



Research Note

Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: First Half of 2022 and the Second Quarter of 2022

This report analyzes interest rate derivatives (IRD) trading activity reported in Europe. The analysis shows European IRD transactions based on the location of reporting venues (EU versus UK), currency, product taxonomy and execution venue. The report also compares European-reported IRD trading activity to what is reported in the US.

The analysis is based on transactions publicly reported by 30 European approved publication arrangements (APAs) and trading venues (TVs). US trading activity analysis is based on information from the Depository Trust & Clearing Corporation's (DTCC) swap data repository (SDR), which only includes trades that are required to be disclosed under US Commodity Futures Trading Commission (CFTC) regulations.

EXECUTIVE SUMMARY

Total European IRD Trading Activity¹

In the first half of 2022:

- Total European IRD trading activity reported by APAs and TVs in the EU and UK was \$101.2 trillion, up by 38.5% from \$73.0 trillion in the second half of 2021.
- Euro-denominated IRD traded notional increased by 66.3% to \$48.3 trillion in the first half of 2022 from \$29.1 trillion in the second half of 2021 and accounted for 47.8% of total European IRD traded notional. Sterling-denominated transactions fell by 23.0% to \$17.7 trillion from \$22.9 trillion over the same period and comprised 17.5% of the European total. Contracts denominated in US dollars rose by 72.8% to \$22.4 trillion from \$13.0 trillion in the second half of 2021, equating to 22.1% of total European traded notional. Other currencies accounted for 12.7% of total European IRD traded notional².
- Overnight index swaps (OIS) traded notional rose by 53.4% to \$46.8 trillion (46.3% of total European IRD traded notional) from \$30.5 trillion in the second half of 2021. Fixed-for-floating interest rate swaps (IRS) traded notional grew by 3.8% to \$31.5 trillion from \$30.4 trillion over the same period and accounted for 31.2% of the European total. Forward rate agreement (FRA) traded notional increased by 128.2% to \$18.4 trillion from \$8.1 trillion and represented 18.2% of total European IRD traded notional.
- 43.1% of total European IRD traded notional took place on TVs and 47.0% was executed by systemic internalizers³ (SIs). The remaining 9.9% of IRD traded notional was reported as XOFF⁴.

In the second quarter of 2022:

- Total European IRD trading activity reported by APAs and TVs in the EU and UK was \$53.8 trillion in the second quarter of 2022, up by 13.4% from \$47.4 trillion in the first quarter of 2022.
- Euro-denominated IRD traded notional increased by 26.5% to \$27.0 trillion from \$21.3 trillion in the first quarter of 2022 and accounted for 50.2% of total European IRD traded notional. Sterling-denominated transactions rose by 9.1% to \$9.2 trillion from \$8.4 trillion over the same period and comprised 17.1% of the European total. Contracts denominated in US dollars dropped by 25.9% to \$9.5 trillion from \$12.9 trillion in the first quarter of 2022, equating to 17.7% of total European traded notional. Other currencies accounted for 14.9% of total European IRD traded notional.
- OIS traded notional climbed by 9.5% to \$24.5 trillion (45.5% of total European IRD traded notional) from \$22.4 trillion in the first quarter of 2022. Fixed-for-floating IRS traded notional declined by 6.9% to \$15.2 trillion from \$16.3 trillion over the same period and accounted for 28.3% of the European total. FRA traded notional rose by 86.5% to \$12.0 trillion from \$6.4 trillion and represented 22.3% of total European IRD traded notional.
- 42.2% of total European IRD traded notional took place on TVs and 47.8% was executed by SIs. The remaining 10.0% of IRD traded notional was reported as XOFF.

¹ European IRD trading activity is measured by IRD traded notional and trade count reported by approved publication arrangements (APAs) and trading venues (TVs) in the EU and UK. The list of APAs and TVs is included in Appendix 1

² Other currencies include South African rand, Japanese yen, Swedish krona, Norwegian krone, Polish złoty, Czech koruna and 'other'. Cross-currency swaps are also included in other currencies

³ This includes financial instruments admitted to trading or traded on a trading venue, where a transaction on that financial instrument is executed by a systematic internalizer (SI). SIs are investment firms that deal on their own account by executing client orders outside a regulated market (RM) or TV

⁴ The XOFF market identifier code is used for financial instruments admitted to trading or traded on a trading venue or for which a request for admission was made, where the transaction on that financial instrument is not executed on a trading venue, SI or organized trading platform outside of the EU and UK, or where an investment firm does not know it is trading with another investment firm acting as an SI

UK IRD Trading Activity

In the first half of 2022:

- Total IRD traded notional reported by APAs and TVs in the UK grew by 37.0% to \$75.8 trillion in first half of 2022 from \$55.4 trillion in the second half of 2021, representing 74.9% of total European IRD traded notional.
- Euro-denominated IRD traded notional increased by 93.4% to \$28.9 trillion from \$14.9 trillion in the second half of 2021. US dollar-denominated IRD rose by 67.4% to \$19.3 trillion from \$11.5 trillion over the same period. Sterling-denominated IRD traded notional decreased by 23.5% to \$17.3 trillion from \$22.6 trillion in the second half of 2021. Euro- and sterling-denominated transactions accounted for 38.1% and 22.8% of total UK IRD traded notional, respectively, while US dollar-denominated trades comprised 25.5%. Other currencies accounted for 13.7% of total UK IRD traded notional.
- OIS traded notional grew by 56.4% to \$40.8 trillion from \$26.1 trillion in the second half of 2021. Fixed-for-floating IRS traded notional dropped by 4.3% to \$19.1 trillion from \$19.9 trillion, while FRA transactions rose by 108.3% to \$12.0 trillion from \$5.8 trillion over the same period. OIS accounted for 53.8% of total UK IRD traded notional, fixed-for-floating IRS comprised 25.1% and FRAs represented 15.8%.
- 40.5% of total UK IRD traded notional occurred on TVs, 48.2% was executed by SIs and 11.3% was reported as XOFF.

In the second quarter of 2022:

- Total IRD traded notional reported by APAs and TVs in the UK grew by 12.6% to \$40.1 trillion in the second quarter of 2022 from \$35.7 trillion in the first quarter of 2022, representing 74.7% of total European IRD traded notional.
- Euro-denominated IRD traded notional increased by 28.1% to \$16.2 trillion from \$12.7 trillion in the first quarter of 2022. US dollar-denominated IRD dropped by 27.9% to \$8.1 trillion from \$11.2 trillion over the same period. Sterling-denominated IRD traded notional rose by 9.1% to \$9.0 trillion from \$8.3 trillion the previous quarter. Euro- and sterling-denominated transactions accounted for 40.4% and 22.4% of total UK IRD traded notional, respectively, while US dollar-denominated trades comprised 20.1%. Other currencies represented 17.0% of total UK IRD traded notional.
- OIS traded notional climbed by 6.1% to \$21.0 trillion from \$19.8 trillion in the first quarter of 2022. Fixed-for-floating IRS traded notional decreased by 5.0% to \$9.3 trillion from \$9.8 trillion, while FRA transactions rose by 98.6% to \$8.0 trillion from \$4.0 trillion over the same period. OIS accounted for 52.3% of total UK IRD traded notional, fixed-for-floating IRS comprised 23.1% and FRAs represented 19.9%.
- 41.4% of total UK IRD traded notional occurred on TVs, 47.0% was executed by SIs and 11.6% was reported as XOFF.

EU IRD Trading Activity

In the first half of 2022:

- Total IRD traded notional reported by APAs and TVs in the EU increased by 43.4% to \$25.4 trillion in the first half of 2022 versus \$17.7 trillion in the second half of 2021, accounting for 25.1% of total European IRD traded notional.
- Euro-denominated IRD traded notional rose by 37.6% to \$19.4 trillion from \$14.1 trillion in the second half of 2021 and accounted for 76.6% of total EU IRD traded notional. US dollar-denominated IRD increased by 116.6% to \$3.1 trillion from \$1.4 trillion and represented 12.2% of total EU IRD traded notional. Sterling-denominated IRD comprised 1.5% of total EU traded notional, while other currencies accounted for 9.7%.

- Fixed-for-floating IRS traded notional grew by 19.2% to \$12.5 trillion from \$10.5 trillion in the second half of 2021, while OIS rose by 35.7% to \$6.0 trillion from \$4.5 trillion. FRA traded notional increased by 177.9% to \$6.4 trillion from \$2.3 trillion over the same period. Fixed-for-floating IRS traded notional comprised 49.2% of total EU IRD traded notional, while OIS and FRAs accounted for 23.8% and 25.2%, respectively.
- 50.9% of total EU IRD traded notional took place on TVs, 43.3% was executed by SIs and 5.8% was reported as XOFF.

In the second quarter of 2022:

- Total IRD traded notional reported by APAs and TVs in the EU increased by 15.8% to \$13.6 trillion in the second quarter of 2022 versus \$11.7 trillion in the first quarter of 2022, accounting for 25.3% of total European IRD traded notional.
- Euro-denominated IRD traded notional rose by 24.2% to \$10.8 trillion from \$8.7 trillion in the first quarter of 2022 and accounted for 79.1% of total EU IRD traded notional. US dollar-denominated IRD fell by 11.8% to \$1.5 trillion from \$1.7 trillion and represented 10.7% of total EU IRD traded notional. Sterling-denominated IRD comprised 1.5% of total EU traded notional, while other currencies accounted for 8.8%.
- Fixed-for-floating IRS traded notional dropped by 9.7% to \$5.9 trillion from \$6.6 trillion in the first quarter of 2022, while OIS increased by 36.2% to \$3.5 trillion from \$2.6 trillion. FRA traded notional grew by 66.3% to \$4.0 trillion from \$2.4 trillion over the same period. Fixed-for-floating IRS traded notional comprised 43.5% of total EU IRD traded notional, while OIS and FRAs accounted for 25.6% and 29.4%, respectively.
- 44.5% of total EU IRD traded notional took place on TVs, 50.0% was executed by SIs and 5.5% was reported as XOFF.

European and US IRD Trading Activity

In the first half of 2022:

- IRD traded notional reported in the US increased by 42.5% to \$156.7 trillion in the first half of 2022 versus \$110.0 trillion in the second half of 2021⁵. Combined EU, UK and US traded notional rose by 40.9% to \$257.9 trillion from \$183.1 trillion over the same period. US-reported traded notional accounted for 60.8% of the combined total, while the EU and UK made up 9.8% and 29.4%, respectively.
- Of the combined \$257.9 trillion in EU, UK and US IRD traded notional, 37.9% was denominated in US dollars, 38.4% was in euros and 11.4% was in sterling. Other currencies accounted for 12.2% of the total, with Australian dollar, Canadian dollar and Swedish krona representing the largest share.
- Total US dollar-denominated IRD traded notional rose by 40.6% to \$97.8 trillion from \$69.6 trillion in the second half of 2021. 77.1% of total US dollar-denominated IRD traded notional was reported in the US, 19.7% was reported in the UK and 3.2% was reported in the EU.
- Total euro-denominated IRD traded notional grew by 91.0% to \$99.1 trillion from \$51.9 trillion in the second half of 2021. Reporting of euro-denominated transactions was split between the three jurisdictions, with 19.6% in the EU, 29.2% in the UK and 51.3% in the US.
- Total sterling-denominated IRD traded notional fell by 23.9% to \$29.5 trillion from \$38.8 trillion in the second half of 2021. 58.5% of sterling-denominated IRD traded notional was reported in the UK, 40.2% was reported in the US and 1.3% was reported in the EU.

⁵ Based on data from the Depository Trust & Clearing Corporation (DTCC) swap data repository (SDR). This data covers only transactions required to be disclosed under US Commodity Futures Trading Commission (CFTC) regulations. Most recent data on US trading activity is available on the ISDA SwapsInfo website <http://swapsinfo.org>

- Single currency fixed-for-floating IRS accounted for 31.8% of total EU, UK and US IRD traded notional. OIS and FRAs made up 44.7% and 14.7%, respectively.

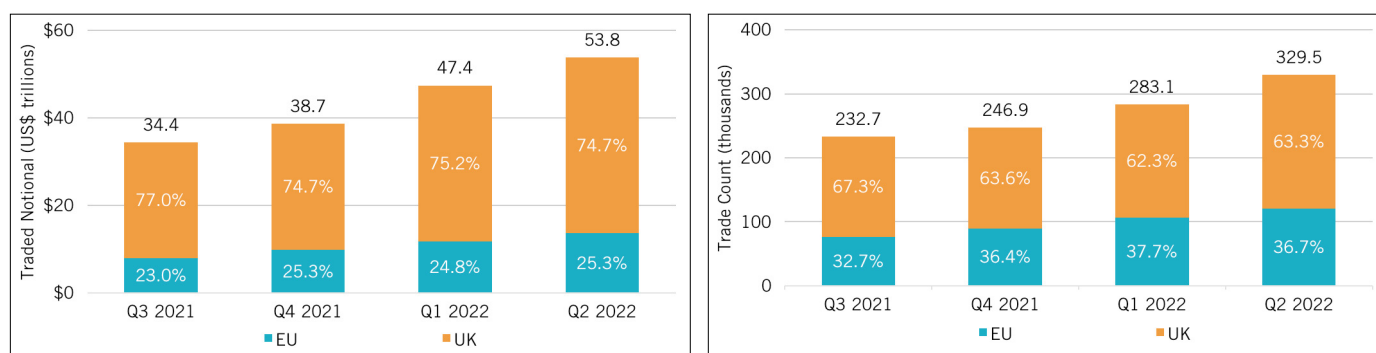
In the second quarter of 2022:

- IRD traded notional reported in the US decreased by 17.9% to \$70.7 trillion in the second quarter of 2022 versus \$86.1 trillion in the first quarter of 2022. Combined EU, UK and US traded notional declined by 6.8% to \$124.4 trillion from \$133.5 trillion over the same period. US-reported traded notional accounted for 56.8% of the combined total, while the EU and UK made up 10.9% and 32.3%, respectively.
- Of the combined \$124.4 trillion in EU, UK and US IRD traded notional, 32.9% was denominated in US dollars, 41.5% was in euros and 12.0% was in sterling. Other currencies accounted for 13.6% of the total, with Australian dollar, Canadian dollar and Swedish krona representing the largest share.
- Total US dollar-denominated IRD traded notional fell by 28.1% to \$40.9 trillion from \$56.9 trillion in the first quarter of 2022. 76.7% of total US dollar-denominated IRD traded notional was reported in the US, 19.8% was reported in the UK and 3.6% was reported in the EU.
- Total euro-denominated IRD traded notional grew by 9.0% to \$51.7 trillion from \$47.4 trillion in the first quarter of 2022. Reporting of euro-denominated transactions was split between the three jurisdictions, with 20.8% in the EU, 31.4% in the UK and 47.8% in the US.
- Total sterling-denominated IRD traded notional increased by 2.7% to \$14.9 trillion from \$14.6 trillion in the first quarter of 2022. 60.3% of sterling-denominated IRD traded notional was reported in the UK, 38.4% was reported in the US and 1.3% was reported in the EU.
- Single currency fixed-for-floating IRS accounted for 29.2% of total EU, UK and US IRD traded notional. OIS and FRAs made up 46.2% and 16.7%, respectively.

EUROPEAN IRD TRADING ACTIVITY

Total European IRD trading activity reported by APAs and TVs in the EU and UK grew by 13.4% to \$53.8 trillion in the second quarter of 2022 versus \$47.4 trillion the previous quarter. Total trade count increased by 16.4% to 329.5 thousand versus 283.1 thousand over the same period. Traded notional reported in the UK accounted for 74.7% of total European IRD traded notional, while UK-reported trade count made up 63.3% of the European total (see Chart 1)^{6,7}.

Chart 1: European IRD Traded Notional and Trade Count



Source: European APAs and TVs

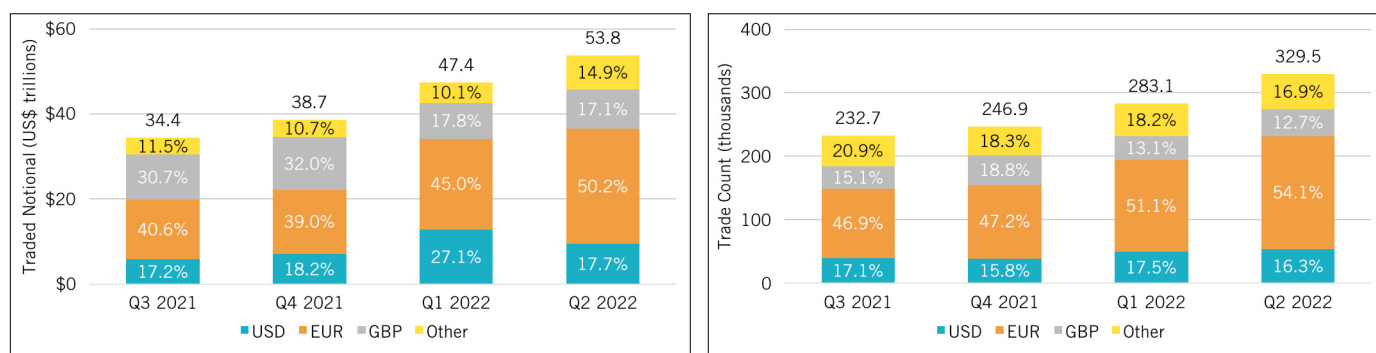
Euro-denominated IRD traded notional increased by 26.5% to \$27.0 trillion in the second quarter of 2022 from \$21.3 trillion in the first quarter of 2022 and accounted for 50.2% of total European traded notional. Euro-denominated contracts made up 54.1% of total European trade count (see Chart 2).

Sterling-denominated IRD traded notional grew by 9.1% to \$9.2 trillion in the second quarter of 2022 from \$8.4 trillion in the first quarter of 2022, while US dollar IRD traded notional fell by 25.9% to \$9.5 trillion from \$12.9 trillion over the same period.

Sterling-denominated transactions comprised 17.1% of total European traded notional and 12.7% of trade count, while US dollar contracts represented 17.7% of total European traded notional and 16.3% of trade count.

Other currencies accounted for 14.9% of total European IRD traded notional and 16.9% of total trade count, with Australian dollar and Swedish krona representing the largest share⁸.

Chart 2: European IRD Traded Notional and Trade Count by Currency



Source: European APAs and TVs

⁶ ISDA's dataset of European data starts in May 2021. See Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: May 2021 www.isda.org/a/h6TgE/Interest-Rate-Derivatives-Trading-Activity-Reported-in-EU-UK-and-US-Markets-May-2021.pdf

⁷ This report used to be published on a monthly basis. Starting with the first quarter of 2022, the report will be published quarterly

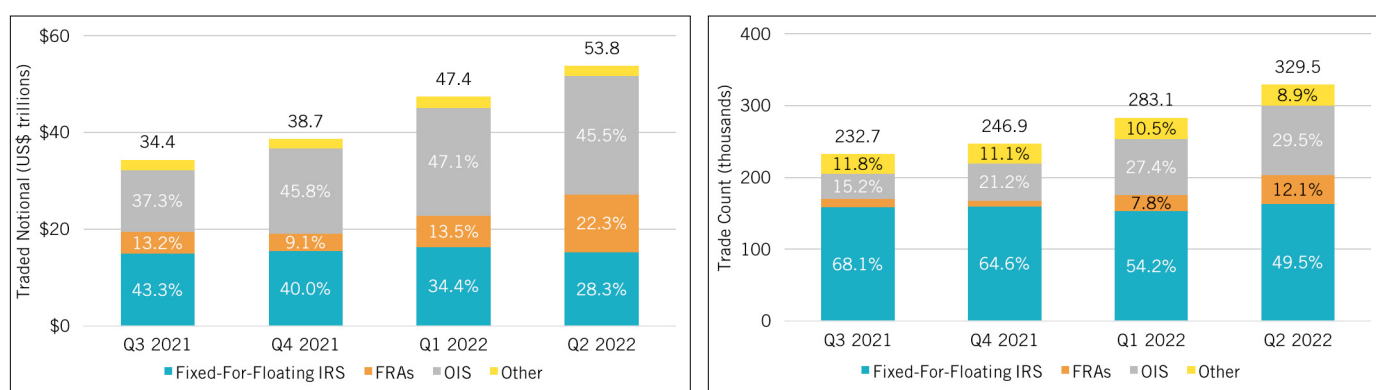
⁸ Other currencies include South African rand, Japanese yen, Swedish krona, Norwegian krone, Polish złoty, Czech koruna and 'other'. Cross-currency swaps are also included in other currencies

OIS traded notional increased by 9.5% to \$24.5 trillion in the second quarter of 2022 from \$22.4 trillion in the first quarter of 2022 and represented 45.5% of total European IRD traded notional. OIS contracts made up 29.5% of total European trade count (see Chart 3).

Fixed-for-floating IRS traded notional fell by 6.9% to \$15.2 trillion in the second quarter of 2022 from \$16.3 trillion the previous quarter. FRA traded notional rose by 86.5% to \$12.0 trillion from \$6.4 trillion over the same period.

Fixed-for-floating IRS accounted for 28.3% of total European IRD traded notional and 49.5% of trade count in the second quarter of 2022, while FRAs represented 22.3% and 12.1% of total European traded notional and trade count, respectively.

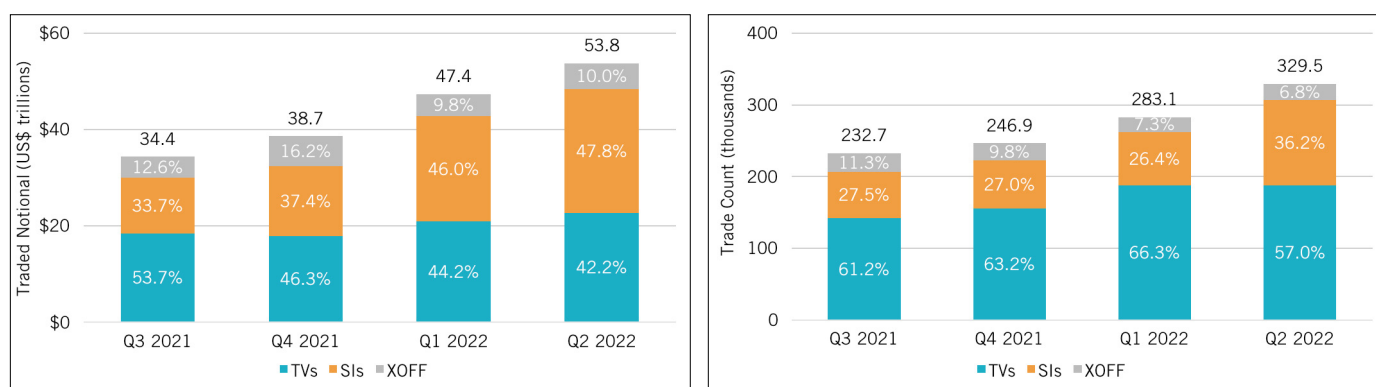
Chart 3: European IRD Traded Notional and Trade Count by Product



Source: European APAs and TVs

In the second quarter of 2022, 42.2% of total European IRD traded notional and 57.0% of trade count took place on TVs, 47.8% of traded notional and 36.2% of trade count was executed by SIs, and 10.0% of traded notional and 6.8% of trade count was reported as XOFF⁹ (see Chart 4).

Chart 4: European IRD Traded Notional and Trade Count by Execution Venue



Source: European APAs and TVs

⁹ The XOFF market identifier code is used for financial instruments admitted to trading or traded on a trading venue or for which a request for admission was made, where the transaction on that financial instrument is not executed on a trading venue, SI or organized trading platform outside of the EU and UK, or where an investment firm does not know it is trading with another investment firm acting as an SI

UK IRD TRADING ACTIVITY

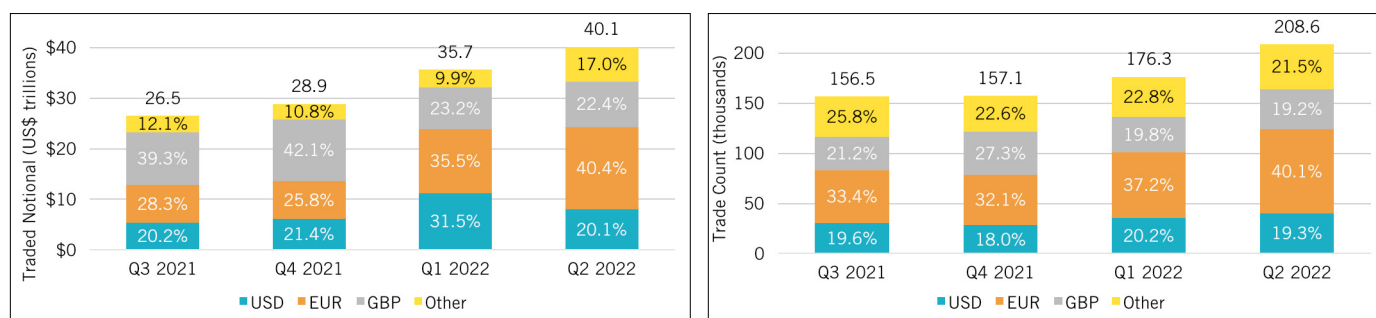
Total IRD traded notional reported by APAs and TVs in the UK rose by 12.6% to \$40.1 trillion in the second quarter of 2022 from \$35.7 trillion in the first quarter of 2022, while trade count increased by 18.3% to 208.6 thousand from 176.3 thousand over the same period. UK-reported trading activity accounted for 74.7% of total European IRD traded notional and 63.3% of total trade count (see Chart 1).

Sterling-denominated IRD traded notional rose by 9.1% to \$9.0 trillion in the second quarter of 2022 from \$8.3 trillion in the first quarter of 2022, while euro-denominated IRD traded notional increased by 28.1% to \$16.2 trillion from \$12.7 trillion over the same period. US dollar-denominated IRD traded notional dropped by 27.9% to \$8.1 trillion in the second quarter of 2022 from \$11.2 trillion the previous quarter.

Sterling-denominated transactions represented 22.4% of total UK IRD traded notional and 19.2% of total trade count, euro-denominated IRD accounted for 40.4% of total UK IRD traded notional and 40.1% of trade count, and US dollar-denominated IRD made up 20.1% of total UK IRD traded notional and 19.3% of trade count (see Chart 5).

Other currencies accounted for 17.0% of total UK IRD traded notional and 21.5% of total trade count. Australian dollar and Swedish krona represented the largest share of other currencies.

Chart 5: UK IRD Traded Notional and Trade Count by Currency

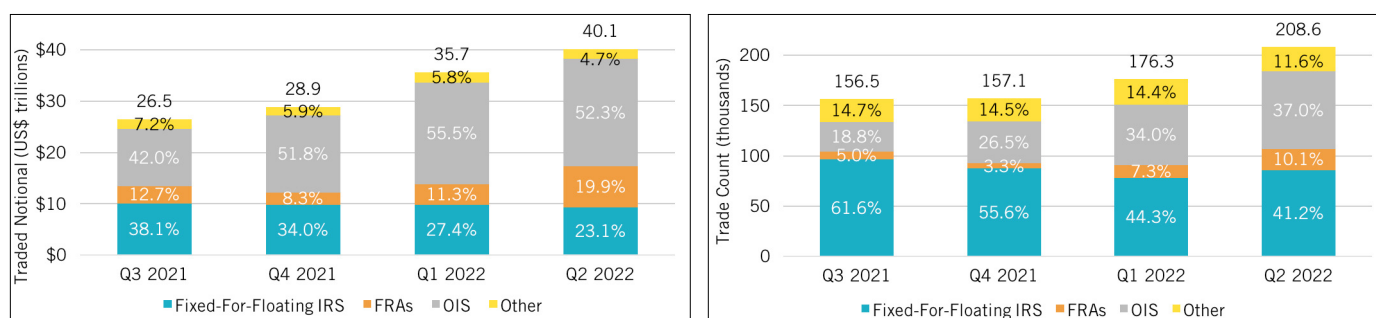


Source: European APAs and TVs

OIS traded notional grew by 6.1% to \$21.0 trillion in the second quarter of 2022 from \$19.8 trillion in the first quarter of 2022. Fixed-for-floating IRS traded notional decreased by 5.0% to \$9.3 trillion from \$9.8 trillion, while FRA traded notional rose by 98.6% to \$8.0 trillion from \$4.0 trillion over the same period.

OIS transactions accounted for 52.3% of total UK IRD traded notional and 37.0% of total trade count. Single currency fixed-for-floating IRS comprised 23.1% of total UK IRD traded notional and 41.2% of trade count, while FRAs made up 19.9% and 10.1% of total UK IRD traded notional and trade count, respectively (see Chart 6).

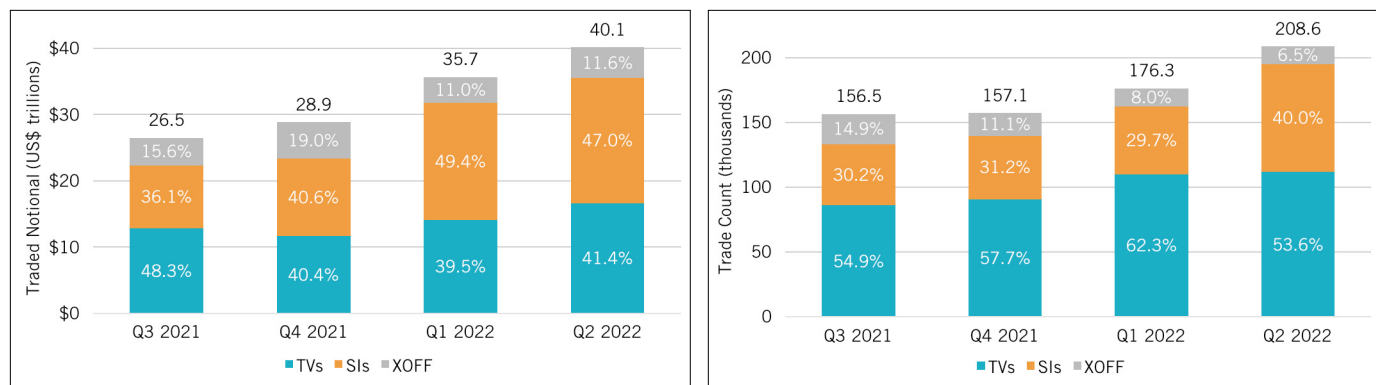
Chart 6: UK IRD Traded Notional and Trade Count by Product



Source: European APAs and TVs

In the second quarter of 2022, 41.4% of total UK IRD traded notional and 53.6% of trade count occurred on TVs, 47.0% of traded notional and 40.0% of trade count was executed by SIs, and 11.6% of traded notional and 6.5% of trade count was reported as XOFF (see Chart 7).

Chart 7: UK IRD Traded Notional and Trade Count by Execution Venue



Source: European APAs and TVs

EU IRD TRADING ACTIVITY

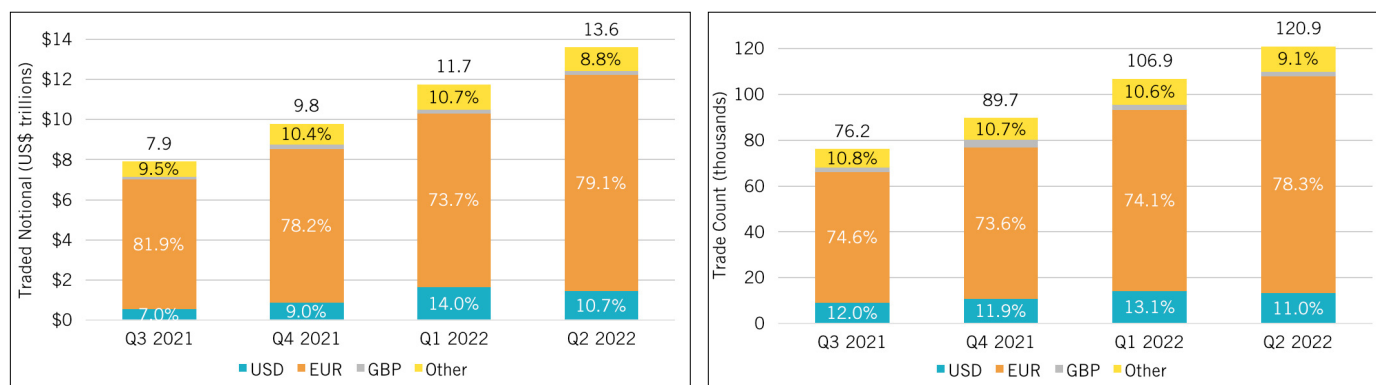
Total IRD traded notional reported by APAs and TVs in the EU increased by 15.8% to \$13.6 trillion in the second quarter of 2022 compared to \$11.7 trillion the previous quarter. Trade count rose by 13.2% to 120.9 thousand from 106.9 thousand over the same period. EU-reported IRD trading activity comprised 25.3% of total European IRD traded notional and 36.7% of trade count (see Chart 1).

Euro-denominated IRD traded notional grew by 24.2% to \$10.8 trillion in the second quarter of 2022 from \$8.7 trillion in the first quarter of 2022 and comprised 79.1% of total EU traded notional. The number of contracts denominated in euro increased by 19.6% to 94.7 thousand from 79.2 thousand and accounted for 78.3% of total EU trade count.

US dollar-denominated IRD traded notional declined by 11.8% to \$1.5 trillion in the second quarter of 2022 from \$1.7 trillion the previous quarter. US dollar activity accounted for 10.7% of total EU IRD traded notional and 11.0% of trade count. Sterling-denominated transactions represented 1.5% and 1.6% of total EU IRD traded notional and trade count, respectively (see Chart 8).

Other currencies accounted for 8.8% of total EU IRD traded notional and 9.1% of trade count. Swedish krona and Canadian dollar represented the largest share of other currencies.

Chart 8: EU IRD Traded Notional and Trade Count by Currency



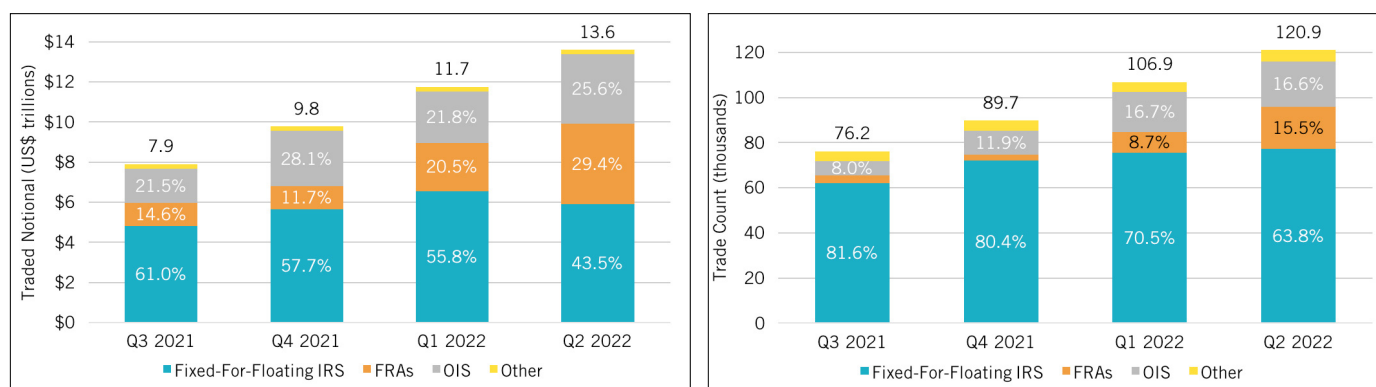
Source: European APAs and TVs

The composition of swaps reported in the EU differed from those reported in the UK, with a larger share of fixed-for-floating IRS and a smaller proportion of OIS.

Fixed-for-floating IRS traded notional declined by 9.7% to \$5.9 trillion in the second quarter of 2022 versus \$6.6 trillion in the first quarter of 2022 and comprised 43.5% of the EU total. Fixed-for-floating IRS made up 63.8% of total EU trade count (see Chart 9).

OIS traded notional grew by 36.2% to \$3.5 trillion in the second quarter of 2022 from \$2.6 trillion the previous quarter. FRA traded notional rose by 66.3% to \$4.0 trillion from \$2.4 trillion over the same period. OIS and FRAs accounted for 25.6% and 29.4% of total EU IRD traded notional and 16.6% and 15.5% of trade count, respectively.

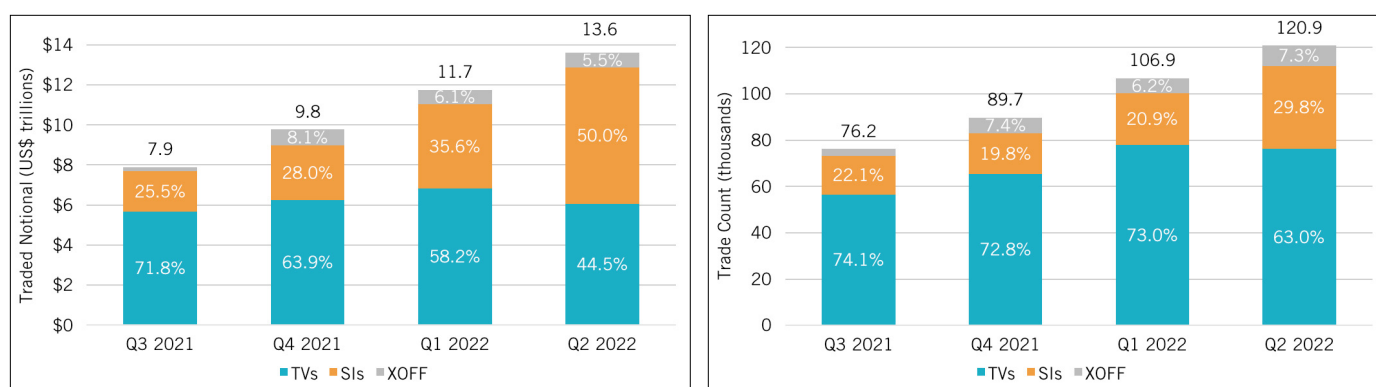
Chart 9: EU IRD Traded Notional and Trade Count by Product



Source: European APAs and TVs

44.5% of total EU IRD traded notional and 63.0% of trade count took place on TVs, while 50.0% of total traded notional and 29.8% of trade count was executed by SIs. 5.5% of EU IRD traded notional and 7.3% of trade count was reported as XOFF (see Chart 10).

Chart 10: EU IRD Traded Notional and Trade Count by Execution Venue



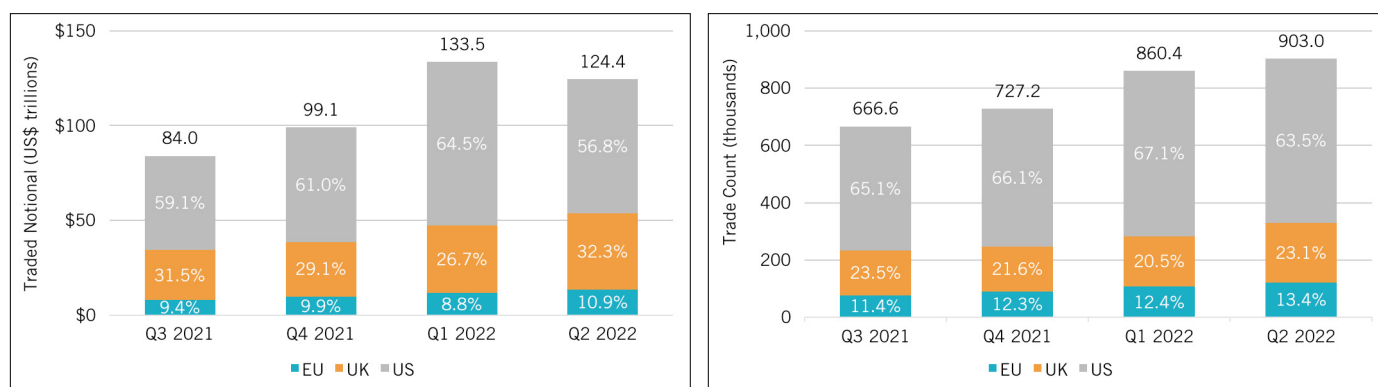
Source: European APAs and TVs

EUROPEAN AND US IRD TRADING ACTIVITY

Total IRD traded notional reported in the US decreased by 17.9% to \$70.7 trillion in the second quarter of 2022 from \$86.1 trillion in the first quarter of 2022, and trade count fell by 0.7% to 573.5 thousand from 577.3 thousand¹⁰. Combined EU, UK and US traded notional fell by 6.8% to \$124.4 trillion from \$133.5 trillion. Combined trade count increased by 4.9% to 903.0 thousand from 860.4 thousand over the same period.

US-reported traded notional accounted for 56.8% of combined EU, UK and US traded notional, while the EU and UK comprised 10.9% and 32.3%, respectively. US-reported transactions represented 63.5% of total trade count, while the EU and UK accounted for 13.4% and 23.1%, respectively (see Chart 11).

Chart 11: US, UK and EU Traded Notional and Trade Count

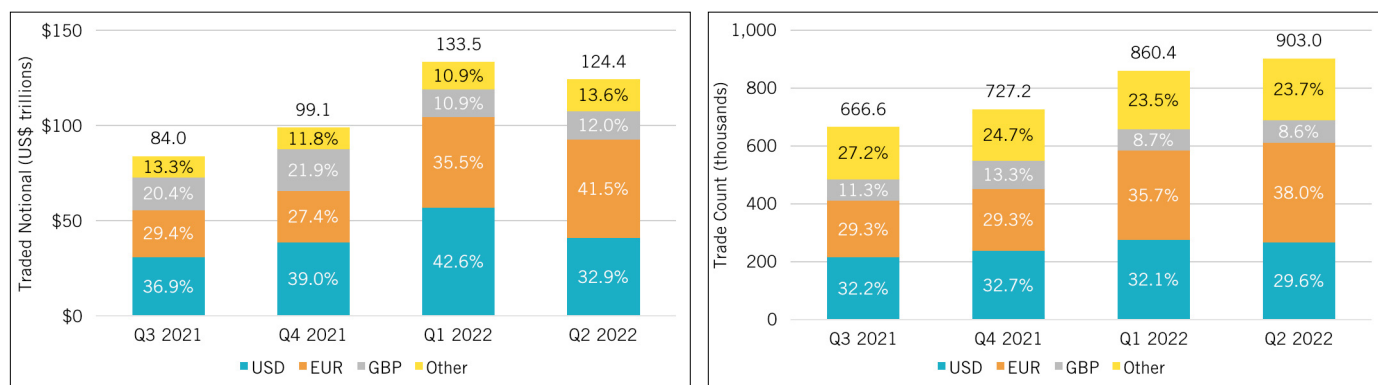


Source: DTCC SDR, European APAs and TVs

Of the combined \$124.4 trillion in EU, UK and US IRD traded notional, 32.9% was denominated in US dollars, 41.5% was in euros and 12.0% was in sterling. Of the 903.0 thousand in combined trade count, 29.6% was denominated in US dollars, 38.0% was in euros and 8.6% was in sterling (see Chart 12).

Other currencies accounted for 13.6% of combined traded notional and 23.7% of trade count. Australian dollar, Canadian dollar and Swedish krona represented the largest share of other currencies.

Chart 12: Combined US, UK and EU IRD Traded Notional and Trade Count by Currency



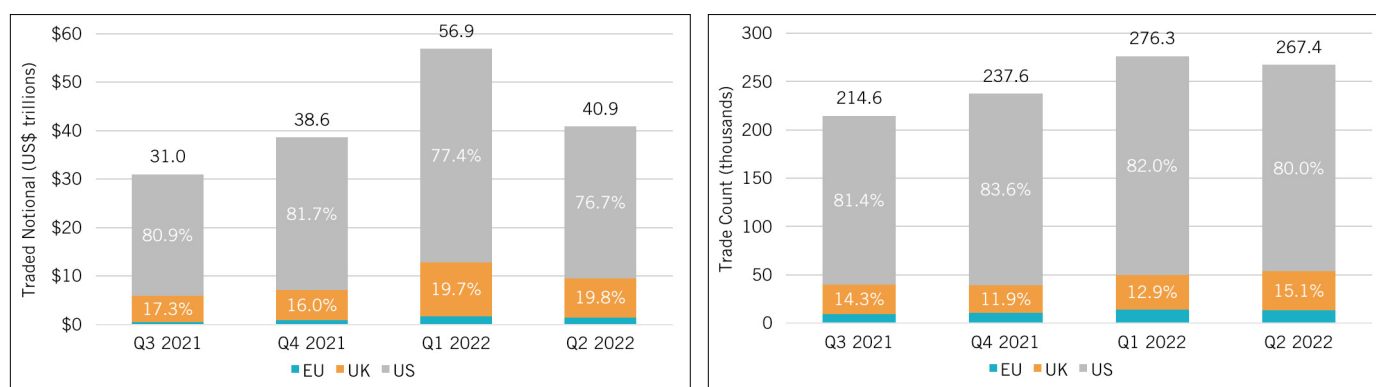
Source: DTCC SDR, European APAs and TVs

¹⁰ Based on data from the DTCC SDR. This data covers only transactions required to be disclosed under US CFTC regulations. Most recent data on US trading activity is available on the ISDA SwapsInfo <http://swapsinfo.org>

Total US dollar-denominated IRD traded notional fell by 28.1% to \$40.9 trillion in the second quarter of 2022 from \$56.9 trillion in the first quarter of 2022. Trade count decreased by 3.2% to 267.4 thousand from 276.3 thousand over the same period.

76.7% of total US dollar-denominated IRD traded notional and 80.0% of total trade count was reported in the US, while 19.8% of traded notional and 15.1% of trade count was reported in the UK (see Chart 13).

Chart 13: Combined US Dollar-denominated IRD Traded Notional and Trade Count by Jurisdiction

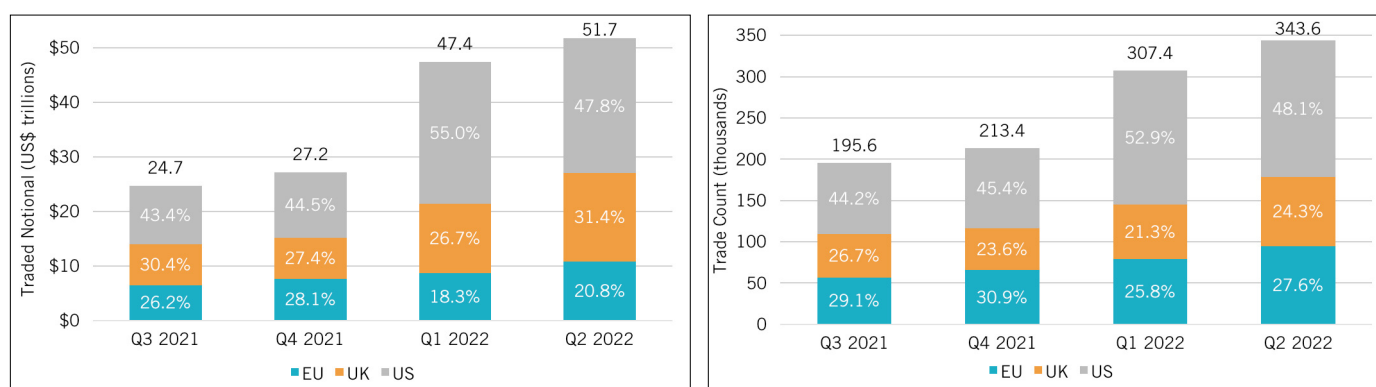


Source: DTCC SDR, European APAs and TVS

Total euro-denominated IRD traded notional increased by 9.0% to \$51.7 trillion in the second quarter of 2022 from \$47.4 trillion in the first quarter of 2022, while trade count rose by 11.8% to 343.6 thousand from 307.4 thousand.

Reporting of euro-denominated IRD transactions was split between the three jurisdictions: 20.8% of total euro-denominated traded notional and 27.6% of trade count was reported in the EU, 31.4% of total traded notional and 24.3% of trade count was reported in the UK, and 47.8% of traded notional and 48.1% of trade count was reported in the US (see Chart 14).

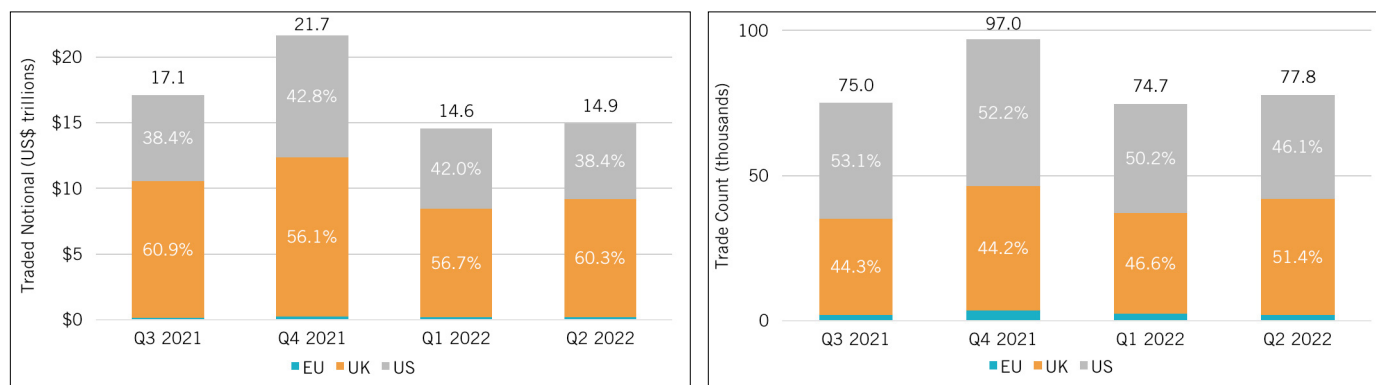
Chart 14: Combined Euro-denominated IRD Traded Notional and Trade Count by Jurisdiction



Source: DTCC SDR, European APAs and TVS

Total sterling-denominated IRD traded notional increased by 2.7% to \$14.9 trillion in the second quarter of 2022 from \$14.6 trillion the previous quarter, while trade count rose by 4.1% to 77.8 thousand from 74.7 thousand over the same period. 60.3% of sterling-denominated IRD traded notional and 51.4% of trade count was reported in the UK and 38.4% of traded notional and 46.1% of trade count was reported in the US (see Chart 15).

Chart 15: Combined Sterling-denominated IRD Traded Notional and Trade Count by Jurisdiction



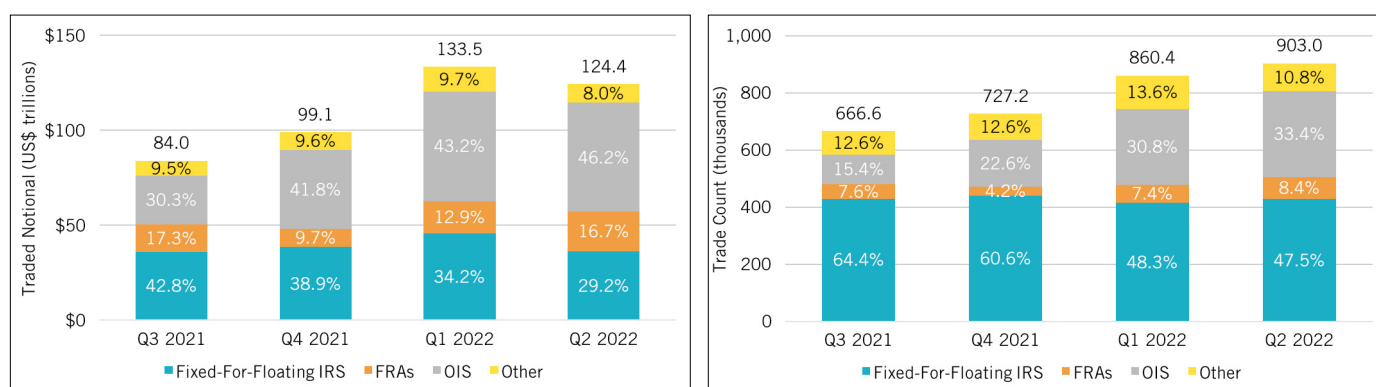
Source: DTCC SDR, European APAs and TVs

Total OIS traded notional fell by 0.5% to \$57.4 trillion in the second quarter of 2022 from \$57.7 trillion the previous quarter and represented 46.2% of combined IRD traded notional. Trade count rose by 13.7% to 301.3 thousand in the second quarter of 2022 from 264.9 thousand in the first quarter of 2022 and accounted for 33.4% of combined trade count.

Single currency fixed-for-floating IRS traded notional dropped by 20.3% to \$36.3 trillion in the second quarter of 2022 from \$45.6 trillion in the first quarter of 2022. Trade count climbed by 3.2% to 428.7 thousand from 415.3 thousand over the same period. Fixed-for-floating IRS accounted for 29.2% of combined EU, UK and US IRD traded notional and 47.5% of combined trade count.

FRA traded notional grew by 20.9% to \$20.8 trillion in the second quarter of 2022 from \$17.2 trillion in the first quarter of 2022. FRA trade count increased by 19.2% to 75.7 thousand from 63.5 thousand over the same period. FRAs accounted for 16.7% of combined EU, UK and US IRD traded notional and 8.4% of trade count (see Chart 16).

Chart 16: Combined US, UK and EU IRD Traded Notional and Trade Count by Product



Source: DTCC SDR, European APAs and TVs

APPENDIX 1: LIST OF MAJOR VENUES REPORTING OTC IRD TRANSACTIONS INCLUDED IN THE ISDA EUROPEAN IRD MARKETS DATASET

Venue Name	Venue Type	MIC	Region
Aurel BGC Paris	OTF	AURO	EU
BGC Brokers LP	OTF	BGCO	UK
Bloomberg BV APA	APA	BAPE	EU
Bloomberg BV MTF	MTF	BTFE	EU
Bloomberg UK APA	APA	BAPA	UK
Bloomberg UK MTF	MTF	BMTF	UK
GFI Brokers Limited	OTF	GFBO	UK
GFI Paris	OTF	GFPO	EU
GFI Securities Limited	OTF	GFSO	UK
ICAP EU OTF	OTF	ICOT	EU
ICAP Global Derivatives MTF	MTF	IGDL	UK
ICAP Securities OTF	OTF	IOTF	UK
iSWAP EU MTF	MTF	ISWP	EU
TP ICAP EU MTF	MTF	TPIC	EU
TP ICAP UK MTF	MTF	ICPM	UK
TRADEcho NL	APA	ECEU	EU
TRADEcho UK	APA	ECHO	UK
Tradeweb BV APA	APA	TWEA	EU
Tradeweb BV MTF	MTF	TWEM	EU
Tradeweb UK APA	APA	TREA	UK
Tradeweb UK MTF	MTF	TREU	UK
Tradition	OTF	TCDS	UK
Trad-X EU	MTF	TRXE	EU
Trad-X UK	MTF	TRDX	UK
Trax APA	APA	TRAX	UK
Trax NL APA	APA	TRNL	EU
TSAF OTC	OTF	TSAF	EU
Tullett Prebon EU OTF	OTF	TPEU	EU
Tullett Prebon Europe MTF	MTF	TPEL	UK
Tullett Prebon Europe OTF	OTF	TPEO	UK

APPENDIX 2: METHODOLOGY

European Data

ISDA's analysis of European-reported IRD trading data is based on transactions publicly reported by eight European APAs and 22 TV¹¹s.

Under European post-trade reporting requirements, "[i]nvestment firms which, either on own account or on behalf of clients, conclude transactions in bonds, structured finance products, emission allowances and derivatives traded on a trading venue shall make public the volume and price of those transactions and the time at which they were concluded"¹².

Trade information must be publicly disseminated either through an APA or by a TV through which a transaction was executed¹³. As of August 2022, there were 15 active APAs registered on the European Securities and Markets Authority's (ESMA) website¹⁴. In the UK, there were five APAs registered by the Financial Conduct Authority (FCA)¹⁵.

While ISDA's data set doesn't include all APAs and TVs that are registered with ESMA and the FCA, the trades reported by the 30 APAs and TVs included in this analysis are believed to cover most over-the-counter (OTC) IRD activity in Europe.

UK IRD trading activity is measured by IRD traded notional and trade count reported by APAs and TVs located in the UK, while EU IRD trading activity is measured by IRD traded notional and trade count reported by APAs and TVs located in the EU. Of the 30 APAs and TVs covered by this analysis, 17 are located in the UK and 13 are located in the EU.

To collect the data, ISDA set up daily feeds from the eight APAs and 22 TV¹⁶s. ISDA also set up a data feed from the Association of National Numbering Agencies' Derivatives Service Bureau to download new International Securities Identification Numbers (ISINs) for IRD transactions¹⁷. By matching IRD ISINs with all daily reported transactions that include various asset classes (equity, fixed income derivatives, etc), ISDA eliminated all non-IRD transactions and kept only the IRD data.

Using ISIN data, ISDA identified IRD instrument type (swap, option, forward, etc), IRD product taxonomy (fixed-for-floating IRS, FRAs, OIS, etc), underlying reference rate and tenor. Using trade details published by APAs and TVs, ISDA identified publication ID, trade data, publication data, venue of execution, notional amount, notional currency, cleared status and supplementary flags.

The ISDA data set includes only new trades. All cancelled transactions are removed and amended trades are updated using the original ID field. Transactions reported with a four-week aggregation flag and volume omission flag are also removed from the data set.

Reported notional is converted to US dollars based on daily foreign exchange (FX) rates. All reported transactions are aggregated on a daily basis. Monthly traded notional referenced in this report represents the sum of converted traded notional of all transactions executed during the month. Monthly trade count represents the number of all transactions executed during the month.

Due to post-trade transparency deferrals, the majority of European transactions are published with a four- to five-week delay.

¹¹ The list of APAs and TVs is included in Appendix 1

¹² Markets in Financial Instruments Regulation Article 21 www.esma.europa.eu/databases-library/interactive-single-rulebook/clone-mifir/article-21

¹³ See Appendix 2 in the Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: May 2021 for more detailed information on post-trade reporting requirements in Europe and US www.isda.org/a/MdMgE/Interest-Rate-Derivatives-Trading-Activity-Reported-in-EU-UK-and-US-Markets.pdf

¹⁴ European Securities and Markets Authority (ESMA) List of Registers https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_upreg

¹⁵ Financial Conduct Authority, The Financial Services Register https://register.fca.org.uk/s/resources#Other_registers

¹⁶ Most APAs and TVs display data only for a short period of time and no historical data is available

¹⁷ Most APAs and TVs don't disclose asset class data and publish all transactions ISINs

US Data

Analysis of US IRD is based on data from the DTCC SDR that only covers transactions required to be disclosed under US CFTC regulations¹⁸.

In the US, the CFTC swap reporting rules were finalized in December 2011 and required all traded swaps to be reported by the end of 2013. These rules require key swap transaction and pricing data to be reported to US-registered SDRs as soon as technologically practicable after execution.

There are three major SDRs in the US: DTCC SDR (reports all asset classes); CME (reports all asset classes except for equity); and ICE Trade Vault (reports credit, FX and commodities)¹⁹. Almost all OTC IRD are reported by the DTCC SDR.

The DTCC SDR reports execution time stamp, effective date, expiration date, asset class, product taxonomy, notional amount, notional currency, underlying reference rate, execution venue, cleared status and other trade details²⁰.

ISDA analysis includes only new transactions. All cancelled transactions are removed and amended trades are updated using the dissemination ID field. Reported notional is converted to US dollars based on daily FX rates. All reported transactions are aggregated on a daily basis.

Delays in reporting (generally 15 or 30 minutes, with a maximum of 24 business hours) are allowed for block trades (transactions with a notional above the minimum block size for the relevant asset class) and large notional trades.

Data Limitations

While ISDA believes this data covers the majority of OTC IRD transactions in Europe, it doesn't capture 100% of the market. First, it doesn't cover all APAs and TVs that are registered with ESMA and the FCA. Second, it captures only transactions that are subject to post-trade transparency reporting requirements. OTC derivatives that are not traded on TVs are considered 'traded on a trading venue' (TOTV) – and are therefore subject to the reporting and transparency requirements – if they share the same reference data details as derivatives traded on TVs²¹. Therefore, OTC derivatives not traded on TVs that are not TOTV are not captured.

When European counterparties face US entities on a swap execution facility (SEF), ESMA does not require EU firms to systematically republish information in the EU about transactions executed on TVs outside the EU that are subject to transparency provisions similar to those applicable to EU TVs. Under US rules, SEFs are required to send relevant trade details to an SDR for real-time public dissemination²². Therefore, these trades will be captured in US trading activity only, resulting in a potential understatement of European traded notional.

Trades executed on multilateral trading facilities (MTFs) and organized trading facilities (OTFs) between EU and US counterparties may be disseminated to the public twice. Since EU and US reporting rules have not been determined equivalent, trades executed on MTFs and OTFs are viewed as off-facility transactions for US real-time reporting purposes and are subject to the CFTC reporting rules. At the same time, MTFs and OTFs have an obligation to send trade details for public dissemination. Therefore, these trades may be double counted in European and US combined trading activity analysis.

¹⁸ CFTC 17 CFR Part 43 Real-Time Public Reporting of Swap Transaction Data www.cftc.gov/sites/default/files/idc/groups/public/@lrfederalregister/documents/file/2011-33173a.pdf

¹⁹ Bloomberg SDR was closed in August 2018 and all transactions were moved to DTCC SDR

²⁰ DTCC SDR services <https://pddata.dtcc.com/gtr/cftc/dashboard.do>

²¹ ESMA Clarifies Traded On a Trading Venue Under MIFID II www.esma.europa.eu/press-news/esma-news/esma-clarifies-traded-trading-venue-under-mifid-ii

²² A Practical Guide to Navigating Derivatives Trading on US/EU Recognized Trading Venues www.isda.org/a/CRmEE/ISDA-Publishes-Guide-to-Trading-on-US-EU-Trading-Venues-FINAL.pdf

The majority of block trades and large notional off-facility swaps (LNOFs) are reported to the DTCC SDR with a capped notional. Block trades and LNOFs are transactions above a designated notional threshold (block size). These transactions are reported with a delay at the capped amounts (cap size). As ISDA cleans up DTCC SDR data, all transactions that are reported with a '+' indicating a block trade are counted at the minimum notional. For example, a transaction reported with \$1,000,000+ notional would be counted as \$1,000,000 traded notional. As the result, total DTCC IRD traded notional is likely to be understated.



ISDA has published other recent research papers:

- ***SwapsInfo First Half of 2022 and the Second Quarter of 2022 Review***

<https://www.isda.org/a/6BagE/SwapsInfo-First-Half-of-2022-and-the-Second-Quarter-of-2022-Review-Full-Report.pdf>

- ***Transition to RFRs Review: First Half of 2022 and the Second Quarter of 2022***

<https://www.isda.org/a/jQagE/Transition-to-RFRs-Review-First-Half-of-2022-and-the-Second-Quarter-of-2022.pdf>

- ***Demystifying Derivatives Trading in the EU***

<https://www.isda.org/a/zAWgE/Demystifying-Derivatives-Trading-in-the-EU.pdf>

ISDA has expanded its SwapsInfo website to include interest rate derivatives (IRD) trading activity reported in the EU and UK. The new data is based on transactions publicly reported by 30 European APAs and TVs. European data is based on the location of reporting venues (EU versus UK), product taxonomy, currency, tenor, and execution venue. To access the expanded SwapsInfo website, [click here](#).

For questions on ISDA Research, please contact:

Olga Roman

Head of Research

International Swaps and Derivatives Association, Inc. (ISDA)

Office: 212-901-6017

oroman@isda.org

ABOUT ISDA

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 990 member institutions from 78 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers,

government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges,

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