

Stock Exchange Turnover

in Derivatives



Exchange turnover stood at EUR 3.0 billion in November

Stronger demand for Credit Linked Notes

STRUCTURED SECURITIES



DDV Classification System

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November | 2018

- The exchanges in Stuttgart and Frankfurt achieved an aggregate structured products turnover of EUR 3.0 billion in in November.
- Investors had a total of 572,300 investment products and 1,255,233 leverage products to choose from at the end of November.
- Turnover in Credit Linked Notes bucked the general trend, went up by 51.3 percent and stood at EUR 14.2 million.
- Turnover from trading in Leverage Products with currencies as an underlying rose to EUR 28.0 million in November.

Exchange turnover stood at EUR 3.0 billion in November

Stronger demand for Credit Linked Notes

Trading in structured securities was more restrained on the exchanges in Stuttgart and Frankfurt in November. Exchange turnover in structured products and leverage products totalled EUR 3.0 billion. This corresponded to a month-on-month decline of 27.8 percent. The number of executed customer orders fell by 21.3 percent to 513,171. The average order size was EUR 5,751 – down 8.3 percent on one month earlier.

The trading volume for investment products came in at EUR 1.2 billion in the month under review. This corresponded to a 40.9 percent share of the aggregate volume. The average order size was EUR 30,841.

Turnover in leverage products stood at EUR 1.7 billion in November, representing 59.1 percent of the total turnover. The average order size was EUR 3,677.

New issues

Banks issued 59,503 new investment products and 389,784 leverage products in the month of November. As a result, a

total of 572,300 investment products and 1,255,223 leverage products were available at the exchanges in Stuttgart and Frankfurt.

Exchange turnover by product category

Investment products

Turnover went down in almost all product categories. In absolute terms, the most substantial losses were seen in **Bonus Certificates** and **Discount Securities**. Turnover in Bonus Certificates dropped to EUR 390.3 million in November, while trading in Discount Securities came in at EUR 477.1 million. Exchange turnover in Capital Protection Products offering full protection also fell to a total of EUR 17.3 million. **Credit Linked Notes** bucked the general trend since turnover in this category grew significantly and stood at EUR 14.2 million, whilst turnover in **Tracker Certificates** decreased to EUR 137.2 million.

Leverage products

Following a rise in turnover in the previous month, negative signs prevailed for all product categories in November.

Turnover in **Warrants** fell to EUR 455.8 million. Trading in **Knock-Out Warrants** was just below EUR 1.1 billion, whereas a figure of EUR 220.6 million was recorded for **Factor Certificates**.

Exchange turnover by underlying

Investment products

Trading activity in products with **indices as an underlying** and **equities as an underlying** shrunk in November. Products based on these categories of underlying assets, however, accounted for a share in total turnover of 91.7 percent. Indices were therefore the most popular underlying among investment products, accounting for a 48.2 percent share. Investment products with **currencies as an underlying** experienced a substantial increase in turnover, whilst the demand for **commodities as an underlying** went down again. Together, they held a share of just 0.4 percent of the market. Investment products with **investment funds as an underlying** or **interest rates as an underlying** accounted for an aggregate share of 1.1 percent in November.



Leverage products

Exchange turnover in the dominant categories of underlyings showed a downward trend in November. Trading in products with **indices as an underlying** declined to EUR 936.3 million and the turnover of products with **equities as an underlying** fell to EUR 615.6 million. However, these products still accounted for 89.0 percent of the total turnover figure. The turnover in products with **commodities as an underlying** and products with **currencies as an underlying** presented a mixed picture in the reporting month. Together, their market share was 3.7 percent.

Exchange turnover

Stuttgart Exchange generated a turnover volume of EUR 2.0 billion and had a market share of 67.0 percent of the total turnover in November. Frankfurt Exchange recorded a trading volume of EUR 1.0 billion. It accounted for 33.0 percent of the aggregate exchange turnover and 43.0 percent of all customer orders placed. 57.0 percent of customer orders were handled by Stuttgart Exchange. ■



Vontobel

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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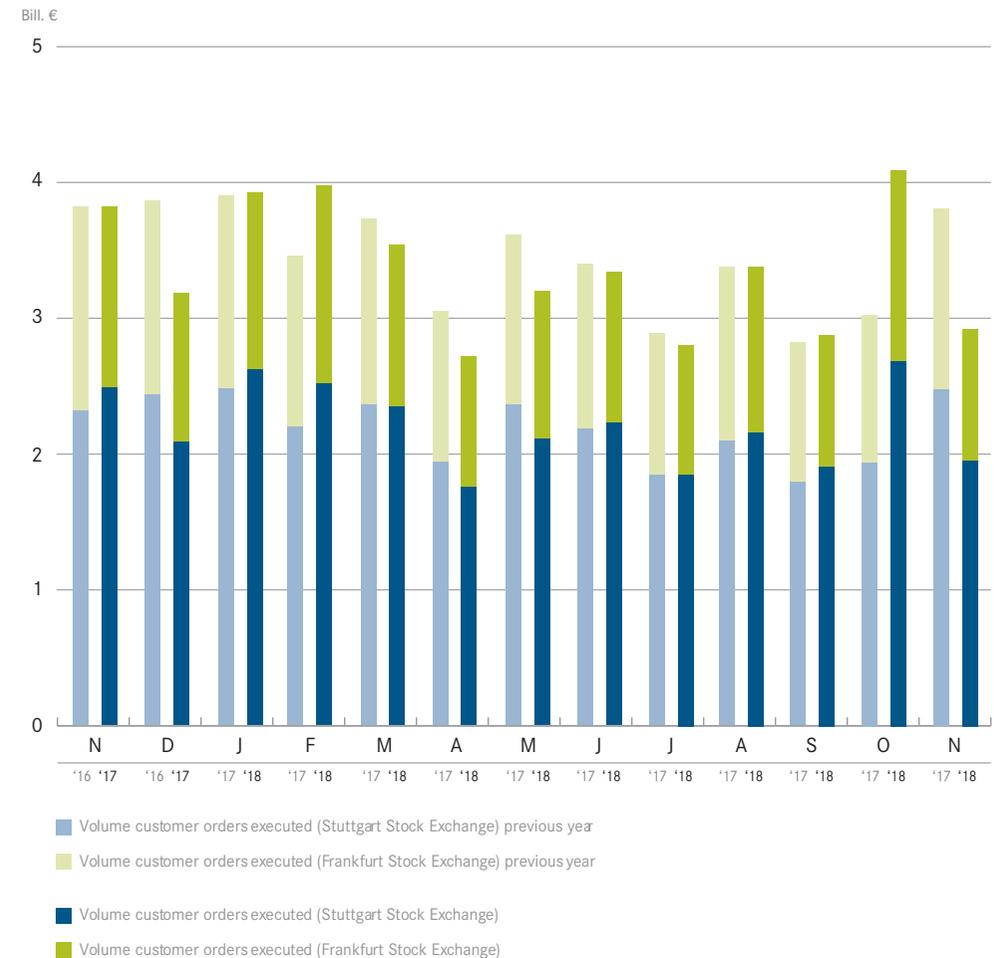
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Year Overview Stock Exchange Turnover November 2018

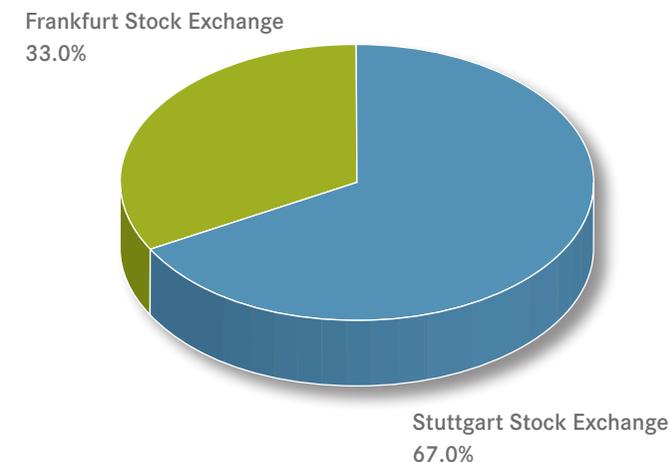
Month	Total		Stuttgart Stock Exchange		Frankfurt Stock Exchange	
	in T€	Number of orders	in T€	Number of orders	in T€	Number of orders
November 2017	3,810,208	578,559	2,476,476	314,925	1,333,731	263,634
December 2017	3,178,408	443,457	2,083,628	247,558	1,094,780	195,899
January 2018	3,925,542	576,336	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
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



Turnover volume by stock exchange November 2018

	Stuttgart Stock Exchange		Frankfurt Stock Exchange		Total	
	Volume	Share	Volume	Share	Volume	Share
Investment products with capital protection	8,784	0.4%	8,460	0.9%	17,244	0.6%
Investment products without capital protection	842,996	42.7%	347,938	35.7%	1,190,934	40.4%
Investment products total	851,780	43.1%	356,398	36.6%	1,208,178	40.9%
Leverage products without knock-out	675,475	34.2%	391,147	40.1%	1,066,622	36.1%
Leverage products with knock-out	449,275	22.7%	227,122	23.3%	676,397	22.9%
Leverage products total	1,124,750	56.9%	618,269	63.4%	1,743,018	59.1%
Total	1,976,530	100.0%	974,666	100.0%	2,951,197	100.0%

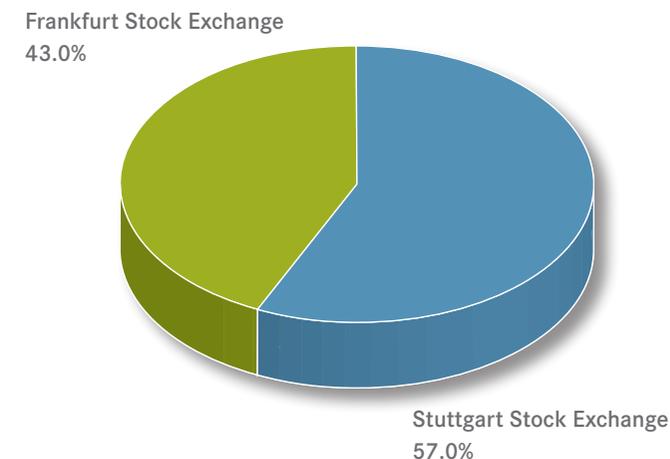
Turnover volume by stock exchange as a percentage



Number of customer orders by stock exchange November 2018

	Börse Stuttgart		Börse Frankfurt		Gesamt	
	Zahl	Anteil	Zahl	Anteil	Zahl	Anteil
Investment products with capital protection	542	0.2%	308	0.1%	850	0.2%
Investment products without capital protection	25,603	8.7%	12,722	5.8%	38,325	7.5%
Investment products total	26,145	8.9%	13,030	5.9%	39,175	7.6%
Leverage products without knock-out	149,354	51.0%	132,019	59.9%	281,373	54.8%
Leverage products with knock-out	117,228	40.0%	75,395	34.2%	192,623	37.5%
Leverage products total	266,582	91.1%	207,414	94.1%	473,996	92.4%
Total	292,727	100.0%	220,444	100.0%	513,171	100.0%

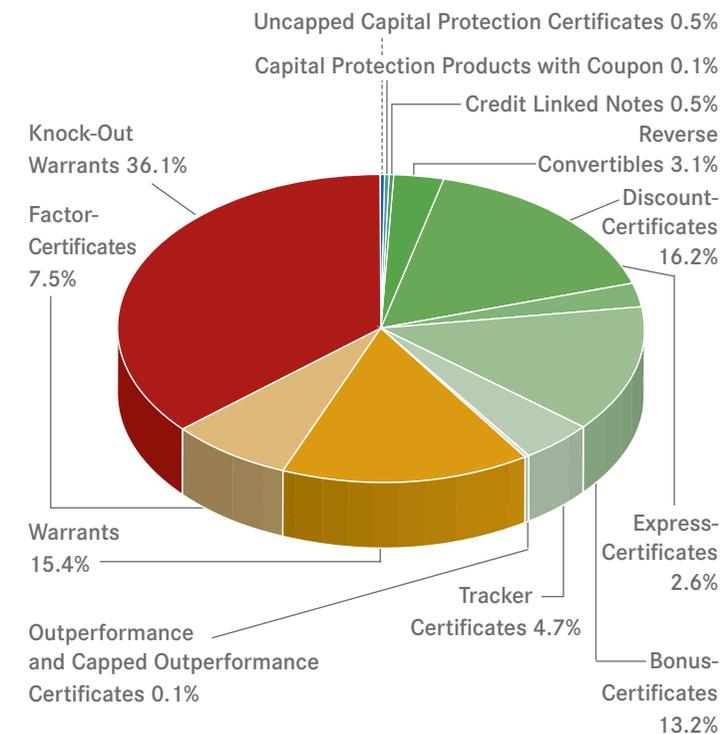
Number of customer orders by stock exchange as a percentage



Turnover by product category November 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	13,486	-10.1	0.5	776	-10.6	0.2	17,379	0.6
■ Capital Protection Products with Coupon	3,759	-3.1	0.1	74	-46.4	0.0	50,792	80.7
■ Credit Linked Notes	14,244	51.3	0.5	410	-8.7	0.1	34,741	65.6
■ Reverse Convertibles	91,145	-20.5	3.1	4,651	-16.2	0.9	19,597	-5.1
■ Discount Certificates	477,092	-16.7	16.2	9,238	-22.7	1.8	51,645	7.8
■ Express Certificates	77,449	-7.1	2.6	4,197	-10.0	0.8	18,453	3.2
■ Bonus Certificates	390,283	-42.0	13.2	10,554	-25.5	2.1	36,980	-22.1
■ Tracker Certificates	137,231	-13.5	4.7	9,242	-26.0	1.8	14,849	16.9
■ Outperformance and Capped Outperformance Certificates	3,489	80.4	0.1	33	-61.2	0.0	105,723	364.8
Investment products	1,208,178	-26.0	40.9	39,175	-22.2	7.6	30,841	-4.8
■ Warrants	455,755	-28.3	15.4	144,714	-24.9	28.2	3,149	-4.6
■ Factor Certificates	220,642	-28.8	7.5	47,909	-25.0	9.3	4,605	-5.1
■ Knock-Out Warrants	1,066,622	-29.3	36.1	281,373	-18.5	54.8	3,791	-13.3
Leverage products	1,743,018	-29.0	59.1	473,996	-21.2	92.4	3,677	-9.9
Total	2,951,197	-27.8	100.0	513,171	-21.3	100.0	5,751	-8.3

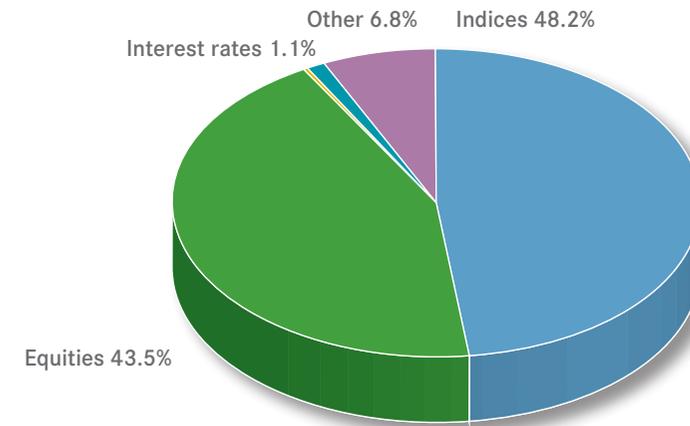
Share in total volume



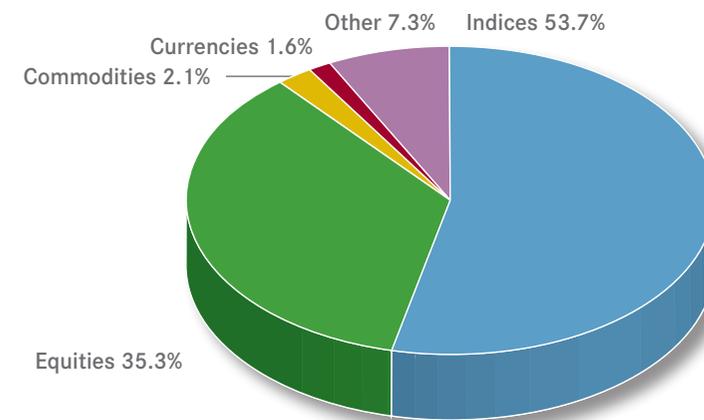
Turnover by underlying November 2018

Underlying	Volume	Change in comparison with previous month	Share
	in T €	in %	in %
Investment products			
Indices	582,319	-37.9%	48.2%
Equities	525,348	-2.5%	43.5%
Commodities	4,651	-13.0%	0.4%
Currencies	112	163.5%	0.0%
Interest rates	12,911	62.0%	1.1%
Investment funds	279	-18.5%	0.0%
Other	82,558	-41.7%	6.8%
Investment products total	1,208,178	-26.0%	100.0%
Leverage products			
Indices	936,261	-23.2%	53.7%
Equities	615,616	-26.3%	35.3%
Commodities	36,550	-24.5%	2.1%
Currencies	27,991	1.7%	1.6%
Interest rates	0	0%	0.0%
Investment funds	0	0%	0.0%
Other	126,601	-61.2%	7.3%
Leverage products total	1,743,018	-29.0%	100.0%
Total	2,951,197	-27.8%	

Investment products by underlying



Leverage products by underlying



Number of new issues November 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
June 2018	13		18	10,466	18,043	390	20,123	89		83,715	1,035	233,061	366,953
July 2018	12		23	8,610	13,518	471	19,090	87	1	90,763	129	213,089	345,793
August 2018	14		30	11,621	31,791	445	24,925	101	169	94,829	1,436	225,581	390,942
September 2018	10		13	10,853	12,430	336	26,595	101	41	64,510	2,723	188,453	306,065
October 2018	17		13	15,261	24,140	456	31,718	36	3	85,342	2,740	380,531	540,257
November 2018	17		41	6,773	22,261	431	29,890	90		86,170	2,854	300,760	449,287
1/18 - 11/18	140	3	285	115,721	205,998	4,525	277,343	1,051	223	834,614	14,328	2,662,908	4,117,139
1/18 - 11/18	143		605,146							848,942		2,662,908	4,117,139
			605,289							3,511,850		4,117,139	

Total number of products November 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	
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
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
November 2018	1,091		571,209							694,875	24,102	536,246	1,827,523
			572,300							1,255,223			1,827,523

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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