## **Bank of England**

## BIS TRIENNIAL SURVEY OF FOREIGN EXCHANGE AND OVER-THE-COUNTER INTEREST RATE DERIVATIVES MARKETS IN APRIL 2022 – UK DATA – RESULTS SUMMARY

## Coverage note

In April this year, central banks and monetary authorities in 52 countries, including the United Kingdom, conducted the latest triennial survey of turnover in the markets for foreign exchange and over-the-counter (OTC) interest rate derivatives. The survey is co-ordinated on a global basis by the Bank for International Settlements (BIS), with the aim of obtaining comprehensive and internationally consistent information on the size and structure of the corresponding global markets. The Bank of England conducted the UK survey, which covers the business of leading financial institutions located within the United Kingdom in these markets. The results of the UK survey are summarised below.

## FOREIGN EXCHANGE

## Geographical distribution of turnover

Net average daily turnover during April 2022 in the UK foreign exchange market increased to \$3,755 billion from \$3,576 billion in April 2019.



While the UK remains the single largest centre of foreign exchange activity, its share of global turnover decreased to 38.1% from 43.2% in April 2019. While there was a small fall in comparison with 2019, the global share recorded in the 2022 survey is broadly in keeping with the UK global market share recorded in previous surveys.



## Average daily turnover by instrument

Turnover in foreign exchange spot activity decreased from \$1,144 billion per day in April 2019 to \$997 billion per day in April 2022, and now accounts for 26.6% of total turnover. Conversely, turnover in foreign exchange swaps increased from \$1,646 billion per day in April 2019 to \$1,945 billion per day in April 2022. Foreign exchange swaps transactions now account for 51.8% of total turnover, increasing their share of overall foreign exchange products from 46.0% in April 2019.

Average daily turnover in outright forward transactions held fairly stable, increasing from \$542 billion in April 2019 to \$557 billion in April 2022. Forward transactions now account for 14.8% of total turnover, a slight decrease on the 15.1% recorded in April 2019.

Turnover in foreign exchange options and other instruments also held stable, increasing from \$167 billion per day in April 2019 to \$175 billion per day in April 2022. Similarly, turnover in currency swaps remained almost flat at \$80 billion per day in April 2022 compared with \$78 billion per day in April 2019, accounting for only 2.1% of total turnover in April 2022.



## Average daily turnover by counterparty

Increased trades with other reporting dealers drove the increase in total turnover, rising from \$1,334 billion per day in April 2019 to \$1,971 billion per day in April 2022. These trades accounted for 52.5% of total turnover in 2022, up from 37.3% in 2019.

Turnover with 'other financial institutions'<sup>1</sup> decreased to \$1,709 billion per day and now account for 45.5% of total turnover in April 2022. Business with 'non-financial institutions' decreased to \$75 billion per day, accounting for only 2.0% of total turnover. While there are notable movements in the counterparty category proportions since 2019, the 2022 proportions are largely in line with those observed prior to 2019.

Cross-border business increased to \$2,533 billion per day in April 2022 and now accounts for 67.5% of total turnover, up from 52.6% in April 2019. Conversely, turnover in local business fell from \$1,695 billion per day in April 2019 to \$1,221 billion per day in April 2022. While this is a marked change to the proportions recorded in 2019, the 2022 proportions are now similar to those recorded prior to 2019.



<sup>1</sup> The definition of 'other financial institutions' can be found in the Annex.

#### Average daily turnover by currency composition

The US dollar continued to be the most traded currency in the UK market, with 90.5% of all trades having one side denominated in the currency<sup>2</sup>, almost unchanged from the 89.5% observed in 2019. The proportion of turnover involving the euro fell slightly, from 36.0% to 33.9%, whilst the proportion involving sterling increased slightly, from 16.6% to 18.7%. Broadly, the currency composition of the UK foreign exchange market was similar to that observed in recent surveys.

US dollar/euro remained the most traded currency pair in 2022, holding fairly flat at an average daily turnover of \$1,019 billion, accounting for 27.1% of total turnover compared with 28.2% in 2019. The proportions of turnover attributable to other notable currency pairings were largely unchanged to that observed in 2019.



<sup>&</sup>lt;sup>2</sup> For foreign exchange turnover, the sum of the percentage shares involving each of the individual currencies totals 200 instead of 100 percent because two currencies are involved in each transaction.

## Average daily turnover by execution method<sup>3</sup>

Trades conducted via an electronic medium remained the most common method of trade execution, accounting for 54.1% of total turnover at \$2,032 billion per day. Within this, the breakdown between direct and indirect electronic trades was fairly evenly split, with turnover in direct electronic trades at \$1,124 billion per day and turnover in indirect electronic trades at \$908 billion per day.

Business conducted by a direct voice method increased to an average daily turnover of \$1,174 billion in April 2022 from \$934 billion in April 2019, and now accounts for 31.3% of all trades compared to 26.1% of all trades in 2019. Trades executed indirectly by a voice method comprised 13.3% of all trades, broadly similar to the 13.1% recorded in April 2019.



<sup>&</sup>lt;sup>3</sup> The definition of each of the execution methods can be found in the Annex.

## **OTC INTEREST RATE DERIVATIVES**

## Geographical distribution of turnover

The UK remains the largest centre for OTC interest rate derivatives activity, despite a notable decrease in average daily turnover which fell from \$3,670 billion in April 2019 to \$2,626 billion in April 2022. Similar decreases were observed for the United States and Hong Kong, the second and third largest centres for OTC interest rate derivatives activity, respectively.



OTC interest rate derivatives activity in the UK market accounted for 45.5% of global turnover in April 2022, slightly lower than the market share of 50.6% recorded in April 2019<sup>4</sup>. Germany and France saw their market shares increase to 4.7% and 3.5% respectively in April 2022, from 0.8% and 1.7% respectively in April 2019. The US market share of global activity fell for the second consecutive survey, from a high of 40.8% recorded in 2016 to a market share of 29.3% of global turnover in 2022.

<sup>&</sup>lt;sup>4</sup> OTC interest rate derivatives activity was first collected on the triennial survey in 1995.



## Average daily turnover by instrument

Average daily turnover in interest rate swaps decreased slightly to \$2,101 billion in April 2022, down from \$2,228 billion in April 2019. Due to a fall in total OTC interest rate derivative turnover, interest rate swaps now account for 80.0% of turnover, up from 60.7% in April 2019. Turnover in forward rate agreements (FRAs) fell substantially to \$362 billion per day in April 2022, down from \$1,000 billion per day in April 2019, and now comprises 13.8% of the UK interest rate derivatives market in April 2022. Average daily turnover in interest rate options and other products also decreased, falling to \$163 billion in April 2022 from \$443 billion in April 2019.



## Average daily turnover by counterparty

OTC interest rate derivatives business with 'other financial institutions' decreased to \$1,907 billion per day, although as a proportion of total turnover its share increased to 72.6%, up from 62.9% in April 2019. In contrast, average daily turnover with reporting dealers fell to \$500 billion from \$1,325 billion in April 2019. The proportion of total turnover attributable to reporting dealers decreased from 36.1% in April 2019 to 19.0% in April 2022.

Business with non-financial institutions increased markedly in April 2022 to \$219 billion per day from \$37 billion per day in April 2019, so that activity with these counterparties now accounts for 8.3% of total turnover.

Local business decreased from \$2,398 billion per day in April 2019 to \$1,742 billion per day in April 2022. Similarly, cross-border business decreased from \$1,272 billion per day in April 2019 to \$885 billion per day in April 2022. As these are of similar magnitude, the proportion of turnover attributable to local and cross-border activity of 66.3% and 33.7% respectively in April 2022 is largely unchanged from the previous survey in 2019.



## Average daily turnover by currency composition

The proportion of OTC interest rate derivatives turnover denominated in US dollars fell sharply to 22.3% in April 2022, down from 32.1% of total turnover in April 2019. The proportion of OTC interest rate derivatives turnover attributable to sterling also decreased, from 14.5% in April 2019 to 13.5% of total turnover in April 2022.

While the average daily turnover of euro denominated OTC interest rate derivatives fell, from \$1,584 billion in April 2019 to \$1,349 billion in April 2022, the euro still remains the most frequently traded currency in April 2022 accounting for 51.4% of all OTC interest rate derivative trades in the UK.



Tables showing the UK results in more detail are available in the Annex. These data are consistent with the global survey results released by the BIS<sup>5</sup>. Totals may not sum due to rounding. Definitions of the different instruments, counterparty sectors, and execution methods collected in the survey can also be found in the annex.

<sup>&</sup>lt;sup>5</sup> Preliminary global results can be found on the BIS website: <u>https://www.bis.org/statistics/rpfx22.htm</u>

Table 1: Foreign exchange market turnover by instrument <sup>a</sup>									
Average daily turnover in April, in billion of US dollars									
Instrument 2013 2016 2019 202									
Foreign exchange instruments	2,726	2,406	3,576	3,755					
o/w related parties	578	650	618	919					
Spot transactions	1,032	784	1,144	997					
Outright forwards	309	266	542	557					
Foreign exchange swaps	1,127	1,161	1,646	1,945					
Currency swaps	32	53	78	80					
Options and other instruments	227	142	167	175					

## **ANNEX - ADDITIONAL TABLES AND BREAKDOWNS**

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

Daily ave	Daily averages in April, in billion of US dollars and percentages								
	2013		2016		2019		2022		
Instrument / counterparty -	Amount	%	Amount	%	Amount	%	Amount	%	
Spot transactions	1,032	100	784	100	1,144	100	997	100	
Reporting dealers	385	37	341	44	328	29	439	44	
Other financial institutions	614	60	423	54	769	67	535	54	
Non-financial customers	32	3	20	3	47	4	23	2	
Outright forwards	309	100	266	100	542	100	557	100	
Reporting dealers	114	37	119	45	165	31	231	41	
Other financial institutions	173	56	134	50	332	61	314	56	
Non-financial customers	21	7	13	5	45	8	13	2	
Foreign exchange swaps	1,127	100	1,161	100	1,646	100	1,945	100	
Reporting dealers	574	51	709	61	724	44	1,167	60	
Other financial institutions	503	45	409	35	844	51	745	38	
Non-financial customers	50	4	43	4	78	5	33	2	
Currency swaps	32	100	53	100	78	100	80	100	
Reporting dealers	21	64	30	56	54	69	59	74	
Other financial institutions	10	32	22	41	23	29	20	25	
Non-financial customers	1	4	1	3	1	1	1	1	
Options	227	100	142	100	167	100	175	100	
Reporting dealers	76	34	51	36	62	37	75	43	
Other financial institutions	141	62	88	62	99	59	96	55	
Non-financial customers	9	4	3	2	6	3	5	3	
Total	2,726	100	2,406	100	3,576	100	3,755	100	
Reporting dealers	1,170	43	1,250	52	1,334	37	1,971	52	
Other financial institutions	1,442	53	1,076	45	2,067	58	1,709	46	
Non-financial customers	113	4	81	3	176	5	75	2	
Other instruments <sup>b</sup>	0	0	0	0	0	0	0	0	
Local <sup>c</sup>	1,095	40	758	31	1,695	47	1,221	33	
Cross-border	1,631	60	1,648	69	1,881	53	2,533	67	

## Table 2a: Foreign exchange market turnover by instrument and counterparty<sup>a</sup>

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

<sup>b</sup> A counterparty breakdown is not collected for other instruments.

<sup>c</sup> Local and cross-border may not add up to totals, as other instruments are not collected with locational breakdown.

Daily averages in April, in billion of US dollars and percentages								
Instrument/maturity	2019	)	2022					
	Amount	%	Amount	%				
Outright forwards <sup>b</sup>	597	100	626	100				
Up to 7 days	131	22	172	28				
of which 1 day <sup>c</sup>			44	7				
of which 1 day to 7 days <sup>c</sup>			129	21				
7 days to 1 month	214	36	230	37				
1 to 3 months	192	32	170	27				
3 to 6 months	37	6	33	5				
Over 6 months	24	4	19	3				
Foreign exchange swaps <sup>b</sup>	1856	100	2249	100				
Up to 7 days	1226	66	1629	72				
of which 1 day <sup>c</sup>			713	32				
of which 1 day to 7 days <sup>c</sup>			917	41				
7 days to 1 month	242	13	255	11				
1 to 3 months	280	15	256	11				
3 to 6 months	75	4	76	3				
Over 6 months	34	2	33	1				

Table 2b: Foreign exchange market turnover by maturity<sup>a</sup>

<sup>a</sup> Data prior to 2019 are not shown due to the different maturity breakdown collected in earlier surveys.

<sup>b</sup> Data broken down by maturity cannot be adjusted for double-counting of local reporting dealers, so maturity values will not be equal to product totals.

 $^{\rm c}$  '..' denotes where data are unavailable, as the breakdown is not collected in that survey year.

Percentage shares of average daily turnover in April								
Currency	2013	2016	2019	2022				
US dollar	88%	89%	90%	90%				
Euro	37%	37%	36%	34%				
Pound sterling	16%	17%	17%	19%				
Japanese yen	23%	19%	15%	14%				
Canadian dollar	4%	4%	5%	6%				
Swiss franc	5%	5%	5%	5%				
Australian dollar	8%	7%	7%	5%				
Other currencies <sup>b</sup>	19%	22%	27%	26%				
All currencies	200%	200%	200%	200%				

## Table 3: Currency distribution of foreign exchange market turnover<sup>a</sup>

<sup>a</sup> Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200 instead of 100 per cent. The figures relate to reported "net-gross" turnover, i.e. they are adjusted for double-counting of local trades between reporting dealers.

<sup>b</sup> Comprises all currencies not listed above.

Table 4: Foreign exchange market turnover by currency pair <sup>a</sup>										
Daily averages in April, in billion of US dollars and percentages										
Currency noir	2013		2016		2019		2022			
Currency pair	Amount	%	Amount	%	Amount	%	Amount	%		
USD/EUR	758	28	695	29	1,009	28	1,019	27		
USD/GBP	329	12	306	13	459	13	543	14		
USD/JPY	516	19	393	16	449	13	439	12		
USD/CAD	86	3	87	4	143	4	220	6		
USD/CHF	94	3	99	4	129	4	164	4		
USD/AUD	182	7	119	5	190	5	163	4		
GBP/EUR	67	2	64	3	92	3	95	3		
Other currency pairs	694	26	643	26	1,105	30	1,112	30		
All currency pairs	2,726	100	2,406	100	3,576	100	3,755	100		

#### .:..a Table 4: Faraire a - a la a . .....

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

Dairy	Daily averages in April, in billion of 05 dollars and percentages									
Execution	2013		2016		2019		2022			
method	Amount	%	Amount	%	Amount	%	Amount	%		
Electronic Direct	716	26	772	32	804	22	1,124	30		
Electronic Indirect	771	28	579	24	1,271	36	908	24		
Voice Direct	709	26	566	24	934	26	1,174	31		
Voice Indirect	506	19	482	20	470	13	499	13		
Unallocated	24	1	7	0	97	3	49	1		

#### Table 5: Foreign exchange market turnover by execution method<sup>a</sup>

Daily averages in April, in billion of US dollars and percentages

<sup>a</sup> Data broken down by execution method cannot be adjusted for double-counting of local reporting dealers, so the total will not be equal to totals FX totals reported elsewhere.

Average daily turnover in April, in billion of US dollars

Instrument	2013	2016	<b>2019</b> <sup>ь</sup>	2022
Interest rate instruments	1,348	1,181	3,670	2,626
o/w related parties	63	201	1,253	807
FRAs	473	375	1,000	362
Swaps	796	757	2,228	2,101
Options and other instruments	80	48	443	163

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

<sup>b</sup> Reporting improvements were introduced from the 2019 survey, these reflect a more comprehensive reporting of "related party trades". Users should bear this in mind when comparing data with previous periods.

Daily averages in April, in billion of US dollars and percentages										
Instrument /	2013		2016		2019 <sup>t</sup>	)	2022			
counterparty	Amount	%	Amount	%	Amount	%	Amount	%		
FRAs	473	100	375	100	1,000	100	362	100		
Reporting dealers	203	43	169	45	263	26	36	10		
Other financial institutions	263	56	204	54	714	71	218	60		
Non-financial customers	7	1	2	0	22	2	107	30		
Swaps	796	100	757	100	2,228	100	2,101	100		
Reporting dealers	314	39	338	45	682	31	429	20		
Other financial institutions	431	54	399	53	1,533	69	1,562	74		
Non-financial customers	50	6	20	3	13	1	110	5		
Options	77	100	45	100	442	100	163	100		
Reporting dealers	36	47	16	36	380	86	34	21		
Other financial institutions	37	48	28	62	61	14	127	78		
Non-financial customers	4	5	1	2	1	0	2	1		
Total	1,348	100	1,181	100	3,670	100	2,626	100		
Reporting dealers	552	41	523	44	1,325	36	500	19		
Other financial institutions	731	54	632	54	2,308	63	1,907	73		
Non-financial customers	61	5	23	2	37	1	219	8		
Other instruments <sup>c</sup>	3	0	3	0	0	0	0	0		
Local <sup>d</sup>	728	54	494	42	2,398	65	1,742	66		
Cross-border	617	46	684	58	1,272	35	885	34		

#### Table 7: OTC interest rate derivatives turnover by instrument and counterparty<sup>a</sup>

Daily averages in April, in billion of US dollars and percentages

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

<sup>b</sup> Reporting improvements were introduced from the 2019 survey, these reflect a more comprehensive reporting of "related party trades". Users should bear this in mind when comparing data with previous periods.

<sup>c</sup> A counterparty breakdown is not collected for other instruments.

<sup>d</sup> Local and cross-border may not add up to totals, as other instruments are not collected with locational breakdown.

Currencu	2013		2016	2016		)	2022	
Currency	Amount	%	Amount	%	Amount	%	Amount	%
Euro	928	69	574	49	1,584	43	1,349	51
US dollar	110	8	215	18	1,177	32	587	22
Pound sterling	191	14	247	21	533	15	355	14
Japanese yen	13	1	30	3	96	3	83	3
Australian dollar	26	2	29	2	83	2	62	2
Czech koruna	0	0	1	0	10	0	40	2
Swedish krona	24	2	10	1	41	1	19	1
All other currencies	53	4	71	6	145	4	130	5
Total	1,348	100	1,181	100	3,670	100	2,626	100

#### Table 8: OTC interest rate derivatives turnover by currency<sup>a</sup>

Daily averages in April, in billion of US dollars and percentages

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

<sup>b</sup> Reporting improvements were introduced from the 2019 survey, these reflect a more comprehensive reporting of "related party trades". Users should bear this in mind when comparing data with previous periods.

contribution by largest reporters <sup>a</sup>									
Percentage shares of average daily turnover in April									
Number of firms	2013	2016	2019	2022					
Top 5 largest contributors	53%	52%	58%	52%					
Top 10 largest contributors	77%	77%	78%	82%					

# Table 9: Foreign exchange market concentration -

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

#### Table 10: OTC interest rate derivatives market concentration - contribution by largest reporters<sup>a</sup>

Percentage shares of average daily turnover in April

Number of firms	2013	2016	2019	2022
Top 5 largest contributors	56%	60%	72%	81%
Top 10 largest contributors	85%	85%	92%	96%

<sup>a</sup> Adjusted for double-counting of local trades between reporting dealers.

## INSTRUMENT DEFINITIONS AND CATEGORISATION

Details of turnover in the following instruments were collected:

## Foreign Exchange Transactions

## Spot Transaction

Single outright transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) within two business days. The spot legs of swaps, and swaps that were for settlement within two days (i.e. overnight swaps, spot next swaps, and "tomorrow/next day" swap transactions) were excluded from this category.

## **Outright Forward**

Transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later). Also included in this category were forward foreign exchange agreement transactions (FXA), non-deliverable forwards, and other forward contracts for differences.

## Foreign Exchange Swap

Transaction which involves the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of the conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future at a rate (generally different from the rate applied to the short leg) agreed at the time of the conclusion of the contract (the long leg). Short-term swaps carried out as "tomorrow/next day" transactions are included in this category.

## Currency Swap

Transaction which involves the actual exchange of two currencies on a specific date at a rate agreed at the time of the conclusion of the contract and an agreement to exchange streams of interest payments in the currencies for an agreed period of time, followed by a reverse exchange at a pre□agreed exchange rate at maturity.

## **Option**

Option contract that gives the right to buy or sell a currency with another currency at a specified exchange rate during a specified period. This category also includes currency swaptions, currency warrants, plain vanilla contracts and exotic foreign exchange options such as average rate options and barrier options.

## Other instruments

"Other" derivative instruments are products where decomposition into individual plain vanilla instruments such as forwards, swaps, or options is impractical or impossible.

## **OTC Interest Rate Derivatives**

Interest rate contracts are contracts related to an interest-bearing financial instrument whose cash flows are determined by referencing interest rates or another interest rate contract (e.g. an option on a futures contract to purchase a Treasury bill). This category is limited to those deals where all the legs are exposed to only one currency's interest rate. Thus it excludes contracts involving the exchange of one or more foreign currencies (e.g. cross-currency swaps and currency options) and other contracts whose predominant risk characteristic is foreign exchange risk.

## Forward Rate Agreement (FRA)

Interest rate forward contract in which the rate to be paid or received on a specific obligation for a set period of time, beginning at some time in the future, is determined at contract initiation.

## Interest Rate Swap

Agreement to exchange periodic payments related to interest rates on a single currency. Interest rate swaps can be fixed for floating, or floating for floating based on different indices. This category includes those swaps whose notional principal is amortised according to a fixed schedule independent of interest rates.

## Interest Rate Option

Option contract that gives the right to pay or receive a specific interest rate on a predetermined principal for a set period of time. Included in this category are interest rate caps, floors, collars, corridors, swaptions and warrants.

## Other instruments

"Other" derivative instruments are products where decomposition into individual plain vanilla instruments such as FRAs, swaps, or options is impractical or impossible.

## **COUNTERPARTY DEFINITIONS AND CATEGORISATION**

## Reporting dealers

Reporting dealers refer to financial institutions that are participating in the globally coordinated survey. These firms actively participate in local and global foreign exchange and derivatives markets.

## Other financial institutions

This category covers the financial institutions that are not reporting dealers. Thus, it will include smaller commercial banks, investment banks and securities houses, and in addition mutual funds, pension funds, hedge funds, currency funds, money market funds, building societies, leasing companies, insurance companies, other financial subsidiaries of corporate firms and central banks.

## Non-financial customers

This category covers any counterparty other than those described above, i.e. mainly non-financial end-users, such as corporates and non-financial government entities.

## **EXECUTION METHOD CATEGORIES AND DEFINITIONS**

## Voice-direct

Trades originated in person, by phone, by telefax or through general messaging systems regardless of how trades are subsequently mated, and not intermediated by a third party.

## Voice-indirect

Trade agreed by a voice method and intermediated by a third party (e.g. a voice broker).

## Electronic-direct

Trades executed via an electronic trading system, not intermediated by a third party. These include transactions originated through specific messaging systems that are part of trading platforms.

## Electronic-indirect

Trades executed via an electronic medium, intermediated by a third-party electronic platform (e.g. via a matching system).