Fifth Third Capital Markets: Market Update

October 11, 2016

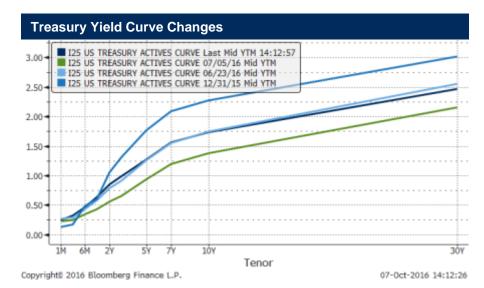


# **Economic Conditions**

We've seen increases in short term and long term rate expectations, a stronger U.S. Dollar and higher oil prices...

- Today's Labor Department report showed employers continuing to add to payrolls in September as record openings drew more Americans into the workforce and most found jobs, indicating the U.S. labor market is settling into a pace that will support the economy. The 156,000 increase for September followed a 167,000 August increase. The unemployment rate rose from 4.9% to 5.0% as the labor participation rate ticked up to a six month high. Average hourly earnings rose 0.2% month over month (18 months of increases and 3 months of no change in the past 21 months) while average hourly earnings rose 2.6% year over year (15 straight months at 2.2% or higher).
- In addition, ISM non-manufacturing (service sector) data rebounded strongly in September, climbing from 51.4 to 57.1, the best level in nearly a year and following ISM manufacturing data that was stronger than expected as well, climbing from 49.4 to 51.5.
- Steady employment gains help underpin further wage gains and consumer spending, the main driver of U.S. expansion this year, and likely encourage Federal Reserve policy makers to follow through on their forecast for an interest rate increase by the end of 2016.
- While the Fed decided last month to wait for stronger signs of growth before raising rates again, some central bank officials have since publicly endorsed a hike in the near term amid signs of a tightening labor market and expectations that inflation will move closer to the Fed's 2% target.
- Adding to more recent and seemingly more hawkish rhetoric and USD strength this week, Fed Vice Chairman Fischer said that "ultra-low rates are not necessarily here to stay" and Cleveland Fed President Loretta Mester said that the case for a rate increase remains "compelling".
- The GBP fell to a 31 year low against USD as concerns appear to be growing that the U.K. is heading for a "hard exit" from the EU, possibly resulting in the UK no longer having unrestricted access to the EU's single market. German Chancellor Angela Merkel warned "there will be no easy negotiations", signaling a growing reluctance to grant any special terms to the U.K. post-Brexit. In addition, reports surfaced this week that the ECB may not remain as accommodative and is considering tapering its QE bond purchasing program in advance of its scheduled end date next year, increasing concerns about a possible European style "taper tantrum" similar to the bond sell off in the U.S. after QE bond purchase tapering was announced in 2013. Concerns have been raised around the Bank of Japan potentially backing away from increasing their bond buying program as well.
- Crude oil hovers around \$50 per barrel as declines in U.S. inventories and OPEC's agreement to cap production supports hopes that the global supply glut may end.

- Fed Funds Futures are currently implying only 11.5 bps of rate increases or a 46% probability of a 25 bp rate increase by year end. That probability was 38% in late September and as high as 70% in late August. Fed Funds Futures are currently implying a total of 25 bps of rate increases by April of 2017 and a total of 50 bps of rate increases by September of 2018.
- 10 year Treasury yields at 1.74% are up 14 basis points month to date, are up 38 bps from their historic lows of 1.36% in early July and are back to the levels seen on June 23 (before the UK referendum results were announced).
- The next round of Retail Sales data is scheduled to be released on October 14, CPI on October 18, the first estimate of 3Q GDP on October 28, Personal Income, Personal Spending and PCE data on October 31, ISM Manufacturing on November 1, ISM Non-Manufacturing data on November 3 and Payroll, Unemployment and Average Hourly Earnings data on November 4.
- The next scheduled FOMC meetings are November 1-2 and December 13-14.



# Rate Information

	Current	2 Weeks Ago	2 Week Range	1 Month Ago	1 Month Range	2015 Year End	Period Range
2 Year Treasury Yield	0.85%	0.75%	12 bps	0.73%	12 bps	1.05%	50 bps
5 Year Treasury Yield	1.27%	1.16%	17 bps	1.12%	17 bps	1.76%	82 bps
10 Year Treasury Yield	1.74%	1.62%	18 bps	1.54%	20 bps	2.27%	91 bps
2-5 Year Treasury Spread	43 bps	40 bps	6 bps	39 bps	8 bps	71 bps	37 bps
2-10 Year Treasury Spread	89 bps	86 bps	7 bps	81 bps	16 bps	122 bps	49 bps
3 Year Sw ap Rate	1.15%	1.07%	12 bps	1.04%	12 bps	1.42%	64 bps
5 Year Sw ap Rate	1.28%	1.19%	14 bps	1.14%	16 bps	1.74%	81 bps
1 Year Forward 4 Year Swap Rate	1.34%	1.23%	16 bps	1.17%	18 bps	1.95%	99 bps
2 Year Forward 3 Year Swap Rate	1.40%	1.29%	19 bps	1.21%	20 bps	2.11%	110 bps
10 Year Sw ap Rate	1.57%	1.46%	17 bps	1.39%	19 bps	2.19%	94 bps
1 Year Forward 10 Year Swap Rate	1.66%	1.55%	19 bps	1.47%	21 bps	2.40%	106 bps
5 Year ATM Implied Cap Vol	52	57	7	61	10	46	42
3M5Y ATM Normal Sw aption Vol	65	65	2	69	10	73	34
	Current	2 Weeks Ago	2 Week Change	1 Month Ago	1 Month Change	2015 Year End	Period Change
Effective Fed Funds	0.40%	0.40%	0 bps	0.40%	0 bps	0.35%	5 bps
Dec. 2016 Fed Funds Futures	0.50%	0.48%	1 bps	0.50%	0 bps	0.89%	-39 bps
Dec. 2017 Fed Funds Futures	0.77%	0.69%	7 bps	0.67%	10 bps	1.43%	-67 bps
One Month LIBOR	0.53%	0.52%	1 bps	0.51%	2 bps	0.43%	10 bps
12/31/16 One Month LIBOR Forward	0.65%	0.66%	-1 bps	0.68%	-3 bps	1.68%	-103 bps
12/31/17 One Month LIBOR Forward	0.92%	0.87%	5 bps	0.86%	6 bps	2.20%	-128 bps
Three Month LIBOR	0.88%	0.85%	2 bps	0.83%	4 bps	0.61%	26 bps
12/31/16 Three Month LIBOR Forward	0.96%	0.93%	3 bps	0.92%	4 bps	1.87%	-91 bps

# **Equity Market Overview**

- 3Q16 earnings season is set to include a familiar theme of reduced analyst expectations, which is typically a good sign for market performance when companies report
  - Over the past four weeks, 392 of the S&P 1500 companies received upward EPS estimate revisions from analysts vs. 518 negative revisions (-126 net)
- Sentiment surrounding the prospects of an OPEC output deal has improved, causing crude oil prices to hover around \$50
- The VIX Index has come back down during late September/ early October after a spike in volatility during mid-September
- Fed Fund futures are currently pointing toward a 68% probability of a rate hike in December (highest odds exhibited since June 2, 2016)
- Signs of a more stabilized US and global economy have trickled out of recent economic reports
- US Presidential election poised to inject uncertainty into

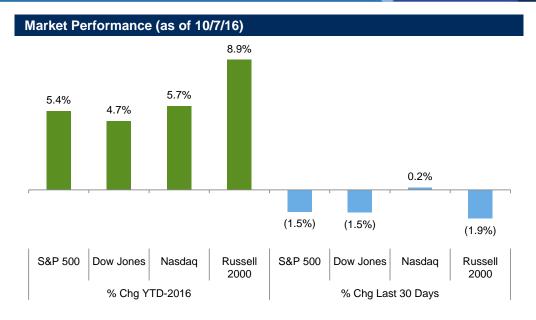
#### markets in addition to other headline risks entering 4Q16 YTD Sector Performance (as of 10/7/16) Energy 16.0% Info Tech 11.0% Telecom Services 9.4% Utilities 8.8% Materials 7.5% Industrials 7.4% **Consumer Staples** 3.6% **Consumer Discretionary** 2.0% Financials 1.2% Real Estate 0.0% Healthcare (0.2%)

0%

10%

20%

(10%)



S&P 1500 Analyst R	S&P 1500 Analyst Revisions of EPS Estimates									
	Net Estimate	Companies in	Percentage of	Last 30 Day						
Sector	Revisions	Sector	Companies	Return						
Cons Discretionary	(58)	255	(22.7%)	(2.8%)						
Cons Staples	(13)	70	(18.6%)	(3.9%)						
Energy	(28)	84	(33.3%)	3.6%						
Financials	5	209	2.4%	(0.5%)						
Health Care	(23)	160	(14.4%)	(1.2%)						
Industrials	(28)	230	(12.2%)	(2.1%)						
Technology	33	231	14.3%	0.3%						
Materials	(13)	94	(13.8%)	(3.1%)						
Real Estate	(3)	97	(3.1%)	(9.4%)						
Telecom Services	(5)	15	(33.3%)	(1.9%)						
Utilities	7_	55_	12.7%	(6.1%)						
S&P 1500	(126)	1,500	-8.4%	(1.6%)						

# **Equity Capital Markets Activity**

- Q4 is off to a hot start on the new issue front, with 6 IPOs, 4 follow-ons, and 2 convertibles pricing in the opening days of October
- New issue deal pipeline has built steadily as equities have continued to hold valuations
- Convertible activity has been spotty YTD; however, 3Q16 ended with nice momentum (September/August pricing 24 CONVs)
- Filing activity has picked up somewhat on the IPO front, yet shelf registrations have slowed
- The IPO market has shown significant signs of life since Labor Day, with 21 IPOs pricing for \$3.5B in proceeds
  - Investor demand has been solid as evidenced by the pricing environment which saw 8 of the deals price above the range (out of 11 for all of 2016) and 10 within the range
- After market performance was also strong, with post-Labor Day IPOs trading up 30% on average on the first day of trading and 29% from offer to current
- IPO filing activity since the beginning of September has yielded
   22 issuers vs. 26 in the same 2015 period
- September saw a continuation of solid follow-on issuance driven by acquisition financings (39% of proceeds raised), yet October has begun with a more tempered start (4 FOs pricing)
- Following a surge of bought deals in August (59% of deals), accelerated offerings saw an uptick in September, accounting for 55% of follow-ons
  - Bought deals accounted for 35% of September activity, as compared for 50% for all of 3Q16 and 31% for 2015
- Shelf filing activity in September tapered off from a robust August (57 filings vs. 70 respectively), and October is off to a slow start with only 7 filings vs. 26 MTD-2015

#### **YTD-Equity Issuance**

	2	016-YTD			2	015-YTD	
	Proceeds	Mkt	#	Pro	ceeds	Mkt	#
Deal Type	(\$B)	Share %	Deals		(\$B)	Share %	Deals
IPOs	\$13.9	9%	67		\$25.9	13%	125
Follow-ons	\$108.6	72%	320	\$	141.7	72%	455
Convertibles	\$28.3	19%	55		\$29.1	15%	55
Total	\$150.7		442	\$	196.7		635

#### **IPO Issuance by Month**



#### Follow-on Issuance by Month



# **Convertible Market Activity**

- Convertible market activity saw a continuation of momentum experienced in August carry over into September, with 12 deals raising \$4.9B
  - Additionally, 2 convertibles have raised \$405mm in the opening weeks of October
  - Acquisition finance has spurred the majority of convertible issuance, accounting for 10 of the 26 deals to price since the beginning of August
- Since the beginning of August, 12 of the 26 deals to successfully price were upsized, evidencing the imbalance between supply and demand for convertibles remains

# Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Apr-16 May-16 Jul-16 Aug-16 Sep-16 Oct-16

1.1

365

0.5

230

1.0

200

10.3

858

1.0

348

7.9

659

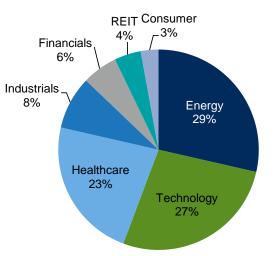
4.9

410

0.4

203

# LTM Issuance by Sector (# deals)



Recen	t Convertible Transa	ictions	Overview						
Pricing		Size	Mkt Cap	% Mkt	Convertible	Maturity	Coupon	Conv	Call Spread
Date	Issuer	(\$mm)	(\$mm)	Cap	Туре	(yrs)	(%)	Prem (%)	Prem (%)
10/07/16	Macquarie Infrastructure	\$350	\$6,758	5%	Cash Pay	6	2.00%	35%	-
10/04/16	Resolute Energy	55	396	14%	Preferred	NA	8.13%	15%	-
09/30/16	Arbor Realty Trust	75	392	19%	Cash Pay	3	6.50%	10%	-
09/29/16	Chesapeake Energy	1,250	4,755	26%	Cash Pay	9	5.50%	40%	-
09/29/16	DTE Energy	600	16,696	4%	Preferred	NA	6.50%	25%	-
09/27/16	Goldman Sachs BDC	115	809	14%	Cash Pay	6	4.50%	10%	-
09/27/16	Great Plains Energy	863	5,632	15%	Mandatory	NA	7.00%	20%	-
09/16/16	Wheeler REIT	40	109	37%	Preferred	NA	8.75%	36%	-
09/14/16	Oasis Petroleum	300	1,750	17%	Cash Pay	7	2.63%	35%	-
09/09/16	Adv Micro Devices	805	4,952	16%	Cash Pay	9	2.13%	33%	-
09/08/16	PDC Energy	200	3,478	6%	Cash Pay	5	1.13%	35%	-
09/07/16	Insulet	345	2,523	14%	Cash Pay	5	1.25%	33%	-
	Average	\$416	\$4,021	16%		6	4.67%	27%	
	Median	\$323	\$3,000	15%		6	5.00%	33%	

Amt (\$B)

Avg Amt (\$mm)

2.1

689

0.4

221

Pacent Convertible Transactions Overvio

1.9

317

0.3

325

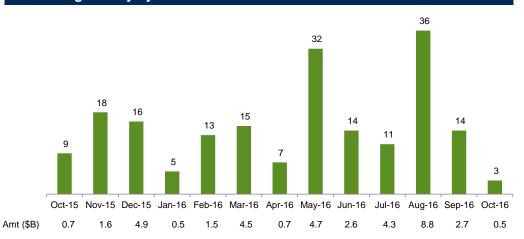
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270

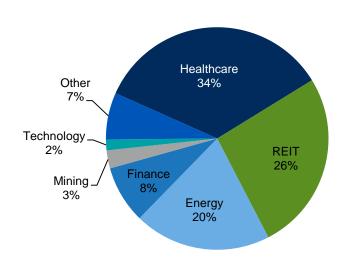
# At-the-Market Offering Update

- At-the-Market ("ATM") offering program filings have increased YTD vs. the same 2015 period (150 vs. 143), aided by a jump in the period since August (53 filings)
- ATM popularity continues to grow, as seasoned issuers seek the ability to opportunistically offer equity with ease during favorable stock price movements
  - Healthcare led LTM ATM filings from a sector perspective, buoyed mostly by Biotech/Pharma, which comprised 85% of all Healthcare ATM filings
  - REITs and Energy continue to comprise a sizeable portion of ATMs filed, making up 26% and 20% of ATM announcements in the LTM, respectively

#### **ATM Filing Activity by Month**



#### LTM ATM Announcements by Sector (# of ATM Filings)



#### Recent ATM Filing Details

	Amt	Mkt Cap @	Offer % of	
uer	(\$mm)	Offer (\$mm)	Mkt Cap	Sector
ncor	\$40	\$972	4.1%	Healthcare
noco	400	2,783	14.4%	Energy
eat Ajax	50	216	23.1%	REIT
otech	50	415	12.1%	Healthcare
REIT	750	9,663	7.8%	REIT
ncor	40	1,023	3.9%	Healthcare
ero Energy Partners	350	2,779	12.6%	Energy
rie Pharmaceuticals	50	563	8.9%	Healthcare
rporate Office Properties	200	2,659	7.5%	REIT
eur Mining	200	2,406	8.3%	Mining
R	250	6,648	3.8%	REIT
P Enterprises	25	402	6.2%	Machinery
l Homes	25	830	3.0%	Const/Build
ORE Capital	400	3,760	10.6%	REIT
mm Sales & Leasing	250	4,910	5.1%	REIT
erage	\$217	\$2,790	9.1%	
dian	\$200	\$2,533	8.0%	
	ncor noco pat Ajax otech REIT ncor lero Energy Partners rie Pharmaceuticals rporate Office Properties eur Mining R P Enterprises I Homes ORE Capital mm Sales & Leasing erage	uer         (\$mm)           nccor         \$40           ncco         400           eat Ajax         50           otech         50           REIT         750           ncor         40           ero Energy Partners         350           rie Pharmaceuticals         50           rporate Office Properties         200           eur Mining         200           R         250           P Enterprises         25           I Homes         25           ORE Capital         400           mm Sales & Leasing         250           erage         \$217	uer         (\$mm)         Offer (\$mm)           ncor         \$40         \$972           ncoc         400         2,783           eat Ajax         50         216           otech         50         415           REIT         750         9,663           ncor         40         1,023           ero Energy Partners         350         2,779           rie Pharmaceuticals         50         563           rporate Office Properties         200         2,659           eur Mining         200         2,406           R         250         6,648           P Enterprises         25         402           I Homes         25         830           ORE Capital         400         3,760           mm Sales & Leasing         250         4,910           erage         \$217         \$2,790	uer         (\$mm)         Offer (\$mm)         Mkt Cap           ncor         \$40         \$972         4.1%           ncoc         400         2,783         14.4%           eat Ajax         50         216         23.1%           otech         50         415         12.1%           REIT         750         9,663         7.8%           ncor         40         1,023         3.9%           ero Energy Partners         350         2,779         12.6%           rie Pharmaceuticals         50         563         8.9%           rporate Office Properties         200         2,659         7.5%           eur Mining         200         2,406         8.3%           R         250         6,648         3.8%           P Enterprises         25         402         6.2%           I Homes         25         830         3.0%           ORE Capital         400         3,760         10.6%           mm Sales & Leasing         250         4,910         5.1%           erage         \$217         \$2,790         9.1%

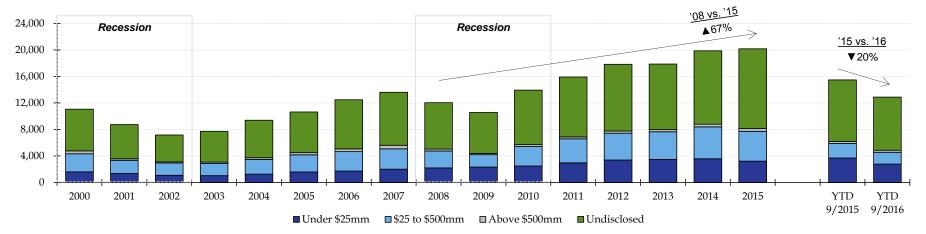


#### U.S. M&A Market

#### Volume and Valuation Trends

#### **Transaction Volume**

- Historically, M&A cycles have not extended past seven years; 2016 is year six of the cycle
- Relative to past cycles, interest rates are lower, corporate balance sheets are stronger, and private equity firms have more untapped capital
- 2016 has demonstrated signs that the buyout cycle is slowing, however, plenty of positive drivers remain



#### Median Transaction Multiples (Enterprise Value / LTM EBITDA)

- Purchase multiples by both financial and strategic buyers remain above their five-year median
- Deal multiples are expected to remain elevated due to strong competition for high quality assets as strategic corporate and private equity firms continue to seek acquisitions to fuel growth and deploy capital



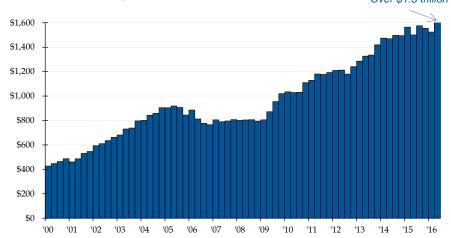
# U.S. Middle Market M&A

## Significant Capital Available to Complete Acquisitions

#### S&P 500 - Aggregate Corporate Cash & Equivalents (\$ in billions) [1]

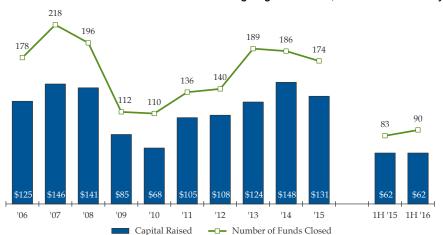
 U.S. corporate cash balances remain near record levels and are driving activity in strategic buyer M&A

Over \$1.5 trillion



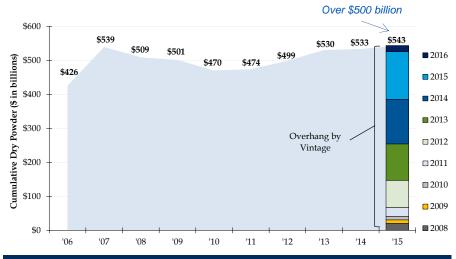
#### U.S. Middle Market PE Fundraising by Year (\$ in billions) [3]

- Strong middle market private equity ("PE") fundraising indicates a stable level of dealmaking going forward
  - 94% of PE funds hit their fundraising target in 1H '16, a historical anomaly



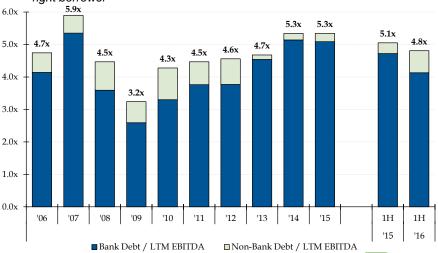
#### U.S. Private Equity Capital Overhang by Year (\$ in billions) [2]

Private equity firms continue to sit on a built up level of dry powder



#### Average Multiples of U.S. Middle Market LBO Loans [4]

 Despite recent market pullback, the credit market remains favorable for the right borrower

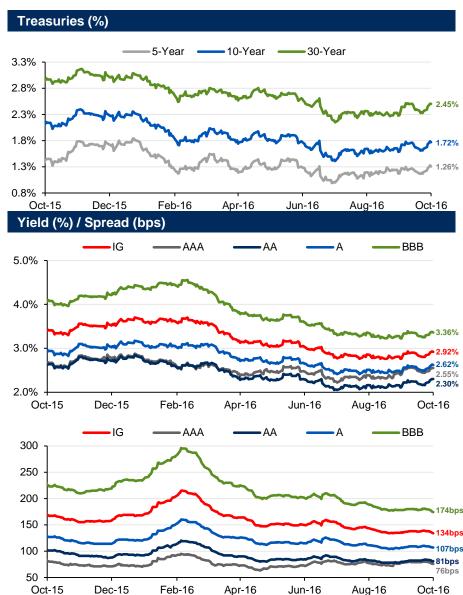


# **Investment Grade Bond Market Update**

#### Commentary

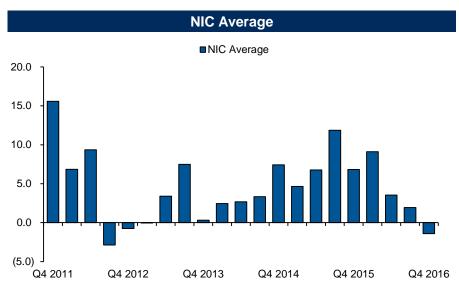
- Last week the investment grade bond market experienced its slowest week in a month, as the majority of corporate issuers entered their blackout periods post-quarter close. Supply for the week totaled 23 tranches for \$12.5 billion, compared to 26 tranches totaling \$17.0 billion in the prior week. Inflows to investment grade funds remained strong at \$1.40 billion, raising the year-to-date net flows to \$39.3 billion. IG spreads fell by 4 bps for the week, but were offset by a sharp increase in Treasury yields across the curve, leading to an increase in IG yields of 8 bps. YTD volume now stands at \$1,073.3 billion, compared to prior year's tally at this point of \$1,020.8 billion, but down 4.5% in deal volume perspective (1,177 tranches priced at 10/10/16 vs. 1,232 at 10/10/15).
- Jumbo issuance was limited last week, as the average deal size of \$541 million was the lowest since mid-June. PepsiCo led the week on Monday with a six-part \$4.5 billion issuance for a refinancing of a portion of its commercial paper and senior notes. The issue received lukewarm interest from investors, receiving an order book at \$11.3 billion (2.5x oversubscribed, compared to the weekly average of 4.1x).
- Xylem Inc. also issued on Monday, as the company sought \$900 million across two tranches to fund a portion of its planned acquisition of Sensus. Despite having to compete with the issue by Pepsi, Xylem's issue was very well-received by investors, amassing a total order book of \$8.9 billion, leading to oversubscription of 9.9x. As a result, both tranches priced 35 to 40 bps tighter than initial price talk.
- Investor reception of Xylem's issue was part of a larger trend that manifest last week, as investors continued to place a premium on new BBB issuers, seeking high quality paper that also provides yield. Spectra Energy (rated Baa2/BBB) came to market on Wednesday seeking \$800 million across two tranches. The issue amassed a total order book of \$6.9 billion, leading to NICs on both tranches of negative 8 bps and oversubscription of 8.6x.
- Average NICs were negative for the first time since August last week at negative 1.4 bps.
   Average order oversubscriptions for the week 4.1x, greater than the YTD average of 3.5x. The strongest execution of the week came from Western Gas Partners' \$200 million 30-year issue at negative 15 bps.
- Treasury yields rose sharply across the curve for the week, ending the two week trend of yields falling: the 5-year rose by 10.6 bps to 1.26%, the 10-year by 12.4 bps to 1.72% and the 30-year by 13.5 bps to 2.45%.

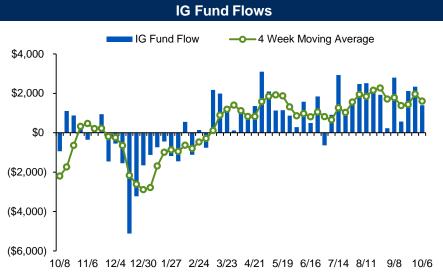


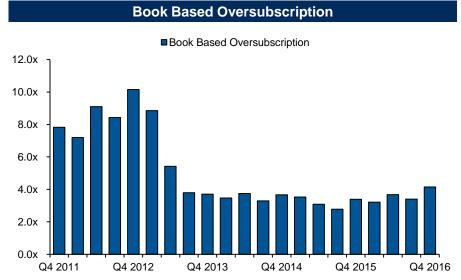


# U.S. Investment Grade Bonds at a Glance – Historical<sup>[1]</sup>







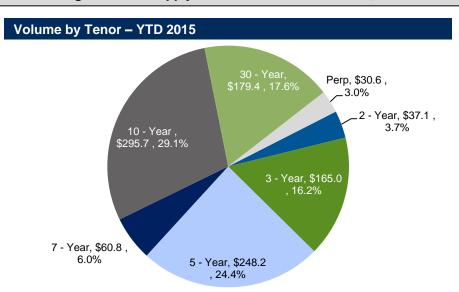


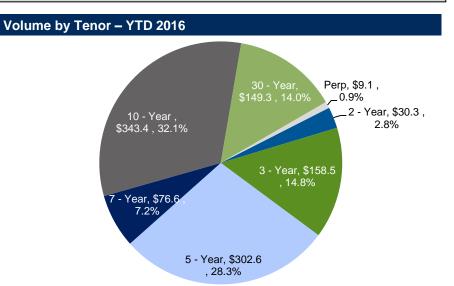
# Recent Investment Grade Bond Transactions

ssue								Rating		At-Issue			Execution
Date	Issuer	Sector	Use of Proceeds	Amount	Coupon	Security	Tenor	Moody's / S&P	Price	Yield	Spread	NIC	Oversubscription
10/6/16	Western Gas Partners	Utilities	Refinancing / Bank	\$200	5.450%	Sr Notes (Add on)	30	Ba1 / BBB-	102.776	5.256%	280	(15.0)	8.8x
10/5/16	MassMutual Global Funding II	Insurance	General Corporate Purposes	\$600	1.550%	FA Backed Notes (144A)	3	Aa2/AA+	99.945	1.569%	60	(4.0)	1.5x
10/5/16	MTN Investments	Telecom	General Corporate Purposes	\$500	5.375%	Sr Notes (144A)	5	Baa3 / BB+	100.000	5.375%		N/A	1.3x
10/5/16	MTN Investments	Telecom	General Corporate Purposes	\$500	6.500%	Sr Notes (144A)	10	Baa3 / BB+	100.000	6.500%		N/A	1.8x
10/5/16	Spectra Energy Partners	Utilities	Refinancing / Bank	\$600	3.375%	Sr Notes	10	Baa2 / BBB	99.865	3.391%	167	(8.0)	7.0x
10/5/16	Spectra Energy Partners	Utilities	Refinancing / Bank	\$200	4.500%	Sr Notes (Add on)	30	Baa2 / BBB	100.663	4.458%	202	(8.0)	13.5x
10/5/16	Tanger Properties	REIT - Retail	Refinancing / Bank	\$100	3.125%	Sr Notes (Add on)	10	Baa1 / BBB+	98.962	3.248%	153	(2.0)	5.0x
10/5/16	UPL Corporation	Chemicals	Refinancing / Bank	\$500	3.250%	Sr Notes (144A)	5	Baa3 / BBB-	99.954	3.260%	200	N/A	2.2x
10/4/16	ERP Operating LP	REIT - Multi Family	General Corporate Purposes	\$500	2.850%	Sr Notes	10	Baa1 / A-	99.341	2.926%	125	(2.5)	3.0x
10/4/16	Korea Housing Finance	Financial Services	General Corporate Purposes	\$500	2.000%	Covered (144A)	5	Aa1 / NR	99.721	2.059%	85	N/A	N/A
10/4/16	Realty Income	REIT - Retail	Refinancing / Bank	\$600	3.000%	Sr Notes	10	Baa1 / BBB+	98.671	3.153%	147	(7.0)	4.2x
10/4/16	Sempra Energy	Utilities	Refinancing / Bank	\$500	1.625%	Sr Notes	3	Baa1 / BBB+	99.898	1.660%	72	(1.0)	2.8x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$750	1.350%	Sr Notes	3	A1 / A	99.985	1.355%	45	0.0	2.3x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$250	3mL+27	Sr Notes	3	A1 / A	100.000		3mL+27	0.0	1.6x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$750	1.700%	Sr Notes	5	A1 / A	99.866	1.728%	55	0.0	2.8x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$250	3mL+53	Sr Notes	5	A1 / A	100.000		3mL+53	0.0	2.0x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$1,000	2.375%	Sr Notes	10	A1 / A	99.982	2.377%	75	4.0	3.0x
10/3/16	PepsiCo	Food & Beverage	Refinancing	\$1,500	3.450%	Sr Notes	30	A1 / A	99.186	3.494%	115	3.0	2.4x
10/3/16	General Motors Financial	Automotive	General Corporate Purposes	\$750	2.350%	Sr Notes	3	Ba1 / BBB-	99.971	2.360%	145	9.0	1.5x
10/3/16	General Motors Financial	Automotive	General Corporate Purposes	\$250	3mL+127	Sr Notes	3	Ba1 / BBB-	100.000		3mL+127	9.0	1.6x
10/3/16	General Motors Financial	Automotive	General Corporate Purposes	\$750	4.000%	Sr Notes	10	Ba1 / BBB-	99.861	4.017%	240	(1.5)	3.3x
10/3/16	Xylem	Utilities	Acquisition	\$500	3.250%	Sr Notes	10	Baa2 / BBB	99.794	3.274%	165	N/A	9.8x
10/3/16	Xylem	Utilities	Acquisition	\$400	4.375%	Sr Notes	30	Baa2 / BBB	98.957	4.438%	210	N/A	10.0x
9/29/16	AIG Global Funding	Insurance	General Corporate Purposes	\$400	1.900%	FA Backed Notes (144A)	5	A2 / A+	99.815	1.939%	83	0.0	1.4x
9/29/16	DTE Energy	Utilities	Refinancing / Bank	\$400	1.500%	Sr Notes	3	A3 / BBB	99.875	1.543%	70	5.0	2.8x
9/29/16	DTE Energy	Utilities	Refinancing / Bank	\$600	2.850%	Sr Notes	10	A3 / BBB	99.897	1.562%	130	10.0	1.8x
9/29/16	El Puerto de Liverpool	Retailer	General Corporate Purposes	\$750	3.875%	Sr Notes (144A)	10	NR / BBB+	98.881	4.012%	245	5.0	3.0x
9/29/16	Fortis	Utilities	Acquisition	\$500	2.100%	Sr Notes (144A)	5	Baa3 / BBB+	99.745	2.154%	105	debut	5.0x
9/29/16	Fortis	Utilities	Acquisition	\$1,500	3.055%	Sr Notes (144A)	10	Baa3 / BBB+	100.000	3.055%	150	debut	2.0x
9/29/16	Viacom Inc	Media	Refinancing / Bonds	\$400	2.250%	Sr Notes	5	Baa3 / BBB-	99.692	2.312%	120	(10.0)	9.3x
9/29/16	Viacom Inc	Media	Refinancing / Bonds	\$900	3.450%	Sr Notes	10	Baa3 / BBB-	99.481	3.512%	195	(10.0)	7.8x
9/28/16	American Tower Corp	REIT - Other	Refinancing / Bank	\$600	2.250%	Sr Notes	5	Baa3 / BBB-	99.858	2.279%	117	5.0	2.3x
9/28/16	American Tower Corp	REIT - Other	Refinancing / Bank	\$400	3.125%	Sr Notes	10	Baa3 / BBB-	99.933	3.133%	157	(2.0)	2.8x
9/28/16	CK Hutchison International	Retailer	Refinancing	\$750	1.875%	Sr Notes (144A)	5	A3 / A-	99.342	2.014%	90	6.0	2.5x
9/28/16	CK Hutchison International	Retailer	Refinancing	\$500	2.750%	Sr Notes (144A)	10	A3 / A-	99.092	2.855%	130	1.0	3.2x
9/28/16	Entergy Louisiana	Utilities	Refinancing / Bonds	\$400	2.400%	Sr Notes	10	A2 / A	99.577	2.448%	90	(3.5)	2.5x
9/28/16	HSBC Holdings	Bank	General Corporate Purposes	\$2,500	2.650%	Sr Notes	5	A1 / A	99.906	2.670%	155	11.0	2.1x
9/28/16	HSBC Holdings	Bank	General Corporate Purposes	\$1,250	3mL+150	Sr Notes	5	A1 / A	100.000		3mL+150	11.0	1.8x
9/27/16	Lehigh University	Universities	General Corporate Purposes	\$150	3.479%	Sr Notes	30	Aa2 / AA-	100.000	3.479%	120	N/A	NA
9/26/16	Air Lease	Leasing	General Corporate Purposes	\$500		Sr Notes	3	NR / BBB-	99.643	2.239%	138	8.5	2.2x
	Total \$ Volume	-		\$24,950				Min	98.671	1.355%		(15.0)	1.3x
	Total Deals			\$24,930 40				Max	102.776	6.500%		11.0	13.5x
	Median Deal Size			\$500									
								Median	99.871	2.891%		0.0	2.6x

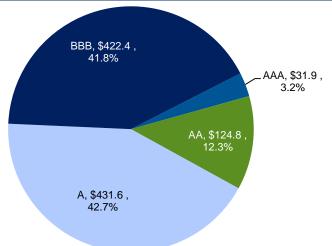
# Comparative Issuance – YTD 2015 vs. YTD 2016<sup>[1]</sup>

Investment grade bond supply for YTD 2016 consisted of 1,177 deals for \$1,073.3 billion, compared to 1,232 deals for \$1,020.8 billion for YTD 2015



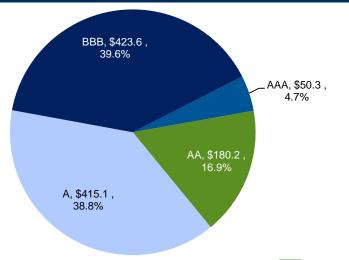


# Volume by Rating - YTD 2015



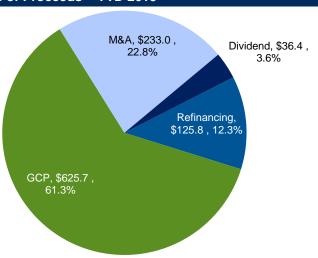
Source: Fifth Third Securities / LCD / IFR Markets Note: \$ in billions [1] YTD data as of October 7<sup>th</sup> for 2015 and 2016

#### Volume by Rating - YTD 2016

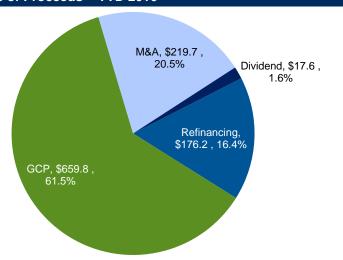


# Comparative Issuance – YTD 2015 vs. YTD 2016<sup>[1]</sup>

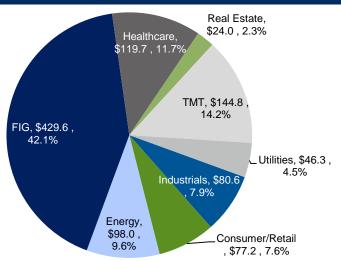
#### Volume by Use of Proceeds - YTD 2015



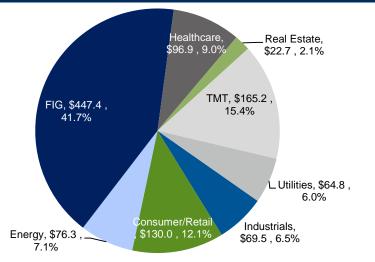
#### Volume by Use of Proceeds - YTD 2016



#### Volume by Sector - YTD 2015



#### Volume by Sector - YTD 2016



Source: Fifth Third Securities / LCD / IFR Markets Note: \$ in billions [1] YTD data as of October 7th for 2015 and 2016

# Leveraged Finance Market Snapshot

#### **Institutional Loan**

- September finished as one of the strongest months ever for the new issue loan market, with a staggering \$75.0 billion of total volume, \$60.3 billion of which was institutional volume. That \$60.3 billion was 63% higher than the prior 2016 monthly high of \$36.9 billion from June. In terms of use of proceeds September was evenly balanced between M&A-fueled transactions and opportunistic activity.
- October so far appears to be more of the same, with arrangers rolling out another 21 deals (29 loans) for \$7.5 billion in new volume through Wednesday. Of those new deals, about three-quarters of them were for opportunistic transactions, which makes sense given current average new issue yields. For single-B issuers coming to market, the average yield to maturity is 5.40%, and for double-B issuers, it's 3.68%. Both figures are inside of their year-to-date averages, and for double-B's, that's the lowest they've been in over 2 1/2 years.
- September came in as the strongest month for new CLO formations since mid-2015 with \$8.2 billion of issuance, up from \$5.9 billion in August. Additionally, US loan fund flows have strung together nine straight weeks of inflows. The supply / demand equation still largely favors issuers, but the imbalance has evened out from what the market saw in August. In August, demand outpaced supply by \$12.1 billion leading to 23 deals flexing down versus only 4 flexing up (5.8x issuer-friendly ratio). Comparatively, in September, demand exceeded supply by \$8.5 billion, and we saw a few more deals flex up: 20 down versus 11 up (1.8x ratio).
- The secondary index established a new year-to-date high of 95.3 this week, the highest it's been since August 2015. Leading the way are the transportation, construction, and gaming sectors all of which are trading above 99.7. 40% of loans are trading at or above par, an increase of 8% from a month earlier, and also the highest we've seen since August 2015.
- Finally, the forward calendar of institutional deals totals \$51.5 billion from 67 deals as of Wednesday. That's down from \$52.5 billion a week prior, but still well above the LTM and YTD averages of \$47.4 billion and \$43.3 billion, respectively.

#### **Monthly Issuance**



#### **High Yield Bonds**

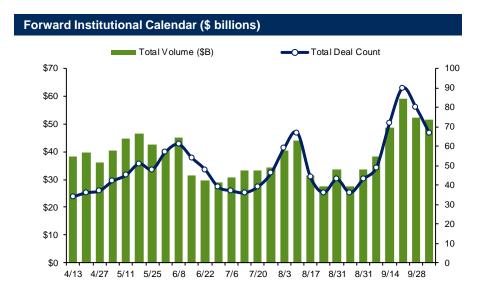
- Central Bank events, OPEC, and Financial Sector events (Wells Fargo & Deutsche Bank) played out over the course of September. On the Central Bank front, the Fed, Bank of England, and Bank of Japan provided narrative largely consistent with market expectations allowing for a stable backdrop. OPEC emerged with a late September announcement regarding plans for production controls to stem the financial challenges members have been facing. Although the headlines provided favorable optics to high yield, the impact will potentially be limited as market participants await further details.
- The third quarter came to a close with the high yield asset class standing at its strongest valuation levels of 2016, with the HY Index closing at 6.25%. Over the course of September, the asset class tended to trade defensively relative to recent months (indices drifting higher leading into key market events), and tightening upon absorption of outcomes/narrative. At 6.25%, the HY Index closed the 3<sup>rd</sup> quarter 100bps below beginning of the quarter levels of 7.25%.
- The defensive secondary environment in September was similarly reflected in the technical backdrop as capital movement was indicative of investors opting to be conservative given the Central Bank event calendar. As such, September saw two inflow weeks and two outflow weeks, with net activity of -\$105 million for the month. On a year-to-date basis, high yield net inflows stand at \$9.3 billion, reflecting a substantially different backdrop relative to 2015, when the net figure stood at -\$5.0 billion.
- The primary market posted the third best volume total for the year, with the \$28.6 billion figure approaching May's \$29.5 billion total and April's \$31.8 billion figure. Compositionally, supply offered a lot of options for investors as debut transactions, lower rated credits, and event driven transactions supplementing much of the high quality refinancing supply that has led the market recently. Although execution varied for some of the weaker credits on offer, issuers who are able to 'play ball' with investors on structural and price considerations have been able to get their deals done (although at higher clearing yields than known high quality names).

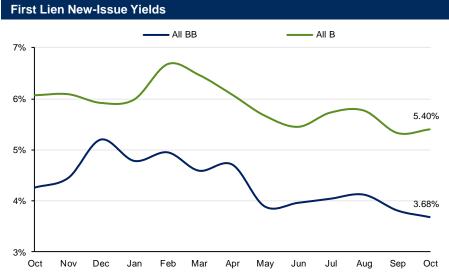
#### **Monthly Issuance**



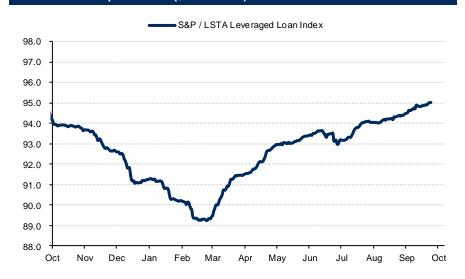


# Institutional Loan Market – Pricing and technicals are extremely favorable following record-setting September

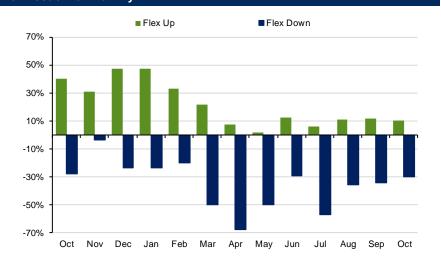




#### Loan Market Capital Flows (\$ in billions)

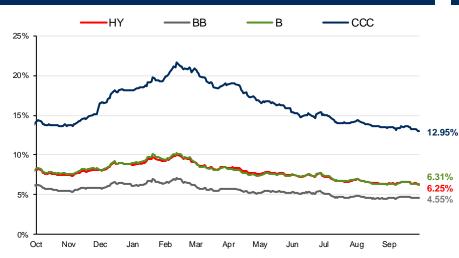


#### **New-Issue Flex Activity**

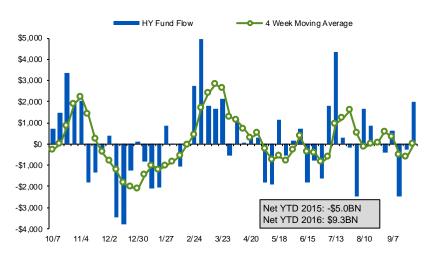


# High Yield – Conclusion of central bank events (FOMC/BoE/BoJ) allows for focus to return to markets

#### HY Index continues to hover at 2016 low



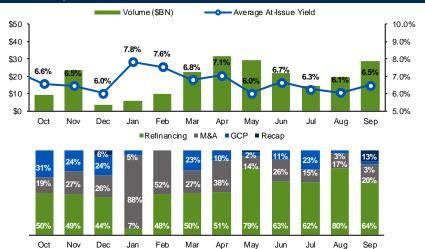
#### Investors appear to be readying themselves for October supply



#### September supply featured M&A and lower rated credits

Issue	leaves.	Rating	Issue	T	Yield	Use of Proceeds	Pricing Execution	Break
Date	Issuer	Moody's / S&P	Amount	Tenor	rieia	Use of Proceeds	Execution	Price
<b>Elevated</b>	yields offered on M&A Deals.	<u>.</u>						
9/30/16	Quality Healthcare Properties	B3 / BB-	\$750	7	8.125%	Spinoff	Outside	101.000
9/30/16	Vertiv (Cortes NP Acquisition)	B3 / B	\$750	8	9.250%	LBO	Wide	101.500
9/29/16	inVentiv Health Inc	Caa2 / CCC+	\$675	8	7.500%	Recap / Dividend	Tight	101.750
9/23/16	Donnelley Financial Solutions	B3 / B	\$300	8	8.250%	Spinoff	Outside	101.000
9/23/16	LSC Communications	Ba3 / B	\$450	7	8.750%	Spinoff	Outside	100.000
9/22/16	JDA Software	Caa1 / CCC+	\$350	8	7.375%	LBO	Through	102.500
In addit 9/29/16 9/20/16 9/16/16	cion to lower rated refinanciu Crescent Communities Landry's Restaurants Inc Cincinnati Bell Inc	ng transactions Caa1 / B+ Caa1 / CCC+ B3 / B	\$400 \$600 \$425	5 8 8	8.875% 6.750% 7.000%	Refinancing / Bonds Refinancing Refinancing / Bonds	Tight Tight Tight	100.500 101.500 101.250
9/13/16	Acelity / Kinetic Concepts	Caa1 / B-	\$1,750	5	9.625%	Refinancing / Bonds	At	100.250
	Low Yield High Yield Median Yield Average Yield				6.750% 9.625% 8.188% 8.150%			

#### Attractive yields continue to induce deals



# September TLB Transactions

\$ in m	illions														
Launch			Use of					Corporate	Facility				Yield at		Clearing
Date	Company	Status	Proceeds	Industry	Amount *	Tenor	Leverage Profile	Ratings	Ratings	Margin	Floor	OID	Launch	Flex	Yield
9/29/2016	Tweddle	In Market	Refinance	Industrial	\$225	7.0yr	3.9x Total	B / B2	B / B2	525-550	100	99.00	6.625%		
9/28/2016	PAE Holding	In Market	Dividend/Recap	Services	\$550*	6.0yr	4.0x 1L / 5.3x Total	B / B3	B / B2	475-500	100	99.00	6.125%		
9/27/2016	Ancestry	In Market	Refinance	TMT	\$1,350*	7.0yr	4.6x 1L / 6.5x Total	B / B2	TBD / TBD	425-450	100	99.50	5.500%		
9/27/2016	Casella Waste Systems	In Market	Refinance	Services	\$350 (Add-On)*	7.0yr	3.7x 1L / 4.6x Total	B / B2	B+ / B1	325	100	99.00	4.500%		
9/23/2016	MotorCity Casino Hotel	In Market	Reprice	Gaming & Leisure	\$478	4.0yr	3.9x 1L / 5.6x Total	B / B2	BB- / B1	325	75	99.00	4.353%		
9/22/2016	Rocket Software	In Market	Acquisition	TMT	\$630*	7.0yr	3.2x 1L / 5.0x Total	B / B2	NR / NR	450-475	100	99.00	5.875%		
9/21/2016	Confie Seguros	In Market	Refinance	Financial Services	\$590	5.5yr	4.0x 1L / 6.3x Total	B / B3	B / B1	425-450	100	99.00	5.625%		
9/21/2016	Fort Dearborn	In Market	LBO	Consumer / Retail	\$455*	7.0yr	4.7x 1L / 6.5x Total	B-/NR	B-/NR	450	100	99.00	5.750%		
9/21/2016	Vivid Seats	In Market	Refinance	TMT	\$400*	6.0yr	4.5x 1L / 6.3x Total	B / B3	B+ / B2	500-550	100	99.00	6.500%		
9/13/2016	ConvergeOne	In Market	Dividend/Recap	TMT	\$335	7.0vr	3.8x 1L / 4.9x Total	NR / B3	B / B2	500	100	99.00	6.250%		
9/12/2016	Keter Plastics	In Market	LBO	Basic Industry	\$773*	7.0vr	4.5x 1L / 5.5x Total	B / B2	B / B2	425	100	99.00	5.500%		
9/27/2016	Reynolds Group	Cleared / Allocated	Refinance	Consumer / Retail		6.5yr	4.9x 1L / 5.8x Total	B+ / B3	B+ / B2	325	100	99.875	4.313%	(0.03%)	4.281%
9/27/2016	Polycom	Cleared / Allocated	LBO	TMT	\$750*	7.0vr	2.7x 1L / 3.4x Total	B / B2	B+ / B1	650	100	96.00	7.375%	1.13%	8.500%
9/27/2016	Vizient	Cleared / Allocated	Reprice	Healthcare	\$1,122	6.5vr	2.8x 1L / 4.4x Total	B / B2	B+ / B1	400	100	100.00	5.000%	0.00%	5.000%
9/22/2016	Chobani	Cleared / Allocated	Refinance	Consumer / Retail	\$650*	7.0vr	3.7x 1L / 7.2x Total	B / B3	B+ / Ba3	425	100	99.50	5.563%	(0.19%)	5.375%
9/22/2016	US LBM	Cleared / Allocated	Refinance	Basic Industry	\$90 (Add-On)*	6.0yr	4.8x 1L / 5.9x Total	B+ / B3	B+ / B3	525	100	99.75	6.313%	0.00%	6.313%
9/21/2016	Focus Brands	Cleared / Allocated	Refinance	Consumer / Retail	\$600*	7.0vr	4.9x Total	B / B2	B / B2	400	100	99.50	5.688%	(0.56%)	5.125%
9/21/2016	Jo-Ann Stores	Cleared / Allocated	Refinance	Consumer / Retail	\$725*	7.0yr	3.8x 1L / 5.0x Total	B / B2	B / B1	500	100	98.00	5.750%	0.75%	6.500%
9/21/2016	Mohegan Tribal Gaming A		Refinance	Gaming & Leisure	\$785	7.0yr	3.6x 1L / 5.0x Total	B- / B3	B / B1	450	100	99.00	5.750%	0.00%	5.750%
9/21/2016	Zest Dental Solutions	Cleared / Allocated	Refinance	Healthcare	\$70 (Add-On)	4.0yr	5.1x Total	B / B3	B / B3	475	100	99.50	5.875%	0.00%	5.875%
9/21/2016		Cleared / Allocated	LBO	Basic Industry	\$320*	7.0vr	4.4x Total	B / B2	B / B2	450	100	99.50		(0.50%)	5.625%
	Henry Company				• • • •	- ,							6.125%		
9/16/2016	Misys	Cleared / Allocated	Refinance	TMT	\$1,000*	7.0yr	3.8x Total	B / B2	BBB- / B1	325	0	100.00	4.263%	(0.16%)	4.107%
9/15/2016	Press Ganey Holdings Inc		LBO	Services	\$760*	7.0yr	5.1x 1L / 6.9x Total	B / B3	B / B2	325	100	99.50	5.125%	(0.75%)	4.375%
9/15/2016	InVentiv Health	Cleared / Allocated	LBO	Healthcare	\$1,730*	7.0yr	4.9x 1L / 6.7x Total	B / B3	B / B2	375	100	99.50	5.625%	(0.75%)	4.875%
9/14/2016	Floor & Décor	Cleared / Allocated	Dividend/Recap	Consumer / Retail	\$350*	7.0yr	3.7x Total	B / B2	B / B2	425	100	99.50	6.000%	(0.63%)	5.375%
9/13/2016	LA Fitness	Cleared / Allocated	Refinance	Consumer / Retail	\$170 (Add-On)*	3.8yr	4.6x Total	B / B2	B+ / B1	500	100	99.50	6.188%	(0.06%)	6.125%
9/12/2016	Landry's Restaurants Inc	Cleared / Allocated	Refinance	Consumer / Retail	\$1,300*	7.0yr	3.8x 1L / 5.5x Total	B / B2	B+ / Ba3	325	75	99.50	4.356%	(0.13%)	4.231%
9/7/2016	Dunn Paper	Cleared / Allocated	LBO	Basic Industry	\$228	6.0yr	4.0x 1L / 5.0x Total	B / B2	B / B2	475	100	99.00	6.000%	0.00%	6.000%
9/7/2016	Thomson Reuters	Cleared / Allocated	LBO	TMT	\$1,550*	7.0yr	5.0x 1L / 6.5x Total	B+ / B3	BB- / B2	375	100	99.50	5.500%	(0.63%)	4.875%
9/7/2016	Blackboard	Cleared / Allocated	Refinance	TMT	\$934 (Add-On)*	4.8yr	4.5x 1L / 6.1x Total	B / B2	B+ / B1	500	100	99.00	6.125%	0.12%	6.250%
9/7/2016	Horizon Global	Cleared / Allocated	Acquisition	Industrial	\$152 (Add-On)	4.5yr	4.1x Total	B / B2	B / B2	600	100	99.50	7.188%	(0.06%)	7.125%
9/7/2016	Dell Software	Cleared / Allocated	Acquisition	TMT	\$1,350*	6.0yr	3.7x 1L / 4.4x Total	B / B2	B / B1	600	100	98.50	6.875%	0.50%	7.375%
9/7/2016	Monitronics	Cleared / Allocated	Refinance	TMT	\$700	6.0yr	3.1x 1L / 4.7x Total	B / B3	B / B1	550	100	98.50	6.375%	0.50%	6.875%
9/6/2016	Landesk	Cleared / Allocated	Dividend/Recap	TMT	\$535*	6.0yr	4.7x 1L / 6.5x Total	B / B2	B / B1	450	100	99.00	5.750%	0.00%	5.750%
09/06/16 -	34 Deals	23 Closed	19 Refinances	Mir	n \$70	3.8yr	2.7x 1L / 3.4x Total	Mid B	Mid BB	325.00	0.00	100.00	4.26%	(0.75%)	4.11%
09/29/16		(68% of total)	11 M&A	Max	\$1,730	7.0yr	5.1x 1L / 7.2x Total	Weak B	Weak B	650.00	100.00	96.00	7.38%	1.13%	8.50%
* Denotes co	ovenant-lite		4 Div/Recaps	Average	\$687	6.3yr	4.1x 1L / 5.3x Total	Mid B	Mid-Strong B	451.10	95.59	99.14	5.76%	(0.06%)	5.73%
			0 Other	Mediar	n \$615	7.0yr	4.0x 1L / 5.0x Total	Mid B	Mid-Strong B	450.00	100.00	99.00	5.75%	(0.03%)	5.75%

# September HY Transactions

\$ in n	nillions												
Issue Date	Issuer	Sector	Amount	Coupon	Security	Tenor	Call	Rating Moody's / S&P	Price	Yield	Spread	Use of Proceeds	Pricing Execution
9/30/16	Quality Healthcare Properties	Real Estate	\$750	8.125%	Secured Notes (2nd lien) (144A life)	7	NC3	B3 / BB-	100.000	8.125%	675	Spinoff	Outside
9/30/16	Vertiv (Cortes NP Acquisition)	Diversified Industrial	\$750	9.250%	Unsecured Notes (144A life)	8	NC3	B3 / B	100.000	9.250%	777	LBO	Wide
9/29/16	Crescent Communities	Real Estate	\$400	8.875%	Secured Notes (144A life)	5	NC2	Caa1 / B+	100.000	8.875%	776	Refinancing / Bonds	Tight
9/29/16	inVentiv Health Inc	Healthcare Services	\$675	7.500%	Unsecured Notes (144A)	8	NC3	Caa2 / CCC+	100.000	7.500%	600	Recap / Dividend	Tight
9/29/16	Mohegan Tribal Gaming Authority	Gaming & Hotel	\$500	7.875%	Unsecured Notes (144A)	8	NC3	B3 / CCC+	99.271	8.000%	653	Refinancing	Tight
9/27/16	Beazer Homes USA	Real Estate	\$100	8.750%	Unsecured Notes (Add on) (144A)	5	3/15/19	B3 / B-	104.250	7.608%	650	Refinancing / Bonds	Tight
9/23/16	AMN Healthcare	Healthcare Services	\$325	5.125%	Unsecured Notes (144A life)	6	NC3	Ba3 / B+	100.000	5.125%	361	Refinancing / Bank	Through
9/23/16	Donnelley Financial Solutions	Printing & Publishing	\$300	8.250%	Unsecured Notes (144A)	8	NC5	B3 / B	100.000	8.250%	672	Spinoff	Outside
9/23/16	LSC Communications	Printing & Publishing	\$450	8.750%	Secured Notes (144A life)	7	NC3	Ba3 / B	100.000	8.750%	732	Spinoff	Outside
9/22/16	Alcoa Nederland	Metals & Mining	\$750	6.750%	Unsecured Notes (144A)	8	NC3	Ba3 / BB-	100.000	6.750%	523	Spinoff	Through
9/22/16	Alcoa Nederland	Metals & Mining	\$500	7.000%	Unsecured Notes (144A)	10	NC5	Ba3 / BB-	100.000	7.000%	537	Spinoff	Through
9/22/16	JDA Software	Softw are	\$350	7.375%	Unsecured Notes (144A life)	8	NC3	Caa1 / CCC+	100.000	7.375%	583	LBO	Through
9/22/16	Targa Resources Partners LP	Midstream/Pipelines	\$500	5.125%	Unsecured Notes (144A)	8	NC3	Ba3 / BB-	100.000	5.125%	359	Refinancing / Bonds	At
9/22/16	Targa Resources Partners LP	Midstream/Pipelines	\$500	5.375%	Unsecured Notes (144A)	10	NC5	Ba3 / BB-	100.000	5.375%	376	Refinancing / Bonds	At
9/21/16	Versum Materials	Chemicals	\$425	5.500%	Unsecured Notes (144A life)	8	NC5	Ba3 / BB-	100.000	5.500%	393	Spinoff	Tight
9/20/16	Brinker International	Restaurants	\$350	5.000%	Unsecured Notes (144A life)	8	NC	Baa3 / BB+	100.000	5.000%	344	Recap / Stock Repurchase	At
9/20/16	Landry's Restaurants Inc	Restaurants	\$600	6.750%	Unsecured Notes (144A)	8	NC3	Caa1 / CCC+	100.000	6.750%	518	Refinancing	Tight
9/19/16	Sabine Pass Liquefaction LLC	Midstream/Pipelines	\$1,500	5.000%	Secured Notes (144A)	10	NC	Ba2 / BBB-	100.000	5.000%	331	Refinancing / Bank	At
9/16/16	Cincinnati Bell Inc	Telecom	\$425	7.000%	Unsecured Notes (144A life)	8	NC3	B3 / B	100.000	7.000%	543	Refinancing / Bonds	Tight
9/16/16	Ziggo	Cable	\$2,000	5.500%	Secured Notes (144A)	10	NC5	Ba3 / BB-	100.000	5.500%	384	Recap / Dividend	Wide
9/16/16	Ziggo	Cable	\$625	6.000%	Unsecured Notes (144A)	10	NC5	B2 / B	100.000	6.000%	434	Recap / Dividend	Tight
9/15/16	Callon Petroleum	E&P	\$400	6.125%	Unsecured Notes (144A)	8	NC3	B3 / B+	100.000	6.125%	453	Refinancing / Bank	Tight
9/15/16	Camelot (Thomson Reuters)	Softw are	\$500	7.875%	Unsecured Notes (144A life)	8	NC3	Caa2 / B+	100.000	7.875%	630	LBO	Through
9/15/16	Great Western Petroleum	E&P	\$300	9.000%	Unsecured Notes (144A life)	5	NC2	Caa1 / CCC+	99.000	9.252%	801	Refinancing / Bank	Outside
9/15/16	Inmarsat	Telecom	\$400	6.500%	Unsecured Notes (144A life)	8	NC3	Ba2 / BB+	100.000	6.500%	493	GCP	Wide
9/14/16	Allison Transmission Inc	Automotive	\$1,000	5.000%	Unsecured Notes (144A life)	8	NC3	Ba3 /	100.000	5.000%	342	Refinancing / Bank	Tight
9/14/16	IMS Health Inc	Healthcare Services	\$1,050	5.000%	Unsecured Notes (144A life)	10	NC5	Ba3 / BB+	100.000	5.000%	329	Refinancing	At
9/13/16	Acelity / Kinetic Concepts	Medical Products	\$1,750	9.625%	Secured Notes (144A life)	5	NC2	Caa1 / B-	100.000	9.625%	841	Refinancing / Bonds	At
9/13/16	Navient Corporation	Financial Services	\$500	7.250%	Unsecured Notes	7	NC	Ba3 / BB-	100.000	7.250%	571	GCP	Tight
9/12/16	PDC Energy	E&P	\$400	6.125%	Unsecured Notes (144A)	8	NC3	B2 / B-	100.000	6.125%	457	Acquisition	Through
9/9/16	CSC Holdings (Cablevision)	Cable	\$1,310	5.500%	Unsecured Notes (Guaranteed) (144A life)	11	NC5.5	Ba1 / BB-	100.000	5.500%	381	Refinancing / Bank	At
9/8/16	Antero Midstream Partners	Midstream/Pipelines	\$650	5.375%	Unsecured Notes (144A)	8	NC3	B1 / BB	100.000	5.375%	385	Refinancing / Bank	Tight
9/8/16	Beazer Homes USA	Real Estate	\$400	8.750%	Unsecured Notes (144A)	6	NC3	B3 / B-	100.000	8.750%	744	Refinancing / Bonds	Tight
9/8/16	BMC East LLC	Building Materials	\$350	5.500%	Secured Notes (144A life)	8	NC3	B3 / BB-	100.000	5.500%	398	Refinancing / Bonds	Tight
9/8/16	Crown Holdings Inc	Metals & Mining	\$400	4.250%	Unsecured Notes (144A)	10	NC	Ba3 / BB-	100.000	4.250%	268	Refinancing / Bank	Tight
9/8/16	Hertz Global Holdings	Leasing	\$800	5.500%	Unsecured Notes (144A life)	8	NC3	B2 / B	100.000	5.500%	399	Refinancing / Bonds	Tight
9/8/16	KIK Custom Products (Kronos)	Consumer Products	\$265	9.000%	Unsecured Notes (Add on) (144A life)	7	8/15/18	Caa2 / CCC	103.000	8.243%	678	Refinancing / Bank	Tight
9/8/16	Schaeffler (IHO Holding)	Automotive		4.125% / 4.875%	Secured PIK Toggle Notes (144A life)	5	NC2	Ba1 / B+	100.000	4.125%	300	Refinancing	Tight
9/8/16	Schaeffler (IHO Holding)	Automotive	\$500	4.5% / 5.25%	Secured PIK Toggle Notes (144A life)	7	NC3	Ba1 / B+	100.000	4.500%	311	Refinancing	Tight
9/8/16	Schaeffler (IHO Holding)	Automotive	\$500	4.75% / 5.5%	Secured PlK Toggle Notes (144A life)	10	NC5	Ba1 / B+	100.000	4.750%	322	Refinancing	Tight

# September HY Transactions (continued)

\$ in n	nillions												
Issue Date	Issuer	Sector	Amount	Coupon	Security	Tenor	Call	Rating Moody's / S&P	Price	Yield	Spread	Use of Proceeds	Pricing Execution
9/7/16	Ardagh Packaging Group	Containers & Packaging	\$770	7.125% / 7.875%	Secured PIK Toggle Notes (144A life)	7	NC3	Caa2 / CCC+	100.000	7.125%	574	Refinancing / Bonds	Tight
9/7/16	Gray Television Inc	Media	\$525	5.125%	Unsecured Notes (144A life)	8	NC3	B2 / B+	100.000	5.125%	367	Refinancing / Bonds	Tight
9/7/16	Gray Television Inc	Media	\$200	5.875%	Unsecured Notes (Add on) (144A life)	10	7/15/21	B2 / B+	103.000	5.398%	385	Refinancing / Bonds	Tight
9/7/16	Louisiana-Pacific	Building Materials	\$350	4.875%	Unsecured Notes (144A)	8	NC3	Ba3 / BB	100.000	4.875%	342	Refinancing / Bonds	Tight
9/7/16	Novelis Inc	Metals & Mining	\$1,500	5.875%	Unsecured Notes (144A life)	10	NC5	B2 / B	100.000	5.875%	434	Refinancing / Bonds	Tight
9/7/16	SM Energy	E&P	\$500	6.750%	Unsecured Notes	10	NC5	B3 / B+	100.000	6.750%	521	Acquisition	Tight
		Total \$ Volume	\$28,595		Min	5			Min	4.125%		<u>Execution</u>	
		Total Deals	46		Max	11			Max	9.625%		Tight / Through	32 / 71%
		Median Deal Size	\$500		Median	8			Median	6.125%		At	7 / 16%
		Average Deal Size	\$622		Average	8			Average	6.497%		Wide / Outside	6 / 13%

# **Commodities Environment**

#### Crude Oil

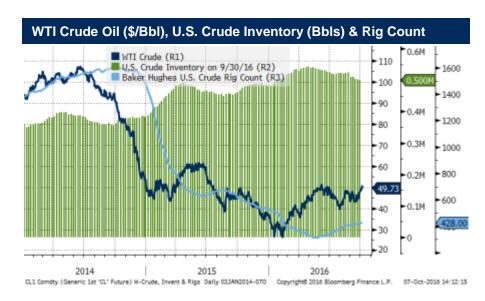
- Oil prices finally pushed above \$50/barrel after more than 3 months of trading below the level. Last week in Algiers, OPEC agreed to cut output in a bid to shrink the world's crude oil glut and boost prices. Front month prices have rallied more than 10% since the announcement, the first time in 8 years that OPEC decided to cut production. Although OPEC pumped record amounts of crude oil in September, they will decide on quotas at an official meeting of the group in Vienna on November 30. A Wall Street Journal article from last week provided some details on the meeting. Saudi Arabia will take on the bulk of the proposed cuts, slashing up to 400,000 barrels a day by the end of the year, Iran agreed to a still undefined cap on its production for the first time and other members agreed to yet to be determined cuts as well. The article describes Saudi Arabia's position as make a deal with rival Iran but do not compromise the Kingdom's ability to fight for oil market share.
- Prompt prices traded near \$50.75 before profit taking took place ahead of the holiday weekend in the U.S. Additionally, Russia cast some doubt over the OPEC deal by suggesting Energy Minister Novak will not be signing any agreements with OPEC during the World Energy Congress being held in Istanbul next week. However, the Energy Conference may mark an important first step toward reaching an agreement by the time ministers meet in Vienna next month.

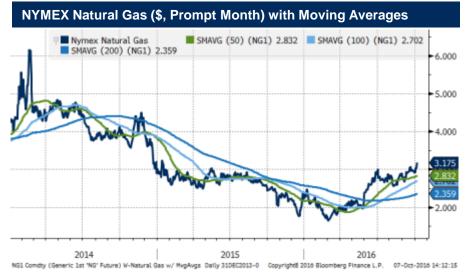
#### **Natural Gas**

Natural gas futures rose above \$3 per mmbtu in September and for the first time in 16 months after unusually warm weather covered much of the U.S. as Summer came to a close. Prices surged to \$3.20 late in the week, marking a 21 month high, as forecasts for unseasonably warm weather continue. High temperatures increase demand for the power plant fuel as more electricity is needed than typical for this time of the year. This is expected to help reduce a supply glut as we head into the winter heating season. The current outlook is calling for warmer than normal weather across most of the lower 48 states from October 12 to 21. Furthermore, some traders are speculating that a weakening Hurricane Matthew will cause fewer power outages in the Southeast than originally expected.

#### Metals / Other

Copper had its first weekly loss since August as we closed out trading on Friday. Traders have been pointing to a rising U.S. dollar, stemming from increasing odds that the FOMC will raise interest rates in December. If the Fed does hike, it would be the first increase of 2016 and may mark the beginning of additional hikes in 2017. Higher interest rates tend to boost investor demand for local assets, which must be paid for in U.S. dollars. A stronger dollar, in turn, can reduce overseas demand for commodities, which are now more expensive from a currency perspective.

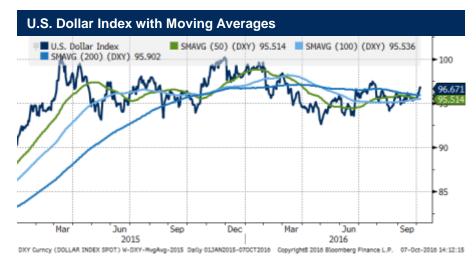


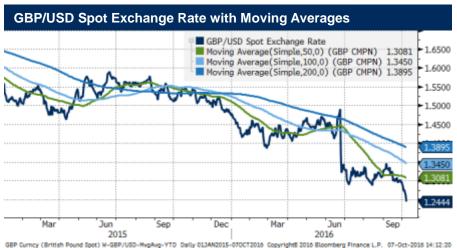


# Foreign Exchange

- USD The USD index is trading near a ten week high as better than expected economic data along with hawkish Fed speakers have increased bets that the Federal Reserve will hike interest rates this year. The much anticipated USA employment report was strong enough to keep risks of a December move intact. Those thinking of a November move by the Fed might be disappointed. That meeting is a week before the presidential election and does not include updated forecasts or press conference. A move at that meeting would be unprecedented.
- Asian trading. It was the biggest plunge in the GBP rate since the UK referendum on June 23. The decline in global trading volumes are making moments of extreme volatility more common place as participants find it harder to enter or exit positions without affecting prices. As computers take over the market, algorithmic traders, who some say exacerbate swings, have more than tripled foreign exchange volumes over the last 3 years. The extent and speed of the drop adds to signs that bouts of extreme volatility are happening more and more in global markets. Wild moves that market watchers struggle to immediately explain aren't just confined to currencies. The GBP was already reeling from the announcement from British PM Theresa May that she would set a March 2017 deadline for the formal departure from the EU to begin. While the March deadline offers some clarity to the divorce process, many in the market worry that the government's stance points to a so-called "hard exit" that would see the UK left outside the single market, in favor of strict controls on migration.
- CNH The CNH hit its weakest level against the USD since January after data showed a sharper than expected decline in Chinese foreign exchange reserves. China's currency reserves fell by \$18.8 billion USD in September. The drop was larger than the \$11 billion fall economists forecasted. The CNH, which freely trades, depreciated to near 6.7200. The fall in China's foreign exchange reserves suggests that capital outflows from the country may have increased last month despite government efforts to stem such outflows and that the central bank was still intervening by selling the USD and buying CNH to defend the rate. Should the Fed raise rates later this year, China might face renewed outflow pressure.
- MXN The 2.0% fall in USD/MXN is the clearest indication that the FX market believes Hilary Clinton won round one of the three scheduled debates against Republican rival Donald Trump. The MXN has been bearing the brunt of the impact of the rise in political risk. The currency seems to rally on Clinton momentum and fall when Trump does better in the polls. MXN got another source of support when the central bank surprised markets and raised rates by 50 bps to 4.75% last week. The MXN rally could continue as speculators have built up a near record gross short MXN positions in the currency. The next US presidential debate will take place on October 9, 2016.
- EUR The EUR has remained amazingly resilient and in tight ranges as well. This comes at a anxious time for European financial institutions and a dovish central bank. Shares of many European banks have come under pressure, especially Deutsche Bank, as questions on liquidity issues increase. Historically, a banking crisis would lead to a weaker EUR and higher volatility. So far, the latest banking stress has had

no impact on the single currency. This could be due to the ECB's improved ability to respond to a systemic liquidity crisis or a perception that the German government authorities would likely prevent a large bank failure. The latest ECB policy minutes confirmed the view that it is very likely that QE would be extended beyond the current end date of March 2017 as underlying price pressure continue to lack a "convincing upward trend".





## **Notes and Definitions**

Average Hourly Earnings - An indicator of labor cost inflation and of the tightness of labor market

Average Weekly Hours - Measures an average of the number of hours worked per week by production workers in U.S.

BCC - Blank Check Company is a development stage company with no specific business plan or purpose or has indicated its business plan to engage in a merger or acquisition with an unidentified company or companies

BRICS - The acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa.

Collateralized loan obligations (CLOs) - A form of securitization where payments from multiple middle sized and large business loans are pooled together and passed on to different classes of owners in various tranches

Consumer Price Indexes (CPI) - A program that produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

Dow Jones Index - A price-weighted average of 30 significant stocks traded on the New York Stock Exchange and Nasdag

Dry Powder - Refers to cash reserves kept on hand to cover future obligations or to purchase assets

Durable or Core Capital Goods Orders – An economic indicator released monthly by the Bureau of Census that reflects new orders placed with domestic manufacturers for delivery of factory hard goods (durable goods) in the near term or future

Exchange-Traded Fund (ETF) - A security that tracks an index, a commodity or a basket of assets like an index fund, but trades like a stock on an exchange

Federal Funds Rate (Fed Funds) - The interest rate at which depository institutions actively trade balances held at the Federal Reserve

FOMC - Federal Open Market Committee reviews economic and financial conditions, determines appropriate stance of monetary policy, and assesses the risk to it's long-run goals of price stability and sustainable economic growth.

GDP - Gross domestic product is the market value of the goods and services produced by labor and property located in the United States.

HY Index – A broad S&P index family designed to measure the performance of non investment-grade (high yield) and U.S. dollar-denominated bonds issued by U.S.-domiciled corporations.

IG Index – A broad S&P index family designed to measure the performance of investment-grade and U.S. dollar-denominated bonds issued by U.S.-domiciled corporations.

ISM Manufacturing – ISM Manufacturing Index compiles a composite diffusion index of national manufacturing conditions by the Institute of Supply Management. Readings above 50 indicate an expanding factory sector.

LIBOR - USD London Interbank Offered Rate is the average interbank interest rate at which a large number of banks on the London money market are prepared to lend one another unsecured funds denominated in US Dollars.

LME Index - London Metals Exchange Metals Index is a weighted index of six, designated, primary metals

MSCI Emerging Market equity index – An index created by Morgan Stanley Capital International (MSCI) that is designed to measure equity market performance in global emerging markets

Nasdag Composite Index – A market-capitalization weighted index of the more than 3,000 common equities listed on the Nasdag stock exchange

Non Farm Payroll – Nonfarm payroll employees, non-profit organization employees, or government employees. It is an economic indicator released monthly by the United States Department of Labor as part of a comprehensive report on the state of the labor market.

Non manufacturing (Service) - ISM Non Manufacturing Index is an index based on surveys of more than 400 non-manufacturing firms' purchasing and supply executives, within 60 sectors across the nation, by the Institute of Supply Management

Participation Rate – Refers to the number of people who are either employed or are actively looking for work. The number of people who are no longer actively searching for work would not be included in the participation rate.

PCE Core – Refers to the core Personal Consumption Expenditures Price Index (PCE PI), which measures the average price increase for American consumers on an annualized basis

Personal Income & Spending – A set of two data points produced by the Bureau of Economic Analysis that track personal income and monthly spending.

Retail Sales Advance & Control Group - A monthly measure of sales of goods to consumers at retail outlets; the control group excludes the volatile autos, gas and building supplies components

Russell 2000 Index - A small-cap stock market index of the bottom 2,000 stocks in the Russell 3000 Index

S&P 500 Index - A broad index that includes 500 American companies

Securities Markets Programme (SMP) – Interventions by the Eurosystem in public and private debt securities markets in the euro area to ensure depth and liquidity in those market segments that are dysfunctional.

SPAC - Special Purpose Acquisition Company is a type of blank check company created specifically to pool funds in order to finance a merger or acquisition opportunity within a set time frame.

The Euro Overnight Index Average is an effective overnight interest rate computed as a weighted average of all overnight unsecured lending transactions in the interbank market in Euros.

The Personal Consumption Expenditure (PCE) measure is the component statistic for consumption in GDP collected by the BEA. It consists of the actual and imputed expenditures of households and includes data pertaining to durable and non-durable goods and services. It is essentially a measure of goods and services targeted towards individuals and consumed by individuals.

The University of Michigan Consumer Confidence (Sentiment) Index is a consumer confidence index published monthly by the University of Michigan and Thomson Reuters. The index is normalized to have a value of 100 in December 1964.

U3 Unemployment Rate – The U3 unemployment rate is the percentage of all individuals above the age of 16 actively looking for work, but unable to find any within the past 4 weeks. Does not include individuals in the military, prisons, mental hospitals, and nursing homes. The Bureau of Labor Statistics publishes the figure on the first Friday of each month, covering the month just concluded.

Underemployment Rate – A measurement compiled by the U.S. Bureau of Labor Statistics that provides the broadest measure of labor underutilization defined as the total unemployed populace, plus all marginally attached workers, plus all persons employed part-time for economic reasons, as a percentage of the civilian labor force plus all marginally attached workers

Unemployment Rate (Household Survey) – Unemployment is defined by the Bureau of Labor Statistics (BLS) as people who do not have a job, have actively looked for work in the past four weeks, and are currently available for work. The BLS measures unemployment through monthly household surveys, also called the Current Population Survey (CPS).

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