

Stock Exchange Turnover

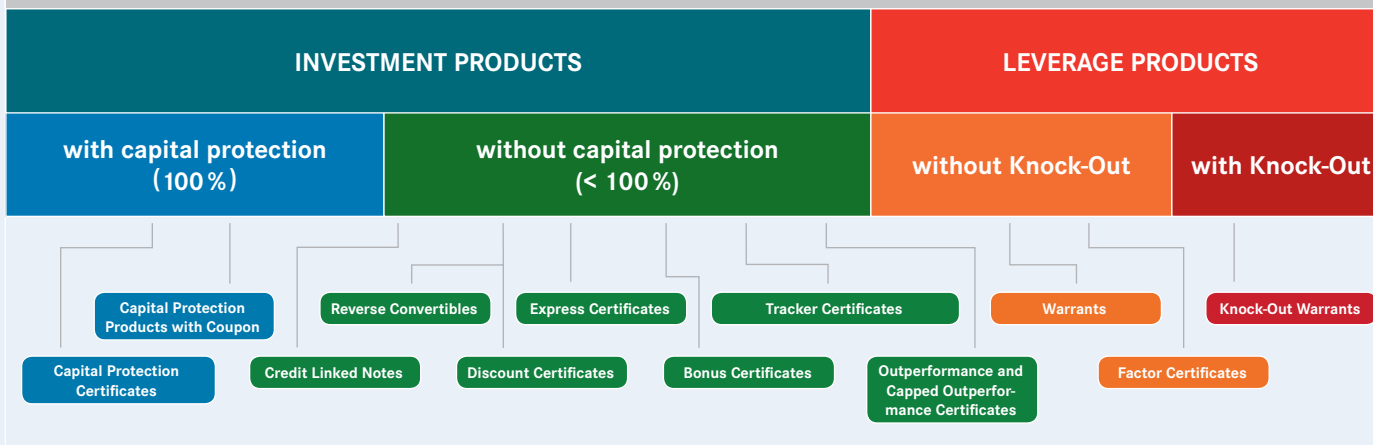
in Derivatives



Structured products market sees growth in turnover

Sharp increase in Discount Certificates and Bonus Securities

STRUCTURED SECURITIES



DDV Classification System

CONTENTS

Year Overview Stock Exchange Turnover	4
Turnover volume by stock exchange	5
Number of customer orders by stock exchange	5
Turnover by product category	6
Investment products by underlying	7
Leverage products by underlying	7
Number of new issues	8
Total number of products	9
Statistics methodology	9

May | 2018

- The exchanges in Stuttgart and Frankfurt achieved turnover of EUR 3.2 billion in investment and leverage products in May.
- Exchange-based turnover in investment products went up by 32.8 percent and outperformed the overall market. This category made up 47.3 percent of the total trading turnover.
- Turnover in Discount Certificates rocketed by 44.1 percent and stood at EUR 563.8 million.
- Investment products with indices as an underlying saw turnover growth of 39.2 percent to EUR 704.3 million.

Structured products market sees growth in turnover

Sharp increase in Discount Certificates and Bonus Securities

Developments on the capital markets prompted an increase in trading in structured products on the exchanges in Stuttgart and Frankfurt in May. Exchange turnover in structured and leverage products totalled EUR 3.2 billion. The total number of orders executed stood at 435,195, while the average order size was EUR 7,313.

A trading volume of EUR 1.5 billion was generated with investment products in May. It made up 47.3 percent of the total transaction volume. The average order size was EUR 28,706.

Turnover in leverage products totalled EUR 1.7 billion in the period under review and accounted for 52.7 percent of the total turnover. The average order size was EUR 4,380.

New issues

Banks issued 52,756 new investment products and 309,146 new leverage products at the end of May. In total, 541,892 investment products and 1,155,472 leverage products were available at the exchanges in Stuttgart and Frankfurt.

Exchange turnover by product category

Investment products

Almost all product categories saw a sharp increase in turnover activity. In particular, Discount Certificates und Bonus Securities recorded a significant rise in absolute terms. Turnover in **Discount Certificates** rose to EUR 563.8 million in May, while turnover in **Bonus Certificates** stood at EUR 511.2 million. **Express Certificates** saw brisk trading as well, whereas **Credit Linked Notes** fell to EUR 9.1 million in turnover. The exchange-based turnover for Uncapped Capital Protection Products offering full capital protection stood at EUR 19.6 million in total.

Leverage products

All product categories recorded a significant increase in turnover. **Warrants** saw turnover growth of EUR 428.1 million. Trading activity in **Knock-Out Warrants** stood at EUR 975.3 million, and at EUR 272.9 million in **Factor Certificates**.

Exchange turnover by underlying

Investment products

Trading in products with **indices as an underlying** rose to EUR 704.3 million in May. Therefore indices were the most popular underlying among investment products, accounting for a 46.8 percent share. Turnover in products with **equities as an underlying** also rose to EUR 678.8 million. Following a slight upsurge in the previous month, turnover in products with **commodities as an underlying** went up to EUR 10.9 million. Turnover in investment products with **currencies as an underlying** rose to EUR 14.0 million, and turnover in investments products with **interest rates as an underlying** decreased markedly. ▶▶

Leverage products

The picture was mixed when it came to exchange-based turnover by underlying. While products with **indices as an underlying** climbed up to 51.0 percent, the market share of products with **equities as an underlying** dropped to 37.4 percent. After the losses recorded in the previous month, **commodities as an underlying** fell again and stood at EUR 34.3 million. The trading volume of **leverage products based on currencies** saw a substantial increase.

Exchange-based turnover

The exchange in Stuttgart recorded a turnover volume of EUR 2.1 billion in May. Its market share of the total turnover amounted to 66.1 percent. Frankfurt's exchange generated a trading volume of EUR 1.1 billion. The figure accounted for 33.9 percent of the total exchange-based turnover. 41.7 percent of all customer orders were executed in Frankfurt and 58.3 percent in Stuttgart. ■



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, Deka-Bank, Deutsche Bank, DZ BANK, Goldman Sachs, Helaba, HSBC Trinkaus, HypoVereinsbank, LBBW, Société Générale, UBS and Vontobel. Furthermore, the Association's work is supported by sixteen 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.

www.derivateverband.de

Office Berlin, Pariser Platz 3, 10117 Berlin, Germany

Office Frankfurt a.M., Feldbergstr. 38, 60323 Frankfurt a.M., Germany

Your contact:

Alexander Heftrich, Media Relations Officer

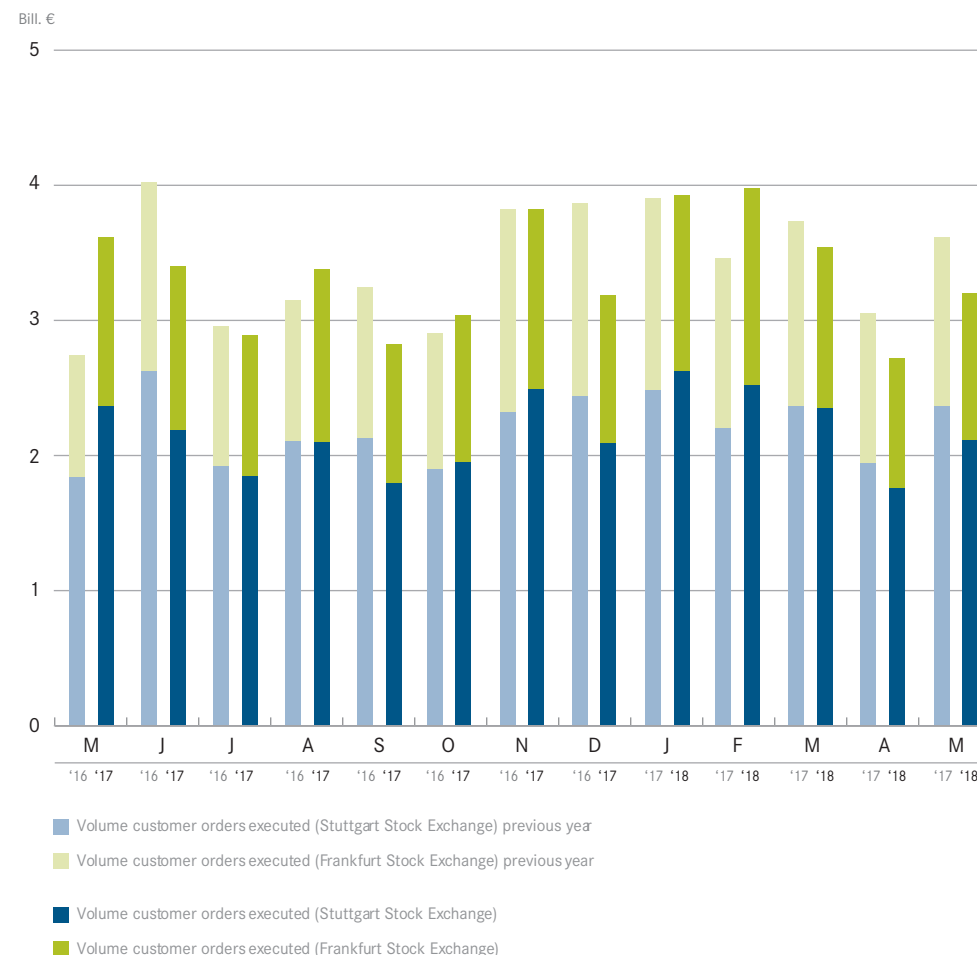
phone: +49 (0)69 244 33 03 70, mobile phone: +49 (0)160 805 30 34

heftrich@derivateverband.de

Under the heading Presse (Media) our website www.derivateverband.de provides not only our latest media releases but also audio and video recordings for reporting (presently only available on the German website).

Year Overview Stock Exchange Turnover May 2018

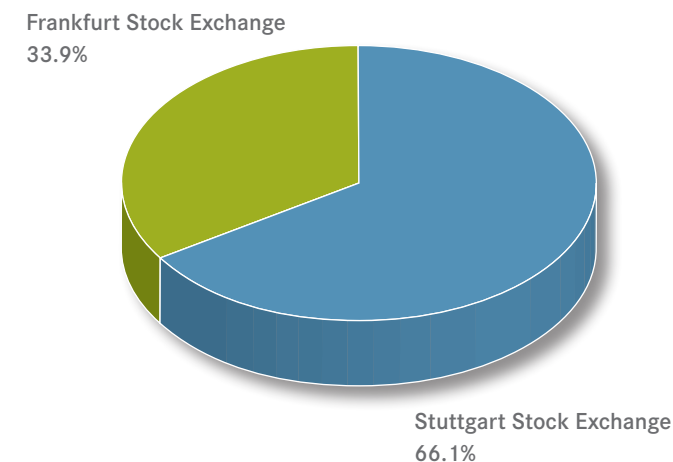
Month	Total		Stuttgart Stock Exchange		Frankfurt Stock Exchange	
	in T€	Number of orders	in T€	Number of orders	in T€	Number of orders
May 2017	3,640,768	446,440	2,376,169	244,843	1,264,600	201,597
June 2017	3,421,454	453,382	2,196,531	243,120	1,224,923	210,262
July 2017	2,911,359	424,463	1,852,962	232,910	1,058,398	191,553
August 2017	3,361,404	485,230	2,085,003	264,830	1,276,401	220,400
September 2017	2,806,304	420,047	1,786,501	222,331	1,019,803	197,716
October 2017	3,013,092	444,144	1,936,767	239,074	1,076,324	205,070
November 2017	3,810,208	578,559	2,476,476	314,925	1,333,731	263,634
December 2017	3,178,408	443,457	2,083,628	247,558	1,094,780	195,899
January 2018	3,925,542	576,336	2,623,866	319,033	1,301,677	257,303
February 2018	3,978,912	606,726	2,519,290	330,209	1,459,622	276,517
March 2018	3,529,187	579,196	2,337,247	331,649	1,191,940	247,547
April 2018	2,699,781	419,262	1,739,813	242,480	959,967	176,782
May 2018	3,182,457	435,195	2,103,841	253,752	1,078,616	181,443



Turnover volume by stock exchange May 2018

	Stuttgart Stock Exchange		Frankfurt Stock Exchange		Total	
	Volume	Share	Volume	Share	Volume	Share
Investment products with capital protection	10,886	0.5%	9,028	0.8%	19,914	0.6%
Investment products without capital protection	963,285	45.8%	522,937	48.5%	1,486,222	46.7%
Investment products total	974,171	46.3%	531,966	49.3%	1,506,136	47.3%
Leverage products without knock-out	631,637	30.0%	343,668	31.9%	975,306	30.6%
Leverage products with knock-out	498,033	23.7%	202,982	18.8%	701,015	22.0%
Leverage products total	1,129,670	53.7%	546,650	50.7%	1,676,320	52.7%
Total	2,103,841	100.0%	1,078,616	100.0%	3,182,457	100.0%

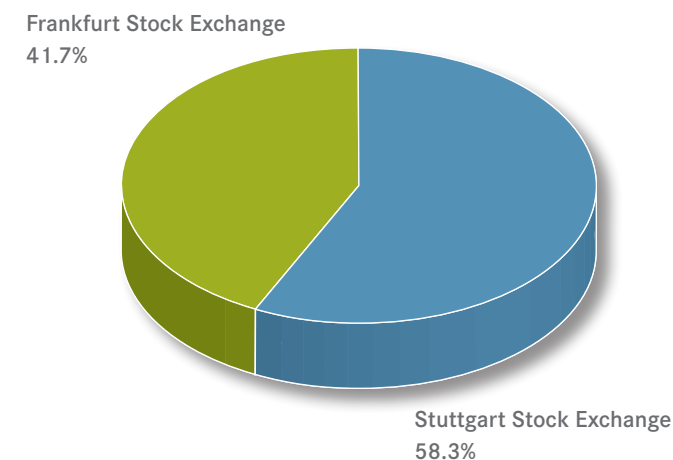
Turnover volume by stock exchange as a percentage



Number of customer orders by stock exchange May 2018

	Stuttgart Stock Exchange		Frankfurt Stock Exchange		Total	
	Number	Share	Number	Share	Number	Share
Investment products with capital protection	661	0.3%	490	0.3%	1,151	0.3%
Investment products without capital protection	34,697	13.7%	16,619	9.2%	51,316	11.8%
Investment products total	35,358	13.9%	17,109	9.4%	52,467	12.1%
Leverage products without knock-out	120,424	47.5%	106,261	58.6%	226,685	52.1%
Leverage products with knock-out	97,970	38.6%	58,073	32.0%	156,043	35.9%
Leverage products total	218,394	86.1%	164,334	90.6%	382,728	87.9%
Total	253,752	100.0%	181,443	100.0%	435,195	100.0%

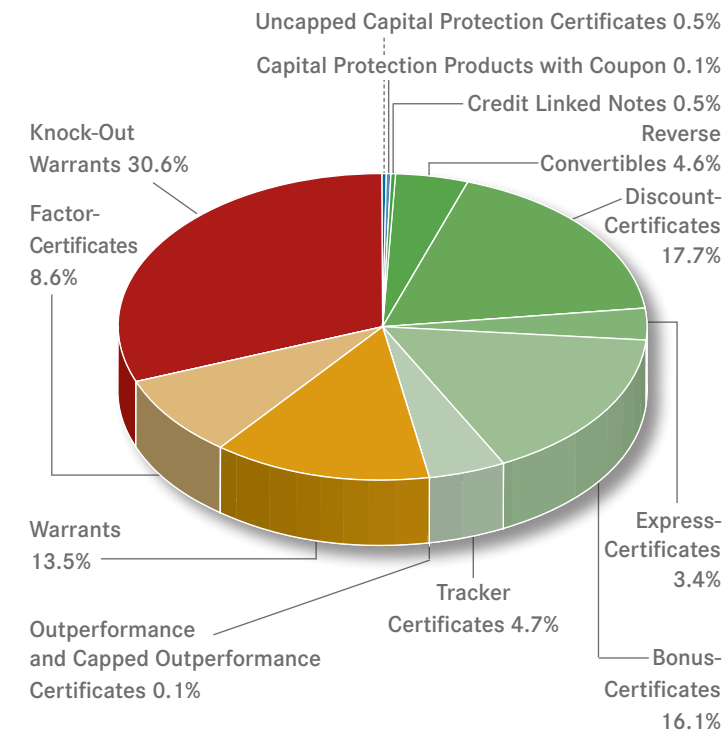
Number of customer orders by stock exchange as a percentage



Turnover by product category May 2018

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	Share	Share
	in T €	in %	in %		#	in %	in %	in T €
■ Uncapped Capital Protection Certificates	17,024	-3.4	0.5	960	-0.4	0.2	17,733	-3.0
■ Capital Protection Products with Coupon	2,614	22.6	0.1	191	-24.2	0.0	15,132	65.0
■ Credit Linked Notes	9,056	-9.1	0.3	373	-8.6	0.1	24,279	-0.6
■ Reverse Convertibles	144,823	29.1	4.6	6,875	33.3	1.6	21,065	-3.2
■ Discount Certificates	563,849	44.1	17.7	14,958	36.8	3.4	37,695	5.3
■ Express Certificates	107,313	43.1	3.4	4,787	21.2	1.1	22,418	18.0
■ Bonus Certificates	511,230	31.1	16.1	12,148	24.0	2.8	42,083	5.8
■ Tracker Certificates	148,613	9.6	4.7	12,116	10.6	2.8	12,243	-0.9
■ Outperformance and Capped Outperformance Certificates	1,614	97.8	0.1	59	43.9	0.0	27,354	37.5
Investment products	1,506,136	32.8	47.3	52,467	23.6	12.1	28,706	7.4
■ Warrants	428,140	2.4	13.5	110,783	-5.9	25.5	3,865	8.8
■ Factor Certificates	272,875	24.8	8.6	45,260	8.9	10.4	6,029	14.5
■ Knock-Out Warrants	975,306	5.0	30.6	226,685	4.2	52.1	4,302	0.8
Leverage products	1,676,320	7.1	52.7	382,728	1.6	87.9	4,380	5.4
Total	3,182,457	17.9	100.0	435,195	3.8	100.0	7,313	13.6

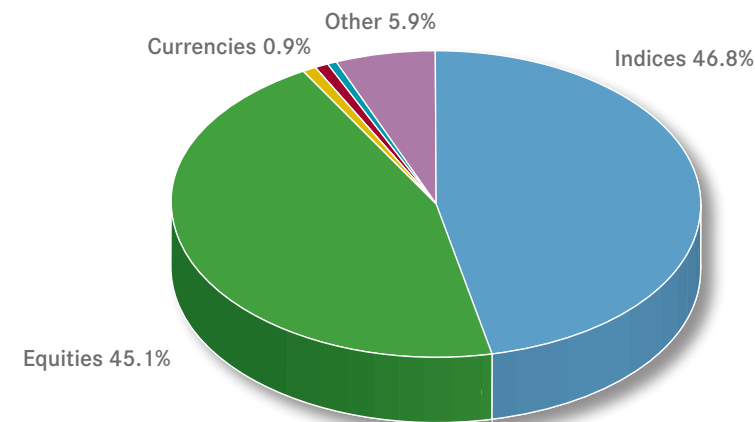
Share in total volume



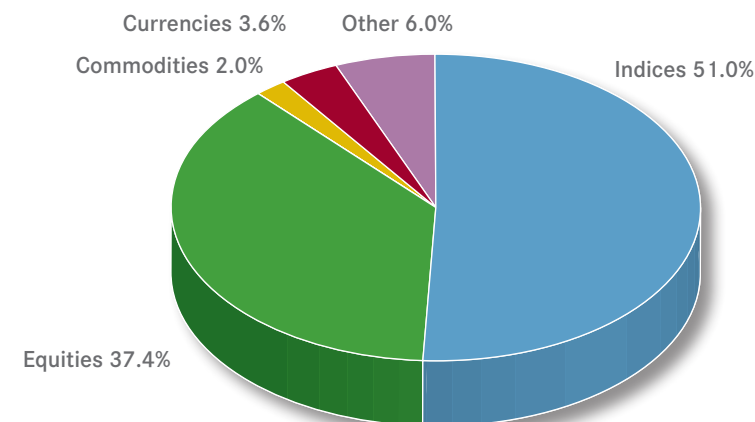
Turnover by underlying May 2018

Underlying	Volume	Change in comparison with previous month	Share
	in T €	in %	in %
Investment products			
Indices	704,276	39.2%	46.8%
Equities	678,840	29.1%	45.1%
Commodities	10,906	44.9%	0.7%
Currencies	14,037	2.7%	0.9%
Interest rates	8,278	-11.0%	0.5%
Investment funds	506	-38.0%	0.0%
Other	89,293	25.2%	5.9%
Investment products total	1,506,136	32.8%	100.0%
Leverage products			
Indices	854,517	12.2%	51.0%
Equities	626,378	-1.4%	37.4%
Commodities	34,321	-23.9%	2.0%
Currencies	60,826	82.3%	3.6%
Interest rates	67	19.7%	0.0%
Investment funds	0	0%	0.0%
Other	100,212	11.2%	6.0%
Leverage products total	1,676,320	7.1%	100.0%
Total	3,182,457	17.9%	

Investment products by underlying



Investment products by underlying



Number of new issues May 2018

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 2018	6		21	10,245	16,415	369	23,889	130	4	63,352	296	224,655	339,382	
February 2018	9		19	12,801	17,261	340	29,717	33	2	68,571	358	253,626	382,737	
March 2018	9	1	31	9,548	13,166	459	23,355	91	2	67,292	1,162	242,083	357,199	
April 2018	18		8	9,181	14,810	411	28,732	190		73,037	919	202,897	330,203	
May 2018	15	2	68	10,362	22,261	417	19,527	103	1	57,239	676	251,231	361,902	
1/18 - 5/18	57	3	147	52,137	83,913	1,996	125,220	547	9	329,491	3,411	1,174,492	1,771,423	
1/18 - 5/18	60		263,969									332,902	1,174,492	1,771,423
1/18 - 5/18			264,029									1,507,394		1,771,423

Total number of products May 2018

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 2017	1,318	129	1,427	123,720	190,046	5,607	252,882	9,153	1,582	551,388	9,583	396,656	1,543,491
June 2017	1,285	118	1,449	118,897	172,643	5,483	228,607	9,204	1,341	525,563	10,962	383,370	1,458,922
July 2017	1,243	112	1,424	127,838	183,595	5,526	251,188	9,500	1,337	557,121	10,908	404,243	1,554,035
August 2017	1,195	108	1,444	129,322	183,128	5,492	258,542	9,600	1,351	592,107	10,904	430,955	1,624,148
September 2017	1,179	100	1,456	123,411	168,780	5,520	231,174	9,906	1,115	571,071	11,107	435,983	1,560,802
October 2017	1,167	94	1,421	120,849	169,748	5,538	241,717	9,981	1,035	628,012	11,186	455,640	1,646,388
November 2017	1,136	92	1,466	121,683	171,478	5,537	233,565	10,017	1,037	651,209	12,063	474,974	1,684,257
December 2017	1,105	86	1,491	114,254	157,301	5,559	208,924	10,083	1,393	613,239	12,562	454,492	1,580,489
January 2018	1,080	82	1,491	119,423	164,173	5,591	215,058	10,139	1,396	620,671	12,817	491,634	1,643,555
February 2018	1,107	42	1,509	124,874	172,299	5,656	227,170	10,118	1,331	628,698	13,044	506,743	1,692,591
March 2018	1,095	37	1,530	115,676	162,686	5,916	214,579	10,137	1,216	603,034	13,879	482,254	1,612,039
April 2018	1,098	37	1,466	119,874	169,138	6,167	228,730	10,265	1,108	621,157	14,744	495,520	1,669,304
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
May 2018	1,132		540,760							622,836	15,374	517,262	1,697,364
			541,892							1,155,472			1,697,364

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).

© Deutscher Derivate Verband (DDV) 2018. This document may only be copied, forwarded or distributed with the express written permission of DDV. Although the data in this document originate from sources deemed to be reliable, no responsibility can be taken for their correctness, completeness or relevance. All the figures for volumes and market shares are based on freely available data. They are provided for information purposes only, and should be taken only as a guide. This document and the information contained in it may only be distributed or published in states in which the relevant statutory provisions permit it. The direct or indirect distribution of this document in the United States, the United Kingdom, Canada or Japan is prohibited, as is its forwarding to US residents.