

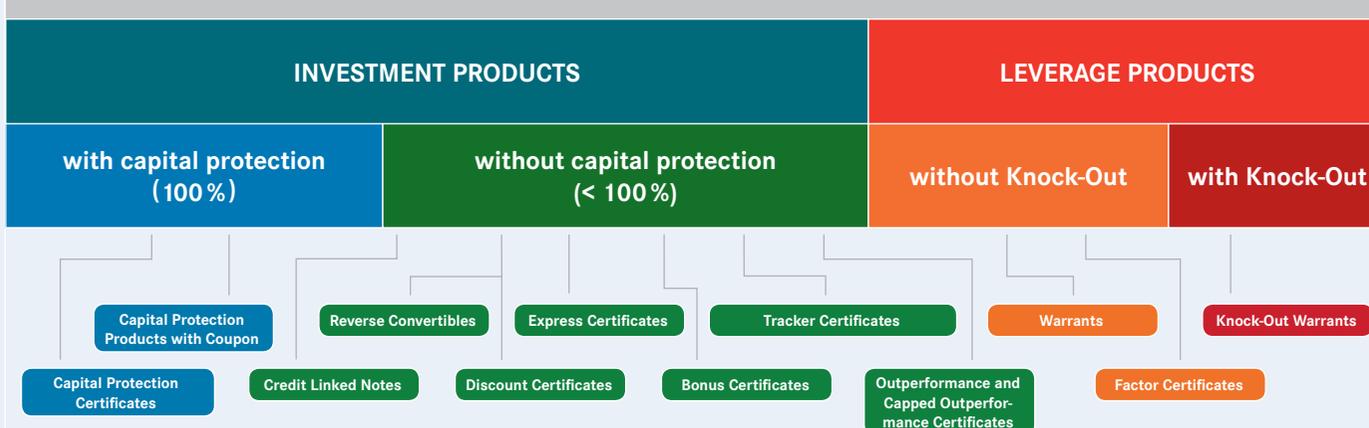
# Market Volume

in Derivatives

## Signs of upturn in early 2019

Particularly strong demand for Express and Discount Certificates

### STRUCTURED SECURITIES



### DDV Classification System

### CONTENTS

Market volume since January 2018	3
Market volume by product class	3
Market volume by product category	4
Change in the market volume by product category	4
Investment products by product category	4
Leverage products by product category	4
Market volume by underlying	5
Change in market volume by underlying	5
Investment products by underlying	5
Leverage products by underlying	5
Collection, validation and analysis methodology	6

## January | 2019

- In January, the total volume of the German structured products market rose to EUR 71.3 billion.
- Express Certificates experienced above-average growth of 8.4 percent, taking their volume to EUR 16.1 billion.
- The market volume of leverage products jumped by 20.0 percent to EUR 1.7 billion.
- Leverage products with equities as an underlying saw growth of 32.6 percent. The volume invested in them climbed to EUR 1.0 billion.

## Signs of upturn in early 2019

Particularly strong demand for Express and Discount Certificates

The outstanding volume of the German structured products market grew significantly in January. Extrapolating the figures to all issuers puts the total volume of the German structured products market at EUR 71.3 billion in January 2019. This corresponds to an increase of 4.2 percent or EUR 2.8 billion month on month. These trends are shown by the latest figures collected each month from 16 banks by the European Derivatives Group (EDG AG) on behalf of Deutscher Derivate Verband (DDV), the German Derivatives Association. The ratio of investment products to leverage products shifted slightly in favour of leverage products.

### Investment products by product category

The positive overall trend increased demand for almost all product categories, when compared with the previous month. Especially **Express** and **Discount Certificates** recorded above-average volume growth. The volume invested in Express Certificates climbed to EUR 16.1 billion as a result. There was also an upswing in demand for **Capital Protection Products offering full capital protection**. A total of EUR 25.4 billion was invested in these products in the month under review. **Credit Linked Notes** bucked the general trend and suffered losses.

### Leverage products by product category

The market volume of **leverage products** increased and stood at EUR 1.7 billion in January. There were rises in all product categories, with the strongest upsurge seen for **Knock-Out Warrants**.

### Investment products by underlying

Structured products with **interest rates as an underlying** remained the most popular category also in January. After gains in the previous month, the volume increased again slightly and stood at EUR 24.5 billion. Investment products with **indices as an underlying** followed in second place. The volume invested in them totalled EUR 19.4 billion. Investment products with **equities as an underlying** recorded growth, following the reduction in investor interest seen in the previous month. Investment products with **commodities as an underlying** recorded an increase to EUR 513.6 million, whereas investment products with **currencies as an underlying** suffered a decline and came in at EUR 32.3 million. The volume of investment products with **funds as an underlying** went up to EUR 845.8 million.

### Leverage products by underlying

Marked increases were seen in the main classes of leverage product in the reporting month. The market volume of leverage products with **equities as an underlying** grew to EUR 1.0 billion, while the volume invested in leverage products with **indices as an underlying** rose to EUR 469.1 million. The market volume of leverage products with **commodities as an underlying** went up to EUR 135.8 million, whereas leverage products with **currencies as an underlying** suffered a drop in demand. The volume invested in leverage products with **interest rates as an underlying** increased to EUR 16.2 million. ■



### 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.

[www.derivateverband.de](http://www.derivateverband.de)

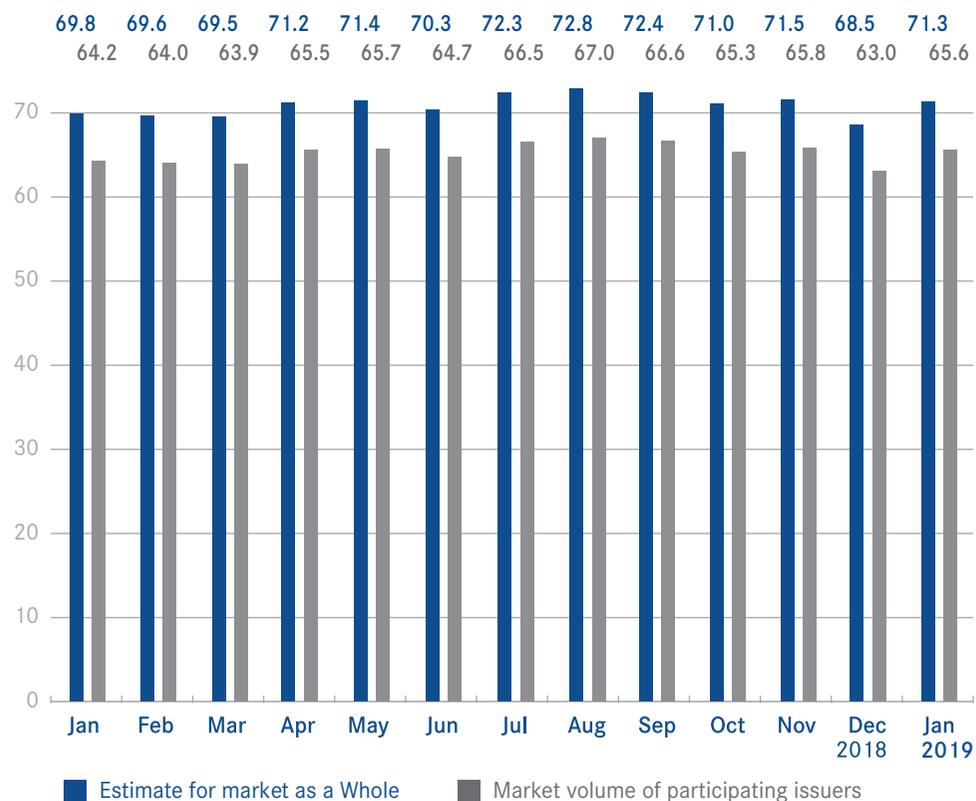
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## Market volume since January 2018



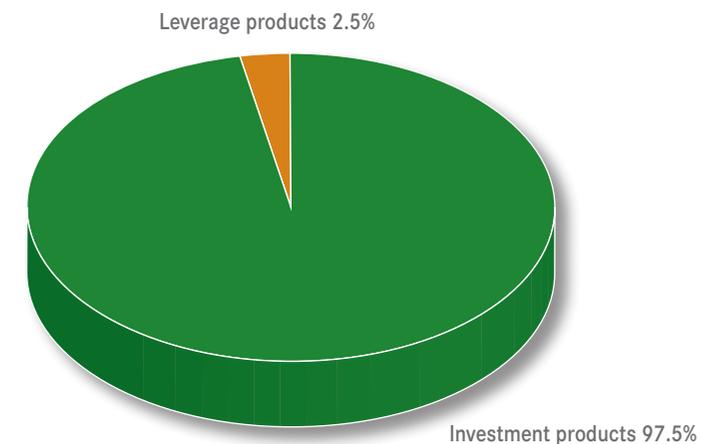
## Product classes

Market volume as at 31 January 2019

Product classes	Market volume	Share
	T€	%
Investment products with capital protection	25,391,963	39.7%
Investment products without capital protection	38,566,890	60.3%
<b>Total Investment products</b>	<b>63,958,853</b>	<b>100.0%</b>
Leverage products without Knock-Out	917,813	55.3%
Leverage products with Knock-Out	742,135	44.7%
<b>Total Leverage products</b>	<b>1,659,947</b>	<b>100.0%</b>
<b>Total Investment products</b>	<b>63,958,853</b>	<b>97.5%</b>
<b>Total Leverage products</b>	<b>1,659,947</b>	<b>2.5%</b>
<b>Total Derivatives</b>	<b>65,618,800</b>	<b>100.0%</b>

## Product classes

Market volume as at 31 January 2019

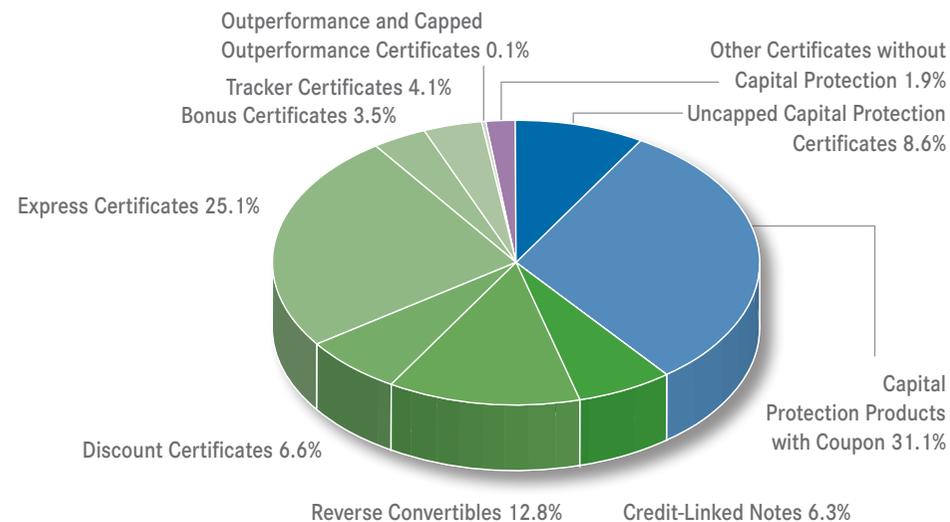


## Market volume by product category as at 31 January 2019

Product categories	Market volume		Market volume price-adjusted		Number of Products	
	T€	in %	T€	in %	#	in %
■ Uncapped Capital Protection Certificates	5,511,336	8.6%	5,480,636	8.8%	1,447	0.3%
■ Capital Protection Products with Coupon	19,880,627	31.1%	19,731,186	31.7%	3,966	0.8%
■ Credit-Linked Notes	4,006,288	6.3%	4,003,492	6.4%	2,462	0.5%
■ Reverse Convertibles	8,157,348	12.8%	7,804,624	12.6%	108,320	21.2%
■ Discount Certificates	4,211,157	6.6%	4,049,357	6.5%	189,129	37.0%
■ Express Certificates	16,085,057	25.1%	15,231,426	24.5%	14,678	2.9%
■ Bonus Certificates	2,219,307	3.5%	2,115,377	3.4%	188,001	36.7%
■ Tracker Certificates	2,607,747	4.1%	2,478,208	4.0%	1,298	0.3%
■ Outperformance and Capped Outperformance Certificates	58,581	0.1%	55,544	0.1%	991	0.2%
■ Other Certificates without Capital Protection	1,221,405	1.9%	1,200,548	1.9%	1,498	0.3%
<b>Investment products total</b>	<b>63,958,853</b>	<b>97.5%</b>	<b>62,150,399</b>	<b>97.5%</b>	<b>511,790</b>	<b>30.4%</b>
■ Warrants	632,558	38.1%	602,865	38.6%	634,563	54.2%
■ Factor Certificates	285,254	17.2%	295,555	18.9%	25,548	2.2%
■ Knock-Out Warrants	742,135	44.7%	665,240	42.5%	511,110	43.6%
<b>Leverage products total</b>	<b>1,659,947</b>	<b>2.5%</b>	<b>1,563,660</b>	<b>2.5%</b>	<b>1,171,221</b>	<b>69.6%</b>
<b>Total</b>	<b>65,618,800</b>	<b>100.0%</b>	<b>63,714,059</b>	<b>100.0%</b>	<b>1,683,011</b>	<b>100.0%</b>

## Investment products by product category

Market volume as at 31 January 2019

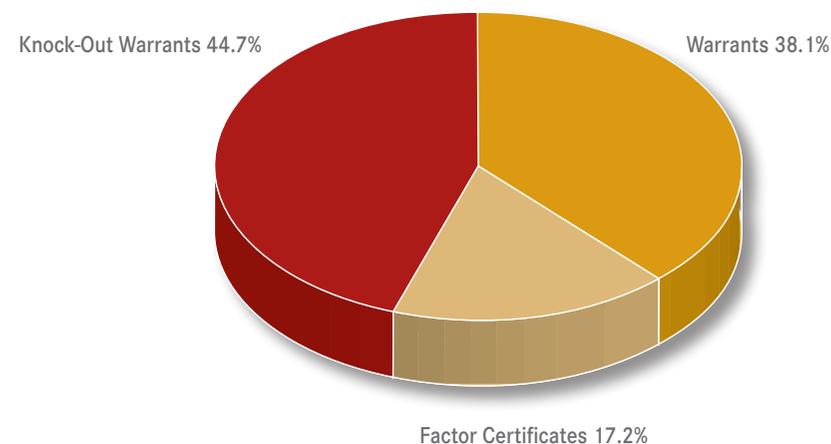


## Change in market volume by product category in comparison with previous month

Product categories	Change		Change price-adjusted		Price effect	
	T€	in %	T€	in %	T€	in %
■ Uncapped Capital Protection Certificates	115,746	2.1%	85,045	1.6%		0.6%
■ Capital Protection Products with Coupon	101,627	0.5%	-47,813	-0.2%		0.8%
■ Credit-Linked Notes	-105,677	-2.6%	-108,473	-2.6%		0.1%
■ Reverse Convertibles	347,700	4.5%	-5,025	-0.1%		4.5%
■ Discount Certificates	328,855	8.5%	167,055	4.3%		4.2%
■ Express Certificates	1,240,052	8.4%	386,422	2.6%		5.8%
■ Bonus Certificates	194,608	9.6%	90,678	4.5%		5.1%
■ Tracker Certificates	71,788	2.8%	-57,750	-2.3%		5.1%
■ Outperformance and Capped Outperformance Certificates	6,136	11.7%	3,098	5.9%		5.8%
■ Other Certificates without Capital Protection	75,389	6.6%	54,532	4.8%		1.8%
<b>Investment products total</b>	<b>2,376,223</b>	<b>3.9%</b>	<b>567,769</b>	<b>0.9%</b>		<b>2.9%</b>
■ Warrants	88,576	16.3%	58,882	10.8%		5.5%
■ Factor Certificates	40,379	16.5%	50,680	20.7%		-4.2%
■ Knock-Out Warrants	147,593	24.8%	70,699	11.9%		12.9%
<b>Leverage products total</b>	<b>276,549</b>	<b>20.0%</b>	<b>180,261</b>	<b>13.0%</b>		<b>7.0%</b>
<b>Total</b>	<b>2,652,772</b>	<b>4.2%</b>	<b>748,030</b>	<b>1.2%</b>		<b>3.0%</b>

## Leverage products by product category

Market volume as at 31 January 2019



## Market volume by underlying asset as at 31 January 2019

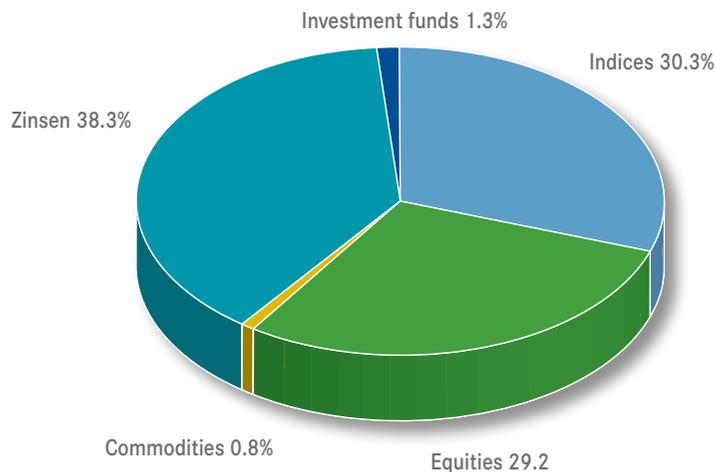
Underlying	Market volume		Market volume price-adjusted*		Number of Products	
	T€	%	T€	%	#	%
<b>Investment products</b>						
Indices	19,365,554	30.3%	18,713,611	30.1%	114,048	22.3%
Equities	18,699,283	29.2%	17,728,770	28.5%	388,580	75.9%
Commodities	513,556	0.8%	483,350	0.8%	2,348	0.5%
Currencies	32,296	0.1%	36,477	0.1%	12	0.0%
Interest rates	24,502,369	38.3%	24,351,359	39.2%	6,541	1.3%
Investment funds	845,795	1.3%	836,833	1.3%	261	0.1%
	<b>63,958,853</b>	<b>97.5%</b>	<b>62,150,399</b>	<b>97.5%</b>	<b>511,790</b>	<b>30.4%</b>
<b>Leverage products</b>						
Indices	469,081	28.3%	525,975	33.6%	279,299	23.8%
Equities	1,003,463	60.5%	861,660	55.1%	758,065	64.7%
Commodities	135,832	8.2%	119,705	7.7%	60,022	5.1%
Currencies	35,350	2.1%	36,807	2.4%	64,687	5.5%
Interest rates	16,221	1.0%	19,514	1.2%	9,148	0.8%
Investment funds	0	0.0%	0	0.0%	0	0.0%
	<b>1,659,947</b>	<b>2.5%</b>	<b>1,563,660</b>	<b>2.5%</b>	<b>1,171,221</b>	<b>69.6%</b>
<b>Total</b>	<b>65,618,800</b>	<b>100.0%</b>	<b>63,714,059</b>	<b>100.0%</b>	<b>1,683,011</b>	<b>100.0%</b>

\*Market volume adjusted for price changes = quantity outstanding as at 31 Januar2019 x price as at 31 December 2018

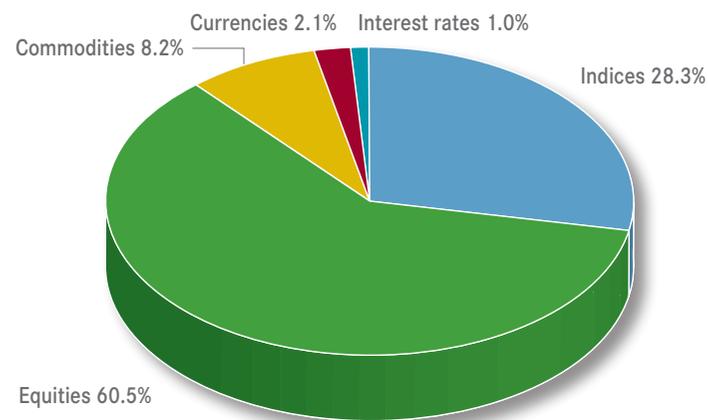
## Change in the market volume by underlying asset in comparison with previous month

Underlying	Change		Change price-adjusted		Price effect
	T€	%	T€	%	
<b>Investment products</b>					
Indices	1,114,821	6.1%	462,877	2.5%	3.6%
Equities	1,130,025	6.4%	159,512	0.9%	5.5%
Commodities	22,565	4.6%	-7,641	-1.6%	6.2%
Currencies	-3,287	-9.2%	894	2.5%	-11.8%
Interest rates	72,516	0.3%	-78,495	-0.3%	0.6%
Investment funds	39,583	4.9%	30,621	3.8%	1.1%
	<b>2,376,223</b>	<b>3.9%</b>	<b>567,769</b>	<b>0.9%</b>	<b>2.9%</b>
<b>Leverage products</b>					
Indices	20,442	4.6%	77,336	17.2%	-12.7%
Equities	246,510	32.6%	104,707	13.8%	18.7%
Commodities	8,969	7.1%	-7,159	-5.6%	12.7%
Currencies	-572	-1.6%	884	2.5%	-4.1%
Interest rates	1,200	8.0%	4,493	29.9%	-21.9%
Investment funds	0	n. a.	0	n. a.	n.a.
	<b>276,549</b>	<b>20.0%</b>	<b>180,261</b>	<b>13.0%</b>	<b>7.0%</b>
<b>Total</b>	<b>2,652,772</b>	<b>4.2%</b>	<b>748,030</b>	<b>1.2%</b>	<b>3.0%</b>

### Investment products by underlying asset Market volume as at 31 January 2019



### Investment products by underlying asset Market volume as at 31 January 2019



## Collection, validation and analysis methodology

### 1. Calculation of the market volume

In calculating the outstanding volume, the first step is to establish the market volume for an individual issue by multiplying the quantity outstanding by the market price on the last trading day of the month under review. The total market volume is calculated by adding the individual values. The price-adjusted figure is obtained by valuing the outstanding quantities at the market prices on the last trading day of the previous month. Newly launched products are valued at the price on the last trading day in the month under review.

### 2. Calculation of the turnover

Turnover is calculated at the relevant exercise price by aggregating the individual trades per issue and period and then adding them up. Purchases and sales are included at their relevant absolute amounts. The only turnover recorded is that relating to end customers. Also, issues are not classified as turnover until their value dates. By contrast, repayments are not included in the turnover figures, since they do not constitute actual trades. This means that there is a natural outflow of funds at the maturity date of the products, although this is offset by new issues if investors continue to invest in these investment classes. This turnover calculation can lead to inflows of funds in one investment class in one month that exceed the turnover recorded for that month in terms of their amounts. Also, large price fluctuations can lead to a change in the market volume that exceeds the turnover amount in terms of its amount.

### 3. Definition of the retail products covered

The collection and analysis process covers market volume and turnover in retail products that are publicly offered and listed on at least one German stock exchange in the relevant survey period. Private placements, institutional transactions and white-label trading are not covered. The possibility that parts of an issue may be bought by institutional investors, for instance through the stock exchange, cannot be ruled out.

### 4. DDV classification system (Derivatives League)

The product classification system used is based on DDV's Derivatives League concept. Investment products include Uncapped Capital Protection Certificates, Capital Protection Products with Coupon, Reverse Convertibles, Discount Certificates, Express Certificates, Bonus Certificates, Tracker Certificates, Outperformance and Capped Outperformance Certificates, as well as other investment products without capital protection. Leverage products comprise Warrants and Knock-Out Warrants. (For further details please refer to [http://www.derivateverband.de/DE/MediaLibrary/Document/ddv\\_klassifizierung\\_final.pdf](http://www.derivateverband.de/DE/MediaLibrary/Document/ddv_klassifizierung_final.pdf)).

### 5. Differentiation by investment class

Retail products are differentiated by the investment class of the underlying. All products with an equity component are included among the equity-based investment or leverage products. Products with a purely bond-based underlying (e.g. index certificates based on the German REX bond index, capital protected certificates based on the EURIBOR Euro Interbank Offered Rate) are included in the investment class of bonds. The currencies and commodities investment class comprises products based on goods, commodities and currencies. Hedge fund products are also shown separately.

### 6. Collection of the data

Each month, the issuers provide the relevant data in a specified scope and format from their internal systems (trading, risk management and pricing systems etc.). The mandatory information comprises ISIN, product type, asset class of the underlying, product category, turnover, market volume, quantity outstanding, maturity date of the products, product name, issue date, issue volume (quantity issued). The optional information includes details of the underlying, the knock-out thresholds, market prices and listings on German stock exchanges.

### 7. Monitoring of compliance with the self-commitment

Compliance with the code of conduct is monitored by means of on-site and off-site inspection of data and systems. Random sampling and targeted requests for selected information are backed up by cross-checking of data using stock exchange data, information services and the websites of issuers. In particular, the data are reconciled on a regular basis in cooperation with Boerse Stuttgart, with the main focus on stock exchange listing, the categorisation of products and the substantiation of figures for turnover and outstanding volumes.

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