

# Activity in the Norwegian foreign exchange and derivatives markets in April 2022

*Every three years since 1989, Norges Bank has conducted a survey of activity in the Norwegian foreign exchange market in cooperation with the Bank for International Settlements (BIS). The 2022 survey is the twelfth in the series. According to figures from April 2022, average daily turnover in the Norwegian foreign exchange market<sup>1</sup> declined from USD 30bn in 2019 to USD 24.5bn. In NOK terms, average daily turnover was NOK 218bn in April 2022. Preliminary figures from the BIS indicate that the market share of reporting dealers in the Norwegian survey was 0.2% of the global foreign exchange market in April 2022, down from 0.4% in April 2019.*

*Average daily turnover in the Norwegian OTC interest rate derivatives market was relatively unchanged from 2019 at approximately USD 6.5bn. Turnover in forward rate agreements (FRAs) fell by 16%, while turnover in interest rate swaps rose by 7% compared with April 2019. No turnover in interest rate options was reported in 2019, while in 2022 turnover was USD 706m. Preliminary figures from the BIS indicate that the market share of reporting dealers in the Norwegian survey was 0.1% of the global OTC interest rate derivatives market in April 2022, unchanged from the survey in April 2019*

## **Background to the survey**

Participation in the BIS survey is voluntary. In 2022, seven out of nine invited banks took part, and it is estimated that approximately 80% of the activity in the Norwegian market is covered. By comparison, five banks took part in the 2019 survey. The object of the survey is to report NOK turnover in the country in which the sales desk is located, regardless of whether deals are entered into in the name of the head office outside Norway or in the reporting dealer's own name. At the same time as Norges Bank conducted its survey, similar surveys were coordinated by the BIS in 51 other countries. Turnover figures from this survey will be published simultaneously on the BIS website and in the participating countries. It is estimated that approximately 1,200 financial institutions took part globally. The object of the survey is to obtain comprehensive and consistent information on activity in the foreign exchange and derivatives markets. The information will enable central banks, authorities and market participants to monitor changing patterns in market activity over time.

The first surveys (1989, 1992 and 1995) were confined to turnover in the foreign exchange market. Over-the-counter (OTC) derivatives were included as from 1998. Exchange-traded derivatives are not covered.

In addition to the turnover survey in April 2019, a separate survey coordinated by the BIS of amounts outstanding took place at the end of June 2019. The BIS plans to publish a more detailed report on these surveys in November 2022.

In the survey, reporting dealers were asked about trends in turnover. The perception was that turnover in the foreign exchange and derivatives markets was stable in April 2022 compared with the six months prior to the survey. Unlike in the 2019 survey, turnover in April 2022 was termed normal.

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<sup>1</sup> Turnover in the spot market, outright forwards, foreign exchange swaps, currency swaps (basis swaps) and currency options.

As from 2010, the BIS has included currency options and currency swaps (also referred to as basis swaps) in the survey of foreign exchange market turnover. The historical tables in this report have been adjusted accordingly.

## Turnover in the Norwegian foreign exchange market<sup>2</sup>

### 1. Breakdown by instrument

Table 1 shows the turnover in the foreign exchange market in the eight most recent BIS surveys between April 2001 and April 2022. In NOK terms, average daily turnover in the Norwegian foreign exchange market was NOK 218bn in April 2022. Average daily turnover declined by 18% between 2019 and 2022, from USD 30bn to USD 24.5bn, respectively. The decline was primarily driven by a fall in forward turnover in addition to lower turnover in currency swaps and currency options. However, spot turnover rose by close to 50% between 2019 and 2022. Currency options turnover fell to slightly above USD 2bn in April 2022, from close to USD 7bn in April 2019. Reported turnover in currency options also show a decline from 2019, to NOK 900m in 2022.

By comparison, preliminary figures from the BIS show that daily turnover in the global foreign exchange market rose by 14% between April 2019 and April 2022. Average daily turnover rose in this period from USD 6.6 trillion to USD 7.5 trillion. The market share of transactions involving the Norwegian krone decreased from 1.8% of global turnover to 1.7%.

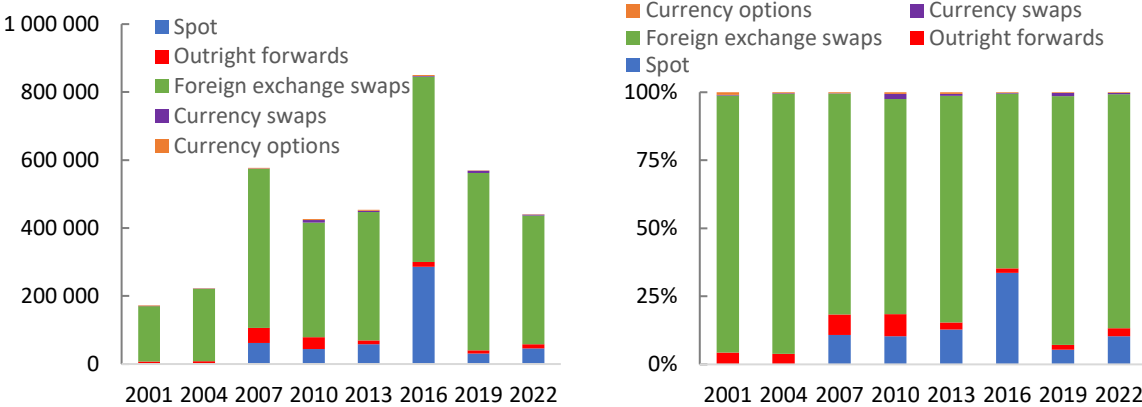
**Table 1: Total turnover in the foreign exchange market in April, by instrument. In millions of USD and NOK**

Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Spot	61 541	51 920	62 291	44 050	57 956	286 233	30 863	45 708
Forwards	169 893	221 492	512 242	372 017	389 616	559 546	530 802	391 379
- <i>Outright forwards</i>	7 454	8 720	43 544	34 652	11 668	13 747	9 827	12 746
- <i>Foreign exchange swaps</i>	162 439	212 772	468 698	337 365	377 948	545 799	520 975	378 632
Currency swaps (basis swaps)	300	312	969	7 771	3 423	1 578	6 852	2 307
Currency options	1 726	938	1 966	2 717	2 700	2 674	1 372	936
Total in millions of USD	233 460	274 662	577 468	426 555	453 694	850 032	569 890	440 330
Banking days in April	18	19	18	19	21	21	19	18
<b>Daily average in mill. USD</b>	<b>12 970</b>	<b>14 456</b>	<b>32 081</b>	<b>22 450</b>	<b>21 605</b>	<b>40 478</b>	<b>29 994</b>	<b>24 463</b>
Monthly average USD/NOK	9.09	6.92	6.00	5.92	5.79	8.22	8.57	8.92
Total in millions of NOK	2 103 735	1 892 011	3 447 198	2 434 026	2 611 173	6 987 263	4 881 284	3 927 939
<b>Daily average in mill. NOK</b>	<b>117 897</b>	<b>100 035</b>	<b>192 489</b>	<b>131 369</b>	<b>124 342</b>	<b>332 726</b>	<b>256 910</b>	<b>218 219</b>

Transactions between local reporting dealers are counted only once. Turnover figures for the foreign exchange market cover spot, outright forwards, foreign exchange swaps, currency swaps (basis swaps) and currency options.

<sup>2</sup> Supplementary tables appear in the annex.

**Chart 1a<sup>3</sup> and 1b: Total turnover in the foreign exchange market in April, by instrument. In millions of USD (left) and as a percentage (right). 2001 – 2022**



The April 2022 survey of the foreign exchange market shows that turnover in the Norwegian forward market is still considerably larger than spot market turnover. The difference is, however, smaller than in 2019. Table 1 and Chart 1 show that turnover in foreign exchange swaps continues to account for by far the largest share of total forward transactions and that spot market turnover continues to be higher than outright forward turnover.

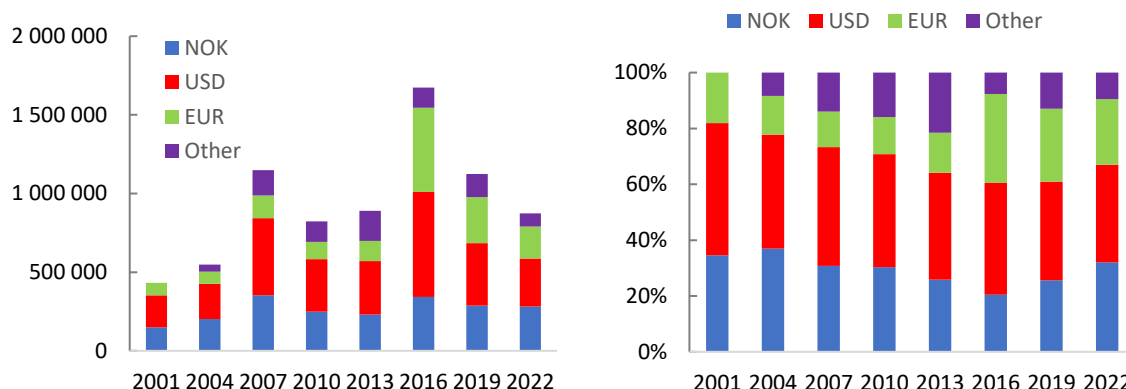
**2. Currency breakdown for the Norwegian foreign exchange market**

The USD share of foreign exchange turnover has remained stable in the period between 2019 and 2022 (Chart 2) at about 35% (See Chart 2b and Annex A.2 for details). The Norwegian krone share of foreign exchange turnover has edged up from 26% in 2019 to 32% in 2022. The euro share has also fallen slightly to 24%, and the share for other currencies is also somewhat lower than in 2019.

According to figures from the BIS, the US dollar has retained its position as reserve currency in the global foreign exchange market. Globally, the US dollar was on one side of 88% of all foreign exchange transactions. The euro was on one side of 31% of all global foreign exchange transactions and continued to be the second most traded currency. Figures from the BIS also show that the Chinese renminbi is continuing to increase its market share, which was 7% of all foreign exchange transactions in April 2022.

<sup>3</sup> Owing to a substantial reporting error in the April 2016 survey, the figure for spot market transactions was too high and the figure for forward transactions was too low. As a result, the decline in spot turnover and the rise in forward turnover between 2016 and 2019 were also too steep.

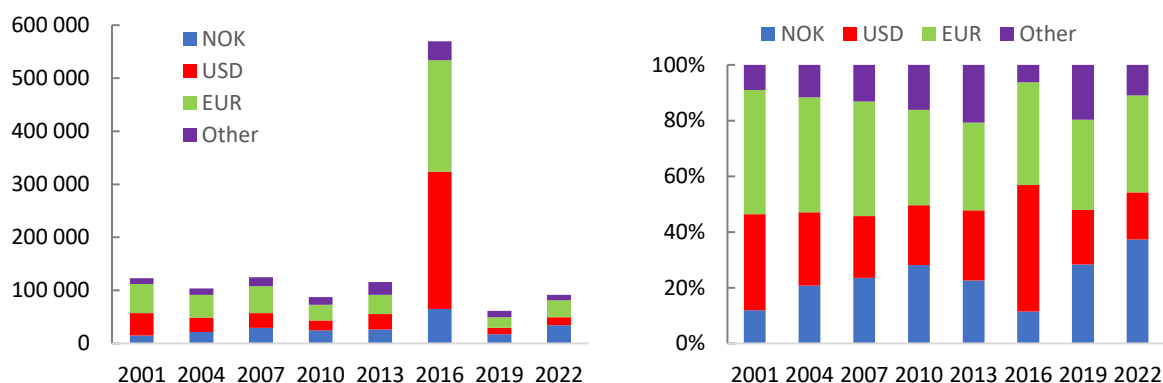
**Chart 2a and 2b: Total turnover in the foreign exchange market in April, by currency. In millions of USD and as a percentage. 2001 – 2022**



### 3. Currency breakdown for the spot market

Turnover in NOK as a share of the total spot market rose from 28% in 2019 to 37% in 2022. The euro share also rose slightly, from 32% to 35%, while the USD share fell from 20% in 2019 to 17% in 2022. The share of other currencies in the spot market fell by almost half, from 20% in 2019 to 11% in 2022.

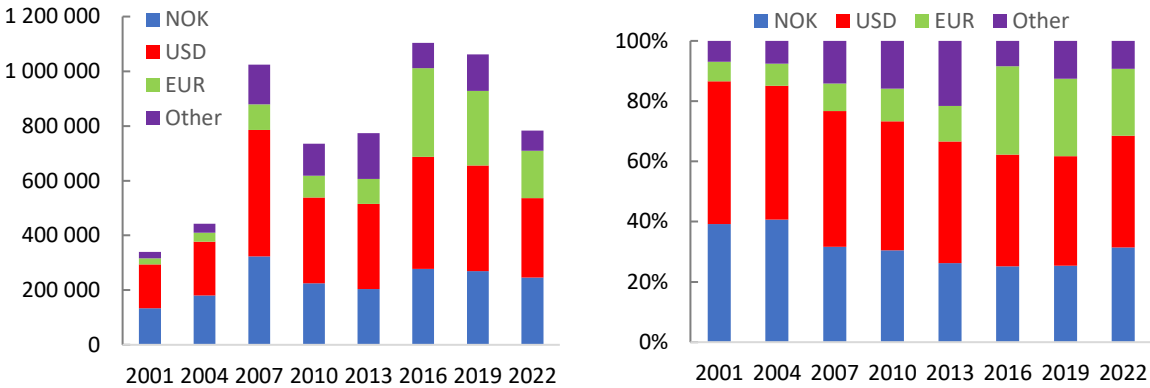
**Charts 3a and 3b: Turnover in the foreign exchange spot market<sup>3</sup> in April, by currency. In millions of USD and as a percentage. 2001 – 2022**



### 4. Currency breakdown for the forward market

According to forward market data, which includes foreign exchange swaps and outright forwards, the Norwegian krone was involved in 32% of transactions in April 2022 (Chart 4b), which is somewhat higher than in 2019 when the share was 25%. Compared with the survey in April 2019, the US dollar share is approximately unchanged at 37%, while the euro share fell slightly, from 26% in 2019 to 22% in 2022. The share of turnover of other currencies was 9% in 2022, down from 13% in 2019.

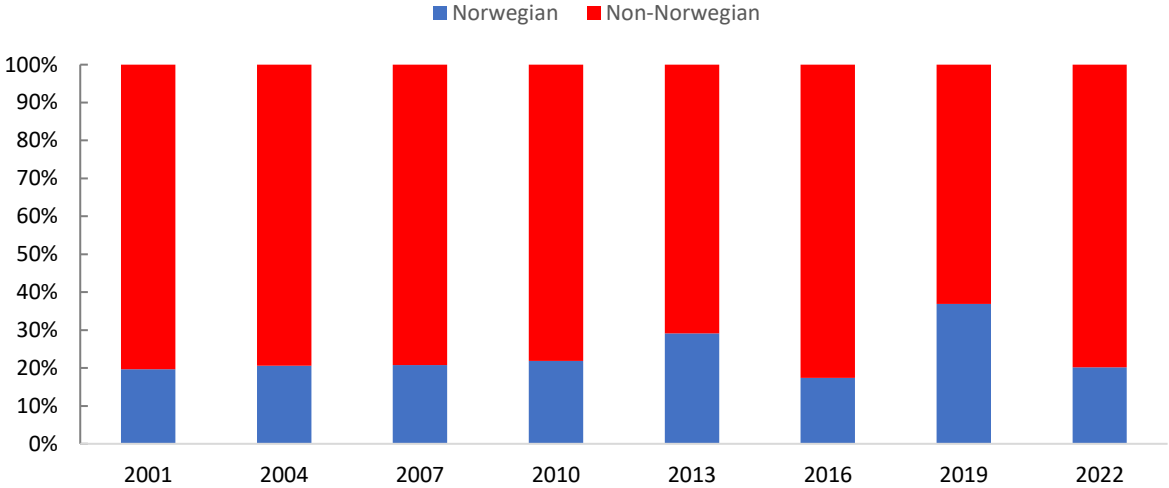
**Charts 4a and 4b: Currency breakdown for forward market turnover. In millions of USD and as a percentage. 2001 – 2022**



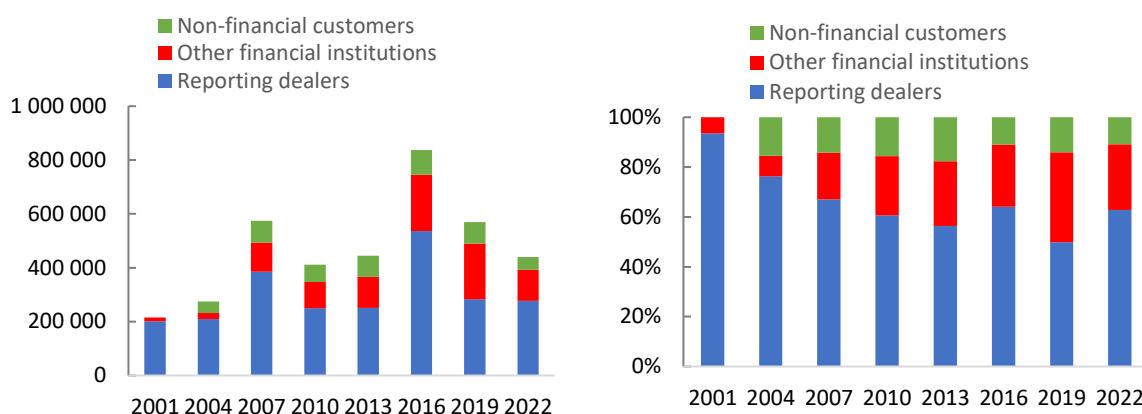
**5. Counterparties in the foreign exchange market**

Compared with 2019, Norwegian participants’ share of foreign exchange turnover in Norway relative to non-Norwegian participants fell in 2022. In April 2019, Norwegian participants accounted for 37% of turnover compared with 20% in April 2022 (Chart 5). Charts 6a and 6b show the breakdown of turnover among Norwegian participants, while Table 2 provides an overview among Norwegian participants that qualify as “Other financial institution”. Reporting dealers’ share of foreign exchange turnover in the Norwegian market has risen somewhat, from 50% in 2019 to 63% in 2022. Similarly, the share traded among non-financial customers fell from 14% to 11%, and turnover among other financial institutions fell from 36% to 26%, largely driven by a decline in turnover among non-reporting dealers.

**Chart 5: Foreign exchange turnover in April, by Norwegian and non-Norwegian participants. Percent. 2001 – 2022**



**Charts 6a and 6b: Foreign exchange turnover in April, by counterparty. In millions of USD and as a percentage. 2001 – 2022**



**Table 2: Foreign exchange turnover in April –breakdown for other financial institutions. In millions of USD and as a percentage**

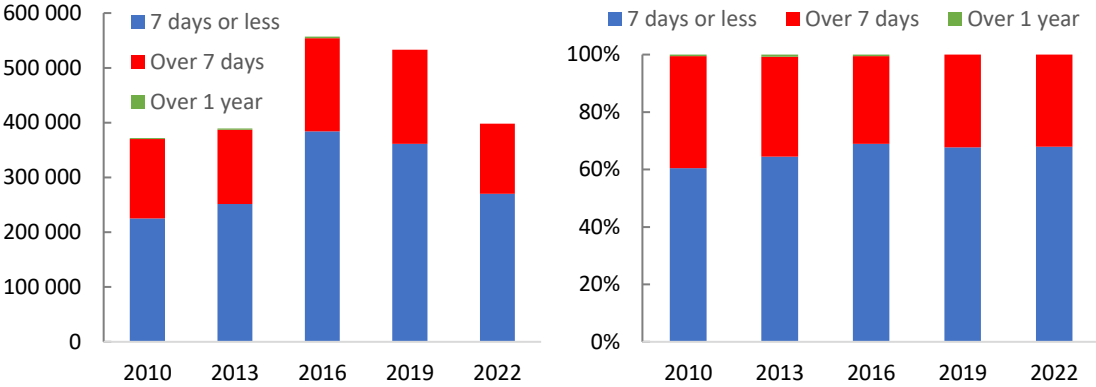
Counterparty	2016	Percentage	2019	Percentage	2022	Percentage
Other financial institution	208 394	24.9%	206 192	36.2%	115 911	26.3%
- Non-reporting dealers	174 486	20.9%	181 407	31.8%	76 177	17.3%
- institutional investors	29 756	3.6%	19 757	3.5%	15 404	3.5%
- Hedge fund and proprietary trading firms	2 618	0.3%	476	0.1%	0	0.0%
- Public sector financial institutions	955	0.1%	470	0.1%	3 580	0.8%
- Other	576	0.1%	4 081	0.7%	916	0.2%
- Undistributed	0	0.0%	0	0.0%	19 834	4.5%

## 6. Maturity breakdown for the forward market

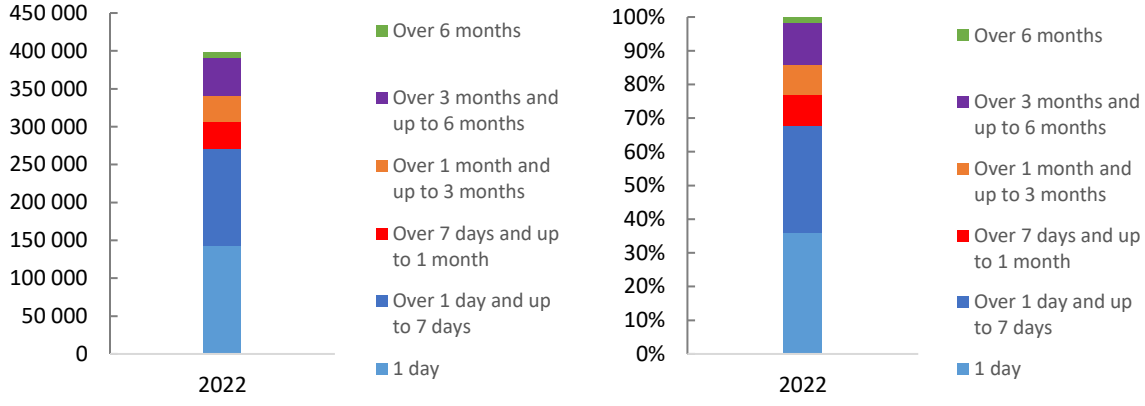
Most forward contracts have a maturity of seven days or less (Charts 7a and 7b). The share of contracts with such a maturity has remained virtually unchanged since 2016.

Reporting banks were asked to provide a more detailed maturity breakdown in the April 2019 survey than earlier. Six different categories of maturity bands are used in this year's survey (Charts 8a and 8b). This further categorisation shows a relatively even breakdown between contracts with a maturity of one day and contracts with a maturity of more than one day and up to seven days.

**Charts 7a and 7b: Forward market turnover in April, by maturity. In millions of USD and as a percentage. 2010 – 2022**



**Charts 8a and 8b: Forward market turnover in April, by maturity. In millions of USD and as a percentage. 2022**

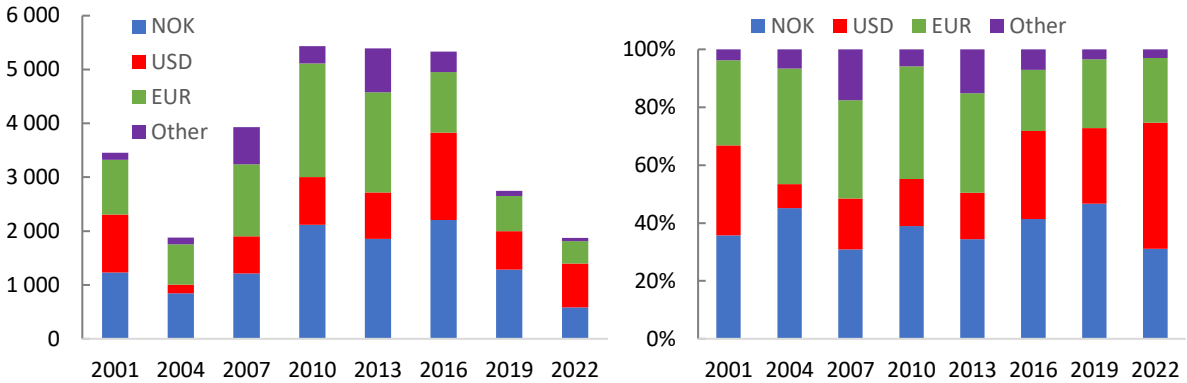


**7. Currency breakdown for the market for currency options and currency swaps (basis swaps)**

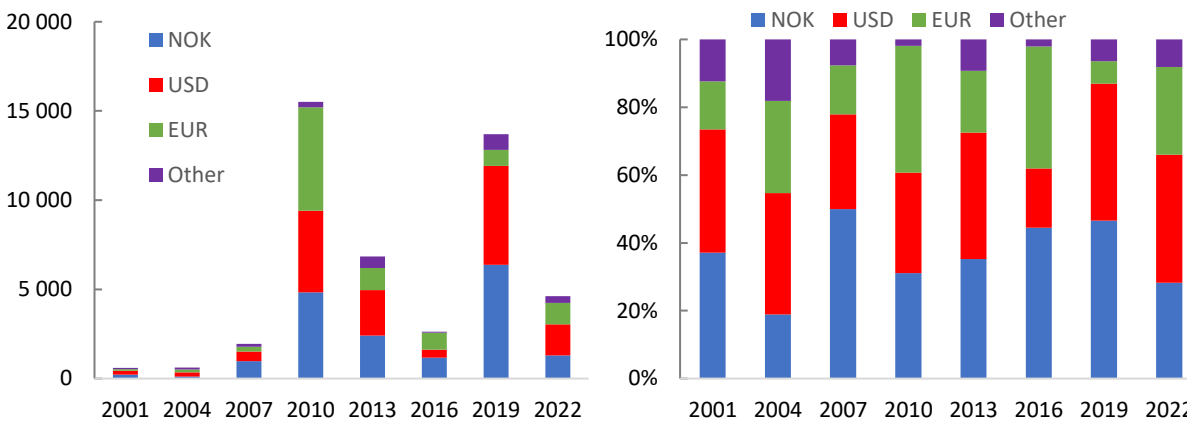
Total turnover in the market for currency options fell between 2016 and 2019, with a further decline from USD 2.7bn in 2019 until NOK 1.9bn in 2022 (Chart 9a). The Norwegian krone was involved in 31% of the turnover in April 2022, down from 47% in April 2019. The USD share increased substantially from 26% to 44%, while the share of turnover involving the euro and other currencies remained approximately unchanged.

Turnover in currency swaps also fell between 2019 and 2022. This was primarily driven by a decline in turnover in currency swaps in NOK and USD. The USD share showed less change, from 40% to 38%, while the euro share increased from 7% in April 2019 to 26% in April 2022. Other currencies accounted for a slightly larger share of currency swaps in 2022, 8% compared with 6% in 2019.

**Charts 9a and 9b: Turnover in currency options in April, by currency. In Millions of USD (left) and as a percentage (right). 2001 – 2022.**



**Charts 10a and 10b: Turnover in currency swaps (basis swaps) in April, by currency. In millions of USD (left) and as a percentage (right). 2001 – 2022.**

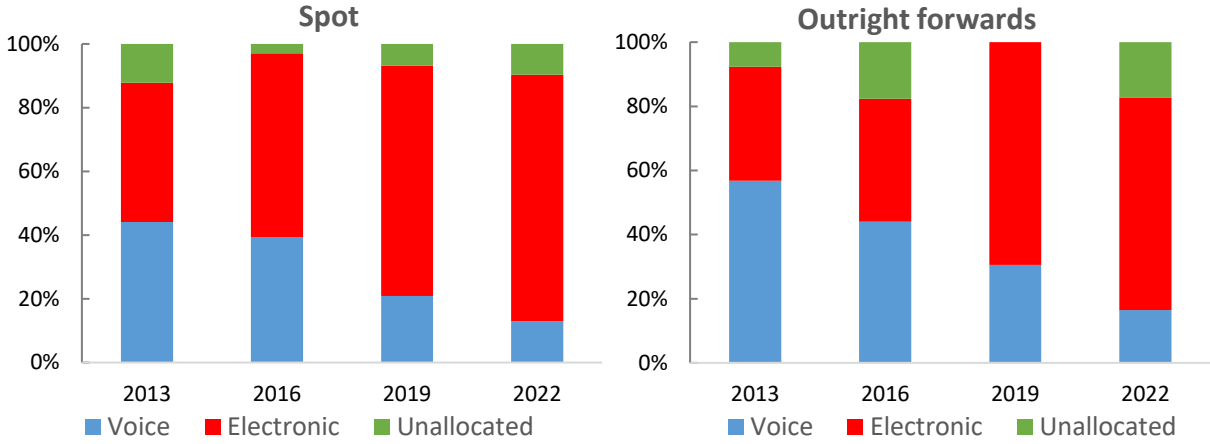


**8. Execution method breakdown**

Since 2013, the share of transactions in both the spot market and for outright forwards executed via electronic trading platforms has increased. This trend has continued in 2022. The spot turnover share was 72% in April 2019 and 77% in 2022. The share of spot transactions executed via telephone (voice) fell from 21% to 13%, while the share of unallocated transactions increased somewhat, from 7% in 2019 to 10% in 2022. For outright forwards, 16% were executed via telephone, 66% via electronic trades, while 17% were unallocated.



Charts 11a and 11b: Foreign exchange market transactions in April, by execution method<sup>4</sup>. Percent. 2013 – 2022.



Shares for forwards in 2019 have been adjusted.

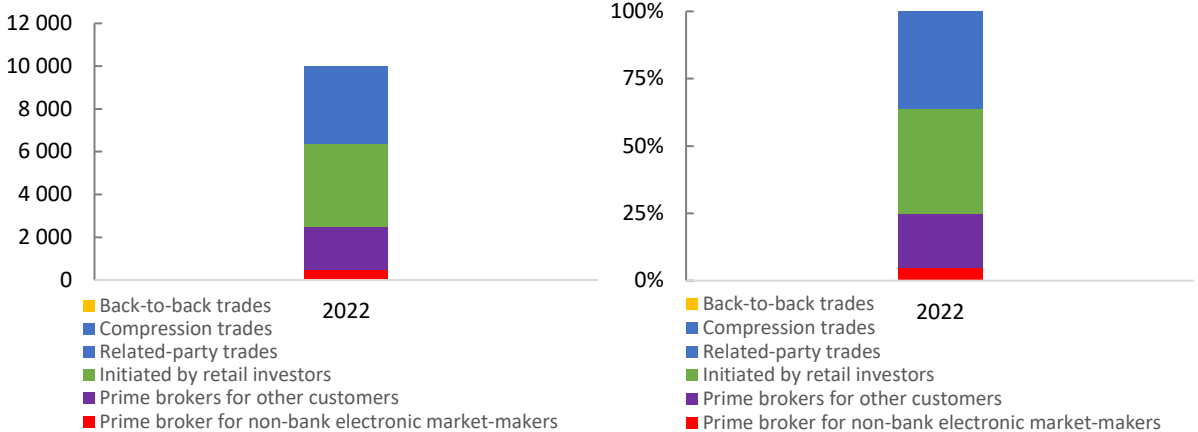
**9. Other breakdowns of reporting dealers’ turnover data**

In the 2019 survey, reporting dealers were asked to provide a breakdown of their turnover data by transactions where they act as “prime broker for non-bank electronic market-makers” or “prime brokers for other customers”, and whether transactions are “initiated by retail investors” or with “related-party trades”. In 2022, two additional categories were introduced: “back-to-back trades” and “compression trades”. Prime brokers are defined in the survey as institutions that facilitate trades for their clients in the prime broker’s name. Retail investors refers to individuals executing transactions on their own behalf or, for example, on behalf of a larger institution. Related-party trades include trades between reporting banks’ own branches and subsidiaries. Back-to-back trades are between related parties where transactions clearly reflect transfers of market risk. Compression trades are one or more transactions aimed at minimising the number of contracts outstanding while also maintaining equal levels of risk between two or more counterparties. These transactions will generally reduce outstanding settlement requirements between each individual counterparty.

The categories are not exhaustive, and not all turnover data can be categorised in this way. Approximately USD 10bn is broken down into the categories in the 2022 survey. Most transactions are categorised as either initiated by retail investors (39%) or as back-to-back trades (36%). In addition, prime brokers for other customers accounted for 20% of transactions.

<sup>4</sup> Voice includes transactions executed over the phone. Indirect voice transactions refer to transactions executed over the phone, intermediated by a third party (eg via a voice broker), while direct voice transactions are not.

**Charts 12a and 12b: Foreign exchange market transactions in April executed by banks as prime brokers, initiated by retail investors and related-party trades. In millions of USD (left) and as a percentage (right). 2022**



**10. Reported settlement method**

In April 2019, reporting dealers were asked to indicate the settlement methods used in foreign exchange market transactions. In April 2022, this part of the survey was also broken down by the three main counterparty categories: “reporting dealers”, “other financial institution”, and “non-financial customers”. In Table 3, it is clear that most transactions are settled using payment versus payment (PvP) solutions<sup>5</sup>. This survey has shown that other solutions are used relatively more by non-financial customers than by financial institutions.

**Table 3: Turnover of all foreign exchange instrument transactions by settlement method. In millions of USD**

Settlement method	Total	Reporting dealers	Other financial institution	Non-financial customers
<i>2022</i>				
Payment versus payment (PvP)	350 471	207 086	104 203	39 182
Non-PvP	6 196	117	3 489	2 590
<i>2019</i>				
PvP	532 777	-	-	-
Non-PvP	29 874	-	-	-

Also includes foreign exchange settlements in non-CLS currencies.

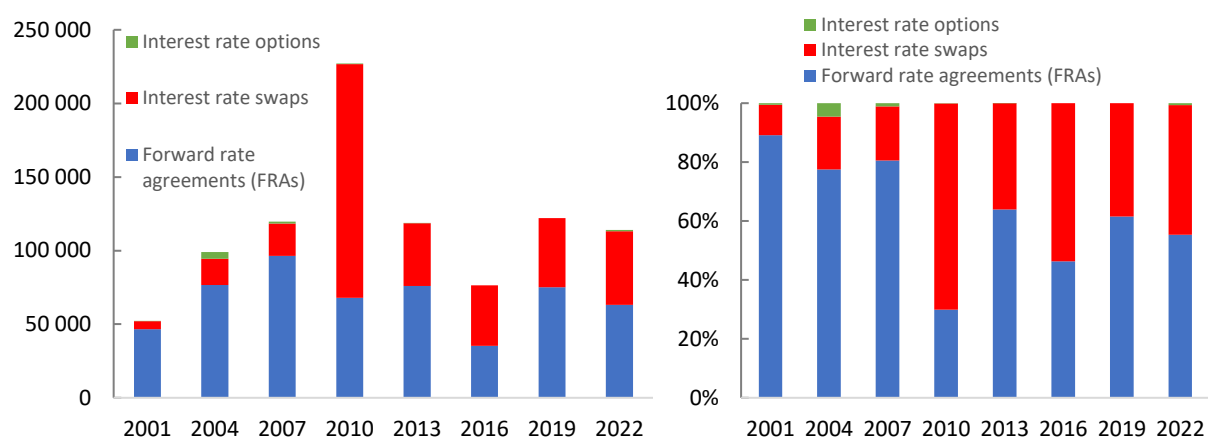
<sup>5</sup> Payment versus payment solutions include CLS, which is the market leader in cash settlement for foreign exchange transactions.

## Breakdown of turnover in the Norwegian OTC interest rate derivatives market

### 1. By instrument

Total turnover in the Norwegian OTC interest rate derivatives market in April 2022 was USD 114bn (Table 4), slightly lower than in 2019 when turnover was reported at USD 122bn. The average daily turnover in the Norwegian market was USD 6.3bn, approximately the same level as in 2019. Since 2019, turnover fell for forward rate agreements (FRAs), but increased somewhat for interest rate swaps<sup>6</sup> and interest rate options.

**Charts 13a and 13b: Turnover in interest rate derivatives in April, by instrument. In millions of USD (left) and as a percentage (right). 2001 – 2022.**



**Table 4: Turnover in interest rate derivatives in April, by instrument. In millions of USD and NOK**

Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Forward rate agreements (FRAs)	46 629	76 708	96 425	67 845	75 874	35 354	75 114	63 107
Interest rate swaps	5 422	17 800	21 896	158 855	42 754	41 007	46 977	50 143
Interest rate options	277	4 513	1 324	348	50	0	0	706
Total in millions of USD	52 328	99 021	119 645	227 048	118 679	76 361	122 091	113 955
<b>Average per banking day in millions of USD</b>	<b>2 907</b>	<b>5 212</b>	<b>6 736</b>	<b>11 950</b>	<b>5 651</b>	<b>3 636</b>	<b>6 426</b>	<b>6 331</b>
Total in millions of NOK	475 662	685 225	717 870	1 344 124	687 150	627 689	1 046 321	1 016 477
<b>Average per banking day in millions of NOK</b>	<b>26 426</b>	<b>36 064</b>	<b>39 882</b>	<b>70 743</b>	<b>32 721</b>	<b>29 890</b>	<b>55 070</b>	<b>56 471</b>

<sup>6</sup> Turnover for interest rate swaps is broken down into OIS (Overnight indexed swaps) and other swaps in Table A.11 in the Annex.

## 2. By currency

In 2022, most FRAs in the Norwegian market have been traded in NOK (Table 5). This share has nevertheless declined slightly since 2019 and the share of these trades denominated in other currencies increased from 5% in 2019 to 6% in 2022. Trades in interest rate swaps are more evenly distributed across NOK, EUR, and USD with shares of 35%, 26% and 37%, respectively. Few interest rate swaps are traded in other currencies. In the two previous surveys, zero turnover in options trades were reported. In 2022, however, turnover of USD 0.7bn was reported, of which 80% was denominated in EUR. Options denominated in NOK accounted for 13% and USD for 7%.

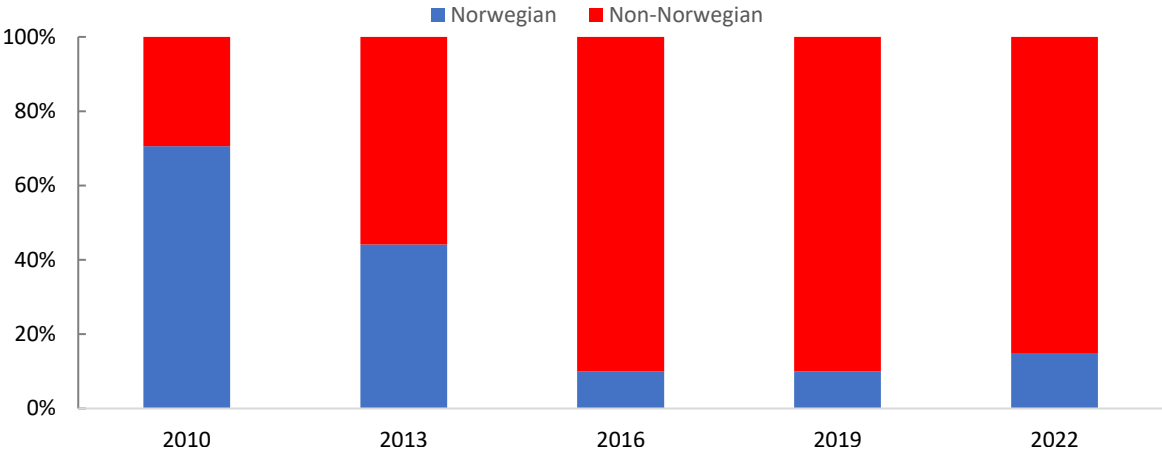
**Table 5: Turnover in interest rate derivatives in April, by instrument and currency. In millions of USD and as a percentage**

<b>Forward rate agreements (FRA)</b>	<b>2013</b>	<b>Percentage</b>	<b>2016</b>	<b>Percentage</b>	<b>2019</b>	<b>Percentage</b>	<b>2022</b>	<b>Percentage</b>
NOK	73 296	96.6%	33 864	95.8%	74 759	99.5%	59 005	93.5%
USD	-	0%	-	0.0%	0	0.0%	0	0.0%
EUR	594	0.8%	-	0.0%	0	0.0%	284	0.5%
Other currencies	1 985	2.6%	1 490	4.2%	355	0.5%	3 817	6.0%
Total	75 874	100.0%	35 354	100.0%	75 114	100.0%	63 107	100.0%
<b>Interest rate swaps</b>	<b>2013</b>	<b>Percentage</b>	<b>2016</b>	<b>Percentage</b>	<b>2019</b>	<b>Percentage</b>	<b>2022</b>	<b>Percentage</b>
NOK	21 941	51.3%	12 811	31.2%	29 491	57.8%	17 482	34.9%
USD	13 308	31.1%	24 132	58.8%	1 526	3.0%	12 976	25.9%
EUR	6 307	14.8%	3 463	8.4%	15 104	29.6%	18 721	37.3%
Other currencies	1 198	2.8%	602	1.5%	0.00	0.0%	964.28	1.9%
Total	42 754	100.0%	41 007	100.0%	51 063	100.0%	50 143	100.0%
<b>Options</b>	<b>2013</b>	<b>Percentage</b>	<b>2016</b>	<b>Percentage</b>	<b>2019</b>	<b>Percentage</b>	<b>2022</b>	<b>Percentage</b>
NOK	28	56.0%	-	0.0%	-	0.0%	92.09	13.1%
USD	-	-	-	0.0%	-	0.0%	50.41	7.1%
EUR	22	44.0%	-	0.0%	-	0.0%	563.12	79.8%
Other currencies	-	-	-	0.0%	-	0.0%	0.00	0.0%
Total	50	100.0%	-	0.0%	-	0.0%	705.63	100.0%
<b>Total</b>	<b>2013</b>	<b>Percentage</b>	<b>2016</b>	<b>Percentage</b>	<b>2019</b>	<b>Percentage</b>	<b>2022</b>	<b>Percentage</b>
NOK	95 265	80.3%	46 674	61.1%	104 250	86.2%	76 579	67.2%
USD	13 308	11.2%	24 132	31.6%	1 526	1.3%	13 026	11.4%
EUR	6 923	5.8%	3 463	4.5%	15 104	12.5%	19 569	17.2%
Other currencies	3 183	2.7%	2 092	2.7%	0	0.0%	4 782	4.2%
Total	118 679	100.0%	76 361	100.0%	120 880	100.0%	113 955	100.0%

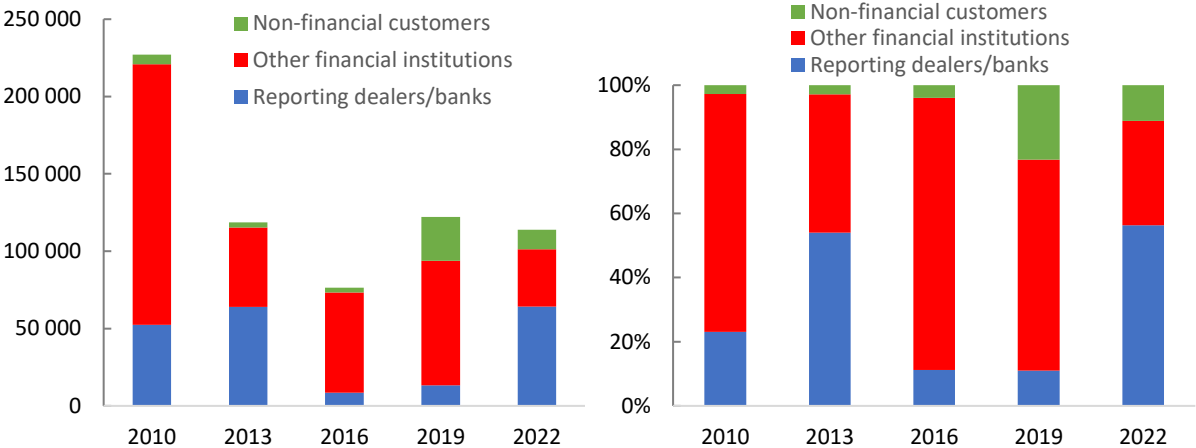
## 3. By counterparty

The share of turnover in the interest rate derivatives market involving Norwegian counterparties has increased somewhat, from 10% in 2019 to 15% in 2022 (Table A.12). This level is low compared with the share in 2010 and 2013 (Chart 14). However, the share of turnover involving reporting dealers has increased considerably, from 11% in 2019 to 56% in 2022 (Chart 15). Correspondingly, turnover involving both non-financial customers and other financial institutions has fallen in the same period, to 11% and 33%, respectively.

**Chart 14: Turnover in interest rate derivatives in April, by counterparty. Percent. 2010 – 2022**



**Charts 15a and 15b: Turnover in interest rate derivatives in April, by counterparty. In millions of USD (left) and as a percent (right)**



## Annex

### Foreign exchange market

**Table A.1: Daily foreign exchange turnover in April, by instrument. In millions of USD and as a percentage**

Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Spot	3 419	2 733	3 460	2 318	2 760	13 630	1 624	2 539
Forwards	9 438	11 658	28 458	19 580	18 553	26 645	27 937	21 743
- <i>Outright forwards</i>	414	459	2 419	1823	556	655	517	708
- <i>Foreign exchange swaps</i>	9 024	11 199	26 039	17 756	17 998	25 990	27 420	21 035
Currency swaps (basis swaps)	17	16	54	409	163	75	361	128
Currency options	96	49	109	143	129	127	72	52
<b>Total</b>	<b>12 970</b>	<b>14 456</b>	<b>32 081</b>	<b>22 450</b>	<b>21 605</b>	<b>40 478</b>	<b>29 994</b>	<b>24 463</b>
Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Spot	26.4%	18.9%	10.8%	10.3%	12.8%	33.7%	5.4%	10.4%
Forwards	72.8%	80.7%	88.7%	87.2%	85.9%	65.8%	93.1%	88.9%
- <i>Outright forwards</i>	3.2%	3.2%	7.5%	8.1%	2.6%	1.6%	1.7%	2.9%
- <i>Foreign exchange swaps</i>	69.6%	77.5%	81.2%	79.1%	83.3%	64.2%	91.4%	86.0%
Currency swaps (basis swaps)	0.1%	0.1%	0.2%	1.8%	0.8%	0.2%	1.2%	0.5%
Currency options	0.7%	0.3%	0.3%	0.6%	0.6%	0.3%	0.2%	0.2%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Transactions between local reporting dealers are counted only once. Turnover figures for the foreign exchange market cover spot, outright forwards, foreign exchange swaps, currency swaps (basis swaps) and currency options. The figures for the forward market prior to 2001 include currency swaps.

**Table A.2: Foreign exchange turnover in April, by currency. In millions of USD and as a percentage**

Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	149 231	202 772	353 115	248 995	229 703	343 183	287 304	280 548
USD	204 358	224 011	489 567	333 222	340 881	667 797	397 602	305 637
EUR	77 880	76 198	145 295	109 462	127 835	534 160	292 814	205 068
Other currencies	34 832	45 720	161 089	130 627	191 314	128 215	145 610	82 922
<b>Total</b>	<b>466 301</b>	<b>548 701</b>	<b>1 149 066</b>	<b>822 306</b>	<b>889 733</b>	<b>1 673 355</b>	<b>1 123 330</b>	<b>874 174</b>
Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	32.0%	37.0%	30.7%	30.3%	25.8%	20.5%	25.6%	32.1%
USD	43.8%	40.8%	42.6%	40.5%	38.3%	39.9%	35.4%	35.0%
EUR	16.7%	13.9%	12.7%	13.3%	14.4%	31.9%	26.1%	23.5%
Other currencies	7.5%	8.3%	14.0%	15.9%	21.5%	7.7%	13.0%	9.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Transactions between local reporting dealers are counted only once, but total turnover involves double-counting, as there are two currencies in each currency trade.

**Table A.3: Turnover in the foreign exchange spot market, by currency. In millions of USD and as a percentage**

Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	14 740	21 556	29 263	24 551	26 191	65 362	17 476	34 109
USD	42 309	27 400	27 745	18 786	29 019	258 827	12 088	15 469
EUR	55 009	42 791	51 212	29 788	36 467	210 057	19 978	31 777
Other currencies	11 025	12 094	16 362	14 123	23 995	35 494	12 184	10 062
Total	123 083	103 841	124 582	87 248	115 671	569 741	61 727	91 416
Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	12.0%	20.8%	23.5%	28.1%	22.6%	11.5%	28.3%	37.3%
USD	34.4%	26.4%	22.3%	21.5%	25.1%	45.4%	19.6%	16.9%
EUR	44.7%	41.2%	41.1%	34.2%	31.5%	36.9%	32.4%	34.8%
Other currencies	9.0%	11.6%	13.1%	16.2%	20.7%	6.2%	19.7%	11.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transactions between local reporting dealers are counted only once, but total turnover involves double-counting, as there are two currencies in each currency trade and both are in the overview.

**Table A.4: Currency distribution in forward market turnover, including outright forwards and foreign exchange swaps. In millions of USD and as a percentage**

Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	133 267	180 369	323 852	224 444	203 512	277 821	269 828	246 439
USD	160 975	196 456	461 646	314 436	311 862	408 969	385 514	290 168
EUR	21 857	32 658	94 084	79 674	91 368	324 103	272 836	173 291
Other currencies	23 687	33 501	144 902	116 504	167 319	92 721	133 426	72 860
Total	339 786	442 985	1 024 484	735 058	774 062	1 103 614	1 061 603	782 757
Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	39.2%	40.7%	31.6%	30.5%	26.3%	25.2%	25.4%	31.5%
USD	47.4%	44.3%	45.1%	42.8%	40.3%	37.1%	36.3%	37.1%
EUR	6.4%	7.4%	9.2%	10.8%	11.8%	29.4%	25.7%	22.1%
Other currencies	7.0%	7.6%	14.1%	15.9%	21.6%	8.4%	12.6%	9.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transactions between local reporting dealers are counted only once, but total turnover involves double-counting, as there are two currencies in each currency trade. Pre-2004 figures include currency swaps (basis swaps).

**Table A.5: Foreign exchange turnover in April, by counterparty. In millions of USD and as a percentage**

<b>Counterparty</b>	<b>2001</b>	<b>2004</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>
Reporting dealers	201 207	209 279	385 625	249 543	250 728	536 616	283 741	276 637
- Norwegian	19 242	6 376	3 103	4 914	2 705	6 365	3 299	7 228
- Non-Norwegian	181 965	202 903	382 522	244 629	248 023	530 251	280 442	269 409
Other financial institution	14 087	22 713	107 648	97 667	115 777	208 394	206 192	115 900
- Norwegian	9 880	15 089	43 202	29 032	64 247	79 678	136 274	44 321
- Non-Norwegian	4 207	7 624	64 446	68 635	51 530	128 715	69 918	71 579
Non-financial customers	17 859	42 360	81 260	63 942	78 361	91 668	79 958	47 799
- Norwegian	16 834	35 092	73 326	56 117	65 562	59 783	70 751	37 335
- Non-Norwegian	1 024	7 268	7 934	7 825	15 799	31 886	9 207	10 464
Total	233 152	274 352	574 533	411 152	444 866	836 678	569 891	440 336
- Norwegian	45 956	56 558	119 631	90 063	129 514	145 826	210 324	88 884
- Non-Norwegian	187 196	217 794	454 902	321 089	315 352	690 853	359 567	351 452
<b>Counterparty</b>	<b>2001</b>	<b>2004</b>	<b>2007</b>	<b>2010</b>	<b>2013</b>	<b>2016</b>	<b>2019</b>	<b>2022</b>
Reporting dealers	86.3%	76,3%	67,1%	60.7%	56.4%	64.1%	49.8%	62.8%
- Norwegian	8.3%	2.3%	0.5%	1.2%	0.6%	0.8%	0.6%	1.6%
- Non-Norwegian	78.0%	74.0%	66.6%	59.5%	55.8%	63.4%	49.2%	61.2%
Other financial institution	6.0%	8.3%	18.7%	23.8%	26.0%	24.9%	36.2%	26.3%
- Norwegian	4.2%	5.5%	7.5%	7.1%	14.4%	9.4%	23.9%	10.1%
- Non-Norwegian	1.8%	2.8%	11.2%	16.7%	11.6%	15.4%	12.3%	16.3%
Non-financial customers	7.7%	15.4%	14.2%	15.5%	17.6%	11.0%	14.0%	10.9%
- Norwegian	7.2%	12.8%	12.8%	13.6%	14.1%	7.1%	12.4%	8.5%
- Non-Norwegian	0.4%	2.6%	1.4%	1.9%	3.6%	3.8%	1.6%	2.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
- Norwegian	19.7%	20.6%	20.8%	21.9%	29.1%	17.4%	36.9%	20.2%
- Non-Norwegian	80.3%	79.4%	79.2%	78.1%	70.9%	82.6%	63.1%	79.8%

Transactions between Norwegian reporting dealers are counted only once. Pre-2007 figures include currency swaps (basis swaps).



**Table A.6a: Forward market turnover in April, by maturity. In millions of USD and as a percentage**

Maturity	2010	Percentage	2013	Percentage	2016	Percentage
7 days or less	225 091	60.5 %	251 382	64.5%	384 352	69.0%
More than 7 days	144 832	38.9 %	135 412	34.8%	169 662	30.4%
More than 1 year	2 050	0.6 %	2 820	0.7%	3 281	0.6%
Total	371 973	100.0 %	389 614	100.0%	557 295	100.0%

Not adjusted for Norwegian double-counting.

**Table A.6b: Forward market turnover in April, by maturity. In millions of USD and as a percentage. 2019**

Maturity	2019	Percentage
7 days or less	361 230	67.7%
More than 7 days and up to 1 month	42 006	7.9%
More than 1 month and up to 3 months	68 268	12.8%
More than 3 months and up to 6 months	54 233	10.2%
More than 6 months	7 644	1.4%
Total	533 381	100.0%

Not adjusted for Norwegian double-counting.

**Table A.6c: Forward market turnover in April, by maturity. In millions of USD and as a percentage. 2022.**

Maturity	2022	Percentage
1 day	143 175	56%
More than 1 day and up to 7 days	127 288	50%
More than 7 days and up to 1 month	35 715	14%
More than 1 month and up to 3 months	35 104	14%
More than 3 months and up to 6 months	50 171	20%
More than 6 months	6 746	3%
Total	255 025	100%

**Table A.7a: Turnover in currency options in April, by currency. In millions of USD and as a percentage**

Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	1 234	848	1 213	2 119	1 857	2 207	1 283	582
USD	1 075	155	691	881	862	1 624	717	818
EUR	1 014	749	1 338	2 114	1 858	1 124	652	417
Other currencies	130	125	690	320	817	380	93	56
Total	3 453	1 876	3 932	5 434	5 393	5 334	2 745	1 873
Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	35.7%	45.2%	30.9%	39.0%	34.4%	41.4%	46.7%	31.1%
USD	31.1%	8.2%	17.6%	16.2%	16.0%	30.4%	26.1%	43.7%
EUR	29.4%	39.9%	34.0%	38.9%	34.4%	21.1%	23.8%	22.3%
Other currencies	3.8%	6.7%	17.5%	5.9%	15.1%	7.1%	3.4%	3.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transactions between local reporting dealers are counted only once, but total turnover involves double-counting, as there are two currencies in each currency trade and both are in the overview.

**Table A.7b: Turnover in currency swaps (basis swaps) in April, by currency. In millions of USD and as a percentage**

Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	223	118	969	4 827	2 411	1 165	6 384	1 305
USD	218	223	541	4 585	2 549	457	5 538	1 742
EUR	85	170	280	5 798	1 246	943	899	1191
Other currencies	74	113	148	300	633	55	884	375
Total	600	624	1 938	15 510	6 833	2 620	13 705	4 613
Currency	2001	2004	2007	2010	2013	2016	2019	2022
NOK	37.2%	18.9%	50.0%	31.1%	35.2%	44.4%	46.6%	28.3%
USD	36.3%	35.7%	27.9%	29.6%	37.3%	17.4%	40.4%	37.8%
EUR	14.2%	27.3%	14.5%	37.4%	18.2%	36.0%	6.6%	25.8%
Other currencies	12.3%	18.1%	7.6%	1.9%	9.3%	2.1%	6.5%	8.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transactions between local reporting dealers are counted only once, but total turnover involves double-counting, as there are two currencies in each currency trade and both are in the overview.

**Table A.8: Foreign exchange turnover in April 2022, by execution method. In millions of USD and as a Percentage**

	Voice <sup>1</sup>		Electronic <sup>2</sup>				Undistributed
	Direct	Indirect	Direct		Indirect		
	Direct	Indirect	Single-bank proprietary trading system <sup>3</sup>	Other	Anonymous venues	Disclosed venues	
Spot	5 939	0	14 614	4 063	1 711	14 938	4 426
Outright forwards	2 096	0	2 527	334	447	5 142	2 199
Foreign exchange swaps	70 228	36 182	101 822	1 440	49 105	32 592	87 262
Currency swaps (basis swaps)	726	0	0	0	0	1 003	578
Currency options	435	83	83	0	0	284	54
Total	79 425	36 264	119 046	5 837	51 263	53 959	94 519
	Voice <sup>1</sup>		Electronic <sup>2</sup>				Undistributed
	Direct	Indirect	Direct		Indirect		
	Direct	Indirect	Single-bank proprietary trading system <sup>3</sup>	Other	Anonymous venues	Disclosed venues	
Spot	13.0%	0.0%	32.0%	8.9%	3.7%	32.7%	9.7%
Outright forwards	16.4%	0.0%	19.8%	2.6%	3.5%	40.3%	17.3%
Foreign exchange swaps	18.5%	9.6%	26.9%	0.4%	13.0%	8.6%	23.0%
Currency swaps (basis swaps)	31.5%	0.0%	0.0%	0.0%	0.0%	43.5%	25.1%
Currency options	46.4%	8.8%	8.8%	0.0%	0.0%	30.3%	5.8%
Total	18.0%	8.2%	27.0%	1.3%	11.6%	12.3%	21.5%

- 1) Voice includes transactions executed over the phone. Indirect voice transactions refers to transactions executed over the phone, intermediated by a third party (eg via a voice broker), while direct voice transactions are not intermediated by a third party.
- 2) Indirect electronic transactions are executed over an electronic medium, intermediated by a third party electronic platform, while direct electronic transactions are not intermediated by a third party.
- 3) Single-bank proprietary trading system refers to an electronic trading system owned and operated by a bank.
- 4) In the April 2019 survey, the BIS broadened the subcategories for electronic-indirect trades.

**Table A.9: Foreign exchange turnover in April 2022, by category. In millions of USD and as a percentage**

Category	2019	Percentage	2022	Percentage
Prime brokers with electronic market-makers	15 737	8.3%	480	7.2%
Prime brokers with other customers	656	0.3%	1 994	30.1%
Initiated by retail investors	2 204	1.2%	3 881	58.6%
Related-party trades	171 868	90.2%	273	4.1%
Back-to-back trades	-	-	3 631	54.8%
Compression trades	-	-	0	0.0%
Total	190 465	100.0%	6 628	100.0%

Not adjusted for Norwegian double-counting.

**Table A.10: Daily turnover in interest rate derivatives in April, by instrument. In millions of USD and as a percentage**

Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Forward rate agreements (FRAs)	2 591	4 037	5 357	3 571	3 613	1 684	3 953	3 506
Interest rate swaps	301	937	1 216	8 361	2 036	1 953	2 472	2 786
Interest rate options	15	238	74	18	2	0	0	39
Total	2 907	5 212	6 647	11 950	5 651	3 636	6 426	6 331
Instrument	2001	2004	2007	2010	2013	2016	2019	2022
Forward rate agreements (FRAs)	89.1%	77.5%	80.6%	29.9%	63.9%	46.3%	61.5%	55.4%
Interest rate swaps	10.4%	18.0%	18.3%	70.0%	36.0%	53.7%	38.5%	44.0%
Interest rate options	0.5%	4.5%	1.1%	0.1%	0.0%	0.0%	0.0%	0.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Transactions between Norwegian reporting dealers are counted only once.

**Table A.11: Daily turnover in interest rate derivatives in April, by instrument. In millions of USD and as a percentage**

Instrument	2019	2022
Forward rate agreements (FRAs)	3 953	3 506
Overnight indexed swaps (OIS)	895	593
Other swaps	1 578	2 193
Interest rate options	0	39
Total	6 426	6 331
Instrument	2019	2022
Forward rate agreements (FRAs)	61.5%	55.4%
Overnight indexed swaps (OIS)	13.9%	9.4%
Other swaps	24.6%	34.6%
Interest rate options	0.0%	0.6%
Total	100.0%	100.0%

Transactions between Norwegian reporting dealers are counted only once.

**Table A.12: Turnover in interest rate derivatives in April, by counterparty. In millions of USD and as a percentage**

Counterparty	2010	Percentage	2013	Percentage	2016	Percentage	2019	Percentage	2022	Percentage
Reporting dealers	52 353	23.1%	128 180	54.0%	17 088	11.2%	26 750	11.0%	128 273	56.3%
- Norwegian	5 399	2.4%	47 272	19.9%	3 264	2.1%	8 172	3.3%	10 608	4.7%
- Non-Norwegian	46 954	20.7%	80 908	34.1%	13 826	9.1%	18 578	7.6%	117 665	51.6%
Other financial institutions	168 494	74.4%	102 314	43.1%	129 616	84.9%	160 763	65.8%	74 316	32.6%
- Norwegian	148 949	65.6%	53 390	22.5%	6 048	4.0%	14 621	6.0%	19 998	8.8%
- Non-Norwegian	19 545	8.6%	48 922	20.6%	123 568	80.9%	146 142	59.8%	54 318	23.8%
Non-financial customers	6 201	2.7%	6 864	2.9%	6 018	3.9%	56 669	23.2%	25 321	11.1%
- Norwegian	5 863	2.6%	4 098	1.7%	5 824	3.8%	1 622	0.7%	3 365	1.5%
- Non-Norwegian	338	0.1%	2 766	1.2%	196	0.1%	55 047	22.5%	21 956	9.6%
Total	227 048	100.0%	237 358	100.0%	152 722	100.0%	244 182	100.0%	227 910	100.0%
- Norwegian	160 211	70.6%	104 761	44.1%	15 135	9.9%	24 415	10.0%	33 971	14.9%
- Non-Norwegian	66 837	29.4%	132 597	55.9%	137 588	90.1%	219 768	90.0%	193 938	85.1%

Transactions between Norwegian reporting dealers are counted only once