## Research Note

Interest Rate Derivatives Trading Activity Reported in EU, UK and US Markets: Third Quarter of 2023 and Year-to-September 30, 2023

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.



#### European IRD Trading Activity<sup>1</sup>

#### In the third quarter of 2023:

- European IRD traded notional reported by APAs and TVs in the EU and UK rose by 35.9% to \$54.6 trillion in the third quarter of 2023 from \$40.2 trillion in the third quarter of 2022.
- Euro-denominated IRD traded notional grew by 55.6% to \$34.8 trillion in the third quarter of 2023 compared to \$22.4 trillion in the third quarter of 2022 and accounted for 63.8% of total European IRD traded notional. Sterling-denominated traded notional increased by 6.6% to \$7.6 trillion from \$7.1 trillion over the same period and comprised 13.8% of the European total. Contracts denominated in US dollars climbed by 12.6% to \$7.4 trillion from \$6.6 trillion, equating to 13.6% of European IRD traded notional. Other currencies made up 8.8% of total European IRD traded notional<sup>2</sup>.
- Overnight index swaps (OIS) traded notional rose by 39.9% to \$31.1 trillion from \$22.2 trillion and accounted for 56.9% of the European total. Fixed-for-floating interest rate swaps (IRS) traded notional fell by 7.2% to \$10.7 trillion from \$11.5 trillion and comprised 19.5% of total European IRD traded notional. Forward rate agreement (FRA) traded notional increased to \$10.0 trillion from \$4.8 trillion and represented 18.3% of the European total.
- 35.4% of European IRD traded notional took place on TVs and 40.0% was executed by systematic internalizers (SIs)<sup>3</sup>. The remaining 24.6% of IRD traded notional was reported as XOFF<sup>4</sup>.

#### Year-to-September 30, 2023:

- European IRD traded notional reported by APAs and TVs in the EU and UK increased by 16.2% to \$156.2 trillion in the year to September 2023 from \$134.4 trillion in the first nine months of 2022<sup>5</sup>.
- Euro-denominated IRD traded notional rose by 35.0% to \$92.5 trillion in the year to September 2023 versus \$68.5 trillion in the nine months to September 30, 2022, and accounted for 59.2% of total European IRD traded notional. Contracts denominated in US dollars dropped by 9.5% to \$26.5 trillion from \$29.3 trillion, representing 17.0% of the European total. Sterling-denominated transactions grew by 8.8% to \$23.4 trillion from \$21.5 trillion and made up 15.0% of total European traded notional. Other currencies comprised 8.9% of total European IRD traded notional.
- OIS traded notional grew by 42.7% to \$93.7 trillion from \$65.6 trillion and accounted for 60.0% of the European total. Fixed-for-floating IRS traded notional fell by 18.5% to \$33.3 trillion from \$40.9 trillion and comprised 21.3% of European IRD traded notional. FRA traded notional increased by 0.3% to \$22.5 trillion from \$22.4 trillion and represented 14.4% of total European IRD traded notional.
- 34.6% of European IRD traded notional occurred on TVs and 43.3% was executed by SIs. The remaining 22.1% of IRD traded notional was reported as XOFF.

<sup>&</sup>lt;sup>1</sup> European interest rate derivatives (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

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

<sup>&</sup>lt;sup>3</sup> 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

<sup>&</sup>lt;sup>4</sup> 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

<sup>&</sup>lt;sup>5</sup> Historical European IRD traded notional and trade count, including EU and UK data, has been restated for 2022 and 2023 due to a database error



#### **UK IRD Trading Activity**

#### In the third quarter of 2023:

- IRD traded notional reported by APAs and TVs in the UK rose by 22.7% to \$35.1 trillion in the third quarter of 2023 versus \$28.6 trillion in the third quarter of 2022, representing 64.2% of total European IRD traded notional.
- Euro-denominated IRD traded notional increased by 32.1% to \$17.2 trillion in the third quarter of 2023 compared to \$13.0 trillion in the third quarter of 2022. Sterling-denominated IRD traded notional grew by 8.3% to \$7.4 trillion from \$6.8 trillion, while US-dollar-denominated IRD rose by 23.4% to \$6.6 trillion from \$5.4 trillion. Euro-, sterling- and US-dollar-denominated transactions accounted for 49.0%, 21.1% and 18.9% of UK IRD traded notional, respectively. Other currencies made up 10.9% of UK IRD traded notional.
- OIS traded notional rose by 32.5% to \$22.6 trillion in the third quarter of 2023 from \$17.0 trillion in the third quarter of 2022. Fixed-for-floating IRS traded notional fell by 21.5% to \$5.7 trillion from \$7.2 trillion, while FRA transactions grew by 47.3% to \$4.2 trillion from \$2.9 trillion over the same period. OIS accounted for 64.4% of total UK IRD traded notional, fixed-for-floating IRS comprised 16.1% and FRAs represented 12.1%.
- 40.9% of UK IRD traded notional took place on TVs, 41.8% was executed by SIs and 17.4% was reported as XOFF.

#### Year-to-September 30, 2023:

- IRD traded notional reported by APAs and TVs in the UK increased by 6.3% to \$105.5 trillion in the year to September 30, 2023 compared to \$99.2 trillion in the nine months to September 30, 2022, accounting for 67.5% of total European IRD traded notional.
- Euro-denominated IRD traded notional grew by 17.3% to \$48.1 trillion versus \$41.0 trillion and sterling-denominated IRD traded notional increased by 10.0% to \$22.9 trillion from \$20.9 trillion. US-dollar-denominated IRD dropped by 6.6% to \$23.2 trillion from \$24.9 trillion. Euro-, sterling- and US-dollar-denominated transactions made up 45.6%, 21.7% and 22.0% of UK IRD traded notional, respectively. Other currencies comprised 10.6% of UK IRD traded notional.
- OIS traded notional rose by 29.1% to \$70.6 trillion from \$54.6 trillion. Fixed-for-floating IRS traded notional dropped by 31.0% to \$17.6 trillion from \$25.6 trillion, while FRA transactions fell by 20.4% to \$11.3 trillion from \$14.2 trillion. OIS accounted for 66.9% of total UK IRD traded notional, fixed-for-floating IRS comprised 16.7% and FRAs represented 10.7%.
- 36.3% of UK IRD traded notional occurred on TVs, 47.0% was executed by SIs and 16.8% was reported as XOFF.

#### **EU IRD Trading Activity**

#### In the third quarter of 2023:

- IRD traded notional reported by APAs and TVs in the EU increased by 68.3% to \$19.6 trillion in the third quarter of 2023 versus \$11.6 trillion in the third quarter of 2022, accounting for 35.8% of total European IRD traded notional.
- Euro-denominated IRD traded notional rose by 88.3% to \$17.6 trillion in the third quarter of 2023 compared to \$9.4 trillion in the third quarter of 2022 and represented 90.1% of total EU IRD traded notional. US-dollar-denominated IRD fell by 35.0% to \$792.4 billion from \$1.2 trillion and represented 4.0% of EU IRD traded notional. Sterling-denominated IRD comprised 0.7% of EU traded notional, while other currencies made up 5.1%.



- OIS traded notional grew by 64.2% to \$8.5 trillion compared to \$5.2 trillion, fixed-for-floating IRS traded notional rose by 16.9% to \$5.0 trillion from \$4.3 trillion and FRA traded notional increased to \$5.8 trillion from \$1.9 trillion. OIS, FRAs and fixed-for-floating IRS comprised 43.5%, 29.5% and 25.6% of EU IRD traded notional, respectively.
- 25.6% of EU IRD traded notional took place on TVs, 36.9% was executed by SIs and 37.5% was reported as XOFF.

#### Year-to-September 30, 2023:

- IRD traded notional reported by APAs and TVs in the EU rose by 44.0% to \$50.7 trillion in the year to September 30, 2023 versus \$35.2 trillion in the nine months to September 30, 2022, accounting for 32.5% of total European IRD traded notional.
- Euro-denominated IRD traded notional grew by 61.4% to \$44.4 trillion compared to \$27.5 trillion and represented 87.4% of EU IRD traded notional. US-dollar-denominated IRD fell by 25.6% to \$3.3 trillion from \$4.4 trillion and made up 6.5% of EU IRD traded notional. Sterling-denominated IRD comprised 0.9% of EU traded notional, while other currencies accounted for 5.2%.
- OIS traded notional rose by 110.1% to \$23.1 trillion in the year to September 30, 2023 compared to \$11.0 trillion in the first nine months of 2022. Fixed-for-floating IRS traded notional grew by 2.2% to \$15.7 trillion from \$15.4 trillion and FRA traded notional increased by 36.1% to \$11.2 trillion from \$8.2 trillion. OIS, FRAs and fixed-for-floating IRS comprised 45.6%, 22.0% and 31.0% of EU IRD traded notional, respectively.
- 31.0% of EU IRD traded notional occurred on TVs, 35.7% was executed by SIs and 33.3% was reported as XOFF.

#### **European and US IRD Trading Activity**

#### In third quarter of 2023:

- IRD traded notional reported in the US rose by 6.5% to \$73.3 trillion in the third quarter of 2023 compared to \$68.8 trillion in the third quarter of 2022<sup>6</sup>. Combined EU, UK and US traded notional grew by 17.3% to \$127.9 trillion from \$109.0 trillion over the same period. US-reported traded notional accounted for 57.3% of the combined total, while the EU and UK made up 15.3% and 27.4%, respectively.
- Of the combined \$127.9 trillion in EU, UK and US IRD traded notional, 28.8% was denominated in US dollars, 45.8% was in euros and 12.1% was in sterling. Other currencies accounted for 13.2% of the total, with Australian dollar, Japanese yen and Canadian dollar representing the largest share.
- US-dollar-denominated IRD traded notional declined by 5.3% to \$36.9 trillion compared to \$38.9 trillion. 79.9% of US-dollar-denominated IRD traded notional was reported in the US, 18.0% was reported in the UK and 2.1% was reported in the EU.
- Euro-denominated IRD traded notional rose by 33.5% to \$58.6 trillion from \$43.9 trillion, of which 30.1% was reported in the EU, 29.3% was reported in the UK and 40.6% was reported in the US.
- Sterling-denominated IRD traded notional grew by 20.0% to \$15.5 trillion compared to \$12.9 trillion. 47.8% of sterling-denominated IRD traded notional was reported in the UK, 51.3% was reported in the US and 0.9% was reported in the EU.
- OIS accounted for 63.0% of total EU, UK and US IRD traded notional, while single currency fixed-for-floating IRS and FRAs made up 16.3% and 10.7%, respectively.

<sup>&</sup>lt;sup>6</sup> Based on data from the Depository Trust & Clearing Corporation (DTCC) swap data repository (SDR). This data only covers 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



#### Year-to-September 30, 2023:

- IRD traded notional reported in the US increased by 12.0% to \$251.3 trillion in the year to September 30, 2023 versus \$224.3 trillion in the nine months to September 30, 2022. Combined EU, UK and US traded notional rose by 13.6% to \$407.5 trillion from \$358.8 trillion over the same period in 2022. US-reported traded notional accounted for 61.7% of the combined total, while the EU and UK made up 12.4% and 25.9%, respectively.
- Of the combined \$407.5 trillion in EU, UK and US IRD traded notional, 31.8% was denominated in US dollars, 43.4% was in euros and 11.8% was in sterling. Other currencies accounted for 12.9% of total IRD traded notional, with Australian dollar, Canadian dollar and Japanese yen representing the largest share.
- US-dollar-denominated IRD traded notional dropped by 5.5% to \$129.8 trillion in the first nine months of 2023 compared to \$137.3 trillion in the nine months to September 30, 2022. 79.6% of US-dollar-denominated IRD traded notional was reported in the US, 17.9% was reported in the UK and 2.5% was reported in the EU.
- Euro-denominated IRD traded notional grew by 27.1% to \$176.8 trillion from \$139.1 trillion, of which 47.7% was reported in the US, 27.2% was reported in the UK and 25.1% was reported in the EU.
- Sterling-denominated IRD traded notional increased by 23.1% to \$48.2 trillion in the nine months to September 30, 2023 compared to \$39.2 trillion in the nine months to September 30, 2022. 47.5% of sterling-denominated IRD traded notional was reported in the UK, 51.6% was reported in the US and 0.9% was reported in the EU.
- OIS accounted for 61.4% of total EU, UK and US IRD traded notional, while single currency fixed-for-floating IRS and FRAs comprised 17.6% and 11.7%, respectively.



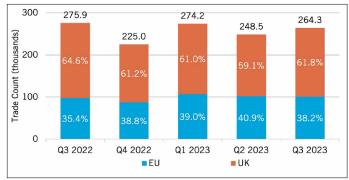
#### **EUROPEAN IRD TRADING ACTIVITY**

European IRD traded notional reported by APAs and TVs in the EU and UK increased by 35.9% to \$54.6 trillion in the third quarter of 2023 versus \$40.2 trillion in the third quarter of 2022. Trade count fell by 4.2% to 264.3 thousand versus 275.9 thousand in the third quarter of 2022.

IRD traded notional reported in the UK accounted for 64.2% of the European total, while EU-reported traded notional comprised 35.8%. UK-reported trade count made up 61.8% of total European trade count and the EU accounted for 38.2% (see Chart 1).

Chart 1: European IRD Traded Notional and Trade Count





Source: European APAs and TVs

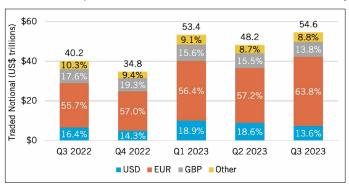
Euro-denominated IRD traded notional rose by 55.6% to \$34.8 trillion in the third quarter of 2023 from \$22.4 trillion in the third quarter of 2022 and accounted for 63.8% of total European traded notional. Euro-denominated contracts made up 48.3% of European trade count (see Chart 2).

Sterling-denominated IRD traded notional grew by 6.6% to \$7.6 trillion in the third quarter of 2023 from \$7.1 trillion in the third quarter of 2022, while US dollar IRD traded notional rose by 12.6% to \$7.4 trillion from \$6.6 trillion over the same period.

Sterling-denominated transactions comprised 13.8% of total European traded notional and 13.6% of trade count, while US dollar contracts represented 13.6% of European traded notional and 17.7% of trade count.

Other currencies accounted for 8.8% of total European IRD traded notional and 20.3% of trade count, with the Swedish krona and Australian dollar representing the largest share<sup>7</sup>.

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





<sup>&</sup>lt;sup>7</sup> 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

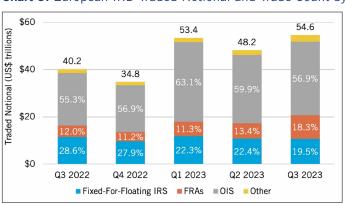


OIS traded notional grew by 39.9% to \$31.1 trillion in the third quarter of 2023 from \$22.2 trillion in the third quarter of 2022 and represented 56.9% of total European IRD traded notional. OIS contracts made up 40.3% of European trade count (see Chart 3).

Fixed-for-floating IRS traded notional dropped by 7.2% to \$10.7 trillion in the third quarter of 2023 from \$11.5 trillion in the third quarter of 2022. FRA traded notional increased to \$10.0 trillion from \$4.8 trillion over the same period.

Fixed-for-floating IRS accounted for 19.5% of total European IRD traded notional and 42.4% of trade count, while FRAs represented 18.3% and 7.0% of European traded notional and trade count, respectively.

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



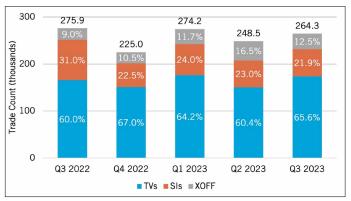


Source: European APAs and TVs

In the third quarter of 2023, 35.4% of European IRD traded notional and 65.6% of trade count took place on TVs, 40.0% of traded notional and 21.9% of trade count was executed by SIs, and 24.6% of traded notional and 12.5% of trade count was reported as XOFF<sup>8</sup> (see Chart 4).

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





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**

IRD traded notional reported by APAs and TVs in the UK rose by 22.7% to \$35.1 trillion in the third quarter of 2023 from \$28.6 trillion in the third quarter of 2022. Trade count fell by 8.3% to 163.4 thousand from 178.3 thousand over the same period (see Chart 5).

Chart 5: UK IRD Traded Notional and Trade Count



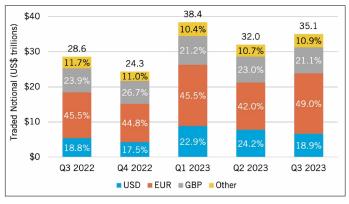
Source: European APAs and TVs

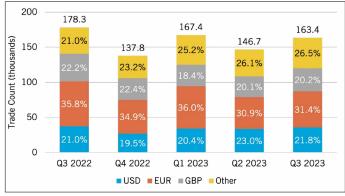
Euro-denominated IRD traded notional rose by 32.1% to \$17.2 trillion in the third quarter of 2023 from \$13.0 trillion in the third quarter of 2022. Sterling-denominated IRD traded notional increased by 8.3% to \$7.4 trillion from \$6.8 trillion and US-dollar-denominated IRD traded notional grew by 23.4% to \$6.6 trillion from \$5.4 trillion.

Euro-denominated IRD transactions represented 49.0% of total UK IRD traded notional and 31.4% of trade count, sterling-denominated IRD accounted for 21.1% of UK IRD traded notional and 20.2% of trade count, and US-dollar-denominated IRD made up 18.9% and 21.8% of UK IRD traded notional and trade count, respectively (see Chart 6).

Other currencies accounted for 10.9% of total UK IRD traded notional and 26.5% of total trade count. Australian dollar and Swedish krona represented the largest share of other currencies.

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



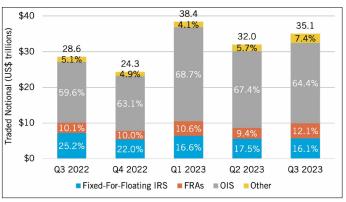


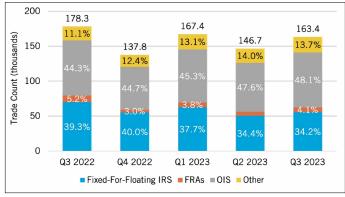


OIS traded notional grew by 32.5% to \$22.6 trillion in the third quarter of 2023 from \$17.0 trillion in the third quarter of 2022. Fixed-for-floating IRS traded notional fell by 21.5% to \$5.7 trillion from \$7.2 trillion and FRA traded notional rose by 47.3% to \$4.2 trillion from \$2.9 trillion over the same period.

OIS transactions accounted for 64.4% of total UK IRD traded notional and 48.1% of trade count. Single currency fixed-for-floating IRS comprised 16.1% of traded notional and 34.2% of trade count, while FRAs made up 12.1% and 4.1% of UK traded notional and trade count, respectively (see Chart 7).

Chart 7: UK IRD Traded Notional and Trade Count by Product

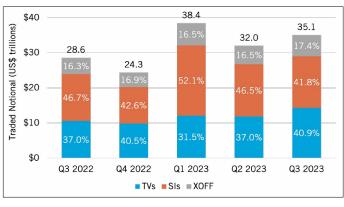


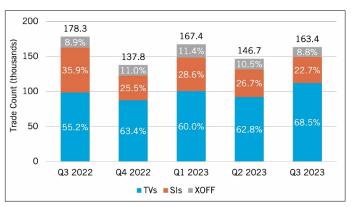


Source: European APAs and TVs

In the third quarter of 2023, 40.9% of UK IRD traded notional and 68.5% of trade count occurred on TVs, 41.8% of traded notional and 22.7% of trade count was executed by SIs, and 17.4% of traded notional and 8.8% of trade count was reported as XOFF (see Chart 8).

Chart 8: UK IRD Traded Notional and Trade Count by Execution Venue





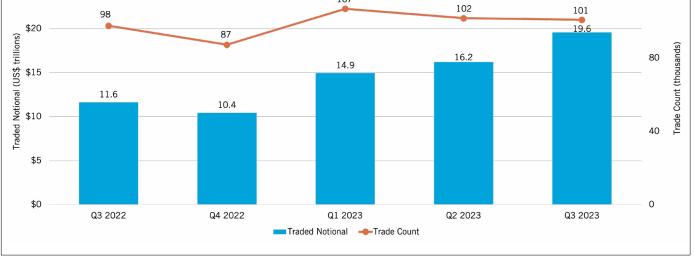


#### EU IRD TRADING ACTIVITY

IRD traded notional reported by APAs and TVs in the EU increased by 68.3% to \$19.6 trillion in the third quarter of 2023 versus \$11.6 trillion in the third quarter of 2022. Trade count rose by 3.3% to 100.8 thousand from 97.6 thousand over the same period in 2022 (see Chart 9).

\$25 120 107 102 101 98 \$20 16.2 14.9

Chart 9: EU IRD Traded Notional and Trade Count



Source: European APAs and TVs

Euro-denominated IRD traded notional grew by 88.3% to \$17.6 trillion in the third quarter of 2023 from \$9.4 trillion in the third quarter of 2022 and comprised 90.1% of total EU traded notional. The number of contracts denominated in euro increased by 3.3% to 76.4 thousand from 74.0 thousand and accounted for 75.8% of EU trade count (see Chart 10).

US-dollar-denominated IRD traded notional dropped by 35.0% to \$792.4 billion in the third quarter of 2023 from \$1.2 trillion in the third quarter of 2022 and accounted for 4.0% of total EU IRD traded notional and 11.0% of trade count. Sterling-denominated transactions represented 0.7% and 3.0% of EU IRD traded notional and trade count, respectively.

Other currencies accounted for 5.1% of EU IRD traded notional and 10.3% of trade count, with Swedish krona and Australian dollar representing the largest share.

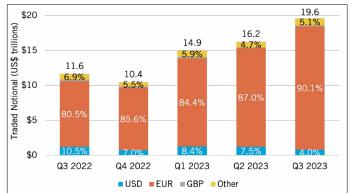
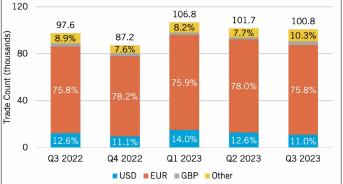


Chart 10: EU IRD Traded Notional and Trade Count by Currency



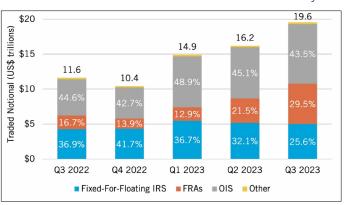


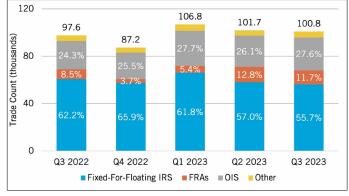
The composition of swaps reported in the EU differed from the UK, with a larger share of fixed-for-floating IRS and a smaller share of OIS.

OIS traded notional rose by 64.2% to \$8.5 trillion in the third quarter of 2023 versus \$5.2 trillion in the third quarter of 2022 and comprised 43.5% of the EU total. OIS made up 27.6% of EU trade count (see Chart 11).

Fixed-for-floating IRS traded notional grew by 16.9% to \$5.0 trillion in the third quarter of 2023 from \$4.3 trillion in the third quarter of 2022. FRA traded notional rose to \$5.8 trillion from \$1.9 trillion over the same period. Fixed-for-floating IRS and FRAs accounted for 25.6% and 29.5% of total EU IRD traded notional and 55.7% and 11.7% of trade count, respectively.

Chart 11: EU IRD Traded Notional and Trade Count by Product

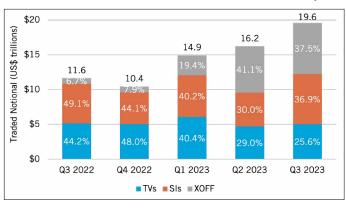


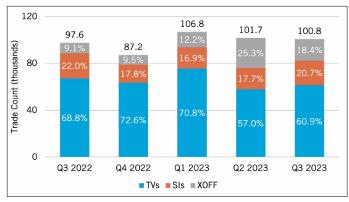


Source: European APAs and TVs

In the third quarter of 2023, 25.6% of EU IRD traded notional and 60.9% of EU IRD trade count took place on TVs, 36.9% of traded notional and 20.7% of trade count was executed by SIs, and 37.5% of traded notional and 18.4% of trade count was reported as XOFF (see Chart 12).

Chart 12: EU IRD Traded Notional and Trade Count by Execution Venue







#### **EUROPEAN AND US IRD TRADING ACTIVITY**

IRD traded notional reported in the US increased by 6.5% to \$73.3 trillion in the third quarter of 2023 from \$68.8 trillion in the third quarter of 2022, while trade count rose by 3.9% to 590.4 thousand from 568.2 thousand (see Chart 13)<sup>9</sup>.

\$150 800 725 596 590 568 Fraded Notional (US\$ trillions) 568 600 103.1 Trade Count (thousands) \$100 75.0 73.3 68.8 400 67.1 \$50 200 \$0 Q3 2022 Q4 2022 Q1 2023 Q2 2023 Q3 2023 Traded Notional ——Trade Count

Chart 13: US IRD Traded Notional and Trade Count

Source: DTCC SDR

Combined EU, UK and US traded notional rose by 17.3% to \$127.9 trillion from \$109.0 trillion and trade count grew by 1.3% to 854.7 thousand from 844.0 thousand.

US-reported IRD traded notional accounted for 57.3% of combined EU, UK and US traded notional, while the EU and UK comprised 15.3% and 27.4%, respectively. US-reported transactions represented 69.1% of total trade count, the EU made up 11.8% and the UK accounted for 19.1% (see Chart 14).

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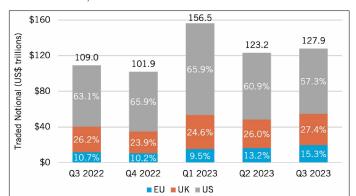


Chart 14: EU, UK and US Traded Notional and Trade Count



999.6

Source: DTCC SDR, European APAs and TVs

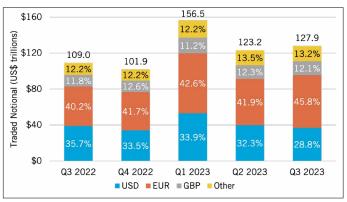
<sup>&</sup>lt;sup>9</sup> Based on data from the DTCC SDR. This data covers only transactions required to be disclosed under US CFTC regulations. Most recent data on US trading activity is available on the ISDA SwapsInfo website http://swapsinfo.org

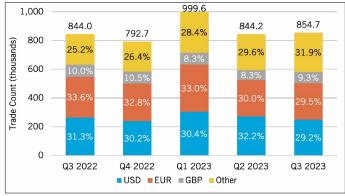


Of the combined \$127.9 trillion in EU, UK and US IRD traded notional, 45.8% was denominated in euros, 28.8% was in US dollars and 12.1% was in sterling. Of the 854.7 thousand in combined trade count, 29.5% was denominated in euros, 29.2% was in US dollars and 9.3% was in sterling (see Chart 15).

Other currencies accounted for 13.2% of combined IRD traded notional and 31.9% of trade count, with Australian dollar, Japanese yen and Canadian dollar representing the largest share.

Chart 15: EU, UK and US IRD Traded Notional and Trade Count by Currency



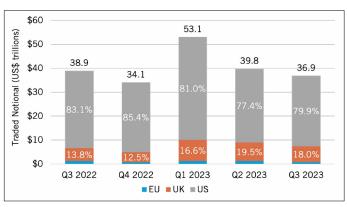


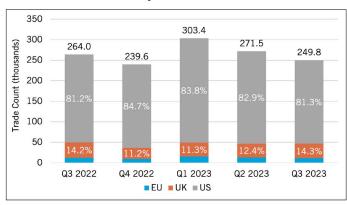
Source: DTCC SDR, European APAs and TVs

US-dollar-denominated IRD traded notional fell by 5.3% to \$36.9 trillion in the third quarter of 2023 from \$38.9 trillion in the third quarter of 2022. Trade count dropped by 5.4% to 249.8 thousand from 264.0 thousand over the same period.

79.9% of US-dollar-denominated IRD traded notional and 81.3% of trade count was reported in the US, while 18.0% of US dollar traded notional and 14.3% of trade count was reported in the UK (see Chart 16).

Chart 16: Combined US-Dollar-denominated IRD Traded Notional and Trade Count by Jurisdiction





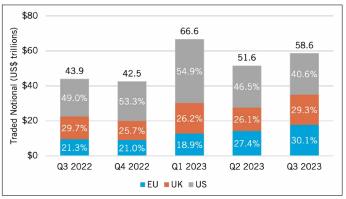
Source: DTCC SDR, European APAs and TVs

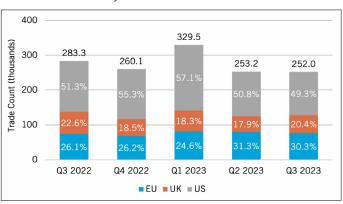
Euro-denominated IRD traded notional grew by 33.5% to \$58.6 trillion in the third quarter of 2023 from \$43.9 trillion in the third quarter of 2022, while trade count fell by 11.0% to 252.0 thousand from 283.3 thousand.

Reporting of euro-denominated IRD transactions was split between the three jurisdictions: 30.1% of traded notional and 30.3% of trade count was reported in the EU, 29.3% of traded notional and 20.4% of trade count was reported in the UK, and 40.6% of traded notional and 49.3% of trade count was reported in the US (see Chart 17).

\$80 400 66.6 58.6 300 \$60 51.6 43.9 42.5

Chart 17: Combined Euro-denominated IRD Traded Notional and Trade Count by Jurisdiction

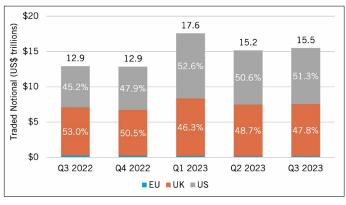


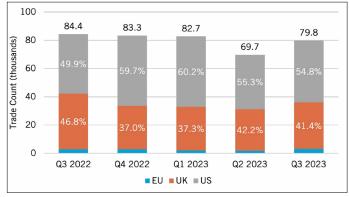


Source: DTCC SDR, European APAs and TVs

Sterling-denominated IRD traded notional rose by 20.0% to \$15.5 trillion in the third quarter of 2023 from \$12.9 trillion the third quarter of 2022, while trade count fell by 5.4% to 79.8 thousand from 84.4 thousand. 47.8% of sterling-denominated IRD traded notional and 41.4% of trade count was reported in the UK and 51.3% of traded notional and 54.8% of trade count was reported in the US (see Chart 18).

Chart 18: Combined Sterling-denominated IRD Traded Notional and Trade Count by Jurisdiction





Source: DTCC SDR, European APAs and TVs

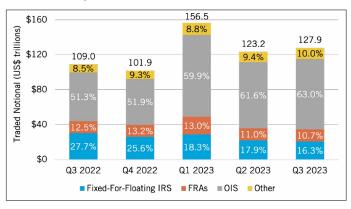
OIS traded notional rose by 44.1% to \$80.6 trillion in the third quarter of 2023 from \$56.0 trillion in the third quarter of 2022 and represented 63.0% of combined IRD traded notional. OIS trade count increased by 25.1% to 405.9 thousand from 324.6 thousand and accounted for 47.5% of the combined total (see Chart 19).

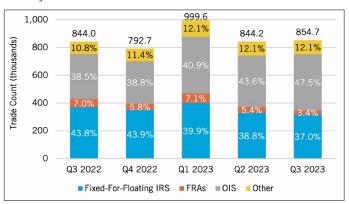
Single currency fixed-for-floating IRS traded notional declined by 31.2% to \$20.8 trillion from \$30.2 trillion in the third quarter of 2022. Trade count dropped by 14.4% to 316.5 thousand from 369.6 thousand over the same period. Fixed-forfloating IRS represented 16.3% of combined EU, UK and US traded notional and 37.0% of trade count.

FRA traded notional increased by 0.7% to \$13.7 trillion in the third quarter of 2023 from \$13.6 trillion in the third quarter of 2022. FRA trade count fell by 50.8% to 29.1 thousand from 59.0 thousand over the same period. FRAs made up 10.7% of combined EU, UK and US IRD traded notional and 3.4% of trade count.



Chart 19: EU, UK and US 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 TVs<sup>10</sup>.

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"11.

Trade information must be publicly disseminated either through an APA or by a TV through which a transaction was executed<sup>12</sup>. As of August 2022, there were 15 active APAs registered on the European Securities and Markets Authority's (ESMA) website<sup>13</sup>. In the UK, there were five APAs registered by the Financial Conduct Authority (FCA)<sup>14</sup>.

While ISDA's data set does not 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 TVs<sup>15</sup>. 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 transactions<sup>16</sup>. 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.

 $<sup>^{\</sup>mathbf{10}}$  The list of APAs and TVs is included in Appendix 1

<sup>&</sup>lt;sup>11</sup> Markets in Financial Instruments Regulation Article 21 www.esma.europa.eu/databases-library/interactive-single-rulebook/clone-mifir/article-21

<sup>&</sup>lt;sup>12</sup> 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

<sup>13</sup> European Securities and Markets Authority (ESMA) List of Registers https://registers.esma.europa.eu/publication/searchRegister?core=esma\_registers\_upreg

<sup>&</sup>lt;sup>14</sup> Financial Conduct Authority, The Financial Services Register https://register.fca.org.uk/s/resources#Other\_registers

<sup>&</sup>lt;sup>15</sup> Most APAs and TVs display data only for a brief period of time and no historical data is available

<sup>&</sup>lt;sup>16</sup> Most APAs and TVs do not 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 CFTC regulations<sup>17</sup>.

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)<sup>18</sup>. 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 details<sup>19</sup>.

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 does not capture 100% of the market. First, it does not 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 TVs $^{20}$ . 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 dissemination<sup>21</sup>. 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.

<sup>&</sup>lt;sup>17</sup> 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

<sup>&</sup>lt;sup>18</sup> Bloomberg SDR was closed in August 2018 and all transactions were moved to DTCC SDR

<sup>19</sup> DTCC SDR services https://pddata.dtcc.com/gtr/cftc/dashboard.do

<sup>20</sup> 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

<sup>&</sup>lt;sup>21</sup> A Practical Guide to Navigating Derivatives Trading on US/EU Recognized Trading Venues

<sup>&</sup>lt;sup>22</sup> 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 a result, total DTCC IRD traded notional is likely to be understated.



#### ISDA has published other recent research papers:

- ISDA-Clarus RFR Adoption Indicator: November 2023 www.isda.org/2023/12/11/isda-clarus-rfr-adoption-indicator-november-2023/
- Key Trends in the Size and Composition of OTC Derivatives Markets in the First Half of 2023 www.isda.org/a/5ihgE/Key-Trends-in-the-Size-and-Composition-of-OTC-Derivatives-Markets-in-the-First-Half-of-2023.pdf
- SwapsInfo Third Quarter of 2023 and Year-to-September 30, 2023
  www.isda.org/a/VSqgE/SwapsInfo-Third-Quarter-of-2023-and-Year-to-September-30-2023-Review.pdf

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#### **ABOUT ISDA**

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 1,000 member institutions from 77 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,

intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on the Association's website: www.isda.org. Follow us on Twitter, LinkedIn, Facebook and YouTube.