply that, based on the experience of the last three credit cycles, there seem

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to have been much larger forces at work that ultimately caused credit spreads to widen and default rates to spike. From the perspective of an investor trying to formulate a high-yield outlook, it seems to us that focusing too much on the maturity wall is probably unhelpful.

Addendum: Reconstructing the Historical Maturity Wall

In order to reconstruct the maturity wall at various points in history, I enlisted the help of my colleague, Carlos Morales, a member of our fixed income quantitative research team. In order to reduce the impact of any errors in the data, we decided to reconstruct historical maturities from two sources, and then average the two sources when they were both available for the same period.

The first data source was the Barclays U.S. Corporate High-Yield Bond Index. This index was created in 1986 and covers Cycles 1, 2, and 3. The index includes all U.S. dollar-denominated, fixed-rate, non-convertible corporate bonds rated below investment grade by an average of Moody's and S&P (and Fitch after July 2005). The index excludes emerging market issuers. It also excludes bonds that are less than $150 million face value (or $100 million before July 2002). One major benefit of this data is that it is widely available through the Barclays POINT system.

One problem with the Barclays data is that it excludes bonds maturing within 1 year of any measurement date. This is standard in index construction, but, for our purposes, unfortunately leaves a "hole" in our maturity wall at the 0-1 year point. To fill this hole, at any time, t, we approximated the 0-1 year maturity bonds by using the 1-2 year maturity bonds from time t_{-1}. Because bonds are rarely issued with a 1-year maturity, we thought this would be an acceptable, albeit rough, approximation. Unfortunately, this estimate will incorrectly include bonds that defaulted, were called, or were upgraded to investment grade between t_{-1} and t. And it will incorrectly exclude bonds that were downgraded to junk between t_{-1} and t. We were also unable to use this technique to reconstruct the 0-1 year point as of October 1988 because we were not able to find data as far back as October 1987 in the POINT database.

The second data source was the Thomson Reuters EJV database. It contains terms and conditions for all global corporate bonds in existence from 1993 to the present. Accordingly, we used it to reconstruct the maturity wall for the key dates in Cycles 2 and 3. We began with the full universe of bonds and then added filters so that our ending universe would closely approximate the constituents of the Barclays Index. Specifically, we excluded bonds not denominated in U.S. dollars, bonds with floating-rate coupons, convertible bonds, emerging market issuers, and any bond less than $150 million face value. We also excluded any bond that was not rated below investment grade by S&P, the only ratings agency for which we had issue-based ratings going back to 1993. Unlike the Barclays data available on POINT, the Thomson Reuters data does not exclude bonds maturing within 1 year of a measurement date, so we did not have to attempt to estimate the 0-1 year maturities. We took comfort that, for Cycles 2 and 3, the Thomson Reuters data for 0-1 year maturities seemed reasonably close to our approximations from the Barclays data. For anyone attempting to replicate this analysis, please be forewarned that the Thomson Reuters data must be purchased separately, and loading all of the historical CUSIP-level information into a database and manipulating it is no small task.

Exhibit 5 illustrates our estimated maturity profile of the high-yield market for the six key dates referenced in this paper. Where we had two data sources for a given date, we used an average for purposes of our analysis. While there are some differences between the two sources, on the whole, we were comforted to see that they were largely consistent with each other. It appears to us that the conclusions of this paper are unlikely to be the result of spurious data.

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Exhibit 5:

Reconstructed Historical Maturity Wall

Source: GMO

Ara Lovitt. Mr. Lovitt is engaged in portfolio management for GMO's Developed Fixed Income team, overseeing the firm's corporate credit effort and serving as Portfolio Manager for the GMO Credit Opportunities Fund. Prior to joining GMO in 2010, Mr. Lovitt was a senior investment professional at Silver Point Capital. Previously, he was a vice president at Morgan Stanley. Mr. Lovitt earned his A.B. in Economics and Philosophy from Dartmouth College and his J.D. from Stanford Law School.

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