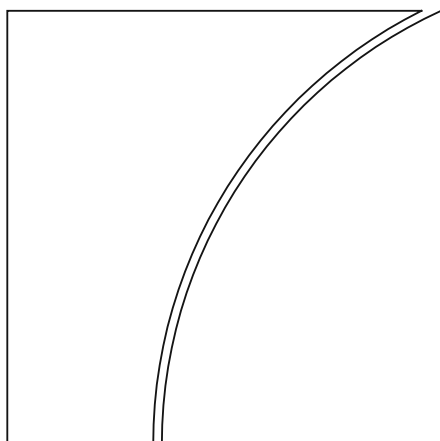




BANK FOR INTERNATIONAL SETTLEMENTS



Triennial Central Bank Survey

Global foreign exchange market turnover in 2019

Monetary and Economic Department

Tables revised on 8 December 2019

BIS Triennial Central Bank Survey 2019
Monetary and Economic Department

Queries concerning this release may be directed to statistics@bis.org.

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2019 Triennial Central Bank Survey

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Global foreign exchange market turnover in September 2019

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Conventions used in the tables

0 = Value close to zero.

... = Reported to be nil, not reported, not shown for reasons of confidentiality, not meaningful or not applicable.

Owing to rounding and incomplete reporting of various breakdowns, the component items do not always sum to the total for the category in question.

"Gross" refers to data for which no adjustment has been made for estimated double-counting; "net-gross" refers to data for which adjustments have been made for estimated local double-counting; and "net-net", or "net", refers to data adjusted for both local and cross-border double-counting.

OTC foreign exchange turnover by instrument, currency, counterparty, execution method and country in April 2019

Summary table

Daily averages, in millions of US dollars

	Total	Spot transactions	Outright forwards	Foreign exchange swaps	Currency swaps	FX options
Total, "net-net" basis¹	6,595,471	1,987,441	999,318	3,202,667	108,486	297,522
<i>by currency</i>						
USD	5,824,036	1,687,179	883,119	2,905,785	101,895	246,058
EUR	2,129,114	615,509	255,673	1,141,653	26,012	90,267
JPY	1,108,495	360,221	145,256	515,729	24,054	63,234
GBP	843,698	239,765	108,735	444,190	19,071	31,937
AUD	446,511	170,020	52,827	186,332	12,077	25,254
CAD	332,053	121,791	42,963	145,739	7,168	14,392
CHF	327,022	85,683	36,237	194,094	1,961	9,047
CNY	285,030	96,896	35,600	136,851	1,564	14,120
Other currencies	1,894,984	597,818	438,227	734,959	23,170	100,736
<i>by counterparty</i>						
with reporting dealers	2,523,140	592,902	267,784	1,498,371	55,952	108,131
local	818,039	201,631	84,770	466,790	20,688	44,161
cross-border	1,705,101	391,271	183,014	1,031,582	35,265	63,970
with other financial institutions	3,598,511	1,235,512	615,431	1,538,516	46,599	162,453
local	1,838,320	708,709	308,869	710,449	12,800	97,493
cross-border	1,760,191	526,803	306,563	828,067	33,799	64,960
non-reporting banks	1,615,720	448,235	126,515	967,327	21,531	52,112
institutional investors	776,872	308,349	214,863	212,409	8,360	32,892
hedge funds and PTFs	593,020	261,175	153,905	122,887	11,463	43,590
official sector	88,805	17,636	21,139	48,457	640	933
other	499,332	195,322	95,394	174,343	3,850	30,422
undistributed	24,760	4,793	3,614	13,093	755	2,504
with non-financial customers	473,784	159,028	116,104	165,780	5,935	26,938
local	243,984	96,115	52,189	77,307	2,657	15,716
cross-border	229,800	62,913	63,915	88,473	3,278	11,222
<i>Of which: prime brokered</i>	<i>1,488,252</i>	<i>918,450</i>	<i>251,431</i>	<i>217,531</i>	<i>395</i>	<i>100,445</i>
<i>Of which: retail-driven</i>	<i>201,653</i>	<i>65,614</i>	<i>13,618</i>	<i>96,824</i>	<i>192</i>	<i>25,405</i>
<i>by execution method</i>						
Voice direct	1,807,326	497,679	310,450	781,351	68,559	149,250
Voice indirect	864,775	51,053	71,669	682,074	14,939	45,040
Electronic direct	1,826,028	630,267	288,707	832,032	13,575	61,447
Electronic indirect	1,892,470	745,142	280,260	829,696	7,528	29,845
undistributed	204,873	63,301	48,233	77,514	3,886	11,939
Total, "net-gross" basis²	8,300,586	2,378,712	1,182,332	4,234,248	143,751	361,493
<i>by country</i>						
United Kingdom	3,576,409	1,143,755	541,629	1,645,696	78,001	167,328
United States	1,370,119	475,773	246,079	579,155	6,550	62,562
Singapore	639,869	153,862	98,318	335,724	7,063	44,890
Hong Kong SAR	632,108	111,701	58,619	417,161	21,686	22,934
Japan	375,505	97,614	61,133	195,279	6,049	15,421
Switzerland	275,719	64,203	29,941	161,148	36	20,389
France	167,123	22,866	19,752	117,885	2,513	4,083
China	136,017	43,302	5,466	84,347	344	2,557
Germany	124,448	18,916	6,982	95,725	1,157	1,668
Other countries	1,003,271	246,719	114,412	602,128	20,351	19,661

¹ Adjusted for local and cross-border inter-dealer double-counting. See annex for abbreviations. ² Adjusted for local inter-dealer double-counting. This corresponds to the total on a "net-net" basis plus local reporting dealers.

Table 1

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	TOT	Specified currency against all other currencies ²					
		AUD	BRL	CAD	CHF	CNY	DKK
Spot	1,987,441	170,020	14,088	121,791	85,683	96,896	7,010
with reporting dealers	592,902	51,108	3,646	34,767	27,719	38,949	2,027
local	201,631	15,521	2,507	12,209	7,633	13,753	484
cross-border	391,271	35,587	1,139	22,558	20,085	25,196	1,543
with other financial institutions	1,235,512	107,863	8,297	78,451	52,770	45,097	4,218
local	708,709	62,036	5,089	43,359	29,835	25,860	2,150
cross-border	526,803	45,827	3,208	35,092	22,936	19,237	2,068
non-reporting banks	448,235	33,002	2,610	27,434	17,503	30,005	1,991
institutional investors	308,349	24,341	1,677	19,722	15,605	5,446	1,207
hedge funds and PTFs	261,175	32,213	825	19,562	10,274	5,047	456
official sector FI	17,636	643	336	541	520	425	31
others	195,322	17,512	2,782	11,054	8,514	3,889	504
undistributed	4,793	153	67	138	354	284	29
with non-financial customers	159,028	11,049	2,145	8,573	5,194	12,850	765
local	96,115	6,599	1,347	5,564	2,727	11,022	492
cross-border	62,913	4,450	798	3,008	2,467	1,828	273
<i>o/w prime brokered</i>	<i>918,450</i>	<i>101,160</i>	<i>1,833</i>	<i>69,199</i>	<i>39,329</i>	<i>17,764</i>	<i>1,362</i>
<i>o/w retail-driven</i>	<i>65,614</i>	<i>7,488</i>	<i>153</i>	<i>3,249</i>	<i>2,862</i>	<i>4,685</i>	<i>115</i>
Outright forwards	999,318	52,827	42,809	42,963	36,237	35,600	4,744
with reporting dealers	267,784	13,488	14,719	9,384	9,269	15,205	586
local	84,770	3,906	6,920	3,097	3,140	4,019	167
cross-border	183,014	9,582	7,799	6,286	6,129	11,186	418
with other financial institutions	615,431	33,664	24,573	28,287	22,565	15,880	3,555
local	308,869	18,558	11,402	16,811	12,710	5,892	1,969
cross-border	306,563	15,106	13,171	11,476	9,854	9,989	1,586
non-reporting banks	126,515	4,513	8,263	4,934	3,772	3,620	763
institutional investors	214,863	11,582	5,660	10,597	10,915	4,810	1,697
hedge funds and PTFs	153,905	11,247	4,840	8,900	5,246	3,297	782
official sector FI	21,139	1,021	403	877	463	482	34
others	95,394	5,089	5,202	2,932	2,053	3,401	275
undistributed	3,614	211	205	46	114	270	4
with non-financial customers	116,104	5,675	3,517	5,292	4,403	4,514	603
local	52,189	2,636	1,924	2,639	1,369	2,865	376
cross-border	63,915	3,039	1,593	2,653	3,033	1,649	227
Seven days or less	268,528	16,511	9,033	15,467	12,999	10,751	1,807
Over 7 days and up to 1 month	290,600	13,549	20,209	8,887	8,626	10,728	497
Over 1 month and up to 3 months	321,867	17,271	11,167	12,654	10,756	8,246	1,397
Over 3 months and up to 6 months	70,861	3,769	1,166	4,415	2,423	2,720	818
Over 6 months	47,462	1,728	1,234	1,539	1,432	3,155	224
<i>o/w prime brokered</i>	<i>251,431</i>	<i>19,160</i>	<i>5,935</i>	<i>12,762</i>	<i>8,973</i>	<i>10,849</i>	<i>266</i>
<i>o/w retail-driven</i>	<i>13,618</i>	<i>1,031</i>	<i>389</i>	<i>387</i>	<i>982</i>	<i>516</i>	<i>86</i>
<i>o/w non-deliverable forwards</i>	<i>258,790</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.1

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²							
EUR	GBP	HKD	HUF	INR	JPY	KRW	
615,509	239,765	56,742	8,632	29,991	360,221	30,319	Spot
172,152	66,034	23,176	2,014	10,370	117,808	14,101	with reporting dealers
51,099	23,739	4,994	714	7,079	36,782	10,533	local
121,053	42,295	18,182	1,300	3,291	81,026	3,567	cross-border
394,306	157,914	28,577	5,966	15,116	219,501	12,869	with other financial institutions
219,814	96,529	15,754	3,724	8,174	128,604	6,624	local
174,491	61,385	12,823	2,242	6,942	90,897	6,245	cross-border
143,624	59,272	10,650	2,425	4,758	73,609	4,806	non-reporting banks
106,790	44,807	5,335	1,154	1,869	62,237	1,686	institutional investors
79,088	26,478	7,721	1,602	1,319	41,205	1,088	hedge funds and PTFs
5,821	2,261	380	11	1,002	2,564	859	official sector FI
57,680	24,611	3,165	768	5,855	39,601	4,325	others
1,303	485	1,326	6	313	286	106	undistributed
49,051	15,817	4,989	652	4,504	22,912	3,349	with non-financial customers
27,676	8,340	3,332	402	3,577	13,471	2,601	local
21,375	7,477	1,656	250	928	9,441	749	cross-border
290,471	105,665	21,666	4,679	3,006	185,373	2,863	<i>o/w prime brokered</i>
20,966	11,025	2,197	430	338	19,810	19	<i>o/w retail-driven</i>
255,673	108,735	26,426	3,146	62,729	145,256	71,569	Outright forwards
50,830	18,831	9,461	688	19,086	36,573	27,977	with reporting dealers
16,750	7,538	1,173	279	6,428	11,078	7,532	local
34,080	11,293	8,288	410	12,659	25,496	20,445	cross-border
165,857	74,149	15,564	1,968	34,437	92,875	40,610	with other financial institutions
77,133	38,927	8,530	1,100	17,061	56,158	17,409	local
88,724	35,222	7,034	869	17,376	36,717	23,201	cross-border
28,557	10,635	2,110	348	9,670	15,436	12,079	non-reporting banks
75,833	31,683	2,694	548	5,967	45,692	7,013	institutional investors
37,318	18,832	8,215	814	6,205	15,308	7,531	hedge funds and PTFs
7,761	5,237	350	13	811	3,508	958	official sector FI
15,980	7,648	1,089	240	11,016	12,516	12,633	others
407	114	1,106	5	768	414	396	undistributed
38,985	15,755	1,402	490	9,206	15,808	2,982	with non-financial customers
16,808	5,437	654	231	4,073	7,857	1,799	local
22,178	10,318	747	259	5,132	7,951	1,183	cross-border
86,173	34,937	10,980	674	9,391	36,131	8,334	Seven days or less
61,503	27,655	5,828	793	21,778	46,505	21,620	Over 7 days and up to 1 month
77,089	36,852	4,948	1,220	23,114	41,850	31,971	Over 1 month and up to 3 months
19,481	6,226	1,714	293	4,053	16,018	5,388	Over 3 months and up to 6 months
11,426	3,065	2,955	166	4,394	4,752	4,256	Over 6 months
44,472	19,498	18,312	2,019	12,007	25,291	18,046	<i>o/w prime brokered</i>
5,132	1,376	652	141	410	2,433	71	<i>o/w retail-driven</i>
4,635	...	...	...	...	2,503	...	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.2

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	Specified currency against all other currencies ²						
	MXN	NOK	NZD	PLN	RUB	SEK	SGD
Spot	48,300	41,599	52,526	12,236	33,765	41,182	37,074
with reporting dealers	11,889	8,807	15,657	3,080	8,346	9,002	13,760
local	3,939	2,905	4,848	1,053	4,838	2,919	3,551
cross-border	7,949	5,902	10,809	2,027	3,508	6,083	10,208
with other financial institutions	31,755	30,267	33,766	7,531	19,721	29,523	20,334
local	17,347	17,808	19,678	4,276	12,965	16,653	11,362
cross-border	14,408	12,459	14,087	3,254	6,757	12,870	8,972
non-reporting banks	13,252	11,272	11,547	2,808	7,013	11,680	7,889
institutional investors	7,559	5,732	8,384	1,676	9,425	6,513	3,715
hedge funds and PTFs	5,925	9,809	7,818	1,851	1,536	7,331	4,654
official sector FI	159	151	294	22	262	159	255
others	4,828	3,205	5,686	1,151	1,443	3,751	3,561
undistributed	33	99	36	21	42	89	259
with non-financial customers	4,656	2,525	3,103	1,625	5,698	2,658	2,980
local	2,913	1,274	1,751	1,178	4,537	1,425	1,571
cross-border	1,743	1,251	1,352	447	1,161	1,233	1,410
<i>o/w prime brokered</i>	<i>23,608</i>	<i>25,248</i>	<i>32,102</i>	<i>5,570</i>	<i>9,397</i>	<i>23,246</i>	<i>16,872</i>
<i>o/w retail-driven</i>	<i>1,184</i>	<i>456</i>	<i>1,822</i>	<i>175</i>	<i>189</i>	<i>546</i>	<i>1,383</i>
Outright forwards	12,773	14,807	15,997	5,173	9,857	16,745	11,977
with reporting dealers	3,138	2,826	4,313	930	2,690	2,963	3,788
local	1,042	1,106	1,353	262	1,119	1,044	1,341
cross-border	2,096	1,720	2,960	668	1,570	1,919	2,448
with other financial institutions	8,373	10,404	10,449	3,199	5,851	11,741	6,563
local	3,896	6,165	5,953	1,695	3,063	6,427	3,309
cross-border	4,477	4,239	4,496	1,503	2,788	5,313	3,254
non-reporting banks	2,385	1,743	1,841	395	1,574	2,306	1,036
institutional investors	1,878	2,500	3,096	1,224	1,973	3,244	2,270
hedge funds and PTFs	3,220	5,453	4,100	1,238	1,523	5,016	2,180
official sector FI	242	119	110	55	77	233	379
others	624	547	1,294	277	662	934	540
undistributed	23	43	9	10	42	7	158
with non-financial customers	1,262	1,577	1,236	1,044	1,316	2,041	1,625
local	601	1,006	658	545	777	1,330	1,221
cross-border	661	571	578	500	539	711	405
Seven days or less	3,180	5,185	4,666	1,604	2,339	5,182	4,115
Over 7 days and up to 1 month	3,760	3,284	3,611	1,291	3,645	4,043	2,615
Over 1 month and up to 3 months	4,015	5,036	6,300	1,819	2,832	5,667	4,076
Over 3 months and up to 6 months	1,052	857	783	225	631	1,370	785
Over 6 months	765	446	636	234	410	483	387
<i>o/w prime brokered</i>	<i>5,397</i>	<i>7,849</i>	<i>8,213</i>	<i>2,459</i>	<i>2,656</i>	<i>8,066</i>	<i>4,420</i>
<i>o/w retail-driven</i>	<i>143</i>	<i>118</i>	<i>325</i>	<i>40</i>	<i>152</i>	<i>271</i>	<i>465</i>
<i>o/w non-deliverable forwards</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.3

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²						
TRY	TWD	USD	ZAR	OTH ³	RES ⁴	
24,102	12,700	1,687,179	26,858	56,593	64,101	Spot
6,494	3,346	503,186	6,577	17,806	13,984	with reporting dealers
2,170	1,787	173,057	2,751	9,115	3,279	local
4,324	1,559	330,128	3,825	8,691	10,705	cross-border
16,424	7,034	1,055,616	18,864	28,123	41,119	with other financial institutions
9,126	3,309	607,581	12,383	14,463	22,915	local
7,298	3,725	448,035	6,480	13,660	18,204	cross-border
7,360	1,401	383,553	7,293	9,163	10,553	non-reporting banks
4,080	1,817	257,774	4,183	4,711	9,250	institutional investors
2,380	627	234,624	4,370	3,671	10,875	hedge funds and PTFs
76	468	14,342	60	3,185	444	official sector FI
2,521	2,708	162,409	2,931	6,435	9,755	others
6	12	2,913	27	958	242	undistributed
1,184	2,320	128,378	1,418	10,663	8,998	with non-financial customers
430	2,043	75,378	770	8,607	3,202	local
754	277	53,000	647	2,056	5,796	cross-border
12,260	1,446	788,826	15,041	10,704	28,209	<i>o/w prime brokered</i>
899	500	47,410	1,082	1,841	406	<i>o/w retail-driven</i>
5,354	34,771	883,119	6,646	71,803	20,901	Outright forwards
1,548	12,690	243,849	1,767	24,452	4,515	with reporting dealers
605	3,559	77,113	646	7,092	1,228	local
943	9,131	166,736	1,121	17,360	3,287	cross-border
3,219	20,396	540,131	3,688	39,343	13,522	with other financial institutions
1,876	8,111	266,076	2,120	18,632	6,753	local
1,342	12,285	274,055	1,568	20,711	6,769	cross-border
562	5,080	114,893	822	13,191	2,503	non-reporting banks
778	6,178	178,469	1,017	10,278	2,128	institutional investors
1,498	2,280	139,035	1,444	6,801	5,486	hedge funds and PTFs
36	643	16,788	45	1,415	215	official sector FI
335	5,974	88,744	347	7,384	3,050	others
9	240	2,201	13	273	141	undistributed
587	1,686	99,139	1,191	8,008	2,865	with non-financial customers
280	353	41,686	570	5,028	1,652	local
308	1,332	57,453	621	2,979	1,213	cross-border
1,879	4,750	230,633	2,247	13,747	4,339	Seven days or less
1,445	11,889	264,777	1,717	23,654	7,293	Over 7 days and up to 1 month
1,312	13,687	287,311	1,957	25,949	5,239	Over 1 month and up to 3 months
404	2,364	58,738	364	4,680	984	Over 3 months and up to 6 months
315	2,082	41,661	360	3,774	3,046	Over 6 months
2,511	4,867	234,071	2,921	13,008	8,833	<i>o/w prime brokered</i>
119	240	10,457	243	713	343	<i>o/w retail-driven</i>
...	...	257,723	...	...	...	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes all participating countries' currencies other than the ones listed. ⁴ Difference between total and listed components

Table 2.4

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	TOT	Specified currency against all other currencies ²					
		AUD	BRL	CAD	CHF	CNY	DKK
Foreign exchange swaps	3,202,667	186,332	555	145,739	194,094	136,851	29,788
with reporting dealers	1,498,371	93,537	114	66,268	95,686	67,068	14,602
local	466,790	26,064	39	23,050	29,935	32,607	2,956
cross-border	1,031,582	67,473	74	43,218	65,751	34,461	11,646
with other financial institutions	1,538,516	86,881	345	71,340	88,659	67,395	13,200
local	710,449	43,852	94	32,869	38,972	48,398	5,021
cross-border	828,067	43,029	251	38,471	49,687	18,997	8,179
non-reporting banks	967,327	46,105	70	39,169	56,565	59,236	9,377
institutional investors	212,409	15,848	93	12,901	17,095	3,344	2,281
hedge funds and PTFs	122,887	10,800	127	7,538	4,632	2,129	642
official sector FI	48,457	2,099	5	1,740	1,581	1,035	84
others	174,343	10,700	51	8,040	8,384	1,357	811
undistributed	13,093	1,329	...	1,953	402	294	5
with non-financial customers	165,780	5,914	96	8,131	9,750	2,388	1,985
local	77,307	3,015	84	4,225	4,924	1,368	998
cross-border	88,473	2,899	12	3,906	4,826	1,021	987
Seven days or less	2,061,740	126,824	103	95,577	131,392	87,170	20,313
Over 7 days and up to 1 month	398,512	18,200	41	16,619	20,766	16,828	2,334
Over 1 month and up to 3 months	520,093	29,421	260	22,852	29,199	13,549	5,032
Over 3 months and up to 6 months	143,465	7,461	30	7,941	9,947	6,932	1,399
Over 6 months	78,856	4,425	121	2,750	2,790	12,372	710
<i>o/w prime brokered</i>	217,531	17,794	0	13,449	10,947	4,097	1,068
<i>o/w retail-driven</i>	96,824	5,011	0	3,374	8,912	693	1,204
Currency swaps	108,486	12,077	1,806	7,168	1,961	1,564	142
with reporting dealers	55,952	5,383	193	3,007	910	758	22
local	20,688	1,130	77	1,567	369	213	1
cross-border	35,265	4,253	116	1,439	541	546	20
with other financial institutions	46,599	6,484	1,204	3,149	809	714	117
local	12,800	901	959	957	401	351	20
cross-border	33,799	5,583	245	2,192	408	364	96
non-reporting banks	21,531	4,439	867	884	257	371	37
institutional investors	8,360	1,330	275	876	269	57	9
hedge funds and PTFs	11,463	201	52	898	79	221	...
official sector FI	640	25	6	188	28	23	35
others	3,850	290	4	300	150	42	35
undistributed	755	199	...	2	26	...	...
with non-financial customers	5,935	210	409	1,011	242	91	4
local	2,657	107	408	860	23	69	0
cross-border	3,278	103	1	151	219	22	4
<i>o/w prime brokered</i>	395	...	...	...	...	130	...
<i>o/w retail-driven</i>	192	5	0	1	10	0	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.5

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²							
EUR	GBP	HKD	HUF	INR	JPY	KRW	
1,141,653	444,190	139,257	12,440	14,889	515,729	18,665	Foreign exchange swaps
511,816	189,483	86,625	5,740	7,909	229,717	12,463	with reporting dealers
133,471	60,713	31,416	1,875	7,180	60,044	11,016	local
378,345	128,770	55,210	3,865	729	169,673	1,446	cross-border
541,363	228,802	50,504	5,976	6,919	266,012	5,525	with other financial institutions
233,879	121,026	20,413	2,899	6,547	113,086	4,907	local
307,484	107,776	30,092	3,077	373	152,926	618	cross-border
347,104	145,223	34,890	3,451	3,569	155,725	2,181	non-reporting banks
79,759	33,306	5,130	753	163	36,933	1,605	institutional investors
39,351	18,620	3,908	695	227	22,085	464	hedge funds and PTFs
17,872	5,310	444	81	191	11,319	643	official sector FI
54,603	23,843	6,003	984	2,770	38,442	632	others
2,674	2,500	128	12	...	1,509	...	undistributed
88,474	25,906	2,127	724	61	20,000	677	with non-financial customers
34,122	12,313	748	320	14	12,198	610	local
54,351	13,592	1,378	404	47	7,802	67	cross-border
703,854	274,430	88,292	9,402	8,010	307,206	8,376	Seven days or less
150,944	55,193	14,645	1,132	1,711	91,626	2,213	Over 7 days and up to 1 month
222,347	91,715	19,238	1,061	2,275	74,049	3,986	Over 1 month and up to 3 months
45,606	18,077	8,793	389	940	31,044	2,066	Over 3 months and up to 6 months
18,903	4,775	8,288	457	1,953	11,804	2,023	Over 6 months
63,694	20,640	8,925	1,334	139	44,146	327	<i>o/w prime brokered</i>
50,720	11,102	871	1,370	7	18,652	2	<i>o/w retail-driven</i>
26,012	19,071	2,618	38	320	24,054	877	Currency swaps
15,019	11,764	1,360	27	110	11,331	513	with reporting dealers
6,180	5,984	342	1	16	2,454	424	local
8,838	5,781	1,019	26	94	8,878	89	cross-border
8,792	6,088	1,130	11	174	12,492	322	with other financial institutions
3,515	3,748	96	0	17	1,257	297	local
5,277	2,341	1,033	11	157	11,234	24	cross-border
4,876	3,275	979	8	135	2,408	49	non-reporting banks
1,025	638	52	0	11	2,786	242	institutional investors
1,184	1,346	21	0	5	6,502	16	hedge funds and PTFs
44	110	11	0	...	70	6	official sector FI
1,379	707	59	3	24	382	9	others
283	12	8	...	...	344	...	undistributed
2,201	1,218	128	0	35	231	42	with non-financial customers
924	274	87	...	34	147	42	local
1,277	944	41	0	1	84	1	cross-border
215	...	...	1	...	1	...	<i>o/w prime brokered</i>
119	12	...	...	...	25	...	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.6

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	Specified currency against all other currencies ²						
	MXN	NOK	NZD	PLN	RUB	SEK	SGD
Foreign exchange swaps	43,595	56,284	53,942	21,890	26,076	70,813	64,646
with reporting dealers	17,000	22,701	27,010	10,921	12,269	26,910	34,265
local	5,646	5,775	6,496	2,863	5,753	6,572	12,779
cross-border	11,354	16,926	20,514	8,059	6,517	20,338	21,486
with other financial institutions	24,702	29,378	24,810	9,260	11,482	36,199	28,375
local	10,048	14,796	12,407	3,937	4,211	15,126	13,883
cross-border	14,654	14,582	12,404	5,323	7,270	21,073	14,492
non-reporting banks	14,872	20,558	13,200	5,314	7,207	24,589	13,899
institutional investors	2,953	2,915	3,697	1,167	2,137	4,451	5,463
hedge funds and PTFs	2,762	2,779	3,029	924	933	2,753	2,000
official sector FI	211	288	1,155	119	72	473	3,396
others	3,885	2,806	3,611	1,612	1,070	3,891	3,614
undistributed	19	33	118	124	62	42	3
with non-financial customers	1,894	4,206	2,121	1,708	2,325	7,704	2,006
local	1,008	2,837	1,469	907	845	3,858	1,190
cross-border	886	1,369	652	801	1,480	3,846	816
Seven days or less	32,524	36,528	38,681	15,973	21,011	46,101	45,234
Over 7 days and up to 1 month	3,321	6,347	5,155	2,480	1,967	8,246	6,101
Over 1 month and up to 3 months	4,313	8,578	7,529	2,498	1,780	9,815	9,414
Over 3 months and up to 6 months	1,716	4,069	1,604	610	687	4,946	2,512
Over 6 months	1,721	761	974	329	631	1,704	1,384
<i>o/w prime brokered</i>	6,230	6,220	7,656	1,787	1,374	5,494	3,391
<i>o/w retail-driven</i>	1,629	1,652	2,351	490	292	1,943	915
Currency swaps	1,201	1,108	4,331	104	755	2,624	1,719
with reporting dealers	261	319	1,936	57	236	1,928	647
local	83	87	227	18	163	679	103
cross-border	178	232	1,709	40	73	1,249	544
with other financial institutions	936	740	2,371	46	477	625	1,047
local	200	343	95	11	278	146	97
cross-border	736	397	2,276	35	199	480	951
non-reporting banks	516	263	1,852	28	299	131	779
institutional investors	142	188	353	6	50	76	204
hedge funds and PTFs	236	205	134	...	30	346	38
official sector FI	6	59	7	3	3	16	...
others	30	22	6	9	92	53	27
undistributed	6	4	20	...	3	4	...
with non-financial customers	4	50	24	0	42	70	25
local	3	13	18	0	26	39	7
cross-border	1	37	6	...	16	31	19
<i>o/w prime brokered</i>	...	...	...	...	...	...	16
<i>o/w retail-driven</i>	8	...	...	...	...	3	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.7

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²						
TRY	TWD	USD	ZAR	OTH ³	RES ⁴	
35,373	10,191	2,905,785	30,412	74,068	32,074	Foreign exchange swaps
13,544	3,226	1,390,381	13,831	32,529	11,127	with reporting dealers
4,045	2,898	438,919	4,216	13,012	4,239	local
9,499	328	951,462	9,615	19,516	6,888	cross-border
20,833	6,014	1,386,509	15,152	33,544	17,852	with other financial institutions
11,526	5,772	625,843	7,308	16,071	8,006	local
9,307	242	760,666	7,844	17,473	9,845	cross-border
12,100	2,007	883,636	8,483	17,702	8,421	non-reporting banks
1,900	2,403	181,192	1,812	4,384	1,135	institutional investors
1,344	70	112,575	1,046	1,849	2,494	hedge funds and PTFs
1,160	1,350	44,592	384	928	379	official sector FI
4,225	164	153,842	3,410	4,650	5,285	others
103	20	10,671	17	4,031	137	undistributed
997	951	128,895	1,429	7,996	3,096	with non-financial customers
566	937	56,958	839	6,630	1,630	local
430	14	71,936	590	1,366	1,466	cross-border
26,406	1,587	1,895,834	23,269	52,030	27,353	Seven days or less
4,802	1,795	352,053	3,034	7,904	1,566	Over 7 days and up to 1 month
2,923	3,056	461,079	2,804	7,724	3,688	Over 1 month and up to 3 months
791	2,790	124,657	772	2,801	1,650	Over 3 months and up to 6 months
452	963	72,160	533	3,609	1,118	Over 6 months
3,747	99	199,163	5,366	4,499	3,475	<i>o/w prime brokered</i>
1,173	...	77,616	1,263	1,464	940	<i>o/w retail-driven</i>
2,001	154	101,895	1,031	1,001	1,339	Currency swaps
1,016	37	54,071	190	421	389	with reporting dealers
601	27	20,122	137	236	136	local
415	10	33,949	53	185	252	cross-border
952	49	43,260	83	432	692	with other financial institutions
478	28	11,206	17	79	105	local
474	21	32,054	66	353	587	cross-border
475	20	19,579	40	253	246	non-reporting banks
174	26	7,752	2	52	123	institutional investors
130	...	11,171	8	70	29	hedge funds and PTFs
14	...	592	10	13	13	official sector FI
159	4	3,567	21	45	282	others
...	...	599	1	0	0	undistributed
33	67	4,565	758	148	258	with non-financial customers
29	67	1,925	89	108	14	local
4	0	2,640	669	40	244	cross-border
6	...	204	...	26	193	<i>o/w prime brokered</i>
...	6	178	...	14	4	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes all participating countries' currencies other than the ones listed. ⁴ Difference between total and listed components.

Table 2.8

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	TOT	Specified currency against all other currencies ²					
		AUD	BRL	CAD	CHF	CNY	DKK
Total options	297,522	25,254	11,475	14,392	9,047	14,120	14
with reporting dealers	108,131	9,530	3,924	5,087	3,484	6,736	1
local	44,161	3,364	2,227	1,446	1,068	1,765	...
cross-border	63,970	6,166	1,697	3,642	2,416	4,971	1
with other financial institutions	162,453	13,284	7,122	6,517	4,178	6,190	1
local	97,493	7,208	4,119	3,140	2,290	2,250	0
cross-border	64,960	6,076	3,003	3,378	1,887	3,940	0
non-reporting banks	52,112	4,348	2,963	2,278	1,353	3,103	0
institutional investors	32,892	3,127	1,402	1,327	858	1,118	0
hedge funds and PTFs	43,590	3,255	2,203	1,838	1,006	1,402	...
official sector FI	933	77	35	84	23	25	...
others	30,422	1,973	511	950	863	528	0
undistributed	2,504	503	7	40	75	15	...
with non-financial customers	26,938	2,441	429	2,787	1,385	1,193	13
local	15,716	1,367	253	633	382	952	13
cross-border	11,222	1,074	176	2,154	1,003	241	0
<i>o/w prime brokered</i>	<i>100,445</i>	<i>7,889</i>	<i>4,502</i>	<i>3,844</i>	<i>3,115</i>	<i>5,177</i>	<i>0</i>
<i>o/w retail-driven</i>	<i>25,405</i>	<i>2,903</i>	<i>53</i>	<i>5,935</i>	<i>2,722</i>	<i>162</i>	<i>3</i>
Other products	37	...	...	...	...	...	...
Total FX contracts	6,595,471	446,511	70,734	332,053	327,022	285,030	41,698
<i>o/w prime brokered</i>	<i>1,488,252</i>	<i>146,003</i>	<i>12,271</i>	<i>99,254</i>	<i>62,363</i>	<i>38,019</i>	<i>2,695</i>
<i>o/w retail-driven</i>	<i>201,653</i>	<i>16,437</i>	<i>595</i>	<i>12,947</i>	<i>15,489</i>	<i>6,056</i>	<i>1,407</i>
<i>o/w related party trade</i>	<i>1,301,149</i>	...	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.9

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²							
EUR	GBP	HKD	HUF	INR	JPY	KRW	
90,267	31,937	7,876	2,328	5,703	63,234	10,338	Total options
32,995	10,995	2,699	1,187	1,974	23,258	4,456	with reporting dealers
15,704	5,795	444	803	618	8,444	1,667	local
17,291	5,199	2,255	384	1,356	14,814	2,788	cross-border
50,776	18,684	4,778	1,110	2,902	31,940	5,557	with other financial institutions
32,873	14,148	2,016	759	1,491	19,523	2,517	local
17,902	4,536	2,762	351	1,411	12,417	3,040	cross-border
15,637	4,667	859	186	870	9,146	1,821	non-reporting banks
8,862	2,703	1,535	282	517	9,003	1,161	institutional investors
12,138	4,790	1,041	568	834	10,036	1,588	hedge funds and PTFs
272	89	5	...	26	162	26	official sector FI
13,180	5,902	1,310	73	622	3,080	940	others
686	534	27	0	33	513	21	undistributed
6,497	2,257	400	32	826	8,037	326	with non-financial customers
3,296	999	268	26	506	6,617	232	local
3,200	1,259	131	6	320	1,420	94	cross-border
29,394	10,578	3,044	1,185	1,821	21,312	3,965	<i>o/w prime brokered</i>
3,693	1,000	220	41	128	13,131	86	<i>o/w retail-driven</i>
...	...	...	...	...	...	...	Other products
2,129,114	843,698	232,920	26,585	113,632	1,108,495	131,768	Total FX contracts
428,246	156,380	51,946	9,217	16,973	276,123	25,202	<i>o/w prime brokered</i>
80,629	24,514	3,940	1,983	882	54,050	177	<i>o/w retail-driven</i>
...	...	...	...	...	...	...	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.10

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

	Specified currency against all other currencies ²						
	MXN	NOK	NZD	PLN	RUB	SEK	SGD
Total options	7,848	4,892	10,022	1,251	1,714	2,814	3,941
with reporting dealers	2,768	1,542	4,000	574	585	689	1,273
local	1,466	800	1,134	282	261	310	319
cross-border	1,302	742	2,866	293	325	379	954
with other financial institutions	4,746	3,107	4,609	601	920	1,849	2,215
local	2,999	2,047	2,312	429	512	1,115	1,479
cross-border	1,747	1,060	2,297	172	409	734	735
non-reporting banks	1,224	991	1,322	212	392	579	1,306
institutional investors	1,215	459	1,332	78	207	358	215
hedge funds and PTFs	1,600	741	1,056	145	175	591	409
official sector FI	9	14	40	0	2	12	82
others	688	838	747	153	136	256	203
undistributed	10	64	112	13	8	51	0
with non-financial customers	334	243	1,413	76	209	276	454
local	234	126	309	63	115	164	142
cross-border	99	117	1,104	13	94	112	312
<i>o/w prime brokered</i>	3,176	1,955	2,647	412	518	1,208	954
<i>o/w retail-driven</i>	41	89	3,156	29	114	37	181
Other products	...	...	...	...	...	...	...
Total FX contracts	113,717	118,691	136,818	40,653	72,168	134,178	119,357
<i>o/w prime brokered</i>	38,411	41,272	50,617	10,227	13,945	38,014	25,652
<i>o/w retail-driven</i>	3,005	2,315	7,654	734	747	2,800	2,945
<i>o/w related party trade</i>	...	...	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 2.11

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Total reported transactions in all currencies

Daily averages, in millions of US dollars

Specified currency against all other currencies ²						
TRY	TWD	USD	ZAR	OTH ³	RES ⁴	
4,384	2,641	246,058	7,202	6,208	10,085	Total options
1,527	848	88,757	2,450	2,177	2,747	with reporting dealers
840	205	36,345	1,202	979	833	local
686	643	52,412	1,248	1,198	1,914	cross-border
2,678	1,699	136,405	2,975	3,363	6,701	with other financial institutions
1,955	807	80,335	1,937	1,577	5,147	local
724	892	56,070	1,038	1,786	1,554	cross-border
590	658	45,489	844	1,213	2,170	non-reporting banks
402	187	27,880	325	642	588	institutional investors
1,298	563	35,538	803	912	2,650	hedge funds and PTFs
32	5	805	38	16	15	official sector FI
333	285	25,011	600	359	1,303	others
23	...	1,681	365	221	6	undistributed
179	94	20,896	1,777	668	636	with non-financial customers
140	55	12,758	986	425	372	local
38	38	8,138	791	243	264	cross-border
1,958	1,260	82,047	2,043	1,957	4,933	<i>o/w prime brokered</i>
65	6	16,817	114	28	57	<i>o/w retail-driven</i>
...	...	...	...	...	...	Other products
71,213	60,456	5,824,036	72,149	209,674	128,573	Total FX contracts
20,483	7,672	1,304,312	25,370	30,194	45,643	<i>o/w prime brokered</i>
2,256	752	152,478	2,702	4,060	1,750	<i>o/w retail-driven</i>
...	...	...	...	...	2,602,298	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes all participating countries' currencies other than the ones listed. ⁴ Difference between total and listed components.

Table 2.12

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	CHF	CNY
Spot	1,687,179	126,890	13,402	105,527	53,053	88,656
with reporting dealers	503,186	37,162	3,445	29,558	16,866	35,351
local	173,057	11,239	2,365	10,488	4,523	11,142
cross-border	330,128	25,923	1,080	19,070	12,344	24,209
with other financial institutions	1,055,616	81,454	8,093	68,762	33,291	42,685
local	607,581	47,171	4,999	38,407	19,322	24,108
cross-border	448,035	34,282	3,094	30,355	13,969	18,577
non-reporting banks	383,553	24,311	2,528	24,061	10,652	28,547
institutional investors	257,774	16,712	1,604	16,824	10,077	4,928
hedge funds and PTFs	234,624	28,217	822	18,358	7,149	4,951
official sector FI	14,342	420	329	414	268	399
others	162,409	11,709	2,773	9,017	5,061	3,722
undistributed	2,913	84	38	89	83	138
with non-financial customers	128,378	8,274	1,864	7,207	2,895	10,620
local	75,378	4,898	1,171	4,617	1,534	8,995
cross-border	53,000	3,377	693	2,590	1,361	1,625
<i>o/w prime brokered</i>	788,826	78,143	1,783	63,071	25,134	17,314
<i>o/w retail-driven</i>	47,410	3,606	148	2,145	1,206	3,940
Outright forwards	883,119	41,197	40,805	35,364	25,122	33,127
with reporting dealers	243,849	10,789	14,096	7,626	6,492	14,434
local	77,113	3,101	6,570	2,570	2,230	3,903
cross-border	166,736	7,689	7,526	5,056	4,262	10,531
with other financial institutions	540,131	26,016	23,525	23,396	15,403	14,977
local	266,076	13,835	10,750	13,928	8,989	5,398
cross-border	274,055	12,181	12,775	9,468	6,414	9,579
non-reporting banks	114,893	3,390	8,078	4,155	2,511	3,390
institutional investors	178,469	7,765	5,302	7,922	7,102	4,538
hedge funds and PTFs	139,035	10,062	4,595	8,106	3,902	3,210
official sector FI	16,788	609	386	630	261	466
others	88,744	4,102	5,085	2,551	1,569	3,257
undistributed	2,201	88	78	33	58	115
with non-financial customers	99,139	4,392	3,183	4,341	3,227	3,716
local	41,686	1,779	1,640	2,142	760	2,309
cross-border	57,453	2,612	1,543	2,199	2,467	1,407
Seven days or less	230,633	12,998	8,519	12,699	8,831	10,196
Over 7 days and up to 1 month	264,777	10,632	19,622	7,368	6,910	9,942
Over 1 month and up to 3 months	287,311	13,774	10,641	10,399	7,002	7,742
Over 3 months and up to 6 months	58,738	2,523	978	3,614	1,430	2,450
Over 6 months	41,661	1,270	1,044	1,284	948	2,797
<i>o/w prime brokered</i>	234,071	17,226	5,658	11,876	6,943	10,689
<i>o/w retail-driven</i>	10,457	446	371	308	606	470
<i>o/w non-deliverable forwards</i>	257,723	...	35,746	...	...	11,768

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.1

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

EUR	GBP	HKD	INR	JPY	KRW	
416,365	167,168	51,082	28,727	259,953	26,919	Spot
115,016	46,276	21,618	10,194	86,129	11,554	with reporting dealers
33,772	17,389	4,618	7,014	27,758	8,323	local
81,244	28,887	17,001	3,180	58,371	3,231	cross-border
273,024	110,330	26,012	14,719	157,422	12,507	with other financial institutions
153,134	67,819	13,894	8,053	93,142	6,411	local
119,891	42,511	12,118	6,666	64,280	6,096	cross-border
97,998	42,605	10,069	4,715	54,442	4,736	non-reporting banks
73,433	29,807	4,811	1,761	41,276	1,538	institutional investors
59,396	20,942	7,604	1,312	33,602	1,072	hedge funds and PTFs
3,267	1,554	182	991	2,093	800	official sector FI
38,375	15,323	2,909	5,808	25,850	4,276	others
555	100	436	132	158	85	undistributed
28,324	10,562	3,452	3,814	16,402	2,858	with non-financial customers
13,988	5,487	2,017	2,942	9,576	2,137	local
14,336	5,075	1,434	872	6,826	721	cross-border
204,265	74,648	21,562	3,003	132,285	2,695	<i>o/w prime brokered</i>
13,100	5,456	1,415	304	9,448	10	<i>o/w retail-driven</i>
175,274	74,789	23,168	60,998	105,102	69,984	Outright forwards
34,740	14,585	8,874	18,775	27,348	27,611	with reporting dealers
11,329	5,939	1,052	6,304	7,949	7,402	local
23,411	8,645	7,822	12,471	19,400	20,209	cross-border
113,948	48,590	13,344	33,440	65,582	39,570	with other financial institutions
48,947	25,873	6,819	16,233	38,362	16,931	local
65,001	22,718	6,525	17,208	27,220	22,639	cross-border
20,929	7,792	1,795	9,533	11,079	11,933	non-reporting banks
50,513	20,221	1,961	5,836	29,310	6,842	institutional investors
25,243	12,200	8,066	6,154	13,450	7,354	hedge funds and PTFs
5,144	2,801	196	792	1,538	929	official sector FI
11,978	5,508	957	10,850	9,852	12,341	others
141	67	369	276	352	171	undistributed
26,586	11,614	951	8,783	12,171	2,802	with non-financial customers
9,381	3,157	373	3,745	5,414	1,671	local
17,204	8,457	577	5,038	6,757	1,132	cross-border
60,596	21,278	9,774	9,047	25,325	7,935	Seven days or less
44,390	20,716	4,919	21,372	35,670	21,320	Over 7 days and up to 1 month
52,552	26,906	4,115	22,491	30,512	31,361	Over 1 month and up to 3 months
10,561	3,826	1,495	3,859	9,872	5,212	Over 3 months and up to 6 months
7,175	2,064	2,865	4,230	3,722	4,157	Over 6 months
31,596	14,513	18,287	11,943	21,205	17,627	<i>o/w prime brokered</i>
3,502	761	442	403	1,092	69	<i>o/w retail-driven</i>
...	...	...	50,018	...	60,103	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.2

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

	MXN	NOK	NZD	PLN	RUB	SEK
Spot	45,807	18,713	38,278	5,017	29,081	17,523
with reporting dealers	11,045	2,978	11,389	949	7,440	3,053
local	3,706	1,017	3,507	352	4,224	1,009
cross-border	7,339	1,961	7,882	597	3,217	2,044
with other financial institutions	30,349	14,857	24,635	3,519	18,747	13,486
local	16,430	9,514	14,666	2,036	12,288	8,246
cross-border	13,919	5,343	9,969	1,483	6,459	5,240
non-reporting banks	12,545	4,754	8,219	1,215	6,523	4,690
institutional investors	7,305	2,199	6,018	638	9,093	2,802
hedge funds and PTFs	5,715	6,815	6,485	1,182	1,504	4,476
official sector FI	128	60	181	9	178	88
others	4,632	1,012	3,712	473	1,411	1,422
undistributed	25	17	19	3	39	7
with non-financial customers	4,413	878	2,255	548	2,893	985
local	2,770	470	1,208	290	1,976	465
cross-border	1,643	408	1,046	258	917	519
<i>o/w prime brokered</i>	22,983	12,313	24,486	2,562	9,270	10,537
<i>o/w retail-driven</i>	1,081	173	748	44	136	256
Outright forwards	11,748	9,748	12,935	3,279	8,985	10,677
with reporting dealers	2,866	1,827	3,528	688	2,377	1,970
local	973	652	1,110	165	1,076	625
cross-border	1,893	1,174	2,417	523	1,301	1,345
with other financial institutions	7,718	7,088	8,475	2,057	5,592	7,724
local	3,527	4,439	4,833	929	2,940	4,105
cross-border	4,192	2,649	3,642	1,128	2,652	3,619
non-reporting banks	2,204	1,121	1,367	256	1,478	1,490
institutional investors	1,636	1,275	2,190	617	1,907	1,732
hedge funds and PTFs	3,089	4,319	3,770	935	1,470	3,907
official sector FI	226	72	91	52	74	136
others	549	279	1,051	190	621	455
undistributed	14	22	7	7	42	3
with non-financial customers	1,164	834	933	533	1,016	983
local	553	516	492	242	596	534
cross-border	610	318	441	292	420	449
Seven days or less	2,835	3,430	3,668	1,158	2,033	3,405
Over 7 days and up to 1 month	3,576	2,086	2,863	786	3,464	2,562
Over 1 month and up to 3 months	3,712	3,374	5,287	1,193	2,629	3,433
Over 3 months and up to 6 months	934	556	601	99	544	947
Over 6 months	691	303	516	43	316	329
<i>o/w prime brokered</i>	5,183	6,241	7,410	1,936	2,578	6,256
<i>o/w retail-driven</i>	117	54	178	9	145	60
<i>o/w non-deliverable forwards</i>	...	...	...	...	5,497	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.3

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

SGD	TRY	TWD	ZAR	OTH ²	RES ³	
32,946	22,206	12,020	24,751	21,020	82,077	Spot
12,238	6,019	3,239	6,089	7,598	17,978	with reporting dealers
3,157	2,069	1,765	2,620	6,135	4,863	local
9,081	3,950	1,474	3,469	1,463	13,115	cross-border
18,519	15,198	6,856	17,556	6,933	56,659	with other financial institutions
10,350	8,400	3,199	11,454	4,121	30,415	local
8,169	6,799	3,657	6,102	2,812	26,245	cross-border
7,158	6,786	1,390	6,753	1,846	17,011	non-reporting banks
3,434	3,883	1,665	4,033	1,508	12,425	institutional investors
4,413	2,334	622	4,286	212	13,156	hedge funds and PTFs
241	69	468	56	1,168	979	official sector FI
3,198	2,123	2,702	2,417	1,466	13,017	others
76	3	9	13	733	71	undistributed
2,188	988	1,925	1,105	6,489	7,440	with non-financial customers
924	287	1,685	554	5,972	1,415	local
1,264	702	240	550	517	6,025	cross-border
16,124	11,587	1,446	14,606	868	38,143	<i>o/w prime brokered</i>
852	545	395	509	1,407	484	<i>o/w retail-driven</i>
10,218	4,722	34,094	5,788	9,260	76,735	Outright forwards
3,456	1,367	12,498	1,478	3,058	23,366	with reporting dealers
1,298	537	3,487	605	995	7,240	local
2,158	830	9,011	873	2,063	16,126	cross-border
5,578	2,931	20,049	3,344	3,082	48,700	with other financial institutions
2,813	1,715	7,860	1,911	2,477	22,462	local
2,765	1,216	12,189	1,433	605	26,238	cross-border
886	481	5,028	726	495	14,776	non-reporting banks
1,809	679	6,107	863	1,751	10,592	institutional investors
2,085	1,446	2,261	1,392	96	11,923	hedge funds and PTFs
276	25	630	42	319	1,092	official sector FI
457	294	5,936	310	330	10,220	others
65	7	87	10	91	97	undistributed
1,184	424	1,547	966	3,121	4,669	with non-financial customers
875	151	308	428	3,015	1,604	local
309	273	1,239	538	106	3,065	cross-border
3,518	1,692	4,626	1,917	2,864	12,290	Seven days or less
2,275	1,279	11,813	1,584	2,364	27,263	Over 7 days and up to 1 month
3,469	1,146	13,335	1,759	2,564	27,913	Over 1 month and up to 3 months
667	367	2,278	298	703	4,922	Over 3 months and up to 6 months
288	238	2,041	229	764	4,346	Over 6 months
4,326	2,383	4,826	2,825	87	22,458	<i>o/w prime brokered</i>
334	86	240	179	403	184	<i>o/w retail-driven</i>
...	...	30,865	...	...	...	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 3.4

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	CHF	CNY
Foreign exchange swaps	2,905,785	165,045	454	130,297	143,926	133,788
with reporting dealers	1,390,381	86,763	40	61,138	72,359	66,080
local	438,919	24,432	29	22,154	20,308	32,379
cross-border	951,462	62,332	11	38,984	52,051	33,701
with other financial institutions	1,386,509	74,363	327	62,534	66,737	65,908
local	625,843	35,709	81	28,622	28,201	47,577
cross-border	760,666	38,655	246	33,912	38,536	18,330
non-reporting banks	883,636	42,261	53	36,347	43,735	58,393
institutional investors	181,192	11,406	91	10,272	12,035	3,094
hedge funds and PTFs	112,575	9,828	127	6,965	3,800	2,066
official sector FI	44,592	1,447	5	1,175	1,329	919
others	153,842	8,369	51	7,160	5,833	1,265
undistributed	10,671	1,052	...	616	5	170
with non-financial customers	128,895	3,918	87	6,625	4,830	1,800
local	56,958	1,876	77	3,524	2,055	1,070
cross-border	71,936	2,042	10	3,101	2,775	731
Seven days or less	1,895,834	114,243	23	88,278	103,215	85,910
Over 7 days and up to 1 month	352,053	15,241	36	14,433	13,088	16,131
Over 1 month and up to 3 months	461,079	24,998	256	18,315	19,502	12,855
Over 3 months and up to 6 months	124,657	6,451	29	6,749	6,226	6,764
Over 6 months	72,160	4,113	110	2,523	1,895	12,127
<i>o/w prime brokered</i>	199,163	15,600	...	12,344	8,132	3,893
<i>o/w retail-driven</i>	77,616	2,248	0	2,441	5,917	652
Currency swaps	101,895	11,181	1,120	6,970	1,706	1,500
with reporting dealers	54,071	5,036	190	2,952	814	740
local	20,122	1,038	74	1,565	355	210
cross-border	33,949	3,998	116	1,387	459	530
with other financial institutions	43,260	6,047	818	3,034	711	673
local	11,206	653	684	951	350	323
cross-border	32,054	5,394	134	2,083	360	350
non-reporting banks	19,579	4,294	780	785	197	333
institutional investors	7,752	1,223	5	870	269	57
hedge funds and PTFs	11,171	201	28	897	79	221
official sector FI	592	24	6	183	16	20
others	3,567	198	...	298	150	42
undistributed	599	106	...	...	...	...
with non-financial customers	4,565	97	112	985	182	86
local	1,925	64	111	849	6	65
cross-border	2,640	34	1	135	176	21
<i>o/w prime brokered</i>	204	...	...	...	...	130
<i>o/w retail-driven</i>	178	5	0	1	7	0

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.5

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

EUR	GBP	HKD	INR	JPY	KRW	
913,823	350,966	135,223	14,847	432,592	18,009	Foreign exchange swaps
427,641	158,927	84,993	7,893	199,967	12,419	with reporting dealers
113,758	51,880	31,038	7,173	54,132	10,995	local
313,883	107,048	53,954	720	145,835	1,423	cross-border
427,685	177,437	48,728	6,894	217,690	4,993	with other financial institutions
174,842	90,243	19,473	6,529	83,477	4,414	local
252,843	87,195	29,254	366	134,214	579	cross-border
276,823	115,106	34,139	3,563	133,364	2,058	non-reporting banks
59,452	23,582	4,593	146	25,756	1,362	institutional investors
31,103	14,546	3,755	226	19,723	422	hedge funds and PTFs
15,319	4,336	395	189	9,537	643	official sector FI
42,933	18,893	5,789	2,770	27,919	507	others
2,055	975	57	...	1,391	...	undistributed
58,497	14,601	1,503	59	14,934	598	with non-financial customers
18,186	6,326	445	12	9,491	560	local
40,311	8,275	1,057	47	5,443	38	cross-border
582,405	221,829	86,432	8,003	260,646	8,199	Seven days or less
113,133	42,136	14,065	1,691	76,789	2,154	Over 7 days and up to 1 month
175,165	71,241	18,088	2,267	60,181	3,787	Over 1 month and up to 3 months
30,208	12,720	8,489	933	24,586	1,917	Over 3 months and up to 6 months
12,912	3,039	8,149	1,953	10,390	1,953	Over 6 months
52,268	16,507	8,661	139	35,804	327	<i>o/w prime brokered</i>
40,174	6,431	774	7	8,926	2	<i>o/w retail-driven</i>
20,508	17,445	2,476	311	23,163	758	Currency swaps
13,684	11,424	1,285	105	10,902	489	with reporting dealers
5,805	5,872	311	14	2,367	409	local
7,879	5,552	975	91	8,535	80	cross-border
5,856	5,045	1,084	173	12,138	239	with other financial institutions
2,122	2,903	88	16	1,141	215	local
3,735	2,142	996	157	10,998	24	cross-border
3,078	2,370	956	135	2,207	40	non-reporting banks
556	531	42	10	2,751	172	institutional investors
893	1,330	21	5	6,502	16	hedge funds and PTFs
17	105	5	...	52	4	official sector FI
1,112	697	52	23	377	7	others
201	12	8	...	249	...	undistributed
968	976	106	33	123	31	with non-financial customers
285	120	68	32	43	31	local
683	856	38	1	80	...	cross-border
40	...	...	...	1	...	<i>o/w prime brokered</i>
108	8	...	...	21	...	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.6

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

	MXN	NOK	NZD	PLN	RUB	SEK
Foreign exchange swaps	40,168	43,155	47,668	16,054	22,574	55,268
with reporting dealers	15,958	19,091	25,050	8,611	11,145	23,389
local	5,478	5,183	5,958	2,144	5,318	5,713
cross-border	10,480	13,908	19,092	6,467	5,827	17,676
with other financial institutions	22,684	22,590	21,382	6,969	10,300	27,936
local	9,250	10,250	10,082	2,888	3,731	10,550
cross-border	13,434	12,340	11,300	4,081	6,570	17,386
non-reporting banks	13,600	16,021	11,961	4,161	6,422	19,531
institutional investors	2,689	1,875	2,722	643	2,048	3,072
hedge funds and PTFs	2,669	2,073	2,691	806	919	2,115
official sector FI	202	185	1,118	104	72	211
others	3,513	2,409	2,776	1,187	784	2,999
undistributed	10	27	114	68	55	8
with non-financial customers	1,526	1,474	1,237	475	1,129	3,943
local	813	811	901	265	342	1,536
cross-border	713	663	336	209	787	2,408
Seven days or less	30,256	29,766	34,640	12,827	18,524	39,470
Over 7 days and up to 1 month	2,947	4,614	4,238	1,298	1,534	5,547
Over 1 month and up to 3 months	3,824	5,346	6,546	1,411	1,419	5,968
Over 3 months and up to 6 months	1,587	2,887	1,356	338	540	3,108
Over 6 months	1,553	542	888	181	557	1,175
<i>o/w prime brokered</i>	5,877	4,827	6,555	1,345	1,336	4,383
<i>o/w retail-driven</i>	1,472	937	1,036	305	246	1,209
Currency swaps	971	927	4,064	11	723	2,330
with reporting dealers	258	244	1,785	5	231	1,828
local	83	76	164	2	161	648
cross-border	176	168	1,620	3	70	1,180
with other financial institutions	709	653	2,261	6	475	473
local	183	313	92	0	276	108
cross-border	526	340	2,169	6	199	365
non-reporting banks	412	198	1,831	3	299	94
institutional investors	141	179	264	0	50	66
hedge funds and PTFs	119	201	134	...	30	269
official sector FI	6	59	7	...	3	16
others	30	18	6	3	92	29
undistributed	2	...	20	...	1	...
with non-financial customers	4	31	18	...	17	29
local	3	0	14	...	6	13
cross-border	1	30	5	...	11	16
<i>o/w prime brokered</i>	...	...	...	...	...	...
<i>o/w retail-driven</i>	8	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.7

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

SGD	TRY	TWD	ZAR	OTH ²	RES ³	
61,453	30,310	10,139	25,185	30,613	84,226	Foreign exchange swaps
33,392	12,334	3,219	12,136	11,670	36,166	with reporting dealers
12,558	3,930	2,896	3,974	7,374	10,116	local
20,834	8,404	323	8,162	4,296	26,050	cross-border
26,961	17,457	5,987	12,276	13,244	45,428	with other financial institutions
13,148	9,550	5,763	5,349	5,993	20,122	local
13,813	7,907	224	6,928	7,251	25,306	cross-border
13,170	10,940	1,996	7,610	5,923	26,462	non-reporting banks
4,988	1,452	2,400	1,480	1,582	4,451	institutional investors
1,900	1,290	70	1,028	89	4,363	hedge funds and PTFs
3,359	1,110	1,350	382	547	658	official sector FI
3,541	2,561	164	1,761	1,274	9,382	others
3	103	7	15	3,830	111	undistributed
1,100	520	933	773	5,699	2,632	with non-financial customers
656	243	925	313	5,510	1,022	local
444	277	8	460	189	1,610	cross-border
43,632	22,494	1,585	19,164	23,214	61,079	Seven days or less
5,651	4,016	1,781	2,385	2,548	6,595	Over 7 days and up to 1 month
8,622	2,654	3,027	2,478	2,612	10,517	Over 1 month and up to 3 months
2,266	724	2,785	667	1,153	2,176	Over 3 months and up to 6 months
1,282	422	961	491	1,086	3,858	Over 6 months
3,234	3,218	99	4,901	1,751	7,963	<i>o/w prime brokered</i>
685	342	...	350	1,601	1,861	<i>o/w retail-driven</i>
1,587	1,915	146	807	366	907	Currency swaps
594	969	37	189	195	116	with reporting dealers
77	569	27	136	135	24	local
517	400	10	52	60	92	cross-border
992	941	49	79	95	707	with other financial institutions
96	468	28	16	60	119	local
896	473	21	63	35	589	cross-border
726	469	20	39	32	283	non-reporting banks
201	168	26	2	34	133	institutional investors
38	130	...	8	0	49	hedge funds and PTFs
...	14	...	10	3	44	official sector FI
27	159	4	18	26	198	others
...	...	...	0	...	0	undistributed
1	6	60	540	76	84	with non-financial customers
...	3	59	63	74	15	local
1	2	0	477	1	69	cross-border
...	6	...	...	24	2	<i>o/w prime brokered</i>
...	...	6	...	14	0	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 3.8

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

US dollar against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	CHF	CNY
Total options	246,058	14,492	10,224	9,167	4,288	13,167
with reporting dealers	88,757	5,349	3,566	2,819	1,382	6,357
local	36,345	1,807	2,071	1,097	505	1,661
cross-border	52,412	3,542	1,495	1,722	876	4,696
with other financial institutions	136,405	7,814	6,267	5,260	2,577	5,692
local	80,335	4,156	3,702	2,331	1,382	2,182
cross-border	56,070	3,658	2,565	2,929	1,195	3,510
non-reporting banks	45,489	2,774	2,717	1,938	885	2,854
institutional investors	27,880	1,963	1,283	1,107	432	932
hedge funds and PTFs	35,538	1,837	1,854	1,382	698	1,354
official sector FI	805	27	17	69	18	25
others	25,011	1,046	393	750	518	512
undistributed	1,681	167	3	14	26	14
with non-financial customers	20,896	1,328	391	1,088	329	1,118
local	12,758	818	221	492	169	916
cross-border	8,138	510	171	596	161	203
<i>o/w prime brokered</i>	82,047	4,019	3,983	2,912	1,843	4,998
<i>o/w retail-driven</i>	16,817	606	53	1,221	270	132
Other products	...	...	...	...	...	...
Total FX contracts	5,824,036	358,804	66,005	287,325	228,095	270,238
<i>o/w prime brokered</i>	1,304,312	114,988	11,424	90,203	42,052	37,025
<i>o/w retail-driven</i>	152,478	6,910	572	6,116	8,006	5,194
<i>o/w related party trade</i>	...	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.9

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

EUR	GBP	HKD	INR	JPY	KRW	
57,755	20,054	7,644	5,415	50,675	10,188	Total options
20,883	7,184	2,611	1,913	18,588	4,420	with reporting dealers
10,180	3,952	432	588	6,606	1,654	local
10,703	3,232	2,178	1,324	11,982	2,766	cross-border
32,939	11,545	4,753	2,754	25,818	5,474	with other financial institutions
20,794	8,484	2,011	1,434	15,878	2,473	local
12,145	3,062	2,742	1,319	9,940	3,001	cross-border
11,204	3,065	846	846	7,524	1,807	non-reporting banks
5,406	1,565	1,535	456	7,779	1,157	institutional investors
6,899	2,885	1,041	826	7,622	1,547	hedge funds and PTFs
237	71	5	26	93	24	official sector FI
8,912	3,870	1,306	585	2,496	921	others
280	90	19	15	303	17	undistributed
3,933	1,325	281	749	6,269	294	with non-financial customers
1,743	534	189	441	5,304	215	local
2,191	791	91	308	965	79	cross-border
16,950	5,607	3,043	1,813	16,754	3,903	<i>o/w prime brokered</i>
2,026	512	135	127	11,194	86	<i>o/w retail-driven</i>
...	...	...	...	...	...	Other products
1,583,725	630,423	219,594	110,298	871,484	125,858	Total FX contracts
305,119	111,274	51,553	16,898	206,048	24,553	<i>o/w prime brokered</i>
58,909	13,168	2,767	840	30,681	167	<i>o/w retail-driven</i>
...	...	...	...	...	...	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.10

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

US dollar against:

Daily averages, in millions of US dollars

	MXN	NOK	NZD	PLN	RUB	SEK
Total options	5,881	741	4,082	332	1,464	411
with reporting dealers	2,097	213	1,410	171	488	111
local	1,053	125	509	60	212	48
cross-border	1,044	88	901	112	276	62
with other financial institutions	3,501	476	2,429	134	824	266
local	2,071	209	1,287	82	445	146
cross-border	1,431	266	1,142	51	379	119
non-reporting banks	1,115	152	648	62	361	49
institutional investors	809	81	748	16	191	59
hedge funds and PTFs	1,050	147	645	17	154	96
official sector FI	7	1	14	0	2	0
others	515	89	332	32	112	45
undistributed	5	7	43	6	4	17
with non-financial customers	283	52	243	27	152	35
local	220	19	189	22	67	25
cross-border	64	33	55	5	85	10
<i>o/w prime brokered</i>	2,072	313	1,479	146	495	132
<i>o/w retail-driven</i>	40	18	77	9	43	12
Other products	...	...	...	...	...	...
Total FX contracts	104,576	73,284	107,028	24,692	62,828	86,210
<i>o/w prime brokered</i>	36,115	23,695	39,929	5,989	13,680	21,308
<i>o/w retail-driven</i>	2,718	1,182	2,039	367	570	1,537
<i>o/w related party trade</i>	...	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 3.11

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

US dollar against:

Daily averages, in millions of US dollars

SGD	TRY	TWD	ZAR	OTH ²	RES ³	
3,619	3,133	2,614	5,808	628	14,275	Total options
1,137	1,203	841	2,048	97	3,869	with reporting dealers
279	659	202	997	49	1,597	local
858	544	639	1,051	49	2,271	cross-border
2,094	1,786	1,680	2,538	362	9,423	with other financial institutions
1,443	1,192	798	1,615	251	5,970	local
652	594	882	923	112	3,453	cross-border
1,261	477	656	820	14	3,414	non-reporting banks
208	330	185	261	214	1,161	institutional investors
385	681	553	763	21	3,081	hedge funds and PTFs
82	29	5	34	6	14	official sector FI
158	258	282	568	1	1,311	others
...	12	...	90	106	442	undistributed
387	144	93	1,222	168	983	with non-financial customers
85	121	55	439	167	310	local
303	24	38	783	1	673	cross-border
887	1,282	1,256	1,883	1	6,274	<i>o/w prime brokered</i>
98	41	6	68	9	34	<i>o/w retail-driven</i>
...	...	...	...	...	...	Other products
109,823	62,287	59,013	62,339	61,887	258,219	Total FX contracts
24,572	18,475	7,627	24,215	2,731	74,840	<i>o/w prime brokered</i>
1,970	1,015	646	1,107	3,433	2,564	<i>o/w retail-driven</i>
...	...	...	...	...	...	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 3.12

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

	TOT	AUD	CAD	CHF	CNY	DKK
Spot	615,509	8,172	5,742	24,490	1,881	3,380
with reporting dealers	172,152	2,467	1,732	8,128	437	1,124
local	51,099	801	651	2,305	178	216
cross-border	121,053	1,666	1,081	5,824	259	908
with other financial institutions	394,306	5,158	3,524	14,733	795	1,800
local	219,814	2,581	1,628	7,991	629	689
cross-border	174,491	2,577	1,896	6,742	166	1,111
non-reporting banks	143,624	1,774	1,119	5,217	559	1,137
institutional investors	106,790	1,563	1,148	4,265	166	349
hedge funds and PTFs	79,088	751	476	2,547	35	117
official sector FI	5,821	79	43	153	1	11
others	57,680	939	719	2,439	34	178
undistributed	1,303	53	19	114	0	8
with non-financial customers	49,051	547	486	1,628	649	457
local	27,676	319	331	758	581	304
cross-border	21,375	228	154	870	69	153
<i>o/w prime brokered</i>	290,471	3,762	2,583	11,539	120	722
<i>o/w retail-driven</i>	20,966	476	238	1,110	180	60
Outright forwards	255,673	3,171	2,608	7,248	721	1,481
with reporting dealers	50,830	473	564	1,720	154	93
local	16,750	158	185	600	26	28
cross-border	34,080	315	378	1,119	128	65
with other financial institutions	165,857	2,346	1,648	4,673	171	1,150
local	77,133	998	923	2,539	64	499
cross-border	88,724	1,347	724	2,135	106	651
non-reporting banks	28,557	340	237	664	63	92
institutional investors	75,833	1,049	761	2,531	62	528
hedge funds and PTFs	37,318	387	373	1,048	32	481
official sector FI	7,761	376	121	107	2	9
others	15,980	192	149	287	11	40
undistributed	407	1	6	37	0	0
with non-financial customers	38,985	352	396	855	397	237
local	16,808	168	267	427	256	119
cross-border	22,178	184	129	428	141	119
Seven days or less	86,173	1,041	936	2,493	108	481
Over 7 days and up to 1 month	61,503	688	511	1,136	82	187
Over 1 month and up to 3 months	77,089	1,105	833	2,582	188	443
Over 3 months and up to 6 months	19,481	211	240	718	121	282
Over 6 months	11,426	126	89	320	221	88
<i>o/w prime brokered</i>	44,472	398	465	1,513	44	24
<i>o/w retail-driven</i>	5,132	57	32	268	18	37
<i>o/w non-deliverable forwards</i>	4,635	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.1

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

GBP	HUF	JPY	NOK	PLN	
34,124	4,600	44,266	17,456	6,451	Spot
8,445	1,367	13,975	4,679	1,990	with reporting dealers
2,990	496	3,853	1,471	673	local
5,455	871	10,121	3,208	1,317	cross-border
23,189	2,869	28,027	11,522	3,504	with other financial institutions
13,700	1,699	15,338	6,503	2,068	local
9,489	1,170	12,688	5,019	1,436	cross-border
9,302	1,300	9,358	4,742	1,430	non-reporting banks
6,653	752	9,735	2,823	958	institutional investors
3,526	518	3,678	2,516	603	hedge funds and PTFs
319	7	150	68	12	official sector FI
3,270	290	5,045	1,331	492	others
120	2	60	41	8	undistributed
2,489	364	2,265	1,255	957	with non-financial customers
1,137	265	1,153	633	789	local
1,352	99	1,112	623	168	cross-border
12,325	2,351	22,963	10,773	2,925	<i>o/w prime brokered</i>
992	294	3,100	209	113	<i>o/w retail-driven</i>
20,420	1,020	21,097	3,113	1,452	Outright forwards
1,806	221	4,993	615	186	with reporting dealers
714	111	2,008	301	88	local
1,092	110	2,985	314	99	cross-border
15,809	619	14,417	2,015	838	with other financial institutions
6,897	405	9,946	1,100	507	local
8,912	214	4,471	915	330	cross-border
1,614	90	2,071	325	108	non-reporting banks
6,827	193	9,857	637	387	institutional investors
5,349	249	806	874	278	hedge funds and PTFs
979	3	643	19	3	official sector FI
1,036	84	992	145	58	others
3	1	46	16	3	undistributed
2,805	181	1,687	483	428	with non-financial customers
1,456	119	1,156	313	240	local
1,349	62	532	170	188	cross-border
8,758	164	4,706	1,143	339	Seven days or less
3,622	269	5,785	817	393	Over 7 days and up to 1 month
6,152	449	6,131	922	517	Over 1 month and up to 3 months
1,238	56	4,045	133	77	Over 3 months and up to 6 months
649	82	430	98	126	Over 6 months
3,742	584	1,418	1,088	511	<i>o/w prime brokered</i>
134	41	456	40	26	<i>o/w retail-driven</i>
...	...	...	...	...	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.2

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

	SEK	TRY	USD	OTH ²	RES ³
Spot	18,694	703	416,365	7,833	21,353
with reporting dealers	4,816	223	115,016	1,181	6,573
local	1,460	35	33,772	737	1,461
cross-border	3,356	188	81,244	443	5,113
with other financial institutions	12,607	347	273,024	2,203	11,005
local	6,390	175	153,134	1,970	5,319
cross-border	6,217	172	119,891	232	5,685
non-reporting banks	5,350	217	97,998	285	3,835
institutional investors	2,825	63	73,433	393	1,664
hedge funds and PTFs	2,415	20	59,396	5	2,486
official sector FI	53	6	3,267	1,392	260
others	1,940	39	38,375	68	2,521
undistributed	23	1	555	60	239
with non-financial customers	1,272	133	28,324	4,450	3,775
local	699	105	13,988	4,090	2,524
cross-border	573	28	14,336	360	1,251
<i>o/w prime brokered</i>	<i>10,514</i>	<i>170</i>	<i>204,265</i>	<i>59</i>	<i>5,399</i>
<i>o/w retail-driven</i>	<i>233</i>	<i>19</i>	<i>13,100</i>	<i>340</i>	<i>503</i>
Outright forwards	4,253	356	175,274	2,046	11,413
with reporting dealers	588	76	34,740	1,051	3,550
local	278	21	11,329	125	778
cross-border	309	55	23,411	926	2,772
with other financial institutions	2,908	176	113,948	162	4,979
local	1,671	109	48,947	123	2,402
cross-border	1,237	67	65,001	38	2,577
non-reporting banks	597	43	20,929	15	1,370
institutional investors	960	62	50,513	107	1,359
hedge funds and PTFs	972	39	25,243	9	1,179
official sector FI	72	10	5,144	7	264
others	303	21	11,978	10	673
undistributed	4	0	141	13	135
with non-financial customers	757	104	26,586	833	2,884
local	580	74	9,381	682	1,569
cross-border	177	30	17,204	150	1,315
Seven days or less	1,325	78	60,596	420	3,585
Over 7 days and up to 1 month	1,069	79	44,390	494	1,980
Over 1 month and up to 3 months	1,561	122	52,552	458	3,076
Over 3 months and up to 6 months	201	32	10,561	271	1,295
Over 6 months	96	45	7,175	403	1,477
<i>o/w prime brokered</i>	<i>1,471</i>	<i>92</i>	<i>31,596</i>	<i>10</i>	<i>1,515</i>
<i>o/w retail-driven</i>	<i>101</i>	<i>13</i>	<i>3,502</i>	<i>158</i>	<i>250</i>
<i>o/w non-deliverable forwards</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 4.3

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

	TOT	AUD	CAD	CHF	CNY	DKK
Foreign exchange swaps	1,141,653	5,774	6,137	37,857	818	5,818
with reporting dealers	511,816	1,538	2,147	16,748	245	2,550
local	133,471	246	240	5,831	31	342
cross-border	378,345	1,293	1,906	10,918	214	2,208
with other financial institutions	541,363	3,508	3,012	17,069	319	2,513
local	233,879	1,554	1,446	8,070	168	1,218
cross-border	307,484	1,954	1,566	8,999	151	1,295
non-reporting banks	347,104	1,544	1,329	10,814	248	1,519
institutional investors	79,759	1,037	1,017	3,416	20	677
hedge funds and PTFs	39,351	353	184	578	13	166
official sector FI	17,872	72	141	178	6	22
others	54,603	447	243	2,069	32	130
undistributed	2,674	55	98	13	...	0
with non-financial customers	88,474	727	979	4,040	253	756
local	34,122	244	453	2,385	94	386
cross-border	54,351	483	526	1,655	159	370
Seven days or less	703,854	2,758	2,716	21,458	205	1,782
Over 7 days and up to 1 month	150,944	861	929	6,383	232	724
Over 1 month and up to 3 months	222,347	1,741	1,990	6,565	197	2,516
Over 3 months and up to 6 months	45,606	311	409	2,744	74	336
Over 6 months	18,903	103	95	708	110	459
<i>o/w prime brokered</i>	<i>63,694</i>	<i>188</i>	<i>165</i>	<i>1,827</i>	<i>17</i>	<i>102</i>
<i>o/w retail-driven</i>	<i>50,720</i>	<i>291</i>	<i>288</i>	<i>2,477</i>	<i>14</i>	<i>164</i>
Currency swaps	26,012	221	188	193	54	44
with reporting dealers	15,019	10	55	84	16	1
local	6,180	7	3	3	2	...
cross-border	8,838	3	52	80	14	1
with other financial institutions	8,792	131	110	61	38	39
local	3,515	85	2	13	25	...
cross-border	5,277	46	107	48	14	39
non-reporting banks	4,876	34	98	48	38	9
institutional investors	1,025	0	2	0	...	...
hedge funds and PTFs	1,184	...	1	1	...	...
official sector FI	44	...	6	12	...	...
others	1,379	85	...	...	...	30
undistributed	283	12	2	...	...	...
with non-financial customers	2,201	80	24	48	0	4
local	924	13	11	17	0	0
cross-border	1,277	67	13	32	0	4
<i>o/w prime brokered</i>	<i>215</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>
<i>o/w retail-driven</i>	<i>119</i>	<i>0</i>	<i>...</i>	<i>3</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.4

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

	GBP	HUF	JPY	NOK	PLN
Foreign exchange swaps	66,315	2,422	43,822	9,541	4,321
with reporting dealers	20,932	1,129	16,766	2,752	1,774
local	5,313	364	2,965	349	542
cross-border	15,619	765	13,801	2,403	1,232
with other financial institutions	36,613	955	24,756	4,654	1,594
local	20,668	391	12,888	3,064	666
cross-border	15,945	564	11,868	1,590	927
non-reporting banks	24,513	449	14,467	3,304	829
institutional investors	5,387	240	4,889	641	396
hedge funds and PTFs	3,197	80	1,560	427	78
official sector FI	513	42	895	29	7
others	2,873	143	2,846	252	281
undistributed	130	0	100	0	3
with non-financial customers	8,770	338	2,301	2,135	953
local	4,423	132	929	1,635	497
cross-border	4,347	206	1,371	500	456
Seven days or less	39,076	990	20,160	5,556	2,235
Over 7 days and up to 1 month	9,012	560	9,750	1,254	921
Over 1 month and up to 3 months	13,328	475	9,141	1,874	840
Over 3 months and up to 6 months	3,534	163	4,028	737	214
Over 6 months	1,365	234	743	120	111
<i>o/w prime brokered</i>	<i>2,060</i>	<i>340</i>	<i>3,441</i>	<i>1,176</i>	<i>301</i>
<i>o/w retail-driven</i>	<i>2,352</i>	<i>389</i>	<i>2,361</i>	<i>607</i>	<i>165</i>
Currency swaps	1,473	37	414	106	92
with reporting dealers	268	26	139	37	52
local	64	0	10	10	15
cross-border	203	26	129	26	37
with other financial institutions	985	11	225	56	40
local	809	0	71	7	10
cross-border	175	11	154	49	30
non-reporting banks	877	8	141	34	25
institutional investors	86	0	19	9	5
hedge funds and PTFs	16	0	...	5	...
official sector FI	1	0	0	...	3
others	4	2	1	4	6
undistributed	...	...	64	4	...
with non-financial customers	220	0	50	14	0
local	148	...	46	7	0
cross-border	72	0	4	7	...
<i>o/w prime brokered</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>
<i>o/w retail-driven</i>	<i>4</i>	<i>...</i>	<i>0</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.5

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

SEK	TRY	USD	OTH ²	RES ³	
11,654	929	913,823	4,718	27,704	Foreign exchange swaps
2,615	229	427,641	2,262	12,487	with reporting dealers
483	22	113,758	360	2,625	local
2,132	208	313,883	1,902	9,862	cross-border
6,240	486	427,685	1,181	10,777	with other financial institutions
3,311	337	174,842	828	4,426	local
2,929	149	252,843	353	6,350	cross-border
4,223	305	276,823	447	6,290	non-reporting banks
721	25	59,452	425	1,416	institutional investors
437	10	31,103	15	1,149	hedge funds and PTFs
222	50	15,319	13	365	official sector FI
636	97	42,933	190	1,431	others
1	...	2,055	93	126	undistributed
2,798	213	58,497	1,274	4,440	with non-financial customers
1,603	117	18,186	689	2,349	local
1,195	96	40,311	585	2,092	cross-border
4,905	482	582,405	3,373	15,752	Seven days or less
2,084	205	113,133	515	4,382	Over 7 days and up to 1 month
2,891	179	175,165	421	5,025	Over 1 month and up to 3 months
1,331	37	30,208	183	1,298	Over 3 months and up to 6 months
443	25	12,912	225	1,249	Over 6 months
881	142	52,268	55	731	<i>o/w prime brokered</i>
694	44	40,174	104	596	<i>o/w retail-driven</i>
212	39	20,508	1,040	1,391	Currency swaps
74	2	13,684	79	493	with reporting dealers
30	...	5,805	36	194	local
45	2	7,879	42	299	cross-border
121	10	5,856	410	701	with other financial institutions
7	10	2,122	341	12	local
114	0	3,735	69	688	cross-border
14	4	3,078	76	392	non-reporting banks
7	6	556	327	6	institutional investors
77	...	893	...	191	hedge funds and PTFs
...	...	17	2	4	official sector FI
23	0	1,112	6	107	others
0	...	201	...	1	undistributed
16	27	968	551	197	with non-financial customers
2	25	285	360	10	local
15	2	683	191	187	cross-border
...	...	40	...	174	<i>o/w prime brokered</i>
3	...	108	1	0	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 4.6

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

Euro against:

Daily averages, in millions of US dollars

	TOT	AUD	CAD	CHF	CNY	DKK
Total options	90,267	1,105	473	2,915	478	0
with reporting dealers	32,995	359	171	1,249	214	0
local	15,704	134	74	453	71	...
cross-border	17,291	224	97	796	143	0
with other financial institutions	50,776	670	218	1,330	221	...
local	32,873	436	106	811	14	...
cross-border	17,902	234	113	519	207	...
non-reporting banks	15,637	206	79	403	94	...
institutional investors	8,862	91	26	355	107	...
hedge funds and PTFs	12,138	217	89	271	14	...
official sector FI	272	1	2	4	...	...
others	13,180	137	22	290	6	...
undistributed	686	18	0	7	...	...
with non-financial customers	6,497	76	84	337	43	0
local	3,296	29	36	128	12	0
cross-border	3,200	47	49	209	31	...
<i>o/w prime brokered</i>	29,394	386	197	1,152	71	...
<i>o/w retail-driven</i>	3,693	130	23	601	11	0
Other products	...	...	...	...	...	...
Total FX contracts	2,129,114	18,442	15,149	72,703	3,952	10,723
<i>o/w prime brokered</i>	428,246	4,733	3,410	16,032	251	848
<i>o/w retail-driven</i>	80,629	954	581	4,460	224	260
<i>o/w related party trade</i>	...	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.7

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

GBP	HUF	JPY	NOK	PLN	
8,375	2,088	3,956	3,274	881	Total options
2,696	1,102	1,574	1,152	390	with reporting dealers
1,565	766	588	588	218	local
1,130	335	986	564	172	cross-border
5,301	960	1,807	2,004	450	with other financial institutions
4,277	669	955	1,462	346	local
1,023	291	852	542	104	cross-border
1,267	139	611	608	144	non-reporting banks
1,023	246	433	236	60	institutional investors
1,776	523	474	434	128	hedge funds and PTFs
5	...	4	4	...	official sector FI
1,168	52	234	698	117	others
61	0	51	25	1	undistributed
379	26	576	119	41	with non-financial customers
188	21	364	91	33	local
191	4	212	28	7	cross-border
3,633	1,074	919	1,258	266	<i>o/w prime brokered</i>
164	35	467	53	18	<i>o/w retail-driven</i>
...	...	...	...	...	Other products
130,707	10,167	113,557	33,490	13,196	Total FX contracts
21,760	4,350	28,741	14,295	4,003	<i>o/w prime brokered</i>
3,645	759	6,383	909	321	<i>o/w retail-driven</i>
...	...	...	...	...	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 4.8

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Euro against:

Daily averages, in millions of US dollars

	SEK	TRY	USD	OTH ²	RES ³
Total options	1,461	381	57,755	283	6,840
with reporting dealers	366	136	20,883	43	2,662
local	156	69	10,180	18	823
cross-border	209	66	10,703	25	1,840
with other financial institutions	925	223	32,939	129	3,599
local	543	148	20,794	4	2,308
cross-border	381	75	12,145	125	1,290
non-reporting banks	318	76	11,204	17	471
institutional investors	162	54	5,406	6	658
hedge funds and PTFs	266	45	6,899	0	1,001
official sector FI	12	1	237	...	2
others	158	47	8,912	0	1,338
undistributed	7	...	280	106	129
with non-financial customers	171	22	3,933	111	579
local	119	14	1,743	108	409
cross-border	52	8	2,191	2	170
<i>o/w prime brokered</i>	565	110	16,950	0	2,813
<i>o/w retail-driven</i>	14	12	2,026	9	131
Other products	...	...	...	...	...
Total FX contracts	36,274	2,407	1,583,725	15,920	68,702
<i>o/w prime brokered</i>	13,431	515	305,119	124	10,633
<i>o/w retail-driven</i>	1,046	87	58,909	611	1,479
<i>o/w related party trade</i>	...	...	...	...	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 4.9

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Yen against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	EUR	NZD
Spot	360,221	17,813	144	3,093	44,266	2,729
with reporting dealers	117,808	6,156	85	1,034	13,975	852
local	36,782	1,775	58	294	3,853	300
cross-border	81,026	4,381	27	740	10,121	551
with other financial institutions	219,501	10,853	33	1,869	28,027	1,731
local	128,604	6,331	29	1,015	15,338	971
cross-border	90,897	4,523	4	854	12,688	759
non-reporting banks	73,609	3,253	30	590	9,358	462
institutional investors	62,237	3,308	3	545	9,735	594
hedge funds and PTFs	41,205	1,684	0	229	3,678	216
official sector FI	2,564	29	1	11	150	4
others	39,601	2,576	0	493	5,045	455
undistributed	286	5	...	1	60	0
with non-financial customers	22,912	804	26	190	2,265	147
local	13,471	387	24	118	1,153	97
cross-border	9,441	416	2	72	1,112	50
<i>o/w prime brokered</i>	<i>185,373</i>	<i>10,887</i>	<i>50</i>	<i>1,325</i>	<i>22,963</i>	<i>1,755</i>
<i>o/w retail-driven</i>	<i>19,810</i>	<i>1,939</i>	<i>0</i>	<i>350</i>	<i>3,100</i>	<i>316</i>
Outright forwards	145,256	3,683	835	1,404	21,097	693
with reporting dealers	36,573	1,146	239	325	4,993	184
local	11,078	249	121	60	2,008	32
cross-border	25,496	897	119	266	2,985	152
with other financial institutions	92,875	2,131	479	992	14,417	460
local	56,158	1,640	242	647	9,946	332
cross-border	36,717	490	237	344	4,471	128
non-reporting banks	15,436	304	106	166	2,071	61
institutional investors	45,692	1,167	164	680	9,857	303
hedge funds and PTFs	15,308	178	159	59	806	26
official sector FI	3,508	6	...	6	643	0
others	12,516	476	49	80	992	69
undistributed	414	0	1	1	46	0
with non-financial customers	15,808	406	116	87	1,687	49
local	7,857	311	113	35	1,156	31
cross-border	7,951	94	3	52	532	18
Seven days or less	36,131	897	204	420	4,706	241
Over 7 days and up to 1 month	46,505	1,115	324	283	5,785	167
Over 1 month and up to 3 months	41,850	846	248	445	6,131	128
Over 3 months and up to 6 months	16,018	680	14	194	4,045	83
Over 6 months	4,752	145	44	63	430	73
<i>o/w prime brokered</i>	<i>25,291</i>	<i>663</i>	<i>165</i>	<i>85</i>	<i>1,418</i>	<i>139</i>
<i>o/w retail-driven</i>	<i>2,433</i>	<i>333</i>	<i>1</i>	<i>13</i>	<i>456</i>	<i>52</i>
<i>o/w non-deliverable forwards</i>	<i>2,503</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 5.1

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Yen against:

Daily averages, in millions of US dollars

TRY	USD	ZAR	OTH ²	RES ³	
970	259,953	778	18,281	12,194	Spot
187	86,129	158	4,967	4,266	with reporting dealers
34	27,758	32	1,959	718	local
154	58,371	126	3,008	3,548	cross-border
743	157,422	563	11,908	6,352	with other financial institutions
457	93,142	497	8,940	1,883	local
286	64,280	66	2,969	4,468	cross-border
257	54,442	50	3,180	1,988	non-reporting banks
124	41,276	58	4,503	2,092	institutional investors
22	33,602	8	779	986	hedge funds and PTFs
1	2,093	0	165	109	official sector FI
339	25,850	447	3,281	1,115	others
...	158	0	1	61	undistributed
40	16,402	57	1,405	1,576	with non-financial customers
21	9,576	31	964	1,099	local
19	6,826	26	442	477	cross-border
488	132,285	234	10,555	4,830	<i>o/w prime brokered</i>
330	9,448	440	2,911	976	<i>o/w retail-driven</i>
171	105,102	73	5,805	6,394	Outright forwards
85	27,348	21	871	1,359	with reporting dealers
42	7,949	4	356	257	local
44	19,400	17	515	1,101	cross-border
64	65,582	41	4,463	4,247	with other financial institutions
24	38,362	30	3,024	1,911	local
40	27,220	11	1,440	2,336	cross-border
14	11,079	8	369	1,257	non-reporting banks
29	29,310	21	2,062	2,100	institutional investors
7	13,450	3	236	383	hedge funds and PTFs
0	1,538	0	1,199	115	official sector FI
14	9,852	8	597	379	others
...	352	0	...	14	undistributed
22	12,171	10	471	789	with non-financial customers
21	5,414	9	413	353	local
1	6,757	1	57	436	cross-border
62	25,325	33	1,864	2,379	Seven days or less
57	35,670	21	1,814	1,269	Over 7 days and up to 1 month
26	30,512	16	1,549	1,947	Over 1 month and up to 3 months
1	9,872	2	508	619	Over 3 months and up to 6 months
25	3,722	1	69	180	Over 6 months
29	21,205	9	816	762	<i>o/w prime brokered</i>
18	1,092	8	392	68	<i>o/w retail-driven</i>
...	...	...	...	...	<i>o/w non-deliverable forwards</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 5.2

OTC foreign exchange turnover by instrument, counterparty and currency in April 2019, "net-net" basis¹

Yen against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	EUR	NZD
Foreign exchange swaps	515,729	9,050	1	1,995	43,822	2,596
with reporting dealers	229,717	3,134	1	656	16,766	851
local	60,044	462	1	69	2,965	140
cross-border	169,673	2,672	...	587	13,801	712
with other financial institutions	266,012	5,401	...	1,261	24,756	1,517
local	113,086	4,367	...	802	12,888	1,212
cross-border	152,926	1,033	...	458	11,868	305
non-reporting banks	155,725	1,336	...	256	14,467	625
institutional investors	36,933	1,874	...	435	4,889	292
hedge funds and PTFs	22,085	112	...	68	1,560	50
official sector FI	11,319	503	...	84	895	8
others	38,442	1,564	...	417	2,846	543
undistributed	1,509	12	...	...	100	...
with non-financial customers	20,000	516	...	78	2,301	227
local	12,198	367	...	20	929	174
cross-border	7,802	149	...	58	1,371	52
Seven days or less	307,206	6,429	...	1,330	20,160	1,940
Over 7 days and up to 1 month	91,626	1,098	1	234	9,750	432
Over 1 month and up to 3 months	74,049	1,179	...	253	9,141	115
Over 3 months and up to 6 months	31,044	233	0	149	4,028	56
Over 6 months	11,804	112	...	28	743	53
<i>o/w prime brokered</i>	44,146	1,480	...	474	3,441	617
<i>o/w retail-driven</i>	18,652	2,053	...	506	2,361	855
Currency swaps	24,054	241	0	...	414	1
with reporting dealers	11,331	182	0	...	139	0
local	2,454	22	0	...	10	0
cross-border	8,878	160	...	...	129	...
with other financial institutions	12,492	52	0	...	225	0
local	1,257	10	0	...	71	0
cross-border	11,234	42	...	...	154	...
non-reporting banks	2,408	18	...	...	141	0
institutional investors	2,786	2	0	...	19	...
hedge funds and PTFs	6,502	...	...	...	...	...
official sector FI	70	...	...	...	0	...
others	382	...	...	...	1	...
undistributed	344	32	...	...	64	...
with non-financial customers	231	7	...	...	50	1
local	147	7	...	...	46	1
cross-border	84	...	...	...	4	...
<i>o/w prime brokered</i>	1	...	...	...	...	...
<i>o/w retail-driven</i>	25	...	...	...	0	...

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 5.3

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

Yen against:

Daily averages, in millions of US dollars

TRY	USD	ZAR	OTH ²	RES ³	
3,751	432,592	3,931	9,664	8,327	Foreign exchange swaps
859	199,967	1,259	3,364	2,860	with reporting dealers
57	54,132	124	1,525	570	local
802	145,835	1,135	1,839	2,290	cross-border
2,663	217,690	2,293	5,704	4,727	with other financial institutions
1,554	83,477	1,767	4,903	2,116	local
1,109	134,214	526	801	2,611	cross-border
740	133,364	507	2,220	2,210	non-reporting banks
375	25,756	250	1,760	1,301	institutional investors
3	19,723	9	290	270	hedge funds and PTFs
...	9,537	...	26	266	official sector FI
1,546	27,919	1,526	1,404	676	others
...	1,391	...	3	3	undistributed
228	14,934	380	597	740	with non-financial customers
187	9,491	334	397	299	local
41	5,443	46	199	441	cross-border
3,198	260,646	3,390	5,839	4,274	<i>Seven days or less</i>
496	76,789	453	1,272	1,102	<i>Over 7 days and up to 1 month</i>
49	60,181	63	1,492	1,577	<i>Over 1 month and up to 3 months</i>
4	24,586	12	910	1,065	<i>Over 3 months and up to 6 months</i>
4	10,390	12	152	309	<i>Over 6 months</i>
353	35,804	378	896	704	<i>o/w prime brokered</i>
767	8,926	855	1,518	811	<i>o/w retail-driven</i>
0	23,163	0	183	51	Currency swaps
0	10,902	...	104	4	with reporting dealers
...	2,367	...	51	3	local
0	8,535	...	53	1	cross-border
0	12,138	0	35	41	with other financial institutions
...	1,141	0	31	4	local
0	10,998	...	4	37	cross-border
0	2,207	0	13	27	non-reporting banks
...	2,751	...	14	1	institutional investors
...	6,502	...	...	...	hedge funds and PTFs
...	52	...	4	13	official sector FI
...	377	...	3	0	others
...	249	...	...	...	undistributed
...	123	0	44	6	with non-financial customers
...	43	0	44	6	local
...	80	...	...	...	cross-border
...	1	...	...	...	<i>o/w prime brokered</i>
...	21	...	0	3	<i>o/w retail-driven</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 5.4

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

Yen against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	EUR	NZD
Total options	63,234	4,234	649	667	3,956	249
with reporting dealers	23,258	1,642	191	271	1,574	121
local	8,444	685	76	100	588	45
cross-border	14,814	957	115	171	986	76
with other financial institutions	31,940	2,206	428	311	1,807	98
local	19,523	1,280	256	200	955	48
cross-border	12,417	926	172	112	852	50
non-reporting banks	9,146	602	138	37	611	27
institutional investors	9,003	560	7	93	433	9
hedge funds and PTFs	10,036	756	255	171	474	35
official sector FI	162	30	18	...	4	...
others	3,080	188	10	11	234	27
undistributed	513	70	...	...	51	1
with non-financial customers	8,037	386	31	85	576	30
local	6,617	337	29	58	364	16
cross-border	1,420	49	2	28	212	14
<i>o/w prime brokered</i>	<i>21,312</i>	<i>2,065</i>	<i>327</i>	<i>341</i>	<i>919</i>	<i>99</i>
<i>o/w retail-driven</i>	<i>13,131</i>	<i>875</i>	<i>...</i>	<i>186</i>	<i>467</i>	<i>45</i>
Other products	...	...	...	...	...	...
Total FX contracts	1,108,495	35,021	1,629	7,159	113,557	6,268
<i>o/w prime brokered</i>	<i>276,123</i>	<i>15,096</i>	<i>542</i>	<i>2,224</i>	<i>28,741</i>	<i>2,611</i>
<i>o/w retail-driven</i>	<i>54,050</i>	<i>5,200</i>	<i>1</i>	<i>1,056</i>	<i>6,383</i>	<i>1,268</i>
<i>o/w related party trade</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>	<i>...</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations.

Table 5.5

**OTC foreign exchange turnover by instrument, counterparty and currency in
April 2019, "net-net" basis¹**

Yen against:

Daily averages, in millions of US dollars

TRY	USD	ZAR	OTH ²	RES ³	
815	50,675	15	381	1,592	Total options
163	18,588	2	127	581	with reporting dealers
105	6,606	1	69	170	local
58	11,982	1	58	411	cross-border
650	25,818	12	148	462	with other financial institutions
612	15,878	10	128	158	local
38	9,940	2	20	304	cross-border
33	7,524	2	22	151	non-reporting banks
18	7,779	0	43	61	institutional investors
572	7,622	10	13	128	hedge funds and PTFs
3	93	...	7	7	official sector FI
25	2,496	0	62	27	others
...	303	...	0	88	undistributed
2	6,269	1	106	550	with non-financial customers
2	5,304	1	53	454	local
1	965	1	53	96	cross-border
564	16,754	10	21	213	<i>o/w prime brokered</i>
0	11,194	0	123	241	<i>o/w retail-driven</i>
...	...	...	...	...	Other products
5,707	871,484	4,797	34,315	28,558	Total FX contracts
1,434	206,048	631	12,288	6,508	<i>o/w prime brokered</i>
1,115	30,681	1,303	4,945	2,098	<i>o/w retail-driven</i>
...	...	...	...	...	<i>o/w related party trade</i>

¹ Adjusted for local and cross-border inter-dealer double-counting. Due to incomplete reporting, the maturity breakdown does not always sum to totals. Due to incomplete counterparty breakdown, components do not always sum to totals. See annex for abbreviations. ² Includes all participating countries' currencies other than the ones listed. ³ Difference between total and listed components.

Table 5.6

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Daily averages, in millions of US dollars

	TOT	Specified currency against all other currencies ²					
		AUD	BRL	CAD	CHF	CNY	DKK
Argentina	1,874	0	1	1	1	1	0
Australia	119,148	58,820	58	2,916	963	2,225	83
Austria	15,911	94	3	126	4,028	5	41
Bahrain	1,901	3	...	9	16	0	0
Belgium	36,011	362	16	615	1,344	52	905
Brazil	18,766	258	13,922	183	68	79	1
Bulgaria	2,085	0	...	2	5	0	0
Canada	109,117	4,253	782	61,043	2,124	981	137
Chile	8,308	9	3	4	26	17	1
China	136,017	1,161	1	1,164	739	101,226	7
Chinese Taipei	29,556	1,550	14	392	180	3,655	2
Colombia	4,144	0	...	27	1	0	0
Czech Republic	7,344	27	...	35	24	2	2
Denmark	63,370	2,514	1	2,803	2,072	7	10,226
Finland	6,584	56	2	84	63	1	131
France	167,123	5,588	1,005	7,089	12,113	1,929	1,412
Germany	124,448	2,472	47	2,512	12,113	814	2,158
Greece	733	21	...	10	88	0	0
Hong Kong SAR	632,108	52,236	5,402	13,669	7,324	107,615	1,167
Hungary	3,979	4	...	3	58	...	1
India	39,932	334	22	173	211	45	50
Indonesia	6,679	167	...	9	5	101	0
Ireland	7,204	74	4	551	281	24	175
Israel	7,126	1	...	32	9	...	...
Italy	17,034	324	5	312	1,081	159	116
Japan	375,505	27,393	352	6,025	4,296	3,220	2,243
Korea	55,317	638	58	505	308	3,125	23
Latvia	461	48	0	14	46	0	1
Lithuania	58	0	...	1	1	0	1
Luxembourg	57,613	2,081	719	747	9,878	186	799
Malaysia	10,119	566	...	47	36	241	1
Mexico	20,101	0	21	143	76	2	0
Netherlands	64,181	1,110	341	3,373	9,688	1,196	1,290
New Zealand	9,273	1,343	...	82	72	32	4
Norway	29,994	129	3	231	1,460	1	503
Peru	2,000	1	1	2	0	0	0
Philippines	3,759	66	...	23	4	40	0
Poland	8,864	12	...	28	283	15	10
Portugal	1,681	21	14	55	81	1	24
Romania	2,499	1	...	2	34	0	1
Russia	46,562	158	...	125	622	230	3
Saudi Arabia	5,548	38	0	41	20	2	0
Singapore	639,869	76,794	674	14,504	10,921	42,565	640
Slovakia	654	59	...	12	11	0	1
South Africa	20,376	176	...	37	122	104	6
Spain	40,704	818	758	1,105	4,133	79	108
Sweden	37,082	153	9	651	2,938	1	901
Switzerland	275,719	14,150	831	9,783	92,153	4,445	1,197
Thailand	14,421	84	...	4	30	177	3
Turkey	19,309	20	...	43	110	2	8
United Arab Emirates	45,885	338	6	273	226	262	13
United Kingdom	3,576,409	232,804	34,114	162,053	174,368	56,667	20,063
United States	1,370,119	80,240	22,375	115,525	65,091	29,859	10,873
Total	8,300,586	569,571	81,560	409,196	421,945	361,390	55,327

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 6.1

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Daily averages, in millions of US dollars

Specified currency against all other currencies ²							
EUR	GBP	HKD	HUF	INR	JPY	KRW	
45	1	...	...	...	0	...	Argentina
15,854	7,125	3,741	15	194	13,226	387	Australia
9,375	650	22	1,329	0	249	1	Austria
440	299	3	...	38	35	0	Bahrain
22,949	3,565	596	571	22	1,085	28	Belgium
2,947	175	0	10	15	410	10	Brazil
2,018	35	...	100	...	13	...	Bulgaria
17,704	15,521	424	21	231	5,885	446	Canada
459	51	0	...	0	48	...	Chile
22,143	1,290	4,752	24	13	5,590	26	China
3,752	893	534	0	164	1,929	399	Chinese Taipei
270	60	...	...	...	21	0	Colombia
5,292	320	0	17	0	7	5	Czech Republic
28,726	5,930	350	459	3	4,092	2	Denmark
6,091	606	24	5	4	103	2	Finland
100,242	23,471	6,145	268	1,619	21,535	1,615	France
88,258	14,130	1,059	1,027	133	13,214	150	Germany
688	96	0	0	...	25	...	Greece
91,828	28,926	145,447	409	12,570	99,903	12,938	Hong Kong SAR
2,284	113	...	2,638	...	3	...	Hungary
2,983	1,358	109	1	34,495	471	15	India
357	201	12	...	0	145	0	Indonesia
5,261	1,340	85	14	2	90	1	Ireland
514	41	...	...	...	9	...	Israel
12,881	1,897	79	516	2	908	1	Italy
74,626	25,888	3,138	122	599	292,287	1,364	Japan
3,098	780	588	3	7	1,729	47,675	Korea
324	50	0	0	...	28	...	Latvia
56	7	0	0	0	0	...	Lithuania
41,162	7,650	630	26	70	5,745	113	Luxembourg
860	758	407	...	16	358	13	Malaysia
750	91	0	...	0	143	0	Mexico
33,182	9,699	1,813	184	21	3,361	29	Netherlands
622	277	35	0	1	399	1	New Zealand
15,493	1,813	257	31	1	368	2	Norway
95	2	0	...	...	8	...	Peru
231	64	46	...	2	226	17	Philippines
4,768	517	0	49	0	58	...	Poland
1,313	163	9	0	...	24	...	Portugal
2,269	84	...	20	...	2	...	Romania
16,686	1,118	39	2	0	484	0	Russia
464	263	0	2	59	162	0	Saudi Arabia
107,436	47,495	40,674	270	18,839	156,682	22,499	Singapore
507	38	...	15	...	13	...	Slovakia
3,199	3,045	8	1	14	189	...	South Africa
23,336	6,355	148	31	1	1,968	0	Spain
15,170	4,088	208	25	2	811	8	Sweden
99,308	20,852	9,587	747	1,058	29,066	1,776	Switzerland
1,150	328	92	...	4	793	2	Thailand
6,298	919	0	...	...	600	...	Turkey
17,123	4,938	256	0	304	1,980	142	United Arab Emirates
1,286,934	592,680	78,667	18,014	46,821	552,318	53,168	United Kingdom
488,901	198,983	17,889	5,603	14,440	189,585	17,270	United States
2,688,720	1,037,035	317,873	32,569	131,762	1,408,382	160,104	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Daily averages, in millions of US dollars

	Specified currency against all other currencies ²						
	MXN	NOK	NZD	PLN	RUB	SEK	SGD
Argentina	0	0	0	...	...	0	...
Australia	198	361	16,290	30	66	518	3,628
Austria	23	170	41	592	731	225	12
Bahrain	...	15	1	...	...	0	86
Belgium	79	1,567	371	1,086	80	2,072	311
Brazil	499	148	60	11	22	77	4
Bulgaria	...	2	...	2	2	1	...
Canada	1,927	301	884	43	10	437	187
Chile	34	1	0	...	...	1	0
China	37	8	308	56	32	59	283
Chinese Taipei	21	9	401	8	19	17	579
Colombia	21	...	...	...	...	0	...
Czech Republic	1	10	0	83	27	9	0
Denmark	329	6,574	739	613	256	9,228	355
Finland	7	380	3	85	322	1,181	42
France	1,169	3,042	931	1,027	649	3,019	1,810
Germany	794	2,153	887	2,335	1,096	3,265	588
Greece	...	3	0	4	0	2	0
Hong Kong SAR	2,263	2,036	16,962	696	2,627	2,345	20,498
Hungary	...	2	...	37	72	2	...
India	0	29	40	2	20	75	84
Indonesia	...	0	22	...	...	2	391
Ireland	33	60	9	105	15	70	20
Israel	...	...	...	...	...	1	...
Italy	150	198	66	293	48	232	31
Japan	1,506	831	6,272	929	181	1,938	2,021
Korea	40	16	49	12	68	42	348
Latvia	0	3	9	2	54	2	0
Lithuania	0	4	0	2	7	1	0
Luxembourg	183	931	288	409	187	1,536	364
Malaysia	...	1	80	...	0	2	700
Mexico	19,293	0	0	0	0	1	0
Netherlands	937	1,265	1,011	796	1,004	1,484	741
New Zealand	1	20	7,241	0	...	23	26
Norway	12	15,525	9	127	32	2,668	33
Peru	0	0	0	...	...	0	...
Philippines	0	...	14	0	...	0	61
Poland	0	89	4	6,317	51	25	1
Portugal	7	19	1	82	0	6	0
Romania	...	1	...	12	0	3	...
Russia	17	44	132	9	32,405	90	8
Saudi Arabia	1	0	2	0	0	4	0
Singapore	1,898	1,737	19,864	605	940	3,022	57,300
Slovakia	...	23	...	51	34	5	...
South Africa	93	6	14	9	7	21	4
Spain	5,118	287	185	367	17	141	68
Sweden	40	2,199	85	174	120	16,462	74
Switzerland	1,522	5,643	4,907	1,591	1,969	5,391	2,627
Thailand	...	3	6	0	0	6	128
Turkey	...	44	...	18	66	20	0
United Arab Emirates	0	10	79	14	1,143	29	104
United Kingdom	53,935	70,268	70,661	23,452	29,872	82,826	46,734
United States	44,407	28,176	26,747	9,653	9,912	25,559	14,745
Total	136,596	144,214	175,676	51,739	84,161	164,145	154,997

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover.

Table 6.3

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Daily averages, in millions of US dollars

Specified currency against all other currencies ²						
TRY	TWD	USD	ZAR	OTH ³	RES ⁴	
...	...	1,843	0	1,854	3	Argentina
154	210	109,230	260	373	1,374	Australia
102	0	12,289	97	1,363	256	Austria
82	...	1,739	0	670	367	Bahrain
107	16	29,356	140	4,239	490	Belgium
24	1	17,215	99	1,100	195	Brazil
1	...	323	...	1,666	0	Bulgaria
69	145	103,361	163	993	161	Canada
...	...	8,181	0	7,782	0	Chile
4	1	132,549	187	93	281	China
1	15,507	28,563	318	197	9	Chinese Taipei
...	...	4,093	0	3,795	0	Colombia
4	...	2,817	1	5,990	18	Czech Republic
523	2	49,493	272	268	903	Denmark
18	...	3,800	9	73	78	Finland
427	860	132,741	604	2,240	1,695	France
1,332	79	91,021	2,058	3,033	2,169	Germany
2	...	517	0	10	0	Greece
4,451	11,003	610,629	1,635	9,173	463	Hong Kong SAR
7	...	2,601	...	125	9	Hungary
1	6	38,829	41	246	227	India
0	...	6,241	0	5,603	101	Indonesia
10	2	6,058	44	39	44	Ireland
...	...	6,514	...	7,126	5	Israel
166	1	13,963	124	257	258	Italy
3,143	327	285,646	3,954	2,348	361	Japan
15	6	51,341	19	93	50	Korea
0	...	337	0	0	3	Latvia
0	...	34	0	1	1	Lithuania
191	54	39,665	289	814	508	Luxembourg
...	2	9,690	1	6,405	53	Malaysia
...	...	19,620	0	61	0	Mexico
230	0	53,868	142	746	849	Netherlands
0	...	8,335	3	6	25	New Zealand
1	0	21,256	6	25	3	Norway
...	...	1,984	0	1,906	0	Peru
0	0	3,667	0	3,027	31	Philippines
18	...	5,333	6	141	3	Poland
0	...	1,527	13	2	1	Portugal
1	...	669	0	1,899	0	Romania
57	...	40,384	25	75	411	Russia
32	0	5,133	2	4,162	706	Saudi Arabia
2,620	12,998	600,352	2,582	26,906	8,921	Singapore
32	...	367	1	104	34	Slovakia
8	...	19,040	14,168	27	452	South Africa
88	...	33,741	32	1,386	1,140	Spain
51	0	29,557	70	181	187	Sweden
1,737	614	223,144	1,619	3,450	12,270	Switzerland
0	2	13,548	0	12,462	20	Thailand
12,446	...	17,271	93	18	639	Turkey
16	4	41,463	1,467	18,270	3,312	United Arab Emirates
46,950	24,272	3,201,527	44,542	81,754	67,355	United Kingdom
11,959	6,015	1,216,261	12,923	32,044	45,204	United States
87,080	72,126	7,358,724	88,011	256,624	151,646	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Because two currencies are involved in each transaction, the sum of transactions in individual currencies comes to twice the total reported turnover. ³ Includes all participating countries' currencies other than the ones listed. ⁴ Difference between total and listed components.

Table 6.4

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

US dollar against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	CHF	CNY
Argentina	1,843	0	0	0	0	0
Australia	109,230	52,728	53	2,067	588	2,114
Austria	12,289	49	1	76	3,377	1
Bahrain	1,739	3	...	9	10	0
Belgium	29,356	278	14	450	928	42
Brazil	17,215	248	12,679	166	50	61
Bulgaria	323	0	...	1	0	0
Canada	103,361	3,694	715	57,509	1,850	324
Chile	8,181	8	3	3	17	15
China	132,549	1,034	1	1,031	717	98,048
Chinese Taipei	28,563	1,299	14	314	153	3,491
Colombia	4,093	0	...	26	1	0
Czech Republic	2,817	25	...	33	4	1
Denmark	49,493	1,880	0	2,341	1,291	2
Finland	3,800	6	0	35	2	...
France	132,741	3,839	693	4,263	7,027	1,212
Germany	91,021	1,261	42	1,429	6,326	469
Greece	517	3	...	2	4	...
Hong Kong SAR	610,629	47,910	5,167	11,110	5,568	105,608
Hungary	2,601	3	...	0	21	...
India	38,829	296	22	130	155	37
Indonesia	6,241	137	...	7	4	80
Ireland	6,058	47	2	528	227	14
Israel	6,514	...	...	...	...	...
Italy	13,963	246	3	229	742	129
Japan	285,646	11,025	294	2,401	1,959	2,739
Korea	51,341	568	58	445	191	720
Latvia	337	19	0	8	18	0
Lithuania	34	0	...	0	0	...
Luxembourg	39,665	929	446	467	4,320	127
Malaysia	9,690	498	...	39	25	229
Mexico	19,620	0	18	119	50	1
Netherlands	53,868	869	340	2,939	7,671	1,177
New Zealand	8,335	754	...	57	62	0
Norway	21,256	92	3	108	355	1
Peru	1,984	1	1	2	0	0
Philippines	3,667	57	...	20	4	36
Poland	5,333	5	...	19	140	9
Portugal	1,527	19	...	45	66	1
Romania	669	0	...	1	14	0
Russia	40,384	113	...	117	453	170
Saudi Arabia	5,133	23	...	22	15	1
Singapore	600,352	67,198	669	11,816	7,992	40,916
Slovakia	367	1	...	6	3	0
South Africa	19,040	146	...	35	115	98
Spain	33,741	733	625	950	3,423	76
Sweden	29,557	102	8	581	2,809	0
Switzerland	223,144	9,620	797	6,717	60,301	4,335
Thailand	13,548	62	...	3	19	127
Turkey	17,271	17	...	34	55	0
United Arab Emirates	41,463	228	...	217	173	209
United Kingdom	3,201,527	190,482	32,408	142,911	129,044	54,299
United States	1,216,261	63,729	21,158	101,707	49,749	26,984
Total	7,358,724	462,288	76,235	353,545	298,087	343,905

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 7.1

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

US dollar against:

Daily averages, in millions of US dollars

EUR	GBP	HKD	INR	JPY	KRW	
16	1	...	...	0	...	Argentina
11,857	5,374	3,485	148	10,348	266	Australia
5,836	322	13	0	118	1	Austria
296	271	3	37	31	0	Bahrain
16,716	2,659	526	13	842	20	Belgium
1,606	135	0	15	288	10	Brazil
260	15	...	...	0	...	Bulgaria
14,563	12,992	386	221	5,106	441	Canada
355	48	0	0	41	...	Chile
20,388	1,123	4,132	13	5,166	14	China
3,424	783	483	164	1,679	398	Chinese Taipei
223	56	...	...	21	0	Colombia
816	138	0	...	1	5	Czech Republic
18,089	3,727	293	2	2,608	1	Denmark
3,354	5	1	0	24	0	Finland
73,640	11,288	2,800	820	15,322	872	France
58,553	6,272	796	120	5,058	134	Germany
475	20	...	...	13	...	Greece
80,487	26,052	142,308	12,487	91,095	12,888	Hong Kong SAR
931	36	...	...	0	...	Hungary
2,478	1,149	102	33,458	393	5	India
258	181	8	0	83	0	Indonesia
4,176	779	42	1	42	1	Ireland
...	...	...	...	...	...	Israel
9,914	1,145	36	1	535	1	Italy
34,718	9,430	2,053	567	209,592	1,304	Japan
2,489	667	420	7	1,329	43,741	Korea
219	36	0	...	10	...	Latvia
32	0	...	...	0	...	Lithuania
24,429	2,884	349	63	2,665	69	Luxembourg
712	670	396	16	241	13	Malaysia
409	35	0	0	106	0	Mexico
23,955	4,027	1,398	3	2,447	25	Netherlands
448	200	29	0	345	1	New Zealand
8,152	1,211	216	0	269	0	Norway
79	2	0	...	8	...	Peru
194	49	45	2	175	17	Philippines
1,440	345	0	0	11	...	Poland
1,159	126	8	...	16	...	Portugal
464	20	...	...	1	...	Romania
10,710	948	31	0	376	0	Russia
306	206	0	30	129	0	Saudi Arabia
85,509	41,468	39,868	18,437	135,110	22,171	Singapore
223	19	...	...	7	...	Slovakia
2,332	2,673	8	14	171	...	South Africa
16,880	2,754	82	0	1,334	0	Spain
9,028	3,537	177	1	708	7	Sweden
63,014	13,273	9,082	1,048	18,900	1,738	Switzerland
839	288	55	3	475	2	Thailand
4,480	634	0	...	215	...	Turkey
16,213	3,405	255	294	974	141	United Arab Emirates
1,008,976	459,074	75,603	46,066	448,868	52,416	United Kingdom
374,724	161,232	16,037	14,034	152,310	16,865	United States
2,020,845	783,786	301,524	128,084	1,115,607	153,567	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 7.2

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

US dollar against:

Daily averages, in millions of US dollars

	MXN	NOK	NZD	PLN	RUB	SEK
Argentina	...	0	...	...	...	0
Australia	149	142	14,331	9	64	258
Austria	22	43	7	380	517	98
Bahrain	...	1	1	...	...	0
Belgium	67	1,384	248	770	40	1,972
Brazil	477	94	54	7	22	68
Bulgaria	...	0	...	0	0	0
Canada	1,901	196	826	24	10	273
Chile	34	1	0	...	...	1
China	37	5	284	0	23	34
Chinese Taipei	21	9	293	8	19	14
Colombia	21	...	...	...	...	0
Czech Republic	0	6	...	38	22	6
Denmark	313	4,615	359	449	195	5,850
Finland	2	51	1	8	112	103
France	873	1,802	696	445	404	1,775
Germany	540	924	525	920	651	1,581
Greece	...	0	...	0	0	0
Hong Kong SAR	2,232	1,394	14,344	495	2,559	1,589
Hungary	...	...	...	13	68	...
India	0	26	34	2	13	68
Indonesia	...	0	19	...	...	1
Ireland	20	13	4	25	6	41
Israel	...	...	...	...	...	...
Italy	85	117	30	213	9	122
Japan	543	307	2,547	396	80	663
Korea	34	15	47	10	57	33
Latvia	0	2	4	0	21	0
Lithuania	...	0	...	0	1	0
Luxembourg	150	417	114	253	129	320
Malaysia	...	1	67	...	0	2
Mexico	18,818	0	0	0	0	1
Netherlands	880	989	954	724	909	1,307
New Zealand	1	15	6,353	...	...	13
Norway	11	8,269	7	106	27	2,039
Peru	0	0	0	...	...	0
Philippines	0	...	12	0	...	0
Poland	0	44	1	3,170	45	6
Portugal	0	13	1	42	0	4
Romania	...	0	...	0	0	0
Russia	17	41	88	9	26,674	70
Saudi Arabia	1	0	2	0	0	2
Singapore	1,676	1,073	15,563	428	924	2,220
Slovakia	...	3	...	23	2	1
South Africa	59	6	8	9	6	19
Spain	4,408	203	118	221	15	117
Sweden	35	909	72	99	96	10,535
Switzerland	1,336	3,771	2,774	865	1,773	3,685
Thailand	...	2	5	0	0	4
Turkey	...	13	...	9	25	15
United Arab Emirates	0	5	42	0	18	24
United Kingdom	50,109	46,291	56,325	14,948	28,502	56,989
United States	40,634	17,375	21,779	7,274	9,480	16,594
Total	125,507	90,583	138,941	32,393	73,518	108,517

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 7.3

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

US dollar against:

Daily averages, in millions of US dollars

SGD	TRY	TWD	ZAR	LOC	RES ²	
...	...	...	0	1,822	3	Argentina
3,442	150	151	220	...	1,285	Australia
8	89	0	93	...	1,237	Austria
86	3	...	0	343	645	Bahrain
156	92	3	127	...	2,009	Belgium
4	24	1	99	...	1,107	Brazil
...	...	...	...	46	0	Bulgaria
176	60	144	159	...	1,791	Canada
0	...	...	0	7,628	26	Chile
160	4	0	187	...	148	China
564	1	14,969	269	...	193	Chinese Taipei
...	...	...	0	3,744	0	Colombia
...	3	...	0	1,697	23	Czech Republic
234	437	1	241	5,756	808	Denmark
5	8	...	3	...	81	Finland
896	370	434	466	...	2,806	France
392	847	78	1,045	...	3,059	Germany
0	0	...	0	...	0	Greece
19,782	4,357	10,895	1,603	...	10,700	Hong Kong SAR
...	3	...	...	1,506	20	Hungary
64	1	6	35	...	357	India
153	0	...	0	5,230	80	Indonesia
14	5	0	20	...	52	Ireland
...	...	...	...	6,514	...	Israel
23	116	1	99	...	166	Italy
1,370	505	308	630	...	2,214	Japan
328	12	6	16	...	148	Korea
0	0	...	0	...	1	Latvia
...	...	...	0	...	1	Lithuania
306	121	43	257	...	809	Luxembourg
605	...	2	0	5,754	422	Malaysia
0	...	...	0	...	63	Mexico
670	213	0	125	...	2,246	Netherlands
19	...	...	2	...	34	New Zealand
22	0	0	5	...	363	Norway
...	...	...	0	1,889	2	Peru
59	0	0	0	2,953	44	Philippines
0	14	...	4	...	80	Poland
0	0	...	6	...	21	Portugal
...	0	...	...	167	2	Romania
8	56	...	25	...	478	Russia
0	32	...	2	3,697	664	Saudi Arabia
54,291	1,837	12,924	1,874	...	36,386	Singapore
...	1	...	1	...	77	Slovakia
3	7	...	13,098	...	230	South Africa
39	35	...	29	...	1,697	Spain
62	48	0	53	...	689	Sweden
2,273	1,442	608	1,334	...	14,457	Switzerland
88	0	2	0	11,530	44	Thailand
0	11,406	...	93	...	273	Turkey
102	15	3	45	9,542	9,556	United Arab Emirates
43,984	43,146	24,021	41,911	...	155,155	United Kingdom
12,880	10,956	5,869	11,769	...	63,122	United States
143,270	76,415	70,470	75,945	69,818	315,873	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Difference between total and listed components.

Table 7.4

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Euro against:

Daily averages, in millions of US dollars

	TOT	AUD	CAD	CHF	CNY	DKK
Argentina	45	...	...	...	...	...
Australia	15,854	1,606	106	114	1	19
Austria	9,375	19	44	645	3	24
Bahrain	440	0	0	0	...	...
Belgium	22,949	75	79	242	10	29
Brazil	2,947	2	5	11	17	...
Bulgaria	2,018	0	0	4	0	0
Canada	17,704	64	1,330	79	1	17
Chile	459	...	...	...	...	...
China	22,143	6	12	1	1,510	0
Chinese Taipei	3,752	42	5	8	13	0
Colombia	270	...	...	...	...	...
Czech Republic	5,292	1	2	13	0	1
Denmark	28,726	179	187	534	3	3,591
Finland	6,091	48	48	60	1	97
France	100,242	847	868	3,772	219	274
Germany	88,258	541	880	5,314	326	739
Greece	688	17	7	84	0	0
Hong Kong SAR	91,828	775	198	912	575	62
Hungary	2,284	0	2	35	...	0
India	2,983	0	1	4	0	0
Indonesia	357	3	1	0	1	0
Ireland	5,261	10	21	44	9	157
Israel	514	...	...	...	...	...
Italy	12,881	53	68	325	30	85
Japan	74,626	397	493	750	2	29
Korea	3,098	0	4	0	1	...
Latvia	324	15	6	21	0	1
Lithuania	56	0	1	1	0	1
Luxembourg	41,162	537	245	5,374	22	407
Malaysia	860	22	0	8	1	0
Mexico	750	...	0	5	...	...
Netherlands	33,182	220	126	1,522	19	62
New Zealand	622	21	0	0	...	0
Norway	15,493	13	1	1,051	0	63
Peru	95	...	...	...	...	...
Philippines	231	1	2	0	0	...
Poland	4,768	4	6	74	3	3
Portugal	1,313	2	10	15	0	5
Romania	2,269	0	1	18	0	1
Russia	16,686	6	6	139	28	0
Saudi Arabia	464	...	...	1	...	...
Singapore	107,436	1,474	204	1,592	450	81
Slovakia	507	28	4	8	0	0
South Africa	3,199	3	0	3	...	0
Spain	23,336	76	141	611	3	36
Sweden	15,170	12	21	71	0	319
Switzerland	99,308	787	316	23,595	41	139
Thailand	1,150	0	0	0	0	...
Turkey	6,298	2	0	37	2	0
United Arab Emirates	17,123	23	17	24	0	0
United Kingdom	1,286,934	10,387	7,939	34,529	1,047	3,897
United States	488,901	3,627	5,258	9,788	370	3,766
Total	2,688,720	21,943	18,663	91,439	4,709	13,905

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 8.1

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Euro against:

Daily averages, in millions of US dollars

GBP	HUF	JPY	NOK	PLN	
...	...	...	...	...	Argentina
636	5	764	78	12	Australia
309	457	87	112	209	Austria
19	...	0	9	...	Bahrain
789	268	226	158	232	Belgium
5	3	11	47	4	Brazil
18	100	12	1	1	Bulgaria
1,278	5	161	71	14	Canada
...	...	...	...	...	Chile
72	24	22	3	56	China
44	0	73	0	0	Chinese Taipei
...	...	...	...	...	Colombia
119	9	2	4	24	Czech Republic
1,048	131	446	1,383	140	Denmark
598	2	78	300	75	Finland
9,369	95	4,894	477	415	France
6,595	476	5,511	991	1,141	Germany
75	0	10	3	4	Greece
1,038	99	4,658	582	157	Hong Kong SAR
72	1,108	2	1	13	Hungary
17	0	10	1	...	India
1	...	2	...	...	Indonesia
541	5	31	42	77	Ireland
...	...	...	...	...	Israel
690	462	301	78	76	Italy
1,510	33	36,211	65	23	Japan
2	...	15	...	1	Korea
12	0	7	2	2	Latvia
7	0	0	3	2	Lithuania
3,763	12	2,332	432	146	Luxembourg
6	...	24	...	...	Malaysia
...	...	...	...	...	Mexico
5,083	15	886	113	62	Netherlands
3	...	1	2	...	New Zealand
63	0	23	5,885	13	Norway
...	...	...	...	...	Peru
9	...	13	...	...	Philippines
87	19	43	37	2,973	Poland
36	0	8	6	40	Portugal
48	16	1	1	9	Romania
98	...	48	3	0	Russia
1	...	2	...	...	Saudi Arabia
2,270	107	12,244	515	152	Singapore
12	6	5	14	18	Slovakia
16	...	2	0	...	South Africa
3,455	11	327	80	146	Spain
222	7	55	684	41	Sweden
3,702	128	3,397	1,375	248	Switzerland
0	...	0	0	...	Thailand
163	...	226	28	0	Turkey
255	...	200	4	0	United Arab Emirates
91,719	6,837	51,665	18,694	7,790	United Kingdom
18,333	1,836	16,543	7,719	1,735	United States
154,207	12,274	141,579	40,005	16,053	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 8.2

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Euro against:

Daily averages, in millions of US dollars

	SEK	TRY	USD	LOC	RES ²
Argentina	...	...	16	29	0
Australia	213	1	11,857	...	442
Austria	114	13	5,836	...	1,502
Bahrain	0	79	296	10	26
Belgium	82	15	16,716	...	4,027
Brazil	6	...	1,606	1,119	111
Bulgaria	1	1	260	1,609	9
Canada	69	0	14,563	...	51
Chile	...	...	355	104	...
China	15	...	20,388	...	33
Chinese Taipei	2	...	3,424	111	31
Colombia	...	...	223	47	...
Czech Republic	2	1	816	4,235	64
Denmark	2,690	49	18,089	...	256
Finland	1,045	10	3,354	...	376
France	721	46	73,640	...	4,605
Germany	1,530	125	58,553	...	5,535
Greece	1	2	475	...	10
Hong Kong SAR	649	7	80,487	739	889
Hungary	1	3	931	...	116
India	0	...	2,478	460	13
Indonesia	...	...	258	45	48
Ireland	24	4	4,176	...	120
Israel	...	...	...	514	...
Italy	108	50	9,914	...	643
Japan	131	16	34,718	...	247
Korea	0	...	2,489	585	1
Latvia	1	0	219	...	38
Lithuania	1	0	32	...	7
Luxembourg	1,052	27	24,429	...	2,385
Malaysia	0	...	712	85	2
Mexico	...	...	409	335	1
Netherlands	85	16	23,955	...	1,018
New Zealand	2	...	448	146	0
Norway	219	0	8,152	...	9
Peru	...	...	79	16	0
Philippines	0	...	194	10	2
Poland	13	2	1,440	...	65
Portugal	2	0	1,159	...	30
Romania	2	0	464	1,707	1
Russia	17	1	10,710	5,616	14
Saudi Arabia	0	...	306	50	103
Singapore	637	21	85,509	558	1,623
Slovakia	3	16	223	...	169
South Africa	0	0	2,332	603	240
Spain	20	53	16,880	...	1,496
Sweden	4,608	1	9,028	...	101
Switzerland	1,082	79	63,014	...	1,404
Thailand	0	...	839	310	0
Turkey	0	826	4,480	...	535
United Arab Emirates	2	0	16,213	217	167
United Kingdom	20,213	1,199	1,008,976	...	22,042
United States	6,961	262	374,724	...	37,979
Total	42,325	2,926	2,020,845	19,260	88,588

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Difference between total and listed components.

Table 8.3

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Yen against:

Daily averages, in millions of US dollars

	TOT	AUD	BRL	CAD	EUR	NZD
Argentina	0	...	...	...	...	...
Australia	13,226	1,464	0	167	764	191
Austria	249	16	...	2	87	0
Bahrain	35	...	...	...	0	...
Belgium	1,085	2	...	4	226	...
Brazil	410	1	77	...	11	1
Bulgaria	13	...	...	...	12	...
Canada	5,885	85	22	377	161	5
Chile	48	...	...	...	...	...
China	5,590	4	...	2	22	0
Chinese Taipei	1,929	32	...	10	73	6
Colombia	21	...	...	...	...	...
Czech Republic	7	...	...	...	2	...
Denmark	4,092	142	...	32	446	51
Finland	103	...	...	...	78	...
France	21,535	159	5	226	4,894	12
Germany	13,214	321	...	38	5,511	40
Greece	25	1	...	0	10	...
Hong Kong SAR	99,903	1,242	229	338	4,658	237
Hungary	3	...	...	...	2	...
India	471	2	...	0	10	0
Indonesia	145	4	...	0	2	0
Ireland	90	2	...	1	31	1
Israel	9	...	...	...	...	...
Italy	908	9	...	11	301	0
Japan	292,287	14,426	59	2,677	36,211	2,720
Korea	1,729	0	...	0	15	...
Latvia	28	6	...	0	7	3
Lithuania	0	...	...	...	0	...
Luxembourg	5,745	127	122	5	2,332	33
Malaysia	358	15	...	7	24	0
Mexico	143	...	...	...	...	...
Netherlands	3,361	1	...	0	886	0
New Zealand	399	3	...	1	1	48
Norway	368	...	...	...	23	...
Peru	8	...	...	...	...	...
Philippines	226	4	...	...	13	0
Poland	58	0	...	0	43	0
Portugal	24	0	...	0	8	0
Romania	2	...	...	...	1	...
Russia	484	12	...	0	48	11
Saudi Arabia	162	...	...	...	2	...
Singapore	156,682	3,559	4	392	12,244	638
Slovakia	13	1	...	...	5	...
South Africa	189	0	...	...	2	...
Spain	1,968	6	...	5	327	12
Sweden	811	1	...	1	55	2
Switzerland	29,066	1,827	5	318	3,397	281
Thailand	793	0	...	...	0	...
Turkey	600	...	...	...	226	...
United Arab Emirates	1,980	15	...	7	200	4
United Kingdom	552,318	15,553	898	2,921	51,665	2,724
United States	189,585	5,047	469	1,380	16,543	739
Total	1,408,382	44,088	1,889	8,923	141,579	7,759

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 9.1

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Yen against:

Daily averages, in millions of US dollars

TRY	USD	ZAR	LOC	RES ²	
...	0	...	0	...	Argentina
...	10,348	7	...	284	Australia
...	118	...	...	26	Austria
...	31	...	0	4	Bahrain
0	842	...	...	12	Belgium
...	288	...	...	33	Brazil
...	0	...	0	0	Bulgaria
...	5,106	...	...	129	Canada
...	41	...	7	0	Chile
...	5,166	...	390	7	China
...	1,679	4	95	31	Chinese Taipei
...	21	...	0	0	Colombia
...	1	...	3	1	Czech Republic
29	2,608	7	59	719	Denmark
...	24	...	...	1	Finland
0	15,322	1	...	917	France
320	5,058	879	...	1,046	Germany
...	13	...	...	1	Greece
87	91,095	11	405	1,602	Hong Kong SAR
...	0	...	1	0	Hungary
...	393	0	59	6	India
...	83	...	41	15	Indonesia
1	42	3	...	10	Ireland
...	...	...	9	...	Israel
...	535	...	...	53	Italy
2,616	209,592	3,241	...	20,747	Japan
...	1,329	...	369	15	Korea
...	10	...	...	2	Latvia
...	0	...	...	0	Lithuania
32	2,665	6	...	422	Luxembourg
...	241	...	15	57	Malaysia
...	106	...	37	0	Mexico
...	2,447	...	...	27	Netherlands
...	345	...	...	1	New Zealand
...	269	...	71	4	Norway
...	8	...	0	0	Peru
...	175	...	33	0	Philippines
...	11	...	2	1	Poland
0	16	...	...	0	Portugal
...	1	...	0	0	Romania
...	376	...	6	31	Russia
...	129	...	3	28	Saudi Arabia
740	135,110	592	258	3,146	Singapore
...	7	...	...	0	Slovakia
...	171	17	...	0	South Africa
...	1,334	1	...	283	Spain
...	708	...	38	5	Sweden
167	18,900	133	1,399	2,637	Switzerland
...	475	...	317	0	Thailand
155	215	...	...	4	Turkey
...	974	0	94	686	United Arab Emirates
2,463	448,868	1,117	20,978	5,130	United Kingdom
156	152,310	57	...	12,885	United States
6,765	1,115,607	6,075	24,692	51,005	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Difference between total and listed components.

Table 9.2

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Local currency against:

Daily averages, in millions of US dollars

	TOT	AUD	CAD	CHF	EUR
Argentina	1,854	0	0	0	29
Australia	58,820	...	289	106	1,606
Austria	9,375	19	44	645	...
Bahrain	361	0	0	0	10
Belgium	22,949	75	79	242	...
Brazil	13,922	2	3	7	1,119
Bulgaria	1,659	0	0	0	1,609
Canada	61,043	289	...	160	1,330
Chile	7,755	1	1	9	104
China	101,226	113	93	20	1,510
Chinese Taipei	15,507	59	25	3	111
Colombia	3,795	0	0	0	47
Czech Republic	5,973	0	0	6	4,235
Denmark	10,226	6	19	19	3,591
Finland	6,091	48	48	60	...
France	100,242	847	868	3,772	...
Germany	88,258	541	880	5,314	...
Greece	688	17	7	84	...
Hong Kong SAR	145,447	328	76	46	739
Hungary	2,638	0	0	2	1,108
India	34,495	33	40	45	460
Indonesia	5,585	7	0	1	45
Ireland	5,261	10	21	44	...
Israel	7,126	1	32	9	514
Italy	12,881	53	68	325	...
Japan	292,287	14,426	2,677	847	36,211
Korea	47,675	69	56	106	585
Latvia	324	15	6	21	...
Lithuania	56	0	1	1	...
Luxembourg	41,162	537	245	5,374	...
Malaysia	6,019	18	1	1	85
Mexico	19,293	0	24	22	335
Netherlands	33,182	220	126	1,522	...
New Zealand	7,241	559	20	8	146
Norway	15,525	24	121	51	5,885
Peru	1,905	0	0	...	16
Philippines	3,012	3	1	0	10
Poland	6,317	2	3	43	2,973
Portugal	1,313	2	10	15	...
Romania	1,898	0	1	2	1,707
Russia	32,405	0	0	16	5,616
Saudi Arabia	3,974	1	2	2	50
Singapore	57,300	993	25	58	558
Slovakia	507	28	4	8	...
South Africa	14,168	26	2	3	603
Spain	23,336	76	141	611	...
Sweden	16,462	26	28	39	4,608
Switzerland	92,153	1,043	1,103	...	23,595
Thailand	12,402	22	1	10	310
Turkey	12,446	0	0	1	826
United Arab Emirates	12,481	5	9	11	217
United Kingdom	592,680	3,847	3,031	3,954	91,719
United States	1,216,261	63,729	101,707	49,749	374,724
Total	3,286,958	88,122	111,936	73,397	568,945

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations.

Table 10.1

OTC foreign exchange turnover by country and currency in April 2019, "net-gross" basis¹

Local currency against:

Daily averages, in millions of US dollars

GBP	JPY	SEK	USD	RES ²	
1	0	0	1,822	1	Argentina
673	1,464	34	52,728	1,919	Australia
309	87	114	5,836	2,321	Austria
1	0	0	343	6	Bahrain
789	226	82	16,716	4,740	Belgium
17	77	2	12,679	15	Brazil
2	0	0	46	1	Bulgaria
1,041	377	66	57,509	271	Canada
2	7	0	7,628	3	Chile
90	390	10	98,048	952	China
24	95	1	14,969	221	Chinese Taipei
4	0	0	3,744	0	Colombia
18	3	1	1,697	12	Czech Republic
311	59	241	5,756	224	Denmark
598	78	1,045	3,354	862	Finland
9,369	4,894	721	73,640	6,130	France
6,595	5,511	1,530	58,553	9,334	Germany
75	10	1	475	19	Greece
243	405	4	142,308	1,299	Hong Kong SAR
5	1	0	1,506	17	Hungary
183	59	4	33,458	214	India
8	41	1	5,230	252	Indonesia
541	31	24	4,176	415	Ireland
41	9	1	6,514	5	Israel
690	301	108	9,914	1,424	Italy
13,421	...	828	209,592	14,285	Japan
111	369	10	43,741	2,627	Korea
12	7	1	219	43	Latvia
7	0	1	32	14	Lithuania
3,763	2,332	1,052	24,429	3,430	Luxembourg
23	15	0	5,754	121	Malaysia
56	37	1	18,818	1	Mexico
5,083	886	85	23,955	1,305	Netherlands
70	48	5	6,353	31	New Zealand
531	71	387	8,269	185	Norway
0	0	...	1,889	0	Peru
6	33	...	2,953	7	Philippines
59	2	7	3,170	59	Poland
36	8	2	1,159	81	Portugal
14	0	1	167	6	Romania
41	6	3	26,674	48	Russia
12	3	1	3,697	205	Saudi Arabia
255	258	3	54,291	860	Singapore
12	5	3	223	225	Slovakia
354	17	2	13,098	63	South Africa
3,455	327	20	16,880	1,826	Spain
312	38	...	10,535	877	Sweden
2,256	1,399	398	60,301	2,059	Switzerland
40	317	2	11,530	169	Thailand
10	155	0	11,406	49	Turkey
38	94	2	9,542	2,561	United Arab Emirates
...	20,978	1,094	459,074	8,982	United Kingdom
161,232	152,310	16,594	...	296,216	United States
212,837	193,841	24,491	1,646,400	366,989	Total

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. See annex for abbreviations. ² Difference between total and listed components.

Table 10.2

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

All instruments

Daily averages, in millions of US dollars

	Gross turnover ²	Net turnover ³				
		Total	With reporting local dealers	With reporting dealers abroad	With other financial institutions	With non-financial customers
Argentina	2,309	1,874	434	168	296	976
Australia	136,291	119,148	17,144	77,207	20,960	3,837
Austria	16,070	15,911	159	13,219	1,815	718
Bahrain	1,952	1,901	51	1,074	469	308
Belgium	44,139	36,011	8,128	19,919	6,435	1,530
Brazil	20,381	18,766	1,615	5,112	7,816	4,224
Bulgaria	2,120	2,085	35	397	1,437	217
Canada	126,164	109,117	17,047	54,441	30,655	6,974
Chile	11,544	8,308	3,236	2,483	1,544	1,046
China	164,698	136,017	28,681	26,341	68,140	12,855
Chinese Taipei	33,976	29,556	4,420	9,933	10,827	4,377
Colombia	5,100	4,144	956	839	1,683	666
Czech Republic	7,433	7,344	88	6,133	789	334
Denmark	65,548	63,370	2,178	18,758	33,075	9,359
Finland	6,621	6,584	37	3,778	1,553	1,216
France	176,685	167,099	9,561	82,814	61,135	13,589
Germany	129,316	124,448	4,869	80,003	27,386	12,190
Greece	739	733	6	452	84	191
Hong Kong SAR	691,236	632,102	59,127	402,121	155,208	15,645
Hungary	4,085	3,979	105	2,926	637	311
India	53,442	39,932	13,510	4,559	13,866	7,998
Indonesia	8,056	6,679	1,377	1,259	2,810	1,233
Ireland	7,233	7,204	29	4,172	2,594	408
Israel	7,361	7,126	234	...	5,977	915
Italy	18,715	17,034	1,681	13,301	1,073	980
Japan	401,176	375,496	25,670	207,659	119,857	22,309
Korea	77,003	55,317	21,687	19,159	10,123	4,348
Latvia	462	461	0	232	150	80
Lithuania	58	58	0	31	7	20
Luxembourg	59,621	57,613	2,008	33,263	18,812	3,529
Malaysia	11,876	10,119	1,757	3,472	3,046	1,844
Mexico	22,050	20,101	1,949	10,248	5,442	2,462
Netherlands	64,908	64,181	726	43,255	19,210	989
New Zealand	9,534	9,273	261	5,358	2,756	899
Norway	30,168	29,994	174	14,760	10,852	4,208
Peru	2,609	2,000	610	480	316	594
Philippines	5,414	3,759	1,655	1,057	432	616
Poland	9,369	8,864	505	5,907	1,017	1,435
Portugal	1,691	1,681	10	1,267	277	127
Romania	2,614	2,499	115	1,860	80	443
Russia	54,531	46,562	7,969	12,248	18,635	7,711
Saudi Arabia	6,099	5,548	551	2,525	780	1,691
Singapore	672,074	639,857	32,205	393,169	195,253	19,231
Slovakia	660	654	6	550	26	72
South Africa	22,112	20,376	1,736	8,880	5,078	4,683
Spain	41,152	40,704	448	21,601	15,290	3,365
Sweden	37,897	37,082	814	22,799	9,013	4,456
Switzerland	303,342	275,719	27,623	193,054	41,527	13,515
Thailand	18,003	14,421	3,582	3,910	4,507	2,422
Turkey	19,970	19,309	661	12,228	5,358	1,061
United Arab Emirates	47,550	45,885	1,665	24,346	12,683	7,190
United Kingdom	3,989,747	3,576,409	413,338	920,595	2,066,532	175,944
United States	1,465,724	1,370,119	95,605	614,882	573,188	86,444
Total	9,118,628	8,300,536	818,039	3,410,203	3,598,511	473,784

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. ² Not adjusted for inter-dealer double-counting (ie "gross-gross" basis). ³ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Excludes other products.

Table 11

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

Spot

Daily averages, in millions of US dollars

	Total	Reporting dealers		Other financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Argentina	1,781	434	124	242	41	939	...
Australia	33,325	4,143	23,555	1,199	3,051	1,152	224
Austria	2,949	19	2,230	117	435	74	74
Bahrain	439	5	242	39	83	63	7
Belgium	4,395	813	2,295	147	1,020	95	26
Brazil	6,973	1,026	1,455	1,189	1,373	1,201	728
Bulgaria	1,710	35	127	1,332	5	208	4
Canada	18,079	2,864	7,703	3,116	2,710	1,478	208
Chile	3,953	2,031	496	677	99	651	...
China	43,302	5,353	6,484	19,474	2,118	9,683	190
Chinese Taipei	10,357	1,137	3,695	1,613	1,485	2,153	274
Colombia	2,072	755	157	566	196	394	4
Czech Republic	552	3	426	6	32	60	25
Denmark	15,405	51	1,981	686	10,890	243	1,554
Finland	724	5	355	121	28	199	15
France	22,866	1,204	12,375	3,420	4,393	836	638
Germany	18,916	333	12,364	1,223	2,198	2,327	471
Greece	301	0	147	2	6	142	3
Hong Kong SAR	111,701	5,335	71,692	3,105	25,323	4,331	1,915
Hungary	718	31	371	96	38	175	6
India	18,777	5,863	2,720	4,581	1,771	3,295	547
Indonesia	3,730	524	857	591	894	808	55
Ireland	702	13	392	106	78	39	74
Israel	1,068	65	...	202	630	164	7
Italy	2,096	91	1,474	99	72	350	9
Japan	97,614	6,800	52,061	24,919	6,789	6,301	745
Korea	19,687	9,106	4,487	2,810	756	2,430	99
Latvia	173	0	36	1	76	8	52
Lithuania	41	0	18	3	4	14	2
Luxembourg	8,625	115	3,911	2,964	1,051	320	263
Malaysia	2,248	241	999	374	210	391	33
Mexico	7,362	633	3,532	706	488	1,857	146
Netherlands	10,705	127	9,711	269	472	74	52
New Zealand	1,086	0	432	214	170	265	4
Norway	1,624	4	572	294	194	467	93
Peru	1,221	478	117	137	16	448	24
Philippines	2,177	838	627	199	87	425	1
Poland	2,556	171	1,204	334	77	757	13
Portugal	436	8	190	4	154	75	5
Romania	773	53	291	45	3	374	7
Russia	22,429	3,565	3,235	6,647	3,565	4,452	966
Saudi Arabia	2,573	219	999	309	171	871	4
Singapore	153,862	5,199	95,608	7,497	38,659	5,090	1,811
Slovakia	80	1	45	2	8	22	1
South Africa	2,214	57	934	142	513	469	98
Spain	7,922	51	4,453	220	2,344	710	143
Sweden	4,694	29	2,698	387	863	506	210
Switzerland	64,203	2,831	49,638	2,544	2,835	1,069	5,286
Thailand	4,384	487	1,460	252	892	1,149	144
Turkey	5,917	272	4,563	206	635	241	1
United Arab Emirates	7,686	297	4,058	948	816	1,213	353
United Kingdom	1,143,755	103,630	224,587	526,544	242,138	21,893	24,962
United States	475,773	34,288	158,354	85,789	163,846	13,163	20,334
Total	2,378,712	201,631	782,542	708,709	526,803	96,115	62,913

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 12

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

Outright forwards

Daily averages, in millions of US dollars

	Total	Reporting dealers		Other financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Argentina	93	0	44	...	12	37	...
Australia	15,060	508	8,607	3,564	965	1,177	241
Austria	1,793	2	1,409	116	20	86	160
Bahrain	385	27	105	54	185	10	4
Belgium	2,917	108	2,013	76	83	267	370
Brazil	9,112	537	2,984	731	3,100	1,194	566
Bulgaria	42	0	10	30	0	2	...
Canada	13,977	904	3,602	5,710	2,368	1,217	176
Chile	3,454	554	1,882	699	...	319	...
China	5,466	68	3,605	243	141	1,388	22
Chinese Taipei	2,451	35	967	481	420	267	280
Colombia	1,902	155	637	528	338	245	...
Czech Republic	2,276	0	2,159	8	1	101	6
Denmark	2,543	16	87	1,328	595	336	181
Finland	364	1	36	32	12	231	53
France	19,752	677	8,291	3,520	5,555	1,150	559
Germany	6,982	404	2,426	1,003	711	1,937	501
Greece	33	...	3	...	0	29	0
Hong Kong SAR	58,619	1,330	39,241	1,478	11,808	1,600	3,161
Hungary	137	...	3	44	16	74	0
India	4,711	223	374	163	283	3,631	37
Indonesia	443	49	58	71	81	175	8
Ireland	1,598	1	33	114	1,358	50	43
Israel	521	7	...	172	52	287	4
Italy	531	7	199	59	54	188	25
Japan	61,133	1,423	20,873	30,342	4,226	4,055	213
Korea	11,984	1,125	8,739	1,105	101	876	38
Latvia	13	...	0	0	10	1	1
Lithuania	4	0	1	1	...	3	0
Luxembourg	15,443	708	5,264	4,902	2,662	773	1,134
Malaysia	1,157	20	427	148	24	491	47
Mexico	916	22	449	252	11	181	1
Netherlands	1,158	9	218	320	371	127	113
New Zealand	754	10	14	564	3	159	4
Norway	517	0	6	157	49	233	72
Peru	636	75	349	104	19	89	...
Philippines	375	14	171	8	40	140	2
Poland	959	1	243	211	10	490	4
Portugal	105	...	49	9	8	37	3
Romania	39	...	6	16	0	16	1
Russia	1,127	81	88	316	111	436	95
Saudi Arabia	1,064	53	347	35	8	618	1
Singapore	98,318	4,658	48,130	5,757	35,247	2,381	2,146
Slovakia	14	0	3	...	...	10	1
South Africa	1,401	61	319	94	161	427	339
Spain	3,372	2	1,393	45	1,419	360	153
Sweden	1,216	1	61	449	126	461	118
Switzerland	29,941	811	23,252	2,922	1,590	852	514
Thailand	1,477	6	240	321	86	769	56
Turkey	331	0	49	98	2	181	1
United Arab Emirates	6,002	135	3,760	276	778	980	74
United Kingdom	541,629	55,814	109,589	191,955	139,578	9,740	34,952
United States	246,079	14,124	63,215	48,238	91,763	11,306	17,434
Total	1,182,332	84,770	366,028	308,869	306,563	52,189	63,915

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 13

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

Foreign exchange swaps

Daily averages, in millions of US dollars

	Total	Reporting dealers		Other financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Argentina	...	...	...	...	...	...	...
Australia	65,079	11,874	41,573	4,130	6,702	655	144
Austria	11,011	135	9,451	101	1,002	65	256
Bahrain	1,069	19	723	3	105	12	208
Belgium	27,799	6,903	15,343	183	4,831	396	143
Brazil	350	0	67	57	159	66	...
Bulgaria	331	0	259	5	65	3	...
Canada	69,111	11,617	40,117	7,162	7,697	1,890	629
Chile	723	590	13	61	...	60	...
China	84,347	22,648	16,029	41,627	3,202	822	19
Chinese Taipei	15,745	3,207	4,780	5,962	722	1,015	59
Colombia	67	32	15	19	0	1	...
Czech Republic	4,451	80	3,508	55	684	96	29
Denmark	43,143	2,111	16,099	1,424	16,626	550	6,334
Finland	5,216	23	3,269	1,174	181	498	72
France	117,885	7,457	58,628	12,281	29,693	5,886	3,940
Germany	95,725	4,071	63,169	3,662	18,190	4,503	2,129
Greece	322	6	242	16	58	...	...
Hong Kong SAR	417,161	51,589	262,508	20,287	79,794	1,344	1,639
Hungary	3,066	74	2,513	143	298	39	...
India	15,578	7,201	1,398	6,471	509	...	...
Indonesia	2,365	751	330	533	613	137	1
Ireland	4,709	16	3,557	160	777	71	128
Israel	5,082	138	...	2,312	2,179	415	38
Italy	13,520	1,084	11,337	158	621	231	89
Japan	195,279	13,503	128,167	31,496	16,379	5,315	419
Korea	22,297	11,020	5,525	4,932	112	678	29
Latvia	276	0	195	7	56	3	15
Lithuania	13	...	12	0	...	1	0
Luxembourg	32,568	1,184	23,527	1,951	4,975	783	149
Malaysia	6,543	1,484	1,968	1,790	463	814	24
Mexico	11,080	1,259	5,812	1,637	2,165	206	...
Netherlands	51,521	408	32,778	7,407	10,344	295	289
New Zealand	7,127	210	4,735	1,507	259	415	1
Norway	27,420	135	14,006	6,572	3,400	2,987	318
Peru	135	57	9	39	...	25	4
Philippines	1,161	794	231	78	16	42	...
Poland	5,190	326	4,380	166	192	124	3
Portugal	1,125	1	1,021	...	99	4	0
Romania	1,676	61	1,558	9	5	10	33
Russia	22,723	4,315	8,846	1,751	6,135	572	1,104
Saudi Arabia	1,873	279	1,162	...	256	174	1
Singapore	335,724	21,316	223,913	19,365	67,486	2,307	1,337
Slovakia	521	...	487	0	15	17	1
South Africa	12,565	1,420	7,138	1,253	2,379	274	102
Spain	26,469	390	14,871	1,031	8,346	112	1,720
Sweden	30,415	750	19,749	3,145	3,830	2,560	380
Switzerland	161,148	23,152	103,368	15,211	15,119	2,950	1,348
Thailand	8,335	3,029	2,195	887	2,006	171	46
Turkey	11,586	383	6,622	3,434	772	373	1
United Arab Emirates	30,769	1,117	16,026	6,924	2,596	3,853	253
United Kingdom	1,645,696	210,712	513,133	425,117	419,009	20,653	57,073
United States	579,155	37,858	366,800	66,751	86,948	12,832	7,966
Total	4,234,248	466,790	2,063,163	710,449	828,067	77,307	88,473

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 14

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

Currency swaps

Daily averages, in millions of US dollars

	Total	Reporting dealers		Other financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Argentina	...	...	...	...	...	...	...
Australia	4,101	534	2,660	193	606	96	13
Austria	45	2	31	7	4	...	1
Bahrain	...	...	...	...	...	...	...
Belgium	569	280	72	7	60	3	147
Brazil	739	31	21	279	...	408	...
Bulgaria	...	...	...	...	...	...	...
Canada	4,154	1,218	836	534	599	869	98
Chile	166	61	86	8	...	10	...
China	344	105	64	114	10	51	0
Chinese Taipei	129	24	9	27	...	67	2
Colombia	17	...	10	0	6	1	...
Czech Republic	31	6	25	0	...	0	...
Denmark	1,543	...	478	316	742	...	6
Finland	24	8	13	3	...	...	...
France	2,513	106	1,265	641	316	70	115
Germany	1,157	15	1,044	16	53	26	3
Greece	7	...	7	...	...	...	...
Hong Kong SAR	21,686	465	11,411	143	9,526	110	32
Hungary	...	...	...	...	...	...	...
India	63	11	4	15	...	33	...
Indonesia	91	42	5	7	0	37	...
Ireland	190	...	188	...	...	2	...
Israel	13	...	...	...	13	...	...
Italy	52	6	46	...	...	...	...
Japan	6,049	1,283	3,408	177	992	120	70
Korea	1,043	419	279	297	5	42	1
Latvia	...	...	...	...	...	...	...
Lithuania	...	...	...	...	...	...	...
Luxembourg	17	...	8	...	9	...	0
Malaysia	28	7	3	7	...	11	...
Mexico	242	20	105	72	39	5	...
Netherlands	704	183	508	1	6	4	3
New Zealand	243	40	146	...	39	18	...
Norway	361	33	158	149	14	6	...
Peru	4	...	3	...	...	1	...
Philippines	33	8	19	1	2	2	...
Poland	41	3	29	4	5	...	...
Portugal	2	...	2	...	...	...	...
Romania	3	...	1	1	...	1	...
Russia	77	...	16	2	24	24	11
Saudi Arabia	7	...	2	...	...	5	...
Singapore	7,063	221	4,425	240	2,094	10	72
Slovakia	...	...	...	...	...	...	...
South Africa	2,147	116	52	9	53	160	1,758
Spain	2,009	5	377	13	1,554	2	58
Sweden	157	31	80	...	10	20	16
Switzerland	36	3	27	...	6	...	1
Thailand	151	46	15	42	21	24	2
Turkey	949	...	713	168	0	69	...
United Arab Emirates	201	...	49	79	73	1	...
United Kingdom	78,001	14,711	39,339	7,378	15,576	235	762
United States	6,550	644	2,491	1,848	1,345	116	107
Total	143,751	20,688	70,529	12,800	33,799	2,657	3,278

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 15

OTC foreign exchange turnover by country and counterparty in April 2019, "net-gross" basis¹

Options

Daily averages, in millions of US dollars

	Total	Reporting dealers		Other financial institutions		Non-financial customers	
		Local	Cross-border	Local	Cross-border	Local	Cross-border
Argentina	0	0	...	...	...	0	...
Australia	1,582	85	812	64	486	115	20
Austria	113	0	98	...	14	0	1
Bahrain	8	...	4	...	...	...	4
Belgium	331	25	197	3	23	50	33
Brazil	1,592	20	585	369	558	59	1
Bulgaria	2	...	1	1	...	...	...
Canada	3,794	443	2,183	504	254	351	57
Chile	12	...	6	1	...	5	...
China	2,557	507	159	1,147	65	667	11
Chinese Taipei	874	17	482	28	88	86	173
Colombia	86	14	19	8	22	22	...
Czech Republic	34	...	15	4	...	12	4
Denmark	736	0	112	18	449	14	142
Finland	255	...	105	3	...	148	0
France	4,083	117	2,255	1,029	286	301	95
Germany	1,668	45	999	30	300	227	66
Greece	70	...	53	0	2	15	...
Hong Kong SAR	22,934	408	17,269	420	3,323	782	732
Hungary	59	...	40	2	...	18	...
India	805	213	63	34	40	442	13
Indonesia	50	9	9	12	7	13	0
Ireland	4	...	2	1	1	0	0
Israel	443	25	...	228	190	...	...
Italy	834	492	245	3	6	86	2
Japan	15,421	2,662	3,149	4,377	161	5,042	30
Korea	305	16	128	5	0	156	...
Latvia	...	...	...	...	...	...	...
Lithuania	...	...	...	...	...	...	...
Luxembourg	960	1	553	148	152	25	82
Malaysia	143	6	75	6	24	32	0
Mexico	501	15	350	70	0	66	...
Netherlands	92	...	40	0	19	9	24
New Zealand	63	...	31	...	...	32	0
Norway	72	0	18	...	22	30	2
Peru	3	...	2	0	...	2	...
Philippines	13	...	8	...	...	4	...
Poland	118	4	52	...	17	44	0
Portugal	13	...	6	0	3	4	...
Romania	8	...	4	...	...	4	0
Russia	207	9	63	0	84	44	7
Saudi Arabia	31	...	15	...	0	15	...
Singapore	44,890	811	21,093	3,309	15,600	986	3,091
Slovakia	38	5	14	...	...	12	8
South Africa	2,050	82	437	397	77	366	690
Spain	932	1	506	2	315	75	33
Sweden	601	3	210	84	119	87	98
Switzerland	20,389	827	16,769	666	634	501	993
Thailand	74	13	0	0	...	60	...
Turkey	526	5	281	37	6	182	14
United Arab Emirates	1,227	117	453	176	18	463	1
United Kingdom	167,328	28,471	33,948	75,739	23,497	2,618	3,054
United States	62,562	8,690	24,023	8,568	18,095	1,445	1,742
Total	361,493	44,161	127,941	97,493	64,960	15,716	11,222

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 16

OTC foreign exchange turnover by country and maturity in April 2019, "net-gross" basis¹

Outright forwards

Percentage share of country's total outright forward transactions

	7 days or less	Over 7 days and up to 1 month	Over 1 month and up to 3 months	Over 3 months and up to 6 months	Over 6 months
Argentina	7	29	46	16	2
Australia	45	17	24	10	4
Austria	69	10	15	3	3
Bahrain	50	8	11	11	20
Belgium	18	29	23	9	21
Brazil	25	32	32	4	7
Bulgaria	1	70	19	2	6
Canada	35	28	22	12	3
Chile	20	26	39	5	9
China	67	9	8	8	8
Chinese Taipei	21	26	42	6	4
Colombia	21	46	27	3	3
Czech Republic	24	36	17	6	17
Denmark	23	16	30	22	8
Finland	17	46	21	11	5
France	42	31	18	6	4
Germany	34	16	24	6	20
Greece	58	12	18	4	8
Hong Kong SAR	22	29	35	6	7
Hungary	20	15	30	22	13
India	31	23	21	9	15
Indonesia	27	29	37	6	1
Ireland	62	10	22	5	1
Israel	58	11	16	8	7
Italy	19	38	27	7	10
Japan	21	29	29	15	6
Korea	16	18	41	11	14
Latvia	92	3	5	0	...
Lithuania	10	31	27	15	18
Luxembourg	38	16	42	3	1
Malaysia	44	16	24	7	10
Mexico	7	35	35	10	12
Netherlands	28	17	33	15	6
New Zealand	24	36	26	7	8
Norway	36	14	16	22	11
Peru	21	36	30	8	5
Philippines	34	19	33	8	6
Poland	57	19	16	5	4
Portugal	40	29	18	8	4
Romania	14	13	22	28	23
Russia	4	47	30	8	11
Saudi Arabia	85	3	3	7	2
Singapore	28	21	37	7	7
Slovakia	46	46	4	2	2
South Africa	59	14	14	7	7
Spain	11	24	33	14	18
Sweden	40	19	27	8	6
Switzerland	38	18	32	6	6
Thailand	11	24	34	13	18
Turkey	42	24	24	7	4
United Arab Emirates	59	17	9	9	6
United Kingdom	22	36	32	6	4
United States	34	21	34	7	4
Total	27	29	32	7	5

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 17

OTC foreign exchange turnover by country and maturity in April 2019, "net-gross" basis¹

Foreign exchange swaps

Percentage share of country's total foreign exchange swaps transactions

	7 days or less	Over 7 days and up to 1 month	Over 1 month and up to 3 months	Over 3 months and up to 6 months	Over 6 months
Argentina	...	...	...	...	...
Australia	77	7	11	4	2
Austria	88	5	6	1	1
Bahrain	74	15	7	2	2
Belgium	84	8	4	2	2
Brazil	12	16	18	7	47
Bulgaria	84	8	7	0	1
Canada	66	13	14	5	2
Chile	19	22	36	7	16
China	65	15	9	4	7
Chinese Taipei	27	22	24	20	6
Colombia	27	39	22	2	9
Czech Republic	86	5	2	1	5
Denmark	78	7	8	6	2
Finland	43	19	20	12	6
France	56	18	17	6	3
Germany	75	13	8	2	2
Greece	48	19	22	11	0
Hong Kong SAR	67	11	12	6	4
Hungary	86	4	4	4	3
India	59	11	13	5	11
Indonesia	58	26	12	3	1
Ireland	58	16	23	2	1
Israel	80	6	6	5	3
Italy	74	13	8	2	3
Japan	63	17	11	6	2
Korea	49	12	19	11	10
Latvia	96	2	1	1	0
Lithuania	58	9	15	11	7
Luxembourg	73	13	11	2	1
Malaysia	83	6	7	3	1
Mexico	80	5	5	3	7
Netherlands	77	11	7	3	3
New Zealand	63	14	17	4	2
Norway	68	8	13	10	1
Peru	69	16	6	6	2
Philippines	59	20	13	4	3
Poland	72	12	13	2	2
Portugal	74	19	6	0	1
Romania	79	7	4	4	5
Russia	92	5	2	1	1
Saudi Arabia	75	11	8	2	3
Singapore	66	13	13	5	4
Slovakia	74	8	6	12	0
South Africa	80	9	5	3	3
Spain	88	5	5	1	1
Sweden	72	9	8	9	2
Switzerland	65	11	18	5	1
Thailand	61	8	17	6	8
Turkey	71	20	7	1	0
United Arab Emirates	84	8	4	2	2
United Kingdom	66	13	15	4	2
United States	47	12	36	4	2
Total	64	12	16	4	2

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Since data on the maturity breakdown were only collected on a gross basis, data on a net basis have been calculated by adjusting the gross data proportionally. Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding.

Table 18

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

All instruments

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina	2	...	1	1	2	1	1	2
Australia	...	30	30	41	48	54	107	176	192	182	121	119
Austria	4	13	12	8	15	19	20	15	19	16
Bahrain	...	3	3	3	3	3	3	3	5	9	6	2
Belgium	...	10	16	29	27	10	21	50	33	22	23	36
Brazil	5	6	4	6	14	17	20	19
Bulgaria	1	1	2	2	2
Canada	10	15	22	31	38	44	59	64	62	65	86	109
Chile	1	2	2	4	6	12	7	8
China	0	...	1	9	20	44	73	136
Chinese Taipei	5	5	9	16	18	26	27	30
Colombia	0	1	2	3	3	4	4
Czech Republic	5	2	2	5	5	5	4	7
Denmark	...	13	28	32	28	24	42	88	120	117	101	63
Estonia	0	1	1	0	...	...
Finland	...	3	7	5	4	2	2	8	31	15	14	7
France	...	26	35	62	77	50	67	127	152	190	181	167
Germany	57	79	100	91	120	101	109	111	116	124
Greece	...	0	1	3	7	5	4	5	5	3	1	1
Hong Kong SAR	...	49	61	91	80	68	106	181	238	275	437	632
Hungary	1	1	3	7	4	4	3	4
India	2	3	7	38	27	31	34	40
Indonesia	2	4	2	3	3	5	5	7
Ireland	...	5	6	5	11	9	7	11	15	11	2	7
Israel	1	5	8	10	8	8	7
Italy	...	10	16	24	29	18	23	38	29	24	18	17
Japan	48	115	126	168	146	153	207	250	312	374	399	376
Korea	4	10	21	35	44	48	48	55
Latvia	2	3	2	2	1	0
Lithuania	1	1	1	1	0	0
Luxembourg	13	19	23	13	15	44	33	51	37	58
Malaysia	1	1	2	3	7	11	8	10
Mexico	9	9	15	15	17	32	20	20
Netherlands	...	13	20	27	43	31	52	25	18	112	85	64
New Zealand	4	7	7	4	7	13	9	12	10	9
Norway	...	4	5	8	9	13	14	32	22	21	40	30
Peru	0	0	1	1	2	1	2
Philippines	1	1	1	2	5	4	3	4
Poland	3	5	7	9	8	8	9	9
Portugal	...	1	1	2	4	2	2	4	4	4	2	2
Romania	3	3	3	3	2
Russia	7	10	30	50	42	61	45	47
Saudi Arabia	2	2	2	4	8	7	8	6
Singapore	...	55	76	107	145	104	134	242	266	383	517	640
Slovakia	1	2	3	0	1	2	1
Slovenia	0	0	0	...	...	...	...
South Africa	3	5	9	10	10	14	14	21	21	20
Spain	...	4	12	18	20	8	14	17	29	43	33	41
Sweden	...	13	21	20	16	25	32	44	45	44	42	37
Switzerland	...	57	68	88	92	76	85	254	249	216	156	276
Thailand	3	2	3	6	7	13	11	14
Turkey	1	3	4	17	27	22	19
United Arab Emirates	46
United Kingdom	90	187	297	479	685	542	835	1,483	1,854	2,726	2,406	3,576
United States	59	129	182	266	383	273	499	745	904	1,263	1,272	1,370
Total	206	744	1,115	1,633	2,099	1,705	2,608	4,281	5,045	6,686	6,514	8,301

¹ Spot transactions, outright forwards, foreign exchange swaps, currency swaps, options and other products. Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 19

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

Spot

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina	2	...	1	1	2	1	1	2
Australia	...	18	13	18	20	13	36	44	60	48	27	33
Austria	4	9	5	4	6	6	6	3	4	3
Bahrain	...	2	2	2	2	1	1	2	1	4	1	0
Belgium	...	5	5	6	7	3	6	15	8	3	4	4
Brazil	5	4	3	5	9	8	7	7
Bulgaria	0	1	1	1	2
Canada	4	6	8	12	11	11	18	14	18	15	17	18
Chile	1	2	2	2	3	6	4	4
China	0	...	1	8	9	23	29	43
Chinese Taipei	3	3	5	9	8	9	10	10
Colombia	0	1	1	2	2	2	2
Czech Republic	2	1	1	1	1	1	1	1
Denmark	...	6	10	9	6	4	9	15	33	35	27	15
Estonia	0	0	0	0	...	...
Finland	...	2	...	3	1	1	1	1	1	1	1	1
France	...	15	18	25	19	9	13	25	27	37	23	23
Germany	30	34	42	26	36	25	30	24	23	19
Greece	...	0	1	2	3	2	1	1	1	1	0	0
Hong Kong SAR	...	30	32	35	31	19	36	38	44	51	92	112
Hungary	1	0	1	2	1	1	1	1
India	1	2	3	14	13	15	15	19
Indonesia	1	3	1	2	2	3	2	4
Ireland	...	4	5	3	5	4	4	4	4	4	1	1
Israel	1	3	4	4	3	2	1
Italy	...	8	11	13	12	5	9	11	9	7	2	2
Japan	19	46	48	55	57	37	53	101	101	157	110	98
Korea	3	6	10	17	18	20	20	20
Latvia	1	1	1	1	0	0
Lithuania	1	1	0	0	0	0
Luxembourg	6	8	8	4	3	13	12	12	11	9
Malaysia	0	0	1	2	4	5	2	2
Mexico	6	4	11	5	5	7	6	7
Netherlands	...	7	9	11	15	5	10	3	5	55	21	11
New Zealand	2	3	2	1	1	2	2	2	1	1
Norway	...	3	2	3	3	3	3	3	2	3	14	2
Peru	0	0	1	1	2	1	1
Philippines	0	0	0	1	2	2	1	2
Poland	2	2	2	2	2	2	2	3
Portugal	...	1	1	1	2	1	1	2	1	1	1	0
Romania	1	1	1	1	1
Russia	6	9	24	34	23	26	19	22
Saudi Arabia	1	1	1	3	5	3	5	3
Singapore	...	31	37	44	60	34	43	89	91	103	122	154
Slovakia	0	0	0	0	0	2	0
Slovenia	0	0	0	...	...	...	...
South Africa	2	2	4	2	2	3	4	5	3	2
Spain	...	3	6	7	6	3	4	6	8	14	10	8
Sweden	...	10	10	9	5	6	7	8	12	9	7	5
Switzerland	...	30	37	44	34	23	23	108	58	63	25	64
Thailand	1	1	1	1	3	5	4	4
Turkey	0	1	1	5	6	7	6
United Arab Emirates	8
United Kingdom	66	119	148	186	217	151	223	335	697	1,032	784	1,144
United States	34	81	95	134	148	104	217	311	473	619	581	476
Total	123	428	541	680	762	519	839	1,305	1,831	2,460	2,054	2,379

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 20

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

Outright forwards

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina	0	...	...	0	0	0	0	0
Australia	1	1	2	3	6	14	8	12	10	15
Austria	0	0	1	0	1	2	2	3	2	2
Bahrain	0	0	1	1	1	0	3	0	0
Belgium	1	0	1	1	2	7	2	1	1	3
Brazil	1	0	0	4	6	9	9
Bulgaria	0	0	0	0	0
Canada	1	3	1	2	4	4	6	10	13	14
Chile	0	1	1	1	2	5	3	3
China	0	3	4	4	5
Chinese Taipei	1	0	1	2	1	1	2	2
Colombia	0	0	0	1	1	2	2
Czech Republic	0	0	1	0	0	0	2
Denmark	2	2	1	1	2	10	11	8	9	3
Estonia	0	0	0	0	...	...
Finland	0	0	0	0	0	0	0	0	0
France	1	2	3	1	5	7	10	9	15	20
Germany	3	4	8	12	12	23	8	4	6	7
Greece	0	1	1	0	0	0	0	0	0	0
Hong Kong SAR	2	3	4	4	5	15	32	37	44	59
Hungary	0	0	0	0	0	0	0	0
India	0	0	1	6	5	4	5	5
Indonesia	0	0	0	1	0	0	0	0
Ireland	0	0	1	1	0	1	2	2	0	2
Israel	0	0	0	1
Italy	1	2	2	1	1	3	1	1	1	1
Japan	9	17	17	20	21	26	32	35	63	61
Korea	0	1	4	5	6	7	9	12
Latvia	0	0	0	0	0	0
Lithuania	0	0	0	0	0	0
Luxembourg	1	1	1	1	2	5	4	15	9	15
Malaysia	0	0	0	0	1	3	1	1
Mexico	0	0	1	0	1	2	1	1
Netherlands	2	3	6	3	4	6	9	12	10	1
New Zealand	0	0	0	0	1	1	1	1	1	1
Norway	0	0	0	0	0	2	2	1	1	1
Peru	0	0	0	0	0	0	1
Philippines	0	0	0	0	1	0	0	0
Poland	0	0	0	1	0	0	1	1
Portugal	0	0	0	0	0	1	0	0	0	0
Romania	0	0	0	0	0
Russia	1	0	1	1	1	1	1	1
Saudi Arabia	0	0	0	0	1	0	0	1
Singapore	3	3	4	8	11	25	36	62	105	98
Slovakia	0	0	0	0	0	0	0
Slovenia	0	0	0	...	...	...	...
South Africa	0	1	2	0	0	1	1	2	1	1
Spain	1	1	1	1	1	2	3	3	3	3
Sweden	2	1	1	1	1	2	2	2	2	1
Switzerland	6	8	5	6	7	17	11	14	8	30
Thailand	0	0	0	1	1	2	1	1
Turkey	0	0	1	3	2	2	0
United Arab Emirates	6
United Kingdom	20	34	48	53	103	124	228	309	266	542
United States	14	28	37	36	61	114	116	227	219	246
Total	70	115	155	164	261	434	559	814	830	1,182

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 21

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

Foreign exchange swaps

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina
Australia	15	21	25	35	61	111	118	115	81	65
Austria	1	4	5	3	7	10	11	9	13	11
Bahrain	1	0	1	0	1	4	2	5	1
Belgium	10	22	18	7	11	26	22	17	18	28
Brazil	0	0	0	0	0	0	0
Bulgaria	0	0	0	1	0
Canada	13	15	25	29	32	42	34	36	48	69
Chile	0	0	1	1	1	1
China	1	8	17	37	84
Chinese Taipei	1	1	2	4	7	11	14	16
Colombia	0	0	0	0	0	0	0
Czech Republic	3	1	1	3	4	4	3	4
Denmark	14	20	20	18	30	61	72	70	63	43
Estonia	0	1	1	0	...	...
Finland	3	3	1	1	7	30	13	12	5
France	14	30	50	38	46	87	104	135	137	118
Germany	22	38	44	51	70	52	64	79	85	96
Greece	0	1	3	3	3	4	3	2	1	0
Hong Kong SAR	27	53	44	44	61	122	147	174	276	417
Hungary	0	0	2	4	3	2	2	3
India	1	1	2	13	8	11	14	16
Indonesia	1	0	1	1	1	1	2	2
Ireland	1	1	4	4	2	6	8	5	1	5
Israel	1	2	4	5	4	5	5
Italy	4	8	15	11	10	22	18	15	13	14
Japan	63	89	61	90	125	112	168	170	206	195
Korea	1	3	6	11	18	19	18	22
Latvia	1	2	1	1	0	0
Lithuania	0	0	1	0	0	0
Luxembourg	6	10	13	8	10	24	17	24	17	33
Malaysia	1	1	0	1	2	3	5	7
Mexico	2	4	3	10	10	22	12	11
Netherlands	9	12	20	21	36	15	3	43	50	52
New Zealand	2	4	5	3	5	10	6	8	8	7
Norway	3	4	6	9	11	26	18	18	26	27
Peru	0	0	...	0	0	0	0
Philippines	0	0	0	1	1	2	1	1
Poland	0	3	4	6	5	5	6	5
Portugal	0	1	2	1	1	1	2	2	2	1
Romania	1	2	2	2	2
Russia	0	...	5	15	18	33	25	23
Saudi Arabia	1	1	1	1	2	3	3	2
Singapore	33	58	75	58	72	116	122	173	248	336
Slovakia	0	1	3	0	1	1	1
Slovenia	0	0	...	...	...	...
South Africa	1	2	4	7	8	10	9	14	13	13
Spain	5	10	12	4	9	8	17	25	19	26
Sweden	10	11	10	17	22	33	29	32	32	30
Switzerland	23	34	42	41	49	116	173	132	116	161
Thailand	2	1	1	4	3	6	5	8
Turkey	0	2	2	7	17	12	12
United Arab Emirates	31
United Kingdom	123	244	372	300	428	899	775	1,127	1,161	1,646
United States	59	83	166	114	183	239	267	341	391	579
Total	457	777	1,052	934	1,329	2,250	2,352	2,947	3,209	4,234

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 22

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

Currency swaps

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina
Australia	0	0	1	1	2	4	4	3	4
Austria	0	0	0	0	0	0	0	0	0
Bahrain	0	0	0	0	0	0	0	...
Belgium	0	0	0	0	0	0	0	0	1
Brazil	0	0	0	0	3	2	1
Bulgaria	0	0	0	...	...
Canada	0	0	0	1	2	1	1	3	4
Chile	0	0	0	0	0	0
China	0	0	0	0
Chinese Taipei	0	0	0	0	0	0	0	0
Colombia	0	0	0	0	0	0	0
Czech Republic	0	0	0	0	0	0	0
Denmark	1	0	0	0	1	1	1	2	2
Estonia	0	...	0	...	...
Finland	0	0	0	0	0	0	0	0	0
France	0	1	0	1	1	4	3	2	3
Germany	0	1	0	0	0	1	1	1	1
Greece	0	0	0	...	0	0	...	0	0
Hong Kong SAR	0	0	0	1	1	7	3	12	22
Hungary	0	...	...	0	...	0	...	...
India	0	0	0	0	0	0	0	0
Indonesia	0	0	0	0	0	0	0	0
Ireland	0	0	0	0	0	1	0	0	0
Israel	0	0	0	0
Italy	0	0	0	0	0	0	0	0	0
Japan	1	1	1	1	1	2	6	6	6
Korea	0	0	0	1	1	1	1	1
Latvia
Lithuania	0	...	...	...
Luxembourg	0	0	0	0	1	0	0	0	0
Malaysia	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	1	1	2	1
New Zealand	0	0	0	0	0	0	1	0	0
Norway	0	0	0	0	0	0	0	0	0
Peru	0	...	0	0	0	0
Philippines	0	0	0	1	0	0	0
Poland	0	0	0	0	0	0
Portugal	0	0	0	...	0	...	...	0	0
Romania	0	...	0	0
Russia	0	0	0
Saudi Arabia	0	0	...	0	...	0
Singapore	1	1	0	0	1	1	2	6	7
Slovakia	0	...	...	...	0	0	...
Slovenia	0	...	...	...	...	...
South Africa	0	0	0	0	0	0	3	2
Spain	0	1	0	0	0	1	0	0	2
Sweden	0	0	0	0	0	0	0	0	0
Switzerland	0	0	0	0	0	0	0	0	0
Thailand	0	0	0	0	0	0	0	0
Turkey	0	1	1	1	1	1
United Arab Emirates	0
United Kingdom	1	5	4	16	18	18	32	53	78
United States	0	1	1	2	6	9	4	7	7
Total	5	13	9	26	40	57	68	106	144

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 23

OTC foreign exchange turnover by country in April 1986 - 2019, "net-gross" basis¹

Options

Daily averages, in billions of US dollars

	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
Argentina	0
Australia	1	1	2	4	5	2	3	1	2
Austria	0	0	1	0	1	1	1	0	0	0
Bahrain	0	0	0	0	0	0	0	0	0
Belgium	0	0	1	0	1	2	1	0	0	0
Brazil	0	0	0	1	0	2	2
Bulgaria	0	...	...	...	0
Canada	0	1	1	2	5	3	2	3	5	4
Chile	0	0	0	0	0
China	0	0	3	3
Chinese Taipei	0	0	1	1	2	4	1	1
Colombia	0	0	0	0	0	0	0
Czech Republic	0	0	0	0	0	0	0	0
Denmark	1	0	1	0	1	1	3	3	1	1
Estonia	0	0	0	...	...
Finland	0	0	0	0	0	0	0	0	0
France	2	3	4	1	2	6	6	5	4	4
Germany	1	3	5	3	3	2	5	3	1	2
Greece	0	0	0	0	0	0	0	0	0
Hong Kong SAR	1	1	1	3	6	8	9	13	23
Hungary	0	0	0	0	0	0	0	0
India	0	0	0	4	1	1	1	1
Indonesia	0	...	0	0	0	0	0	0
Ireland	0	0	0	0	0	0	0	0	0	0
Israel	0	0	0	0	0	0
Italy	0	0	0	1	3	2	1	1	1	1
Japan	6	6	9	5	8	11	9	6	15	15
Korea	0	0	0	1	0	1	0	0
Latvia
Lithuania	0	0	0	0	...
Luxembourg	0	0	0	0	0	1	0	0	0	1
Malaysia	0	0	0	0	0	0	0	0
Mexico	0	0	0	0	0	0	1	1
Netherlands	0	1	2	0	3	1	0	1	2	0
New Zealand	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0
Peru	0	0	0	0
Philippines	0	0	1	0	0	0
Poland	0	0	0	0	0	0
Portugal	0	0	0	0	1	0	0	0	0
Romania	0	0	0	0	0
Russia	0	...	...	0	0	1	0	0
Saudi Arabia	0	0	0	0	0	1	0	0
Singapore	2	1	5	3	8	10	16	43	37	45
Slovakia	0	0	0	0	0
Slovenia	0	0	...	...	...	...
South Africa	0	0	0	0	0	0	1	0	0	2
Spain	0	0	0	0	0	1	1	1	1	1
Sweden	0	0	1	1	1	2	2	1	1	1
Switzerland	2	2	10	5	6	12	8	8	6	20
Thailand	0	0	0	0	0	0	0	0
Turkey	0	0	1	1	1	1
United Arab Emirates	1
United Kingdom	7	14	43	33	65	106	135	227	142	167
United States	15	21	31	18	36	75	39	71	74	63
Total	38	55	117	79	152	253	246	397	315	361

¹ Adjusted for local inter-dealer double-counting (ie "net-gross" basis). Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. The data for the Netherlands are not fully comparable over time due to reporting improvements in 2013. The 2019 data for Switzerland are not fully comparable with past periods due to reporting improvements in 2019.

Table 24

OTC foreign exchange turnover by currency in April 1992 - 2019, "net-net" basis¹

Daily averages, in billions of US dollars and percentage share

Currency	1989		1992		1995		1998		2001		2004	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
USD	485	90	668	82	981	83	1,325	87	1,114	90	1,702	88
EUR	...	...	...	...	...	...	...	...	470	38	724	37
JPY	151	28	190	23	291	25	332	22	292	24	403	21
GBP	78	15	112	14	110	9	168	11	162	13	319	16
AUD	13	2	20	2	31	3	46	3	54	4	116	6
CAD	8	1	27	3	40	3	54	4	56	4	81	4
CHF	52	10	69	8	85	7	108	7	74	6	117	6
CNY	...	...	...	...	...	...	0	0	0	0	2	0
HKD	5	1	8	1	13	1	15	1	28	2	34	2
NZD	...	...	2	0	3	0	3	0	7	1	21	1
SEK	6	1	9	1	7	1	5	0	31	2	42	2
KRW	...	...	...	...	...	...	2	0	10	1	22	1
SGD	2	0	2	0	5	0	17	1	13	1	18	1
NOK	1	0	2	0	3	0	4	0	18	1	27	1
MXN	...	...	...	...	...	...	7	0	10	1	21	1
INR	...	...	...	...	...	...	1	0	3	0	6	0
RUB	...	...	...	...	...	...	5	0	4	0	12	1
ZAR	...	...	2	0	4	0	6	0	12	1	14	1
TRY	...	...	...	...	...	...	...	...	0	0	2	0
BRL	...	...	...	...	...	...	3	0	6	0	5	0
TWD	...	...	...	...	...	...	2	0	3	0	8	0
DKK	3	0	4	0	6	1	4	0	15	1	17	1
PLN	...	...	...	...	...	...	1	0	6	0	7	0
THB	...	...	...	...	...	...	2	0	2	0	4	0
IDR	...	...	...	...	...	...	1	0	1	0	2	0
HUF	...	...	...	...	...	...	1	0	0	0	4	0
CZK	...	...	...	...	...	...	4	0	2	0	3	0
ILS	...	...	...	...	...	...	...	...	1	0	2	0
CLP	...	...	...	...	...	...	1	0	2	0	2	0
PHP	...	...	...	...	...	...	0	0	1	0	1	0
AED	...	...	...	...	...	...	...	...	...	...	...	...
COP	...	...	...	...	...	...	...	...	0	0	1	0
SAR	...	...	1	0	...	...	1	0	1	0	1	0
MYR	...	...	...	...	...	...	1	0	1	0	1	0
RON	...	...	...	...	...	...	...	...	...	...	...	...
PEN	...	...	...	...	...	...	...	...	0	0	0	0
ARS	...	...	...	...	...	...	2	0	...	...	1	0
BHD	0	0	0	0	0	0	0	0	0	0	0	0
BGN	...	...	...	...	...	...	...	...	...	...	...	...
DEM	141	26	323	40	430	36	465	30	...	...	...	...
FRF	9	2	32	4	94	8	76	5	...	...	...	...
XEU	5	1	24	3	26	2	21	1	...	...	...	...
ITL	4	1	10	1	14	1	16	1	...	...	...	...
NLG	6	1	8	1	8	1	14	1	...	...	...	...
ESP	3	0	6	1	9	1	9	1	...	...	...	...
FIM	1	0	4	0	1	0	2	0	...	...	...	...
BEF	3	0	3	0	7	1	9	1	...	...	...	...
ATS	...	...	1	0	3	0	2	0	...	...	...	...
PTE	...	...	1	0	1	0	2	0	...	...	...	...
LUF	...	...	0	0	1	0	1	0	...	...	...	...
Other	103	19	108	13	189	16	314	21	81	7	103	5
Total	539	200	817	200	1,182	200	1,527	200	1,239	200	1,934	200

¹ Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%. Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). Turnover for years prior to 2013 may be underestimated owing to incomplete reporting in previous surveys. Methodological changes in the 2013 survey ensured more complete coverage of activity in emerging market and other currencies. See annex for abbreviations.

Table 25.1

OTC foreign exchange turnover by currency in April 1992 - 2019, "net-net" basis¹

Daily averages, in billions of US dollars and percentage share

Currency	2007		2010		2013		2016		2019	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
USD	2,845	86	3,371	85	4,662	87	4,437	88	5,824	88
EUR	1,231	37	1,551	39	1,790	33	1,590	31	2,129	32
JPY	573	17	754	19	1,235	23	1,096	22	1,108	17
GBP	494	15	512	13	633	12	649	13	844	13
AUD	220	7	301	8	463	9	349	7	447	7
CAD	143	4	210	5	244	5	260	5	332	5
CHF	227	7	250	6	276	5	243	5	327	5
CNY	15	0	34	1	120	2	202	4	285	4
HKD	90	3	94	2	77	1	88	2	233	4
NZD	63	2	63	2	105	2	104	2	137	2
SEK	90	3	87	2	94	2	112	2	134	2
KRW	38	1	60	2	64	1	84	2	132	2
SGD	39	1	56	1	75	1	91	2	119	2
NOK	70	2	52	1	77	1	85	2	119	2
MXN	44	1	50	1	135	3	97	2	114	2
INR	24	1	38	1	53	1	58	1	114	2
RUB	25	1	36	1	86	2	58	1	72	1
ZAR	30	1	29	1	60	1	49	1	72	1
TRY	6	0	29	1	71	1	73	1	71	1
BRL	13	0	27	1	59	1	51	1	71	1
TWD	12	0	19	0	24	0	32	1	60	1
DKK	28	1	23	1	42	1	42	1	42	1
PLN	25	1	32	1	38	1	35	1	41	1
THB	6	0	8	0	17	0	18	0	32	0
IDR	4	0	6	0	9	0	10	0	27	0
HUF	9	0	17	0	23	0	15	0	27	0
CZK	7	0	8	0	19	0	14	0	26	0
ILS	5	0	6	0	10	0	14	0	20	0
CLP	4	0	7	0	16	0	12	0	19	0
PHP	4	0	7	0	8	0	7	0	19	0
AED	...	...	...	...	...	...	...	...	14	0
COP	2	0	4	0	6	0	8	0	12	0
SAR	2	0	3	0	5	0	15	0	12	0
MYR	4	0	11	0	21	0	18	0	9	0
RON	2	0	3	0	7	0	5	0	6	0
PEN	1	0	1	0	3	0	4	0	5	0
ARS	1	0	2	0	1	0	1	0	4	0
BHD	0	0	0	0	0	0	0	0	2	0
BGN	0	0	1	0	1	0	1	0	2	0
DEM	...	...	...	...	...	...	...	...	...	...
FRF	...	...	...	...	...	...	...	...	...	...
XEU	...	...	...	...	...	...	...	...	...	...
ITL	...	...	...	...	...	...	...	...	...	...
NLG	...	...	...	...	...	...	...	...	...	...
ESP	...	...	...	...	...	...	...	...	...	...
FIM	...	...	...	...	...	...	...	...	...	...
BEF	...	...	...	...	...	...	...	...	...	...
ATS	...	...	...	...	...	...	...	...	...	...
PTE	...	...	...	...	...	...	...	...	...	...
LUF	...	...	...	...	...	...	...	...	...	...
Other	253	8	184	5	83	2	103	2	129	2
Total	3,324	200	3,973	200	5,357	200	5,066	200	6,595	200

¹ Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%. Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). Turnover for years prior to 2013 may be underestimated owing to incomplete reporting in previous surveys. Methodological changes in the 2013 survey ensured more complete coverage of activity in emerging market and other currencies. See annex for abbreviations.

Table 25.2

OTC foreign exchange turnover by execution method in April 2019, "net-net" basis¹

Daily averages, in millions of US dollars

	Voice		Electronic				Unallocated
	Direct	Indirect	Direct		Indirect		
			Single-bank proprietary trading system	Other	Anonymous venues	Disclosed venues	
Spot	497,679	51,053	330,864	299,404	518,325	226,817	63,301
Outright forwards	310,450	71,669	129,635	159,071	134,826	145,434	48,233
Foreign exchange swaps	781,351	682,074	436,647	395,385	379,804	449,892	77,514
Currency swaps	68,559	14,939	3,491	10,084	1,084	6,443	3,886
FX options	149,250	45,040	56,193	5,255	9,366	20,478	11,939
Other products	37	...	...	...	...	...	0
All instruments	1,807,326	864,775	956,829	869,199	1,043,405	849,065	204,873

¹ Data may differ slightly from national survey data owing to differences in aggregation procedures and rounding. Adjusted for local and cross-border inter-dealer double-counting (ie "net-net" basis). Due to incomplete allocation by execution method, components do not sum to the aggregates published in the other tables

Table 26

Settlement of OTC foreign exchange turnover in April 2019, "gross-gross" basis¹

Daily averages, in billions of US dollars

	Total turnover					Turnover resulting in settlement obligation					
	Total	Settled with single payment	Settled with multiple payments			Total ²	Payment versus payment (PvP)			Via same clearer or on-us accounts	Non-PvP
			Total	O/w subject to bilateral netting			Total	Via CLS	Via other PvP		
				Before netting	After netting						
Argentina	2.3	0.1	2.2	0.1	0.1	2.2	1.9	...	1.3	0.6	0.3
Australia	136.3	2.7	133.6	27.7	10.0	115.9	98.1	59.7	16.2	22.3	17.8
Austria	16.1	0.1	16.0	5.1	4.9	15.8	6.9	2.7	1.4	2.8	8.8
Bahrain	2.0	...	...	...	...	...	...	...	...	...	...
Belgium	44.1	0.2	43.9	0.2	0.1	43.9	12.2	12.2	...	...	31.7
Brazil	20.4	14.5	5.9	1.7	1.0	5.1	3.7	0.3	2.3	1.1	1.5
Bulgaria	2.1	0.6	1.5	0.2	0.0	1.3	0.2	...	0.1	0.1	1.1
Canada	126.2	4.2	121.9	14.0	2.7	110.7	82.0	67.9	1.5	12.5	28.7
Chile	11.5	5.2	6.3	...	...	...	...	...	...	...	...
China	165.6	0.5	165.1	8.4	3.1	159.8	63.7	14.9	42.6	6.2	96.1
Chinese Taipei	34.0	1.0	33.0	5.3	3.1	30.8	4.9	1.7	2.8	0.4	25.9
Colombia	5.1	1.9	3.2	0.8	0.6	3.0	2.2	0.0	2.1	0.1	0.8
Czech Republic	7.4	0.0	7.4	4.8	1.5	4.1	0.8	0.2	0.0	0.6	3.4
Denmark	65.5	20.3	45.3	4.2	1.5	42.6	36.7	32.8	...	3.9	6.0
Finland	6.6	0.0	6.6	0.2	0.0	6.5	3.3	2.1	0.9	0.3	3.2
France	176.7	7.4	169.3	105.5	86.5	150.3	109.1	103.6	0.1	5.3	41.2
Germany	129.3	2.4	126.9	9.0	2.4	120.3	109.7	90.9	8.6	10.2	10.6
Greece	0.7	...	0.7	0.4	0.1	0.5	0.4	0.1	0.2	0.1	0.1
Hong Kong SAR	691.2	80.0	611.2	282.3	152.0	480.9	267.8	194.4	22.0	51.4	213.1
Hungary	4.1	0.7	3.4	1.0	0.4	2.8	1.0	0.3	0.4	0.3	1.9
India	53.4	2.5	51.0	8.1	2.0	44.9	28.5	4.6	22.6	1.2	16.5
Indonesia	8.1	0.2	7.9	0.1	...	7.7	1.7	0.1	1.2	0.4	6.0
Ireland	7.2	0.0	7.2	1.3	0.9	6.8	4.6	1.3	2.2	1.1	2.2
Israel	7.4	0.1	7.3	...	...	7.3	7.3	5.3	1.9	...	...
Italy	18.7	0.1	18.6	2.5	2.4	18.6	15.7	13.1	0.2	2.4	2.9
Japan	401.2	12.8	388.4	97.4	50.4	341.4	214.0	155.2	33.6	25.2	127.4
Korea	77.0	10.9	66.1	3.1	2.2	65.1	45.4	42.2	3.1	0.0	19.8
Latvia	0.5	0.2	0.2	0.1	0.1	0.2	0.1	...	...	0.1	0.2
Lithuania	0.1	0.0	0.1	0.0	0.0	0.1	0.0	...	...	0.0	0.0
Luxembourg	59.6	3.3	56.3	8.8	6.6	54.1	38.1	14.0	12.8	11.3	16.0
Malaysia	11.9	0.1	11.7	2.3	1.0	10.4	3.5	0.5	2.7	0.3	7.0
Mexico	22.0	0.2	21.9	12.9	5.1	14.1	7.8	3.6	3.0	1.2	6.3
Netherlands	64.9	0.3	64.6	2.5	0.2	62.3	46.3	8.3	29.7	8.3	16.0
New Zealand	9.5	0.7	8.8	...	...	8.8	8.3	5.5	...	2.8	0.5
Norway	30.2	0.0	30.2	0.6	0.0	29.6	28.0	18.6	4.0	5.5	1.6
Peru	2.6	0.6	2.0	...	...	2.0	0.8	...	0.8	0.0	1.1
Philippines	5.4	0.2	5.3	0.0	0.0	5.3	4.5	0.3	4.0	0.2	0.8
Poland	9.4	0.5	8.9	0.7	0.5	8.6	2.7	...	0.0	2.7	5.9
Portugal	1.7	0.1	1.6	0.7	0.1	1.1	0.8	0.1	0.4	0.3	0.3
Romania	2.6	0.0	2.6	0.3	0.3	2.6	0.5	...	0.0	0.5	2.1
Russia	54.5	0.6	53.9	35.4	4.5	22.9	5.5	...	5.5	...	17.4
Saudi Arabia	6.1	0.6	5.5	0.0	0.0	5.5	2.4	...	2.3	0.1	3.1
Singapore	672.1	202.6	469.5	187.9	75.7	357.4	257.0	190.9	4.1	62.0	100.4
Slovakia	0.7	0.0	0.6	...	...	0.6	0.5	0.0	0.3	0.1	0.1
South Africa	22.1	0.0	22.1	17.5	2.8	7.4	5.2	4.0	0.5	0.7	2.2
Spain	41.2	23.4	17.7	4.0	3.7	17.4	9.9	9.4	0.5	0.1	7.5
Sweden	37.9	0.0	37.9	1.2	0.5	37.1	34.2	28.7	2.2	3.4	2.9
Switzerland	303.3	23.7	279.6	87.9	71.4	263.1	251.4	166.0	7.2	78.2	11.7
Thailand	18.0	0.0	18.0	0.2	0.2	17.9	1.0	0.0	0.3	0.7	16.9
Turkey	20.0	0.0	19.9	1.2	0.1	18.7	8.6	4.6	0.8	3.3	10.1
United Arab Emirates	47.6	...	...	...	...	...	...	...	...	...	...
United Kingdom	3,989.7	233.5	3,756.3	973.6	269.2	3,051.9	2,264.0	1,407.6	38.8	817.6	787.9
United States	713.6	33.6	680.0	367.2	85.8	398.6	241.8	154.9	0.0	86.9	145.8
Total	8,367.5	692.8	7,625.2	2,288.2	855.7	6,186.4	4,344.7	2,822.9	287.4	1,234.5	1,830.7

¹ Planned settlement information at the time of the transaction, not adjusted for inter-dealer double-counting (ie "gross-gross" basis). ² Corresponds to the total turnover settled with multiple payments, minus the part subject to bilateral netting before netting, plus the part subject to bilateral netting after netting.

Table 27

Annex 1: abbreviations used in the tables

FI	financial institutions
PTFs	proprietary trading firms
AED	United Arab Emirates dirham
ARS	Argentine peso
ATS	Austrian schilling
AUD	Australian dollar
BEF	Belgian franc
BGN	Bulgarian lev
BHD	Bahraini dinar
BRL	Brazilian real
CAD	Canadian dollar
CHF	Swiss franc
CLP	Chilean peso
CNY	Chinese yuan (renminbi)
COP	Colombian peso
CZK	Czech koruna
DEM	Deutsche mark
DKK	Danish krone
ESP	Spanish peseta
EUR	euro
FIM	Finnish markka
FRF	French franc
GBP	pound sterling
HKD	Hong Kong dollar
HUF	Hungarian forint
IDR	Indonesian rupiah
ILS	Israeli new shekel
INR	Indian rupee
ITL	Italian lira
JPY	Japanese yen
KRW	Korean won
LOC	local currencies
MXN	Mexican peso
MYR	Malaysian ringgit
NLG	Dutch guilder
NOK	Norwegian krone
NZD	New Zealand dollar
OTH	currencies of other reporting countries
PEN	Peruvian sol
PHP	Philippine peso
PLN	Polish zloty
PTE	Portuguese escudo
RES	residual currencies
RMB	renminbi; see CNY
RON	Romanian leu
RUB	Russian rouble
SAR	Saudi riyal
SEK	Swedish krona
SGD	Singapore dollar
THB	Thai baht
TOT	total
TRY	Turkish lira
TWD	New Taiwan dollar
USD	US dollar
XEU	European currency unit
ZAR	South African rand

Annex 2: basic features of the April 2019 foreign exchange market survey

Country	Coverage, in per cent	Banks covering 75%	Number of participants	Trading days	Nature of turnover	
					April	Preceding six months
Argentina	82	8	22	19	Normal	Steady
Australia	96	8	23	19	Normal	Steady
Austria	90	2	10	21	Normal	Steady
Bahrain	100	6	30	22	...	...
Belgium	90	1	4	21	Below normal	Decreasing
Brazil	80	6	13	21	Normal	Steady
Bulgaria	92	3	9	20	Normal	Steady
Canada	98	6	15	21	Normal	Steady
Chile	98	6	27	21	Normal	Decreasing
China	46	7	15	21	Normal	Steady
Chinese Taipei	88	17	30	20	Normal	Steady
Colombia	95	11	17	20	Normal	Steady
Czech Republic	85	3	9	20	Normal	Steady
Denmark	97	2	7	19	Below normal	Decreasing
Finland	93	2	4	20	Normal	Steady
France	99	4	44	21	Normal	Steady
Germany	95	5	33	20	Normal	Steady
Greece	93	3	4	20	Below normal	Steady
Hong Kong SAR	95	12	61	19	Normal	Steady
Hungary	91	5	10	20	Normal	Steady
India	85	12	23	19	Normal	Steady
Indonesia	95	21	29	20	Normal	Steady
Ireland	100	4	14	21	Normal	Steady
Israel	90	4	10	18	Normal	Steady
Italy	96	4	16	20	Normal	Steady
Japan	90	11	36	20	Normal	Steady
Korea	98	15	56	22	Normal	Steady
Latvia	52	3	6	20	Normal	Steady
Lithuania	54	2	3	21	Normal	Steady
Luxembourg	100	12	132	20	Normal	Steady
Malaysia	80	9	10	22	Normal	Steady
Mexico	93	7	20	20	Normal	Steady
Netherlands	95	2	5	20	Below normal	Decreasing
New Zealand	99	2	4	19	Normal	Steady
Norway	80	3	5	19	Below normal	Steady
Peru	98	5	18	20	Normal	Increasing
Philippines	100	13	30	19	Normal	Steady
Poland	95	8	13	21	Normal	Steady
Portugal	100	4	50	20	Normal	Steady
Romania	99	5	28	20	Normal	Steady
Russia	99	9	55	22	Normal	Increasing
Saudi Arabia	90	5	23	26	Normal	Steady
Singapore	99	12	80	21	Normal	Steady
Slovakia	100	3	4	20	Normal	Steady
South Africa	97	4	11	20	Normal	Steady
Spain	96	3	4	20	Below normal	Decreasing
Sweden	90	3	4	20	Normal	Steady
Switzerland	100	4	31	20	Normal	Steady
Thailand	100	12	28	19	Above normal	Steady
Turkey	96	6	16	21	Normal	Decreasing
United Arab Emirates	88	7	11	22	Normal	Steady
United Kingdom	97	9	55	20	Normal	Steady
United States	90	7	19	22	Normal	Steady