US Credit Research

US Corporate Credit: Revolver & Liquidity Analysis

Credit Analysis

The rapid pace of corporate liquidity creation

The key findings of our US credit liquidity analysis are:

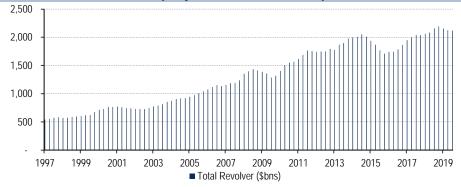
- We estimate that revolver draws across credit now total ~\$550bn, \$200bn of which has been added in the last two weeks alone
- Four COVID-linked sectors account for 50% of the recent draws: Retail, Airspace & Autos, Real Estate, and Leisure
- An average issuer has drawn ~70% of their credit facility the last two weeks, pushing the overall revolver utilization rate to 25%
- We expect revolver draws to reach \$800bn, or 40% of the total \$2.1tn capacity, vs the GFC when utilization reached 35%

As consensus is seemingly building around a global recession, opinions differ on the depth and the duration of it, and the pace of the ensuing rebound. While some investors are making a case for a V-shaped recovery, our economics team believes that recovery is more likely to be U or W shaped given the sudden and total collapse of economic activity. They are now expecting global GDP to shrink -2.7%, and the US economy to contract-6% in 2020, potentially making this the worst recession in the post-war era.

Revolver draws to increase

The dollar value of revolvers extended to corporate America has grown from \$0.5tn levels in 1995 to \$2.1tn today, with the pace being <u>particularly strong</u> in this credit cycle. Growth in the number of debt issuers has brought smaller companies within reaching distance of bank credit facilities, while larger issuers have managed to increase the size of their existing ones. Understandably, revolver commitments decline during downturns – we saw noticeable dips during the 2003 recession (\$700bn), 2009 recession (\$1.3tn), as well as the commodity crises (1.7tn). With the current economic decline, we are likely to see another dip as banks likely start to pull back on extending new credit lines.

Exhibit 1: Current total revolver capacity is \$2.1tn across the credit space



Source: BofA Global Research, LCD, ICE Data Indices LLC

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Refer to important disclosures on page 46 to 48.

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Credit United States Cross-Industry

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The \$2.1tn in total revolver capacity today is split up between IG at \$1.3tn and HY at \$0.4tn, with the rest being credit issuers not covered by our fundamental team of analysts. In this report, we present a consolidated view of the state of liquidity across our covered issuers, by sector. Overall, we see that the most strained sectors are the ones directly impacted by the shutdown and the oil slide. These are also the sectors which have incrementally utilized their revolvers the most.

We estimate that revolver draws across credit now total ~\$550bn, \$200bn of which has been added in the last two weeks alone. Four COVID-linked sectors account for 50% of the recent draws: Retail (\$40bn), Airspace & Autos (\$30bn), Real Estate (\$15bn), and Leisure (\$10bn). An average issuer has drawn ~70% of their credit facility the last two weeks, pushing the overall revolver utilization rate to 25%. We expect revolver draws to reach \$800bn, or 40% of the total \$2.1tn capacity. Comparatively the high tick during the Global Financial Crisis was 35% utilization.

Rapidly deteriorating economic conditions have made corporate access to capital market financing erratic. Leveraged finance primary markets have been effectively shut for the past month, while the CP market- a crucial source of short-term funding for IG corps, has not been fully functional either. As such issuers have been racing to shore up their liquidity by any means necessary. This includes drawing down existing credit lines, creating new ones, and placing long-term debt when possible. On the HY side, flexible documentation has aided the creation of new incremental capacity via carve-outs to the extent investors and banks stand ready to finance. IG corporates have the added benefit of relatively open bond primary markets, and they have been inking deals at a record pace. As such we expect the rapid rate of liquidity creation by corporates to continue, offering greater flexibility to management teams to navigate the downturn.



High Yield - Public Issuers

High Yield - Aerospace & Defense

HY A&D - F	Public Names	
Issuer / Company	Bond Ticker	As of
Bombardier	BBDBCN	12/31/2019
Kratos	KTOS	12/31/2019
Maxar	MAXR	12/31/2019
Moog	MOGA	12/28/2019
Transdigm	TDG	12/31/2019
Triumph	TGI	3/18/2020
Totals		

	L	iquidity (\$ millions	s)	
Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity
2,629	1,296	2022	-	1,296	3,925
173	90	2022	-	90	258
59	500	2023	-	500	541
124	1,100	2024	50	1,050	1,174
4,194	760	2022	-	760	4,912
404	700	2024	350	350	754
7,583	4,446		400	4,046	11,563

	Credit	Metrics	
LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
896	0.0 x	10.4x	N/A
75	4.0 x	4.0x	N/A
416	5.3 x	5.3x	N/A
399	0.0 x	2.5x	92%
2,613	4.6 x	7.1x	N/A
240	2.9 x	6.2x	N/A

HY Autos - Pu	blic Names			l	_iquidity (\$ millions	s)		Credit Metrics LTM EBITDA Secured Total Dividend / FCF Maintenance Leverage Test Comments							
Issuer / Company High Yield - Au	Bond Ticker		Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg		· ·	Comments		
Asbury	ABG	3/25/2020	254	250	2022	250	-	676	331	1.0 x	4.7x	N/A	Consolidated Total Lease Adj Leverage 5.75x or below			
Adient	ADNT	3/23/2020	1,790	1,250	2024	825	425	2,215	908	1.8 x	4.3x	34%	1st Lien Net Leverage 2.50x or below			
Allison	ALSN	12/31/2019	192	600	2024	-	600	787	1,059	0.6 x	2.4x	11%	1st Lien Net Leverage 5.50x or below			
Avis Budget Group	CAR	12/31/2019	686	1,800	2023	-	1,800	1,405	788	1.4 x	4.8x	N/A	Consolidated 1st Lien Leverage 2.50x or below			
Cooper Standard	CPS	12/31/2019	360	210	2021	-	210	533	202	1.6 x	4.7x	N/A	None			
Cooper Tire	CTBUS	12/31/2019	391	625	2021	-	625	1,016	331	0.6 x	1.4x	24%	Net Leverage 3.25x or below			
Carvana	CVNA	12/31/2019	76	950	2020	515	435	460	(230)	N/A	N/A	N/A	None			
Dana	DAN	12/31/2019	527	1,000	2024	-	1,000	1,506	1,019	0.8 x	3.0x	36%	1st Lien Net Leverage 2.00x or below			
Delphi	DLPH	12/31/2019	191	500	2022	-	500	691	521	1.3 x	3.6x	N/A	Net Leverage 4.00x or below			
Ford	F	3/19/2020	37,461	15,400	2023	15,400	-	37,461	8,881	0.2 x	4.1x	Suspended	None			
Gates Global	GATGLO	12/31/2019	635	480	2021	-	480	1,064	611	3.9 x	4.9x	10%	1st Lien Net Leverage 7.15x or below			
Group 1 Automotive	GPI	12/31/2019	24	2,100	2021	1,398	702	726	422	1.2 x	5.2x	10%	Total Adjusted Net Leverage 5.50x or below			
Goodyear Tire and Rubber Co	GT	12/31/2019	908	2,899	2021	-	2,899	4,486	1,617	0.8 x	3.9x	N/A	None			
Hertz	HTZ	12/31/2019	865	1,167	2021	-	1,167	1,832	649	3.0 x	5.7x	N/A	Consolidated Total Net Corporate Leverage 4.50x or below			
IAA	IAASPI	12/29/2019	47	225	2024	-	225	265	412	1.9 x	3.1x	N/A	Consolidated Senior Secured Net Leverage 3.50x or below			
KAR	KAR	12/31/2019	508	325	2021	-	325	805	510	1.9 x	3.5x	43%	Consolidated Senior Secured Net Leverage 3.50x or below			
Lithia	LAD	12/31/2019	84	2,800	2025	2,226	574	630	144	0.0 x	6.7x	4%	Funded Debt to EBITDAR 5.00x or below	Funded debt excludes Floorplan Financing and Swing Line Loans, plus eight times rental or lease expense		
LKQ Corp	LKQ	12/31/2019	523	3,260	2024	1,337	1,923	2,446	1,303	1.1 x	3.0x	N/A	Net Leverage 4.50x or below			
Meritor	MTOR	12/31/2019	108	625	2024	'	625	831	499	0.7 x	2.5x	N/A	Priority Debt Ratio 2.25x or below	Priority debt (consisting principally of amounts outstanding under the senior secured revolving credit facility, U.S. accounts receivable securitization and factoring programs, and third-party non- w orking capital foreign debt		
Penske Automotive Group	PAG	12/31/2019	28	975	2021	243	733	761	807	0.9 x	4.1x	(162%)	Funded Debt to EBITDA 2.50x or below	Funded debt excludes Floorplan Financing, Subordinated Debt and Real Estate Debt		
Sonic Automotive	SAH	12/31/2019	29	245	2021	-	245	259	354	1.5 x	6.4x	28%	Consolidated Total Lease Adj Leverage 5.75x or below			
Tenneco	TEN	12/31/2019	389	1,500	2023	229	1,271	1,640	1,527	3.1 x	4.2x	N/A	Connsolidated Net Leverage 3.75x or below			
Tesla	TSLA	12/31/2019	6,268	4,750	2023	1,727	3,023	9,291	2,985	0.6 x	4.3x	N/A	None			
Totals			52,344	43,936		24,150	19,786	71,785								



High Yield - Cable



HY Cable/Sate	llite - Public N	ames			2,475 1/31/2024 178 2,297 2,999 4,340 3.5x 5.3x N/A Ratios exclude \$2.5bn of stock 4,750 2/1/2025 90 4,660 8,393 18,116 3.1x 4.3x N/A Ratios exclude \$2.5bn of stock 2,432 Various 260 2,172 2,911 5,755 4.1x 5.2x N/A 1,925 7/20/2023 154 1,771 1,785 1,880 0.1x 3.3x 46% 625 6/30/2023 - 625 1,060 942 2.2x 4.5x N/A 990 12/31/2021 161 829 851 736 2.9x 4.4x N/A 1,000 1/31/2026 78 922 957 2,369 3.6x 4.3x N/A 800 1/31/2026 138 662 866 1,828 4.4x 5.6x N/A - NA - - 2,861 2,810 0.0x 5.2x <						cs		
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn						FCF	Comments
Altice Usa/Cablevision	CSCHLD	12/31/2019	702	2,475	1/31/2024	178	2,297	2,999	4,340	3.5x	5.3x	N/A	
Charter Communications	CHTR	12/31/2019	3,733	4,750	2/1/2025	90	4,660	8,393	18,116	3.1x	4.3x	N/A	Ratios exclude \$2.5bn of preferred stock
Altice Luxumberg	ALTICE	9/30/2019	739	2,432	Various	260	2,172	2,911	5,755	4.1x	5.2x	N/A	
Quebecor Media/Videotron	QBRCN	12/31/2019	14	1,925	7/20/2023	154	1,771	1,785	1,880	0.1x	3.3x	46%	
Cable & Wireless	CWCLN	12/31/2019	435	625	6/30/2023	-	625	1,060	942	2.2x	4.5x	N/A	
UPC	UPCB	12/31/2019	22	990	12/31/2021	161	829	851	736	2.9x	4.4x	N/A	
Virgin Media	VMED	12/31/2019	35	1,000	1/31/2026	78	922	957	2,369	3.6x	4.3x	N/A	
Vodafone - Ziggo	ZIGGO	12/31/2019	204	800	1/31/2026	138	662	866	1,828	4.4x	5.6x	N/A	
Dish Netw ork	DISH	12/31/2019	2,861	-	NA	-	-	2,861	2,810	0.0x	5.2x	N/A	
Gogo Inc.	GOGO	PF 12/31/2019	231	30	8/26/2022	22	-	231	146	6.5x	8.2x	N/A	RCF matures Dec. '21 if the '22 Converts aren't addressed.
Hughes/Echostar	SATS	12/31/2019	1,792	-	NA	-	-	1,792	610	1.2x	3.9x	N/A	
Intelsat S.A.	INTEL	12/31/2019	811	-	NA	-	-	811	1,379	3.6x	10.7x	N/A	
ViaSat, Inc.	VSAT	12/31/2019	48	700	1/18/2024	138	562	610	446	2.0x	3.6x	N/A	
Totals			11,627	15,727		1,219	14,500	26,127					

High Yield - Chemicals

HY Chemical	s - Public Nam	ies			Liquidity (\$ million	s)		Credit Metrics						
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Net Levg	Comments	
Chemours Company	CC	12/31/2019	943	800	2023	-	697	1,640	1,020	1.4x	4.1x	97%	3.2x		
CF Industries	CF	12/31/2019	287	750	2024	-	750	1,037	1,610	0.6x	2.6x	23%	2.4x		
CVR Partners	UAN	12/31/2019	37	50	2021	-	50	87	117	5.5x	5.5x	N/A	5.2x		
Hexion	HXN	12/31/2019	250	419	2024	-	360	610	382	3.5x	4.7x	N/A	4.0x		
Kraton	KRA	12/31/2019	35	250	2021	-	250	285	257	0.8x	4.0x	N/A	3.8x	PF for the Mar. 2020 sale of Carliflex	
Kronos	KRO	12/31/2019	391	206	2022	-	206	596	194	0.0x	2.3x	N/A	0.3x		
LSB Industries	LXU	12/31/2019	23	75	2024	-	42	65	56	8.6x	8.6x	N/A	8.2x		
OCI N.V.	OCINV	12/31/2019	600	750	2022	-	727	1,328	928	5.3x	5.3x	N/A	4.6x	PF Sept. 2019 JV with ADNOC	
Olin Corp.	OLN	12/31/2019	221	800	2024	-	797	1,017	940		3.7x	46%	3.5x		
Trinseo	TRINSE	12/31/2019	456	525	2022	-	511	967	352	1.9x	3.4x	N/A	2.1x		
Tronox	TROX	12/31/2019	511	-	2022	200	137	648	681	2.7x	4.5x	14%	4.0x	PF for the Cristal acquisition & \$200 mm partial draw	
Univar Solutions	UNVR	12/31/2019	330	1,525	2024	200	601	931	709	3.2x	3.9x	N/A	3.4x	PF for the Nexeo Solutions acquisition	
Venator Materials	VNTR	12/31/2019	55	350	2022	-	252	307	186	2.0x	4.1x	N/A	3.8x		
Ashland	ASH	12/31/2019	157	1,028	2025	157	793	950	519		3.4x	59%	3.1x		
Axalta	AXTA	12/31/2019	1,018	400	2024	-	361	1,379	939	3.0x	4.1x	N/A	3.0x		
Element Solutions	ESI	12/31/2019	510	355	2024	320	31	541	417	2.6x	4.5x	N/A	3.2x	Mar. 26 \$320 revolver draw	
GCP Applied Technologies	GCPA PP	12/31/2019	325	350	2023	-	344	669	145		2.4x	N/A	0.2x		
H.B. Fuller	FUL	3/2/2020	79	400	2022	-	393	472	427	3.9x	4.7x	15%	4.5x		
Ingevity Corp	NGVT	12/31/2019	314	750	2023	381	367	681	379	2.4x	3.1x	N/A	2.8x	PF for the Perstorp Capa acquisition & \$250 mm partial draw	
Koppers	KOP	12/31/2019	33	600	2024	329	222	255	211	2.0x	4.5x	N/A	4.0x	·	
PolyOne	POL	12/31/2019	508	450	2022	-	281	789	446	1.4x	4.2x	14%	3.1x	PF for the Clariant acquisition and P,P&S Sale	
PQ Corp	PQCOR	12/31/2019	72	200	2021	-	170	243	474	3.3x	4.1x	N/A	3.9x		
Rayonier Advanced	RYAM	12/31/2019	64	250	2022	-	217	281	75	7.9x	14.5x	N/A	13.6x	PF for sale of Matane Mill to Sappi	
W.R. Grace	GRA	12/31/2019	283	439	2023	-	418	700	574	1.6x	3.5x	37%	3.0x	_	
Totals	_		7,501	11,722		1,587	8,976	16,477							



High Yield - Consumer



HY Consur	ner - Public Nam	ies			Liquidity (\$ million	s)			Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
Coty	COTY	12/31/2019	289	2,750	2023	695	2,055	2,344	1,381	4.4 x	5.4x	46%
Mattel	MAT	12/31/2019	630	1,600	2022	-	1,543	2,173	449	0.0 x	6.4x	N/A
Edgew ell	EPC	12/31/2019	252	725	2020	-	718	969	355	0.0 x	3.1x	N/A
Spectrum Brands	SPB	12/29/2019	142	800	2022	103	679	821	554	0.0 x	4.3x	350%
Central Garden & Pet	CENT	12/28/2019	459	400	2024	-	358	817	212	0.0 x	3.3x	N/A
Scotts Miracle Gro	SMG	12/28/2019	27	1,700	2023	537	684	711	568	2.3 x	3.7x	133%
Valvoline	VVV	12/31/2019	612	450	2024	450	-	612	497	1.1 x	2.7x	42%
ACCO	ACCO	12/31/2019	28	600	2024	8	567	594	297	1.5 x	2.8x	14%
Tempur Sealy	TPX	12/31/2019	65	500	2024	-	477	542	508	0.0 x	3.0x	N/A
American Greetings	AMEGRE	11/29/2019	34	290	2023	-	263	297	238	2.1 x	3.3x	N/A
KIK Custom Products	KIKCN	9/28/2019	62	232	2020	-	221	283	279	3.9 x	7.1x	N/A
Revlon	REV	12/30/2019	104	442	2021	272	158	262	266	8.7 x	12.2x	N/A
Vista Outdoor	VSTO	12/29/2019	32	450	2023	180	150	182	109	1.6 x	4.9x	N/A
Prestige Brands	PBH	12/30/2019	29	135	2024	-	103	131	334	2.1 x	5.2x	N/A
Totals			2,765	11,074		2,246	7,974	10,739				

High Yield - Energy (Page 1 of 2)

HY Energy - Pเ	ıblic Names				Liquidity (\$ m	illions)				Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Net Levg
Parsley Energy	PARSLY	4Q19	68	1,000	28-10-2021	400	593	661	1,833	0.2 x	1.7x	1.65 x
WPX Energy	WPX	4Q19	60	1,500	17-04-2023	-	1,472	1,532	2,083	0.0 x	1.5x	1.47 x
Centennial Resource Production LLC	CENREP	4Q19	10	800	05-05-2023	25	775	785	574	0.0 x	1.6	1.59 x
Murphy Oil Corp.	MUR	4Q19	307	1,600	01-11-2023	-	1,596	1,903	1,803	0.0 x	1.6x	1.40 x
Seven Generations Energy Ltd.	VIICN	3Q19	6	1,400	31-12-2024	56	1,282	1,289	1,499	0.0 x	1.4x	1.41 x
PDC Energy	PDCE	4Q19	70	1,850	01-05-2023	557	1,281	1,351	1,388	0.4 x	1.3x	1.29 x
Matador Resources Co.	MTDR	4Q19	40	700	31-10-2023	255	399	439	611	0.7 x	2.4x	2.31 x
Meg Energy	MEGCN	4Q19	206	1,300	30-07-2024	146	753	959	1,111	0.6 x	2.2x	1.98 x
Northern Oil and Gas Inc	NOG	4Q19	16	800	22-11-2024	580	220	236	460	2.2 x	2.5	2.42 x
Unit Corp.	UNTUS	3Q19	1	275	18-10-2023	134	141	142	283	0.5 x	2.8x	2.77 x
Vermilion Energy Inc.	VETCN	4Q19	29	2,100	31-05-2023	1,539	551	580	1,021	1.5 x	1.9x	1.86 x
Baytex Energy	BTECN	4Q19	-	1,046	02-04-2024	692	339	339	1,010	0.7 x	1.8x	1.84 x
QEP Resources	QEP	4Q19	166	1,250	01-09-2022	-	1,247	1,413	690	0.0 x	2.9x	2.71 x
Whiting Petroleum	WLL	4Q19	9	1,750	12-04-2023	356	1,392	1,400	977	0.4 x	2.9x	2.86 x
Callon Petroleum	CPE	4Q19	13	2,000	20-12-2024	1,285	697	710	1,143	1.1 x	2.8x	2.78 x
HighPoint Resources Corp	HPR	4Q19	16	500	16-07-2022	140	334	350	340	0.4 x	2.3x	2.20 x
Oasis Petroleum	OAS	4Q19	20	1,675	16-10-2023	796	863	883	1,008	0.8 x	2.8	2.73 x
Extraction Oil & Gas	XOG	4Q19	32	950	16-08-2022	470	420	452	611	0.8 x	2.6x	2.52 x
Laredo Petroleum	LPI	4Q19	41	975	19-04-2023	295	665	706	575	0.5 x	2.1x	2.01 x
SM Energy	SM	4Q19	0	1,200	08-09-2023	123	1,078	1,078	984	0.1 x	2.8	2.80 x
Chaparral Energy Inc	CHAP	3Q19	22	325	21-12-2022	110	215	237	142	0.8 x	2.8x	2.67 x
W&T Offshore Inc	WTI	4Q19	32	250	18-10-2022	105	139	172	335	2.1 x	2.1x	2.05 x
Range Resources	RRC	4Q19	1	2,800	13-04-2023	450	2,100	2,100	897	0.5 x	3.6x	3.59 x
Antero Resources Corp.	AR	4Q19	-	2,640	26-10-2022	552	1,465	1,465	1,225	0.5 x	3.1x	3.07 x
Montage Resources Corp	MR	4Q19	12	500	01-02-2024	130	341	352	331	0.4 x	1.9x	1.90 x
Southw estern Energy Co	SWN	4Q19	5	2,000	01-04-2024	34	1,794	1,799	973	0.0 x	2.3x	2.26 x
Gulfport Energy Corp.	GPOR	4Q19	92	1,000	13-12-2021	120	636	728	808	0.1 x	2.4	2.33 x
CNX Resources Corp	CNX	4Q19	16	2,100	01-04-2024	661	1,234	1,250	922	1.5 x	3.0x	3.00 x
EQT Corp	EQT	4Q19	-	3,500	01-07-2022	1,294	2,179	2,179	2,073	0.7 x	2.6	2.60 x
Comstock Resources	CRK	4Q19	19	1,500	16-07-2024	1,250	250	269	879	1.4 x	3.1x	3.08 x
Denbury Resources	DNR	4Q19	1	615	09-12-2021	11	517	517	607	3.0 x	3.7x	3.69 x
California Resources Corp.	CRC	4Q19	17	1,000	30-06-2021	625	210	227	1,134	4.9 x	5.1x	5.09 x
Chesapeake Energy Corp 1.5L TL	CHK	4Q19	6	3,000	01-09-2023	1,590	1,351	1,357	2,530	2.1 x	3.5x	3.52 x
Ensign Energy Services	ESICN	3Q19	40	900	26-11-2021	774	86	126	415	1.9 x	4.0x	3.91 x
Exterran Corp	EXTNRG	4Q19	17	700	01-10-2023	74	602	619	201	0.4 x	2.2x	2.15 x
Nabors Industries	NBR	4Q19	132	1,426	11-10-2023	-	1,426	1,558	754	1.7 x	4.4x	4.25 x
Precision Drilling	PDCN	4Q19	75	500	01-11-2023	-	475	550	392	0.0 x	3.6x	3.45 x
Weatherford International	WFT	4Q19	800	376	13-06-2024	-	235	1,035	566	0.1 x	3.8x	2.41 x



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High	Yield	-	Energy	(P	age	2	of	2)

HY Energy - P	Public Names				Liquidity (\$ n	nillions)				Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Net Levg
Calfrac Holdings	CFWCN	4Q19	43	375	01-06-2022	148	226	269	159	1.7 x	5.7x	5.46 x
FTS International	FTSINT	4Q19	223	63	22-02-2023	-	56	279	125	3.7 x	3.7x	1.88 x
Basic Energy Services	BASX	3Q19	51	88	01-05-2023	-	50	101	67	5.2 x	5.2x	4.44 x
Nine Energy Services	NINE	4Q19	93	99	01-07-2021	-	99	192	115	3.5 x	3.5	2.66 x
Forum Energy Services	FET	4Q19	58	300	01-07-2021	-	281	339	68	0.0 x	5.9	5.04 x
Superior Energy Services Inc.	SPN	4Q19	273	287	20-10-2022	-	203	476	251	0.0 x	5.1x	4.05 x
Archrock Partners LP	APLP	4Q19	4	1,250	08-11-2024	863	373	377	449	1.9 x	4.2x	4.14 x
CSI Compressco, L.P.	CCLP	4Q19	2	75	29-06-2023	-	72	74	128	2.7 x	5.0x	5.02 x
USA Compression Partners LP	USAC	4Q19	0	1,600	02-04-2023	407	1,193	1,193	420	1.0 x	4.5x	4.49 x
Diamond Offshore	DO	4Q19	556	950	02-10-2023	400	544	1,100	74	5.4 x	32.3x	24.80 x
Valaris Plc. (Pride)	VAL	3Q19	1,094	2,300	30-09-2022	133	2,039	3,133	187	0.0 x	32.2x	26.37 x
Noble Holding	NE	4Q19	105	1,000	03-01-2023	335	665	770	329	3.3 x	11.5x	11.17 x
Transocean Inc.	RIG	4Q19	2,540	1,360	31-07-2023	-	1,338	3,878	979	7.0 x	11.0x	8.36 x
Shelf Drilling Holdings Ltd.	SHLFDI	3Q19	46	225	30-04-2023	58	95	141	171	0.3 x	5.6x	5.32 x
Antero Midstream Partners LP	AM	4Q19	3	2,132	26-10-2022	959	1,173	1,176	782	1.2 x	3.7x	3.69 x
Crestw ood Midstream Partners	CMLP	4Q19	26	1,218	16-10-2023	557	661	687	556	1.0 x	4.2x	4.14 x
CNX Midstream Partners LP	CNXMPF	4Q19	0	600	24-04-2024	312	288	288	232	1.3 x	3.1x	3.07 x
DCP Midstream LP	DCP	4Q19	1	1,400	12-08-2022	200	1,185	1,186	1,198	0.2 x	4.9x	4.94 x
Enlink Midstream Partners LP	ENLK	4Q19	77	1,750	25-01-2024	350	1,395	1,473	1,080	0.3 x	6.5x	6.43 x
EQT Midstream Partners LP	EQM	3Q19	154	3,000	06-09-2021	558	2,443	2,596	1,080	0.5 x	4.5x	4.36 x
NGL Energy Partners, L.P.	NGL	F3Q20	12	1,915	05-10-2021	1,392	406	418	589	1.6 x	4.5x	4.47 x
Nustar Logistics	NSUS	4Q19	15	1,200	20-09-2021	495	705	720	801	0.6 x	4.2x	4.17 x
Summit Midstream	SUMMPL	4Q19	62	1,250	13-05-2022	564	677	100	279	2.1 x	6.3x	6.12 x
Tallgrass Energy Partners, L.P.	TEP	4Q19	9	2,250	18-11-2024	1,277	972	981	1,001	1.3 x	5.2x	5.17 x
Targa Resources Partners, L.P.	NGLS	4Q19	331	2,200	6/29/232	-	2,112	2,443	1,373	0.3 x	5.7x	5.49 x
Cheniere Energy Partners	CQP	3Q19	1,707	1,950	29-05-2024	-	1,536	3,243	2,557	5.3 x	6.9x	6.20 x
AmeriGas Partners, L.P.	APU	4Q19	8	600	15-12-2022	328	209	217	580	0.6 x	5.0x	5.01 x
Ferrellgas, LP	FGP	3Q19	135	575	04-05-2023	275	198	333	234	1.4 x	9.2x	8.58 x
Suburban Propane	SPH	F3Q19	2	500	03-03-2021	127	307	309	240	0.5 x	5.2x	5.21 x
Buckeye Partners LP	BPL	3Q19	6	600	01-11-2024	-	600	606	875	2.6 x	6.8x	6.79 x
Delek Logistics Partners	DKL	4Q19	6	850	28-09-2023	583	267	272	186	3.1 x	4.5x	4.44 x
Genesis Energy, L.P.	GEL	4Q19	11	1,700	08-05-2022	985	714	725	669	1.5 x	5.2x	5.15 x
Holly Energy Partners	HEP	4Q19	7	1,400	27-07-2022	962	438	445	365	2.6 x	4.0x	3.98 x
Martin Midstream Partners, L.P.	MMLP	4Q19	3	400	31-08-2023	201	186	189	107	1.9 x	5.4x	5.39 x
PBF Logistics, L.P.	PBFX	4Q19	35	500	13-02-2023	283	212	247	213	1.3 x	3.8x	3.62 x
Global Partners, L.P.	GLP	4Q19	12	1,300	29-04-2022	517	660	672	247	2.7 x	4.2x	4.14 x
Parkland Fuel Corp	PKICN	3Q19	290	1,534	08-01-2023	530	1,004	1,294	1,292	0.4 x	2.6x	2.38 x
Sunoco LP	SUN	4Q19	323	1,500	27-07-2023	150	1,342	1,665	693	0.4 x	4.4x	3.93 x
Calumet Specialty Products	CLMT	4Q19	(102)	409	23-02-2023	100	267	165	298	0.3 x	3.8x	4.10 x
CVR Refining	CVI	4Q19	1,152	400	14-11-2022	-	393	1,595	788	0.1 x	1.4x	(0.11)x
Par Petroleum	PARRFN	3Q19	111	58	11-01-2026	-	55	165	255	2.3 x	2.6x	2.19 x
PBF Holding	PBFENE	4Q19	536	1,515	02-05-2023	525	990	1,738	1,117	0.5 x	2.8x	2.31 x
Totals			12,416	94,481		30,202	59,982	72,020				

High Yield - Financials

HY Financials -	- Public Nam	es		L	_iquidity (\$ million:	s)				(Credit Metri	cs
lacuer / Company	Bond Ticker	As of	Cash	Total	Maturity	Drawn	Available	Current	LTM	Secured	Total	Dividend / FCF	Comments
Issuer / Company	Bond licker	AS Of	Casn	Revolver	Waturity	Drawn	Revolver	Liquidity	EBITDA	Levg	Levg	(OCF-CE)	Comments
													Levg = net asset coverage of
Alliance Data Systems	ADS	12/31/2019	338	750	2022	0	750	1,088	1,271	N/A	1.2x	15%	corporate debt, FCF on corporate basis, PF for Epsilon sale
													Liquidity as of 3/18/20, £170mn
Ardonagh (£)	KIRSMD	12/31/2019	50	160	2022	70	90	140	206	5.5x	5.5x	0%	revolver limited by credit facility
													basket to £160mn of capacity
Avation	AVTCAP	12/31/2019	74	0	N/A	0	0	74	199	52%	81%	100%	Sec levg = sec debt/value, Levg = loan to value
													Cash at parent only, liquidity
CIT Group	СІТ	12/31/2019	376	400	2021	41	359	735	N/A	N/A	12%	16%	excludes FHLB capacity, Levg =
I Sir Group	O.I.	12/01/2010	0,0	400	2021	7.		700	1 1	14/	1270	1070	CET1 capital ratio, dividend / OCF
 				<u> </u>									only Includes March revolver draw,
Common Biographical	000	40/04/0040	0.45	050	0000	400	450	005	044	0.00	0.0	0400/	revolver includes \$250mn
Compass Diversified	CODI	12/31/2019	245	850	2023	400	450	695	241	0.6x	2.3x	219%	accordion, dividend includes
													common and preferred
													Revolvers incl. w/h, EBITDA incl. funding interest, Levg = net asset
Credit Acceptance	CACC	12/31/2019	187	1,565	21-22	0	1,565	1,752	914	N/A	2.3x	0%	coverage of corporate recourse
													liabilities
C	CURO	42/24/2040	75	50	h.m. 20	0	58	400	201	NI/A	0.00	F0/	Levg = net asset coverage of
Curo Group	CURU	12/31/2019	75	58	Jun. 20	U	58	133	261	N/A	0.9x	5%	corporate recourse liabilities, PF for dividend started in 2020
Enova International	ENVA	12/31/2019	35	125	2022	72	53	88	276	N/A	1.1x	0%	Levg = net asset coverage of
													corporate recourse liabilities
FirstCash	FCFS	12/31/2019	47	500	2024	338	162	209	304	0.0x	2.1x	23%	Contain and debth relies Lave
Fly Leasing	FLY	12/31/2019	286	0	N/A	0	0	286	530	53%	73%	0%	Sec levg = sec debt/value, Levg = loan to value
													Sec levg = sec debt/value, Levg =
Fortress Transportation	FTAI	12/31/2019	227	250	2022	0	250	477	503	1.1%	52%	86%	loan to value, run rate dividend
i i													includes common and pref, FCF before equipment capex
													In C\$, Levg = net asset coverage of
GoEasy	GSYCN	12/31/2019	35	310	2022	115	195	230	196	N/A	1.3x	6%	corporate recourse liabilities, FCF
L		10/01/0010	===	4.050	2004	10		4 504	4.000	.		4004	before origination activity
LPL Holdings	LPLA	12/31/2019	590	1,050	2024	49	1,001	1,591	1,036	1.1x	2.3x	18%	Liq. as of 3/25/2020, sec levg = sec
MGIC Investment Corp	MTG	12/31/2019	563	0	N/A	0	0	563	N/A	0%	16%	13%	debt/value, Levg = loan to value,
· ·													OCF substituted for FCF
14. 0	NONA	40/04/0040	000	4.000	00.04	400	0.40	4.400	4 404	0.4::	0.0	00/	EBITDA incl. cap MSR before
Mr. Cooper	NSM	12/31/2019	329	1,000	20-21	160	840	1,169	1,131	0.1x	2.3x	0%	amortization; leverage includes MSR facilities
													Revolver incl. additional ABCP
Navient	NAVI	12/31/2019	1,233	687	20-21	0	687	1,920	N/A	N/A	1.2x	14%	capacity, Levg = net asset
								,					coverage of corporate recourse liabilities
													Liquidity as of 3/31/20, EBITDA incl.
Ocw en	OCN	12/31/2019	264	0	N/A	0	0	264	108	3.4x	9.4x	0%	cap MSR before amortization,
	CON	12/01/2010	204		14/1	O		204	100	0.4%	0.4x	0,0	metrics not PF post-quarter capital
													markets activity Liquidity as of 3/18/2020 incl. post
OneMain	AMGFIN	12/31/2019	4,400	7,100	21-22	3,550	3,550	7,950	N/A	N/A	1.3x	8%	FY19 draw , Levg = net asset
Orielviairi	AWGFIN	12/31/2019	4,400	7,100	21-22	3,330	3,550	7,950	INA	IWA	1.38	0%	coverage of corporate recourse
<u> </u>													liabilities Liq. as of 3/25/2020, sec levq = sec
Radian Group	RDN	12/31/2019	680	268	Oct. 20	0	268	948	N/A	0%	18%	14%	debt/value, Levg = loan to value,
										- / -		.,,	OCF substituted for FCF
													Liquidity includes new facility post
Sallie Mae	SLM	12/31/2019	30	2,000	2021	289	1,711	1,741	N/A	N/A	12%	12%	FY19, Levg = CET1 capital ratio, common + pref dividend / FFO
													instead of FCF
			10,063	17,072		5,084	11,989	22,051					



High Yield - Food



HY Food	- Public Names	:			_iquidity (\$ million	s)			(Credit Me	trics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
B&G	BGS	12/28/2019	11	700	11/21/22	-	698	710	305	1.5x	6.2x	N/A	
Chobani	CHBANI	9/28/2019	66	150	10/7/21	-	144	210	202	0.2x	6.8x	39%	
Primo Water Corporation*	PRMWCN	12/28/2019	611	250	6/22/23	92	77	688	362	0.3x	5.5x	N/A	*Pro forma
Darling Ingredients	DAR	12/28/2019	73	1,000	12/16/21	39	912	985	437	1.2x	3.7x	N/A	
Dole	DOLE	10/5/2019	70	175	4/6/22	15	89	159	220	6.1x	6.1x	N/A	
FAGE	FAGEGA	9/30/2019	140	46	4/27/21	-	46	186	73	0.0x	5.7x	41%	
Herbalife	HLF	12/31/2019	839	250	8/16/23	-	208	1,048	761	1.3x	2.5x	N/A	
Lamb Weston	LW	11/24/2019	24	500	11/9/21	-	497	521	893	0.7x	2.5x	25%	
Performance Food Grp	PFGC	12/28/2019	1,091	1,950	12/30/24	786	1,295	2,386	534	1.5x	4.5x	N/A	
Pilgrim's Pride	PPC	12/29/2019	281	950	7/20/23	161	744	1,025	984	0.5x	2.4x	N/A	
Post Holdings	POST	12/31/2019	813	800	3/28/22	-	778	1,591	1,221	0.7x	5.4x	N/A	
TreeHouse	THS	12/31/2019	202	750	2/1/23	-	724	926	496	2.3x	3.8x*	N/A	
US Foods*	USFOOD	12/31/2019	1,090	1,600	5/31/24	1,190	227	1,317	1,341	2.8 x	3.6x	N/A	*Pro forma
Totals			5,310	9,121		2,283	6,440	11,750					

High Yield - Gaming

HY Gaming - Public	Names				Liquidity (\$ million	s)				Credit	Metrics
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Comments
Boyd Gaming	BYD	12/31/2019	205	946	2021	657	-	878*	793	1.6x	4.8x	Lease adjusted 5.2x, 4.9x net *\$673mm of revolver availability as of 3/13 per company
Caesars Resorts Collection	CGPHLC	12/31/2019	960	1,000	2022	1,000	-	1,936	1,140	4.0x	5.5x	CRC only; Springing SSLR test if >25% revovler drawn
Caesars Entertainment Operating Co.	N/A	12/31/2019	434	200	2022	161	-	661	N/A	N/A	N/A	*Estimated cash balance Springing SSLR test if >30% revovler draw n
Caesars Parent / Other	N/A	12/31/2019	361	15	2022	15	-	376	N/A	N/A	N/A	Parent/Korea/Insurance Captive
Churchill Downs	CHDN	12/31/2019	96	700	2024	694	-	791	451	0.9x	5.2x	3/16/20 - extended revolver, reduced revolver pricing
Eldorado Resorts	ERI	12/31/2019	206	500	2023	482	-	671	610	0.8x	4.2x	Credit stats are PF; 4.7x, 4.4x net lease-adjusted
Everi Holdings	EVRI	12/31/2019	42	35	2022	35	-	77	253	3.0x	4.1x	4Q cash is pro forma for notes redemption
Gaming & Leisure Properties	GLPI	12/31/2019	27	1,175	2023	576	599	1,156	1,040	N/A	5.6x	*Includes acquisition carve out; drew \$530mm on 3/23/20
Golden Entertainment	GDEN	12/31/2019	112	200	2022	200	-	312	176	4.4x	6.6x	
International Game Technology	IGT	12/31/2019	663	1,752	2024	-	1,752	2,415	1,693	4.7x	4.7x	Includes multi-currency revolver
Las Vegas Sands	LVS	12/31/2019	4,226	4,250	23/'24/'26	300	3,950	10,956	5,025	N/A	2.5x	Liquidity includes \$2.78bln of availability under DD Singapore TL
MGM Resorts Int'l	MGM	12/31/2019	1,700	1,500	2025	1,454	-	3,900	3,060	2.3x*	5.6x*	Liquidity excludes MGP & MGM China *Levg reflects w holly-ow ned lease adjusted figures **Per Bloomberg
MGM China	MGM China	12/31/2019	420	1,250	2024	667	583	1,003	719	0.9x	3.0x	
MGM Grow th Properties	MGMGPO	12/31/2019	202	1,350	2023	46	1,304	1,506	932	1.8x	4.7x	
Penn National Gaming	PENN	12/31/2019	437	700	2022	530	-	967	737	1.1x	3.3x	Lease adj. levg 6.0x/5.7x net; Draw n 3/13/20
Red Rock Resorts	RRR	12/31/2019	129	1,030	2025	-	1,030	1,159	520	4.8x	5.9x	12/31 cash is pro forma for 2/20 notes issuance
Scientific Games	SGMS	12/31/2019	313	650	2024	207	443	756	1,335	4.5x	6.6x	
Tw in Riiver Worldwide Holdings	TRWH	12/31/2019	183	250	2024	-	250	205**	196	1.5x	3.6x	**Pro forma credit stats & estimated liquidity Springing levg test if >30% of revolver utilized
VICI Properties	VICI	12/31/2019	108**	1,000	2024	-	1,000	1,108	1,263	1.6x	5.4x	
Totals			12,068	20,253		7,043	11,811	32,833				



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High Yield - Healthcare



HY Healthcare -	Public Name	S			Liqu	idity					Credit	: Metrics
Issuer / Company	Bond Ticker	As of	Cash	Total	Maturity	Drawn	Available	Current	LTM	Secured	Total	Comments
. ,				Revolver		Di uwii	Revolver	Liquidity	EBITDA	Levg	Levg	
Acadia Healthcare Company	ACHC	12/31/2019	124	500	2021	-	485	609	586	2.9 x	5.4x	1Q20-3Q20 5.75x maintenace cov
AMN Healthcare Service	AMN	12/31/2019	83	400	2025	-	383	466	277	0.0 x	2.3x	
Avantor	AVTR	12/31/2019	187	550	2022	56	467	653	1,031	2.8 x	4.5x	Comprised of \$300M Receivables Facility due 2023 and \$250M
Avantor	AVIK	12/31/2019	107	330	2022	50	407	000	1,031	2.0 X	4.5X	Revolver due 2022
												\$2.5Bn of cash to be used to pay
Bausch Health	BHCCN	12/31/2019	3,243	1,225	2023	-	1,055	4,298	3,571	2.9 x	6.9x	DOJ and redeem 5 7/8% notes in
												1Q20
Catalent Pharma	CTLT	12/31/2019	338	550	2024	-	543	881	652	1.9 x	4.5x	Includes new \$300M A/R facility
												PF lev estimated for WCG
Centene Corporation	CNC	12/31/2019	7,157	2,000	2024	93	1,839	8,996	3,431	0.5 x	3.1x	acquisition (\$6.1Bn of cash used to
Change Healtheare	EM	12/31/2019	3	785	2024		770	700	000	3.8 x	4.00	fund acquisition)
Change Healthcare	_				ļ	- 676	779	782	989		4.8x	
Charles River Laboratories Community Health Systems	CRL CYH	12/31/2019	238 216	2,050 1,000	2023 2023	676 273	1,366 442	1,604 658	673 1,626	1.3 x 7.5 x	2.8x 8.7x	ABL Facility
Encompass Health	EHC	12/31/2019	95	1,000	2023	45	916	1,011	965	0.7 x	3.2x	ADL FACILITY
•	ENDP	12/31/2019		- '	2024	300	697	 			6.5x	
Endo International	ENDP	12/31/2019	1,455	1,000	2024	300	697	2,151	1,309	4.1 x	0.5X	\$3.75Bn ABL Revolver, \$2Bn 364-
												day TL facility (undrawn), \$2Bn
HCA, Inc.	HCA	12/31/2019	621	7,750	2022	2,480	5,270	5,891	9,857	1.9 x	3.4x	Revolver
												6.75x maintenance cov
												\$1.2Bn Revolver, \$110M
Hill-Rom	HRC	12/31/2019	204	1,400	2024	75	1,325	1,529	672	1.8 x	3.0x	Receivables Securitization Program,
				,			, , ,	,				\$90M Note Securitization Facility
Hologic	HOLX	12/31/2019	371	1,750	2023	_	1,750	2,121	1,070	1.6 x	2.9x	Includes \$250M A/R facility
Horizon Therapeutics	HZNP	12/31/2019	1,076	200	2024	_	200	1,276	483	0.9 x	2.9	includes \$200mm, including
. ionizon morapouneo	1 .=	12/01/2010	1,010					1,2.0		0.0 X	2.0	DE 11/4 / 000014T
IQVIA	IQV	12/31/2019	900	1,500	2023	100	1 400	2 200	2,400	2.7 x	5.1x	PF debt/leverage for new \$900M TL Cash and availability per 8-K on
IQV IA	IQV	12/31/2019	900	1,500	2023	100	1,400	2,300	2,400	2.7 X	5.18	4/2/20
												4/2/20
Mallinckrodt	MNK	12/31/2019	791	900	2020	900	-	791	1,353	2.3x	4.0x	
Medical Properties Trust	MPW	12/31/2019	1,462	1,300	2021	-	1,300	2,762	821	1.0 x	8.6x	T
Mednax	MD	12/31/2019	305	1,200	2024	320	880	1,185	501	0.0 x	3.5x	Through 3Q20 5.0x maintenance cov
Molina Healthcare	MOH	12/31/2019	997	500	2022	-	499	1,496	1,178	0.2 x	1.3x	300
Ow ens & Minor	OMI	12/31/2019	67	400	2022	178	210	277	238	6.6 x	6.6x	
PPD	PPDI	12/31/2019	661	300	2022	-	298	959	777	4.0 x	5.5x	PF for IPO and debt repayment
Select Medical	SEM	12/31/2019	175	450	2022	-	412	587	645	3.4 x	5.3x	
Service Corp	SCI	12/31/2019	186	1,000	2024	295	671	857	836	1.4 x	4.3x	
Surgery Partners	SURCEN	12/31/2019	213	120	2022	120	-	213	327	5.9 x	8.3x	PF for draw of revolver on 3/18
Teleflex	TFX	12/31/2019	301	1,050	2024	300	748	1,049	751	1.4 x	2.6x	Includes \$50M A/R facility
												Updated cash and revolver balance
Tenet	THC	12/31/2019	1,250	2,000	2024	500	1,500	2,750	2,706	3.5 x	5.5x	as of April 2, 2020, PF for \$700M
		12/01/2010	1,200	2,000		000	.,000	2,.00	2,. 55	0.0 %	0.0%	new issuance and \$500M ABL
								 				capacity expansion
Teva	TEVA	12/31/2019	1,975	2,300	2022	-	2,300	4,275	4,685	0.0 x	5.8x	\$1.15Bn Revolver A due 2022 \$1.15Bn Revolver B due 2024
Universal Health Services	UHS	12/31/2019	61	1,000	2023	31	967	1,028	1,802	2.2 x	2.2x	ψ1.13Diff Nevolver D due 2024
Totals	5110	12/01/2013	24,756	36,180	2020	6,741	28,702	53,458	1,002	2.2 ^	۷.۷	
i Viulo			27,730	30,100		0,741	20,702	33,430				

High Yield - Homebuilders

HY Homebuilders	s - Publ <mark>ic Na</mark> me	es			_iquidity (\$ million	s)			С	redit Met	rics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Net Levg
Beazer Homes USA Inc	BZH	Dec 19	41	250	2022	30	220	261	183	N/A	69%	N/A	69%
Century Communities Inc	CCS	Dec 19	91	640	2023	68	572	663	225	N/A	48%	N/A	45%
Hovnanian Enterprises Inc	HOV	Jan 20	101	125	2022	-	125	226	187	N/A	141%	N/A	145%
KB Home	KBH	Nov 19	454	500	2023	-	481	935	539	N/A	42%	10%	35%
Lennar Corp	LEN	Nov 19	1,201	2,600	2024	-	2,416	3,617	2,928	N/A	33%	4%	29%
LGI Homes Inc	LGIH	Dec 19	38	549	2022	395	228	266	267	N/A	45%	N/A	44%
MDC Holdings Inc	MDC	Dec 19	424	1,000	2023	15	962	1,386	367	N/A	39%	221%	29%
Meritage Homes Corp	MTH	Dec 19	319	780	2023	-	719	1,039	427	N/A	34%	N/A	26%
PulteGroup Inc	PHM	Dec 19	1,218	1,000	2023	-	737	1,955	1,553	N/A	34%	12%	22%
Taylor Morrison Home Corp	TMHC	Dec 19	326	600	2024	-	522	849	522	N/A	42%	N/A	37%
Toll Brothers Inc	TOL	Jan 20	520	1,905	2024	150	1,592	2,112	994	N/A	46%	18%	42%
Five Point Holdings LLC	FPH	Sep 19	330	125	2022	-	124	454	(30)	N/A	25%	N/A	14%
M/I Homes Inc	МНО	Dec 19	6	500	2021	66	365	371	240	N/A	38%	N/A	38%
William Lyon Homes	WLH	Sep 19	42	325	2022	150	166	208	195	N/A	58%	N/A	57%
American Woodmark Corp	AMWD	Jan 20	47	100	2022	_	95	142	246	1.0x	2.5x	N/A	2.3x
Boise Cascade Co	BCC	Dec 19	285	370	2022	-	337	622	215	0.4x	2.1x	33%	0.7x
Beacon Roofing Supply Inc	BECN	Dec 19	44	1,300	2023	216	944	988	449	3.3x	6.2x	15%	6.1x
TopBuild Corp	BLD	Dec 19	185	250	2022	-	189	373	359	0.9x	2.1x	N/A	1.5x
Builders FirstSource Inc	BLDR	Dec 19	14	900	2023	27	681	695	515	2.5x	2.5x	N/A	2.5x
BMC Stock Holdings Inc	BMCH	Dec 19	165	425	2024	-	362	528	264	1.4x	1.9x	N/A	1.3x
Masonite International Corp	DOOR	Dec 19	167	250	2024	-	198	365	283	2.8x	2.8x	N/A	2.2x
HD Supply Inc	HDSUPP	Oct 19	37	1,500	2022	362	619	656	881	1.5x	2.5x	N/A	2.4x
Hillman Cos Inc/The	HILCOS	Sep 19	13	150	2024	103	35	48	191	6.0x	8.3x	N/A	8.3x
Installed Building Products In	IBP	Dec 19	178	200	2024	-	161	339	197	1.4x	2.9x	N/A	2.0x
JELD-WEN Holding Inc	JELWEN	Dec 19	226	418	2022	-	329	555	415	1.4x	3.7x	N/A	3.1x
James Hardie International Fin	JHXAU	Dec 19	149	500	2022	180	315	464	496	0.4x	2.9x	411%	2.6x
Patrick Industries Inc	PATK	Dec 19	139	550	2024	135	411	550	217	1.1x	3.2x	4%	2.6x
PGT Innovations Inc	PGTI	Dec 19	97	80	2024	-	78	175	128	0.5x	3.0x	N/A	2.2x
Cornerstone Building Brands In	CNR	Dec 19	102	726	2023	70	426	528	584	4.4x	5.5x	N/A	5.4x
Summit Materials LLC / Summit	SUMMAT	Dec 19	311	345	2024	-	330	641	461	1.5x	4.3x	2%	3.6x
US Concrete Inc	USCR	Dec 19	41	350	2022	140	244	284	184	0.5x	3.7x	N/A	3.5x
USG Corp	USG	Dec 18	328	220	2022	-	171	499	534	0.4x	2.0x	108%	1.4x
Griffon Corp	GFF	Dec 19	65	350	2021	100	229	294	223	0.7x	5.2x	21%	4.9x
Ashtead Capital Inc	AHTLN	Jan 20	18	4,100	2023	2,803	1,446	1,464	2,296	1.3x	1.9x	29%	1.9x
Herc Rentals Inc	HRI	Dec 19	33	1,750	2023	650	1,079	1,112	741	2.8x	2.8x	N/A	2.8x
H&E Equipment Services Inc	HEES	Dec 19	14	750	2021	217	525	540	473	0.5x	2.5x	(117%)	2.6x 2.4x
Mobile Mini Inc	MINI	Dec 19	8	1,000	2024	555	440	448	243	2.6x	3.6x	38%	3.6x
United Rentals Inc	URI	Dec 19	52	4,725	2024	2,563	2,086	2,138	4,355	1.0x	2.6x	N/A	2.6x
Williams Scotsman Internationa	WLSC	Dec 19	3	1,425	2024	885	509	512	357	4.6x	4.6x	N/A	4.6x
Nesco Holdings Inc	NSCOHL	Sep 19	0	350	2022	250	82	82	127	4.6X 3.7x	5.5x	N/A	4.6x 5.5x
1 to coo i loidingo into	NOCOFIL	Seh 1a			2024	200	<u> </u>	<u></u>	121	3.7 X	J.5X	14/7	J.5X
Totals			7,835	33,983		10,129	21,550	29,385					



High Yield - Industrials



HY Industrials	s - Public Name	es			Liquidity ((\$ million	s)				(Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
Anixter International	AXE	12/31/2019	80	750	2023	56	675	754	472	0.1 x	2.3x	N/A	Being acquired by by WCC
Park-Ohio Industries	PKOH	12/31/2019	56	375	2024	173	195	251	137	1.4 x	4.2x	30%	
Rexel	RXLF	12/31/2020	577	2,412	2025	598	842	1,419	1,082	1.1 x	3.1x	31%	PF for March 2020 €550mn Revolver Draw
WESCO International	wcc	12/31/2019	33	1,200	2024	415	749	782	411	1.0 x	3.1x	N/A	Acquiring AXE; \$600mn RCF + \$600mn A/R Facility
Advanced Disposal Services	ADSWST	12/31/2019	13	300	2021	30	242	254	425	3.4 x	4.4x	N/A	Being acquired by Waste Management (WM)
Clean Harbors	CLH	12/31/2019	372	400	2021	-	229	601	540	1.4 x	2.9x	N/A	
Covanta	CVA	12/31/2019	37	900	2023	183	489	526	428	1.8 x	5.9x	196%	
GFL Environmental (USD)	GFLENV	12/31/2019	442	523	2023	-	442	884	622	2.8 x	6.0x	N/A	PF for March 2020 IPO, Cash = Unregulated cash
Harsco	HSC	12/31/2019	57	700	2024	530	145	202	306	2.5 x	4.1 x	N/A	PF for pending \$463mn acquisition
Stericycle	SRCL	12/31/2019	35	1,200	2022	296	871	906	543	0.1 x	4.1 x	N/A	PF for pending \$463mn sale
The Manitow oc Company Inc.	MTW	12/31/2019	199	275	2024	-	206	406	157	1.9 x	2.0 x	N/A	
Terex Corp	TEX	12/31/2019	535	600	2022	-	600	1,135	448	1.3 x	2.7 x	49%	
Titan International	TWI	12/31/2019	67	125	2022	36	31	98	38	13.3 x	13.3 x	13%	
Welbilt, Inc.	WBT	12/31/2019	131	400	2023	142	255	385	286	3.5 x	5.0 x	N/A	
AECOM	ACM	12/31/2019	2,980	1,350	2023	134	1,194	4,174	755	1.8 x	4.6 x	N/A	PF for \$2.4bn Management Services sale
MasTec	MTZ	12/31/2019	71	1,350	2024	339	913	984	843	1.2 x	1.7 x	N/A	
Tutor Perini	TPC	12/31/2019	194	350	2022	114	236	430	260	0.6 x	3.3 x	N/A	
EnerSys	ENS	12/31/2019	273	822	2022	68	750	1,022	383	1.3 x	2.9 x	23%	
ltron	ITRI	12/31/2019	550	500	2024	400	59	609	270	3.5 x	5.0 x	N/A	PF for March 2020 \$400mn Revolver Draw
Resideo	REZI	12/31/2019	122	350	2023	-	350	472	362	2.2 x	3.3 x	N/A	
Enerpac Tool Group	EPAC	2/29/2020	163	400	2024	-	394	557	92	0.0 x	3.1 x	4%	
Advanced Drainage Systems	WMS	12/31/2019	98	350	2024	-	342	440	327	2.0 x	3.1 x	13%	Excludes special dividend in 2Q19
Altra Industrial Motion	AIMC	12/31/2019	267	300	2023	100	196	463	379	3.4 x	4.5 x	22%	PF for \$100mn RCF draw in March 2020
Briggs & Stratton	BGG	12/31/2019	42	625	2024	428	159	201	64	6.7 x	9.9 x	N/A	Dividend discontinued in Jan 2020
Colfax Corp.	CFX	12/31/2019	110	1,247	2024	51	1,196	1,305	761	1.1 x	3.1 x	N/A	\$975mn RCF plus Bi-lateral Facilities
EnPro Industries	NPO	12/31/2019	121	400	2023	134	249	370	169	1.7 x	3.7 x	19%	
Matthews International Corp.	MATW	12/31/2019	39	1,054	2021	619	435	474	215	3.2 x	4.6 x	29%	\$900mn RCF plus other facilities
Mueller Water Products	MWA	12/31/2019	137	175	2021	-	122	259	204	0.0 x	2.2 x	(206%)	
SPX FLOW	FLOW	12/31/2019	299	650	2024	-	573	872	268	0.5 x	2.7 x	N/A	\$300mn RCF, \$200mn RCF and other
Rexnord Corp.	RXN	12/31/2019	277	353	2023	-	341	618	456	1.4 x	2.5 x	16%	PF for dividend initiated in Jan 2020
Tennant Co.	TNC	12/31/2019	75	200	2022	40	157	231	148	0.3 x	2.3 x	48%	
TriMas Corp.	TRS	12/31/2019	172	300	2022	-	284	456	147	0.0 x	2.0 x	N/A	
Totals			8,625	20,937		4,886	13,916	22,541					

High Yield - Lodging & Leisure

HY Lodging & Leisure	- Public Name	S			Liquidity (\$	millions	5)				Credit	Metrics
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Comments
Cedar Fair	FUN		182	275	2022	-	260	442	505	1.4x	4.3x	
Choice Hotels	CHH	12/31/2019	34	600	2023	18	582	616	365	n/a	2.4x	
Corrections Corp	CXW	12/31/2019	92	800	2023	388	412	504	444	1.3x	3.7x	
RLJ Lodging	FCH	12/31/2019	883	600	2024	-	600	1,483	92	3.1x	3.1x	
Hilton Grand Vacations	HGVLLC	12/31/2019	152	800	2023	320	479	631	399	1.3x	2.1x	Incl non-recourse leverage is 4.1x, 3.5x net
Hilton Worldwide	HLT / HILDOC	12/31/2019	630	1,750	2024	1,750	-	2,320	2,308	1.2x	3.5x	Draw n 3/5
Marriot Vacations	VAC	12/31/2019	287	600	2023	600	-	615	758	1.2x	2.9x	Draw n 3/24; VAC also has \$140mm of gross vacation ow nership notes receivable that it expects to be eligible for securitization under its w arehouse facility; levg 5.4x, 5.2x net inc securitizations
Norw egian Cruise Line	NCLH		253	1,550	2021 / 2024	1,550	-	1,803	1,935	3.2x	3.5x	Incremental \$675mm revolver added 3/5; total revolver size now \$1.55bln; Draw n fully 3/12
Ryman Hospitality	RHP	12/31/2019	362	700	2021	700	300	928	511	1.3x	5.1x	Draw n 3/17
Six Flags	SIX		174	350	2024	-	329	853	536	1.5x	4.3x	Also have \$350mm accordian on TLB
The GEO Group	GEO	12/31/2019	32	900	2024	521	317	349	483	2.8x	5.0x	Also have a \$450mm accordian; 5.7x, 5.5x net inc non recourse
Wyndham Destinations	WYND	12/31/2019	355	1,000	2023	-	983	1,338	992	3.1x	3.1x	Also had \$439mm available under asset-backed conduit facility; Levg 5.6x, 5.3x net inc non recourse
Wyndham Hotels	WH	12/31/2019	94	750	2023	750	-	829	613	2.6x	3.5x	Draw n 3/17
Totals			3,530	10,675		6,597	4,262	12,711				



High Yield - Media



HY Media/Enterta	inment - Publi	c Names			_iquidity (\$ million	s)				(Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
AMC Entertainment	AMC	PF 12/31/2019	597	356	4/22/2024	356	-	597	862	3.4x	6.7x	N/A	~US\$131mn GBP revolver due 12/22
AMC Netw orks	AMCX	12/31/2019	616	500	7/28/2022	-	500	1,116	944	0.8x	3.1x	N/A	
Cimpress	CMPR	12/31/2019	37	1,092	2/13/2025	334	758	795	471	1.6x	2.9x	N/A	
Cinemark	CNK	12/31/2019	488	100	11/28/2022	1	99	587	745	0.9x	2.6x	91%	
Clear Channel Outdoor	CCO	PF 12/31/2019	549	300	8/23/2024	219	81	630	582	5.9x	9.1x	N/A	Lvg. excludes \$45mn pref.
Cumulus	CUMINT	12/31/2019	15	50	8/17/2023	3	47	62	213	4.8x	4.8x	N/A	
Donnelley Financial	DFIN	12/31/2019	17	300	12/28/2023	68	232	249	137	0.0x	2.2x	N/A	
Entercom	ETM	PF 12/31/2019	180	250	8/19/2024	250	-	180	341	3.0x	5.4x	49%	
E.W. Scripps	SSP	12/31/2019	33	210	4/27/2022	6	204	237	375	2.8x	5.2x	8%	
Graham Holdings	GHC	12/31/2019	814	300	5/30/2023	5	295	1,109	357	0.3x	1.5x	41%	
Gray Television	GTN	12/31/2019	212	200	1/2/2024	-	200	412	816	2.2x	4.6x	N/A	Lvg. excludes \$650mn pref.
iHeartMedia	IHRT	PF 12/31/2019	600	450	6/14/2023	398	52	652	1,001	4.5x	5.9x	N/A	
Lamar Advertising	LAMR	PF 12/31/2019	490	750	2/6/2025	638	112	602	785	1.9x	4.7x	79%	REIT / Board is currently evaluating dividend plans / Revolver contains a net secured maintenance covenant of 4.5x (ratio stands at 1.4x post draw), and the credit facility includes a 7x net debt incurrence covenant of 7x (stands at 4.2x post draw).
Lions Gate	LGF	12/31/2019	196	1,500	3/22/2023	-	1,500	1,696	440	3.9x	6.4x	N/A	2.2 /.
Live Nation	LYV	12/31/2019	697	500	10/17/2024	84	417	1,114	943	1.1x	3.6x	N/A	
LSC Communications	LKSD	12/31/2019	105	300	9/30/2021	300	-	105	145	6.3x	6.3x	N/A	
Match Group	МТСН	12/31/2019	126	750	2/13/2025	-	750	876	779	0.5x	4.9x	N/A	Includes converts assumed from IAC spin
MDC Partners	MDZACN	12/31/2019	107	250	5/3/2021	5	245	352	184	0.0x	4.9x	69%	Lvg. excludes \$145mn pref.
Meredith Corp.	MDP	12/31/2019	21	350	1/31/2023	58	292	313	646	1.7x	3.7x	56%	Lvg. excludes \$650mn pref.
National CineMedia	NATCIN	12/31/2019	81	175	6/20/2023	43	132	213	208	3.4x	4.5x	41%	
Netflix	NFLX	12/31/2019	5,018	750	3/29/2024	-	750	5,768	3,113	0.0x	4.7x	N/A	
Nexstar Media	NXST	12/31/2019	232	163	10/26/2023	24	140	372	1,615	3.7x	5.3x	38%	
Nielsen Holdings	NLSN	12/31/2019	454	850	7/9/2023	17	833	1,287	1,853	2.2x	4.5x	72%	
Outfront Media	OUT	PF 12/31/2019	559	625	11/18/2024	607	18	578	522	2.5x	5.7x	142%	REIT
Quad Graphics	QUAD	12/31/2019	79	800	1/31/2024	36	764	843	335	2.6x	3.3x	22%	
R.R. Donnelley	RRD	12/31/2019	191	800	9/29/2022	166	634	825	434	1.3x	4.2x	5%	
Urban One	ROIAK	12/31/2019	34	38	4/21/2021	-	38	71	134	5.0x	6.7x	N/A	
Salem Communications	SALM	12/31/2019	0	30	5/19/2022	12	18	18	43	5.4x	5.4x	63%	
Sinclair Broadcast	SBGI	PF 12/31/2019	1,008	650	8/23/2024	649	1	1,009	937	3.5x	5.5x	14%	
Diamond Sports	DSPORT	PF 12/31/2019	598	650	8/23/2024	225	425	1,023	1,114	5.9x	7.5x	N/A	Lvg. excludes \$525mn of pref.
Sirius XM	SIRI	12/31/2019	106	1,750	6/29/2023	-	1,750	1,856	2,427	0.0x	3.3x	14%	
Tegna	TGNA	12/31/2019	29	1,500	8/15/2024	905	595	624	857	1.2x	4.9x	29%	
Tow nsquare Media	TSQ	PF 12/31/2019	133	50	4/1/2022	50	-	133	102	3.2x	6.0x	16%	
		40/04/0040	0.000	500	8/7/2023	_	500	7,139	4.040	0.04	2.3x	N/A	
Tw itter	TWTR	12/31/2019	6,639	500	0/1/2023	-	500	7,139	1,210	0.0x	2.3X	IVA	

High Yield - Metals & Mining

HY Metals & Mir	ning - Public N	Names		I	_iquidity (\$ million	s)				(Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITD	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
Allegheny Technologies	ATI	12/31/2019	491	500	2024	-	465	956	448	0.2 x	3.1x	N/A	
Commercial Metals	CMC	2/29/2020	232	676	2022	-	617	849	632	0.3 x	1.8x	12%	Includes both US and Polish facilities
Ferroglobe	GSM	9/30/2019	177	250	2021	250	-	177	38	9.1 x	18.3x	N/A	
Ryerson	RYI	12/31/2019	11	1,032	2021	378	380	391	190	5.1 x	5.2x	N/A	
US Steel	X	12/31/2019	749	2,517	2024	993	1,524	2,273	711	0.8 x	5.3x	(6%)	US (\$2.0b) plus European facilities
Alcoa	AA	12/31/2019	1,079	1,500	2023	-	1,500	2,579	1,656	0.0 x	1.1x	N/A	
Arconic Rolled Products	ARCROL	9/30/2019	400	1,000	2025	-	1,000	1,400	755	1.6 x	1.6 x	33%	PF for split from How met Aerospace
Century Aluminum	CENX	12/31/2019	39	225	2023	4	162	201	(31)	na	na	N/A	US Facility (\$175mn) and Iceland Facility (\$50mn)
Constellium	CSTM	12/31/2019	206	515	2022	142	372	579	629	0.2 x	4.2x	N/A	US Facility, French Facility. factoring facilities
Kaiser Aluminum	KALU	12/31/2019	343	375	2024	-	353	696	213	0.0 x	2.4x	23%	Cash includes \$79mn of ST Investments
First Quantum	FMCN	12/31/2019	543	1,600	2022	762	838	1,381	1,609	1.9 x	5.1x	(1%)	PF for January 2020 Refinancing
Freeport-McMoRan	FXC	12/31/2019	2,020	3,500	2024	-	3,487	5,507	2,698	0.3 x	3.6	(25%)	
Hudbay Minerals	HBMCN	12/31/2019	396	550	2022	-	421	817	333	0.1 x	3.2	(26%)	
Taseko Mines	TKOCN	12/31/2019	41	-	na	-	-	41	38	7.5 x	7.5x	N/A	Translated from CAD
Anglogold Ashanti	ANGSJ	12/31/2019	456	1,752	2023	-	1,752	2,208	1,580	0.0 x	1.3x	19%	\$1.4bn US Facility, ZAR 4.7bn Facility
Coeur Mining	CDE	12/31/2019	56	250	2022	-	250	306	176	0.4 x	1.7x	N/A	
Eldorado Gold Corp.	ELDCN	12/31/2019	181	250	2024	-	186	367	236	2.1 x	2.1x	N/A	
Hecla Mining	HL	12/31/2019	31	250	2023	-	216	247	178	0.1 x	2.7x	N/A	PF for February 2020 Refinancing
IAMGOLD Corp	IMGCN	12/31/2019	837	500	2024	-	500	1,336	280	0.3 x	1.7x	N/A	
New Gold	NGDCN	12/31/2019	383	400	2021	30	251	635	251	0.1 x	2.9x	N/A	
Cleveland-Cliffs	CLF	12/31/2019	298	2,000	2025	625	1,275	1,573	958	1.8 x	4.5x	(94%)	PF for AKS Acquisition and Refi
Fortescue Metals	FMGAU	12/31/2019	3,314	1,025	2021	-	1,025	4,339	8,642	0.2 x	0.5x	47%	
Alliance Resource Partners	ARLP	12/31/2019	36	595	2021	329	257	293	599	0.7 x	1.3x	133%	\$400mn RCF plus other facilities
Consol Energy	CEIX	12/31/2019	80	400	2023	-	330	411	406	1.4 x	1.7x	30%	Dividends publicly owned portion of CCR
Peabody Energy	BTU	12/31/2019	732	815	2023	-	544	1,276	837	1.6 x	1.6x	66%	\$565mn RCF plus A/R Facility;div discontinued
Suncoke Energy	SXCP	12/31/2019	97	400	2024	143	245	342	248	0.6 x	3.2x	28%	PF for run-rate dividends (started in 4Q19)
Warrior Met Coal	HCC	12/31/2019	193	125	2023	-	116	310	479	0.7 x	0.7x	3%	Excludes special dividend in 2Q19
Totals			13,423	23,002		3,656	18,064	31,486					



High Yield - Paper & Packaging



HY Paper & Pacl	kaging - Public	Names			_iquidity (\$ million	s)					Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Net Levg	Comments
Ardagh Packaging	ARGID / ARDFIN	12/31/2019	614	664	2022	-	664	1,278	1,173	2.9x	7.4x	65%	6.8x	PF for the Trivium transaction
Ball Corp	BLL	12/31/2019	244	2,750	2024	-	2,687	2,931	1,836	1.0x	4.1x	21%	4.0x	PF for the sale of Chinese metal ca
Berry Global	BERY	12/31/2019	566	850	2024	-	850	1,416	2,030	4.4x	5.5x	N/A	5.3x	PF for the RPC Group acquisition
Cascades	CASCN	12/31/2019	155	525	2023	52	473	628	604	0.5x	3.5x	11%	3.4x	PF for the Orchards Paper acquisition
Clearw ater	CLW	12/31/2019	21	250	2024	14	230	251	167	2.0x	5.4x	N/A	5.3x	
Crow n	CCK	12/31/2019	607	1,650	2024	-	1,586	2,193	1,702	1.8x	5.5x	N/A	5.1x	
Graphic Packaging	GPK	12/31/2019	153	1,670	2023	60	1,610	1,763	1,049	2.0x	3.2x	20%	3.0x	PF for the IP shares repurchase
Greif	GEF	12/31/2019	176	1,075	2024	215	645	820	687	3.1x	4.1x	46%	3.9x	PF for the consumer packaging sal
Intertape Polymer	ITPCN	12/31/2019	7	400	2023	39	358	365	178	1.7x	2.9x	59%	2.9x	PF for the Nortech packaging acquisition
Louisiana-Pacific	LPX	12/31/2019	195	350	2024	-	336	531	209		1.7x	N/A	0.1x	
Norbord	OSB	12/31/2019	20	260	2021	-	252	272	138	4.8x	4.8x	(66%)	4.7x	
Ow ens-Illinois	OI	12/31/2019	551	1,500	2024	-	1,500	2,051	1,251	1.9x	4.8x	21%	4.4x	PF for the acquisition of Nueva Fabrica
Resolute Forest Products	RFP	12/31/2019	3	522	2025	201	224	227	213		3.0x	N/A	2.9x	PF for the acquisition of three Conifex saw mills
Sappi Limited	SAPSJ	12/31/2019	270	658	2023	-	658	928	687	1.0x	3.3x	N/A	2.9x	PF for the purchase of Matane Mill
Schw eitzer-Mauduit	SWM	12/31/2019	103	506	2023	-	502	605	197	1.7x	3.3x	50%	2.8x	PF for the acquisition of Tekra and Trient
Sealed Air	SEE	12/31/2019	262	1,344	2023	89	1,229	1,491	988	0.8x	3.9x	20%	3.6x	PF for APS acquisition
Silgan	SLGN	12/31/2019	204	1,202	2023	-	1,186	1,390	699	1.4x	4.5x	14%	4.5x	PF for the dispensing system acquisition
Totals			4,151	16,176		669	14,988	19,139						·

High Yield - Retail

HY Retail	- Public Names	5			_iquidity (\$ millions	s)			Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
Bed Bath & Beyond	BBBY	11/30/2019	900	250	2022	-	250	1,150	671	0.0 x	2.2x	30%
Caleres	CAL	2/2/2019	45	600	2024	275	295	340	233	1.4 x	2.4x	10%
Carters	CRI	12/28/2019	864	750	2023	750	-	864	514	0.2 x	1.0x	28%
GameStop	GME	11/2/2019	290	420	2022	-	413	703	138	0.0 x	3.2x	N/A
Guitar Center	GTRC	2/3/2020	32	375	2023	268	44	76	185	5.2 x	7.1x	N/A
Hanesbrands	HBI	12/28/2019	959	1,000	2022	630	366	1,325	1,099	0.9 x	3.1x	31%
JCPenney	JCP	2/1/2020	1,636	2,350	2023	1,250	1,391	3,027	594	4.1 x	6.3x	N/A
L Brands	LB	2/1/2020	2,449	1,000	2024	950	40	2,489	1,886	0.0 x	2.9x	40%
Levi Strauss	LEVI	11/24/2019	934	850	2022	-	800	1,734	765	0.0 x	1.3x	54%
Michaels Stores	MIK	2/1/2020	1,010	850	2024	600	130	734	791	3.0 x	3.7x	N/A
Neiman Marcus	NMG	2/1/2020	38	900	2021	524	372	410	418	11.1 x	11.6x	N/A
Party City	PRTY	12/31/2019	185	540	2023	268	506	691	269	3.1 x	6.3x	N/A
Rite Aid	RAD	11/30/2019	289	2,750	2023	1,135	1,482	1,771	537	3.0 x	6.9x	N/A
Sally Beauty	SBH	12/31/2019	462	500	2022	395	86	548	559	1.3 x	2.9x	N/A
Tailored Brands	TLRD	2/1/2020	14	500	2022	310	190	204	255	3.7 x	4.4x	N/A
Ingles Markets	IMKTA	12/28/2019	23	175	2022	-	165	188	262	0.6 x	3.2x	31%
The Fresh Market	TFM	10/27/2019	115	100		-	50	165	118	1.1 x	7.9x	N/A
Weight Watchers	WW	12/28/2019	183	150	2022	-	149	332	352	3.7 x	4.6x	N/A
Brinker	EAT	12/25/2019	12	1,000	2021	570	430	442	396	1.7 x	3.3x	37%
Grubhub	GRUB	12/31/2019	376	225	2024	-	220	595	186	0.0 x	2.6x	N/A
Restaurant Brands	BCULC	12/31/2019	2,531	1,000	2024	998	-	2,531	2,304	5.3 x	5.3x	64%
Wendy's	WEN	9/29/2019	439	-	NM	-	-	439	455	6.0 x	6.2x	62%
YUM! Brands	YUM	12/31/2019	605	1,000	2022	-	1,000	1,605	2,112	4.0 x	5.0x	46%
Totals			14,393	17,285		8,923	8,377	22,364				



High Yield - Services



HY Service	es - Public Nam	es			Liquidity (\$ million	s)					Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITD	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
ADT / Prime Security	ADT	12/31/2019	30	400	2023	220	180	210	2,483	3.6 x	4.1x	21%	
Aramark Services Inc	ARMK	12/31/2019	1,139	1,000	2023	954	(0)	1,139	1,648	3.3 x	4.9x	28%	Fully drew revolver, said have ~\$1.3bn liquidity
ASGN Incorporated	ASGN	12/31/2019	95	250	2024	-	246	341	449	1.1 x	2.3x	N/A	
Booz Allen Hamilton	BAH	12/31/2019	697	500	2023	-	500	1,197	735	2.4 x	2.9	30%	
Cardtronics Plc	CATM	12/31/2019	602	750	2024	739	-	602	308	2.4 x	4.3x	N/A	Fully drew revolver, said have ~\$600mn in cash
Clarivate Analytics	CAMFIN	12/31/2019	76	250	2024	65	181	257	294	5.7 x	5.7x	N/A	Acquired DRG, stock and incremental TL
Diebold Nixdorf	DBD	12/31/2019	711	413	20 / 22	387	-	711	401	5.4 x	6.3x	N/A	Revolver fully draw n, \$69mn due Dec '20 and \$344mn due Apr '22
Fair Isaac Corp	FAIRIC	12/31/2019	111	400	2023	95	305	416	374	0.3 x	2.5x	N/A	
Frontdoor Inc	FTDR	12/31/2019	267	250	2023	-	250	517	303	2.1 x	3.3x	N/A	
Gartner, Inc	П	12/31/2019	281	1,200	2022	148	1,052	1,333	684	2.1 x	3.2x	N/A	
Iron Mountain Inc	IRM	12/31/2019	194	1,750	2023	349	1,397	1,590	1,438	1.8 x	6.1x	90%	
Korn Ferry	KFY	1/31/2020	100	650	2024	•	646	746	313	0.0 x	1.3x	13%	
Laureate Education	LAUR	12/31/2019	340	410	2024	202	207	547	647	0.3 x	1.9x	N/A	
MSCI Inc	MSCI	12/31/2019	1,317	400	2024	-	400	1,717	850	0.0 x	3.8x	34%	
Sabre Corp	SABHLD	12/31/2019	823	400	2022	387	-	823	946	4.0 x	4.0x	33%	Fully drew revolver, no maturities until 2022
Science Applications	SAIC	11/30/2019	162	400	2023	-	390	552	499	3.9 x	3.9x	20%	Not PF for recent Unisys acquisition and financing
ServiceMaster	SERV	12/31/2019	280	400	2024	-	370	650	417	1.8 x	4.2x	N/A	
Signature Aviation	BBALN	12/31/2019	113	400	2024	-	400	513	439	0.0 x	2.6x	43%	
The Brink's Company	BCO	12/31/2019	875	1,000	2024	115	885	1,760	564	2.9 x	4.0x	15%	Added TL \$590mn, said ~\$800mn liquidity post G4S acquisition
Vivint Inc	APXSEC	12/31/2019	122	350	2025	-	350	472	643	3.8 x	4.5x	N/A	Cash and liquidity PF for post-4Q refinancing
Wex Inc	WEX	12/31/2019	370	820	2023	-	769	1,139	711	3.9 x	3.9x	N/A	eNett and Optal acquisition \$1.7bn cash and stock, to close mi-2020
Totals			8,704	12,393		3,661	8,527	17,232					

High Yield - Technology

HY Technolo	gy - Public Nar	nes			Liquidity (\$ million	s)					Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITD	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
ACI Worlw ide	ACIW	12/31/2019	121	500	4/5/2024	239	261	382	338	2.9 x	4.1x	0.0%	Leverage PF for Speedpay acquisition
AMD	AMD	12/31/2019	1,503	500	6/7/2024	0	486	1,989	1,057	0.0 x	0.5x	0.0%	
Amkor	AMKR	12/31/2019	895	250	7/13/2023	0	250	1,145	757	1.1 x	1.8x	0.0%	Excludes foreign subsidiary revolvers
CDK Global	CDK	12/31/2019	222	750	8/17/2023	90	660	882	776	0.0 x	3.6x	24.0%	PF for sale of digital marketing business
CDW	CDW	12/31/2019	154	1,450	3/31/2022	51	1,000	1,154	1,431	1.1 x	2.3x	23.0%	
Clarivate	CCC	12/31/2019	76	250	10/31/2024	0	250	326	294	4.7x	4.7x	0.0%	
CommScope	COMM	12/31/2019	498	1,000	4/4/2024	250	547	1,045	1,369	4.3 x	7.2x	0.0%	Leverage PF for ARRIS
Dell	DELL	4/2/2020	12,302	4,500	12/20/2023	3,000	1,500	13,802	11,787	3.3 x	4.4x	0.0%	PF for revolver draw, secured issue
Endurance International	EIGI	12/31/2019	111	165	2/9/2021	0	165	276	314	4.3 x	5.4x	0.0%	
Entegris	ENTG	12/31/2019	351	300	11/6/2023	0	300	651	437	0.9 x	2.2x	0.0%	
Go Daddy	GDDY	12/31/2019	1,086	600	2/15/2024	0	600	1,686	587	3.1 x	4.1x	0.0%	
Infor	LWSN	1/31/2020	331	120	2/1/2022	0	111	442	753	4.2 x	6.9x	0.0	Private company, registered bonds
j2 Global	JCOM	12/31/2019	676	100	1/7/2024	0	100	776	550	2.0 x	2.9x	13.0%	
MagnaChip	MX	12/31/2019	152	0				152	75	0.0 x	3.0x	0.0%	
NCR	NCR	12/31/2019	1,146	1,100	8/28/2024	1,070	0	1,146	1,058	2.0 x	4.2x	0.0%	PF for revolver draw
NortonLifeLock	NLOK	12/31/2019	4,768	1,000	11/4/2024	0	1,000	5,768	NA	NA	NA	NA	
ON Semiconductor	ON	12/31/2019	2,064	1,970	6/12/2024	1,970	0	2,064	1,250	1.9 x	3.0x	0.0%	PF for revolver draw
OpenText	OTEX	12/31/2019	770	750	5/5/2024	0	750	1,520	1,242	0.8 x	2.9x	0.0%	PF for \$1.8Bn issuance in Feb '20
Pitney Bowes	PBI	12/31/2019	933	500	11/1/2024	0	500	1,433	438	2.9 x	5.2x	31.0%	PF for divestiture and bond tender
Plantronics	PLT	12/31/2019	172	100	7/2/2023	0	100	272	336	3.3 x	4.8x	NA	
PTC	PTC	12/28/2019	237	1,000	2/13/2025	171	829	1,066	283	0.6 x	4.1x	0.0%	
Qorvo	QRVO	12/28/2019	1,098	300	12/5/2022	0	300	1,398	1,012	0.0 x	1.6x	0.0%	
Seagate	STX	1/3/2020	1,744	1,500	2/20/2024	0	1,500	3,244	1,751	0.0 x	2.4x	58.0%	
Sensata	ST	12/31/2019	1,200	420	3/7/2024	400	16	1,216	888	1.0 x	4.2x	0.0%	PF for revolver draw
SS&C Technologies	SSNC	12/31/2019	398	250	4/16/2023	245	0	398	1,878	2.8 x	3.8x	11.0%	PF for revolver draw
TTM Technologies	TTMI	12/31/2019	400	150	6/3/2024	40	110	510	376	2.3 x	4.0x	0.0%	
Uber Technologies	UBER	12/31/2019	11,313	2,270	6/15/2023	0	2,270	13,583	-2,725	NA	NA	NA	
Verisign	VRSN	12/31/2019	1,218	200	12/12/2024	0	200	1,418	945	0.0 x	1.9x	0.0%	
Western Digital	WDC	1/3/2020	3,137	2,250	2/27/2023	0	2,250	5,387	1,635	4.0 x	6.1x	154.0%	
Xerox	XRXCRP	12/31/2019	2,740	1,800	8/9/2022	0	1,800	4,540	1,627	2.7 x	1.0x	21.0%	
Totals			51,817	26,045		7,526	17,855	69,671					



High Yield - Telecommunications



HY Teleco	m - Public Nam	es			Liquidity (\$ million	s)				(Credit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
Alaska Communications	ALSK	12/31/2019	27	20	1/15/2024	-	20	47	63	2.9 x	2.9x	N/A	
CenturyLink	CTL	12/31/2019	946	2,200	1/31/2025	250	1,950	2,896	9,070	2.9 x	3.8x	36%	PF for 1Q20 debt repayment, refi
Cincinnati Bell	CBB	12/31/2019	12	200	10/2/2022	57	143	155	405	2.4x	4.8x	N/A	Agreement to be acquired
Cogent	CCOI	12/31/2019	292	-	-		-	292	212	2.9 x	4.5x	136%	Does not have a revolver
Consolidated	CNSL	12/31/2019	12	110	10/15/2021	40	53	65	524	3.5 x	4.4x	52%	
Frontier	FTR	9/30/2019	733	850	2/27/2022	750	100	833	3,216	2.1 x	5.5x	N/A	
GCI	GCILLC	12/31/2019	61	550	12/27/2023	275	275	336	257	2.4 x	5.4x	N/A	
GTT	GTT	12/31/2019	42	250	5/31/2023	-	250	292	439	6.0 x	7.4x	N/A	
Millicom	TIGO	12/31/2019	1,166	600	1/27/2022	-	600	1,766	149	0.0 x	2.8x	412%	
QTS	QTS	12/31/2019	16	1,000	12/17/2023	317	679	695	250	5.8 x	5.8x	N/A	
SBA	SBAC	12/31/2019	108	1,250	4/11/2023	235	1,015	1,123	1,450	5.4 x	7.2x	10%	
Sprint	S	12/31/2019	4,267	2,000	2/2/2021	-	1,884	6,151	11,280	1.4 x	3.4x	NA	Pre-merger close
TDS	TDS	12/31/2019	465	400	3/2/2025	-	399	864	1,319	0.0 x	0.6x	127%	
T-Mobile US	TMUS	12/31/2019	1,528	2,500	12/29/2022	-	2,500	4,028	13,383	0.3 x	2.2x	N/A	Pre-merger close
US Cellular	USM	12/31/2019	285	300	5/10/2023	-	298	583	1,015	0.0 x	1.5x	N/A	
Uniti	UNIT	12/31/2019	197	418	4/24/2022	418	-	197	813	4.0 x	6.8x	44%	PF for recent transactions - est.
Zayo	ZAYO	12/31/2019	184	750	3/9/2027	-	750	934	1,250	5.8 x	6.8x	N/A	LQA adj. EBITDA, PFfor LBO
Totals			10,341	13,398		2,342	10,916	21,257					

High Yield - Utilities

HY Utilities - Public Names												
Issuer / Company	Bond Ticker	As of										
Calpine Corp	CPN	12/31/2019										
NRG Energy	NRG	12/31/2019										
Vistra Energy	VST	12/31/2019										
Atlantica Yield	AY	12/31/2019										
NextEra Energy Partners	NEP	12/31/2019										
Clearw ay Energy	CWEN	12/31/2019										
Terraform Pow er	TERP	12/31/2019										
Totals												

Liquidity (\$ millions)												
Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity							
79	1,996	2023	-	1,392	1,471							
345	2,600	2024	83	1,794	2,139							
300	2,725	2023	350	1,426	1,726							
66	425	2022	82	341	407							
128	1,250	2024	510	618	746							
30	425	2023	170	186	216							
51	800	2024	-	684	735							
999	10,221		1,195	6,441	7,440							

		Credit	Metrics	
	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
1	2,291	3.3x	4.7x	118%
	1,977	0.7x	2.7x	3%
	3,393	1.8x	3.2x	11%
	811	N/A	0.9x	N/A
	567	N/A	5.1x	143%
	751	N/A	2.5x	62%
	629	N/A	3.1x	56%
ĺ				



Investment Grade - Public Issuers



Investment Grade - Building Materials

IG Building Materials - Public Names											
Issuer / Company	Bond Ticker	As of									
Fortune Brands Home & Security Inc	FBHS	12/31/2019									
DR Horton Inc	DHI	12/31/2019									
Martin Marietta Materials Inc	MLM	12/31/2019									
Masco Corp	MAS	12/31/2019									
Mohaw k Industries Inc.	MHK	12/31/2019									
Ow ens Corning	OC	12/31/2019									
Vulcan Materials Co	VMC	12/31/2019									
Totals											

		_iquidity (\$ millions	s)	
Cash	Total Revolver	Maturity Drawn		Available Revolver	Current Liquidity
388	1,250	2024	1	1,250	1,638
1,583	1,590	2024	-	1,448	3,032
21	1,100	2024	340	758	779
1,547	1,000	2024	-	1,000	2,547
135	1,800	2024	1,203	541	676
172	1,080	2024	-	1,074	1,246
272	750	2021	-	697	969
4,118	8,570		1,543	6,768	10,886

		Credit	Metrics	
,	LTM EBITDA	Total Levg	Dividend / FCF (OCF-CE)	Net Levg
	920	2.4x	24%	1.95 x
	2,249	1.7x	27%	0.98 x
	1,256	2.2x	23%	2.19 x
	1,240	2.2x	21%	0.99 x
	1,531	1.7	N/A	1.59 x
	1,285	2.3x	16%	2.21 x
	1,260	2.2x	27%	1.99 x

Investment Grade – Chemicals

IG Chemicals - P	ublic Names		Liquidity (\$ millions)						Credit Metrics					
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Net Levg	Comments
Albemarle Corp	ALB	12/31/2019	613	1,200	2024	187	1,013	1,626	1,031	N/A	3.0x	(195%)	2.38 x	
Air Products & Chemicals Inc	APD	12/31/2019	2,406	2,300	2022	-	2,300	4,706	3,582	N/A	0.9x	106%	0.26 x	
Cabot Corp	CBT	12/31/2019	173	1,296	2022	4	1,292	1,465	527	N/A	2.1x	30%	1.77 x	
Celanese Corp	CE	12/31/2019	463	1,370	2024	387	983	1,446	1,805	N/A	2.2	28%	1.91 x	
CF Industries Holdings Inc	CF	12/31/2019	287	750	2024	-	750	1,037	1,610	0.6x	2.5x	24%	2.35 x	
Dow Chemical Co	DOW	12/31/2019	2,388	7,617	2024	-	7,617	10,005	7,290	N/A	2.3x	39%	2.00 x	
DuPont de Nemours Inc	DD	12/31/2019	1,540	3,750	2024	1,829	1,901	3,441	5,640	N/A	3.1x	(152%)	2.82 x	
Eastman Chemical Co	EMN	12/31/2019	604	1,750	2023	570	1,180	1,784	2,000	N/A	3.1x	31%	2.79 x	
FMC Corp	FMC	12/31/2019	339	1,500	2024	-	1,283	1,622	1,221	N/A	2.7x	46%	2.39 x	
International Flavors & Fragrances Inc.	IFF	12/31/2019	624	1,107	2023	-	1,053	1,677	1,174	N/A	3.7x	68%	3.20 x	
Huntsman International LLC	HUN	12/31/2019	1,568	1,378	2023	-	1,366	2,934	881	N/A	2.5	24%	0.70 x	
LyondellBasell Industries NV	LYB	12/31/2019	1,054	3,400	2022	1,562	1,838	2,892	5,808	N/A	2.1x	64%	1.90 x	
The Mosaic Company	MOS	12/31/2019	519	2,000	2021	-	1,987	2,506	1,381	N/A	3.9x	(38%)	3.50 x	
Nutrien Ltd	NTRCN	12/31/2019	671	4,500	2023	650	3,850	4,521	4,066	N/A	2.7x	53%	2.57 x	
PPG Industries Inc	PPG	12/31/2019	1,216	2,200	2024	100	1,948	3,164	2,525	N/A	2.0x	28%	1.52 x	
RPM International Inc	RPM	11/30/2019	208	1,500	2023	786	714	922	781	N/A	3.2x	63%	2.96 x	
Sherw in-Williams Co	SHW	12/31/2019	214	3,500	2024	384	3,116	3,330	3,077	N/A	2.9x	21%	2.85 x	
Westlake Chemical Corp	WLK	12/31/2019	1,728	1,000	2023	1,000	-	1,728	1,444	N/A	3.1x	26%	1.88 x	Fully drew on revolver on March 20th
Totals			17,294	44,118		7,514	36,136	53,430						



Investment Grade - Consumer & Retail (Page 1 of 2)



IG Consumer & Retail - Public Names					Liquidit	y (\$ millic	ons)			Credit Metrics			
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	New Revolver ?	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
WALMART INC	WMT	1/31/2020	9,465	18,000	2020, 2024	2,200	15,800		25,265	35,387	2.1x	2.1x	41.6%
NIKE INC.	NKE	11/30/2019	3,182	2,000	2020	0	2,000		5,182	6,805	1.2x	1.2x	41.0%
COSTCO WHOLESALE	COST	2/16/2020	8,715	875	2020	150	725		9,440	6,822	1.5x	1.5x	26.6%
TARGET CORP	TGT	2/1/2020	2,577	2,500	2023	0	2,500		5,077	7,300	1.8x	1.8x	32.5%
TJX COS INC	TJX	2/1/2020	3,217	1,000	2022, 2024	1,000	0		3,217	6,921	1.7x	1.7x	37.7%
RALPH LAUREN COR	RL	12/28/2019	1,908	500	2024	475	25		1,933	1,425	2.1x	2.1x	34.6%
VF CORP	VFC	12/31/2019	584	2,250	2023	1,000	1,250		1,834	2,960	1.4x	1.4x	92.3%
ROSS STORES INC	ROST	2/1/2020	1,351	800	2024	800	0		1,351	3,080	1.1x	1.1x	22.9%
HOME DEPOT INC	HD	2/2/2020	2,133	3,500	2020, 2022	0	3,500	Υ	5,633	18,015	1.9x	1.9x	53.9%
LOWE'S COS INC	LOW	1/31/2020	876	3,000	2023	0	3,000	Υ	3,876	7,833	2.6x	2.6x	57.5%
AUTOZONE INC	AZO	2/15/2020	153	2,000	2022	3	1,997		2,150	3,003	2.6x	2.6x	0.0%
O'REILLY AUTO.	ORLY	12/31/2019	40	1,200	2022	300	900		941	2,562	2.3x	2.3x	0.0%
ADVANCE AUTO PARTS	AAP	12/28/2019	419	1,000	2023	500	500		919	1,579	2.0x	2.0x	2.9%
BEST BUY CO INC	BBY	2/1/2020	2,229	1,250	2023	1,250	0		2,229	3,085	1.2x	1.2x	28.9%
DOLLAR GENERAL	DG	1/31/2020	240	1,250	2024	7	1,243		1,484	4,073	2.9x	2.9x	22.5%
DOLLAR TREE INC	DLTR	2/1/2020	539	1,250	2023	750	500		1,039	3,589	2.8x	2.8x	0.0%
NORDSTROM INC	JWN	2/1/2020	853	800	2023	800	0		853	1,729	2.8x	2.8x	76.1%
KOHLS CORP	KSS	2/1/2020	723	1,000	2024	1,000	0		723	2,436	2.5x	2.5x	52.7%
MACY'S INC	М	2/1/2020	685	1,500	2024	1,500	0		685	2,648	2.9x	2.9x	66.0%
TAPESTRY INC	TPR	12/28/2019	1,167	900	2024	700	200		1,367	1,375	2.4x	2.4x	82.2%
MICHAEL KORS	KORS	12/28/2019	237	1,000	2023	519	481		718	1,366	3.0x	3.0x	0.0%
MCDONALDS CORP	MCD	12/31/2019	899	4,500	2024	1,000	3,500	Υ	4,399	12,264	3.8x	3.8x	62.5%
STARBUCKS CORP	SBUX	12/29/2019	3,109	3,000	2020, 2022	-	3,000		6,109	6,093	2.8x	2.8x	66%
DARDEN RESTAURANT	DRI	2/23/2020	157	750	2022	750	-		157	1,590	3.3x	3.3x	53%
KROGER CO	KR	2/1/2020	399	2,750	2022	2	2,748		3,147	5,629	3.8x	3.8x	32%
ALIMENTATION COUCHE-TARD	ATDBCN	2/2/2020	899	2,525	2020, 2024	36	2,489		3,388	4,150	2.1x	2.1x	11%
HERSHEY CO/THE	HSY	12/31/2019	493	1,890	2020, 2024	32	1,858		2,351	1,981	2.3x	2.3x	42%
ARCHER-DANIELS	ADM	12/31/2019	852	5,000	2020, 2024	700	4,300		5,152	3,695	2.5x	2.5x	(13%)
SYSCO CORP	SYY	12/28/2019	525	2,000	2024	1,600	400		925	3,551	2.9x	2.9x	57%
MONDELEZ INT'L	MDLZ	12/31/2019	1,291	7,750	2020, 2024	-	7,750	Υ	9,041	5,173	3.6x	3.6x	51%
MCCORMICK	MKC	11/30/2019	171	1,262	2022	56	1,205		1,376	1,232	3.5x	3.5x	39%
GENERAL MILLS	GIS	2/23/2020	607	3,600	2022, 2024	251	3,349		3,956	3,529	4.1x	4.1x	48%
KELLOGG CO	K	12/28/2019	397	2,500	2020, 2023	104	2,396		2,793	2,248	4.2x	4.2x	130%
FLOWERS FOODS	FLO	12/28/2019	11	700	2022	87	613		624	521	2.6x	2.6x	61%
JM SMUCKER CO	SJM	1/31/2020	74	1,800	2022	-	1,800		1,874	1,619	3.3x	3.3x	41%
TYSON FOODS-A	TSN	12/28/2019	497	1,750	2020	-	1,750		2,247	4,182	2.8x	2.8x	43%
CAMPBELL SOUP CO	CPB	1/26/2020	58	1,850	2021	1	1,849		1,907	1,641	3.8x	3.8x	49%
CONAGRA BRANDS	CAG	11/24/2019	99	1,600	2024	-	1,600		1,699	2,099	4.9x	4.8x	45%
COCA-COLA CO.	КО	12/31/2019	7,947	22,905	2020, 2024	987	21,918		29,865	11,774	3.5x	3.5x	82%
PEPSICO INC	PEP	12/28/2019	5,738	7,500	2020, 2024	-	7,500		13,238	13,466	2.9x	2.9x	98%
BROWN-FORMAN	BF/B	1/31/2020	307	800	2023	-	800		1,107	1,207	2.2x	2.2x	52%

Investment Grade - Consumer & Retail (Page 2 of 2)

IG Consumer & R	etail - Public N	ames			Liquidity	/ (\$ millic	ns)			Credit Metrics			
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	New Revolver ?	Current Liquidity	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)
KEURIG DR PEPPER	KDP	12/31/2019	75	3,250	2020, 2023	44	3,206		3,281	3,223	4.5x	4.5x	39%
CONSTELLATION BRANDS	STZ	11/30/2019	94	2,000	2022, 2023	12	1,988		2,082	2,885	4.5x	4.5x	37%
MOLSON COORS BEER	TAP	12/31/2019	523	1,500	2024	•	1,500		2,023	2,364	3.9x	3.9x	33%
PROCTER & GAMBLE	PG	12/31/2019	6,279	8,000	2020, 2022, 2024	1	8,000		14,279	19,250	1.9x	1.9x	59%
COLGATE-PALMOLIVE	CL	12/31/2019	883	4,150	2020, 2023	-	4,150		5,033	4,487	2.1x	2.1x	58%
KIMBERLY-CLARK	KMB	12/31/2019	416	2,750	2020, 2023	-	2,750		3,166	4,380	1.9x	1.9x	92%
ESTEE LAUDER	EL	12/31/2019	3,596	1,500	2020, 2023	22	1,478		5,074	4,135	2.1x	2.1x	37%
CLOROX CO	CLX	12/31/2019	168	1,200	2024	-	1,200		1,368	1,388	2.4x	2.4x	63%
CHURCH & DWIGHT	CHD	12/31/2019	156	1,000	2024	3	997		1,153	1,035	2.2x	2.2x	28%
WHIRLPOOL CORP	WHR	12/31/2019	1,952	3,748	2024	20	3,728		5,680	2,245	2.9x	2.9x	44%
HASBRO INC	HAS	12/29/2019	4,580	1,500	2023	-	1,500		6,080	1,005	4.4x	4.4x	65%
NEWELL BRANDS	NWL	12/31/2019	349	1,250	2023	50	1,200		1,549	1,445	4.8x	4.8x	50%
PHILIP MORRIS INT'L	PM	12/31/2019	6,861	7,500	2020, 2023, 2025	-	7,500		14,361	12,635	2.8x	2.8x	78%
ALTRIA GROUP INC	MO	12/31/2019	2,117	3,000	2023	-	3,000		5,117	10,831	2.6x	2.6x	80%
Totals			93,872	166,355		18,711	147,644		241,515				



Investment Grade – Energy (Page 1 of 2)



	- Public Name	s			Liquidity (\$	millions)				Credit Metrics						
3,				Total			Available	Current	LTM	Total	Net	Dividend /				
Issuer / Company	Bond Ticker	As of	Cash	Revolver	Maturity	Drawn	Revolver		EBITDA		l	FCF (OCF-CE)	Comments			
E&P		· · · · · · · · · · · · · · · · · · ·		,				· · · · · · ·								
Apache	APA	12/31/2019	\$247	4,000	14-03-2024	0	4,000	4,247	3,958	2.2x	2.1x	-696.30%	OCF-CE is negative			
Canadian Natl Resources	CNQCN	12/31/2019	\$107	4,959	30-06-2022	222	4,737	4,844	8,490	1.9x	1.9x	96.35%	CAD			
Cenovus Energy	CVECN	12/31/2019	\$143	4,500	30-11-2023	265	4,235	4,378	2,880	1.8x	1.7x	12.37%	CAD			
Cimarex Energy	XEC	12/31/2019	\$95	1,250	05-02-2024	3	1,248	1,343	1,458	1.4x	1.3x	86.77%				
Concho Resources	CXO	12/31/2019	\$70	2,000	09-05-2022	0	2,000	2,070	2,988	1.3x	1.3x	-28.57%	OCF-CE is negative			
Continental Resources	CLR	12/31/2019	\$39	1,500	09-04-2023	55	1,445	1,484	3,391	1.6 x	1.6x	12.76%				
ConocoPhillips	COP	12/31/2019	\$8,116	6,000	21-05-2023	0	6,000	14,116	15,267	1.0 x	0.4x	33.57%				
Diamondback	FANG	12/31/2019	\$123	2,000	01-11-2022	13	1,987	2,110	3,025	1.8 x	1.7x	-11.57%				
Devon Energy	DVN	12/31/2019	\$1,464	3,000	05-10-2024	0	3,000	4,464	2,356	1.8 x	1.2x	137.25%				
Ovintiv	OVV	12/31/2019	\$190	4,000	16-07-2024	698	3,302	3,492	3,518	2.0 x	1.9x	36.52%				
EOG Resources	EOG	12/31/2019	\$2,028	2,000	27-06-2024	0	2,000	4,028	7,927	0.7 x	0.4x	33.79%				
Hess	HES	12/31/2019	\$2,545	3,500	15-05-2023	0	3,500	6,045	3,057	2.7x	1.8x	-26.62%	OCF-CE is negative, plus \$1.0b 36- day term loan			
Husky Energy	HSECN	12/31/2019	\$1,375	4,000	19-06-2022	0	4,000	5,375	2,605	1.6x	1.1x	-116.70%	other \$2b facility matures in 2024, OCF-CE is negative			
Marathon Oil	MRO	12/31/2019	\$858	3,000	28-05-2023	0	3,000	3,858	3,236	1.7 x	1.4x	-279.31%	OCF-CE is negative			
National Fuel Gas	NFG	12/31/2019	\$35	750	25-10-2023	0	750	785	794	2.9 x	2.9x	-122.12%	OCF-CE is negative			
Noble Energy	NBL	12/31/2019	\$484	4,000	09-03-2023	0	4,000	4,484	2,338	3.2 x	3.0x	-43.16%	OCF-CE is negative			
Occidental Petroleum	OXY	12/31/2019	\$3,032	5,000	31-01-2023	0	5,000	8,032	9,415	4.6 x	4.3x	257.25%	Doesn't include Anadarko Acquisiton			
Pioneer Natural Resources	PXD	12/31/2019	\$631	1,500	31-10-2023	1,000	500	1,131	3,447	0.7x	0.5x	-120.95%	OCF-CE is negative			
Suncor Energy	SUCN	12/31/2019	\$1,518	8,328	15-04-2023	3,439	4,889	6,407	9,870	1.2x	1.0x	53.75%	CAD			
MLP/Pipelines																
				<u> </u>			<u> </u>	<u> </u>		<u> </u>			T			
Boardw alk Pipeline Partners	BWP	12/31/2019	\$4	1,500	26-05-2022	295	1,205	1,209	830	4.3x	4.3x	43.49%				
·	BWP ENBL	12/31/2019 12/31/2019	\$4 475	1,500 1,750	26-05-2022 06-04-2023	295 160	1,205 1,590	1,209 2,065	830 1,124	4.3x 4.1x	4.3x 4.0x	43.49% 111%				
Boardw alk Pipeline Partners								 				1				
Boardw alk Pipeline Partners Enable Midstream Partners	ENBL	12/31/2019	475	1,750	06-04-2023	160	1,590	2,065	1,124	4.1x	4.0x	111%				
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc.	ENBL ENB	12/31/2019 12/31/2019	475 4	1,750 19,125	06-04-2023 2021-2024	160 9,872	1,590 9,253	2,065 9,257	1,124 10,460	4.1x 4.6x	4.0x 4.6x	111% 217%	\$1.5b 364 day credit facility			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer	ENBL ENB ETP	12/31/2019 12/31/2019 12/31/2019	475 4 291	1,750 19,125 6,000	06-04-2023 2021-2024 01-12-2023	160 9,872 4,210	1,590 9,253 1,790	2,065 9,257 2,081	1,124 10,460 10,834	4.1x 4.6x 4.9x	4.0x 4.6x 4.8x	111% 217% 372%	\$1.5b 364 day credit facility			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners	ENBL ENB ETP EPD	12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335	1,750 19,125 6,000 5,500	06-04-2023 2021-2024 01-12-2023 10-09-2024	160 9,872 4,210	1,590 9,253 1,790 5,500	2,065 9,257 2,081 5,835	1,124 10,460 10,834 8,043	4.1x 4.6x 4.9x 3.6x	4.0x 4.6x 4.8x 3.6x	111% 217% 372% 200%	\$1.5b 364 day credit facility			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc.	ENBL ENB ETP EPD KMI	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185	1,750 19,125 6,000 5,500 4,000	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023	160 9,872 4,210 - 100	1,590 9,253 1,790 5,500 3,900	2,065 9,257 2,081 5,835 4,085	1,124 10,460 10,834 8,043 7,286	4.1x 4.6x 4.9x 3.6x 4.6x	4.0x 4.6x 4.8x 3.6x 4.6x	111% 217% 372% 200% 125%	\$1.5b 364 day credit facility			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners	ENBL ENB ETP EPD KMI MMP	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58	1,750 19,125 6,000 5,500 4,000 1,000	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022	160 9,872 4,210 - 100 4	1,590 9,253 1,790 5,500 3,900 997	2,065 9,257 2,081 5,835 4,085 1,055	1,124 10,460 10,834 8,043 7,286 1,490	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x	111% 217% 372% 200% 125% 244%	\$1.5b 364 day credit facility			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP	ENBL ENB ETP EPD KMI MMP MPLX	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15	1,750 19,125 6,000 5,500 4,000 1,000 3,500	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024	160 9,872 4,210 - 100 4 1	1,590 9,253 1,790 5,500 3,900 997 3,499	2,065 9,257 2,081 5,835 4,085 1,055 3,514	1,124 10,460 10,834 8,043 7,286 1,490 4,467	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x	111% 217% 372% 200% 125% 244% 152%	\$1.5b 364 day credit facility Capacity remains at \$750 million, option to increase to \$1 billion			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc	ENBL ENB ETP EPD KMI MMP MPLX OKE	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024	160 9,872 4,210 - 100 4 1 5	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x	111% 217% 372% 200% 125% 244% 152% (77%)	Capacity remains at \$750 million,			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP	ENBL ENB ETP EPD KMI MIMP MPLX OKE PSXP	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024	160 9,872 4,210 - 100 4 1 5	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x	111% 217% 372% 200% 125% 244% 152% (77%)	Capacity remains at \$750 million, option to increase to \$1 billion			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 10-08-2024	160 9,872 4,210 - 100 4 1 5 1 1,000	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 3.5x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x	111% 217% 372% 200% 125% 244% 152% (77%) (957%)	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative RCF is expandable to a maximum of			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline TransCanada	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA TRPCN	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45 985	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750 1,600	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 30-07-2024 10-08-2024 2020-2024	160 9,872 4,210 - 100 4 1 5 1 1,000 1,664	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749 600 10,936	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035 645 11,921	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135 7,030	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 3.5x 5.0x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x 3.5x 4.8x	111% 217% 372% 200% 125% 244% 152% (77%) (957%) 79% (178%)	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline TransCanada Western Gas Partners	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA TRPCN WES	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45 985 100	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750 1,600 12,600 2,000	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 30-07-2024 10-08-2024 2020-2024	160 9,872 4,210 - 100 4 1 5 1 1,000 1,664 385	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749 600 10,936 1,615	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035 645 11,921	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135 7,030 1,750	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x 3.2x 4.5x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x 3.5x 4.8x 4.5x	111% 217% 372% 200% 125% 244% 152% (77%) (957%) 79% (178%)	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative RCF is expandable to a maximum of			
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Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline TransCanada Western Gas Partners Williams Companies Baker Hughes, a GE Companier	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA TRPCN WES WMB	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45 985 100 289	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750 1,600 12,600 2,000 4,500	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 30-07-2024 10-08-2024 2020-2024 26-02-2025 10-08-2023	160 9,872 4,210 - 100 4 1 5 1 1,000 1,664 385 14	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749 600 10,936 1,615 4,486	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035 645 11,921 1,715 4,775	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135 7,030 1,750 4,758	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x 3.2x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x 3.5x 4.8x 4.5x 4.6x	111% 217% 372% 200% 125% 244% 152% (77%) (957%) 79% (178%) (61%) 215%	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative RCF is expandable to a maximum of			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline TransCanada Western Gas Partners Williams Companies Baker Hughes, a GE Companies	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA TRPCN WES WMB	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45 985 100 289	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750 1,600 12,600 2,000 4,500	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 30-07-2024 10-08-2024 2020-2024 26-02-2025 10-08-2023	160 9,872 4,210 - 100 4 1 5 1 1,000 1,664 385 14	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749 600 10,936 1,615 4,486	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035 645 11,921 1,715 4,775	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135 7,030 1,750 4,758	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x 3.2x 4.5x 4.8x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x 3.5x 4.8x 4.5x 4.6x	111% 217% 372% 200% 125% 244% 152% (77%) (957%) 79% (178%) (61%) 215%	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative RCF is expandable to a maximum of			
Boardw alk Pipeline Partners Enable Midstream Partners Enbridge Inc. Energy Transfer Enterprise Products Partners Kinder Morgan Inc. Magellan Midstream Partners MPLX LP ONEOK Inc Phillips 66 Partners LP Plains All American Pipeline TransCanada Western Gas Partners Williams Companies Baker Hughes, a GE Companies Halliburton Helmetich & Payne	ENBL ENB ETP EPD KMI MMP MPLX OKE PSXP PAA TRPCN WES WMB	12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019 12/31/2019	475 4 291 335 185 58 15 21 1,286 45 985 100 289	1,750 19,125 6,000 5,500 4,000 1,000 3,500 2,500 750 1,600 12,600 2,000 4,500 3,000 3,500 750	06-04-2023 2021-2024 01-12-2023 10-09-2024 16-11-2023 26-10-2022 30-07-2024 30-06-2024 30-07-2024 10-08-2024 2020-2024 26-02-2025 10-08-2023	160 9,872 4,210 - 100 4 1 5 1 1,000 1,664 385 14	1,590 9,253 1,790 5,500 3,900 997 3,499 2,495 749 600 10,936 1,615 4,486	2,065 9,257 2,081 5,835 4,085 1,055 3,514 2,516 2,035 645 11,921 1,715 4,775	1,124 10,460 10,834 8,043 7,286 1,490 4,467 2,651 1,210 3,135 7,030 1,750 4,758	4.1x 4.6x 4.9x 3.6x 4.6x 3.2x 4.5x 4.8x 3.2x 3.5x 5.0x 4.5x 4.7x	4.0x 4.6x 4.8x 3.6x 4.6x 3.1x 4.5x 4.8x 3.0x 3.5x 4.8x 4.5x 4.6x	111% 217% 372% 200% 125% 244% 152% (77%) (957%) 79% (178%) (61%) 215%	Capacity remains at \$750 million, option to increase to \$1 billion OCF-CE is negative RCF is expandable to a maximum o			

Investment Grade - Energy (Page 2 of 2)

IG Energ	y - Public Name	S			Liquidity (\$	millions)					C	redit Metri	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Total Leverage	Net Leverage	Dividend / FCF (OCF-CE)	Comments
Refiners													
Holly Frontier	HFC	12/31/2019	885	1,350	16-02-2022	-	1,350	2,235	1,820	1.3x	0.9x	65%	
Marathon Petroleum	MPC	12/31/2019	1,527	5,000	31-10-2023	-	5,000	6,527	10,209	2.8x	2.7x	36%	
Phillips 66	PSX	12/31/2019	1,614	5,000	30-07-2024	1,750	3,250	4,864	6,561	1.9x	1.5x	168%	Plus \$1b 364 term loan factored
Valero Energy	VLO	12/31/2019	2,583	4,000	31-03-2024	44	3,956	6,539	5,663	1.7x	1.3x	45%	
Local Distribution Com	panies												
Atmos Energy	ATO	12/31/2019	189	1,500	25-09-2023	-	1,500	1,689	1,163	3.7x	3.6x	(200%)	OCF-CE is negative
One Gas	OGS	12/31/2019	18	700	31-10-2024	1	699	717	476	3.8x	3.8x	(99%)	OCF-CE is negative
Southw estern Gas	SWX	12/31/2019	50	400	28-03-2022	344	56	106	675	4.0x	3.9x	(24%)	OCF-CE is negative
Totals	1		43,443	165,912		25,544	140,369	183,812					



Investment Grade – Financials



IG Financial	s - Public Nam	es	Liquidity (\$ millions)									
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity				
AerCap	AER	12/31/2019	1,121	7,450	'22-'24	4,875	2,575	3,696				
Air Lease	AL	12/31/2019	317	6,020	23	20	6,000	6,317				
Air Castle	AYR	12/31/2019	141	1,100	'21-'22	150	950	1,091				
Totals			1,580	14,570		5,045	9,525	11,105				

		Credit Metrics											
	LTM EBITDA	Total Levg	Comments										
	N/A	2.6x	On 3/13, AER announced to be party to a \$4bn revolver										
	N/A	<2.5x	On 3/13, AL said it has no utilization on its revolver										
1	862	2.4x	Went private on 3/27/20										
1													

Investment Grade – Healthcare (Page 1 of 2)

IG Healthcare - Public Names				Liquidity (\$ millions)							Credit Metrics				
			l	Total		_	Available	Current	LTM	Total	Dividend /				
Issuer / Company	Bond Ticker	As of	Cash	Revolver	Maturity	Drawn	Revolver	Liquidity	EBITDA	Levg	FCF (OCF-CE)	Comments			
Abbott	ABT	12/31/2019	4,140	5,000	2023	0	5,000	9,140.0	8,569	2.1x	50.5%				
AmerisourceBergen	ABC	12/31/2019	3,233	1,400	2024	-	1,400	4,633	2,381	1.8x	20%	ABC also has a receivables facility with \$1.1 bn available to draw.			
Amgen	AMGN	12/31/2019	8,911	2,500	2024	-	2,500	11,411	12,699	2.4x	41%				
Anthem	ANTM	12/31/2019	2,700	3,500	2024	-	3,100	5,800	7,866	38.8%	16%	ANTM has a \$2.5 bn revolver due 2024 and a \$1 bn revolver due June 2020.			
AstraZeneca	AZN	12/31/2019	5,369					5,369	5,145	3.4x	181%				
Baxter	BAX	12/31/2019	3,335	2,224	2024	224	2,000	5,335	2,693	2.0x	30%	BAX has a \$2 bn revolver due 2024 and a Euro 200 mn revolver due 2024 (fully drawn).			
Biogen	BIIB	12/31/2019	4,476	1,000	2025	-	1,000	5,476	7,882	0.8x	N/A				
Boston Scientific	BSX	12/31/2019	217	2,750	2023	-	2,039	2,256	3,291	3.0x	N/A				
Bristol Myers Squibb	BMY	12/31/2019	15,393	6,000	2024	-	6,000	21,393	10,093	4.6x	37%	364 day \$2 bn facility maturing 2021, \$1 bn facility maturing in 2022, and tw o \$1.5 bn facilities maturing in 2023 and 2024			
Cardinal Health	CAH	12/31/2019	1,659	2,000	2024	-	1,542	3,201	2,792	2.8x	34%	CAH also has a receivables facility with \$775 mn available to draw.			
Cigna	Cl	12/31/2019	1,100	4,250	2023	-	4,250	5,350	12,318	45.2%	N/A	Cl has a \$1 bn revolver maturing in 2020 and a \$3.25 bn revolver maturing in 2023.			
CVS Health	cvs	12/31/2019	8,056	6,000	2024	-	6,000	14,056	20,015	4.4x	25%	\$1 bn revolver due 2020, \$1 bn revolver due 2022, \$2 bn revolver due 2023, and \$2 bn revolver due 2024			
Danaher	DHR	12/31/2019	19,912	10,000	2024	2,500	2,000	21,912	4,749	4.6x	16%	DHR has a \$5 bn revolver due 2020 and a \$5 bn revolver due 2024.			
Eli Lilly	LLY	12/31/2019	2,439	5,000	2024	-	5,000	7,439	7,022	2.2x	63%	LLY has a \$2 bn revolver due 2020 and a \$3 bn revolver due 2024.			
Gilead	GILD	12/31/2019	24,352	2,500	2021	-	2,500	26,852	11,444	2.1x	39%				
GlaxoSmithKline	GSK	12/31/2019	5,401	4,688	2022	-	4,688	10,089	12,240	3.3x	53%	GSK has a \$2.5 bn revolver due 2020 and a GBP1.9 bn revolver due 2022			
Humana	HUM	12/31/2019	1,360	2,000	2022	-	2,000	3,360	3,650	32.9%	6%				
Johnson & Johnson	JNJ	12/31/2019	19,287	10,000	2020	-	10,000	29,287	27,810	1.0x	50%				
LabCorp	LH	12/31/2019	338	1,000	2022	-	924	1,262	2,064	3.0x	N/A				
McKesson	MCK	12/31/2019	2,065	4,000	2024	-	4,000	6,065	4,349	2.3x	9%				
Medtronic	MDT	12/31/2019	11,628	3,500	2024	-	3,500	15,128	9,733	2.6x	43%				
Merck	MRK	12/31/2019	10,450	6,000	2024	-	6,000	16,450	17,928	1.5x	57%				
Merck KGaA	MRK GR	12/31/2019	939	2,146	2024	-	2,146	3,085	4,590	3.2x	9%				
Mylan	MYL	12/31/2019	476	2,000	2023	-	2,000	2,476	2,906	4.4x	N/A	MYL also has a \$400 mn receivables facility.			
Novartis	NOVNSW	12/31/2019	11,446	6,000	2024	-	6,000	17,446	16,269	1.7x	54%				
Perrigo	PRGO	12/31/2019	354	1,000	2023	-	1,000	1,354	831	4.1x	45%				
Pfizer	PFE	12/31/2019	9,830	15,000	2024	-	15,000	24,830	21,112	2.5x	77%	PFE has an \$8 bn revolver due 2020 and a \$7 bn revolver due 2024.			



Investment Grade – Healthcare (Page 2 of 2)



IG Healthca		Liquidity (\$ millions)						Credit Metrics				
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Total Levg	Dividend / FCF (OCF-CE)	Comments
Quest Diagnostics	DGX	12/31/2019	1,192	750	2023	-	750	1,942	1,569	3.0x	34%	DGX also has a \$600 mn receivables facility.
Roche	ROG SW	12/31/2019	12,253	7,500	2024	-	7,500	19,753	21,598	0.7x	40%	
Stryker	SYK	12/31/2019	4,425	1,500	2023	-	1,500	5,925	4,151	2.7x	50%	
Thermo Fisher	TMO	12/31/2019	2,399	2,500	2021	-	2,428	4,827	6,634	2.7x	7%	
United Health	UNH	12/31/2019	584	12,500	2024	-	12,500	13,084	22,405	40.2%	24%	UNH has a \$3.75 bn revolver due 2020, a \$4.375 bn revolver due 2022, and a \$4.375 bn revolver due 2024.
Zimmer Biomet	ZBH	12/31/2019	618	1,500	2024	-	1,500	2,118	2,592	3.2x	19%	
Zoetis	ZTS	12/31/2019	1,934	1,000	2023	-	1,000	2,934	2,430	2.7x	24%	
Totals			202,270	138,708		2,724	128,767	331,037				

Investment Grade - Industrials

IG Industrials			_iquidity (\$ millions	Credit Metrics							
				Total					LTM	Secured Total		Dividend /
Issuer / Company	Bond Ticker	As of	Cash	Revolver	Maturity	Drawn	Revolver	Current Liquidity	EBITDA	Levg	Levg	FCF (OCF-CE)
ABB	ABBNVX	12/31/2019	3,544	2,000	2021	0	2,000	5,404	3,737	0.2 x	3.0x	155.2%
Aptiv	APTV	3/23/2020	1,700	2,300	2021	2,000	0	1,700	1,276	0.2 x	2.2x	Suspended
AutoNation	AN	12/31/2019	42	1,800	2022	0	1,421	1,254	826	0.0 x	5.9x	60.7%
BAE Systems	BALN	12/31/2019	2,587	2,000	2023	0	2,000	4,587	2,559	0.0 x	3.1x	69.2%
Boeing	BA	3/13/2020	23,310	23,425	2021	13,825	9,600	27,346	14,811	0.9 x	3.7x	Suspended
BorgWarner	BWA	3/16/2020	832	1,500	2025	0	1,500	2,304	1,703	0.0 x	1.3x	31.9%
Burlington Northern Santa Fe	BNSF	12/31/2019	1,984	N/A	N/A	N/A	N/A	1,984	10,474	0.1 x	2.8x	96.6%
Canadian National Railw ay Co	CNRCN	12/31/2019	64	2,750	2022	200	2,550	1,337	7,155	0.0 x	1.9x	75.0%
Canadian Pacific Railway	CP	12/31/2019	133	1,300	2021	0	1,300	801	3,830	0.1 x	2.5x	30.7%
Caterpillar	CAT	12/31/2019	7,302	2,945	2022	•	2,945	10,247	9,683	0.0 x	1.1x	36%
CSX	CSX	12/31/2019	1,954	1,200	2024	•	1,200	3,154	6,314	0.0 x	2.6x	24%
Cummins	CMI	12/31/2019	1,470	3,500	2023	-	3,500	4,310	3,731	0.2 x	0.6x	31%
Daimler	DAIGR	12/31/2019	16,152	11,000	2023	-	11,000	34,674	15,733	0.0 x	2.7x	159%
Deere & Co	DE	2/2/2020	2,866	8,499	2023	-	8,499	9,820	5,189	0.0 x	1.3	31%
Eaton	ETN	12/31/2019	591	2,000	2023	-	2,000	2,328	3,797	0.0 x	2.6x	42%
GATX	GMT	12/31/2019	151	850	2022	-	850	1,001	778	2.6 x	2.6x	(25%)
General Dynamics	GD	12/31/2019	902	5,000	2023	-	5,000	5,902	5,114	0.0 x	3.3x	58%
General Electric	GE	12/31/2019	21,042	40,300	2021	-	40,300	58,342	11,430	0.0 x	4.1x	40%
General Motors	GM	3/24/2020	31,500	19,500	2022	16,000	3,500	35,000	12,893	0.0 x	2.0x	198%
Honeyw ell	HON	12/31/2019	10,416	6,000	2024	-	6,000	16,416	8,485	0.0 x	1.9x	40%
Hubbell	HUBB	12/31/2019	196	750	2023	-	750	927	748	0.0 x	2.4x	38%
Illinois Tool Works	ΠW	12/31/2019	1,981	2,700	2024	-	2,700	4,681	3,828	0.0 x	2.0x	49%
Ingersoll Rand	TT	12/31/2019	1,304	2,000	2021	-	2,000	3,304	2,589	0.0 x	2.4x	32%
Johnson Controls	JCI	12/31/2019	2,160	3,000	2024	-	3,000	5,160	3,594	0.0 x	2.3x	117%
Kansas City Southern	KSU	12/31/2019	149	800	2024	-	800	949	2,423	0.0 x	1.7x	30%
L3Harris Technologies	LHX	1/3/2020	824	2,000	2024	-	2,000	2,824	2,424	0.0 x	2.9x	21%
Lear	LEA	3/26/2020	2,488	1,750	2023	1,000	750	3,238	1,841	0.1 x	1.4x	39%
Lockheed Martin	LMT	12/31/2019	1,514	2,500	2024	-	2,500	4,014	7,763	0.0 x	3.3x	44%
Magna	MGCN	12/31/2019	1,276	3,050	2024	110	2,940	4,216	3,890	0.0 x	1.0x	19%
Norfolk Southern Corporation	NSC	12/31/2019	580	1,150	2021	-	1,150	1,730	5,127	0.0 x	2.6x	51%
Northrop Grunman	NOC	12/31/2019	2,245	2,000	2023	-	2,000	3,747	4,987	0.0 x	4.0x	29%
Paccar	PCAR	12/31/2019	5,337	3,000	2023	-	3,000	4,227	3,088	1.3 x	3.6x	50%
Pentair	PNR	12/31/2019	83	800	2023	36	764	750	591	0.4 x	1.9x	43%
Raytheon	RTN	12/31/2019	4,292	1,250	2021	-	1,250	5,542	4,654	0.0 x	2.7x	29%
Republic Services	RSG	12/31/2019	47	2,385	2023	196	2,189	1,885	2,923	0.1 x	3.0x	43%
Roper	ROP	12/31/2019	710	2,500	2021	-	2,500	3,136	1,926	0.0 x	2.7x	14%
Ryder	R	12/31/2019	74	1,400	2023	-	1,400	818	2,407	0.8 x	3.4x	(11%)
Southwest Airlines	LUV	3/16/2020	3,548	2,000	2021	1,000	1,000	5,924	4,176	0.2 x	2.6x	13%
Textron	TXT	12/31/2019	1,181	1,000	2024	-	1,000	2,171	1,614	0.0 x	2.4x	3%
Union Pacific	UNP	12/31/2019	831	2,800	2023	400	2,400	3,231	10,770	0.2 x	2.5x	50%
United Technologies	UTX	12/31/2019	7,378	10,350	2021	-	10,350	17,728	131,174	0.0 x	3.5x	37%
Waste Management	WM	12/31/2019	3,561	3,500	2024	-	3,500	6,649	4,328	0.0 x	3.1x	43%
Totals			170,301	190,554		34,767	155,108	314,762				



Investment Grade - Insurance



IG Insurance - Pub	olic Name	S		Credit	Metrics					
Issuer / Company	Bond Ticker	As of	Cash & Cash Equiv.*	Total Revolver	Revolver Maturity	Revolver Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Total Debt/Total Cap
Aflac Inc	AFL	12/31/2019	4,896	2,061	2024	0	2,061	6,957	4,673	18%
Alleghany Corp	Y	12/31/2019	1,179	300	2022	0	300	1,479	1,224	18%
Allstate Corp/The	ALL	12/31/2019	338	1,000	2021	0	1,000	1,338	6,416	22%
American Financial Group Inc/O	AFG	12/31/2019	2,314	500	2021	0	500	2,814	1,176	21%
American International Group I	AIG	12/31/2019	2,856	4,500	2022	0	4,500	7,356	6,704	35%
Ameriprise Financial Inc	AMP	12/31/2019	3,827	750	2022	0	750	4,577	2,232	47%
Aon PLC	AON	12/31/2019	790	1,650	2024	0	1,650	2,440	2,169	72%
Arch Capital Group Ltd	ACGL	12/31/2019	726	500	2024	0	500	1,226	1,970	17%
Argo Group International Holdi	ARGO	12/31/2019	138	200	2023	0	200	338	34	28%
Arthur J Gallagher & Co	AJG	12/31/2019	605	1,200	2024	520	680	1,285	806	48%
Assurant Inc	AIZ	12/31/2019	1,867	450	2022	0	450	2,317	665	27%
Athene Holding Ltd	ATH	12/31/2019	4,237	1,250	2024	-	1,250	5,487	2,302	9%
Brighthouse Financial Inc	BHF	12/31/2019	2,877	1,000	2024	-	1,000	3,877	(861)	35%
Brown & Brown Inc	BRO	12/31/2019	542	800	2022	100	700	1,242	590	35%
Chubb Ltd	CB	12/31/2019	1,537	300	2022	-	300	1,837	5,801	23%
Cincinnati Financial Corp	CINF	12/31/2019	767	300	2025	39	261	1,028	2,525	8%
CNA Financial Corp	CNA	12/31/2019	242	250	2024	-	250	492	1,354	20%
CNO Financial Group Inc	CNO	12/31/2019	580	250	2022	-	250	830	427	45%
Enstar Group Ltd	ESGR	12/31/2019	703	600	2023	-	600	1,303	929	19%
Everest Re Group Ltd	RE	12/31/2019	808	200	2021	-	200	1,008	1,135	8%
Globe Life Inc	GL	12/31/2019	76	750	2021	-	750	826	1,016	18%
Hartford Financial Services Gr	HIG	12/31/2019	262	750	2023	-	750	1,012	2,819	24%
LIBERTY MUTUAL GROUP	LIBMUT	12/31/2019	5,466	1,000	2024	-	1,000	6,466	-	N/A
Lincoln National Corp	LNC	12/31/2019	2,563	2,250	2024	-	2,250	4,813	1,246	25%
Markel Corp	MKL	12/31/2019	3,073	300	2024	-	300	3,373	2,457	25%
Marsh & McLennan Cos Inc	MMC	12/31/2019	1,155	1,800	2023	-	1,800	2,955	2,677	64%
MASSMUTUAL GLOBAL FUNDIN	MASSMU	12/31/2019	4,317	1,000	2023	-	1,000	5,317	-	N/A
Mercury General Corp	MCY	12/31/2019	294	50	2022	-	50	344	395	19%
MetLife Inc	MET	12/31/2019	16,598	3,000	2021	-	3,000	19,598	7,750	23%
MUTUAL OF OMAHA INS CO	MUTOMA	12/31/2019	NA	300	2024	-	300	NA	-	N/A
NATIONWIDE FINANCIAL SER	NATMUT	12/31/2019	NA	750	2020	-	750	NA	-	N/A
Principal Financial Group Inc	PFG	12/31/2019	2,516	995	2022	93	901	3,417	1,847	21%
Protective Life Corp	PL	9/30/2019	174	1,000	2023	-	1,000	1,174	489	N/A
Prudential Financial Inc	PRU	12/31/2019	16,327	4,000	2022	-	4,000	20,327	6,636	33%
Radian Group Inc	RDN	12/31/2019	93	268	2020	-	268	360	905	19%
Reinsurance Group of America I	RGA	12/31/2019	1,449	850	2023	-	850	2,299	1,334	24%
RenaissanceRe Holdings Ltd	RNR	12/31/2019	1,379	500	2023	-	500	1,879	1,026	14%
Selective Insurance Group Inc	SIGI	12/31/2019	0	50	2022	-	50	50	370	21%
Travelers Cos Inc/The	TRV	12/31/2019	494	1,000	2023	-	1,000	1,494	3,482	20%
Unum Group	UNM	12/31/2019	84	600	2024	-	600	684	1,560	26%
Voya Financial Inc	VOYA	12/31/2019	1,249	500	2024	-	500	1,749	780	23%
Totals			89,398	39,773		752	39,021	127,369		

Sources: Bloomberg, company filings as reported by the company as of the most recent filing date.

^{*}As reported by the company, Cash & Cash equiv on the balance sheet as of most recent filing date.

^{*}Note: Does not yet factor in statutory dividend capacity and availablity to HoldCo.

^{*} LIBMUT, MASSMU, MUTOMA, NATMUT are mutual insurance companies

Investment Grade - Media

IG Media - P			Liquidity (\$ million	s)	Credit Metrics					
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver		LTM EBITDA	Dividend / FCF (OCF-CE)	Comments
Comcast Corp	CMCSA	12/31/2019	5,500	9,228	5/26/2022	•	9,228	14,728	34,182	24%	
Walt Disney Co/The	DIS	12/28/2019	6,833	12,250	3/5/2021	,	12,250	18,549	16,003	263%	CP as of 12/31/2019 w as \$6.5bn. AssumeD \$6bn issuance on 3/19/2020 used to term out CP
Discovery Communications LLC	DISCA	12/31/2019	1,552	2,500	8/11/2022	500	2,000	3,552	4,537	N/A	
Fox Corp	FOXA	12/31/2019	1,551	1,000	3/15/2024	-	1,000	2,551	2,093	18%	Cash PF for \$440mm acquisition of Tubi
ViacomCBS Inc	VIAC	12/31/2019	778	3,500	1/23/2025	-	3,500	3,579	5,531	68%	
Activision Blizzard Inc	ATVI	12/31/2019	5,794	1,500	8/24/2023	-	1,500	7,294	2,297	17%	
Electronic Arts Inc	EA	12/31/2019	5,602	500	8/29/2024	-	500	6,102	1,435	N/A	
Interpublic Group of Cos Inc/The	IPG	12/31/2019	1,192	1,500	11/1/2024	-	1,500	2,692	1,398	27%	
Omnicom Capital Inc	OMC	12/31/2019	4,309	2,500	2/14/2025	-	2,500	6,809	2,354	32%	
WPP CP LLC	WPP ^{1,2}	12/31/2019	3,938	2,500	3/15/2024	-	2,500	6,438	2,381	50%	
Cox Enterprises Inc4	COXENT	N/A	N/A	3,500	12/13/2023	-	3,500	3,500	N/A	N/A	
Totals			37,049	40,478		500	39,978	75,794			



¹ Reports semi-annually

² Financial results converted to USD

³ Current liquidity is equal to cash on hand + available revolver less commercial paper outstanding

⁴ Private Company

Investment Grade - Metals & Mining



IG Metals & Minin	g - Public Nan	nes			Liquidity (\$ million	s)		Credit Metrics						
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Total Levg	Dividend / FCF (OCF-CE)	Net Levg			
Barrick Gold Corp	ABXCN	12/31/2019	3,195	3,000	2025	-	3,000	6,195	4,365	1.2x	48%	0.46 x			
Kinross Gold Corp	KCN	12/31/2019	1,425	1,800	2024	750	803	2,228	1,361	2.0x	N/A	0.94 x			
New mont Goldcorp Corporation	NEM	12/31/2019	3,643	3,000	2024	-	2,940	6,583	3,727	1.8x	63%	0.86 x			
Nucor Corp	NUE	12/31/2019	1,535	1,519	2023	-	1,491	3,026	2,702	1.6	37%	1.05 x			
Reliance Steel & Aluminum Co.	RS	12/31/2019	174	1,500	2021	368	1,095	1,269	1,233	1.3x	14%	1.15 x			
Steel Dynamics Inc	STLD	12/31/2019	1,644	1,200	2024	-	1,158	2,802	1,333	2.1x	21%	0.84 x			
Anglo American Capital PLC	AALLN	12/31/2019	6,345	9,500	2025	800	8,700	15,045	9,161	1.2x	55%	0.48 x			
BHP Billiton Finance (USA) Limited	BHP	12/31/2019	13,965	5,500	2024	-	5,500	19,465	24,598	1.1x	108%	0.52 x	Paid \$5.2bn of special dividends in 2019		
Glencore Funding LLC	GLENLN	12/31/2019	1,899	14,425	2021	6,290	8,135	10,034	11,601	3.2x	21%	2.30 x			
Rio Tinto Finance (USA) plc	RIOLN	12/31/2019	8,027	7,500	2022	-	7,500	15,527	21,197	0.7x	110%	0.32 x	Paid \$4.9bn of special dividends in 2019		
Teck Resources Limited	TCKBCN	12/31/2019	1,026	5,196	2024	-	5,196	6,222	4,253	1.1x	12%	0.90 x			
ArcelorMittal	MTNA	12/31/2019	4,867	5,500	2024	-	5,500	10,367	5,195	2.8x	10%	1.82 x			
Totals			47,745	59,640		8,208	51,018	98,763							

Source: Bloomberg, Bof A Global Research, Company Filings

Investment Grade - Paper & Packaging

IG Paper & Packa	aging - Public	Names
Issuer / Company	Bond Ticker	As of
Avery Dennison Corp	AVY	12/31/2019
CCL Industries Inc	CCLBCN	12/31/2019
International Paper Co	IP	12/31/2019
Packaging Corp of America	PKG	12/31/2019
Domtar Corporation	UFS	12/31/2019
WestRock Co	WRK	12/31/2019
West Fraser Timber Co. Ltd.	WFTCN	12/31/2019
Weyerhaeuser Co	WY	12/31/2019
Sonoco Products Co.	SON	12/31/2019
Totals		

		iquidity (\$ millions	5)	
Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity
333	800	2022	-	800	1,133
704	1,559	2023	781	774	1,478
761	2,250	2021	30	2,220	2,981
680	350	2021	-	350	1,030
61	833	2023	135	645	706
156	3,359	2022	757	2,602	2,759
16	850		377	412	428
689	1,500	2025	550	950	1,639
145	500	2022	100	400	545
3,544	12,001		2,730	9,153	12,698

	Credit	Metrics	
LTM EBITDA	Total Levg	Dividend / FCF (OCF-CE)	Net Levg
1,003	2.0x	34%	1.68 x
1,067	2.3x	28%	1.61 x
3,852	2.5	34%	2.34 x
1,445	1.7x	37%	1.26 x
563	1.7x	58%	1.58 x
3,160	3.2x	46%	3.18 x
301	3.5x	(19%)	3.47 x
1,276	5.4x	174%	4.89 x
764	2.2x	74%	2.39 x

Source: Bloomberg, BofA Global Research, Company Filings



Investment Grade – REITs (Page 1 of 2)



IG REITs - Public	Names						Liquidi	ty (\$ millions)						Credit Metric	S*
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Revolver Maturity	Revolver Drawn	Available Revolver	Total Commercial Paper	Commercial Paper Drawn	Available Commercial Paper	Current Liquidity	LTM EBITDA	Secured Debt/Total Debt	Secured Debt/Total Assets	Total Leverage (Net Debt/Adj. LTM EBITDA)
American Campus Communities In	ACC	12/31/2019	150	1,000	2022	610	390	0	0	0	540	478	33%	17%	7.7x
American Homes 4 Rent	AMH	12/31/2019	38	800	2022	6	794	0	0	0	831	569	69%	21%	5.3x
American Tow er Corp	AMT	12/31/2019	1,501	5,260	2025	700	4,560	0	0	0	6,061	5,920	91%	66%	5.4x
Alexandria Real Estate Equitie	ARE	12/31/2019	190	2,200	2023	384	1,816	750	0	750	2,006	983	9%	3%	6.9x
AvalonBay Communities Inc	AVB	12/31/2019	755	1,750	2024	750	1,000	0	0	0	1,755	1,530	14%	6%	4.8x
Brandyw ine Realty Trust	BDN	12/31/2019	90	600	2022	1	599	0	0	0	689	316	16%	8%	6.9x
Brixmor Property Group Inc	BRX	12/31/2019	550	1,250	2023	640	610	0	0	0	1,160	728	1%	1%	6.9x
Boston Properties Inc	BXP	12/31/2019	645	1,500	2022	2	1,498	0	0	0	2,142	1,713	31%	18%	6.7x
CBL & Associates Properties In	CBL	12/31/2019	313	685	2023	681	4	0	0	0	317	171	62%	47%	7.7x
Mack-Cali Realty Corp	CLI	12/31/2019	26	600	2021	329	271	0	0	0	297	197	68%	36%	12.5x
Camden Property Trust	CPT	12/31/2019	23	900	2023	53	847	0	0	0	870	589	1%	0%	4.7x
CubeSmart	CUBE	12/31/2019	55	750	2024	1	749	0	0	0	804	404	7%	4%	4.8x
Digital Realty Trust Inc	DLR	12/31/2019	90	2,664	2024	141	2,523	0	0	0	2,612	1,495	7%	3%	7.2x
Duke Realty Corp	DRE	12/31/2019	111	1,200	2022	0	1,200	0	0	0	1,311	536	3%	1%	5.3x
EPR Properties	EPR	12/31/2019	1,279	1,000	2022	750	250	0	0	0	1,529	487	1%	0.4%	5.4x
Equity Residential	EQR	12/31/2019	46	2,500	2024	20	1,480	1,000	1,000	0	1,526	1,775	24%	11%	7.1x
Essex Property Trust Inc	ESS	12/31/2019	70	1,235	2022	55	1,180	0	0	0	1,250	974	19%	9%	6.2x
Extra Space Storage Inc	EXR	12/31/2019	66	790	2023	158	632	0	0	0	698	874	86%	54%	6.0x
First Industrial Realty Trust	FR	12/31/2019	21	725	2021	160	565	0	0	0	587	260	13%	6%	5.3x
Federal Realty Investment Trus	FRT	12/31/2019	1,017	1,000	2024	1,000	0	0	0	0	1,017	600	20%	10%	7.0x
Highw oods Properties Inc	HW	12/31/2019	10	600	2022	221	379	0	0	0	388	438	3%	2%	6.3x
Healthcare Realty Trust Inc	HR	12/31/2019	1	700	2023	350	350	0	0	0	351	258	16%	7%	5.9x
Host Hotels & Resorts Inc	HST	12/31/2019	3,073	1,500	2024	1,500	0	0	0	0	3,073	1,521	14%	5%	1.8x
Healthcare Trust of America In	HTA	12/31/2019	33	1,000	2022	100	900	0	0	0	933	440	11%	5%	6.6x
Industrial Logistics Propertie	ILPT	12/31/2019	28	750	2021	310	440	0	0	0	468	141	78%	45%	9.7x
Invitation Homes Inc	INVH	12/31/2019	92	1,000	2021	0	1,000	0	0	0	1,092	883	78%	38%	9.5x
Kimco Realty Corp	KIM	12/31/2019	800	2,000	2025	700	1,300	0	0	0	2,100	698	11%	5%	8.0x
Kilroy Realty Corp	KRC	12/31/2019	60	750	2022	345	405	0	0	0	465	495	10%	4%	7.8x
Kite Realty Group Trust	KRG	12/31/2019	339	600	2023	300	300	0	0	0	639	135	30%	13%	6.7x
Ladder Capital Corp	LADR	12/31/2019	58	266	2025	0	266	0	0	0	325	460	76%	56%	12.5x
Life Storage Inc	LSI	12/31/2019	17	500	2023	25	475	0	0	0	492	436	3%	1%	8.6x
Lexington Realty Trust	LXP	12/31/2019	123	600	2023	0	600	0	0	0	723	254	63%	27%	4.7x
Mid-America Apartment Communit	MAA	12/31/2019	20	1,000	2023	3	927	500	70	430	948	928	15%	6%	4.8x
Macerich Co.	MAC	12/31/2019	735	1,500	2020	1,370	130	0	0	0	865	557	85%	51%	9.1x
Marriott International	MAR	3/31/2020	3,700	4,500	2023	4,500	0	2,000	2,000	0	3,700	2,388	N.A.	N.A.	4.8x
National Retail Properties Inc	NNN	12/31/2019	1	900	2022	151	749	0	0	0	750	573	1%	0%	5.2x
Realty Income Corp	0	12/31/2019	54	3,000	2023	704	2,296	0	0	0	2,350	1,296	6%	3%	6.1x
Corporate Office Properties Tr	OFC	12/31/2019	15	800	2023	177	623	0	0	0	638	297	13%	6%	6.2x
Omega Healthcare Investors Inc	OHI	12/31/2019	315	1,250	2021	512	738	0	0	0	1,053	805	8%	4%	6.4x
Office Properties Income Trust	OPI	12/31/2019	94	750	2023	0	750	0	0	0	844	402	14%	8%	7.0x
Healthpeak Properties Inc	PEAK	3/31/2020	450	2,500	2023	0	2,500	1,000	0	1,000	2,950	825	8%	4%	6.1x
Piedmont Office Realty Trust I	PDM	12/31/2019	14	500	2022	100	400	0	0	0	414	270	13%	5%	5.4x
Prologis Inc	PLD	3/31/2020	800	3,946	2023	146	3,800	0	0	0	4,600	2,132	9%	3%	5.3x
Public Storage	PSA	12/31/2019	410	500	2024	16	484	0	0	0	894	1,978	1%	0%	0.8x

Investment Grade - REITs (Page 2 of 2)

IG REITs - Public			(1 0.80		_,		l iquidi	ity (\$ millions)						Credit Metric	<u>*</u>
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Revolver Maturity	Revolver Drawn	Available Revolver	Total Commercial Paper	Commercial Paper Drawn	Available Commercial Paper	Current Liquidity	LTM EBITDA	Secured Debt/Total Debt	Secured Debt/Total Assets	Total Leverage (Net Debt/Adj. LTM EBITDA)
Regency Centers Corp	REG	12/31/2019	720	1,250	2022	705	545	0	0	0	1,265	762	17%	6%	5.5x
Realogy Holdings Corp	RLGY	12/31/2019	487	1,425	2023	767	658	0	0	0	1,145	485	61%	31%	5.5x
Retail Properties of America	RAPI	12/31/2019	860	850	2022	850	0	0	0	0	860	301	11%	5%	5.6x
Sabra Health Care REIT Inc	SBRA	12/31/2019	39	1,000	2023	105	895	0	0	0	934	399	5%	2%	4.5x
SITE Centers Corp	SITC	12/31/2019	516	970	2021	645	325	0	0	0	841	297	7%	3%	6.0x
Tanger Factory Outlet Centers	SKT	12/31/2019	617	600	2021	600	0	0	0	0	617	235	11%	8%	7.2x
SL Green Realty Corp	SLG	12/31/2019	166	1,500	2022	200	1,300	0	0	0	1,466	690	44%	20%	8.4x
Diversified Healthcare Trust	DHC	12/31/2019	37	1,000	2022	538	463	0	0	0	500	386	20%	10%	7.3x
Simon Property Group Inc	SPG	12/31/2019	669	7,500	2024	125	6,000	2,000	1,327	673	6,669	4,338	30%	24%	5.6x
Spirit Realty Capital Inc	SRC	3/31/2020	214	800	2023	314	486	0	0	0	700	420	26%	9%	4.8x
iStar Inc	STAR	12/31/2019	307	350	2022	0	350	0	0	0	657	145	36%	24%	nm
STORE Capital Corp	STOR	12/31/2019	100	600	2022	600	0	0	0	0	630	582	65%	28%	6.8x
Starw ood Property Trust Inc	STWD	12/31/2019	478	120	2024	0	120	0	0	0	598	1,280	84%	13%	8.7x
Service Properties Trust	SVC	12/31/2019	28	1,000	2022	377	623	0	0	0	651	801	0%	0%	8.9x
UDR Inc	UDR	12/31/2019	8	1,190	2023	0	890	500	300	200	898	732	27%	14%	6.7x
VEREIT Inc	VER	12/31/2019	13	1,500	2022	150	1,350	0	0	0	1,363	162	30%	13%	8.0x
Vornado Realty Trust	VNO	12/31/2019	1,515	2,750	2024	575	2,175	0	0	0	3,690	752	78%	34%	8.5x
Ventas Inc	VTR	12/31/2019	2,900	3,000	2021	2,900	100	1,000	0	1,000	3,000	1,881	17%	9%	6.4x
Welltow er Inc	WELL	12/31/2019	300	3,000	2022	0	2,150	1,000	850	356	2,450	2,233	23%	10%	6.8x
WP Carey Inc	WPC	12/31/2019	196	1,800	2025	201	1,599	0	0	0	1,795	961	25%	11%	6.1x
Washington Real Estate Investm	WRE	12/31/2019	13	700	2022	56	644	0	0	0	657	230	5%	2%	6.3x
Weingarten Realty Investors	WRI	12/31/2019	523	500	2024	500	0	0	0	0	523	295	18%	8%	5.9x
Apartment Investment & Managem	AIV	12/31/2019	443	800	2022	582	218	0	0	0	661	548	94%	63%	8.1x
Cousins Properties Inc	CUZ	12/31/2019	16	1,000	2023	252	749	0	0	0	764	345	89%	28%	9.5x
Physicians Realty Trust	DOC	12/31/2019	2	850	2022	348	503	0	0	0	505	259	9%	3%	7.4x
Gaming and Leisure Properties	GLPI	12/31/2019	557	1,175	2021	576	599	0	0	0	1,156	973	3%	2%	6.0x
Hudson Pacific Properties Inc	HPP	12/31/2019	46	600	2022	75	525	0	0	0	571	479	21%	9%	6.6x
Hersha Hospitality Trust	нт	12/31/2019	27	250	2024	170	80	0	0	0	107	149	37%	20%	7.7x
Totals			30,075	97,901		30,182	64,125				94,730				

Sources: Bloomberg, company filings as reported by the company

Note: Data is as reported by company as of 12/31/2019 & in select cases 03/31/2020, **adjustments made** post date for CP programs/recent company revolver draws through April 6th, 2020 for the names who has reported as of 12/31/2019.

Note: CP backstopped by revolver and reduces availability. PLD not adjusted for LPT acquisition.



Investment Grade - Technology



IG Technology - P	ublic Names				_iquidity (\$ millions	s)		Credit Metrics							
3)							Available	Current	LTM	Secured	Total	Dividend /				
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Revolver	Current Liquidity ¹	EBITDA	Levg	Levg	FCF (OCF-CE)	Comments			
Adobe Inc	ADBE	2/28/2020	4,171	1,000	10/17/2023	-	1,000	5,171	4,290	N/A	1.0x	0.0%				
Analog Devices Inc	ADI	2/1/2020	654	1,250	6/28/2024	-	1,250	1,904	3,054	N/A	1.8x	40.1%				
Autodesk Inc	ADSK	1/31/2020	1,844	650	12/17/2023	-	650	2,494	494	N/A	4.2x	0.0%				
Applied Materials Inc	AMAT	1/26/2020	3,960	1,500	2/21/2025	1,500	-	3,960	3,939	N/A	1.3x	25.8%				
Amazon.com Inc	AMZN	12/31/2019	55,021	7,000	4/27/2021	-	7,000	62,021	36,329	N/A	1.4x	0.0%				
Amphenol Corp	APH	12/31/2019	909	2,500	1/15/2024	-	2,500	3,013	1,940	N/A	1.9x	23.2%				
Arrow Electronics Inc	ARW	12/31/2019	300	2,000	12/14/2023	10	1,990	2,280	1,242	N/A	2.4x	0.0%				
Broadcom Inc	AVGO	2/2/2020	6,444	5,000	5/7/2024	-	5,000	11,444	10,315	N/A	4.3x	48.1%				
Avnet Inc	AVT	12/28/2019	489	1,250	6/28/2023	-	1,250	1,739	645	N/A	2.6x	10.0%				
Alibaba Group Holding Ltd	BABA	12/31/2019	76,883	5,150	10/7/2022	-	5,150	82,033	18,488	N/A	1.0x	0.0%				
Baidu Inc	BIDU	12/31/2019	21,019	1,000	6/8/2021	500	500	21,519	1,963	N/A	4.9x	0.0%				
Booking Holdings Inc	BKNG	12/31/2019	11,787	2,000	8/14/2024	-	2,000	13,787	5,880	N/A	1.5x	0.0%				
Cadence Design Systems Inc	CDNS	12/28/2019	705	350	1/28/2022	-	350	1,055	630	N/A	0.5x	0.0%				
salesforce.com Inc	CRM	1/31/2020	7,947	1,000	4/28/2023	-	1,000	8,947	2,764	N/A	1.1x	0.0%				
Cisco Systems Inc	CSCO	1/25/2020	27,062	3,000	5/15/2020	-	3,000	30,062	16,598	N/A	1.0x	40.3%				
Citrix Systems Inc	CTXS	12/31/2019	589	250	11/26/2024	-	250	839	753	N/A	1.0x	25.4%				
Dell International LLC	DELL	1/31/2020	9,302	4,500	12/20/2023	-	4,500	13,802	10,538	N/A	4.9x	0.0%				
DXC Technology Co	DXC	12/31/2019	2,560	4,000	10/11/2024	1,500	2,500	4,251	3,504	N/A	2.5x	8.5%				
eBay Inc	EBAY	12/31/2019	2,825	2,000	5/31/2023	-	2,000	4,825	3,183	N/A	2.4x	18.5%	Debt, cash, and revolver availability PF for March 2020 revolver draw			
Expedia Group Inc	EXPE	12/31/2019	5,741	2,000	3/6/2025	1,900	100	5,841	1,871	N/A	3.7x	12.1%				
Fidelity National Information Services Inc	FIS	12/31/2019	1,152	5,500	5/31/2023	600	4,900	3,329	4,256	N/A	4.8x	29.7%				
Fiserv Inc	FISV	12/31/2019	893	3,500	9/19/2023	174	3,326	4,219	3,810	N/A	5.7x	0.0%				
Flex Ltd	FLEX	12/31/2019	1,789	1,750	6/30/2022	-	1,750	3,539	1,559	N/A	1.8x	0.0%				
FLIR Systems Inc	FLIR	12/31/2019	285	650	3/29/2024	-	650	935	453	N/A	1.5x	28%				
Corning Inc	GLW	12/31/2019	2,434	1,500	8/15/2023	-	1,500	3,934	3,477	N/A	2.3x	(138%)				
Alphabet Inc	GOOGL	12/31/2019	119,675	4,000	7/19/2023	-	4,000	123,675	47,709	N/A	0.1x	N/A				
Global Payments Inc	GPN	12/31/2019	1,678	3,000	7/9/2024	903	2,097	3,775	1,935	N/A	5.0x	6%				
Hew lett Packard Enterprise Co	HPE	1/31/2020	3,171	4,750	8/16/2024	-	4,750	7,225	4,952	N/A	2.8x	72%				
HP Inc	HPQ	1/31/2020	4,205	4,000	3/30/2023	-	4,000	8,205	5,126	N/A	0.9x	22%				
International Business Machines Corp	IBM	12/31/2019	8,868	15,250	7/20/2024	-	15,250	23,814	18,870	N/A	3.3x	46%				
Jabil Inc	JBL	2/28/2020	697	2,850	1/22/2025	-	2,850	3,547	1,540	N/A	1.8x	20%				
Juniper Networks Inc	JNPR	12/31/2019	1,954	500	4/25/2024	_	500	2,454	708	N/A	2.4x	62%				
Keysight Technologies Inc	KEYS	1/31/2020	1,691	450	2/15/2022	-	450	2,141	1,082	N/A	1.7x	N/A				
KLA Corp	KLAC	12/31/2019	1,678	1,000	11/30/2023	225	775	2,453	2,117	N/A	1.6x	40%				
Lam Research Corp	LRCX	12/29/2019	5,934	1,250	10/13/2022	1,250	-	5,934	2,698	N/A	2.1x	28%	Debt, cash, and revolver availability PF for March 2020 revolver draw			
Mastercard Inc	MA	12/31/2019	7,676	6.000	11/14/2024	-	6,000	13,676	10,186	N/A	0.8x	17%				
Microchip Technology Inc	MCHP	12/31/2019	402	3,600	5/18/2023	615	2,985	3,387	1,970	N/A	4.9x	24%				
Marvell Technology Group Ltd	MRVL	2/1/2020	648	500	7/9/2024	350	150	798	410	N/A	3.5x	57%				
Motorola Solutions Inc	MSI	12/31/2019	1,001	2,200	4/25/2022	-	2,200	3,201	2,496	N/A	2.1x	24%				
Micron Technology Inc	MU	11/28/2019	10,687	2,500	7/3/2023	2,500	-	10,687	9,623	N/A	0.8x	N/A	Debt, cash, and revolver availability PF for March 2020 revolver draw			
NetApp Inc	NTAP	1/24/2020	3,008	1,000	12/10/2021	-	1,000	3,623	1,158	N/A	1.6x	46%				
NVIDIA Corp	NV DA	1/26/2020	10,897	575	10/7/2021	-	575	11,472	3,272	N/A	0.6x	9%				
NXP BV	NXPI	12/31/2019	1,045	1,500	6/11/2024	-	1,500	2,545	3,500	N/A	2.1x	17%				
PayPal Holdings Inc	PYPL	12/31/2019	10,761	6,000	9/11/2024	-	6,000	16,761	3,728	N/A	1.3x	N/A				
QUALCOMM Inc	QCOM	12/29/2019	11,423	4,470	11/8/2021	-	4,470	15,394	10,120	N/A	1.6x	42%				
Tech Data Corp	TECD	1/31/2020	841	1,500	5/15/2024	-	1,500	2,341	760	N/A	1.9x	N/A				
Tyco Electronics Group SA	TEL	12/27/2019	742	1,500	11/14/2023	-	1,500	1,681	2,913	N/A	1.4x	34%				
Trimble Inc	TRMB	12/30/2019	189	1,250	5/15/2023	110	1,140	1,329	626	N/A	2.9x	N/A				
Texas Instruments Inc	TXN	12/31/2019	5,387	2,000	3/9/2024	-	2,000	7,387	7,002	N/A	0.8x	52%				
Visa Inc	V	12/31/2019	14,389	5,000	7/25/2024	-	5,000	19,389	16,374	N/A	1.0x	19%				
VMw are Inc	VMW	1/31/2020	2,915	1,000	9/12/2022	-	1,000	3,915	2,891	N/A	2.0x	N/A				
Xilinx Inc	XLNX	12/28/2019	2,425	400	12/7/2021		400	2,825	1,021	N/A	1.2x	37%	 			
Apple Inc	AAPL	12/28/2019	207,061	-	N/A		-	202,071	78,121	N/A	1.4x	22%				
Microsoft Corp	MSFT	12/31/2019	134,253	-	N/A	-	-	134,253	61,347	N/A	1.4x	36%				
	CSCO	2/29/2020			N/A N/A			-		N/A N/A			 			
Oracle Corp			25,858	-			-	25,858	17,252		3.0x	25%	Cash and leverage PF for 3/20 \$8bi			
Intel Inc Totals	INTC	12/28/2019	25,090 873,014	138,345	N/A	12,137	126,208	25,090 987,849	32,564	N/A	1.1x	33%	debt issuance			
	I .		3. 3,0 14				0,200	55.,545		1		1				

Totals
Source: Bloomberg, BofA Global Research, Company Filings

Investment Grade - Telecommunications

IG Telecom - P	ublic Names				_iquidity (\$ million	s)				(Credit Metric	cs
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity3	LTM EBITDA	Secured Levg	Total Levg	Dividend / FCF (OCF-CE)	Comments
AT&T Inc	T	12/31/2019	12,130	15,000	12/11/2021	,	15,000	27,130	59,872	N/A	2.7x	51%	
Verizon Communications Inc	VZ	12/31/2019	2,594	9,500	4/4/2022	,	9,500	12,094	48,909	N/A	2.3x	56%	
Crown Castle International Corp	CCI	12/31/2019	196	5,000	6/21/2024	525	4,475	4,671	3,232	N/A	5.6x	298%	
American Tow er Corp	AMT	12/31/2019	1,501	5,250	6/28/2023	800	4,450	5,951	4,907	N/A	4.9	58%	
Equinix Inc	EQIX	12/31/2019	1,880	2,000	12/12/2022	-	2,000	3,880	2,451	N/A	4.8x	NA ⁴	
CyrusOne Inc	CONE	12/31/2019	76	1,700	3/29/2022	649	1,051	1,127	494	N/A	5.9x	NA ⁴	
Digital Reality Trust LP	DLR	12/31/2019	90	2,675	1/24/2024	235	2,440	2,530	1,105	N/A	9.2x	NA ⁴	
Vodafone Group PLC 1,2	VOD	12/31/2019	14,151	9,611	2/27/2022	-	9,611	23,762	18,191	N/A	4.3x	29%	
British Telecommunications PLC 1,2	BRITEL	12/31/2019	5,194	2,412	9/4/2021	-	2,412	7,606	9,567	N/A	2.3x	137%	
Rogers Communications Inc ²	RCICN	12/31/2019	381	2,205	9/20/2023	-	2,205	1,362	4,595	N/A	3.1x	59%	
Bell Canada Inc 2	BCECN	12/31/2019	112	2,756	11/9/2024	-	2,756	1,365	7,779	N/A	2.6x	76%	
TELUS Corp ²	TCN	12/31/2019	1,312	1,550	5/31/2023	-	1,550	2,081	4,262	N/A	3.4	118%	Cash PF for February equity offering, UoP for investment in business and debt reduction
America Movil SAB de CV ²	AMXLMM	12/31/2019	1,046	4,500	8/12/2024	,	4,500	5,546	16,307	N/A	2.1x	32%	
Bharti Airtel Ltd ²	BHARTI	12/31/2019	4,474	2,500	5/16/2024	,	2,500	6,974	4,695	N/A	4.4x	129%	
Koninklijke KPN NV ²	KPN	12/31/2019	1,169	1,545	7/1/2023	,	1,545	2,714	2,886	N/A	2.6x	45%	
Ooredoo International Finance Limited	QTLEQD	12/31/2019	4,022	1,500	6/7/2022	480	1,020	5,042	3,213	N/A	2.6x	12%	
Orange SA 1,2	ORAFP	12/31/2019	16,105	6,659	7/11/2022	•	6,659	22,763	14,438	N/A	2.9x	107%	
SES SA 1,2	SESGFP	12/31/2019	1,297	1,822	6/26/2024	,	1,822	2,970	1,362	N/A	3.7x	52%	
Telefonica SA 2	TELEFO	12/31/2019	9,052	7,968	3/15/2024	313	7,655	14,349	18,354	N/A	3.1x	40%	
Totals		·	76,782	86,154		3,002	83,152	153,917					

Source: Bloomberg, Bof A Global Research, Company Filings



¹ Reports semi-annually

² Financial results converted to USD

³ Current liquidity is equal to cash on hand + available revolver less commercial paper outstanding

⁴ Negative FCF

Investment Grade – Utilities



IG Utilities	- Public Name	S		I	_iquidity (\$ millions	s)			Credit	Metrics	
Issuer / Company	Bond Ticker	As of	Cash	Total Revolver	Maturity	Drawn	Available Revolver	Current Liquidity	LTM EBITDA	Debt/Cap	CFO pre- WC/Debt	Total Levg
Ameren Corp.	AEE	12/31/2019	16	2,300	2024	-	1,860	1,876	2,348	55%	21%	4.2x
American Electric Pow er	AEP	12/31/2019	1,200	4,000	2022	ı	1,890	3,090	5,674	60%	16%	5.4x
Avangrid	AGR	12/31/2019	178	2,500	2024	ı	1,938	2,116	1,961	34%	17%	4.1x
Black Hills Corp	BKH	12/31/2019	10	750	2023	ī	370	380	617	59%	15%	5.7x
CMS Energy Corporation	CMS	12/31/2019	140	2,198	2023	ı	2,047	2,187	2,279	72%	13%	5.8x
CenterPoint Energy	CNP	12/31/2019	25	5,100	2022	ı	2,857	2,882	2,777	64%	12%	5.5x
Dominion Resources	D	12/31/2019	166	6,000	2023	ı	5,075	5,241	10,004	53%	11%	3.8x
DTE Energy	DTE	12/31/2019	93	2,560	2024	-	1,503	1,596	3,085	60%	16%	5.7x
Duke Energy	DUK	12/31/2019	1,900	9,000	2024	1,000	4,400	6,300	11,170	58%	12%	5.8x
Consolidated Edison	ED	12/31/2019	981	2,250	2023	-	558	1,539	4,541	55%	13%	5.0x
Edison International	EIX	12/31/2019	68	4,500	2024	-	3,798	3,866	4,492	56%	(0%)	4.4x
Eversource Energy	ES	12/31/2019	15	2,100	2024	-	865	880	2,922	54%	12%	5.1x
Entergy	ETR	12/31/2019	34	6,278	2024	460	3,862	3,897	4,950	59%	13%	4.1x
Evergy	EVRG	12/31/2019	23	2,500	2023	20	1,921	1,944	2,174	54%	16%	4.6x
Exelon Corp	EXC	12/31/2019	587	10,559	2021	ı	8,246	8,833	10,674	52%	18%	3.7x
FirstEnergy	FE	12/31/2019	627	3,500	2022	-	3,496	4,123	4,376	59%	11%	4.5x
Alliant Energy Corp	LNT	12/31/2019	16	1,083	2022	ı	746	762	1,341	55%	15%	4.9x
NextEra Energy	NEE	12/31/2019	598	11,795	2025	-	7,871	8,469	9,754	51%	19%	4.4x
OGE Energy Corp	OGE	12/31/2019	-	900	2023	112	788	788	865	45%	21%	3.9x
Public Service Enterprise Gro	PEG	12/31/2019	147	4,200	2023	ı	2,864	3,011	3,856	52%	18%	4.3x
Pinnacle West Capital	PNW	12/31/2019	10	1,200	2023	ı	1,123	1,133	1,356	51%	19%	4.3x
PPL Corporation	PPL	12/31/2019	815	4,155	2024	243	3,058	3,873	4,164	64%	11%	5.6x
Southern Company	SO	12/31/2019	1,975	9,631	2024	350	7,576	9,551	8,820	60%	14%	5.5x
Sempra Energy	SRE	12/31/2019	108	6,685	2024	-	4,351	4,459	4,353	55%	12%	6.0x
WEC Energy Group	WEC	12/31/2019	38	2,800	2022	-	1,967	2,004	2,463	55%	19%	5.2x
Xcel Energy Inc.	XEL	12/31/2019	248	3,100	2024	-	2,984	3,232	4,258	61%	16%	4.8x
Totals			10,018	111,644		2,185	78,013	88,032				

Source: Bloomberg, BofA Global Research, Company Filings





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