

## BIS TRIENNIAL SURVEY OF FOREIGN EXCHANGE AND OVER-THE-COUNTER INTEREST RATE DERIVATIVES MARKETS IN APRIL 2019 – UK DATA – RESULTS SUMMARY

In April this year, central banks and monetary authorities in 53 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.

## **GUIDANCE ON COVERAGE**

Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades. Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> The increase in related party trades mainly affects OTC interest rate derivatives and can be seen in Table 5 of the Annex.

### **FOREIGN EXCHANGE**

## **Daily turnover**

Net average daily turnover during April 2019 in the UK foreign exchange market was \$3,576 billion, compared to \$2,406 billion per day recorded in April 2016. The increase more than reverses the fall of 12 per cent seen between the 2013 and 2016 surveys.

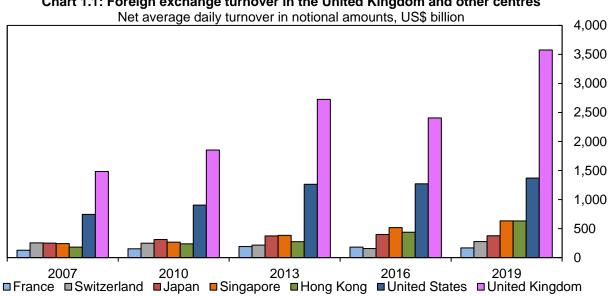


Chart 1.1: Foreign exchange turnover in the United Kingdom and other centres

## Geographical distribution of turnover

The UK remains the single largest centre of foreign exchange activity with 43 per cent of global turnover, up from 37 per cent in April 2016. The distribution recorded in the 2019 survey is broadly in keeping with the UK global market share recorded in previous surveys.

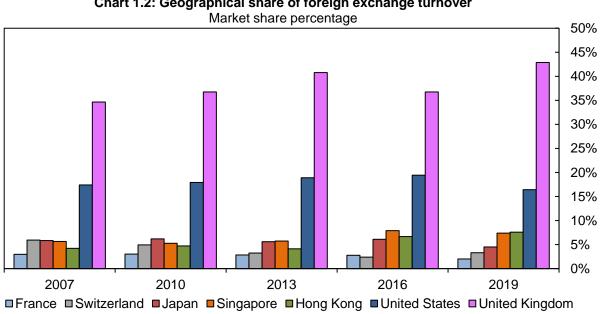


Chart 1.2: Geographical share of foreign exchange turnover

### **Market concentration**

The UK foreign exchange market concentration is virtually unchanged since April 2016. The combined market share of the ten institutions with highest turnover increased slightly from 77 per cent to 78 per cent while the share of the top twenty institutions also increased slightly from 95 per cent in April 2016 to 96 per cent in April 2019. In total, 19 out of 55 firms accounted for one per cent or more of total turnover in April 2019.

## Average daily turnover by instrument

Turnover in foreign exchange spot activity increased from \$784 billion per day in April 2016 to \$1,144 billion per day in April 2019. Foreign exchange spot turnover accounts for 32 per cent of total turnover. Similarly, turnover in foreign exchange swaps increased from \$1,161 billion per day in April 2016 to \$1,646 billion per day in April 2019. Foreign exchange swaps transactions now account for 46 per cent of total turnover, decreasing their market share of overall foreign exchange products from 48 per cent in April 2016.

Average daily turnover in forward transactions increased from \$266 billion in April 2016 to \$542 billion in April 2019 while turnover in foreign exchange options and other instruments increased from \$142 billion to \$167 billion over the same period. Turnover in currency swaps increased to \$78 billion per day in April 2019, this instrument only accounted for 2 per cent of total turnover.

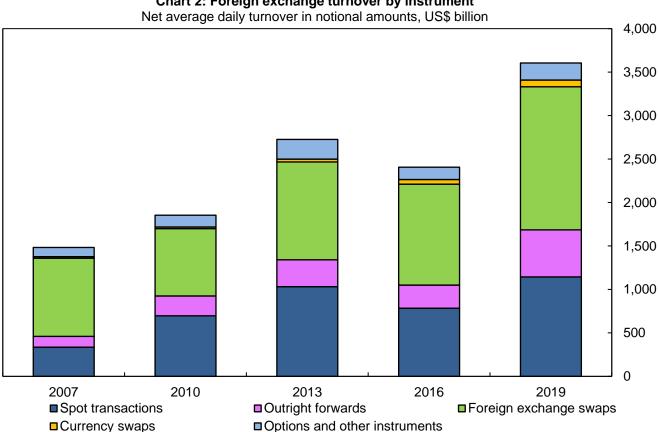


Chart 2: Foreign exchange turnover by instrument

### Average daily turnover by counterparty

The increase in turnover was primarily seen with 'other financial institutions' – a counterpart category that includes non-reporting banks, security dealers, hedge funds, pension funds, mutual funds, insurance companies and central banks. Turnover with this category increased to \$2,067 billion per day, resulting in business with 'other financial institutions' accounting for 58 per cent of total turnover.

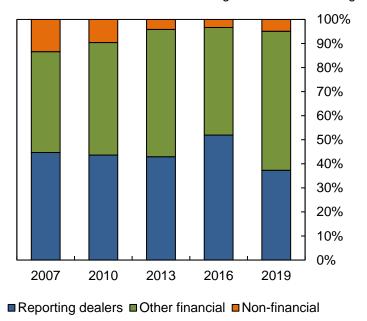
Business with 'non-financial institutions' increased to \$176 billion per day. Turnover with 'non-financial institutions' has increased for the first time since April 2007 and now accounts for 5 per cent of total turnover.

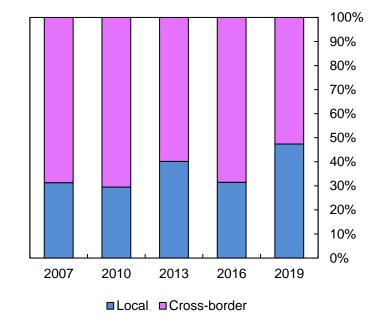
Similarly, activity with other reporting dealers increased from \$1,250 billion per day in April 2016 to \$1,334 billion per day in April 2019. Business with other reporting dealers now accounts for 37 per cent of total turnover, reversing the increase seen in 2016 where over half of total turnover in the foreign exchange market occurred with other reporting dealers. The majority share of turnover is now with other financial institutions.

Local business increased from \$758 billion per day in April 2016 to \$1,695 billion per day in April 2019. In contrast, cross-border business increased by just 14 per cent between April 2016 and April 2019, increasing from \$1,648 billion to \$1,881 billion, and now accounts for 53 per cent of total turnover, compared to 69 per cent in April 2016.

Chart 3: Foreign exchange turnover by counterparty

Percentage share of net average daily turnover in notional amounts





## Average daily turnover by currency composition

The US dollar continued to be the most traded currency in the UK market, with 90 per cent of all trades having one side denominated in US dollar<sup>2</sup>. The proportion of turnover involving the Japanese yen decreased from 19 per cent to 15 per cent whilst the proportion of turnover involving the euro remained largely unchanged falling just 1 per cent to a level of 36 per cent of total turnover.

By currency pair, average daily turnover in US dollar/other currencies showed the largest increase, increasing to \$822 billion per day. US dollar/euro remained the most traded currency pair comprising 28 per cent, \$1,009 billion, of the total foreign exchange market turnover.

90% 28% 89% USD 29% **USD/EUR** 88% 28% 85% 32% 23% **EUR** 18% USD/Other 16% 13% 17% **GBP 2019** 16% 13% **2019** 18% 16% **2016** USD/JPY ■2016 19% 15% 14% **2013** 19% **JPY 2013** 23% 17% **2010** 13% **2010** 13% USD/GBP 6% 12% 6% AUD 13% 8% 5% 5% 5% 5% USD/AUD **CHF** 7% 6% 6% 0% 20% 40% 60% 80% 100% 20% 30% 40% 0% 10%

Chart 4: Foreign exchange turnover by currency<sup>2</sup> and currency pairs
Percentage share of net average daily turnover in notional amounts

## Average daily turnover by execution method

The average daily turnover of trades executed directly conducted via an electronic medium remained the most common method of trade execution, accounting for 58 per cent of total turnover at \$2,075 billion per day. Business conducted over the phone stands at \$934 billion in April 2019 per day, accounting for 26 per cent of all trades compared to 24 per cent of all trades in 2016. Trades executed by a voice broker comprised 13 per cent of all trades, down from the 20 per cent recorded in April 2016.

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

### **OTC INTEREST RATE DERIVATIVES**

## **GUIDANCE ON COVERAGE**

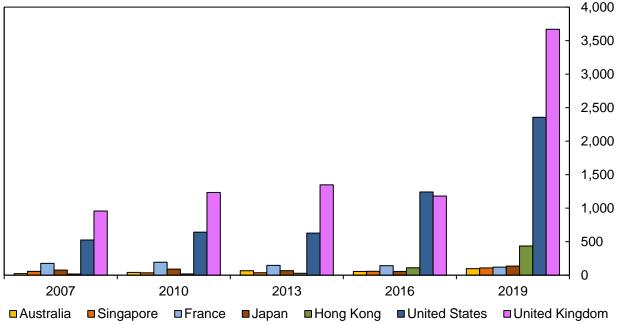
Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years<sup>3</sup>.

## Total average daily turnover

In the UK, average daily turnover in OTC interest rate derivatives increased from \$1,181 billion in April 2016 to \$3,670 billion in April 2019. The UK is once again the largest centre for OTC interest rate derivatives activity<sup>4</sup>.

Chart 5.1: Interest rate derivatives turnover in the United Kingdom and other centres

Net average daily turnover in notional amounts, US\$ billion



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<sup>&</sup>lt;sup>3</sup> The increase in related party trades mainly affects OTC interest rate derivatives and can be seen in Table 5 of the Annex.

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

## Geographical distribution of turnover

The market share of the UK has increased from 39 per cent in April 2016 to 50 per cent in April 2019. The UK has overtaken the US as the largest centre for OTC interest rate derivatives activity, whereas the US has decreased its global market share to 32 per cent, down from 41 per cent in April 2016. The 2019 survey is in keeping with the UK global market share recorded in the 2010 and 2013 surveys at 47 per cent and 50 per cent respectively.

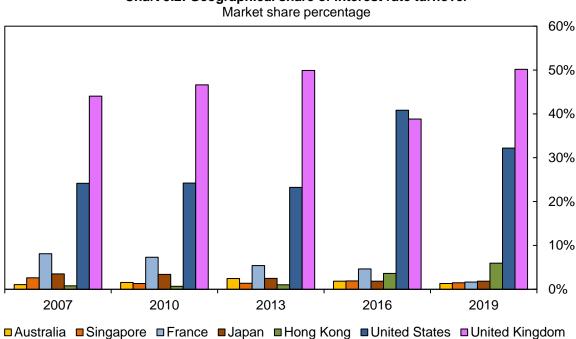


Chart 5.2: Geographical share of interest rate turnover

### **Market concentration**

Market concentration in the OTC derivatives market increased from April 2016 with the top ten institutions with the highest derivatives trading volumes now accounting for 92 per cent of total turnover, compared to 85 per cent in April 2016. Of the 55 reporting dealers in the April 2019 survey, 34 undertook business in the OTC interest rate derivatives markets.

## Average daily turnover by instrument

Average daily turnover in interest rate swaps increased to \$2,228 billion per day and still account for just under two thirds (61 per cent) of the OTC interest rate derivatives market in April 2019. Turnover in forward rate agreements (FRAs) increased to \$1,000 billion and comprises 27 per cent of the interest rate derivatives market in April 2019. Turnover in interest rate options also increased, reaching \$442 billion per day in April 2019.

Net average daily turnover in notional amounts, US\$ billion 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 2007 2010 2013 2016 2019 **■**FRAs ■IR swaps ■IR options

Chart 6: Interest rate derivatives turnover by instrument
Net average daily turnover in notional amounts. US\$ billion

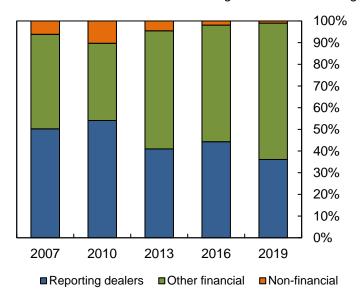
## Average daily turnover by counterparty

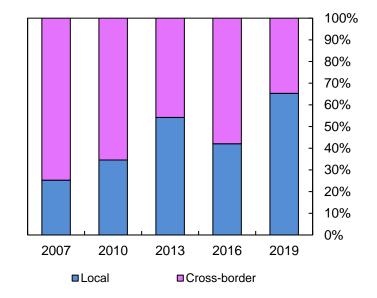
Business with non-reporting dealers has increased in percentage terms, and now accounts for 64 per cent of total OTC interest rate derivatives turnover in April 2019, up from 56 per cent in April 2016. Daily turnover with 'other financial institutions' increased to \$2,309 billion, increasing the share of total turnover to 63 per cent, up from 54 per cent in April 2016.

Average daily turnover with reporting dealers stands at \$1,324 billion, and business with 'non-financial institutions' stands at \$37 billion in April 2019. The share of business with reporting dealers decreased from 44 per cent in 2016, and now account for 36 per cent of the total OTC interest rate derivatives activity in the UK. The share of business with non-financial institutions similarly decreased from 2 per cent, and now account for just under 1 per cent.

Local business increased from \$497 billion per day in April 2016 to \$2,398 billion per day in April 2019. Similarly, cross-border business increased from \$684 billion in April 2016 to \$1,272 billion per day in April 2019, and now accounts for 35 per cent of total turnover.

Chart 7: Interest rate derivatives turnover by counterparty
Percentage share of net average daily turnover in notional amounts

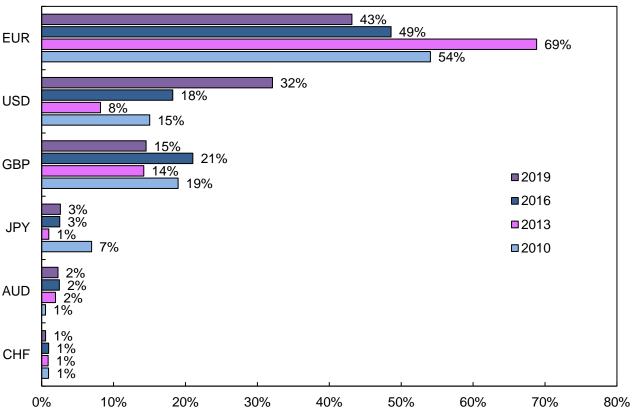




## Average daily turnover by currency composition

The proportion of OTC interest rate derivative denominated in USD increased in April 2019, up from 18 per cent of total turnover in April 2016 to 32 per cent in April 2019. In contrast, the proportion of OTC interest rate derivatives turnover attributable to euro and sterling decreased from 49 and 21 per cent to 43 and 15 per cent in April 2019 respectively.

Chart 8: Interest rate derivatives turnover by currency
Percentage share of net average daily turnover in notional amounts



Tables showing the UK results in more detail are attached. 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 and counterparty sectors collected in the survey are also attached.

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<sup>&</sup>lt;sup>5</sup> Preliminary global results can be found on the BIS website here <a href="http://www.bis.org/publ/rpfx19.htm">http://www.bis.org/publ/rpfx19.htm</a>

## **ANNEX**

Table 1

Foreign exchange market turnover by instrument<sup>1</sup>

Average daily turnover in April, in billions of US dollars

Instrument		2010	2013	2016	2019 <sup>3</sup>
Foreign exchange instruments	1,483	1,854	2,726	2,406	3,576
of which: Related party trades			578	650	618
Spot transactions	335	697	1,032	784	1,144
Outright forwards	124	228	309	266	542
Foreign exchange swaps	899	775	1,127	1,161	1,646
Currency swaps	18	18	32	53	78
Options and other instruments  Memo:	106	135	227	142	167
Turnover at April 2019 exchange rates <sup>2</sup>	1,371	1,701	2,518	2,367	3,576

<sup>1</sup> Adjusted for local double-counting.

<sup>2</sup> Non-US dollar legs of foreign currency transactions were converted into original currency amounts at average exchange rates for April of each survey year and then reconverted into US dollar amounts at average April 2019 exchange rates.

<sup>3</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

Table 2a

Foreign exchange market turnover by instrument and counterparty<sup>1</sup>

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

Instrument/sountsmorts	2010		2013		2016		2019 <sup>3</sup>		
Instrument/counterparty	Amount	%	Amount	%	Amount	%	Amount	%	
Spot	697	38	1,032	38	784	33	1,144	32	
with reporting dealers	293	16	385	14	341	14	328	9	
with other financial institutions	344	19	614	23	423	18	769	21	
with non-financial customers	60	3	32	1	20	1	47	1	
Outright forwards	228	12	309	11	266	11	542	15	
with reporting dealers	63	3	114	4	119	5	165	5	
with other financial institutions	124	7	173	6	134	6	332	9	
with non-financial customers	40	2	21	1	13	1	45	1	
Foreign exchange swaps	775	42	1,127	41	1,161	48	1,646	46	
with reporting dealers	399	22	574	21	709	29	724	20	
with other financial institutions	309	17	503	18	409	17	844	24	
with non-financial customers	67	4	50	2	43	2	78	2	
Currency swaps	18	1	32	1	53	2	78	2	
with reporting dealers	7	0	21	1	30	1	54	2	
with other financial institutions	11	1	10	0	22	1	23	1	
with non-financial customers	1	0	1	0	1	0	1	0	
Options and other instruments <sup>2</sup>	135	7	227	8	142	6	167	5	
with reporting dealers	47	3	76	3	51	2	62	2	
with other financial institutions	79	4	141	5	88	4	99	3	
with non-financial customers	10	1	9	0	3	0	6	0	
Total	1,854	100	2,726	100	2,406	100	3,576	100	
with reporting dealers	809	44	1,170	43	1,250	52	1,334	37	
with other financial institutions	866	47	1,442	53	1,076	45	2,067	58	
with non-financial customers	178	10	113	4	81	3	176	5	
Local	547	29	1,095	40	758	31	1,695	47	
Cross-border	1,307	71	1,631	60	1,648	69	1,881	53	

<sup>1</sup> Adjusted for local double-counting.

<sup>2</sup> The category "other instruments" covers highly leveraged transactions and/or trades whose notional amount is variable and where a decomposition into individual plain vanilla components was impractical or impossible.

<sup>3</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

# Table 2b Foreign exchange market turnover by maturity<sup>1</sup>

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

Instrument/counterparty	2010		201	3	2016		2019 <sup>2</sup>	
Instrument/counterparty	Amount	%	Amount	%	Amount	%	Amount	%
Outright forwards <sup>1</sup>	241	100	329	100	307	100	597	100
Up to 7 days	144	60	167	51	120	39	131	22
Over 7 days and up to 1 year	94	39	138	42	178	58		
of which over 7 days and up to 1 Month							214	36
of which over 1 month and up to 3 months							192	32
of which over 3 months and up to 6 months							37	6
Over 1 year	3	1	24	7	9	3		
of which over 6 months			••				24	4
Foreign exchange swaps <sup>1</sup>	873	100	1,318	100	1,355	100	1,856	100
Up to 7 days	653	75	932	71	941	69	1,226	66
Over 7 days and up to 1 year	215	25	302	23	402	30		
of which over 7 days and up to 1 Month							242	13
of which over 1 month and up to 3 months							280	15
of which over 3 months and up to 6 months							75	4
Over 1 year	6	1	84	6	12	1		
of which over 6 months							34	2

<sup>1</sup> Data for maturity breakdown cannot be adjusted for local reporting dealers, so maturity values will not be equal to product totals.

<sup>2</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

Table 3
Currency distribution of foreign exchange market turnover<sup>1</sup>

Percentage shares of average daily turnover in April Currency US dollar Euro Japanese yen Pound sterling Australian dollar Swiss franc Canadian dollar Other currencies<sup>2</sup>

All currencies

<sup>1</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 local double counting.

<sup>2</sup> Comprises currencies that are no greater than 3 per cent of total foreign exchange turnover.

Table 4
Foreign exchange market turnover by currency pair<sup>1</sup>
Daily averages in April, in billions of US dollars and percentages

Currency pair	2007		2010		2013		2016		2019 <sup>2</sup>	
Currency pair	Amount		Amount	%	Amount	%	Amount	%	Amount	%
USD/EUR	472	32	595	32	758	28	695	29	1,009	28
USD/Other	240	16	244	13	433	16	444	18	822	23
USD/GBP	254	17	233	13	329	12	306	13	459	13
USD/JPY	175	12	250	14	516	19	393	16	449	13
USD/AUD	60	4	102	6	182	7	119	5	190	5
USD/CAD	40	3	75	4	86	3	87	4	143	4
USD/CHF	58	4	71	4	94	3	99	4	129	4
EUR/GBP	43	3	75	4	67	2	64	3	92	3
EUR/Other	34	2	50	3	62	2	59	2	82	2
EUR/JPY	31	2	56	3	68	3	35	1	52	1
EUR/CHF	30	2	35	2	36	1	19	1	35	1
EUR/AUD	3	0	5	0	11	0	8	0	10	0
EUR/CAD	3	0	4	0	7	0	6	0	8	0
Other pairs	40	3	58	3	78	3	73	3	97	3
All currency						=		=	, ,	
pairs	1,483	100	1,854	100	2,726	100	2,406	100	3,576	100

<sup>1</sup> Adjusted for local double-counting.

<sup>2</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

Table 5
OTC interest rate derivatives market turnover by instrument<sup>1</sup>
Average daily turnover in April. in billions of US dollars

Instrument	2007	2010	2013	2016	20194
Interest rate instruments <sup>2</sup>	957	1,235	1,348	1,181	3,670
of which: Related party trades			63	201	1,253
FRAs	154	382	473	375	1,000
Swaps	710	739	796	757	2,228
Options and other instruments	93	114	80	48	442
Memo: Turnover at April 2019 exchange rates <sup>3</sup>	809	1,070	1,170	1,148	3,670

<sup>1</sup> Adjusted for local double-counting.

<sup>2</sup> Single-currency interest rate contracts only.

<sup>3</sup> Non-US dollar transactions were converted into original currency amounts at average exchange rates for April of each survey year and then reconverted into US dollar amounts at average April 2019 exchange rates.

<sup>4</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

Table 6
OTC interest rate derivatives turnover by instrument, counterparty<sup>1</sup>
Daily averages in April, in billions of US dollars and percentages

2019<sup>3</sup> Instrument/counterparty % **Amount** % **Amount** % **Amount** % **Amount FRAs** 1,000 with reporting dealers with other financial institutions with non-financial customers **Swaps** 2,228 with reporting dealers with other financial institutions 1,533 with non-financial customers Options and other instruments<sup>2</sup> with reporting dealers with other financial institutions with non-financial customers 1,235 **Total** 1,348 1,181 3,670 with reporting dealers 1,325 with other financial institutions 2,309 with non-financial customers 

Local

Cross-border

2,398

1,272

<sup>1</sup> Adjusted for local double-counting. Single-currency interest rate contracts only.

<sup>2</sup> The category "other instruments" covers highly leveraged transactions and/or trades whose notional amount is variable and where a decomposition into individual plain vanilla components was impractical or impossible.

<sup>3</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

Table 7
OTC interest rate derivatives turnover by currency<sup>1</sup>

<sup>1</sup> Adjusted for local double-counting. Single-currency interest rate contracts only.

<sup>2</sup> Includes 'other products' where a currency breakdown is not available.

<sup>3</sup> Part of the increase between the 2016 and 2019 survey results reflect a more comprehensive reporting of "related party trades". Related party trades are reported as an "of which" item under total turnover, but are not allocated by instrument, currency or counterparty sector. Users should bear in mind the more comprehensive coverage when comparing the 2019 results to those of previous years.

### **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, 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.

### **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.

### **COUNTERPARTY DEFINITIONS AND CATEGORISATION**

## Reporting dealers

Reporting dealers collectively refer to large commercial and investment banks as well as securities dealers that are participating in the globally co-ordinated survey. These firms actively participate in local and global foreign exchange and derivative 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 endusers, such as corporates and non-financial government entities.

### Related party trades

Transactions between desks and offices, transactions with branches and subsidiaries, and transactions between affiliated firms. These trades are included regardless of whether the counterparty is resident in the same country as the reporting dealer or in another country. Back-to-

back trades that involve the transfer of risk from the sales desk to another affiliate are included. However, trades conducted as back-to-back deals and trades to facilitate internal bookkeeping and internal risk management within the same sales desk (i.e. reporting dealer) are excluded.