

Credit

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Speculative Grade Credit Weekly

Hiding From High Yield ETFs

- Prices have fallen over two points since we recommended investors reduce high yield risk but the average price remains above par. True, spreads are undeniably wide for the default risk, but much of that reflects the extraordinary Treasury rally rather than investors shunning high yield product. Although investors we speak to share our cautious view, we sense positioning is not reflective of that and many investors are equally worried about missing a potential bounce.
- Spanish 10y yields rose above 6.5% for the first time in the post-LTRO period. With banks pulling back on sovereign purchases and hopes of additional ECB assistance fading with Draghi's comments this week, we expect the market to sway with developments across the pond.
- The Ford upgrade triggered a flurry of additional trading in the capital structure with TRACE volumes doubling in May versus prior months. The activity has generally involved account purchases, presumably driven by investment-grade investors preparing for the June transition. High yield investors have yet to aggressively sell their Ford holdings but the upgrade should eventually lead to high yield selling which will provide a significant technical boost to the market as the capital is deployed across other issuers.
- The outsized influence of high yield ETFs on the high yield cash market has been undeniable. We analyze the most liquid (as defined by secondary trading volume) high yield ETF and non-ETF bonds, computing the correlations between the bonds in each set and list the reasons why the non-ETF bonds are not eligible for ETF inclusion. There are a few places within high yield to "hide" from ETF technicals and doing so often requires deviating from "fairway" high yield bonds.

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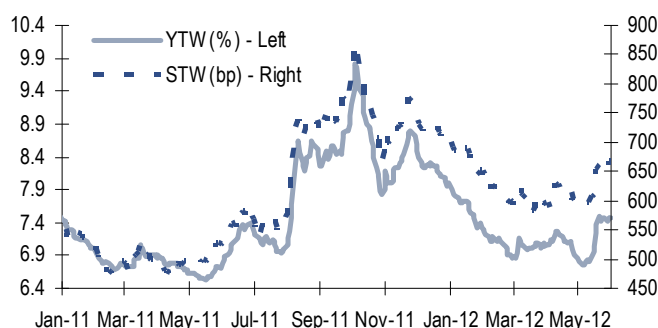
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High Yield Market Recap

	Yesterday's Close		Weekly Change		8-Week Average	
	Price	Spread	Price	Spread	Price	Spread
CDX HY 18	92.56	688	-1.19	32	94.68	631
Citi High Yield Market	100.32	668	-0.03	9	101.54	620
BB Index	104.67	485	0.12	6	105.43	450
B Index	100.67	702	-0.13	11	102.08	647
CCC Index	86.82	1182	-0.16	16	88.85	1100
Citi Lev Loan Tracker	92.33	622	-0.25	9	93.26	590
Capped Tracker	94.51	566	-0.24	9	95.54	535
CDX IG 18	98.92	123	-0.24	5	99.73	106
Citi US BIG Corporate	112.30	211	0.79	3	111.94	191
BBB Index	112.05	261	0.77	4	111.85	239
S&P 500	1310.33		-7.49		1355.90	

Source: CIRA

Citi High Yield Market Index, Yield-to-Worst and Spread-to-Worst



Source: CIRA

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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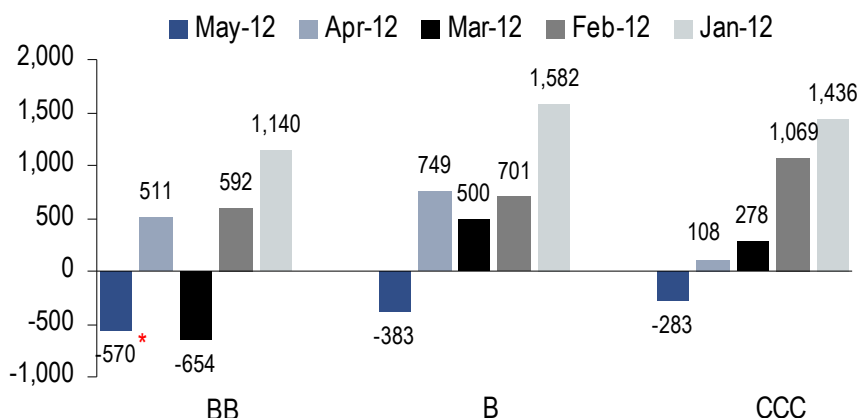
A June Boon or Swoon?

The risk-off signals we've mentioned the last few weeks are flashing more brightly as European sovereign and global growth concerns accelerate. Spanish 10y yields rose above 6.5% for the first time in the post-LTRO period and the Euro fell to a 2-year low. In contrast, safe-haven US Treasury and German Bund yields plunged further, setting new all-time lows. Oil dropped \$7, dipping below \$84, reflecting the weakening global demand among other factors. Even gold continues to bounce around the bottom of the 2012 range.

The calendar turning to late April is becoming a reliable sell signal for the speculative-grade markets. For the third straight year, high yield peaked in April after a brisk start, only to falter in May. Investors no doubt are hoping for a June rebound and given the uncertain nature of the European situation a rebound is certainly possible. Thursday's equity market is a perfect example of the risks to being either too long or too short. The steep morning declines reversed and the S&P 500 briefly rose into positive territory on a Wall Street Journal article that the European wing of the IMF is considering assisting in a Bankia bail out in the event Spain fails to complete the rescue. We don't see much in the report to allay our broader concerns and the market faded in the afternoon. Unfortunately investors are likely to see continued headline-driven volatility, a harsh environment for risky assets such as high yield.

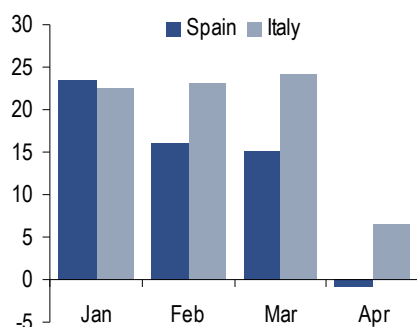
Prices have fallen over two points since we recommended investors reduce high yield risk but the average price remains above par. Spreads are undeniably wide for the default risk, but much of that reflects the extraordinary Treasury rally rather than investors shunning high yield product. Although our cautious view is echoed by many of the investors we speak to, we don't sense that positioning is reflective of that view (not to say that positioning is stretched either). In fact, our estimates of TRACE volumes illustrate that investors have been more likely to sell double-B bonds rather than less-liquid high-beta credits. A similar trend is present in loans where high-dollar, high-quality paper has been sold instead of deep-discounted loans. We conclude that many investors are more worried about not missing a potential bounce and therefore will raise cash by selling positions with limited upside rather than positions that could run up while they are not invested. According to TRACE data, we estimate that accounts have net sold \$570mn double-B bonds (when adjusting for the post-upgrade Ford activity which was dominated by investment grade buying).

Account Net Buys/Sells (\$mn Notional, Estimated)



Source: Citi Investment Research and Analysis, TRACE; *Note that this number adjusts for post-upgrade Ford activity

Monthly Changes in Govt Hldgs of Euro Banks (bn Eur)



Source: Citi Investment Research and Analysis, European Central Bank

Spanish 10-year yields rose this week to the mid-6s, 165bp higher than the early-March trough. More worrisome is the fact that the spread to 10-year Bunds exceeded November's pre-LTRO peak. Yields are rising just as peripheral-based banks are pulling back from purchasing sovereign debt. Data released by the ECB show that Italian and Spanish banks significantly slowed their government bond purchases in April. From the release it is difficult to determine if this reflects banks selling safer debt such as Bunds to raise cash to meet deposit withdrawals or just less activity. Either way it is consistent with recent comments from several banks that they are full of sovereign debt.

The most effective tools from Europe have been deployed by the ECB but comments from ECB President Mario Draghi this week indicate that there are limits to what it will do to address the sovereign crisis. Specifically it will continue to address liquidity concerns but solvency issues are likely a different story.

Not helping matters is quickly-deteriorating global economy. Starting in the European peripherals, Spanish retail sales in April collapsed 11.3%, confirming our European economists' expectations for a 3.1% drop in GDP in the second quarter, accelerating to 6% for the second half of the year. Data from May is equally poor with Chinese PMI slipping to 50.4, the lowest in 5 months and the UK PMI registering its second-largest decline on record (to a 3-year low). As we go to press, US payrolls disappointed, adding to the aforementioned string of poor headlines.

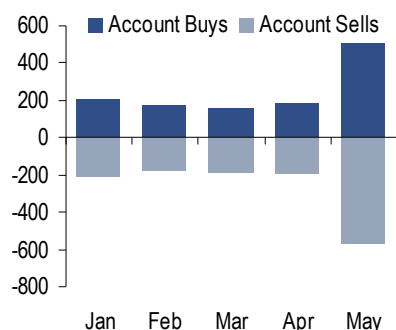
Greek voters head to the polls in two weeks and recent surveys indicate the New Democracy party is gaining momentum and leading the anti-austerity Syriza. While this is certainly a positive, we note that the number of undecided voters is very high, leaving the strong possibility of more shifts before election day.

Moody's Drives Ford Back to Investment Grade

On May 22, Moody's upgraded Ford to investment grade by raising Ford's senior unsecured rating from Ba2 to Baa3 and Ford Motor Credit's rating from Ba1 to Baa3. Ford has been the largest high yield issuer over the past few years, with \$25.8bn of index-eligible debt as of May (accounting for 3.5% of the index's market value). As of June 1, Ford bonds will now move into the BIG Corporate Index, marking the largest rising star in the history of the Citi High Yield Market Index. Post the upgrade, the largest high yield issuer will now be Sprint Nextel Corp (\$20.4bn), followed by HCA Holdings (\$17.1bn) and CIT Group (\$15.5bn). Using a preliminary version of next month's BIG Corporate Index, Ford will be the 15th largest issuer, with \$28.3bn of debt (0.94% of the index).

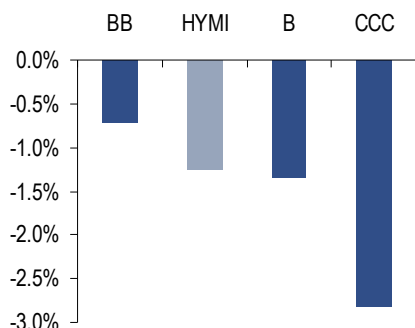
The upgrade triggered a flurry of additional trading in the capital structure with TRACE volumes doubling in May versus prior months. The four most actively traded high yield bonds over the last five days have all been Ford issues (the 7.45s of '31, the 5.875s of '21, the 5s of '18 and the 4.25s of '17). Furthermore, the activity has generally involved account purchases, presumably driven by investment-grade investors preparing for the June transition. High yield investors have yet to aggressively sell their Ford holdings but the upgrade should eventually lead to high yield selling which will provide a significant technical boost to the market as the capital is deployed across other issuers.

Ford Block Trades



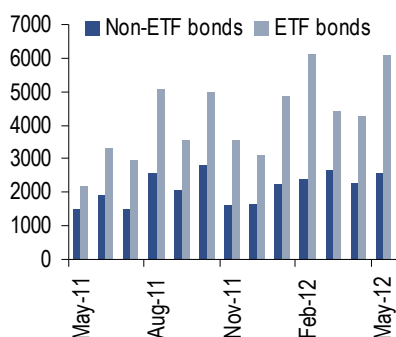
Source: Citi Investment Research and Analysis, TRACE

May Preliminary Total Returns



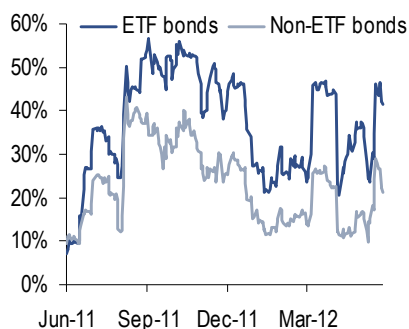
Source: Citi Investment Research and Analysis

Monthly Block Trades



Source: Citi Investment Research and Analysis, TRACE

Rolling Avg. Pairwise Correlations of Price Changes



Source: Citi Investment Research and Analysis, TRACE; Note a 20-day rolling window was used for this analysis.

May Performance Sneak Peak

Driven by continued macro concerns weighing on the market, high yield lost 1.26%¹ last month, closing out the worst month since November. Leveraged Loans fell 0.91%, while our Capped Loan Tracker fell 1.12%. High yield issuance slowed slightly on the month, with \$18.5bn priced, down slightly from April's \$19.1bn. YTD issuance is \$127bn (down 16% from the same period last year when \$151bn was issued). AMG reports that high yield funds have seen three straight weeks of outflows, with last week's \$2.5bn the 4th largest outflow on record. .

Hiding From High Yield ETFs

The outsized influence of high yield ETFs on the high yield cash market has been undeniable. It has led some investors to favor strategies that focus on non-ETF eligible bonds in order to avoid ETF-related technicals. As a result, in this section, we analyze the most liquid ETF and non-ETF bonds, computing and comparing the correlations between the bonds in each set and list the reasons why the non-ETF bonds are not eligible for ETF inclusion.

In order to conduct the study, we compiled a list of the 50 most liquid high yield bonds that were in the two major ETFs as well as a separate list with the 50 most liquid non-ETF high yield bonds. We computed the relative liquidity (i.e. trading volumes) between the two sets and found that the ETF list was roughly twice as liquid (i.e. twice the volume). This is not surprising given that the primary objective in creating the ETF portfolio is to concentrate on the most liquid subset of the high yield market. But as we detail in a couple of paragraphs there are a number of reasons that liquid high yield bonds are not in the major ETFs.

One common observation we hear from investors is the increase in correlations due to ETF activity. As the market rallies, ETF authorized participants are aggressive buyers of the bonds on the creation lists and when the market sells off they are sellers of the bonds on the redemption list. This accentuates the high correlation we already see across the high yield universe. Over the short run this can diminish the benefits of superior credit selection and so it's logical that investors might want to avoid ETF bonds.

Over the past year, the correlation of the bonds within both universes has varied between 20 and 60% but the correlation across the ETF list is generally 20% higher than the correlation of the non-ETF list. We believe that technical forces are the primary cause but we should note a couple of fundamental reasons for the lower correlation in the non-ETF universe. First there are a few capital securities from bank or insurance companies. There should be some diversification benefits here. Second, there are some smaller issuers that trade with robust volumes. Despite being small these bonds tend to have idiosyncratic factors driving valuations and therefore are more likely to be uncorrelated with the broad high yield market.

The primary reasons for liquid high yield bonds not to be in ETFs include (in descending order of importance):

- **Issue/Issuer Too Small:** Approximately one-quarter of the non-ETF list is from issuers (or individual issues) that are too small to meet the ETF Index rules. These issues may be liquid because the credit story is quickly evolving, creating bursts of secondary trading that may not be as consistent.

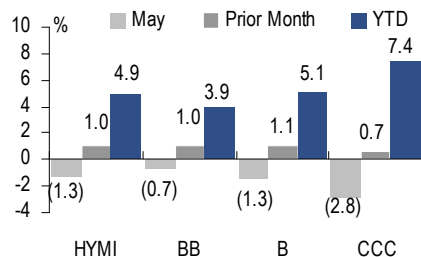
¹ Please note that all returns are preliminary and subject to change.

- **Maturity Doesn't Meet Rules:** The ETF Indices have either explicit or implicit rules governing the maturity of eligible bonds. For example, both of the major ETF Indices don't include bonds shorter than 1 year. One of the indexes excludes bonds that were longer than 15 years to maturity on issue date while the other excludes bonds of certain age (i.e. time since issue date), which effectively limits the allocation to original-issue 30-year bonds.
- **Investment Grade Ratings:** Roughly one-fifth of the non-ETF universe includes split-rated bonds that TRACE includes in the high yield series but ETF indices classify as investment grade.
- **Bonds in the ETF Index but Not the ETF:** Although the ETFs allocation is generally closely aligned with their indexes, roughly 10% of the bonds on our non-ETF list are included in an ETF Index but are not in the ETF itself. Presumably this is because the issuer has other bonds that serve as appropriate proxies for the index bond.
- **Capital Securities:** Neither ETF index explicitly prohibits capital securities but there are very few capital securities in the indices.

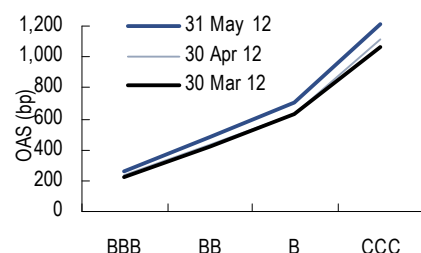
As we can see from the reasons listed above, there are a few places within high yield to "hide" from ETF technicals but the strategy often requires deviating from "fairway" high yield bonds.

HY Performance Review (As of Thursday)

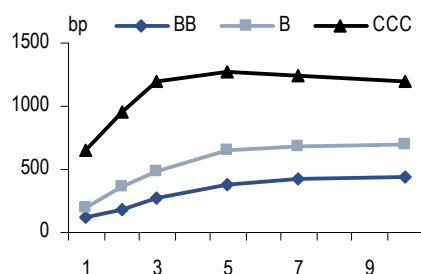
Index Total Returns



HY Risk Curve



Median HY CDS Curves by Rating



Source: CIRA, Markit

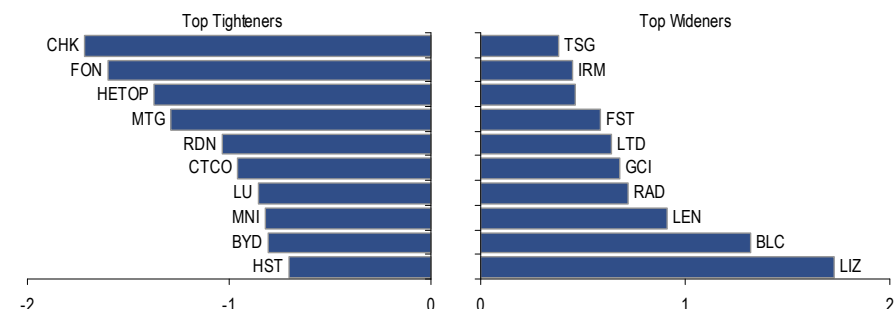
- High yield bonds were flat this week. Citi's High Yield Market Index yields 7.46% which translates to a 668bp spread and \$100.32 price.
- Double-B paper (-0.72%) continued to outperform, and led both single-B (-1.34%) and triple-C (-2.81%) credits in May.
- Nearly all major sectors were down last month. Auto manufacturing/vehicle parts (+0.77%) and basic materials (-0.25%) were the top performers, while technology (-2.73%) and media & entertainment (-1.91%) lagged.

Cash Performance by Sector, May

Sector	YTW(%)	MTD(%)	YTD(%)	Sector	YTW(%)	MTD(%)	YTD(%)
Auto Mfg/Vehicle Parts	4.722	0.77	8.16%	Media & Entertainment	9.838	-1.91	6.46%
Basic Materials	8.087	-1.90	1.96%	Paper & Packaging	7.083	-1.67	4.89%
Building/Bldg Products	7.478	-0.40	9.90%	Power	8.880	-1.20	0.72%
Consumer Products	6.831	-0.69	4.80%	Retail	7.129	-1.49	4.63%
Energy	7.181	-1.55	1.84%	Service	8.099	-0.93	6.28%
Finance	7.467	-1.03	8.40%	Technology	8.564	-2.73	5.96%
Healthcare	7.332	-1.27	4.54%	Telecom & Cable	7.372	-1.45	3.71%
Leisure & Gaming	8.245	-1.17	7.28%	Transportation	7.901	-0.25	8.55%
Manufacturing	6.491	-0.79	4.24%	HYMI	7.461	-1.26	4.88

Source: Citi

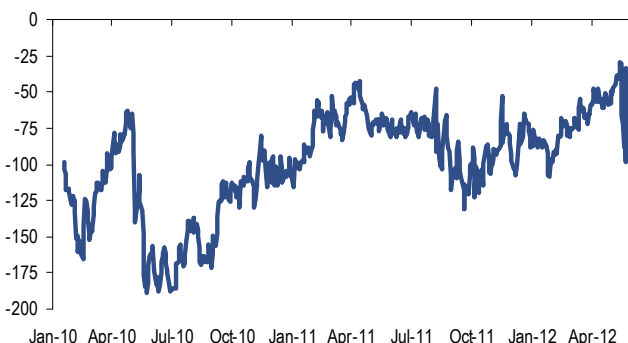
HY 18 CDX Underlying Performance, 25 May – 30 May (pts)



Source: Markit

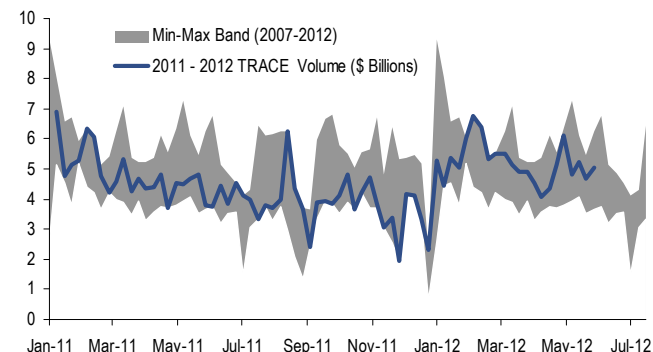
Source: Markit

Median High-Yield Non-Call Liquid Basis



Source: CIRA

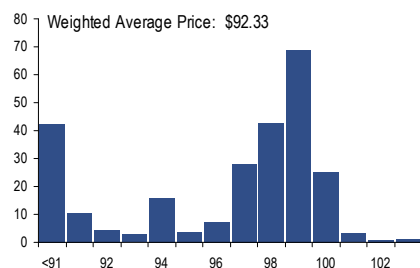
HY Bonds Traded Volume, 5-Day MA



Source: TRACE

Leveraged Loan Tracker (As of Thursday)

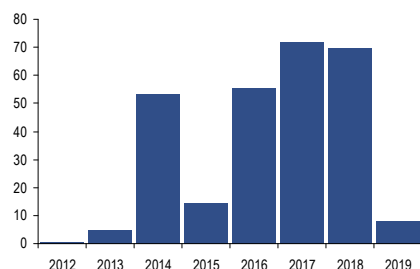
Loan Price Distribution (Market Value, \$bn)



Note: Price distribution of the loans in the Leveraged Loan Tracker.

Source: CIRA, Markit

Maturity Wall (Notional, \$bn)

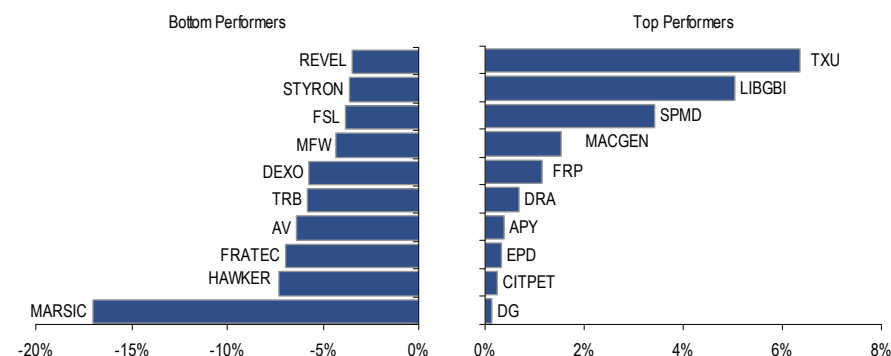


Note: Maturity wall of the loans in the Leveraged Loan Tracker.

Source: CIRA, Markit

- The Leveraged Loan Tracker lost 0.19% last week, taking the year-to-date performance to +3.35%. The Tracker's average price and spread are \$92.33 and 622bp, respectively.
- The Capped Tracker lost 0.18% last week; year-to-date performance is now +3.49%.
- Power (+3.65%) was the top performer last month, while energy (-3.37%) and finance (-2.26%) are lagging.

Leveraged Loan Tracker Issuer Performance (%), May



Source: CIRA, Markit

Source: CIRA, Markit

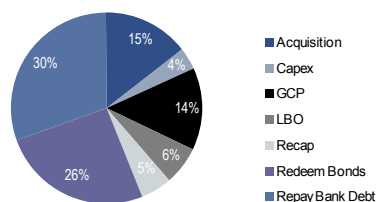
Leveraged Loan Tracker Capped and Uncapped Total Returns by Sector

	Uncapped							Capped						
	Current			Month-to-Date		Year-to-Date		Current			Month-to-Date		Year-to-Date	
	Market Value	Price	Spread	Total Return	Spread Change	Total Return	Spread Change	Market Value	Price	Spread	Total Return	Spread Change	Total Return	Spread Change
All Loans	\$256,438	92.33	622	-0.91%	42	3.35%	17	\$235,454	94.51	566	-1.12%	45	3.49%	5
Auto Mfg/Vehicle Parts	3.77%	97.85	417	-1.44%	57	4.12%	-15	4.11%	97.85	417	-1.44%	57	4.21%	-15
Basic Materials	4.79%	97.62	419	-1.37%	33	1.79%	47	5.22%	97.62	419	-1.37%	33	2.23%	47
Building/Bldg Products	1.23%	95.40	585	-0.78%	38	3.95%	12	1.34%	95.40	585	-0.78%	38	4.34%	12
Consumer Products	4.93%	99.02	379	-0.62%	25	3.59%	-171	5.37%	99.02	379	-0.62%	25	3.59%	-171
Energy	1.18%	94.91	692	-3.37%	116	-2.54%	191	1.29%	94.91	692	-3.37%	116	-2.38%	191
Finance	2.80%	87.16	806	-2.26%	59	5.80%	12	3.05%	87.16	806	-2.26%	59	5.25%	12
Healthcare	13.64%	98.87	397	-0.69%	26	2.89%	18	14.54%	98.89	398	-0.69%	25	3.21%	17
Leisure & Gaming	4.88%	94.93	558	-1.74%	58	4.36%	-22	4.57%	95.79	522	-1.66%	37	3.72%	-31
Manufacturing	2.72%	93.12	681	-1.19%	57	-0.70%	156	2.96%	93.12	681	-1.19%	57	-0.39%	156
Media & Entertainment	11.35%	81.77	1,144	-1.87%	85	7.77%	-101	9.88%	81.72	1,183	-1.75%	89	7.79%	-115
Paper & Packaging	1.33%	99.12	489	-0.47%	23	2.04%	195	1.45%	99.12	489	-0.47%	23	2.10%	195
Power	7.08%	69.04	1,463	3.65%	-74	-2.63%	334	4.17%	80.84	1,056	1.46%	-9	-0.45%	230
Retail	11.78%	98.57	411	-0.84%	40	3.36%	2	12.83%	98.57	411	-0.84%	40	3.27%	2
Service	5.46%	94.74	559	-1.37%	67	7.11%	-107	5.94%	94.74	559	-1.37%	67	6.89%	-107
Technology	9.84%	96.38	503	-1.01%	39	5.01%	-71	8.88%	97.10	487	-1.13%	42	3.95%	-57
Telecom & Cable	12.80%	97.52	461	-1.47%	46	2.00%	70	13.95%	97.52	461	-1.47%	46	1.87%	69
Transportation	0.42%	95.21	520	-0.41%	38	10.78%	-366	0.45%	95.21	520	-0.41%	38	10.78%	-366

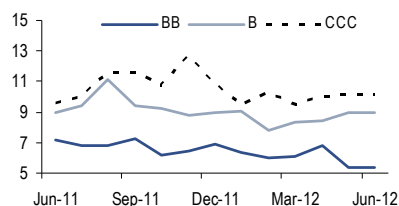
Source: Citi Investment Research and Analysis, Markit. Note that MTD values are for May.

Issuance Tracker (As of Thursday)

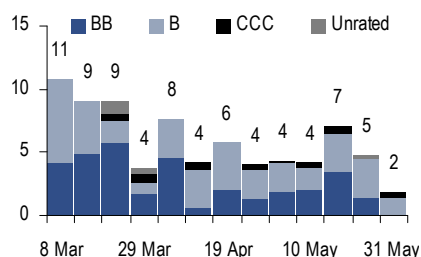
Breakdown of Use of Proceeds, 2011-2012



Weighted Average Coupon by Rating (%)



Weekly Issuance by Rating (\$bn)



Note: USD denominated issuance only.

Source: CIRA

■ The primary market was quiet this week. 4 companies issued \$1.2 billion through Thursday.

■ The forward calendar looks light as the summer approaches.

Bond Deals Priced in the Market for May 25 – May 31 (\$ in Millions)

Date	Issuer	Amt	Coupon	Maturity	Ratings	Use of Proceeds
05/31/12	Boyd Gaming Corp	350.0	9.000	7/1/2020	B3/B	Acquisition
05/31/12	Comstock Resources	285.9	9.500	6/15/2020	B3/B-	Repay Bank Debt
05/30/12	Rivers Pittsburgh LP	275.0	9.500	6/15/2019	Caa1/B	Redeem Existing
05/30/12	Nara Cable Funding	263.5	8.875	12/1/2018	B1/B+	Redeem Existing

4 Transactions **1,174**

Note: Some deals might be removed for compliance reasons; therefore the sum of the deals might not equal the total. Non-USD deals are included.

Source: CIRA

Representative Bond Transactions Currently in the Market (\$ in Millions)

Issuer	Amount	Term	Priority
American Casino	310.0	7.0	Sr. Secured Notes

Source: Citi Syndicate

Appendix A-1

Analyst Certification

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