

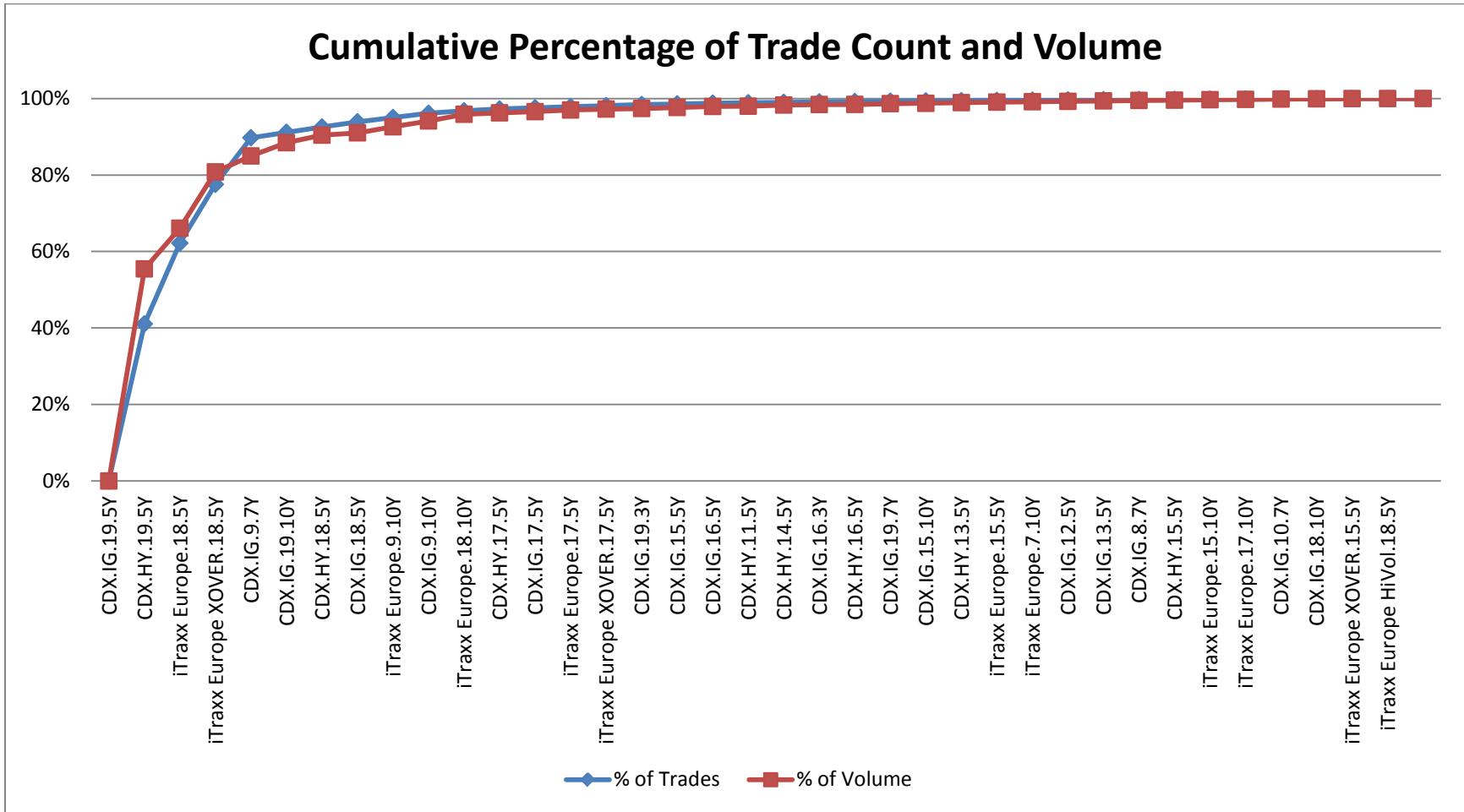
*The observations below are based solely on public data compiled from the DTCC SDR, and do not take into any account, swap activity that has not been publicly reported by the DTCC SDR<sup>1</sup>*

- The data for the selected time periods below has revealed a clear pattern in both interest rate and credit swap trading activity. That pattern is consistent with statements made in prior ISDA comment letters and argues for a product-specific approach to both block thresholds and execution requirements. The results are robust to different time period selections.
- Specifically, liquidity in both markets is highly concentrated in a very small number of products, with a long tail of highly illiquid instruments (even among products subject to mandatory clearing).
  - For the 10 trading sessions from 1/11/2013 through 1/24/2013 in the credit market:
    - Of the 85 index products subject to mandatory clearing, only 37 were reported as having traded at all.
      - 90% of the trades were concentrated in just 4 out of 85 products.
      - 41% of the trades were in one product – the on-the-run IG index.
    - CDX.IG.19.5Y reported 181 trades per day. From there the decay was exponential.
      - The second most frequently reported contract traded half as much as the most liquid contract. The 5<sup>th</sup> most frequently traded product traded only 6 times per day.
      - Even among the most liquid contracts, HY appears less liquid than IG. In series 19, HY trades approximately half as frequently as IG, with an average trade size which is 63% smaller (\$19mm vs \$51mm).
      - Different tenors even within the same series of index display differences in liquidity. For example in CDX.IG.18.5Y traded approximately 5 times daily, whereas the 10yr tenor traded only once in the 10 day period.
    - Of the 85 products, only 11 traded as frequently as twice per day and 20 traded less than once every two days. 48 contracts did not trade at all in the period.
  - For the 14 sessions from 12/31/2012 through 1/18/2013 in the interest rate market:
    - Liquidity varies widely among currencies.
    - The daily averages for USD trades were: 1,103 (52%) Fixed-floating swaps, 328 (15%) Swaptions and 291 (14%) FRAs.
    - The standard "benchmark" tenors: 2, 5, 10 and 30yr trade with much greater frequency than the surrounding dates. For example, there were 2,788 spot starting 10yr USD fixed-floating swap trades, compared to 335 9-years and 45 11-years.
    - A similar pattern is evident when we compare other full-year tenor interest rate swaps (e.g. 2, 3, 4, 5 years to maturity) to swaps that trade on more "off-market" dates (usually because they are unwinds or novations). For example, the dataset contains \$93.1bn notional of swaps that mature 5 years after the effective date but only \$22.7bn of swaps that mature within a year of, but not on the 5yr maturity date. Calculations using trade count data are directionally consistent with the notional-based calculations.
    - Basis Swaps, OIS Swaps, Caps, Floors, and Inflation Swaps were each < 3% of the volume and cumulatively amounted to only 7% of all reported volume in the USD swap market in that period.
- The number of block trades varies widely even among the most liquid contracts. However, it may be difficult to draw conclusions about the distribution of ticket sizes for instruments with very low reported trade counts.

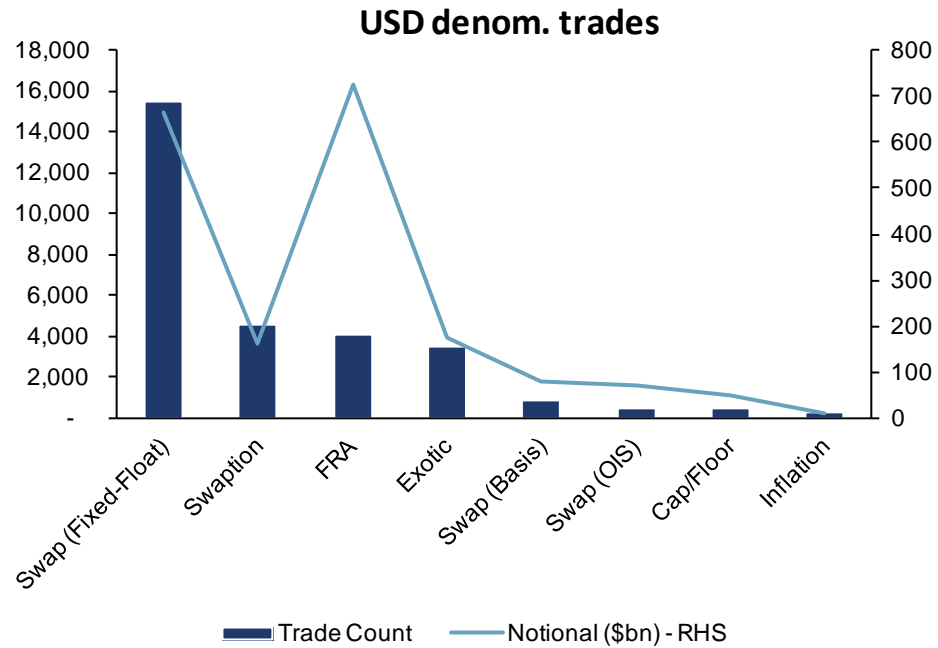
<sup>1</sup> Reference to the DTCC SDR refer to The Depository Trust & Clearing Corporation's Real-Time Dissemination Dashboard

Sorted by Trade Count							
Instrument	Trade Count	Volume (Incl. Block, Home Currency)	Number Block	% Block	Avg Trade Size (Home Currency)	Cum. Trades	Cum. Volume
CDX.IG.19.5Y	1813	92,342,020,000	576	32%	50,933,271	41.1%	55.4%
CDX.HY.19.5Y	933	17,718,539,000	28	3%	18,990,931	62.2%	66.1%
iTraxx Europe.18.5Y	678	24,500,595,000	0	0%	36,136,571	77.6%	80.8%
iTraxx Europe XOVER.18.5Y	538	6,965,980,000	2	0%	12,947,918	89.7%	85.0%
CDX.IG.9.7Y	63	5,779,000,000	49	78%	91,730,159	91.2%	88.5%
CDX.IG.19.10Y	61	3,269,680,000	19	31%	53,601,311	92.5%	90.4%
CDX.HY.18.5Y	60	1,016,996,500	6	10%	16,949,942	93.9%	91.0%
CDX.IG.18.5Y	49	2,623,600,000	21	43%	53,542,857	95.0%	92.6%
iTraxx Europe.9.10Y	49	2,557,000,000	15	31%	52,183,673	96.1%	94.1%
CDX.IG.9.10Y	29	2,900,000,000	29	100%	100,000,000	96.8%	95.9%
iTraxx Europe.18.10Y	21	620,100,000	4	19%	29,528,571	97.3%	96.3%
CDX.HY.17.5Y	14	521,450,000	3	21%	37,246,429	97.6%	96.6%
CDX.IG.17.5Y	13	716,200,000	7	54%	55,092,308	97.9%	97.0%
iTraxx Europe.17.5Y	12	405,200,000	4	33%	33,766,667	98.1%	97.2%
iTraxx Europe XOVER.17.5Y	12	261,075,000	1	8%	21,756,250	98.4%	97.4%
CDX.IG.19.3Y	8	430,000,000	2	25%	53,750,000	98.6%	97.7%
CDX.IG.15.5Y	8	451,500,000	4	50%	56,437,500	98.8%	97.9%
CDX.IG.16.5Y	5	111,620,000	1	20%	22,324,000	98.9%	98.0%
CDX.HY.11.5Y	5	500,000,000	5	100%	100,000,000	99.0%	98.3%
CDX.HY.14.5Y	5	227,000,000	2	40%	45,400,000	99.1%	98.4%
CDX.IG.16.3Y	4	46,000,000	0	0%	11,500,000	99.2%	98.5%
CDX.HY.16.5Y	4	336,000,000	3	75%	84,000,000	99.3%	98.7%
CDX.IG.19.7Y	3	140,000,000	1	33%	46,666,667	99.4%	98.7%
CDX.IG.15.10Y	3	300,000,000	3	100%	100,000,000	99.4%	98.9%
CDX.HY.13.5Y	3	227,000,000	2	67%	75,666,667	99.5%	99.1%
iTraxx Europe.15.5Y	3	160,000,000	2	67%	53,333,333	99.6%	99.2%
iTraxx Europe.7.10Y	3	169,000,000	1	33%	56,333,333	99.6%	99.3%
CDX.IG.12.5Y	2	200,000,000	2	100%	100,000,000	99.7%	99.4%
CDX.IG.13.5Y	2	200,000,000	2	100%	100,000,000	99.7%	99.5%
CDX.IG.8.7Y	2	120,000,000	1	50%	60,000,000	99.8%	99.6%
CDX.HY.15.5Y	2	200,000,000	2	100%	100,000,000	99.8%	99.7%
iTraxx Europe.15.10Y	2	138,000,000	1	50%	69,000,000	99.9%	99.8%
iTraxx Europe.17.10Y	2	150,000,000	2	100%	75,000,000	99.9%	99.9%
CDX.IG.10.7Y	1	100,000,000	1	100%	100,000,000	99.9%	99.9%
CDX.IG.18.10Y	1	100,000,000	1	100%	100,000,000	100.0%	100.0%
iTraxx Europe XOVER.15.5Y	1	10,000,000	0	0%	10,000,000	100.0%	100.0%
iTraxx Europe HiVol.18.5Y	1	25,000,000	0	0%	25,000,000	100.0%	100.0%
<b>All Other Products</b>	0	-	0	0%	0	100.0%	100.0%

Source: DTCC ; Period January 11, 2013 through January 24, 2013



Source: DTCC ; Period January 11, 2013 through January 24, 2013



**USD-denominated trades only**  
**Excludes cross-currency swaps**  
**Does not reflect non-public SDR data**  
**YTD as of 18-Jan-2013**

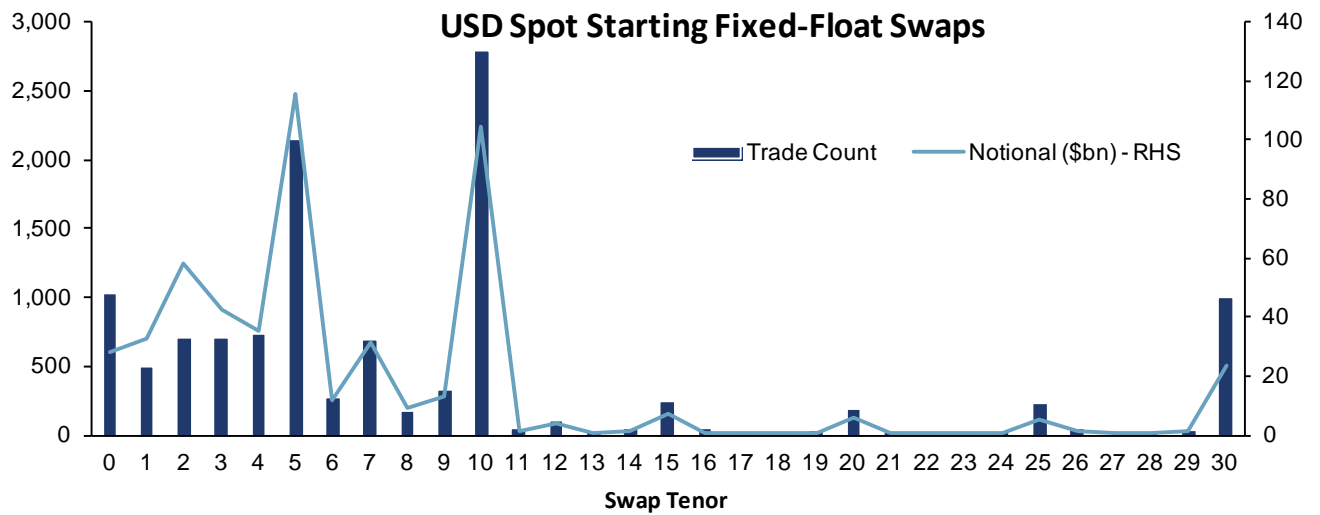
	Trade Count	Notional (\$bn) - RHS	Block Trades (%)
Swap (Fixed-Float)	15,438	664.4	23%
Swaption	4,585	161.3	29%
FRA	4,070	726.8	53%
Exotic	3,495	176.9	11%
Swap (Basis)	835	80.5	60%
Swap (OIS)	468	71.2	63%
Cap/Floor	439	49.5	46%
Inflation	323	9.8	9%

*(subject to block limit)*

Source: DTCC, period Dec.31, 2012 through Jan.18, 2013.

**USD-denominated Spot Starting Fixed-Float Swaps only**  
**Does not reflect non-public SDR data**  
**YTD as of 18-Jan-2013**

Tenor	Trade Count	Notional (\$bn) - RHS
<= 0.5	1,034	28.4
1	499	32.6
2	705	57.8
3	709	42.4
4	734	35.0
5	2,149	115.8
6	272	11.6
7	693	31.7
8	177	9.0
9	335	13.2
10	2,788	104.4
11	45	1.5
12	109	3.8
13	28	1.0
14	46	1.6
15	245	7.4
16	56	0.8
17	22	0.7
18	27	0.9
19	31	0.9
20	188	5.7
21	16	0.4
22	19	0.9
23	16	0.6
24	19	0.6
25	234	4.9
26	54	1.3
27	12	0.4
28	22	0.6
29	32	1.3
30	1,006	23.6
<b>Total</b>	<b>12,322</b>	<b>540.8</b>



Source: DTCC, period Dec.31, 2012 through Jan.18, 2013. Includes spot starting swaps only. Tenor of swap is computed assuming a Jan.9 2013 trade date to overcome data quality issues.

**USD-denominated Spot Starting Fixed-Float Swaps only**  
**Does not reflect non-public SDR data**  
**YTD as of 18-Jan-2013**

Tenor	Spot Notionals		
	Round	Broken	Round / Broken
0	21.4	7.0	303%
1	13.7	19.0	72%
2	37.8	20.0	189%
3	27.3	15.0	182%
4	13.3	21.7	61%
5	93.1	22.7	409%
6	5.2	6.3	83%
7	23.9	7.7	309%
8	5.4	3.5	154%
9	7.2	6.0	121%
10	87.6	16.8	521%
11	0.1	1.3	10%
12	2.8	1.0	271%
13	0.1	0.9	14%
14	0.2	1.4	14%
15	4.3	3.1	137%
16	0.0	0.8	0%
17	0.0	0.6	6%
18	0.1	0.8	14%
19	0.0	0.9	0%
20	4.0	1.7	229%
21	0.0	0.4	2%
22	0.0	0.9	2%
23	0.1	0.5	18%
24	0.0	0.6	0%
25	2.0	3.0	66%
26	0.1	1.2	8%
27	0.0	0.4	4%
28	0.0	0.6	0%
29	0.7	0.6	125%
30	19.0	4.6	409%

Source: DTCC, period Dec.31, 2012 through Jan.18, 2013. Includes spot starting swaps only. Tenor of swap is computed assuming a Jan.9 2013 trade date to overcome data quality issues. "Round" date includes tenors that are within a 3 week window on either side of the specified tenor. "Broken" swaps are rounded to the nearest tenor bucket.