J.P.Morgan

Technology & Telecom Weekly

TTMI, PBI, SECMOS, NBIS, ILDFP, ZAYO and UNIT

North America Corporate Credit - Technology and Telecommunication Services (HY)

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Last week we finally settled into August as earnings and news flow slowed. In tech, TTMI fulfilled its M&A ambitions with the $1.1bn acquisition of Epiq Solutions, and PBI launched a $50mn cash tender for its 2043s and 2037s. Within HPC, NBIS priced an upsized convertible notes offering and exchanged existing converts into equity, and NVDA agreed to support SB Energy's Ohio data center campus leased to OpenAI. Meanwhile, in telecom, ILDFP's owner continued to increase his stake in Tele2, ZAYO extended its agreement with GLW to support its fiber buildout, and UNIT announced the results of its tender for its 2028 and 2033 notes. We expect news flow to remain muted this week, with only one late reporter scheduled to release numbers, ESTC.

Technology:

- TTM Technologies (TTMI) – Announced $1.1bn acquisition of Epiq Solutions
- Pitney Bowes (PBI) – Launched cash tender offers for up to $50mn across 2043s and 2037s, funded with cash on hand

High-Performance Compute:

- SB Energy (SECMOS) – Nvidia agreed to support SB Energy's Ohio data center campus leased to OpenAI
- Nebius (NBIS) – Priced upsized $5.0bn in convertible notes and exchanged $800mn of existing convertible notes into equity

Telecom:

- Iliad (ILDFP) – Owner Xavier Niel has increased his economic exposure to Tele2 while avoiding a mandatory bid
- Zayo (ZAYO) – Expanded Corning supply agreement to lock in fiber through the end of the decade as AI-driven buildout accelerates
- Uniti Group (UNIT) – Announced results of tender offers for 2028/2033 notes

See page 27 for analyst certification and important disclosures.

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Technology

The high yield Technology index widened by 16bp to a YTW of 8.43% from 8.27% in the previous week, while the overall high yield index widened by 5bp to 7.34% compared to 7.29% in the previous week. The Technology STW widened 13bp to 418 while the overall high yield index widened 4bp to 310.

Technology:

- **TTM Technologies (TTMI) – Announced $1.1bn acquisition of Epiq Solutions.** TTMI agreed to acquire Epiq Solutions (a radar products company that complements TTMI's A&D business) for ~$1.1bn in cash (~17.4x synergy-adjusted Adj. 2027 EBITDA), expected to close in 4Q26. The company has secured $1.1bn of committed financing from several banks, including a $300mn TLA and $800mn TLB. Pro forma for the transaction, net leverage is expected to climb to ~2.3x from 0.9x as of 2Q26, with a target to delever back to ~1.5x–1.7x within 12–18 months. Epiq is expected to contribute ~$160mn of revenue in 2027 with mid-30s EBITDA margins, and TTMI expects to realize ~$9mn of synergies from the transaction.
- This transaction was hardly surprising, as TTMI has been below its historical 1.5-2.0x net leverage target for some time now and has historically been acquisitive. Further, under the May 2026 credit agreement, the company was able to add more TL facilities if need be. Thus, we knew M&A was top of mind for management (our August 2026 earnings note was titled "M&A in Focus"). Still, this is a big acquisition for TTM, and TTM is also spending heavily on ramping its new facilities to meet data center related demand, limiting upside for creditors.
- **Pitney Bowes (PBI) – Launched cash tender offers for up to $50mn across 2043s and 2037s, funded with cash on hand.** PBI commenced tender offers to repurchase up to $50mn of its 6.70% notes due 2043 ($349.3mn outstanding; priority 1) and 5.250% notes due 2037 ($31.1mn outstanding; priority 2), with consideration of 88c for the 2043s and 85c for the 2037s. The tender offer expires September 18 with settlement expected September 22, and the company intends to fund the repurchases with cash on hand.

High-Performance Compute:

- **SB Energy (SECMOS) – Nvidia agreed to support SB Energy's Ohio data center campus leased to OpenAI.** Nvidia agreed to provide up to $105bn of guarantees supporting OpenAI's 20-year lease of a large Ohio data center campus being developed by SoftBank-owned SB Energy, while also investing $1.5bn directly into the developer. The data center campus will be equipped with Nvidia's semiconductors and computers, and Nvidia's backing will begin in phases from 2028 to 2030 and last for 20 years. The deal adds to an already huge commitment by OpenAI to buy Nvidia gear, which represents roughly $600bn of revenue for Nvidia through 2030.
- **Nebius (NBIS) – Priced an upsized $5.0bn in convertible notes and exchanged $800mn of existing convertible notes into equity.** NBIS priced $5.0bn of convertible notes (upsized from $4.5bn) including $3.0bn of 0.5% converts due 2030 and $2.0bn of 4.5% converts due 2034. Initial purchasers have the option to purchase an additional $450mn of the 2030s and $300mn of the 2034s. Net proceeds of ~$4.94bn (or ~$5.68bn if fully upsized) will be used to fund NBIS' data center buildout, full-stack AI cloud investment, footprint expansion, and GPU

procurement.

- Concurrently, NBIS agreed to exchange $400mn of its 2.00% 2029 converts and $400mn of its 3.00% 2031 converts for ~15.8mn Class A shares.

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Telecommunications

The high yield Telecommunication index widened by 5bp to a YTW of 8.94% from 8.89% in the previous week, while the overall high yield index widened by 5bp to 7.34% compared to 7.29% in the previous week. The Telecommunication STW widened 4bp to 462 while the overall high yield index widened 4bp to 310.

Telecom:

- **Iliad (ILDFP) – Owner Xavier Niel has increased his economic exposure to Tele2 while avoiding a mandatory bid.** According to *Dagens Industri*, Xavier Niel did this by converting A shares to B shares, which reduced his voting rights but raised his share of Tele2's capital. As a result, Niel now holds 23.5% of the capital and 28.1% of the votes, versus 22.1% and 29.1% at the end of June. The report notes that Niel sees more potential for the stock.
- **Zayo (ZAYO) – Expanded Corning supply agreement to lock in fiber through the end of the decade as AI-driven buildout accelerates.** ZAYO signed an expanded long-term supply agreement with Corning to secure a significant portion of its projected fiber needs through the remainder of the decade, aiming to de-risk execution as it undertakes one of its largest network expansions. Management framed the move as proactive supply assurance as AI workloads drive higher density connectivity needs, with ZAYO targeting ~15,000 incremental route miles by 2030 (including 8,000+ miles of new long-haul fiber in collaboration with NVIDIA) while adding capacity across existing corridors where AI infrastructure is clustering.
- **Uniti Group (UNIT) – Announced results of tender offers for 2028/2033 notes.** Investors elected to tender $555mn of the notes, primarily concentrated in the 2028s and above the $480mn cap. As a result, the company only accepted tenders for $479mn of the 2028s and $1.2mn of the 2033s. The company intends to settle the asset sale tender offers today.

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Relative Value Analysis

Table 1: High Performance Compute

				Moody's /	Amount	Recent Quotes			Next Call									
Coupon	Description	Recomm.	Maturity	S&P	Outst.	Bid	YTW	Spread	Date	YTC	Price	Location	Size	Completion	Tenant	Lease	Amort	Leverage
Meta-Partnered SPVs		**NC**																
Beignet Investor LLC (RPLDCI)																		
6.580%	Sec Nts	NC	30-May-49	NR/A+	27,293.8	96 4/7	6.88%	189bp				LA	2.1 GW	Jun-29	Meta	NNN / 4x5yr	Fully amort	
Sopaipilla Investor LLC (TXEDCI)																		
7.534%	1st lien	NC	30-Nov-48	NR/NR	12,639.5	103 1/5	7.25%	255bp				TX	960 MW IT	Dec-28	Meta	NNN / 4x4yr	Fully amort	
QTS		**NC**																
QTS Thunder Managing Issuer LLC (QTS)																		
S+225	Term Loan B	NC	22-Jul-33	Baa3/NR	3250.0	99 1/5	6.51%	277bp				VA / AZ / OH / TX	494 MW IT	Complete	3 IG Hyperscalers	Various	~7% by maturity	
QTS Fayetteville I Dc1-2 LLC (QTSQST)																		
5.700%	Sr Sec Nts	NC	15-Apr-36	Baa2/NR	4,600.0	91 1/5	6.97%	235bp	15-Oct-35	7.06%	100.00	GA	340 MW IT	Complete	Microsoft	Fixed NNN / 20yr + 15yr	Bullet	
RD Michigan Property Owner I LLC		**NC**																
7.500%	Sec Nts (1st Lien)	NC	30-Mar-45	Baa3/NR	14,000.0	95 1/2	7.96%	309bp	30-Apr-29	9.57%	100.00	MI	1.383 GW	Apr-28	Oracle	NNN / ~17.6y WAL + ext	Fully amort	
Hut 8																		
Hut 8 DC LLC (HUTRBA)																		
6.192%	Sec Nts (1.5 Lien)	NC	15-Nov-42	NR/BBB-	3,250.0	98	6.39%	158bp	15-May-42	6.44%	100.00	LA	330 MW	Oct-27	Fluidstack (Google)	Fixed NNN / 15y + 3x5yr	Fully amort	8.4x
Beacon Point DC LLC (HUTBPA)																		
6.129%	1st lien	NC	30-Nov-42	Baa2/NR	4,250.0	96	6.65%	195bp	30-May-42	6.54%	100.00	TX	500 MW	Nov-27	Nvidia	Fixed NNN / 15y + 3x5yr	Fully amort	8.0x
CoreWeave		**Overweight**																
9.250%	Sr Nts	OW	1-Jun-30	B1/B	2,000.0	94 1/2	11.07%	681bp	1-Jun-27	24.98%	104.63							6.8x
9.000%	Sr Nts	OW	1-Feb-31	B1/B	1,750.0	91 4/7	11.47%	716bp	1-Feb-28	19.48%	104.50							6.8x
9.750%	Sr Nts	OW	1-Oct-31	B1/B	2,750.0	91 1/2	12.02%	767bp	1-Oct-28	17.36%	104.88							6.8x
TeraWulf		**Underweight**																
WULF Compute (WULF)																		
7.750%	Sec Nts	UW	15-Oct-30	Ba2/BB	3,200.0	104	6.34%	212bp	15-Oct-27	7.39%	103.88	Upstate NY	523 MW	Dec-26	Fluidstack (Google)	Gross / 10yr + 2x5yr	~40% by maturity	5.1x
Fluidstack		**NC**																
Flash Compute (FLASHC)																		
7.250%	Sec Nts	NC	31-Dec-30	Ba3/NR	1,300.0	101	6.93%	268bp	31-Dec-27	9.27%	103.63	West TX	240 MW	Sep-26	Fluidstack (Google)	Gross / 25y + short to 15-20y	~30% by maturity	5.9x

Source: Company reports and J.P. Morgan estimates.

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Table 2: High Performance Compute (cont.)

				Moody's /	Amount	Recent Quotes			Next Call									
Coupon	Description	Recomm.	Maturity	S&P	Outst.	Bid	YTW	Spread	Date	YTC	Price	Location	Size	Completion	Tenant	Lease	Amort	Leverage
Cipher Digital		**Overweight**																
Cipher Compute LLC (CIFR)																		
7.125%	Sr Sec Nts (1st Lien)	OW	15-Nov-30	Ba3/NR	1,733.0	101 7/8	6.47%	224bp	15-Nov-27	8.39%	103.56	West TX	300 MW	Feb-27	Fluidstack (Google)	Gross / 10yr + 2x5yr	~40% by maturity	4.5x
Black Pearl Compute (BLKPRL)																		
6.125%	Sr Sec Nts	OW	15-Feb-31	Ba2/NR	2,000.0	100 3/8	6.00%	176bp	15-Feb-28	7.79%	103.06	West TX	300 MW	Mar-27	Amazon	Fixed NNN / 15yr + 3x5yr	~30% by maturity	5.7x
Stringray Compute (STNGRY)																		
6.000%	Secured	NC	15-Jun-31	Ba2/NR	810.0	97 3/4	6.55%	216bp	15-Jun-28	8.92%	103.00	West TX	100 MW	May-27	Amazon	Fixed NNN / 15yr + 3x5yr	~30% by maturity	6.6x
Applied Digital		**Overweight**																
Applied Digital Corp (APLD)																		
9.250%	Sec Nts	OW	15-Dec-30	NR/BB-	2,350.0	105 2/5	7.38%	314bp	15-Dec-27	8.24%	104.63	ND	330 MW	Jun-26	CoreWeave (@ IG Box)	Gross / 15yr + 3x5yr	~25% by maturity	7.0x
APLD ComputeCo 2 LLC (PFORGE)																		
6.750%	Sr Sec Nts	OW	15-Mar-31	Ba3/NR	2,150.0	97 3/5	7.38%	307bp	15-Mar-28	10.60%	103.38	ND	280 MW	Apr-27	Oracle	Gross / 15yr + 2x5yr	~20% by maturity	8.1x
APLD ComputeCo 3 LLC (ELNFOR)																		
7.000%	Sr Sec Nts (1st Lien)	NC	15-Jun-31	NR/BB-	1,590.0	96 1/9	8.22%	383bp	15-Jun-28	11.59%	103.50	ND	198 MW	Jul-27	CoreWeave	Gross / 15yr + 3x5yr	~13% by maturity	7.6x
Fleet Data Centers		**NC**																
SV RNO Property Owner 1 (TRACTC)																		
5.875%	Sec Nts	NC	1-Mar-31	Ba1/BB+	3,800.0	92 1/4	7.94%	363bp	1-Mar-28	13.54%	102.94	Reno	240 MW	Jun-28	Nvidia	YoC NNN / 16yr + 2x10yr	~10% by maturity	8.5x
SV RNO Property Owner 1 (TRACTD)																		
6.500%	Sec Nts	NC	1-May-31	Ba1/BB	4,585.0	93 4/9	8.20%	388bp	1-May-28	12.60%	103.25	Reno	240 MW	Apr-28	Nvidia	YoC NNN / 16yr + 2x10yr	~9% by maturity	9.4x
Fluidstack / Next Frontier JV																		
Zenith ARC (ZENARC)																		
8.875%	Secured	NC	31-Aug-31	Ba2/BB	2,250.0	96 1/4	9.83%	544bp	31-Aug-28	13.01%	104.44	IN	200 MW	Nov-28	Jane Street	Fixed NNN / 15yr + 2x5yr	~10% by maturity	8.4x
Meridian ARC Holdco LLC (MERIDI)																		
6.250%	Sec Nts	NC	30-Apr-31	Ba2/BB-	5,700.0	95 5/8	7.37%	305bp	30-Apr-28	9.73%	103.13	IN	581 MW	Nov-27	Fluidstack (Google)	YoC NNN / 15yr + 3x5yr	~15% by maturity	8.4x
Edged Compute LLC		**NC**																
7.500%	Sec Nts	NC	30-Apr-31	NR/BB+	1,300.0	94 1/4	9.02%	470bp	30-Apr-28	13.97%	103.75	Chi / Atl	114 MW IT	Dec-27	CoreWeave & Alibaba	Mixed / 15&16yr + 2x5yr	~10% by maturity	7.3x
Core Scientific Finance		**NC**																
7.750%	Sec Nts	NC	15-May-31	NR/BB	3,300.0	97 3/4	8.33%	401bp	15-May-28	11.53%	103.88	Various	900 MW	Jun-27	CoreWeave	Gross / most 12yr + 2x5yr	~25% by maturity	5.6x
SE Cosmos LLC		**NC**																
8.875%	Sr Sec Nts (1st Lien)	NC	1-May-31	NR/BB+	999.0	99 1/2	9.00%	468bp	1-May-28	11.93%	104.44	Austin TX	70 MW	Jun-27	SoftBank sub	YoC NNN / 15yr + 10yr	None	7.5x
Elk Grove Village Property LLC		**NC**																
7.500%	Sr Sec Nts	NC	15-Jun-31	Ba3/BB-	900.0	96 2/7	8.45%	413bp	15-Jun-28	11.90%	103.75	Chi	108 MW	Feb-27	CoreWeave	Fixed NNN / 15yr + 2x7yr	~22% by maturity	7.0x
Yondr JK 1 LLC		**NC**																
6.875%	Sr Sec Nts (1st Lien)	NC	30-Jun-31	Ba3/NR	715.0	93 1/2	8.53%	420bp	30-Jun-28	12.75%	103.44	VA	48 MW IT	Oct-28	Oracle	Modified Gross / 15yr + 2x5yr	~8% by maturity	8.5x
Galaxy Helios Data Centers II LLC		**NC**																
9.875%	Secured	NC	1-Aug-31	NR/BB-	3,507.0	99 1/8	10.10%	571bp	1-Aug-28	12.70%	104.94	TX	400 MW	Mar-28	CoreWeave	YoC Gross / 15yr + 2x5yr	~11% by maturity	8.2x

Source: Company reports and J.P. Morgan estimates.

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Table 3: Technology: Hardware / Equipment

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
CDW LLC														
4.125%	Sr Nts	1-May-25	Baa3/BBB-	211.3	100	4.86%	52bp			$1,976	8.4%	3.0x	2.8x	9.0x
4.250%	Sr Nts	1-Apr-28	Baa3/BBB-	600.0	98 3/4	5.05%	97bp			$1,976	8.4%	3.0x	2.8x	9.0x
3.250%	Sr Nts	15-Feb-29	Baa3/BBB-	700.0	95 4/9	5.23%	104bp			$1,976	8.4%	3.0x	2.8x	9.0x
2.670%	Sr Nts	1-Dec-26	Baa3/BBB-	1,000.0	99 2/5	4.84%	104bp	1-Nov-26	100.00	$1,976	8.4%	3.0x	2.8x	9.0x
3.276%	Sr Nts	1-Dec-28	Baa3/BBB-	500.0	96 1/7	5.08%	91bp	1-Oct-28	100.00	$1,976	8.4%	3.0x	2.8x	9.0x
3.569%	Sr Nts	1-Dec-31	Baa3/BBB-	1,000.0	90 1/2	5.67%	132bp	1-Sep-31	100.00	$1,976	8.4%	3.0x	2.8x	9.0x
**Covered by Erica Spear*														
Coherent														
S+175	Term Loan B B-2	2-Jul-29	Ba1/BB+	1,080.0	100	5.68%	194bp			$1,520	21.4%	1.5x	0.2x	8.0x
5.000%	Sr Nts	15-Dec-29	B1/BB-	990.0	98 4/5	5.40%	116bp	14-Dec-26	102.50	$1,520	21.4%	2.1x	0.8x	8.0x
Dell Inc														
6.020%	Sr Sec Nts (1st Lien)	15-Jun-26	Baa2/BBB	2,486.4	101 2/9	4.71%	60bp	15-Mar-26	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
4.900%	Sr Sec Nts (1st Lien)	1-Oct-26	Baa2/BBB+	1,750.0	100	4.70%	97bp			$15,141	11.3%	2.1x	1.3x	9.5x
6.100%	Sr Sec Nts (1st Lien)	15-Jul-27	Baa2/BBB+	500.0	101 1/9	4.54%	62bp	15-May-27	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
7.100%	Sr Nts	15-Apr-28	Baa3/BBB+	300.0	104	4.57%	48bp			$15,141	11.3%	2.1x	1.3x	9.5x
5.300%	Sr Sec Nts (1st Lien)	1-Oct-29	Baa2/BBB+	1,750.0	101 1/5	4.85%	63bp	1-Jul-29	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
6.200%	Sr Sec Nts (1st Lien)	15-Jul-30	Baa2/BBB+	750.0	104 1/8	4.95%	70bp	15-Apr-30	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
8.100%	Sr Sec Nts (1st Lien)	15-Jul-36	Baa2/BBB+	990.8	116 3/5	5.79%	118bp	15-Jan-36	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
6.500%	Sr Nts	15-Apr-38	Baa3/BBB+	387.8	105	5.90%	121bp			$15,141	11.3%	2.1x	1.3x	9.5x
5.400%	Sr Nts	10-Sep-40	Baa3/BBB+	264.4	94 1/9	6.03%	128bp			$15,141	11.3%	2.1x	1.3x	9.5x
8.350%	Sr Sec Nts (1st Lien)	15-Jul-46	Baa2/BBB+	645.9	121 5/8	6.39%	149bp	15-Jan-46	100.00	$15,141	11.3%	2.1x	1.3x	9.5x
**Covered by Erica Spear*														

Source: J.P. Morgan and company reports.

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Table 4: Technology: Hardware / Equipment (cont.)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
NCR Voyix Corp														
5.000%	Sr Nts	1-Oct-28	B2/B+	650.0	97 5/6	6.10%	194bp			$431	17.0%	2.6x	2.0x	7.1x
5.125%	Sr Nts	15-Apr-29	B2/B+	402.9	97 1/2	6.16%	196bp			$431	17.0%	2.6x	2.0x	7.1x
5.250%	Sr Nts	1-Oct-30	B2/B+	52.1	89 1/2	8.31%	402bp	1-Oct-26	101.75	$431	17.0%	2.6x	2.0x	7.1x
Nokia														
4.375%	Sr Nts	12-Jun-27	Ba1/BBB-	500.0	99 1/3	5.18%	125bp			$1,781	8.8%	1.9x	-1.0x	11.7x
6.450%	Sr Nts	15-Mar-29	NR/NR	206.0	100 1/8	6.39%	220bp			$1,781	8.8%	1.9x	-1.0x	11.7x
6.625%	Sr Nts	15-May-39	Ba1/BBB-	500.0	102 2/5	6.34%	163bp			$1,781	8.8%	1.9x	-1.0x	11.7x
Pitney Bowes														
6.875%	Sr Nts	15-Mar-27	B2/B+	380.0	99 2/3	7.07%	308bp	15-Mar-26	100.00	$590	31.6%	3.7x	3.2x	9.7x
7.250%	Sr Nts	15-Mar-29	B2/B	476.0	100 8/9	5.63%	173bp	15-Mar-27	100.00	$590	31.6%	3.7x	3.2x	9.7x
5.250%	Sr Nts	15-Jan-37	B3/B	35.8	77 1/8	8.62%	397bp			$590	31.6%	3.7x	3.2x	9.7x
Seagate Technology														
4.091%	Sr Nts	1-Jun-29	Ba3/BB+	430.9	97	5.24%	103bp	1-Mar-29	100.00	$3,213	26.3%	1.2x	0.7x	11.3x
3.125%	Sr Nts	15-Jul-29	Ba3/BB+	99.8	90 1/2	6.78%	257bp			$3,213	26.3%	1.2x	0.7x	11.3x
4.125%	Sr Nts	15-Jan-31	Ba3/BB+	213.2	94 1/4	5.62%	131bp	15-Oct-30	100.00	$3,213	26.3%	1.2x	0.7x	11.3x
3.375%	Sr Nts	15-Jul-31	Ba3/BB+	44.8	87	6.51%	218bp	15-Jan-27	101.13	$3,213	26.3%	1.2x	0.7x	11.3x
5.750%	Sr Nts	1-Dec-34	Ba3/BB+	327.6	99	5.90%	137bp	1-Jun-34	100.00	$3,213	26.3%	1.2x	0.7x	11.3x
Axon Enterprises														
6.125%	Sr Nts	15-Mar-30	Ba2/BB+	1,000.0	101 3/5	5.45%	126bp	15-Mar-27	103.06	$757	23.5%	2.3x	1.4x	2.7x
6.250%	Sr Nts	15-Mar-33	Ba2/BB+	750.0	101 2/3	5.72%	146bp	15-Mar-28	103.13	$757	23.5%	2.3x	1.4x	2.7x

Source: J.P. Morgan and company reports

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Table 5: Technology: Hardware / Equipment (cont.)

			Moody's /	Amount	Recent Quotes			Next Call		LTM	EBITDA	Debt /	Net Debt /	EBITDA /
Coupon	Description	Maturity	S&P	Outst.	Bid	YTW	Spread	Date	Price	EBITDA	Margin	EBITDA	EBITDA	Interest
TTM Technologies														
S+175	Term Loan B	30-May-30	Ba1/BB+	394.7	99 3/4	5.81%	207bp			$547	16.2%	0.9x	0.0x	12.5x
4.000%	Sr Nts	1-Mar-29	Ba3/B+	500.0	96	5.74%	155bp			$547	16.2%	1.8x	0.9x	12.5x
Xerox														
S+400	Term Loan B	19-Nov-29	B2/B-	673.4	75 6/7	18.67%	1,493bp			$634	8.2%	2.5x	1.7x	1.8x
5.000%	Sr Nts	15-Aug-25	B3/B+	388.0	99	7.66%	340bp	15-Jul-25	100.00	$634	8.2%	7.0x	6.2x	1.8x
5.500%	Sr Nts	15-Aug-28	Caa3/D	556.1	58 1/2	36.72%	3,256bp	15-Jul-28	100.00	$634	8.2%	7.0x	6.2x	1.8x
8.875%	Guar Sr Nts	30-Nov-29	Caa3/CCC	500.0	40 3/4	45.10%	4,086bp	30-Nov-26	104.44	$634	8.2%	7.0x	6.2x	1.8x
10.250%	Sec Nts	15-Oct-30	B2/B-	400.0	88	14.16%	987bp	15-Apr-27	105.13	$634	8.2%	2.5x	1.7x	1.8x
13.500%	Sr Sec Nts (2nd Lien)	15-Apr-31	Caa1/CCC	500.0	65 2/3	26.81%	2,249bp	15-Apr-28	106.75	$634	8.2%	3.2x	2.5x	1.8x
4.800%	Sr Nts	1-Mar-35	Ca/CCC	250.0	34 2/7	22.39%	1,784bp			$634	8.2%	7.0x	6.2x	1.8x
6.750%	Sr Nts	15-Dec-39	Ca/CCC	350.0	35 1/3	21.78%	1,705bp			$634	8.2%	7.0x	6.2x	1.8x
Western Digital														
4.750%	Sr Nts	15-Feb-26	Ba2/BB	2,300.0	99 1/2	5.31%	122bp	15-Nov-25	100.00	$4,865	37.7%	0.2x	-0.1x	29.5x
2.850%	Sr Nts	1-Feb-29	Ba1/BBB-	500.0	90 3/4	5.56%	150bp	1-Dec-28	100.00	$4,865	37.7%	0.2x	-0.1x	29.5x
3.100%	Sr Nts	1-Feb-32	Ba1/BBB-	500.0	84 3/8	5.91%	172bp	1-Nov-31	100.00	$4,865	37.7%	0.2x	-0.1x	29.5x
Insight Enterprises														
6.625%	Sr Nts	15-May-32	Ba3/BB+	500.0	101 5/6	5.88%	168bp	15-May-27	103.31	$583	6.8%	2.5x	1.9x	6.1x
Zebra Technologies														
6.500%	Sr Nts	1-Jun-32	Ba2/BB	500.0	101 1/2	5.90%	169bp	1-Jun-27	103.25	$1,225	21.0%	2.2x	2.0x	11.3x

Source: J.P. Morgan and company reports.

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Table 6: Technology: Electronic Manufacturing Services (EMS)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
Flex Ltd.														
4.750%	Sr Nts	15-Jun-25	Baa3/BBB-	592.4	99 3/4	5.82%	152bp			$2,010.0	6.9%	3.0x	1.5x	12.3x
4.875%	Sr Nts	15-Jun-29	Baa3/BBB-	650.0	99 2/3	5.01%	74bp	15-Mar-29	100.00	$2,010.0	6.9%	3.0x	1.5x	12.3x
4.875%	Sr Nts	12-May-30	Baa3/BBB-	650.0	98 1/2	5.33%	106bp	12-Feb-30	100.00	$2,010.0	6.9%	3.0x	1.5x	12.3x
Jabil Circuit														
3.950%	Sr Nts	12-Jan-28	Baa3/BBB-	500.0	99	4.71%	67bp	12-Oct-27	100.00	$2,136.0	6.4%	1.8x	1.2x	14.5x
3.600%	Sr Nts	15-Jan-30	Baa3/BBB-	500.0	95 2/7	5.12%	88bp	15-Oct-29	100.00	$2,136.0	6.4%	1.8x	1.2x	14.5x
3.000%	Sr Nts	15-Jan-31	Baa3/BBB-	600.0	91 1/3	5.22%	92bp	15-Oct-30	100.00	$2,136.0	6.4%	1.8x	1.2x	14.5x
4.250%	Sr Nts	15-May-27	Baa3/BBB-	500.0	99 5/6	4.50%	31bp	15-Apr-27	100.00	$2,136.0	6.4%	1.8x	1.2x	14.5x

Source: J.P. Morgan and company reports.

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Table 7: Technology: Semiconductors

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt/ EBITDA	Net Debt / EBITDA	EBITDA / Interest
Advanced Micro Devices														
2.375%	Sr Nts	1-Jun-30	A1/A	750.0	91 1/6	4.96%	57bp			$11,540.0	27.9%	0.4x	-0.8x	78.5x
3.924%	Sr Nts	1-Jun-32	A1/A	500.0	94 1/9	5.11%	73bp			$11,540.0	27.9%	0.4x	-0.8x	78.5x
**Covered by Erica Spear*														
Amkor Technologies														
5.875%	Sr Nts	1-Oct-33	Ba3/BB	500.0	98 5/6	6.08%	161bp	1-Oct-28	102.94	$1,392.8	18.7%	1.8x	0.0x	18.2x
Micron Technology														
4.185%	Sr Nts	15-Feb-27	Baa3/BBB-	900.0	99	4.76%	76bp	15-Dec-26	100.00	$68,316.0	75.7%	0.1x	-0.3x	297.0x
5.327%	Sr Nts	6-Feb-29	Baa3/BBB-	700.0	101 2/9	4.95%	91bp	6-Nov-28	100.00	$68,316.0	75.7%	0.1x	-0.3x	297.0x
4.663%	Sr Nts	15-Feb-30	Baa3/BBB-	850.0	98 3/7	5.03%	94bp	15-Nov-29	100.00	$68,316.0	75.7%	0.1x	-0.3x	297.0x
**Covered by Erica Spear*														
Microchip Technology														
4.250%	Sr Nts	1-Sep-25	Baa2/NR	1,200.0	99 2/3	4.96%	72bp			$1,469.7	28.7%	3.7x	3.5x	6.9x
5.050%	Sr Nts	15-Mar-29	Baa2/NR	1,000.0	100 1/2	4.82%	63bp	15-Feb-29	100.00	$1,469.7	28.7%	3.7x	3.5x	6.9x
**Covered by Erica Spear*														
NXP BV														
4.400%	Sr Nts	1-Jun-27	Baa2/BBB+	500.0	99 4/5	4.66%	73bp	1-May-27	100.00	$5,106.0	38.7%	2.1x	1.5x	12.8x
**Covered by Erica Spear*														
ON Semiconductor Corp														
3.875%	Sr Nts	1-Sep-28	Ba2/BB	700.0	97 1/9	5.40%	123bp			$1,586.6	25.6%	2.5x	0.0x	25.8x
Sensata Technologies														
4.000%	Sr Nts	15-Apr-29	Ba2/BB+	239.9	96 1/2	5.41%	122bp			$710.4	18.8%	3.4x	2.8x	5.5x
4.375%	Sr Nts	15-Feb-30	Ba2/BB+	450.0	96 3/4	5.41%	116bp	15-Nov-29	100.00	$710.4	18.8%	3.4x	2.8x	5.5x
5.875%	Sr Nts	1-Sep-30	Ba2/BB+	500.0	100 1/4	5.61%	164bp	1-Sep-26	101.47	$710.4	18.8%	3.4x	2.8x	5.5x
3.750%	Sr Nts	15-Feb-31	Ba2/BB+	750.0	93 1/3	5.45%	114bp	15-Feb-27	100.94	$710.4	18.8%	3.4x	2.8x	5.5x
Qorvo Inc														
4.375%	Sr Nts	15-Oct-29	Ba1/BBB-	850.0	96 3/7	5.63%	140bp	15-Oct-26	100.73	$723.2	19.8%	2.1x	0.3x	10.3x
3.375%	Sr Nts	1-Apr-31	Ba1/BBB-	700.0	91 2/3	5.44%	113bp	1-Apr-27	101.13	$723.2	19.8%	2.1x	0.3x	10.3x
**Covered by Erica Spear*														

Source: J.P. Morgan and company reports.

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Table 8: Technology: Software & Services

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt/ EBITDA	Net Debt / EBITDA	EBITDA / Interest
ASGN Incorporated														
4.625%	Sr Nts	15-May-28	Ba3/BB	550.0	97 1/3	6.26%	215bp			$400.8	10.1%	3.6x	3.2x	5.6x
BMC Software														
S+300	Term Loan B-3	30-Jul-31	B2/B	4,245.4	93 5/9	9.21%	547bp							
CDK Global Inc														
8.000%	Sr Sec Nts (1st Lien)	15-Jun-29	Caa2/B-	755.0	52 7/8	35.88%	3,167bp	15-Jun-27	100.00					
7.250%	Sec Nts (1st Lien)	15-Jun-29	Caa2/B-	750.0	51 2/7	36.17%	3,197bp	15-Jun-27	100.00					
Crowdstrike Holdings Inc														
3.000%	Sr Nts	15-Feb-29	Baa2/BBB-	750.0	95 2/9	5.07%	88bp			$1,380.2	27.1%	0.5x	-2.8x	50.3x
Elastic NV														
4.125%	Sr Nts	15-Jul-29	Ba2/BB	575.0	96 3/8	5.49%	128bp			$288.4	16.6%	2.0x	-2.8x	11.5x
Go Daddy Group														
S+175	Term Loan B-3	30-May-31	Ba1/BB	980.0	98 1/4	6.35%	261bp			$1,635.0	32.0%	1.5x	0.8x	10.8x
5.250%	Sr Nts	1-Dec-27	Ba3/BB-	600.0	99 7/9	5.43%	141bp			$1,635.0	32.0%	2.3x	1.6x	10.8x
3.500%	Sr Nts	1-Mar-29	Ba3/BB-	800.0	94 5/7	5.77%	158bp			$1,635.0	32.0%	2.3x	1.6x	10.8x
GrubHub Holdings Inc														
5.500%	Sr Nts	1-Jul-27	B3/B-	500.0	92	9.51%	551bp	1-Jul-25	100.00					
J2 Global Inc														
4.625%	Sr Nts	15-Oct-30	Ba3/BB	460.0	94 1/4	6.22%	193bp	15-Oct-26	101.54	$427.5	32.3%	2.0x	-1.7x	16.5x
Gen Digital														
6.750%	Sr Nts	30-Sep-27	B1/BB-	900.0	100 1/6	5.13%	140bp	30-Sep-26	100.00	$2,610.0	51.4%	3.1x	2.9x	4.9x
7.125%	Sr Nts	30-Sep-30	B1/BB-	600.0	101 7/9	5.45%	147bp	30-Sep-26	101.78	$2,610.0	51.4%	3.1x	2.9x	4.9x
Open Text														
S+275	Term Loan B-3	31-Jan-30	Ba1/BBB-	2,173.5	99 1/3	5.96%	212bp			$1,903.2	36.3%	1.3x	0.8x	6.1x
6.900%	Sr Sec Nts	1-Dec-27	Ba1/BBB-	1,000.0	101 3/4	5.36%	136bp	1-Nov-27	100.00	$1,903.2	36.3%	1.3x	0.8x	6.1x
3.875%	Sr Nts	15-Feb-28	Ba3/BB	900.0	97 5/9	5.61%	155bp			$1,903.2	36.3%	3.0x	2.5x	6.1x
3.875%	Sr Nts	1-Dec-29	Ba3/BB	850.0	92 6/7	6.32%	208bp	1-Dec-26	100.00	$1,903.2	36.3%	3.0x	2.5x	6.1x
4.125%	Sr Nts	15-Feb-30	Ba3/BB	900.0	92 6/7	6.45%	220bp	15-Feb-27	100.69	$1,903.2	36.3%	3.0x	2.5x	6.1x
4.125%	Sr Nts	1-Dec-31	Ba3/BB	650.0	88 3/4	6.69%	233bp	1-Dec-26	102.06	$1,903.2	36.3%	3.0x	2.5x	6.1x

Source: J.P. Morgan and company reports.

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Table 9: Technology: Software & Services (cont.)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt/ EBITDA	Net Debt / EBITDA	EBITDA / Interest
PTC Inc														
4.000%	Sr Nts	15-Feb-28	Ba2/BB	500.0	97 2/3	5.68%	162bp			$1,216.9	41.2%	1.3x	1.0x	18.6x
Rackspace Hosting Inc														
S+275	Term Loan-3	15-May-28	Caa2/CCC+	1,601.5	89 1/8	13.88%	1,014bp			$285.6	10.6%	8.0x	7.6x	2.8x
S+625	Term Loan B-3	15-May-28	B2/B	268.8	101 1/8	9.47%	573bp			$285.6	10.6%	1.5x	1.1x	2.8x
3.500%	Sr Sec Nts (1st Lien)	15-Feb-28	Caa3/CCC-	43.9	74	25.62%	2,156bp			$285.6	10.6%	8.3x	7.9x	2.8x
3.500%	Sec Nts (1st Lien)	15-May-28	Caa2/CCC+	250.3	85 2/5	13.15%	904bp			$285.6	10.6%	8.0x	7.6x	2.8x
5.375%	Sr Nts	1-Dec-28	Ca/CCC-	89.4	80	16.20%	1,202bp			$285.6	10.6%	9.5x	9.1x	2.8x
Snap Inc														
6.875%	Sr Nts	1-Mar-33	B1/BB-	1,500.0	99 1/4	7.02%	259bp	1-Mar-28	103.44	$1,022.9	16.1%	3.4x	0.8x	7.1x
6.875%	Sr Nts	15-Mar-34	B1/BB-	550.0	98 1/4	7.18%	269bp	15-Sep-28	103.44	$1,022.9	16.1%	3.4x	0.8x	7.1x
SS&C Technologies														
S+200	Term Loan B-3	9-May-31	Ba1/BB+	3,935.0	100	5.98%	224bp			$2,598.1	39.6%	1.7x	1.5x	10.3x
5.500%	Sr Nts	30-Sep-27	Ba3/B+	2,000.0	100	5.46%	147bp			$2,598.1	39.6%	3.0x	2.8x	10.3x
6.500%	Sr Nts	1-Jun-32	Ba3/B+	750.0	101 1/6	6.04%	183bp	1-Jun-27	103.25	$2,598.1	39.6%	3.0x	2.8x	10.3x
TriNet HR Corp														
3.500%	Sr Nts	1-Mar-29	Ba3/BB	500.0	95 1/6	5.58%	139bp			$471.0	9.6%	1.9x	1.2x	8.7x
7.125%	Sr Nts	15-Aug-31	Ba3/BB	400.0	102 1/2	5.77%	162bp	15-Aug-27	101.78	$471.0	9.6%	1.9x	1.2x	8.7x
Twilio Inc														
3.625%	Sr Nts	15-Mar-29	Ba1/BB+	500.0	96 1/2	5.09%	89bp			$1,096.3	19.7%	0.9x	0.2x	29.1x
3.875%	Sr Nts	15-Mar-31	Ba1/BB+	500.0	94	5.35%	104bp			$1,096.3	19.7%	0.9x	0.2x	29.1x
Unisys														
6.875%	Sr Sec Nts	1-Nov-27	B2/BB-	485.0	97	8.18%	417bp	1-Nov-25	100.00	$276.9	14.2%	2.7x	1.6x	3.5x

Source: J.P. Morgan and company reports.

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Table 10: Technology: Fintech / Payment Processors

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	Recent Quotes YTW	Recent Quotes Spread	Next Call Date	Next Call Price	LTM EBITDA	EBITDA Margin	Debt/ EBITDA	Net Debt / EBITDA	EBITDA / Interest
Paysafe Limited														
S+275	Term Loan B	28-Jun-28	B2/B	813.6	96 1/2	8.74%	509bp			$428.8	24.3%	6.1x	5.6x	3.1x
4.000%	Sr Sec Nts	15-Jun-29	B2/B	345.6	85 2/5	10.08%	587bp			$428.8	24.3%	6.1x	5.6x	3.1x
Block Inc														
2.750%	Sr Nts	1-Jun-26	Ba2/BB+	1,000.0	97	5.39%	132bp	1-May-26	100.00	$3,293.9	13.2%	2.4x	-0.2x	25.5x
3.500%	Sr Nts	1-Jun-31	Ba1/BB+	1,000.0	91 2/3	5.50%	118bp	1-Mar-31	100.00	$3,293.9	13.2%	2.4x	-0.2x	25.5x
6.500%	Sr Nts	15-May-32	Ba2/BB+	2,000.0	101	6.20%	214bp	15-May-27	103.25	$3,293.9	13.2%	2.4x	-0.2x	25.5x

Source: J.P. Morgan and company reports.

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Table 11: Telecommunications: Rural, Regional, and National Wireless

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	Recent Quotes YTW	Recent Quotes Spread	Next Call Date	Next Call Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
Altice International Sarl USD														
S+500	Term Loan B	29-Oct-27	Caa2/CCC	1,600.0	64 6/7	50.21%	4,647bp			$1,791	37.1%	1.9x	1.4x	3.6x
9.625%	Sec Nts	15-Jul-27	Caa2/CCC	375.0	66	64.91%	6,096bp			$1,791	37.1%	5.2x	4.8x	3.6x
5.000%	Sr Sec Nts	15-Jan-28	Caa2/CCC	1,200.0	63 1/2	41.96%	3,792bp			$1,791	37.1%	5.2x	4.8x	3.6x
5.750%	Sr Sec Nts	15-Aug-29	Caa2/CCC	2,050.0	63 1/2	23.41%	1,920bp			$1,791	37.1%	5.2x	4.8x	3.6x
Altice France USD														
9.500%	Sec Nts	1-Nov-29	Caa1/CCC+	1,333.8	101 1/9	8.21%	448bp	1-Oct-26	101.00	$3,257	31.8%	6.1x	5.3x	2.4x
6.875%	Sr Sec Nts	15-Oct-30	Caa1/CCC+	838.4	98 1/3	7.34%	305bp	1-Oct-26	101.00	$3,257	31.8%	6.1x	5.3x	2.4x
6.500%	Sr Sec Nts	15-Oct-31	Caa1/CCC+	366.0	97	7.22%	287bp	1-Oct-26	101.00	$3,257	31.8%	6.1x	5.3x	2.4x
6.500%	Sr Sec Nts	15-Mar-32	Caa1/CCC+	1,905.5	97 1/3	7.09%	271bp	1-Oct-26	101.00	$3,257	31.8%	6.1x	5.3x	2.4x
6.875%	Sec Nts	15-Jul-32	Caa1/CCC+	1,524.2	97 6/7	7.32%	293bp	1-Oct-26	101.00	$3,257	31.8%	6.1x	5.3x	2.4x
10.000%	Sr Nts	15-Jan-33	Caa3/CCC-	948.0	97 4/5	10.46%	604bp	1-Oct-26	101.00	$3,257	31.8%	7.4x	6.6x	2.4x
Iliad USD														
7.000%	Sr Sec Nts	15-Oct-28	B1/BB-	900.0	100	7.00%	283bp	15-Oct-26	100.00	$3,791	38.3%	4.2x	3.8x	8.7x
8.500%	Sr Sec Nts	15-Apr-31	B1/BB-	950.0	105 1/4	6.32%	212bp	15-Apr-27	104.25	$3,791	38.3%	4.2x	3.8x	8.7x
7.000%	Sr Sec Nts	15-Apr-32	B1/BB-	850.0	101 3/8	6.53%	229bp	1-Dec-27	103.50	$3,791	38.3%	4.2x	3.8x	8.7x
Telecom Italia														
6.375%	Sr Nts	15-Nov-33	Ba1/BB+	499.2	103 5/8	5.75%	128bp			$3,673	25.2%	4.3x	3.0x	4.5x
6.000%	Sr Nts	30-Sep-34	Ba1/BB+	500.0	101 1/2	5.77%	125bp			$3,673	25.2%	4.3x	3.0x	4.5x
7.200%	Sr Nts	18-Jul-36	Ba1/BB+	500.0	109 3/8	5.93%	130bp			$3,673	25.2%	4.3x	3.0x	4.5x
7.721%	Sr Nts	4-Jun-38	Ba1/BB+	500.0	113	6.16%	147bp			$3,673	25.2%	4.3x	3.0x	4.5x

**Covered by Andrew Webb*

Source: J.P. Morgan and company reports.

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Table 12: Telecommunications: Rural, Regional, and National Wireless (cont.)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	Recent Quotes YTW	Recent Quotes Spread	Next Call Date	Next Call Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
T-Mobile														
3.750%	Sr Sec Nts (1st Lien)	15-Apr-27	Baa1/BBB+	3,999.4	99 5/8	4.32%	41bp	15-Feb-27	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
2.050%	Sr Sec Nts (1st Lien)	15-Feb-28	Baa1/BBB+	1,749.2	96 2/5	4.59%	53bp	15-Dec-27	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
2.625%	Sr Nts	15-Feb-29	Baa1/BBB+	1,000.0	95	4.79%	60bp			$35,909	39.0%	2.2x	2.1x	9.5x
3.375%	Sr Nts	15-Apr-29	Baa1/BBB+	2,350.0	96 3/5	4.76%	56bp			$35,909	39.0%	2.2x	2.1x	9.5x
3.875%	Sr Sec Nts (1st Lien)	15-Apr-30	Baa1/BBB+	6,999.2	96 1/4	5.01%	75bp	15-Jan-30	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
2.550%	Sr Sec Nts (1st Lien)	15-Feb-31	Baa1/BBB+	2,499.7	90	5.05%	75bp	15-Nov-30	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
2.875%	Sr Nts	15-Feb-31	Baa1/BBB+	1,000.0	91 1/4	5.08%	77bp	15-Feb-27	100.96	$35,909	39.0%	2.2x	2.1x	9.5x
3.500%	Sr Nts	15-Apr-31	Baa1/BBB+	2,450.0	93 3/5	5.06%	75bp	15-Apr-27	101.17	$35,909	39.0%	2.2x	2.1x	9.5x
2.250%	Sr Sec Nts (1st Lien)	15-Nov-31	Baa1/BBB+	1,000.0	87	5.10%	75bp	15-Aug-31	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
4.375%	Sr Sec Nts (1st Lien)	15-Apr-40	Baa1/BBB+	2,000.0	84 3/5	6.05%	131bp	15-Oct-39	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
3.000%	Sr Sec Nts (1st Lien)	15-Feb-41	Baa1/BBB+	2,500.0	70 2/5	6.11%	134bp	15-Aug-40	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
4.500%	Sr Sec Nts (1st Lien)	15-Apr-50	Baa1/BBB+	3,000.0	76 1/5	6.48%	147bp	15-Oct-49	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
3.300%	Sr Sec Nts (1st Lien)	15-Feb-51	Baa1/BBB+	3,000.0	61 1/2	6.45%	141bp	15-Aug-50	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
3.600%	Sr Sec Nts (1st Lien)	15-Nov-60	Baa1/BBB+	1,698.0	60 1/3	6.50%	120bp	15-May-60	100.00	$35,909	39.0%	2.2x	2.1x	9.5x
**Covered by Erica Spear*														
Sprint														
5.152%	Sr Sec Nts (1st Lien)	20-Mar-28	Aa2/NR	643.1	100 1/9	5.08%	100bp			$35,909	39.0%	2.2x	2.1x	9.5x
6.875%	Sr Nts	15-Nov-28	Baa1/BBB+	2,475.0	104 1/2	4.74%	57bp			$35,909	39.0%	2.2x	2.1x	9.5x
8.750%	Sr Nts	15-Mar-32	Baa1/BBB+	2,000.0	116 1/2	5.30%	92bp			$35,909	39.0%	2.2x	2.1x	9.5x

Source: J.P. Morgan and company reports.

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Table 13: Telecommunications: Towers

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	Recent Quotes YTW	Recent Quotes Spread	Next Call Date	Next Call Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest	Total Debt / TEV
American Tower															
3.375%	Sr Nts	15-Oct-26	Baa2/BBB+	1,000.0	99 6/7	4.22%	48bp			$7,277	66.5%	6.2x	5.9x	5.2x	34%
3.550%	Sr Nts	15-Jul-27	Baa2/BBB+	750.0	99 1/4	4.42%	47bp	15-Apr-27	100.00	$7,277	66.5%	6.2x	5.9x	5.2x	34%
3.600%	Sr Nts	15-Jan-28	Baa2/BBB+	700.0	98 2/3	4.57%	53bp	15-Oct-27	100.00	$7,277	66.5%	6.2x	5.9x	5.2x	34%
3.950%	Sr Nts	15-Mar-29	Baa2/BBB+	600.0	98	4.79%	60bp	15-Dec-28	100.00	$7,277	66.5%	6.2x	5.9x	5.2x	34%
**Covered by Erica Spear*															
Crown Castle International*															
3.300%	Sr Nts	1-Jul-30	Baa3/BBB	709.3	93 1/2	5.16%	89bp	1-Apr-30	100.00	$2,786	66.9%	8.4x	8.0x	3.0x	18%
2.500%	Sr Nts	15-Jul-31	Baa3/BBB	712.1	88 1/4	5.25%	92bp	15-Apr-31	100.00	$2,786	66.9%	8.4x	8.0x	3.0x	18%
4.150%	Sr Nts	1-Jul-50	Baa3/BBB	493.0	73 5/6	6.28%	126bp	1-Jan-50	100.00	$2,786	66.9%	8.4x	8.0x	3.0x	18%
**Covered by Erica Spear*															
SBA Communications															
3.875%	Sr Nts	15-Feb-27	Ba3/BBB	1,500.0	99 1/4	5.42%	153bp			$1,939	67.5%	6.7x	6.5x	3.7x	10%
3.125%	Sr Nts	1-Feb-29	Ba3/BBB	1,500.0	95 3/4	4.99%	80bp			$1,939	67.5%	6.7x	6.5x	3.7x	10%

Source: J.P. Morgan and company reports.

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Table 14: Wireline Telecommunications

			Moody's /	Amount	Recent Quotes			Next Call		LTM	EBITDA	Debt /	Net Debt /	EBITDA /
Coupon	Description	Maturity	S&P	Outst.	Bid	YTW	Spread	Date	Price	EBITDA	Margin	EBITDA	EBITDA	Interest
Cogent														
7.000%	Sr Nts	15-Jun-27	B3/B-	300.0	97 5/8	10.06%	612bp			$294	30.7%	8.0x	7.4x	1.5x
7.000%	Sr Nts	15-Jun-27	B3/B-	450.0	96 3/4	11.24%	731bp			$294	30.7%	8.0x	7.4x	1.5x
6.500%	Sr Sec Nts	1-Jul-32	Ba2/B+	600.0	82	10.73%	634bp	1-Jul-28	103.25	$294	30.7%	5.5x	4.8x	1.5x
Equinix														
2.900%	Sr Nts	18-Nov-26	Baa1/BBB+	600.0	99 4/7	4.65%	87bp	18-Sep-26	100.00	$4,975	50.7%	4.7x	4.2x	8.7x
3.200%	Sr Nts	18-Nov-29	Baa1/BBB+	1,200.0	94 7/8	4.93%	70bp	18-Aug-29	100.00	$4,975	50.7%	4.7x	4.2x	8.7x
**Covered by Erica Spear*														
Frontier Communications														
6.750%	Sr Nts	15-May-27	NR/NR	90.9	98 2/3	8.62%	470bp			$2,422	39.7%	1.5x	1.4x	3.0x
6.860%	Sr Nts	1-Feb-28	Baa2/NR	24.0	100 1/2	6.46%	241bp			$2,422	39.7%	1.5x	1.4x	3.0x
6.730%	Sr Nts	15-Feb-28	NR/NR	34.4	101 1/7	5.92%	186bp			$2,422	39.7%	1.5x	1.4x	3.0x
8.500%	1st Mtg Nts	15-Nov-31	NR/NR	47.0	109 3/8	6.36%	201bp			$2,422	39.7%	1.2x	1.0x	3.0x
FiberCop SpA USD														
6.375%	Sec Nts	15-Nov-33	Ba1/BB+	500.0	99 3/5	6.45%	197bp			$2,125	56.3%	6.3x	5.0x	3.7x
6.000%	Sec Nts	30-Sep-34	Ba1/BB+	500.0	96 1/2	6.56%	203bp			$2,125	56.3%	6.3x	5.0x	3.7x
7.200%	Sec Nts	18-Jul-36	Ba1/BB+	500.0	101 3/4	6.95%	232bp			$2,125	56.3%	6.3x	5.0x	3.7x
7.721%	Sec Nts	4-Jun-38	Ba1/BB+	500.0	103 3/4	7.24%	255bp			$2,125	56.3%	6.3x	5.0x	3.7x

Source: Company reports and J.P. Morgan estimates.

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Table 15: Wireline Telecommunications (cont.)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	YTW	Spread	Next Call Date	Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
Level 3 Communications														
S+275	Term Loan B	29-Mar-32	Ba3/B+	2,400.0	100 3/8	6.58%	284bp			$2,553	39.0%	2.7x	2.5x	3.4x
4.250%	Sr Nts	1-Jul-28	B3/B-	5.7	98 1/2	5.10%	97bp			$2,553	39.0%	3.9x	3.7x	3.4x
3.625%	Sr Nts	15-Jan-29	B3/B-	8.5	96 1/2	5.19%	100bp			$2,553	39.0%	3.9x	3.7x	3.4x
4.875%	Sec Nts (2nd Lien)	15-Jun-29	NR/B+	10.9	99 3/4	4.96%	75bp	22-Mar-27	101.16	$2,553	39.0%	3.9x	3.7x	3.4x
3.750%	Sr Nts	15-Jul-29	B3/B-	59.5	95 7/9	5.34%	112bp			$2,553	39.0%	3.9x	3.7x	3.4x
3.875%	Sr Nts	15-Nov-29	B3/B-	53.9	94	5.94%	170bp	15-Aug-29	100.00	$2,553	39.0%	3.9x	3.7x	3.4x
3.875%	Sr Sec Nts (2nd Lien)	15-Oct-30	NR/B+	24.4	92	6.07%	179bp	22-Mar-27	100.00	$2,553	39.0%	3.9x	3.7x	3.4x
4.000%	Sr Sec Nts (2nd Lien)	15-Apr-31	NR/B+	20.4	91 3/8	6.15%	184bp	22-Mar-27	100.00	$2,553	39.0%	3.9x	3.7x	3.4x
6.875%	Sec Nts (1st Lien)	30-Jun-33	Ba3/B+	2,000.0	102 1/5	6.22%	195bp	30-Jun-28	103.44	$2,553	39.0%	2.7x	2.5x	3.4x
7.000%	Sr Sec Nts (1st Lien)	31-Mar-34	Ba3/B+	2,425.0	102 4/7	6.26%	198bp	31-Aug-28	103.50	$2,553	39.0%	2.7x	2.5x	3.4x
7.500%	Sr Nts	15-Feb-37	B3/B-	1,000.0	100 1/2	7.41%	289bp	15-Aug-31	103.75	$2,553	39.0%	3.9x	3.7x	3.4x
Lumen Technologies (CenturyLink)														
6.875%	Sr Nts	15-Jan-28	Caa1/B	130.7	100 1/3	6.60%	256bp			$2,935	24.8%	4.5x	3.9x	2.9x
6.875%	Sr Nts	15-Jul-28	NR/CCC	53.6	99 1/8	7.37%	323bp			$382	3.2%	5.0x	4.9x	0.4x
4.500%	Sr Nts	15-Jan-29	Caa1/B	299.6	94 3/4	6.92%	273bp			$2,935	24.8%	4.5x	3.9x	2.9x
5.375%	Sr Nts	15-Jun-29	Caa1/B	231.5	95 1/4	7.26%	305bp			$2,935	24.8%	4.5x	3.9x	2.9x
7.750%	Sr Nts	15-Feb-31	NR/CCC	115.9	92 1/3	9.90%	560bp			$382	3.2%	5.0x	4.9x	0.4x
7.600%	Sr Nts	15-Sep-39	Caa1/B	348.8	91 1/4	8.73%	401bp			$2,935	24.8%	4.5x	3.9x	2.9x

Source: J.P. Morgan and company reports.

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Table 16: Wireline Telecommunications (cont.)

Coupon	Description	Maturity	Moody's / S&P	Amount Outst.	Recent Quotes Bid	Recent Quotes YTW	Recent Quotes Spread	Next Call Date	Next Call Price	LTM EBITDA	EBITDA Margin	Debt / EBITDA	Net Debt / EBITDA	EBITDA / Interest
Uniti Group														
4.750%	Sr Sec Nts (1st Lien)	15-Apr-28	B2/B	570.0	99 5/8	4.99%	89bp			$1,578	44.6%	4.4x	4.4x	2.2x
8.250%	Sr Sec Nts (1st Lien)	1-Oct-31	B2/NR	2,200.0	104 5/8	6.58%	235bp	1-Oct-27	104.13	$1,578	44.6%	4.4x	4.4x	2.2x
6.500%	Sr Nts	15-Feb-29	Caa2/CCC	1,110.0	98 7/8	7.00%	281bp			$1,578	44.6%	6.7x	6.7x	2.2x
6.000%	Sr Nts	15-Jan-30	Caa2/CCC	700.0	96 1/3	7.22%	298bp	15-Jan-27	100.00	$1,578	44.6%	6.7x	6.7x	2.2x
Zayo Group														
S+350	Term Loan B	11-Mar-30	B3/B-	3,824.3	100 1/7	6.91%	317bp							

Source: J.P. Morgan and company reports.

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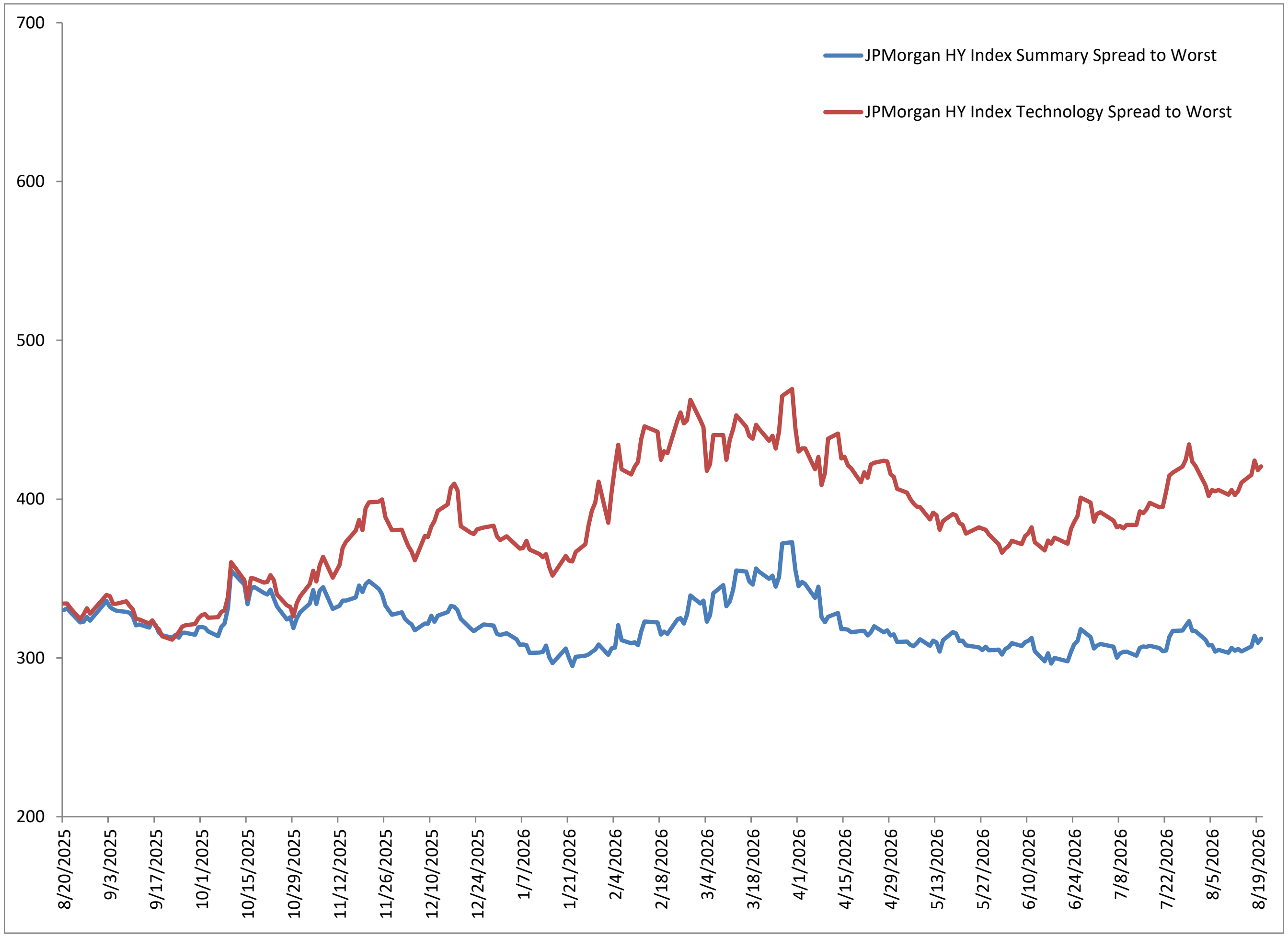
Figure 1: HY Market versus HY Technology – Spread to Worst



Source: J.P. Morgan.

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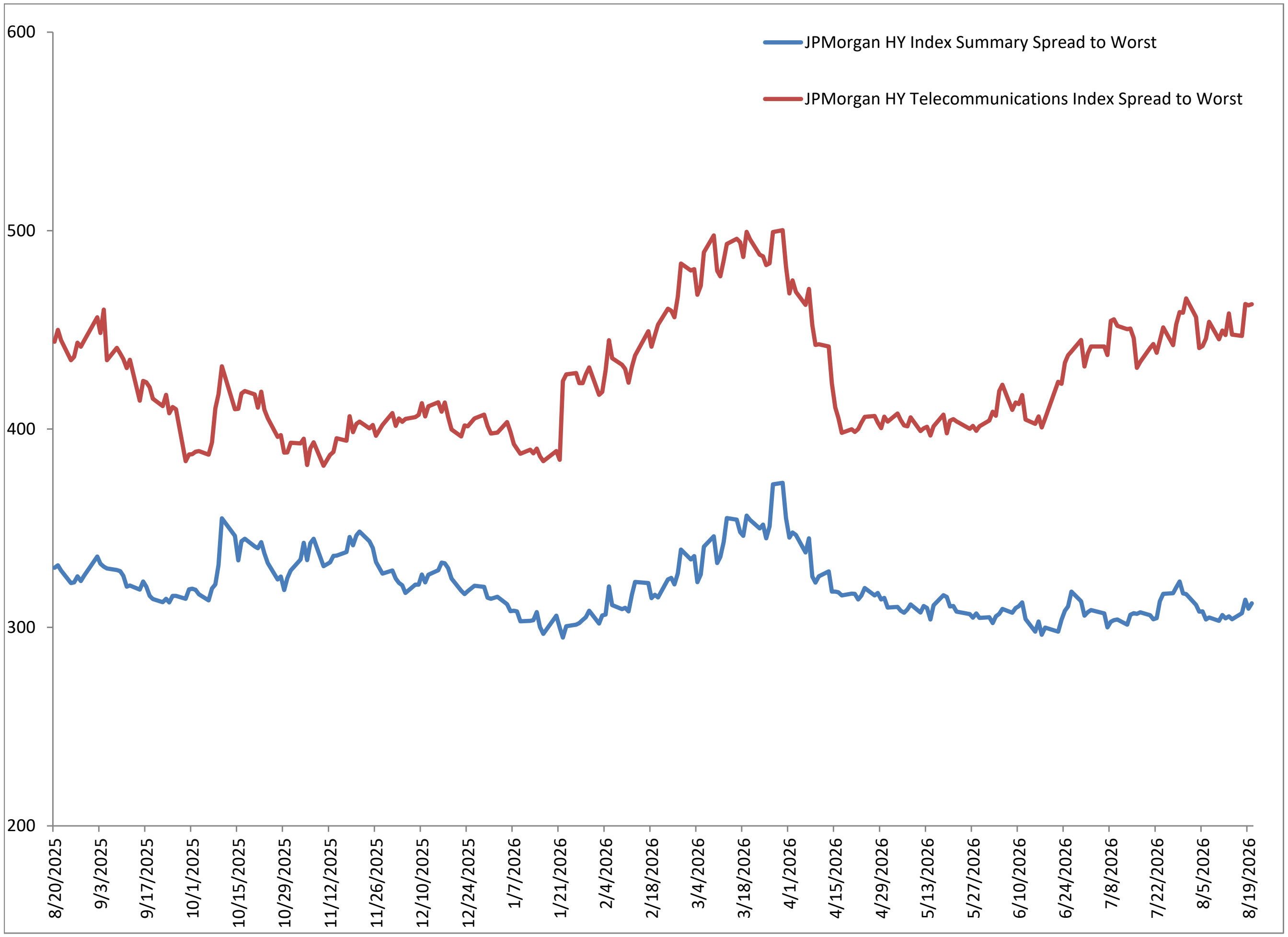
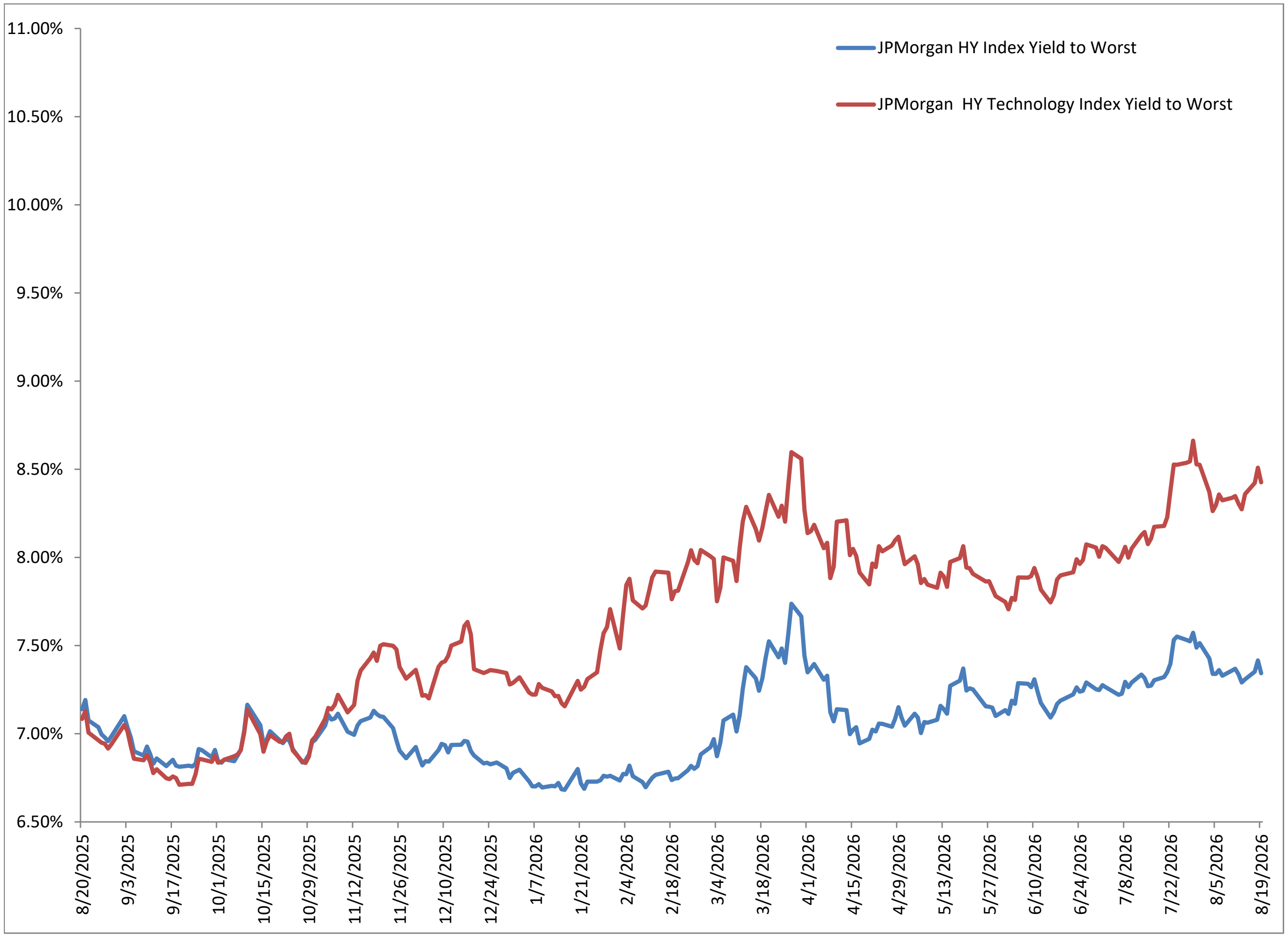
Figure 2: HY Market versus HY Telecommunications – Spread to Worst



Source: J.P. Morgan.

Figure 3: HY Market versus HY Technology – Yield to Worst



Source: J.P. Morgan.

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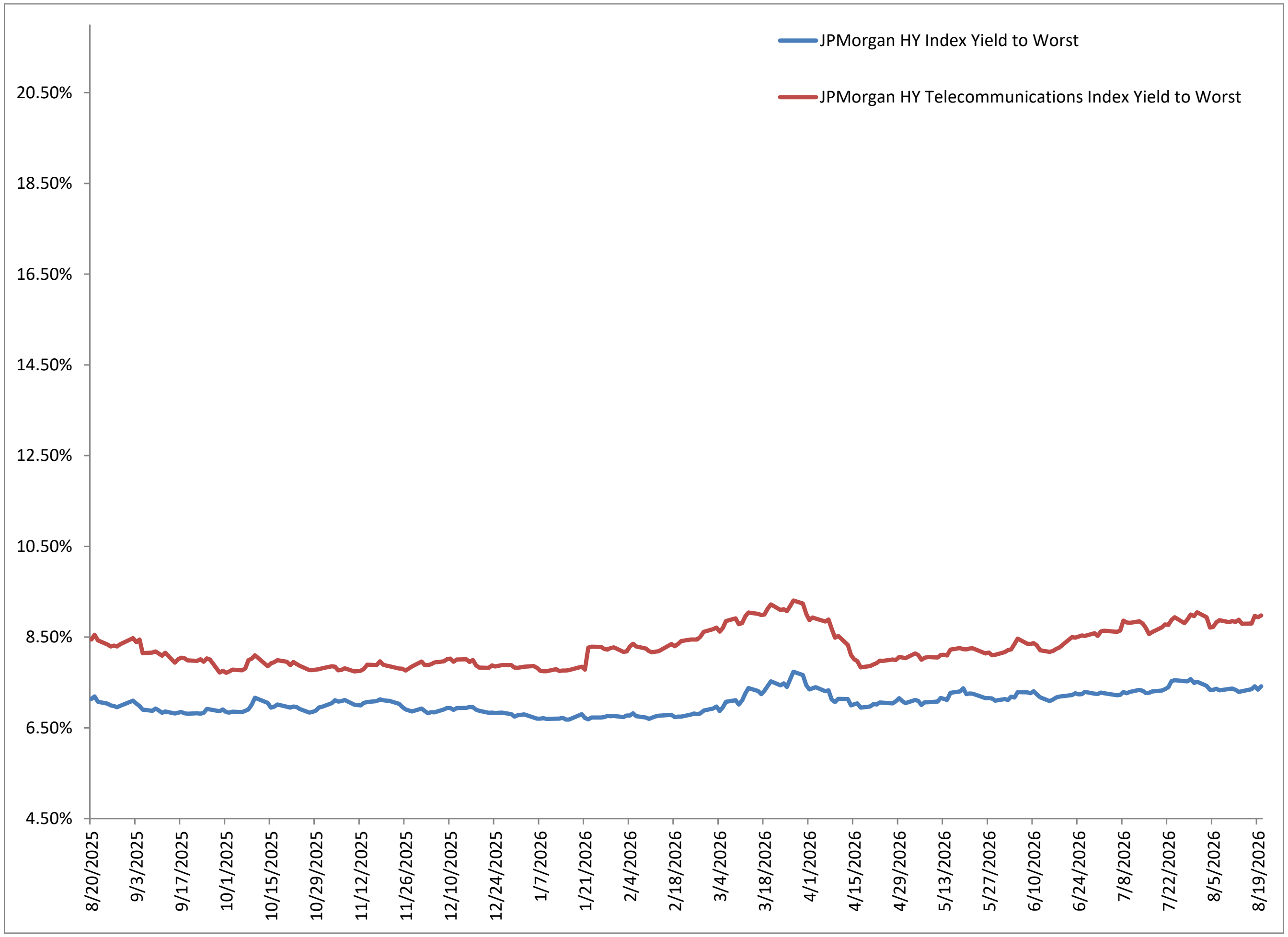
Figure 4: HY Market versus HY Telecommunications – Yield to Worst



Source: J.P. Morgan.

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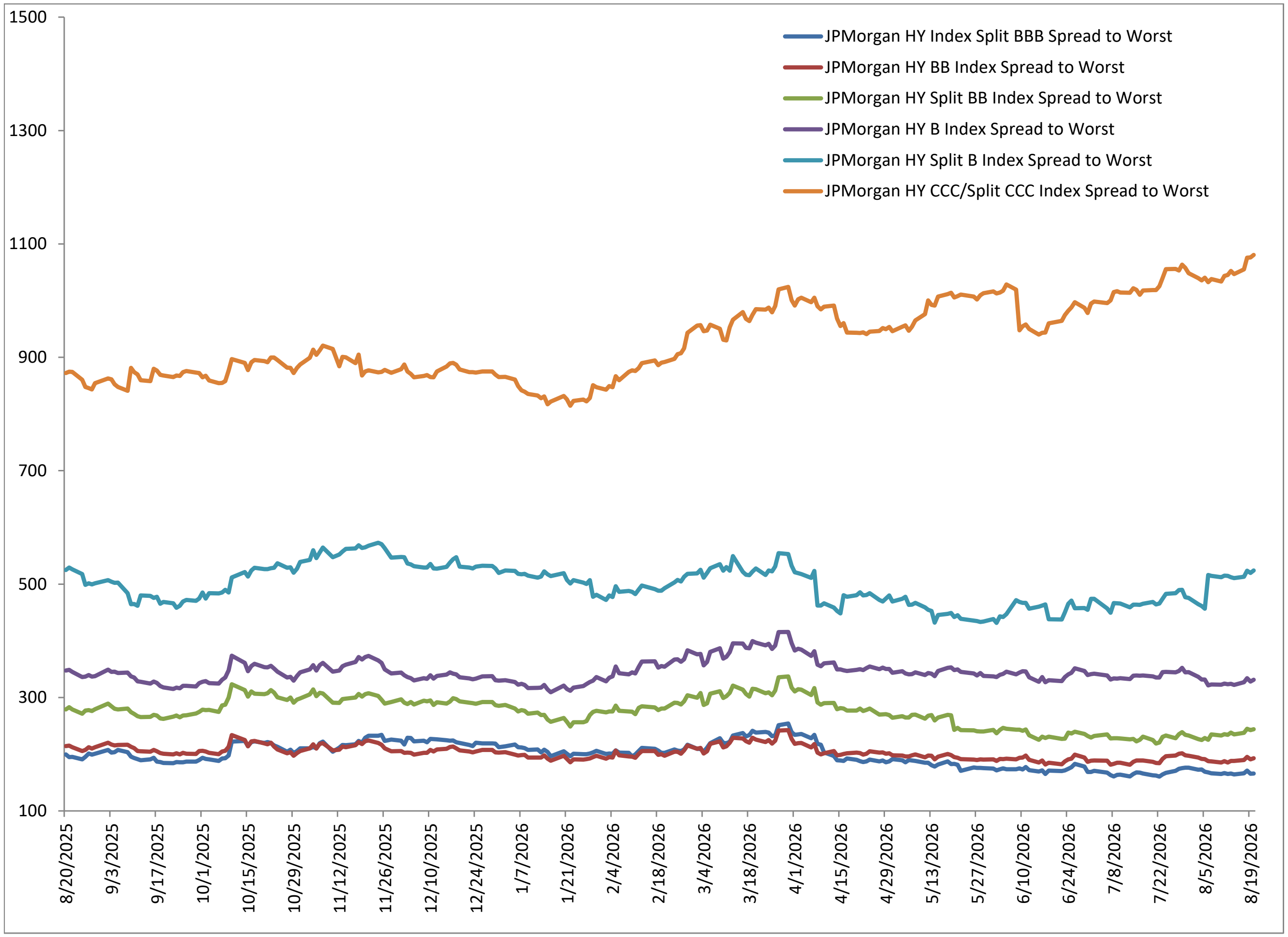
Figure 5: HY Market – Spread to Worst by Rating



Source: J.P. Morgan.

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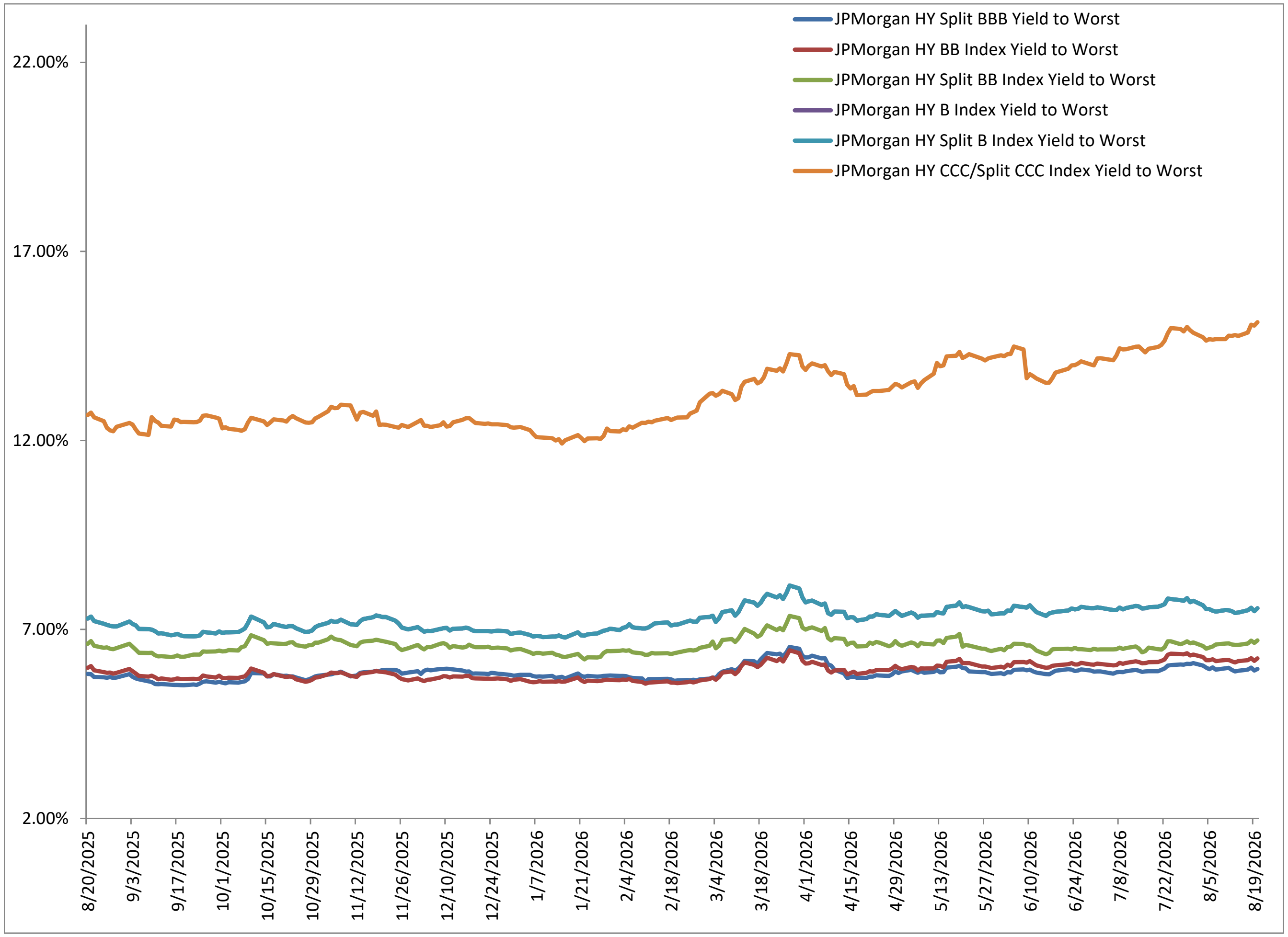
Figure 6: HY Market – Yield to Worst by Rating



Source: J.P. Morgan.