

ICE Credit Derivative Services 3Q 2021 Update

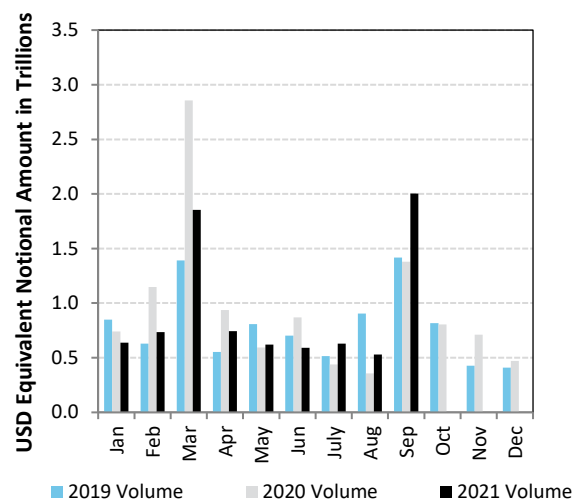
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Clearing Highlights

- **\$26.8T total notional amount¹ cleared across all 3 CDS clearinghouses YTD 3Q 2021**
 - Up 7% relative to YTD 3Q 2019
 - Down 14% relative to YTD 3Q 2020
- **ICE total cleared notional amount grew 28% YOY from \$7.2T in 3Q 2020 to \$9.2T in 3Q 2021**
- **93.75% ICE share of YTD 3Q 2021 CDS volume**
 - 81.75% ICE Clear Credit (+3.25 pts vs. FY 2020)
 - 12.00% ICE Clear Europe (-2.50 pts vs. FY 2020)
 - 6.25% LCH (-0.75 pts vs. FY 2020)
- **86.50% ICE share of YTD 3Q 2021 EUR iTraxx volume**
 - 62.25% ICE Clear Credit (+6.75 pts vs. FY 2020)
 - 24.25% ICE Clear Europe (-4.75 pts vs. FY 2020)
 - 13.50% LCH (-2.00 pts vs. FY 2020)
- **73.75% ICE share of YTD 3Q 2021 EUR SN volume**
 - 44.75% ICE Clear Credit (+7.25 pts vs. FY 2020)
 - 29.00% ICE Clear Europe (-12.0 pts vs. FY 2020)
 - 26.25% LCH (+4.75 pts vs. FY 2020)
- **\$9.3T ICE client notional amount² cleared YTD 3Q 2021**
 - Up 6.75% relative to YTD 3Q 2019
 - Down 11.5% relative to YTD 3Q 2020

(A) ICE Clear Credit Monthly Client CDS Index Volume



(B) ICE Clear Credit Monthly Client CDS Single Name Volume

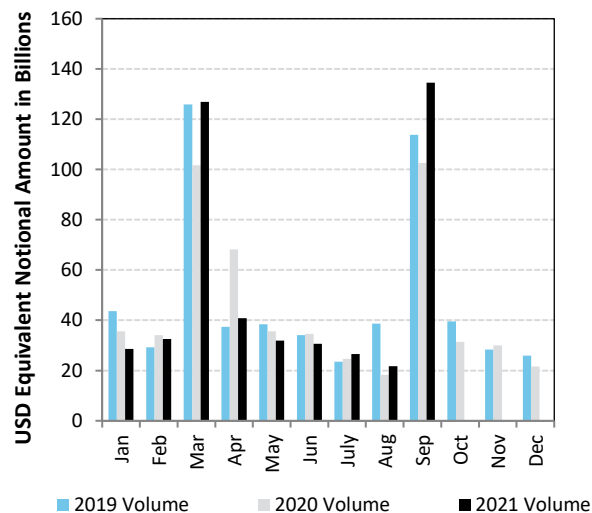


Figure 1: ICE Clear Credit monthly client clearing notional amounts from January 2019 through September 2021

- **Continued strength in voluntary SN client clearing at ICE Clear Credit demonstrated by growth in cleared notional amounts YTD 3Q 2021 vs. YTD 3Q 2020, see Figure 1**
 - 6.5% growth in USD Corporate SNs
 - 24% growth in EUR Corporate SNs

¹ Combined client/dealer notional amount counting both legs of each cleared transaction (see Technical Notes)

² Sum of all transaction-legs associated with buy-side counterparties (see Technical Notes)

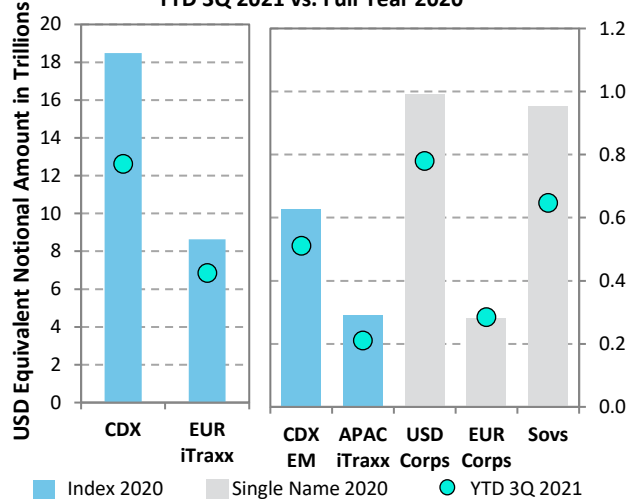
(A) Market Share of Combined Client/Dealer Volume Cleared YTD 3Q 2021, and Change in Market Share Relative to FY 2020

Instrument Category	Notional Amount (USD)	ICC Share (%)	ICEU Share (%)	LCH Share (%)
All	26.8T	81.75 (+3.25)	12.0 (-2.50)	6.25 (-0.75)
CDX	13.0T	97.50 (+0.50)	2.25 (-0.75)	0.25 (0.25)
EUR iTraxx	11.0T	62.25 (+6.75)	24.25 (-4.75)	13.5 (-2.00)
APAC iTraxx	200B	100	-	-
CDX EM	500B	100	-	-
Sovereign SN	700B	92.0 (-0.50)	8.00 (+0.50)	-
USD Corp. SN	775B	100	-	0
EUR Corp. SN	625B	44.75 (+7.25)	29.00 (-12.0)	26.25 (+4.75)

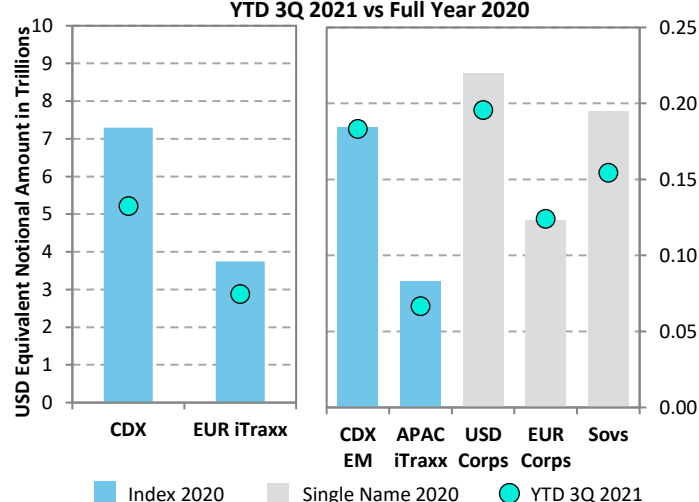
(B) Share Between ICE Clear Credit and ICE Clear Europe of YTD 3Q 2021 Client Volume, and Change in Share Relative to FY 2020

Instrument Category	Notional Amount (USD)	ICC Share (%)	ICEU Share (%)
All	9.3T	95.25 (+1.75)	4.75 (-1.75)
CDX	5.3T	98.00 (+0.50)	2.00 (-0.50)
EUR iTraxx	3.2T	90.00 (+4.00)	10.00 (-4.00)
APAC iTraxx	75B	100	-
CDX EM	200B	100	-
Sovereign SN	175B	100.00 (+0.25)	0.00 (-0.25)
USD Corp. SN	200B	100	-
EUR Corp. SN	150B	97.50 (+2.25)	2.50 (-2.25)

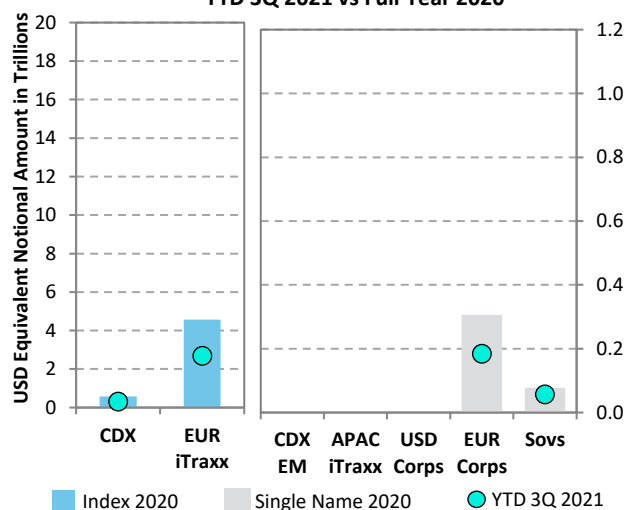
(C) ICE Clear Credit Combined Client/Dealer CDS Volume: YTD 3Q 2021 vs. Full Year 2020



(D) ICE Clear Credit Client CDS Volume: YTD 3Q 2021 vs Full Year 2020



(E) ICE Clear Europe Combined Client/Dealer CDS Volume: YTD 3Q 2021 vs Full Year 2020



(F) ICE Clear Europe Client CDS Volume: YTD 3Q 2021 vs. Full Year 2020

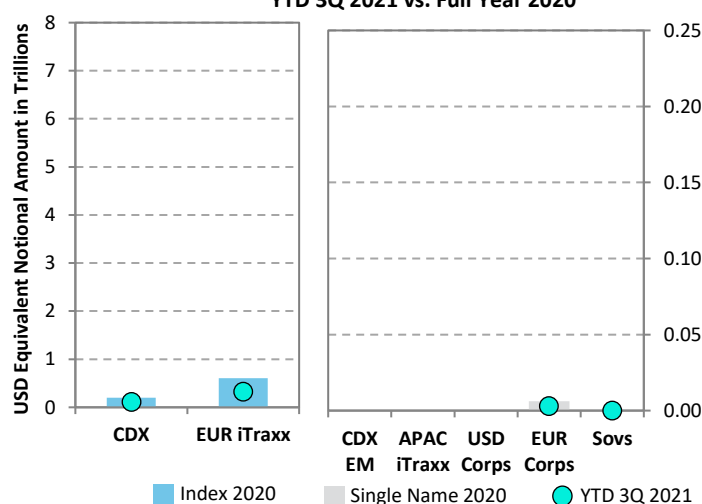


Figure 2: Cleared notional amounts, share of cleared notional amounts and change in cleared notional amounts for YTD 3Q 2021 vs. full-year 2020, by clearinghouse and instrument type. Abbreviations: CDX.IG and CDX.HY indices (**CDX**), EUR denominated iTraxx indices (**EUR iTraxx**), emerging markets CDX indices (**CDX EM**), Asia-Pacific iTraxx indices (**APAC iTraxx**), USD denominated Corporate SNs (**USD Corps**), EUR denominated Corporate SNs (**EUR Corps**), and Sovereign SNs (**Sovs**).

3Q / Year-To-Date Cleared Volumes

Combined Client/Dealer Volumes

3Q was the first quarter since the onset of the Covid-19 pandemic in which quarterly ICE CDS volumes exceeded those seen in 2020. ICE cleared notional amounts grew 28% YOY from \$7.2T in 3Q 2020 to \$9.2T in 3Q 2021. See Figure 2 (A), (C) and (E).

- The September 2021 roll saw the largest ICE Clear Credit weekly notional amount since inception, with over \$3T cleared the week ending September 24, 2021
- Total notional amount cleared at ICE Clear Credit in 3Q 2021 grew 38% YOY from \$5.9T in 3Q 2020 to \$8.1T in 3Q 2021
- EUR iTraxx notional amount cleared at ICE Clear Credit increased 47%, from \$1.8T in Q3 2020 to \$2.6T in Q3 2021, bringing ICE Clear Credit's share of YTD 3Q 2021 volume in EUR iTraxx instruments to 62.25%, an increase of 6.75 points relative to ICE Clear Credit's Full Year (FY) 2020 share; ICE Clear Europe and LCH had a YTD 3Q 2021 share of 24.25% and 13.5%, respectively
- EUR Corporate SN notional amount cleared at ICE Clear Credit increased 18% from \$86.5B in Q3 2020 to \$102B in 3Q 2021, bringing ICE Clear Credit's share of YTD 3Q volumes in EUR Corporate SNs to 44.75%, an increase of 7.25 points relative to ICE Clear Credit's YTD 3Q 2020 share; ICE Clear Europe and LCH had a YTD 3Q 2021 share of 29% and 26.25%, respectively. For EUR Corporate SNs cleared at ICE Clear Credit, the notional amount cleared at the end of 3Q 2021 exceeded the notional amount cleared in FY 2020

Total cleared volume across the three CDS clearinghouses YTD 3Q 2021 was approximately 16% lower than for the same period the previous year, dropping from \$31.2T for YTD 3Q 2020 to \$26.8T for YTD 3Q 2021. At the end of 3Q 2021, the YTD share of combined client/dealer notional amount between ICE Clear Credit, ICE Clear Europe and LCH was 81.75%, 12% and 6.25%, respectively.

Client Volumes

Similar to combined client/dealer volumes, at ICE Clear Credit all instrument categories experienced YOY growth in 3Q client volumes, with total client cleared notional amount growing 44% from \$2.3T in 3Q 2020 to \$3.4T in 3Q 2021. See Figure 1 and Figure 2 (B), (D) and (F).

- The September 2021 roll saw the largest ICE Clear Credit weekly client notional amount since inception, with \$1.3T cleared the week ending September 24, 2021
- EUR iTraxx client notional amount cleared at ICE Clear Credit increased 49%, from \$759B in 3Q 2020 to \$1.1T in 3Q 2021, bringing the ICE Clear Credit portion of ICE YTD 3Q 2021 EUR iTraxx client notional amount to 90%, an increase of 4 points relative to ICE Clear Credit's FY 2020 portion
- EUR Corporate SN client notional amount cleared at ICE Clear Credit increased 17%, from \$38B in Q3 2020 to \$45B in 3Q 2021, bringing the ICE Clear Credit portion of ICE YTD 3Q 2021 EUR Corporate SN client notional amount to 97.5%, an increase of 2.25 points relative to ICE Clear Credit's FY 2020 portion
- CDX.EM client notional amount cleared at ICE Clear Credit increased 61% from \$48B in 3Q 2020 to \$77B in 3Q 2021
- Both CDX.EM and EUR Corporate SN client notional amounts cleared at ICE Clear Credit YTD 3Q 2021 were close to or exceeded, respectively, the corresponding client notional amounts for FY 2020

Total cleared client volume at ICE YTD 3Q 2021 was approximately 13% lower than for the same period the previous year, dropping from \$10.5T for YTD 3Q 2020 to \$9.3T for YTD 3Q 2021. The share of YTD 3Q 2021 client volume between ICE Clear Credit and ICE Clear Europe was 95.25% and 4.75%, respectively.

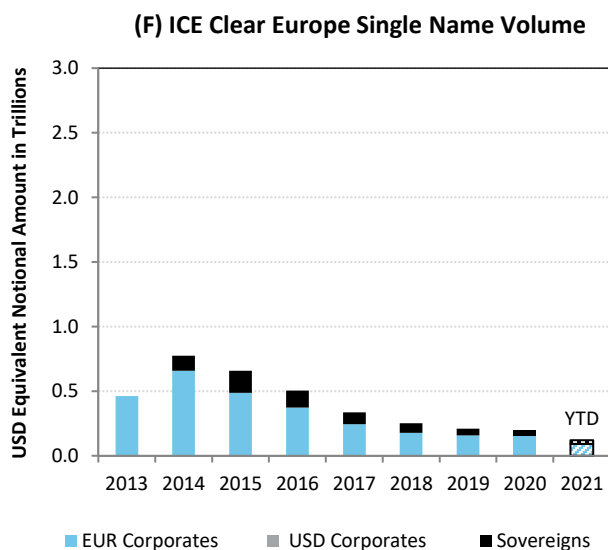
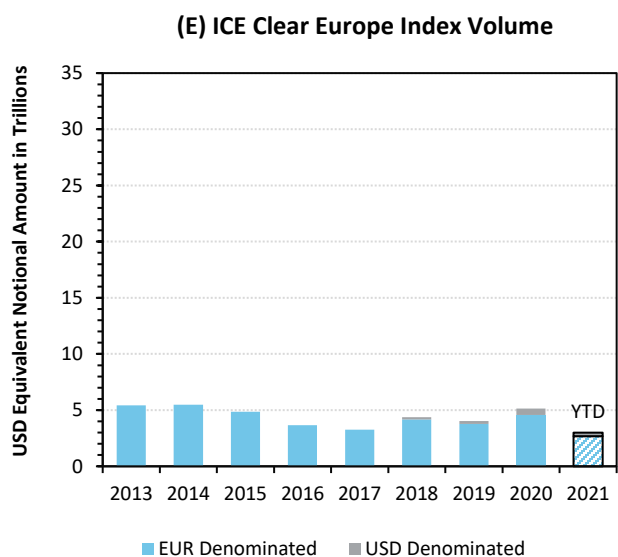
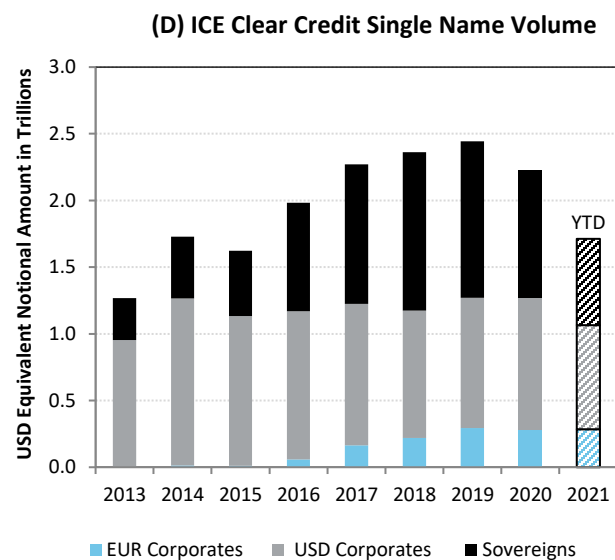
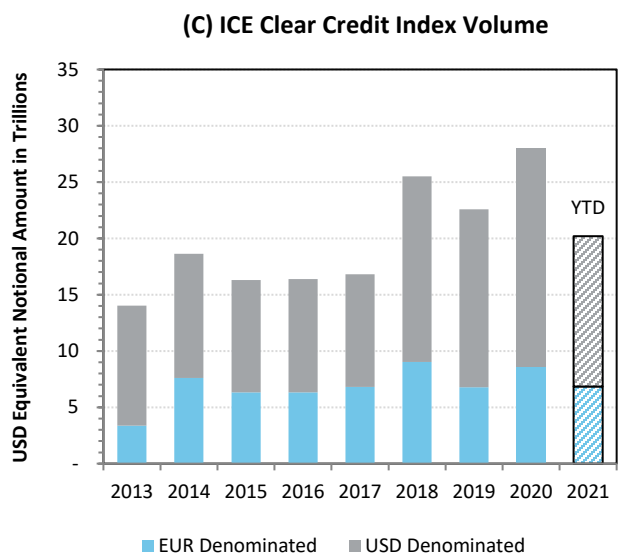
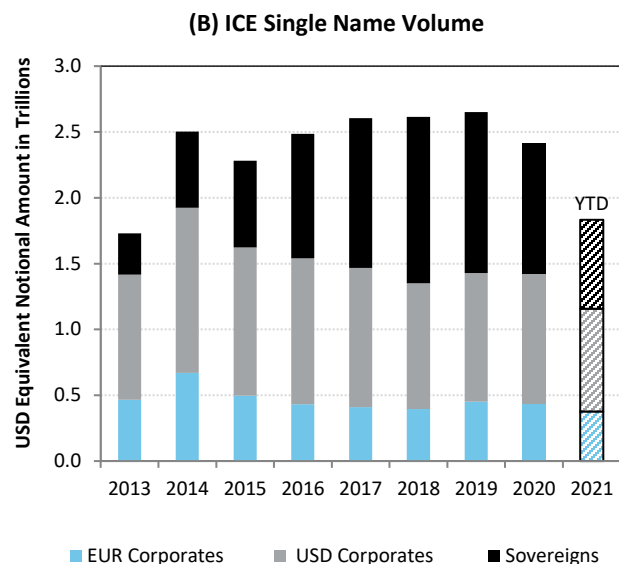
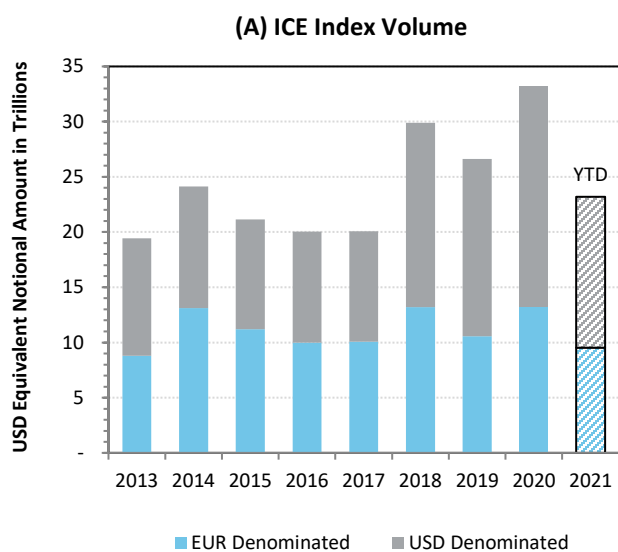


Figure 3: Combined client/dealer annual notional amounts for index and SN instruments at ICE Clear Credit, ICE Clear Europe and in total across both ICE CDS clearinghouses.

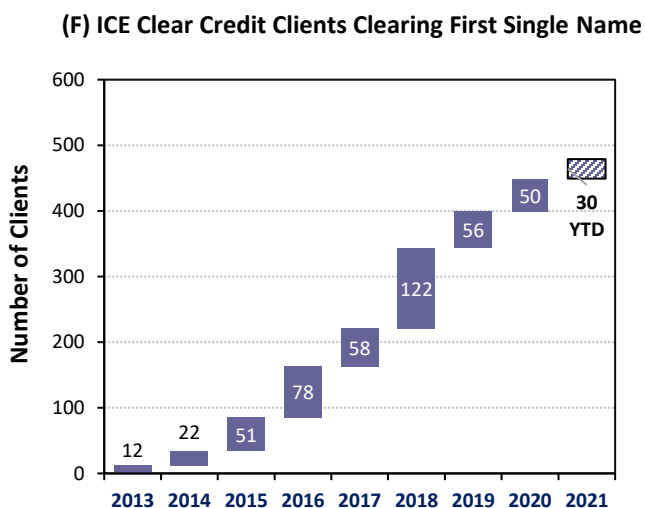
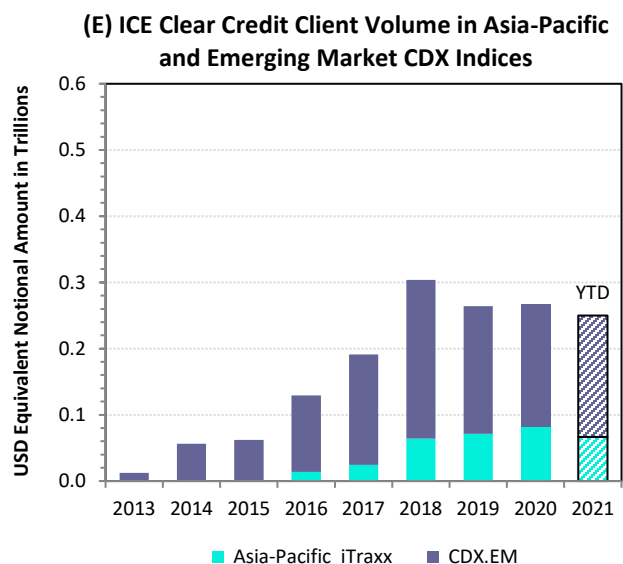
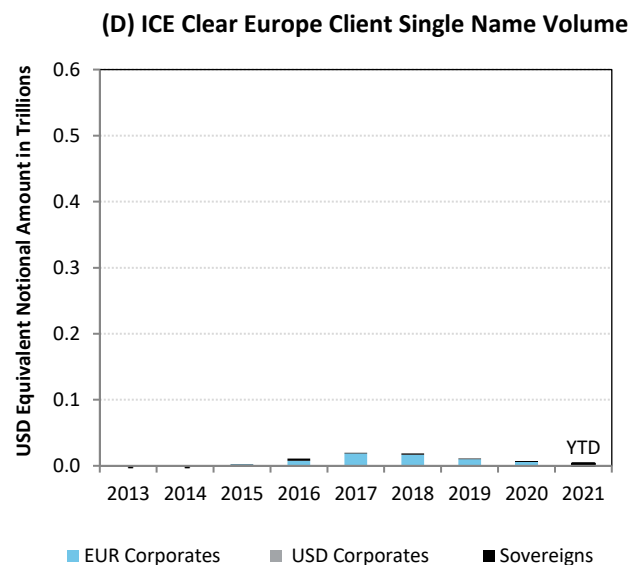
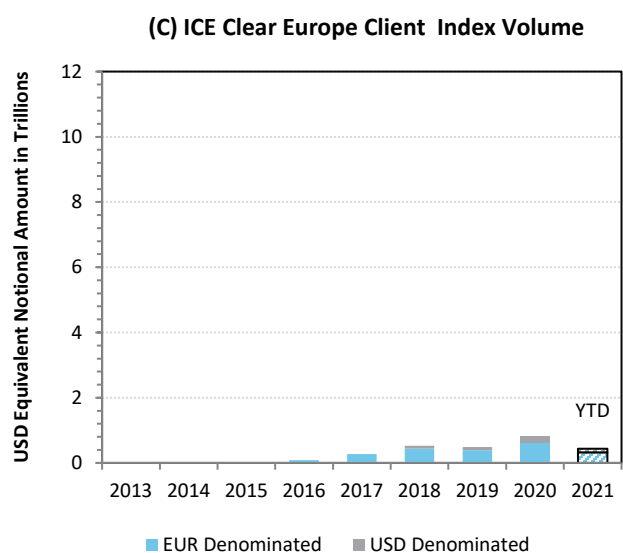
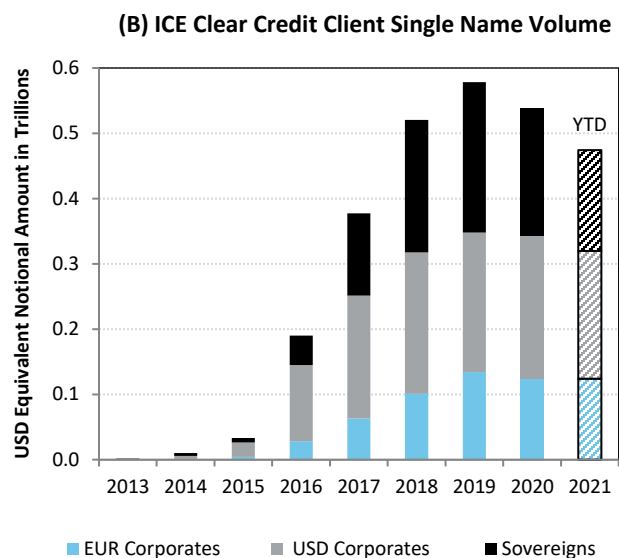
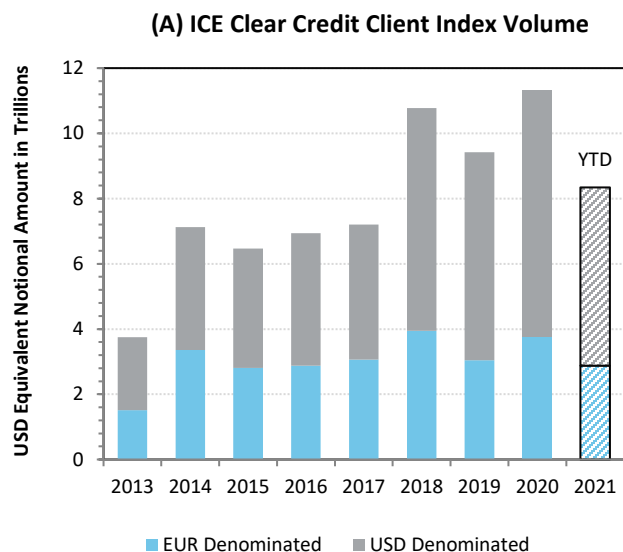


Figure 4: Index and SN annual client notional amounts cleared at ICE Clear Credit and ICE Clear Europe, and number of clients clearing their first SN at ICE Clear Credit. The notional amounts provided for USD denominated index instruments at ICE Clear Credit include the separately-shown notional amounts for Asia-Pacific iTraxx and CDX.EM indices.

Historical Volumes

Figure 3 and Figure 4 provide annual combined cleared client/dealer notional amounts and annual client notional amounts, respectively, by ICE CDS clearinghouse and instrument category. The visualized trends have been discussed in previous quarterly updates and the main themes are as follows:

- Growth in voluntary client clearing SN volumes and combined client/dealer SN volumes at ICE Clear Credit; see Figure 3(D) and Figure 4(B)
- Precipitous decline in SN clearing activity at ICE Clear Europe, impacting both client and dealer volumes; see Figure 3(F) and Figure 4(D)
- Growth in client index volumes at ICE Clear Europe, including the introduction of CDX indices at ICE Clear Europe in 2018; see Figure 4(C)
- Growth in client clearing of Asia-Pacific iTraxx indices at ICE Clear Credit; see Figure 4(E)

New Single Name Additions

On August 30, 2021, ICE Clear Credit added 10 new SN reference entities, bringing to 27 the total number of reference entities that have been added in 2021

- 16 European Corporate
- 10 North American Corporate
- 1 Sovereign
- 9 Secured / Domestic Debt (SECDOM)
- 18 Senior Unsecured / Foreign Debt (SNRFOR)

On February 28, 2022, ICE Clear Credit plans to expand the reference entities on which it clears SN CDS instruments to include 15 new Asia-Pacific reference entities, 5 new European Corporate reference entities, and 12 new North American Corporate reference entities, see Table 1. The additional reference entities may change depending on operational, market and legal considerations, and require successful completion of ICE governance.

Table 1: New SN reference entities planned for clearing at ICE Clear Credit, starting February 28th, 2022.

Reference Entity	Tier ³	ISDA Def.	Date
Asia-Pacific Single Names			
ALIBABA GROUP HOLDING LIMITED	SNRFOR	CR14	Feb28 '22
BAIDU, INC.	SNRFOR	CR14	Feb28 '22
CHINA NATIONAL CHEMICAL CORPORATION LIMITED	SNRFOR	CR14	Feb28 '22
CHINA PETROCHEMICAL CORPORATION	SNRFOR	CR14	Feb28 '22
CITIC LIMITED	SNRFOR	CR14	Feb28 '22
STATE GRID CORPORATION OF CHINA	SNRFOR	CR14	Feb28 '22
KT CORPORATION	SNRFOR	CR14	Feb28 '22
TENCENT HOLDINGS LIMITED	SNRFOR	CR14	Feb28 '22
CHINA CONSTRUCTION BANK CORPORATION	SNRFOR	CR14	Feb28 '22
EXPORT-IMPORT BANK OF INDIA	SNRFOR	CR14	Feb28 '22
INDUSTRIAL AND COMMERCIAL BANK OF CHINA LIMITED	SNRFOR	CR14	Feb28 '22
STATE BANK OF INDIA	SNRFOR	CR14	Feb28 '22
WOORI BANK	SNRFOR	CR14	Feb28 '22
TELSTRA CORPORATION LIMITED	SNRFOR	MR14	Feb28 '22
SCENTRE MANAGEMENT LIMITED	SNRFOR	MR14	Feb28 '22
European Corporate Single Names			
NOVAFIVES	SECDOM	MM14	Feb28 '22
ELIS	SNRFOR	MM14	Feb28 '22
HOCHTIEF AKTIENGESELLSCHAFT	SNRFOR	MM14	Feb28 '22
EDP FINANCE B.V.	SNRFOR	MM14	Feb28 '22
LOUIS DREYFUS COMPANY B.V.	SNRFOR	MM14	Feb28 '22
North American Corporate Single Names			
SABRE HOLDINGS CORPORATION	SNRFOR	XR14	Feb28 '22
BALL CORPORATION	SNRFOR	XR14	Feb28 '22
TARGA RESOURCES PARTNERS LP	SNRFOR	XR14	Feb28 '22
DAVITA INC.	SNRFOR	XR14	Feb28 '22
NETFLIX, INC.	SNRFOR	XR14	Feb28 '22
SIRIUS XM RADIO INC.	SNRFOR	XR14	Feb28 '22
ASHLAND LLC	SNRFOR	XR14	Feb28 '22
FISERV, INC.	SNRFOR	XR14	Feb28 '22
BORGWARNER INC.	SNRFOR	XR14	Feb28 '22
TRANSCANADA PIPELINES LIMITED	SNRFOR	XR14	Feb28 '22
FEDEX CORPORATION	SNRFOR	XR14	Feb28 '22
ORACLE CORPORATION	SNRFOR	XR14	Feb28 '22

³ Note that senior unsecured "SNRFOR" and senior secured "SECDOM" tiers are both senior debt. SN instruments that trade "SECDOM" will be referenced as "SNRFOR" for clearing

purposes since outright "SNRFOR" instruments will not be considered for clearing, in general.

Technical Notes

Volume Reporting

Combined client/dealer volumes are reported as double-sided, i.e., a transaction between two counterparties clearing a trade executed on a notional amount of \$10 million is reported as a volume of \$20 million.

Client volumes are reported based on the notional amount of each transaction leg associated with a buy-side counterparty. For example, a transaction between a dealer and client with a notional amount of \$10 million is reported as \$20 million combined client/dealer volume and \$10 million client volume. A transaction between two clients with a notional amount of \$10 million is reported as a combined client/dealer volume of \$20 million, and a client volume of \$20 million. Please note that the clearing volumes on the ICE website are single-sided combined client/dealer volumes, and therefore are half the respective combined client/dealer volumes reported here.