

# ICE Credit Derivative Services 4Q 2021 Update

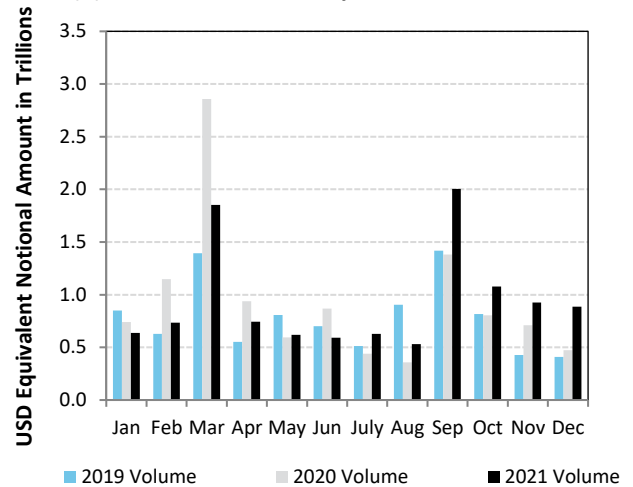
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## Clearing Highlights

- **2021 set multiple records for Full Year (FY) cleared notional amounts at ICE Clear Credit**
  - Client and combined client/dealer records were set for iTraxx Main/Crossover, iTraxx Sub Fins and EUR Corporate Single Name (SN) instruments
  - Additionally, client records were set for CDX EM, Asia-Pacific iTraxx and USD Corporate SNs
- **ICE YOY client/dealer notional amounts grew 35% from \$6.6T in 4Q 2020 to \$8.9T in 4Q 2021, the largest ever 4Q CDS notional amount cleared at ICE**
- **\$36.6T combined client/dealer notional amount was cleared across all 3 CDS clearinghouses in 2021**
  - Up 17.3% relative to FY 2019
  - Down 4.7% relative to FY 2020
- **93.25% ICE share of 2021 client/dealer CDS notional amount across all product categories**
  - 81.00% ICE Clear Credit (+2.5 pts vs. FY 2020)
  - 12.25% ICE Clear Europe (-2.25 pts vs. FY 2020)
  - 6.75% LCH (-0.25 pts vs. FY 2020)
- **86% ICE share of 2021 client/dealer EUR iTraxx notional amount**
  - 62.75% ICE Clear Credit (+7.25 pts vs. FY 2020)
  - 23.25% ICE Clear Europe (-5.75 pts vs. FY 2020)
  - 14.00% LCH (-1.50 pts vs. FY 2020)

(A) ICE Clear Credit Monthly Client CDS Index Volume



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

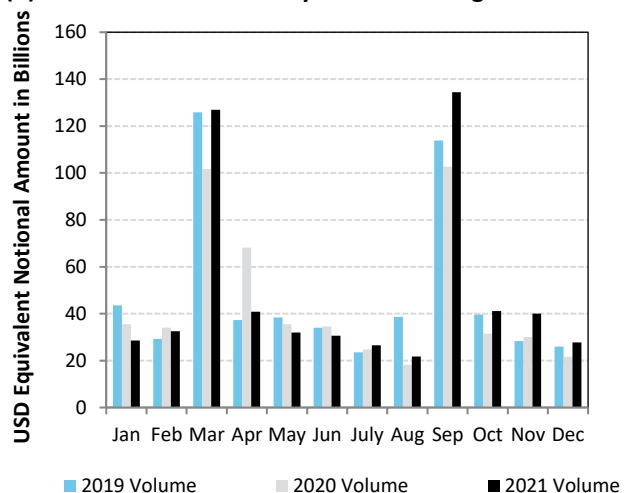


Figure 1: ICE Clear Credit monthly client clearing notional amounts from January 2019 through December 2021

- **71.75% ICE share of 2021 client/dealer EUR Corporate SN notional amount**
  - 41.25% ICE Clear Credit (+3.75 pts vs. FY 2020)
  - 30.50% ICE Clear Europe (-10.50 pts vs. FY 2020)
  - 28.25% LCH (+6.75 pts vs. FY 2020)
- **Continued strength in voluntary SN client clearing at ICE Clear Credit, demonstrated by YOY growth in client cleared volume from FY 2020 to FY 2021**
  - 8% growth in USD Corporate SNs
  - 23% growth in EUR Corporate SNs

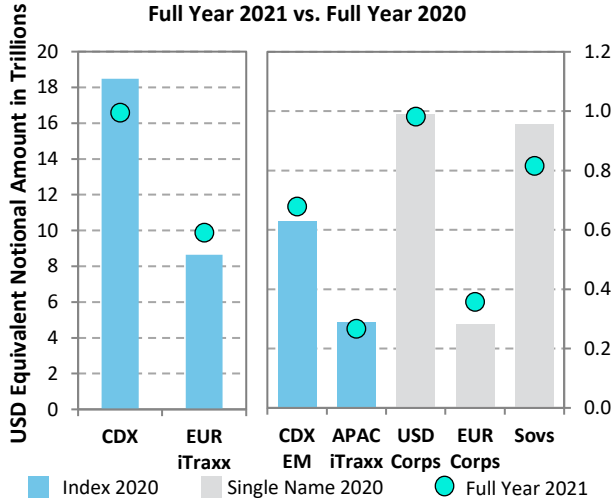
**(A) Market Share of Combined Client/Dealer Volume Cleared FY 2021, and Change in Market Share Relative to FY 2020**

Instrument Category	Notional Amount (USD)	ICC Share (%)	ICEU Share (%)	LCH Share (%)
All	36.6T	81.00 (+2.5)	12.25 (-2.25)	6.75 (-0.25)
CDX	17.1T	97.00 (0)	2.75 (-0.25)	0.25 (0.25)
EUR iTraxx	15.8T	62.75 (+7.25)	23.25 (-5.75)	14.00 (-1.50)
APAC iTraxx	275B	100	-	-
CDX EM	675B	100	-	-
Sovereign SN	900B	92.00 (-0.50)	8.00 (+0.50)	-
USD Corp. SN	975B	100 (0)	-	0.00 (0)
EUR Corp. SN	875B	41.25 (+3.75)	30.50 (-10.5)	28.25 (+6.75)

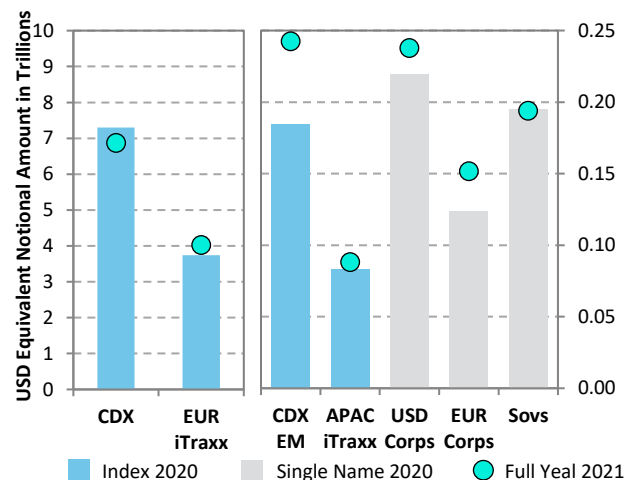
**(B) Share Between ICE Clear Credit and ICE Clear Europe of FY 2021 Client Volume, and Change in Share Relative to FY 2020**

Instrument Category	Notional Amount (USD)	ICC Share (%)	ICEU Share (%)
All	12.3T	95.75 (+2.25)	4.25 (-2.25)
CDX	7.0T	98.00 (+0.50)	2.00 (-0.50)
EUR iTraxx	4.4T	91.25 (+5.25)	8.75 (-5.25)
APAC iTraxx	100B	100	-
CDX EM	250B	100	-
Sovereign SN	200B	99.75 (0)	0.25 (0)
USD Corp. SN	225B	100	-
EUR Corp. SN	175B	97.25 (+2.00)	2.75 (-2.00)

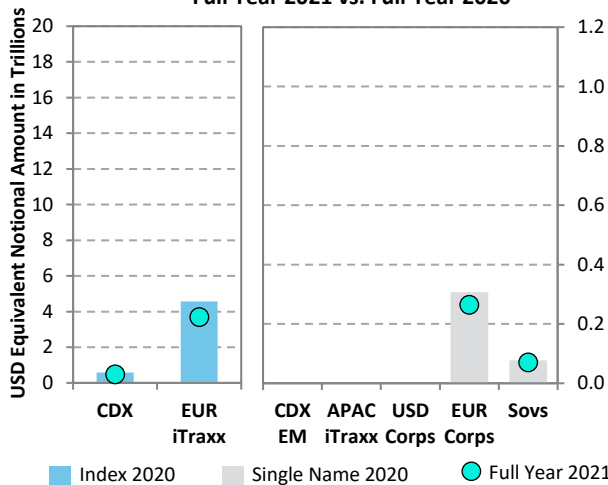
**(C) ICE Clear Credit Combined Client/Dealer CDS Volume: Full Year 2021 vs. Full Year 2020**



**(D) ICE Clear Credit Client CDS Volume: Full Year 2021 vs. Full Year 2020**



**(E) ICE Clear Europe Combined Client/Dealer CDS Volume: Full Year 2021 vs. Full Year 2020**



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

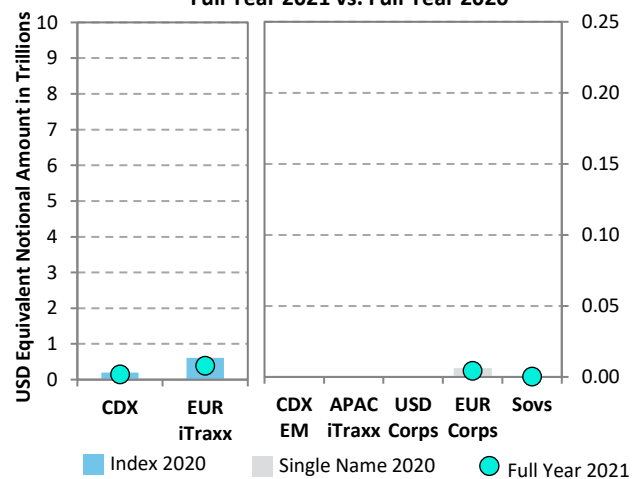


Figure 2: Cleared notional amounts, share of cleared notional amounts and change in cleared notional amounts for full year 2021 vs. full year 2020, by clearinghouse and instrument type. Abbreviations: CDX.IG and CDX.HY indices (**CDX**), EUR denominated iTraxx indices (**EUR iTraxx**), emerging markets 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**).

(\$4.0T), CDX EM (\$240B), Asia-Pacific iTraxx (\$90B), USD Corporate SNs (\$240B) and EUR Corporate SNs (\$150B). See Figure 1 and Figure 2 (B) and (D).

## 2021 Cleared Volumes

### Combined Client/Dealer Volumes

During 2021, ICE Clear Credit significantly increased its share of combined client/dealer volumes for EUR denominated iTraxx indices and EUR Corporate SNs, while maintaining its dominant share in all USD denominated instruments. ICE Clear Credit achieved YOY growth relative to FY 2020 for EUR denominated iTraxx, CDX EM and EUR Corporate SNs, setting new record annual-notional-amounts for EUR denominated iTraxx indices (\$9.9T) and EUR Corporate SNs (\$360B). See Figure 2 (A) and (C).

- EUR iTraxx notional amount cleared at ICE Clear Credit increased 71%, from \$1.8T in 4Q 2020 to \$3.0T in 4Q 2021, bringing ICE Clear Credit's share of FY 2021 volume in EUR iTraxx instruments to 62.75%, an increase of 7.25 points relative to ICE Clear Credit's FY 2020 share; ICE Clear Europe and LCH had a FY 2021 share of 23.25% and 14%, respectively
- EUR Corporate SN notional amount cleared at ICE Clear Credit increased 33% from \$55B in 4Q 2020 to \$73B in 4Q 2021, bringing ICE Clear Credit's share of FY 2021 volume in EUR Corporate SNs to 41.25%, an increase of 3.75 points relative to ICE Clear Credit's FY 2020 share; ICE Clear Europe and LCH had a FY 2021 share of 30.5% and 28.25%, respectively

Total cleared volume across the three CDS clearinghouses for FY 2021 was approximately 5% lower than for FY 2020, dropping from \$38.4T in 2020 to \$36.6T in 2021. At the end of 2021, the YTD share of combined client/dealer notional amount between ICE Clear Credit, ICE Clear Europe and LCH was 81%, 12.25% and 6.75%, respectively.

### Client Volumes

During 2021 there was a continued shift in share of client volume from ICE Clear Europe to ICE Clear Credit for EUR denominated iTraxx and EUR Corporate SNs. ICE Clear Credit experienced YOY growth relative to FY 2020 for EUR denominated iTraxx, CDX EM, Asia-Pacific iTraxx, USD Corporate SNs and EUR Corporate SNs, setting new record annual-client-notional-amounts for EUR iTraxx

- EUR iTraxx client notional amount cleared at ICE Clear Credit increased 65%, from \$700B in 4Q 2020 to \$1.2T in 4Q 2021, bringing the ICE Clear Credit portion of ICE YTD 4Q 2021 EUR iTraxx client notional amount to 91.25%, an increase of 5.25 points relative to ICE Clear Credit's FY 2020 portion
- EUR Corporate SN client notional amount cleared at ICE Clear Credit increased 18%, from \$23B in 4Q 2020 to \$28B in 4Q 2021, bringing the ICE Clear Credit portion of ICE FY 2021 EUR Corporate SN client notional amount to 97.25%, an increase of 2 points relative to ICE Clear Credit's FY 2020 portion
- CDX.EM client notional amount cleared at ICE Clear Credit increased 31% from \$185B in 2020 to \$240B in 2021

Total cleared client volume at ICE Clear Credit for FY 2021 was approximately flat relative to FY 2020, remaining around \$11.8T. The share of FY 2021 client volume between ICE Clear Credit and ICE Clear Europe was 95.75% and 4.25%, respectively.

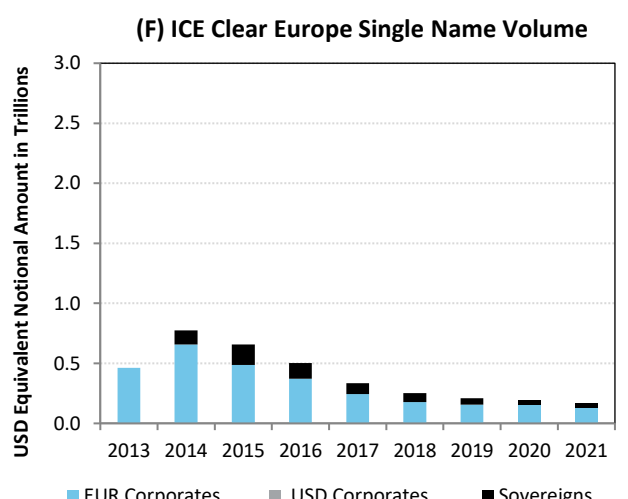
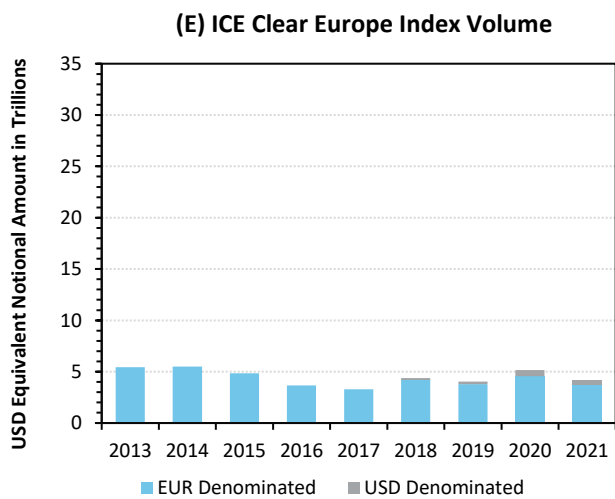
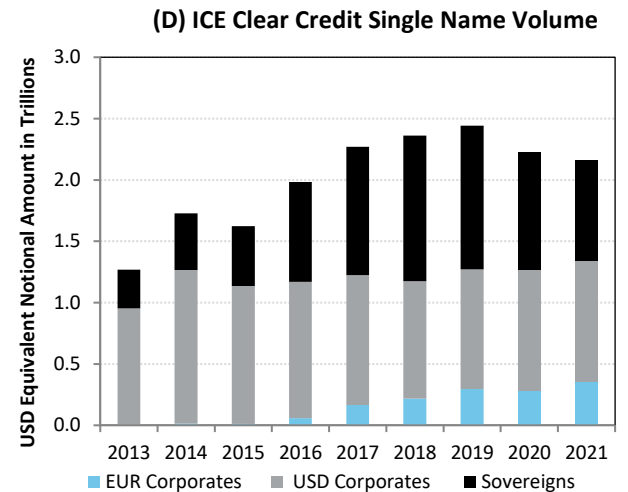
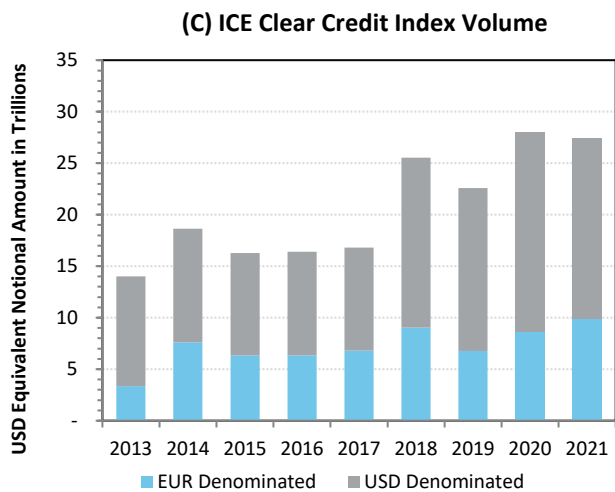
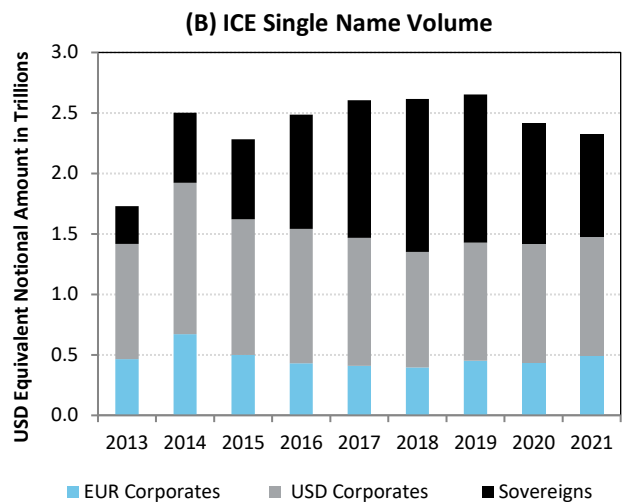
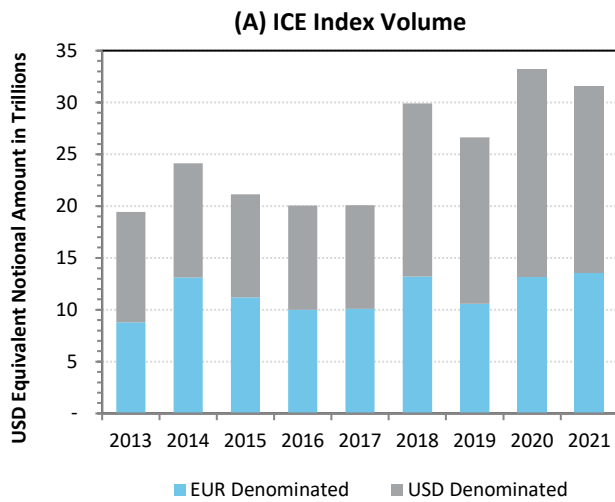


Figure 3: Combined client/dealer annual notional amounts for index and SN instruments at ICE Clear Credit, ICE Clear Europe and in total across both ICE CDS clearinghouses.

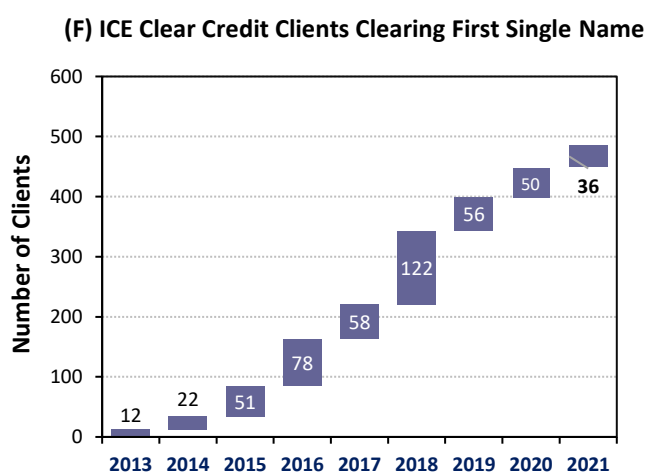
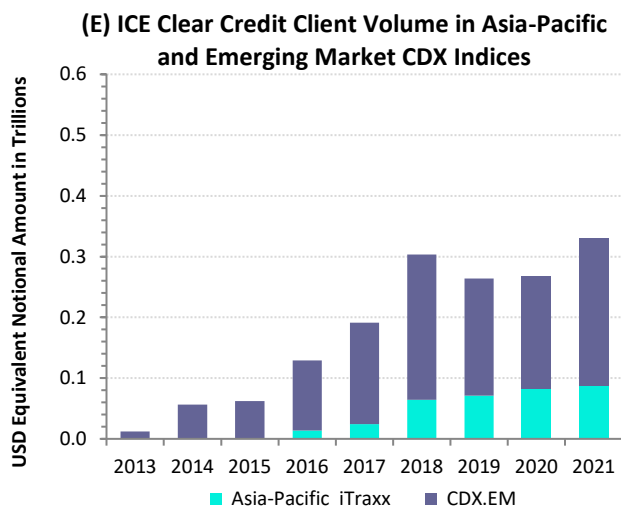
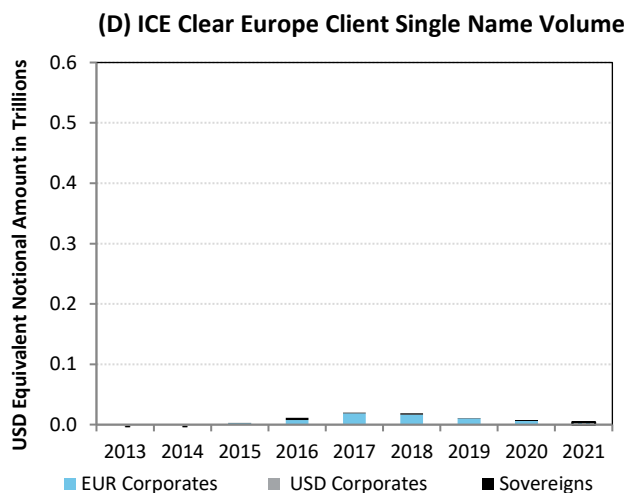
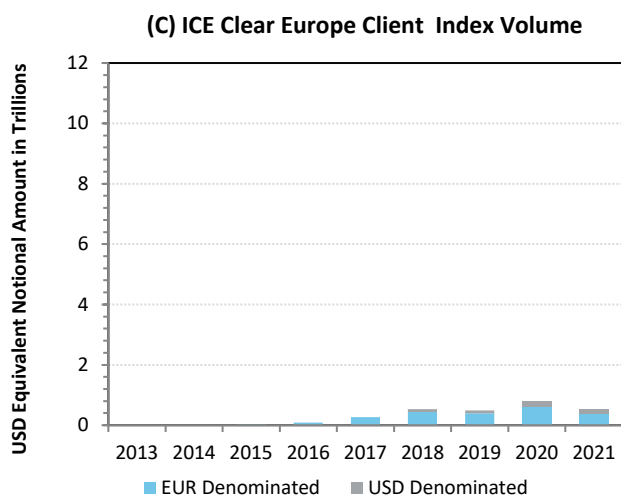
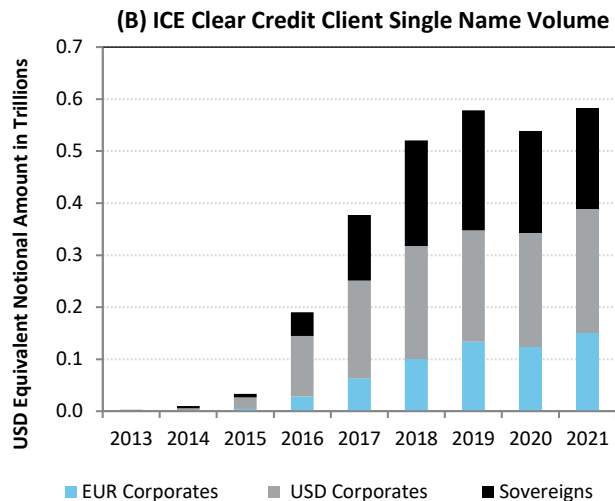
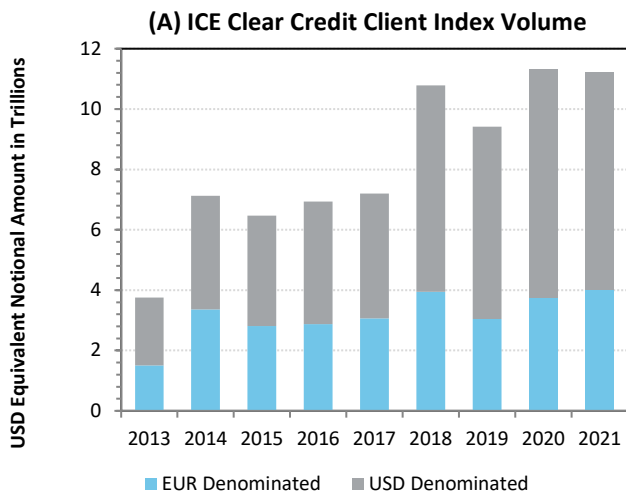


Figure 4: Index and SN annual client notional amounts cleared at ICE Clear Credit and ICE Clear Europe, and number of clients clearing their first SN at ICE Clear Credit. The notional amounts provided for USD denominated index instruments at ICE Clear Credit include the separately-shown notional amounts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

- Growth in voluntary client clearing of EUR and USD Corporate SNs, with recent decrease to flat client Sovereign SN volume; see Figure 4(B)
- Growth in combined client/dealer volumes for EUR Corporate SNs, with relatively consistent USD Corporate SN combined client/dealer volume and recently decreasing client/dealer Sovereign SN volume; see Figure 3(D)
- Recently increasing EUR denominated index volumes at ICE Clear Credit for both client and combined client/dealer clearing; see Figure 3(C) and Figure 4(A)
- 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 clearing of Asia-Pacific iTraxx and CDX EM indices at ICE Clear Credit; see Figure 4(E)

## New Single Name Additions

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.

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

Reference Entity	Tier <sup>1</sup>	ISDA Def.	Date
<b>Asia-Pacific Single Names</b>			
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
<b>European Corporate Single Names</b>			
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
<b>North American Corporate Single Names</b>			
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

<sup>1</sup> 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.