Mikkelsen, Yunyi Zhang

We have more issues

Bank of America Merrill Lynch

04 September 2019

We have more issues. US IG new issuance accelerated to \$28.8bn across 15 deals today (54.3bn week-to-date). Refinancing trades continue to dominate with \$21.1bn of today's issuance partially towards commercial paper, credit revolver, term loan, short and long-term debt. New issue concessions were little changed at 7.8bps compared with 7.6bps yesterday, while break performance remains solid at 2.2bps tighter today versus 2.8bps tighter yesterday. This week's new issues are trading 3.2bps tighter on average from pricing. On the back of overnight developments in HK providing for a positive macro backdrop, CDX IG tightened 1.40bps, CDX HY rose \$0.22pt, equities were up 1.08% and Treasuries steepened (2s yields down 2bps, 30s up 2bps). Liquid secondaries performed in line with US banks 1-3bps tighter, TMT 1-5bps tighter, consumer retail 1-4bps tighter, energy 2-10bps tighter (oil up

3.8%), health care and industrials 2bps wider to 3bps tighter on the day. – Hans

- cash burn. Remember the corporate cash repatriation story? For our list of 24 cash-rich companies we calculate they reduced cash, cash equivalents & investments by \$232.4bn over the first six post-tax reform quarters (through 2Q19) to \$864.2bn. So there is a long way to go despite Apple, with more than \$200bn in cash, for some reason deciding to issue \$7bn today (first time since 2017). In terms of asset classes the biggest corporate holdings are corporate bonds at \$250bn (down \$127.9bn from 4Q17) and Treasuries \$188.5bn (down \$29.0bn) but they also hold for example money market funds, agencies and securitized products. Hans Mikkelsen, Yunyi Zhang
- Formosa. Another consequence of the collapse in interest rates this summer is that Formosa bonds should now get called just like what began to happen on a smaller scale last time yields declined materially in 2016/17. Recently we have seen a number of such cases including by Verizon. Recall that the typical Formosa bond was issued with long maturities of around 30 years, but was callable after a couple of years. Basically issuers paid very little for that option as a way for investors to incentivize supply into the relatively small Formosa market. Now with the collapse in yields it should be favorable for issuers in many cases to call and replace existing Formosa bonds with new debt at lower yields. For Taiwanese lifers that means the need to replace attractive book yields with lower yields on new bonds. While technically some of the new issuance could come as Formosa the Taiwanese regulator no longer provides favorable treatment of that over foreign bonds so there is no need to. Moreover since Formosa ETFs receive favorable treatment we suspect that will be the favorite vehicle for replacement. Hans Mikkelsen, Yunyi Zhanq
- Daily foreign demand tracker. Yuri Seliger, Yunyi Zhang

Credit Strategy United States Cross Product

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Credit Strategy

Research Overview — The Situation

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US IG new issuance accelerated to \$28.8bn across 15 deals today (54.3bn week-to-date). Refinancing trades continue to dominate with \$21.1bn of today's issuance partially towards commercial paper, credit revolver, term loan, short and long-term debt repayments. Apple surprised the market by issuing \$7bn, despite being the most cash rich company in the country (see piece below). MPLX in contrast came as expected, but the \$2bn 2-3 year floater deal was both smaller in size and shorter in maturity than investors were looking for, which helped reprice secondaries 10-15bps tighter for the name and 2-9bps tighter across the MLP sector. Meanwhile Seagate Technologies announced a tender offer to be funded with cash-on-hand and a term loan, and Marathon Oil announced early redemption of the 2020 note likely to be funded with cash-on-hand.

The average new issue concession was little changed at 7.8bps today compared with 7.6bps yesterday, while break performance remains solid at 2.2bps tighter today versus 2.8bps tighter yesterday (Figure 1). This week's new issues are trading 3.2bps tighter on average from pricing. In addition, Air Liquide Finance, Enel, Fortune Brands Home & Security, Hospitality Properties Trust, PerkinElmer and Wintershall Dea announced fixed income investor calls with possible USD issuance to follow. On the other hand, AT&T priced EUR3bn of Reverse Yankee bonds to pay down two USD term loan facilities related to the Time Warner acquisition, implying less USD issuance down the road. AT&T's 6-year and 10-year tranches priced flat while the 20-year came about 24bps back of USD secondary comps (Figure 2).

Not surprisingly, following two very busy days in the new issue market, dealer inventories rose by about \$1.5bn today. However, on the back of overnight developments in Hong Kong (extradition legislation formally withdrawn) and some positive European data providing for a positive macro backdrop, CDX IG tightened 1.40bps, CDX HY rose \$0.22pt, equities were up 1.08% and Treasuries steepened (2s yields down 2bps, 30s up 2bps). Liquid secondaries performed in line with US banks 1-3bps tighter, TMT 1-5bps tighter, consumer retail 1-4bps tighter, energy 2-10bps tighter (oil up 3.8%), health care and industrials 2bps wider to 3bps tighter on the day.

Figure 1: Recent new issue pricing and new issue concessions

				Size	Moody's/S&P	Coupon	Px Spread	New Issue	* Break	Current
Date	Ticker	Nam e	Tenor	(\$mm)	Rating	(%)	(bps)	Conc. (bps) p	erformanc	e spread (bps)
2019-09-03	AGR	New York State Electric & Gas Corp	30	\$300	A3/A-	3.3	138	n.a.	-8	131
2019-09-03	ARE	Alex andria Real Estate Equities Inc	10	\$400	Baa1/BBB+	2.75	130	18	-1	129
2019-09-03	ARE	Alex andria Real Estate Equities Inc	30	\$200	Baa1/BBB+	4	150	7	-3	147
2019-09-03	BATSLN	BAT Capital Corp	5	\$1,000	Baa2/BBB+	2.789	145	n.a.	-2	143
2019-09-03	BATSLN	BAT Capital Corp	7	\$1,000	Baa2/BBB+	3.215	180	28	-2	174
2019-09-03	BATSLN	BAT Capital Corp	10	\$500	Baa2/BBB+	3.462	200	21	-2	198
2019-09-03	BATSLN	BAT Capital Corp	30	\$1,000	Baa2/BBB+	4.758	280	22	-2	275
2019-09-03	BIMBOA	Grupo Bimbo SAB de CV	30	\$600	Baa2/BBB	4	215	8	-7	208
2019-09-03	BOCAVI	BOC Aviation Ltd	10	\$500	NA/A-	3	165	n.a.	n.a.	n.a.
2019-09-03	BX	Blackstone Holdings Finance Co LLC	10	\$500	NA/A+	2.5	117	1	-2	116
2019-09-03	BX	Blackstone Holdings Finance Co LLC	30	\$400	NA/A+	3.5	160	3	-4	157
2019-09-03	CAT	Caterpillar Financial Services Corp	18m	\$500	A3/A	FRN	3mL+30	n.a.	n.a.	n.a.
2019-09-03	CAT	Caterpillar Financial Services Corp	3	\$750	A3/A	1.9	57	-2	-4	54
2019-09-03	CKHH	CK Hutchison International 19 II Ltd	10	\$500	A2/A	2.75	135	20	-3	134

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				Size	Moody's/S&P	Coupon	Px Spread	New Issue	* Break	Current
Date	Ticker	Nam e	Tenor	(\$mm)	Rating	(%)	(bps)	Conc. (bps)	performance	spread (bps)
2019-09-03	CKHH	CK Hutchison International 19 II Ltd	30	\$750	A2/A	3.375	150	n.a.	-8	143
2019-09-03	COF	Capital One NA	3	\$1,500	Baa1/BBB+	2.15	78	10	-1	77
2019-09-03	CSX	CSX Corp	10	\$400	Baa1/BBB+	2.4	97	3	-4	93
2019-09-03	CSX	CSX Corp	30	\$600	Baa1/BBB+	3.35	145	12	-5	140
2019-09-03	DE	Deere & Co	30	\$500	A2/A	2.875	95	0	-4	89
2019-09-03	DIS	Walt Disney Co/The	2	\$500	A2/A	FRN	3mL+25	n.a.	n.a.	n.a.
2019-09-03	DIS	Walt Disney Co/The	3	\$500	A2/A	FRN	3mL+39	n.a.	n.a.	n.a.
2019-09-03	DIS	Walt Disney Co/The	3	\$500	A2/A	1.65	35	-3	-3	32
2019-09-03	DIS	Walt Disney Co/The	5	\$1,500	A2/A	1.75	50	-2	-3	47
2019-09-03	DIS	Walt Disney Co/The	10	\$2,000	A2/A	2	70 05	-1 7	-3 -2	67
2019-09-03 2019-09-03	DIS EXC	Walt Disney Co/The	30 30	\$2,000 \$325	A2/A Aa3/A	2.75 3	95 110	-7 10	-2 -2	93 106
2019-09-03	INTNED	PECO Energy Co ING Groep NV	PERP	\$325 \$1,500	Ba1/NA	ა 5.75	n.a.	n.a.	-z n.a.	n.a.
2019-09-03	KRC	•	10	\$1,300 \$500	Baa2/BBB	3.75	160	11.a. 7	11.a. 1	160
2019-09-03	PPL	Kilroy Realty LP PPL Electric Utilities Corp	30	\$300 \$400	A1/A	3.05	115	9	-1	112
2019-09-03	PSXP	Phillips 66 Partners LP	5	\$300	Baa3/BBB	2.45	115	-3	-1 -3	111
2019-09-03	PSXP	Phillips 66 Partners LP	10	\$600	Baa3/BBB	3.15	170	2	-3 -2	164
2019-09-03	UNANA	Unilever Capital Corp	5	\$500	A1/A+	2.6	55	-2	-2	50
2019-09-03	UNANA	Unilever Capital Corp	10	\$850	A1/A+	2.125	75	10	-2	72
2019-09-03	WLTW	Willis North America Inc	10	\$450	Baa3/BBB	2.95	150	16	-3	150
2019-09-03	WLTW	Willis North America Inc	30	\$550	Baa3/BBB	3.875	195	22	-5	191
2019-09-03	XEL	Northern States Power Co/MN	30	\$600	Aa3/A	2.9	105	4	-2	102
2019-09-04	AAPL	Apple Inc	3	\$1.000	Aa1/AA+	1.7	35	-2	n.a.	n.a.
2019-09-04	AAPL	Apple Inc	5	\$750	Aa1/AA+	1.8	53	6	n.a.	n.a.
2019-09-04	AAPL	Apple Inc	7	\$2,000	Aa1/AA+	2.05	68	6	n.a.	n.a.
2019-09-04	AAPL	Apple Inc	10	\$1,750	Aa1/AA+	2.2	78	3	n.a.	n.a.
2019-09-04	AAPL	Apple Inc	30	\$1,500	Aa1/AA+	2.95	103	8	n.a.	n.a.
2019-09-04	ANTM	Anthem Inc	5	\$850	Baa2/A	2.375	108	15	-4	104
2019-09-04	ANTM	Anthem Inc	10	\$825	Baa2/A	2.875	143	8	-1	142
2019-09-04	ANTM	Anthem Inc	30	\$825	Baa2/A	3.7	178	5	0	178
2019-09-04	APH	Amphenol Corp	10	\$900	Baa1/BBB+	2.8	135	19	n.a.	n.a.
2019-09-04	COF	Capital One Financial Corp	PERP	\$1,500	Baa3/BB	5	n.a.	n.a.	n.a.	n.a.
2019-09-04	CS	Credit Suisse Group AG	6NC5	\$2,000	Baa2/BBB+	2.593	128	2	-2	126
2019-09-04	ENBL	Enable Midstream Partners LP	10	\$550	Baa3/BBB-	4.15	270	15	n.a.	n.a.
2019-09-04	HIW HPE	Highwoods Realty LP	10	\$400	Baa2/BBB	3.05 FRN	163 3mL+68	-3	-3	160
2019-09-04 2019-09-04	HPE	Hew lett Packard Enterprise Co Hew lett Packard Enterprise Co	18m 4	\$500 \$1,000	Baa2/BBB Baa2/BBB	2.25	90	n.a. 4	n.a. n.a.	n.a. n.a.
2019-09-04	KEY	Key Corp	10	\$1,000 \$750	Baa1/BBB+	2.25	110	4	n.a.	n.a.
2019-09-04	KO	Coca-Cola Co/The	5	\$1,000	A1/A+	1.75	47	5	n.a.	n.a.
2019-09-04	KO	Coca-Cola Co/The	10	\$1,000	A1/A+	2.125	67	5	n.a.	n.a.
2019-09-04	MPLX	MPLX LP	2	\$1,000	Baa2/BBB	FRN	3mL+90	n.a.	n.a.	n.a.
2019-09-04	MPLX	MPLX LP	3	\$1,000	Baa2/BBB	FRN	3mL+110	n.a.	n.a.	n.a.
2019-09-04	SO	Georgia Power Co	5	\$400	Baa1/A-	2.2	90	n.a.	-2	88
2019-09-04	SO	Georgia Power Co	10	\$350	Baa1/A-	2.65	120	6	<u>-</u> -1	119
2019-09-04	SPG	Simon Property Group LP	5	\$1.000	A2/A	2	70	17	-4	66
2019-09-04	SPG	Simon Property Group LP	10	\$1,250	A2/A	2.45	110	19	-2	108
2019-09-04	SPG	Simon Property Group LP	30	\$1,250	A2/A	3.25	130	14	-3	127
2019-09-04	UNM	Unum Group	30	\$450	Baa2/BBB	4.5	255	n.a.	-5	250
2019-09-04	WFC	Wells Fargo Bank NA	3NC2	\$1,000	Aa2/A+	FRN	3mL+66	n.a.	n.a.	n.a.
2019-09-04	WFC	Wells Fargo Bank NA	3NC2	\$2,000	Aa2/A+	2.082	65	9	n.a.	n.a.

Note: We calculate new issue concessions by estimating the difference between new issue bond spread and interpolated G spread from comparable liquid secondary bonds of the same issuer prior to the new issue deal announcement, adjusted for the spread impact of dollar prices deviating from par. Break performance is computed as the difference between new issue pricing and secondary dosing spread on the first day of trading. Source: BofA Merrill Lynch Global Research

Figure 2: New issue concession on recent EUR Reverse Yankee deal based on USD secondary comps

					EUR	USD	USD				USD comp	
Ticker	Currency	Announce date	Maturity	Tenor	pricing MS spread	comp current T spread	comp current I spread	Cross currency swap	Spread income FX hedge	3M 6M swap	currency hedged MS spread	New issue concession vs USD comps
T	EUR	09/04/19	03/04/26	6	75	106	120	-25	-12	-8	76	-1
T	EUR	09/04/19	03/04/30	10	105	152	160	-27	-22	-7	104	1
T	EUR	09/04/19	09/14/39	20	175	182	227	-27	-44	-5	151	24
DHR	EUR	09/03/19	03/18/28	9	85	75	87	-24	-11	-7	45	35
DHR	EUR	09/03/19	09/18/31	12	95	84	103	-24	-16	-7	56	34
PM	EUR	07/29/19	08/03/26	7	48	58	78	-24	-8	-3	43	5
PM	EUR	07/29/19	08/01/31	12	73	116	117	-24	-17	-7	68	5

Figure 2: New issue concession on recent EUR Reverse Yankee deal based on USD secondary comps

		Announce			EUR pricing MS	USD comp current T	USD comp current I	Cross currency	Spread income FX	3M 6M	USD comp currency hedged MS	New issue concession vs
Ticker	Currency	date	Maturity	Tenor	spread	spread	spread	swap	hedge	swap	spread	USD comps
FDX	EUR	07/22/19	08/05/25	6	70	74	83	-21	-8	-8	46	24
FDX	EUR	07/22/19	08/05/31	12	110	120	121	-23	-18	-7	73	37
JPM	EUR	07/18/19	07/25/31	12	80	107	124	-23	-18	-7	77	3
MDT	EUR	06/25/19	07/02/25	6	50	56	59	-20	-6	-7	26	24
MDT	EUR	06/25/19	07/02/31	12	68	56	88	-21	-13	-6	48	20
FISV	EUR	06/17/19	07/01/27	8	115	123	138	-21	-16	-7	94	21
FISV	EUR	06/17/19	07/01/30	11	135	138	148	-20	-21	-7	101	34
FIS	EUR	05/14/19	05/21/27	8	125	116	126	-21	-14	-8	83	42
FIS	EUR	05/14/19	05/21/30	11	150	132	140	-19	-19	-8	94	56
BX	EUR	04/02/19	04/10/29	10	105	119	127	-14	-17	-7	89	16
VZ	EUR	04/02/19	04/08/27	8	63	96	104	-15	-12	-8	70	-7
VZ	EUR	04/02/19	04/08/30	11	75	119	119	-14	-17	-7	81	-6
MMC	EUR	03/14/19	09/21/26	8	100	90	97	-16	-11	-8	63	37
PEP	EUR	03/11/19	03/18/27	8	40	61	65	-16	-7	-7	34	6
MCD	EUR	03/11/19	06/15/26	7	65	87	94	-16	-10	-7	60	5
MDT	EUR	03/04/19	03/07/27	8	70	70	76	-16	-9	-8	43	27
F	EUR	02/28/19	03/06/24	5	333	298	293	-15	-24	-8	246	87
CL	EUR	02/26/19	03/06/26	7	25	68	63	-15	-6	-8	35	-10
KO	EUR	02/25/19	09/22/26	8	40	65	72	-15	-8	-8	42	-2
MO	EUR	02/11/19	06/15/27	8	175	178	183	-17	-21	-7	137	38
IBM	EUR	01/24/19	01/29/27	8	80	103	104	-18	-12	-7	68	12
SYK	EUR	11/27/18	11/30/27	9	135	112	108	-13	-13	-6	76	59
AGN	EUR	11/08/18	11/15/28	10	165	141	144	-18	-19	-6	101	64
ABT	EUR	09/14/18	09/27/26	8	75	92	90	-16	-10	-6	59	16

Source: Bloomberg, BofA Merrill Lynch Global Research

Credit Strategy

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Cash burn

Remember the corporate cash repatriation story? As part of Tax Reform, which went into effect in 2018, US companies gained access to untaxed foreign earnings previously "trapped" abroad due to unfavorable tax treatment. Prior to 2018, given the negative tax consequences of repatriation many cash-rich companies issued bonds for general corporate purposes – including share buybacks – in lieu of bringing home overseas earnings. Then starting last year following tax reform many companies – primarily in the Technology and Health Care sectors – stopped issuing and began spending the cash. For our list of 24 cash-rich companies we calculate they reduced cash, cash equivalents & investments by \$232.4bn over the first six post-tax reform quarters (through 2Q19) to \$864.2bn (Figure 3). So there is a long way to go despite Apple, with more than \$200bn in cash, for some reason deciding to issue \$7bn today (first time since 2017). In terms of asset classes the biggest corporate holdings are corporate bonds at \$250bn (down \$127.9bn from 4Q17) and Treasuries \$188.5bn (down \$29.0bn) but they also hold for example money market funds, agencies and securitized products.

Figure 3: Total Cash, Cash Equivalent & Investments for 24 cash rich companies as of 2Q19 (and change from pre-Tax Reform 4Q17)

					Foreign			Money			Total Cash, Cash		
		Commercial			Gov't	Corp	Debt	Market	Securitized		Equivalent, &	Total	
Company	CDs	Paper	Treasuries	Agencies	Bonds	Bonds	Funds	Funds	Products	Other	Investments	4Q17	Change
AAPL	4.8	5.2	37.2	9.5	20.8	94.3		10.6	15.2	13.0	210.6	285.1	-74.5
MSFT	2.0	2.2	106.7	1.0	6.3	7.6			3.6	0.3	129.7	146.7	-17.1
GOOGL	3.5		54.6	3.5	3.5	26.3			17.2	12.6	121.1	101.9	19.2
GE			1.8			28.9			3.2	37.5	71.4	82.0	-10.6
AMZN			8.6		1.6	9.9		10.8	1.8	9.1	41.8	32.3	9.5
ORCL***						22.2		5.7		9.9	37.8	71.6	-33.8
CSCO			1.5	0.3		21.2		8.3	1.4	0.0	32.7	71.7	-39.0
BMY	0.2	0.0				1.8		27.8		0.6	30.4	9.3	21.1
GILD	5.4		3.9	1.5	0.4	13.3		3.0	0.5	2.2	30.2	36.7	-6.5
AMGN			6.2	0.1	1.0	5.7		3.9	1.8	2.4	21.1	41.3	-20.2
JNJ	0.7		0.7	0.4		1.6		1.4		10.6	15.3	18.3	-3.0
KO			4.0							9.4	13.4	20.7	-7.3
QCOM						0.0				13.1	13.1	39.3	-26.2
٧			0.6	5.5				6.3		0.3	12.7	12.6	0.1
INTC	3.1			2.7		4.0		0.5		1.7	11.9	14.0	-2.1
MRK			0.6		0.0	2.7			0.8	6.8	10.9	20.6	-9.7
MDT			1.3		0.0	3.1			1.1	5.1	10.7	14.4	-3.8
PG			3.6			2.4				4.2	10.3	18.8	-8.5
CELG	0.0							0.6		8.7	9.3	12.0	-2.7
NVDA	0.0		2.2	1.1	0.0	2.1		2.9	0.1	0.1	8.5	7.1	1.4
CAT			0.0	0.0		8.0			0.4	6.1	7.4	8.3	-0.8
LRCX	1.6		0.5		0.0	1.5		1.6	0.0	0.5	5.8	6.0	-0.3
NKE	1.8	0.0	0.3	0.0				1.6		0.9	4.7	6.4	-1.7
PEP			0.1							3.5	3.6	19.5	-15.9
Total	21.1	9.2	188.5	51.9	53.8	250.0	0.0	84.8	47.1	158.6	864.2	1,096.6	-232.4
Total 4Q17	19.6	14.1	217.6	81.3	30.2	377.9	2.6	80.2	64.0	208.8			
Change	1.5	-5.0	-29.0	-29.3	23.6	-127.9	-2.6	4.7	-16.9	-50.2			

Note: *** Data for ORCL is as of 1Q19 as they have not yet filed a 10-Q for 2Q19. Disclosures and asset dass definitions are limited, inconsistent, and may not be directly comparable across companies. Allocations may be based on cash, cash equivalent, marketable securities, and investment portfolios.

Source: Company reports, BofA Merrill Lynch Global Research

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Calling Formosa bonds

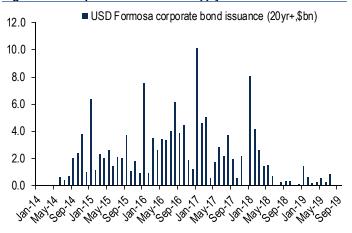
Another consequence of the collapse in interest rates this summer (Figure 4) is that Formosa bonds should now get called just like what began to happen on a smaller scale last time yields declined materially in 2016/17 (Figure 5). Recently we have seen a number of such cases including by Verizon. Recall that the typical Formosa bond was issued with long maturities of around 30 years (Figure 6), but was callable after a couple of years (Figure 7). Basically issuers paid very little for that option as a way for investors to incentivize supply into the relatively small Formosa market. Now with the collapse in yields it should be favorable for issuers in many cases to call and replace existing Formosa bonds with new debt at lower yields. For Taiwanese lifers that means the need to replace attractive book yields with lower yields on new bonds. While technically some of the new issuance could come as Formosa the Taiwanese regulator no longer provides favorable treatment of that over foreign bonds so there is no need to. Moreover since Formosa ETFs receive favorable treatment we suspect that will be the favorite vehicle for replacement.

Figure 4: Collapse in long-term corporate yields



Source: ICE Data Indices, LLC

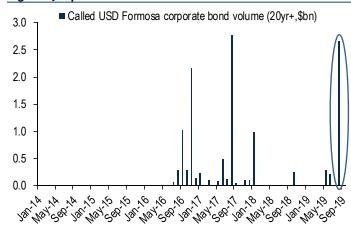
Figure 6: USD corporate Formosa bond supply volumes



Source: Bloomberg, BofA Merrill Lynch Global Research

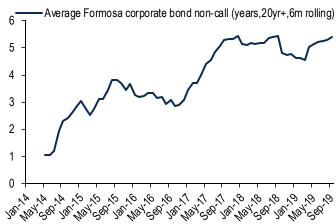
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Figure 5: Jump in Formosa bond call volumes



Source: Bloomberg, BofA Merrill Lynch Global Research

Figure 7: Average length of Non-call period by month of issuance



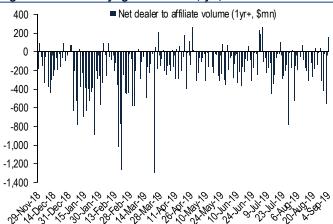
Source: Bloomberg, BofA Merrill Lynch Global Research

Daily foreign demand tracker

We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: Credit Market Strategist: One year round-trip in spreads 15 July 2016). Figure 8 shows the overall daily dealer-to-affiliate volumes while Figure 9, Figure 10 and Figure 11 show subsets of this data. In particular Figure 9 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 10 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 11shows the subset of net trades reported between 8am and noon (biased

toward European buying). Figure 8 and Figure 9 include data from today, whereas Figure 10 and Figure 11 run through the previous business day.

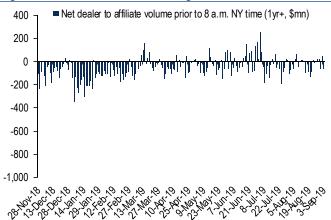
Figure 8: Net dealer buying from affiliate (1yr+)



Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

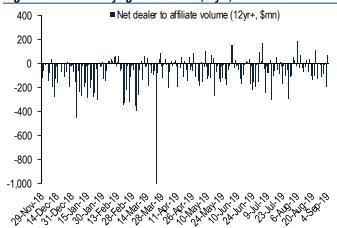
Figure 10: Net dealer-to-affiliate trading volumes before 8 a.m. NY time



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Merrill Lynch Global Research, TRACE

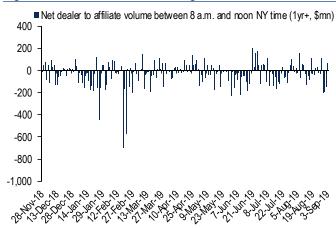
Figure 9: Net dealer buying from affiliate (12yr+)



Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

Figure 11: Net dealer-to-affiliate trading volumes 8 a.m. - noon NY time



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Merrill Lynch Global Research, TRACE

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