

Stock Exchange Turnover

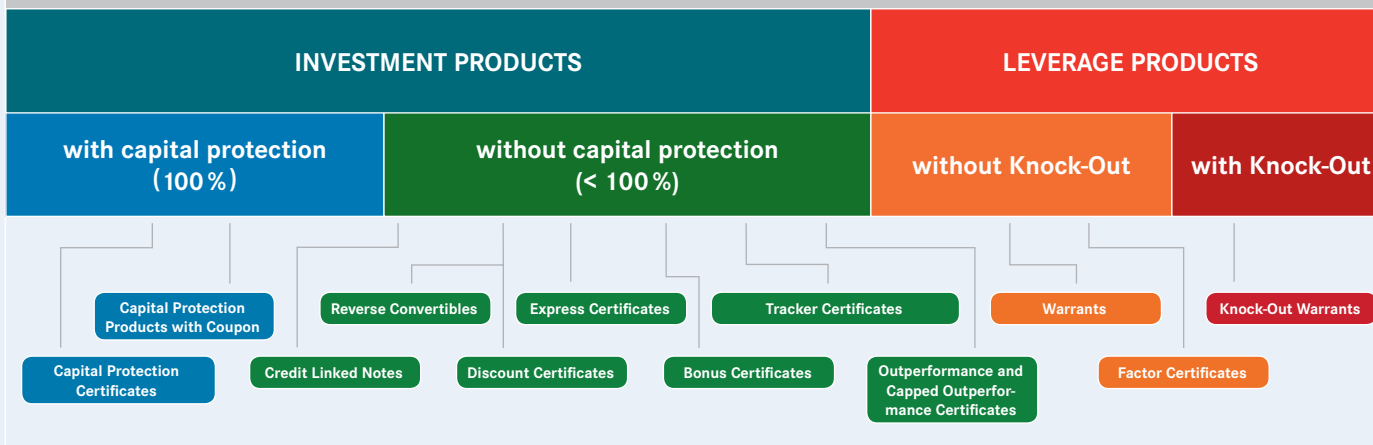
in Derivatives



Rise in turnover on the structured products market

Clear growth in leverage products

STRUCTURED SECURITIES



DDV Classification System

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May | 2019

- The exchanges in Stuttgart and Frankfurt generated turnover of EUR 3.6 billion with investment and leverage products in May.
- Investors had a total of 601,827 investment certificates and 1,292,937 leverage products to choose from at the end of May.
- Turnover in Bonus Certificates rose by 13.6 percent to EUR 451.8 million.
- Leverage products with indices as an underlying registered turnover growth of 116.5 percent to EUR 1.2 billion.

Rise in turnover on the structured products market

Clear growth in leverage products

Developments on the capital markets prompted an increase in trading in structured products on the Stuttgart and Frankfurt Exchanges in May. Exchange turnover in structured and leverage products totalled EUR 3.6 billion. All in all, 542,082 customer orders were completed. The average order size was EUR 6,578, edging up by 0.3 percent on one month earlier.

The trading volume for investment products came in at just under EUR 1.5 billion in May. Their share of the total volume stood at 40.3 percent. The average order size was EUR 27,257.

Turnover in leverage products stood at EUR 2.1 billion in the reporting period. This product category accounted for 59.7 percent of the total turnover as a result. The average order size was EUR 4,348.

New issues

Banks issued 60,580 new investment products and 335,939 leverage products in the month of May. As a result, a total of 601,827 investment products and 1,292,937 leverage products were available at the Stuttgart and Frankfurt Exchanges.

Exchange turnover by product category

Investment products

Marked increases were seen in most of the highest-turnover product categories. In absolute terms, the most substantial turnover growth was seen in Bonus Certificates and Tracker Certificates. Turnover in **Bonus Certificates** climbed to EUR 451.8 million in May, for instance, while trading in **Tracker Certificates** stood at EUR 179.0 million. Trading in **Reverse Convertibles** was also brisk. By contrast, turnover in **Discount Certificates** fell slightly to EUR 550.7 million. The exchange turnover for Capital Protection Products offering full capital protection stood at a total of EUR 21.0 million in the reporting month.

Leverage products

Clear turnover growth was seen across all product categories. Turnover in **Warrants** increased to EUR 527.1 million. Trading in **Knock-Out Warrants** climbed to EUR 1.3 billion, while a figure of EUR 266.5 million was recorded for **Factor Certificates**.

Exchange turnover by underlying

Investment products

Trading in products with **indices as an underlying** rose to EUR 669.5 million in May. Indices were therefore the most popular underlying among investment products, accounting for a 46.5 percent share. Turnover in investment products with **equities as an underlying** dipped slightly, however, taking it to EUR 618.2 million. Turnover in products linked to **commodities** climbed markedly, while turnover in products with **currencies as an underlying** soared. By contrast, trading in products with **interest rates as an underlying** was down again.

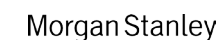


Leverage products

Exchange turnover by underlying rose across the board. Thanks to an increase in turnover to almost EUR 1.2 billion, the share attributable to products with **indices as an underlying** rose to 54.2 percent. Turnover in products with **equities as an underlying** climbed to EUR 789.5 million. Following decreases in the previous month, May also saw a rise in turnover in products with **commodities** and **currencies as underlyings**. Together, their market share stood at 5.1 percent.

Exchange turnover

Stuttgart Exchange generated a turnover volume of EUR 2.3 billion in May. Its market share of the total turnover stood at 65.1 percent. Frankfurt Exchange recorded a trading volume of just under EUR 1.3 billion. It accounted for 34.9 percent of the total exchange turnover and 41.2 percent of customer orders, while Stuttgart Exchange handled 58.8 percent. ■



Deutscher Derivate Verband (DDV)

Deutscher Derivate Verband (DDV), the German Derivatives Association, is the industry representative body for the leading issuers of derivative securities in Germany, who represent more than 90 percent of the German structured products market: BayernLB, BNP Paribas, Citigroup, Commerzbank, DekaBank, Deutsche Bank, DZ BANK, Goldman Sachs, Helaba, HSBC Trinkaus, HypoVereinsbank, LBBW, Morgan Stanley, Société Générale, UBS and Vontobel. Furthermore, the Association's work is supported by seventeen sponsoring members, which include the Stuttgart and Frankfurt Exchanges, Baader Bank, the direct banks comdirect bank, Consorsbank, DAB Bank, flatex, ING-DiBa and S Broker, as well as finance portals and other service providers.

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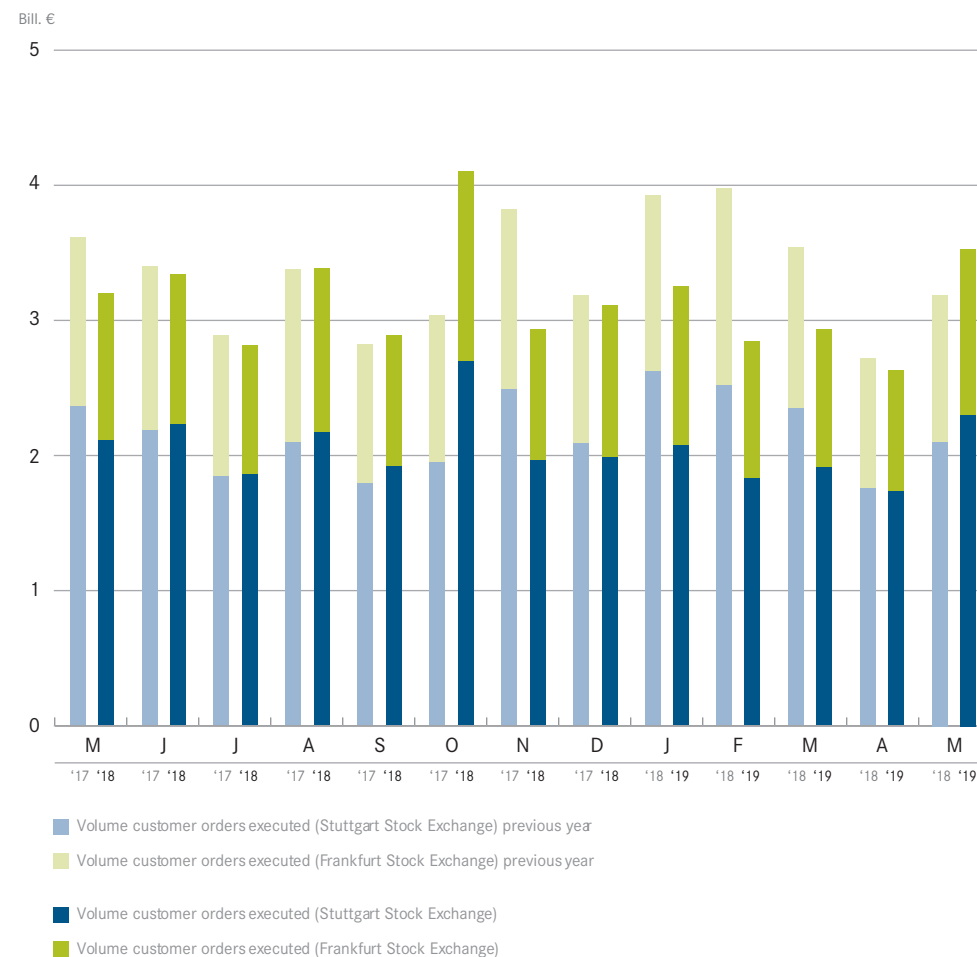
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Year Overview Stock Exchange Turnover May 2019

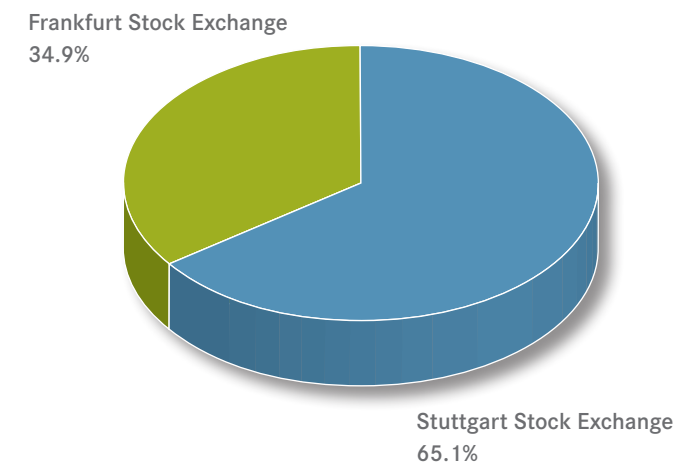
Month	Total		Stuttgart Stock Exchange		Frankfurt Stock Exchange	
	in T€	Number of orders	in T€	Number of orders	in T€	Number of orders
May 2018	3,182,457	435,195	2,103,841	253,752	1,078,616	181,443
June 2018	3,321,895	481,069	2,213,430	280,744	1,108,465	200,325
July 2018	2,802,793	447,662	1,851,967	259,871	950,825	187,791
August 2018	3,369,222	500,422	2,156,137	282,702	1,213,085	217,720
September 2018	2,880,282	432,418	1,908,106	253,298	972,176	179,120
October 2018	4,087,224	651,980	2,688,959	384,280	1,398,265	267,700
November 2018	2,951,197	513,171	1,976,530	292,727	974,666	220,444
December 2018	3,130,096	427,537	1,993,650	244,763	1,136,447	182,774
January 2019	3,271,585	451,157	2,083,642	266,809	1,187,943	184,348
February 2019	2,861,561	436,585	1,837,677	256,199	1,023,885	180,386
March 2019	2,949,541	458,939	1,922,316	272,742	1,027,225	186,197
April 2019	2,642,565	402,971	1,744,403	239,227	898,162	163,744
May 2019	3,566,034	542,082	2,321,421	318,674	1,244,613	223,408



Turnover volume by stock exchange May 2019

	Stuttgart Stock Exchange		Frankfurt Stock Exchange		Total	
	Volume	Share	Volume	Share	Volume	Share
Investment products with capital protection	11,084	0.5%	9,900	0.8%	20,983	0.6%
Investment products without capital protection	1,006,393	43.4%	411,183	33.0%	1,417,576	39.8%
Investment products total	1,017,476	43.8%	421,083	33.8%	1,438,559	40.3%
Leverage products without knock-out	773,780	33.3%	560,087	45.0%	1,333,867	37.4%
Leverage products with knock-out	530,165	22.8%	263,443	21.2%	793,608	22.3%
Leverage products total	1,303,945	56.2%	823,531	66.2%	2,127,475	59.7%
Total	2,321,421	100.0%	1,244,613	100.0%	3,566,034	100.0%

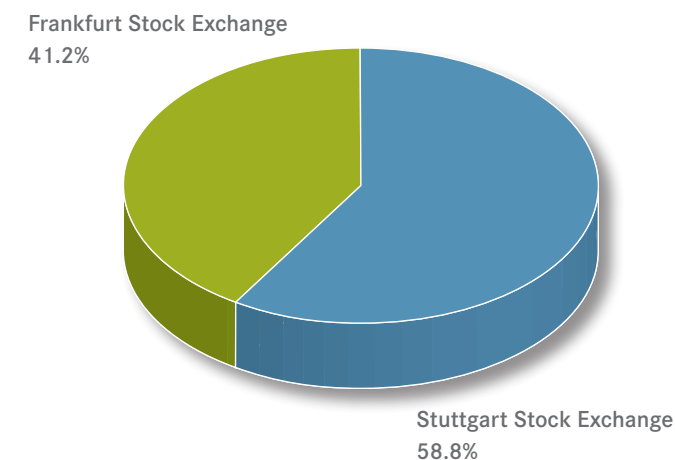
Turnover volume by stock exchange as a percentage



Number of customer orders by stock exchange May 2019

	Stuttgart Stock Exchange		Frankfurt Stock Exchange		Total	
	Number	Share	Number	Share	Number	Share
Investment products with capital protection	582	0.2%	357	0.2%	939	0.2%
Investment products without capital protection	34,975	11.0%	16,864	7.5%	51,839	9.6%
Investment products total	35,557	11.2%	17,221	7.7%	52,778	9.7%
Leverage products without knock-out	160,050	50.2%	132,634	59.4%	292,684	54.0%
Leverage products with knock-out	123,067	38.6%	73,553	32.9%	196,620	36.3%
Leverage products total	283,117	88.8%	206,187	92.3%	489,304	90.3%
Total	318,674	100.0%	223,408	100.0%	542,082	100.0%

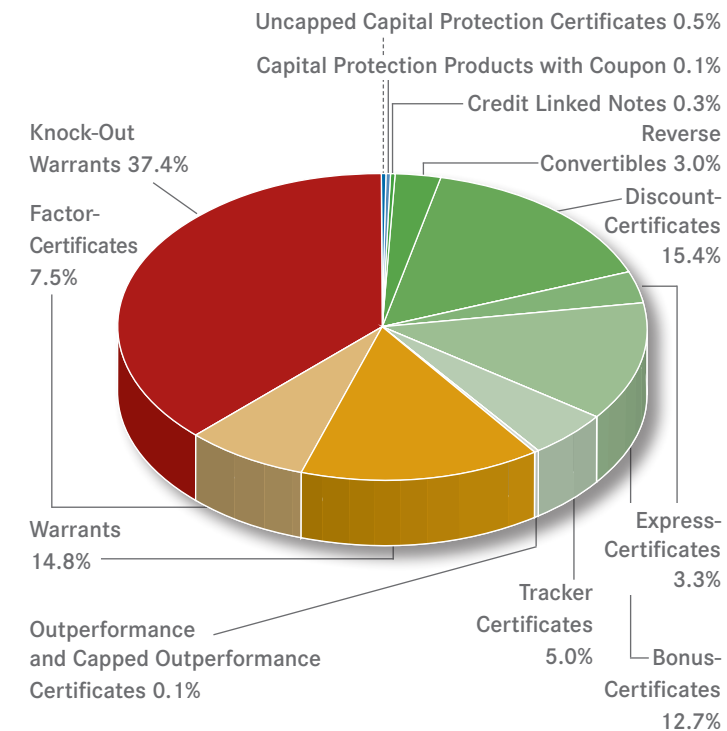
Number of customer orders by stock exchange as a percentage



Turnover by product category May 2019

Product categories	Change in comparison with previous month			Number of orders	Change in comparison with previous month		Change in comparison with previous month	
	Volume	Share	Share		Volume per order	Share	Volume	Share
	in T €	in %	in %		#	in %	in %	in T €
■ Uncapped Capital Protection Certificates	18,481	-2.0	0.5	835	-4.6	0.2	22,133	2.7
■ Capital Protection Products with Coupon	2,503	-1.6	0.1	104	-28.3	0.0	24,063	37.2
■ Credit Linked Notes	10,418	-37.1	0.3	484	-25.2	0.1	21,524	-15.9
■ Reverse Convertibles	106,555	14.7	3.0	5,329	17.5	1.0	19,995	-2.4
■ Discount Certificates	550,693	-1.6	15.4	12,071	-4.1	2.2	45,621	2.6
■ Express Certificates	116,263	9.7	3.3	6,042	14.2	1.1	19,242	-3.9
■ Bonus Certificates	451,810	13.6	12.7	11,570	17.5	2.1	39,050	-3.3
■ Tracker Certificates	178,952	28.4	5.0	16,247	35.7	3.0	11,014	-5.4
■ Outperformance and Capped Outperformance Certificates	2,884	-14.7	0.1	96	-23.8	0.0	30,043	12.0
Investment products	1,438,559	7.6	40.3	52,778	14.7	9.7	27,257	-6.2
■ Warrants	527,125	24.8	14.8	143,822	35.1	26.5	3,665	-7.6
■ Factor Certificates	266,484	66.7	7.5	52,798	34.7	9.7	5,047	23.8
■ Knock-Out Warrants	1,333,867	84.4	37.4	292,684	38.5	54.0	4,557	33.1
Leverage products	2,127,475	62.9	59.7	489,304	37.1	90.3	4,348	18.9
Total	3,566,034	34.9	100.0	542,082	34.5	100.0	6,578	0.3

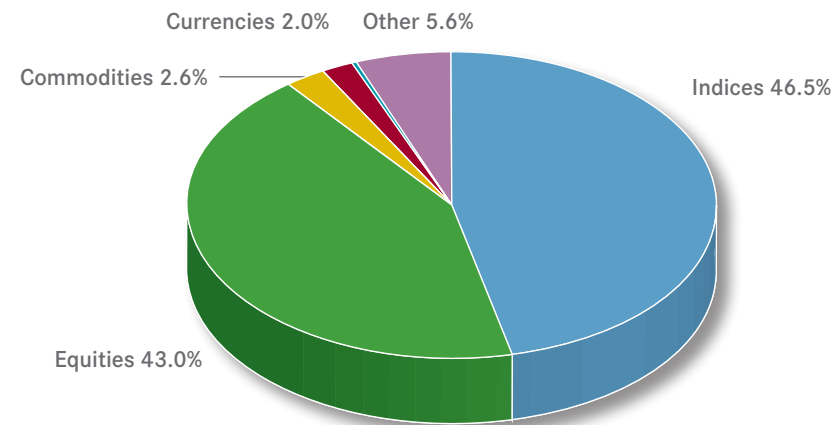
Share in total volume



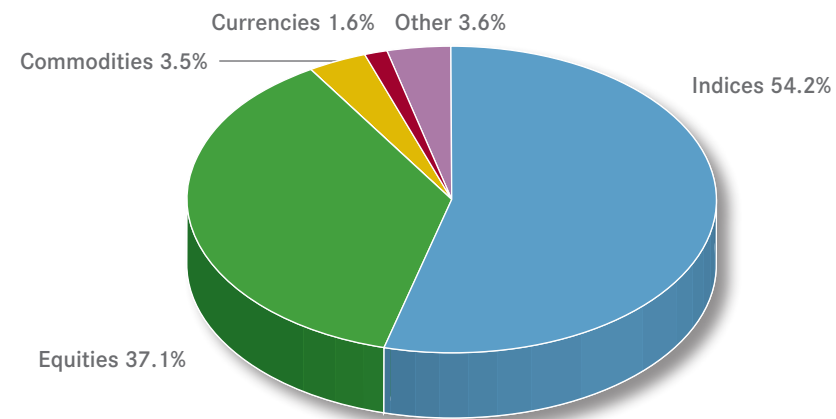
Turnover by underlying May 2019

Underlying	Volume	Change in comparison with previous month	Share
	in T €	in %	in %
Investment products			
Indices	669,496	10.7%	46.5%
Equities	618,216	-0.3%	43.0%
Commodities	37,837	47.7%	2.6%
Currencies	28,695	221.1%	2.0%
Interest rates	3,140	-46.0%	0.2%
Investment funds	702	-42.5%	0.0%
Other	80,473	15.1%	5.6%
Investment products total	1,438,559	7.6%	100.0%
Leverage products			
Indices	1,153,083	116.5%	54.2%
Equities	789,455	25.2%	37.1%
Commodities	73,799	2.7%	3.5%
Currencies	33,643	15.5%	1.6%
Interest rates	0	0%	0.0%
Investment funds	0	0%	0.0%
Other	77,495	87.0%	3.6%
Leverage products total	2,127,475	62.9%	100.0%
Total	3,566,034	34.9%	

Investment products by underlying



Leverage products by underlying



Number of new issues May 2019

Month	Investment products									Leverage products			Total
	With capital protection		Without capital protection							Without knock-out	With knock-out		
	Uncapped Capital Protection Certificates	Capital Protection Products with Coupon	Credit Linked Notes	Reverse Convertibles	Discount Certificates	Express Certificates	Bonus Certificates	Tracker Certificates	Outperformance and Capped Outperformance Certificates	Warrants	Factor Certificates	Knock-Out Warrants	
January 2019	8		22	13,524	20,785	391	31,845	95	309	111,414	2,149	264,824	445,366
February 2019	12		42	8,798	15,661	436	21,070	95	34	72,069	2,772	223,545	344,534
March 2019	13	1	18	11,471	19,767	460	25,817	114	1	88,071	2,217	221,277	369,227
April 2019	13	2	33	8,657	19,727	424	36,051	122	226	74,866	1,573	212,561	354,255
May 2019	13		50	12,160	18,732	517	28,888	213	7	80,354	3,244	252,341	396,519
1/19 - 5/19	59	3	165	54,610	94,672	2,228	143,671	639	577	426,774	11,955	1,174,548	1,909,901
1/19 - 5/19	62		296,562							438,729		1,174,548	1,909,901
1/19 - 5/19			296,624							1,613,277			1,909,901

Total number of products May 2019

Month	Investment products									Leverage products			Total
	With capital protection		Without capital protection							Without knock-out		With knock-out	
	Uncapped Capital Protection Certificates	Capital Protection Products with Coupon	Credit Linked Notes	Reverse Convertibles	Discount Certificates	Express Certificates	Bonus Certificates	Tracker Certificates	Outperformance and Capped Outperformance Certificates	Warrants	Factor Certificates	Knock-Out Warrants	
May 2018	1,094	38	1,532	118,424	179,351	6,418	223,621	10,305	1,109	622,836	15,374	517,262	1,697,364
June 2018	1,088	38	1,548	105,732	173,421	6,519	197,763	10,319	883	602,348	16,355	493,419	1,609,433
July 2018	1,079	38	1,549	109,883	179,149	6,754	204,104	10,335	801	644,308	16,456	500,248	1,674,704
August 2018	1,075	37	1,579	112,534	203,466	7,036	213,767	10,378	969	682,584	17,704	516,883	1,768,012
September 2018	1,072	37	1,587	105,265	188,587	7,178	200,534	10,423	866	633,788	19,113	498,177	1,666,627
October 2018	1,065	36	1,565	111,597	204,209	7,523	208,927	10,370	782	659,057	21,561	517,095	1,743,787
November 2018	1,055	36	1,606	112,867	216,750	7,864	221,010	10,413	699	694,875	24,102	536,246	1,827,523
December 2018	1,047	35	1,624	102,783	205,025	8,147	200,353	10,456	603	634,932	25,473	496,737	1,687,215
January 2019	1,038	35	1,613	109,128	217,048	8,448	205,822	10,468	788	670,149	27,407	530,707	1,782,651
February 2019	1,034	34	1,654	113,378	220,940	8,747	203,208	10,522	744	673,256	29,185	549,680	1,812,382
March 2019	1,027	34	1,668	108,282	210,793	9,000	201,443	10,597	698	650,360	31,012	537,442	1,762,356
April 2019	1,027	35	1,646	113,856	219,750	9,088	222,847	10,648	886	675,083	32,078	568,384	1,855,328
May 2019	1,024	33	1,696	120,007	228,148	9,406	229,858	10,813	842	687,705	33,918	571,314	1,894,764
May 2019	1,057						600,770			687,705	33,918	571,314	1,894,764
							601,827				1,292,937		1,894,764

The statistics include the turnover in derivatives at the stock exchanges in Stuttgart (EUWAX) and Frankfurt (Börse Frankfurt Zertifikate). The turnover figures are taken from Xetra and XONTRO (Xontro Order). The number of customer orders executed was integrated into the EUWAX statistics. The statistics cover all orders entered into the system by customers (not issuers or market makers) and executed by price determination. Issuers' market making activities (provision of liquidity for own securities) are not taken into account. Orders routed via an order flow provider offering an intermediary service are only counted once. Each partial execution of an order counts as an order. Later corrections made in stock exchange systems (e.g. a cancellation following a mistrade) are not taken into account. The securities are allocated using securities master data from WM Gruppe (Wertpapier-Mittelungen), the German numbering agent and provider of securities information, as well as the securities master data from boerse-stuttgart AG. This allows the best possible classification of the turnover data by stock exchange, product group and issuer. From January 2010, the derivatives are classified according to the product classification developed by Deutscher Derivate Verband (DDV).

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