warrants and certificates Activity report

lssue 65

December 2016



Contents

- 05 Euronext Markets
- 06 Market overview
- 11 Market trend
- 15 Issuers activity
- 18 Top 50 traded products
- 19 Euronext Amsterdam
- 20 Market overview
- 25 Market trend
- 29 Issuers activity
- 32 Top 50 traded products
- 33 Euronext Brussels
- 34 Market overview
- 39 Market trend
- 43 Issuers activity
- 46 Top 50 traded products
- 47 Euronext Lisbon
- 48 Market overview
- 53 Market trend
- 57 Issuers activity
- 60 Top 50 traded products
- 61 Euronext Paris
- 62 Market overview
- 67 Market trend
- 71 Issuers activity
- 74 Top 50 traded products

This publication is for information purposes only and is not a recommendation to engage in investment activities. This publication is provided "as is" without representation or warranty of any kind. Whilst all reasonable care has been taken to ensure the accuracy of the content, Euronext does not guarantee its accuracy or completeness. Euronext will not be held liable for any loss or damages of any nature ensuing from using, trusting or acting on information provided. No information set out or referred to in this publication shall form the basis of any contract. The creation of rights and obligations in respect of financial products that are traded on the exchanges operated by Euronext's subsidiaries shall depend solely on the applicable rules of the market operator. All proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced in any form without the prior written permission of Euronext.

All data as of the date of publication unless stated otherwise. Euronext disclaims any duty to update this information.

Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at https:// www.euronext.com/terms-use.

© 2017, Euronext N.V. - All rights reserved.

	Euronext Amsterdam	Euronext Brussels	Euronext Lisbon	Euronext Paris	Euronext Markets
Live listings (as of 31/12/2016)	15,231	4,597	1,726	28,991	50,545
Newlistings	2,599	901	344	9,320	13,164
Value traded (in M€)	414	4.6	93.1	266	777
Value traded YTD (in M€)	5,142	69.1	552.9	3,460	9,224
Traded volume (in M)	215	3.1	18.9	516	752
Traded volume YTD (in M)	2,575	54.7	249.5	6,326	9,205
Number of trades	105,691	2,000	9,952	94,253	211,896
Number of trades YTD	1,397,486	32,206	102,659	1,357,554	2,889,905
(Source: Euronext)					

MANAGE AGRICULTURAL PRICE VOLATILITY

HEDGE AND TRADE WITH THE EUROPEAN GRAIN BENCHMARK

MILLING WHEAT | RAPESEED | DAIRY | CORN

For more information derivatives.euronext.com/commodities or contact us commodities@euronext.com



Those wishing either to trade in any products available at Euronext or to offer and sell them to others should consider both their legal and regulatory position in the relevant jurisdiction and the risks associated with such products before doing so. Potential users of Euronext contracts should familiarize themselves with the full contract specification of the product concerned and any associated information. © 2015, Euronext N.V. - All rights reserved.



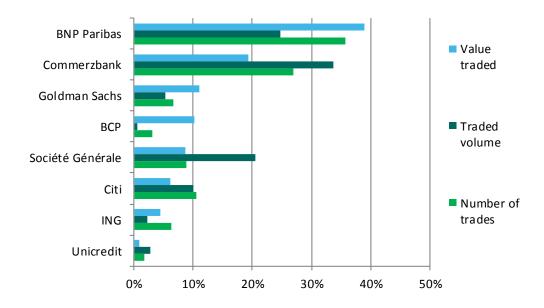
Euronext Markets

Issuers

The table below displays the daily averages of traded value, traded volume and number of trades across all Euronext markets per issuer, as well as the variation over the previous month and the weight of each issuer over the total of all Euronext markets.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	/olume		N	lumber c	oftrades	
Issuer	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
BNP Paribas	14.4	-9.8%	3.4%	39.0%	8.9	-21%	-3.4%	24.8%	3,600	-14%	-6.6%	35.7%
Commerzbank	7.2	-20%	-5.8%	19.3%	12.1	-20%	6.0%	33.8%	2,724	-22%	-13%	27.0%
Goldman Sachs	4.1	-9.5%	-2.8%	11.1%	1.9	-16%	1.7%	5.3%	665	-17%	-16%	6.6%
BCP	3.8	149%	168%	10.2%	0.2	164%	182%	0.6%	317	87%	94%	3.1%
Société Générale	3.2	-32%	-14%	8.7%	7.3	1.8%	-11%	20.5%	894	-26%	-23%	8.9%
Citi	2.3	-20%	-3.6%	6.2%	3.6	-8.2%	9.8%	10.0%	1,071	-14%	-0.8%	10.6%
ING	1.7	-44%	-26%	4.5%	0.8	-41%	-18%	2.3%	633	-43%	-30%	6.3%
Unicredit	0.3	-19%	14%	0.9%	1.0	-17%	36%	2.8%	185	-22%	14%	1.8%
Total	37.0	-12%	3.2%		35.8	-16%	0.0%		10,090	-19%	-10%	

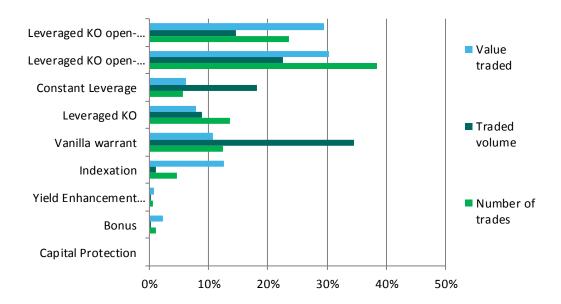


Product types

The table below displays the daily averages of traded value, traded volume and number of trades across all Euronext markets per issuer, as well as the variation over the previous month and the weight of each issuer over the total of all Euronext markets.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		N	lumber c	oftrades	
Product type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Leveraged KO open-end	10.9	-18%	-0.7%	29.5%	5.2	-17%	7.1%	14.6%	2,372	-18%	-11%	23.5%
Leveraged KO open-end BEST	11.2	-13%	-3.9%	30.3%	8.1	-22%	-2.0%	22.5%	3,884	-21%	-6.0%	38.5%
Constant Leverage	2.3	-24%	-17%	6.2%	6.5	2.0%	-3.5%	18.2%	573	-31%	-33%	5.7%
Leveraged KO	2.9	-33%	-19%	7.9%	3.2	-13%	-5.8%	8.9%	1,370	-19%	-17%	13.6%
Vanilla warrant	4.0	-17%	-0.3%	10.7%	12.4	-20%	1.9%	34.6%	1,260	-21%	-14%	12.5%
Indexation	4.6	78%	115%	12.5%	0.4	68%	0.1%	1.0%	461	28%	46%	4.6%
Yield Enhancement & Other	0.3	-13%	29%	0.7%	0.0	32%	83%	0.1%	62	-22%	2.5%	0.6%
Bonus	0.8	25%	56%	2.2%	0.0	4.7%	13%	0.1%	109	-1.4%	9.9%	1.1%
Total	37.0	-12%	3.1%		35.8	-16%	0.0%		10,090	-19%	-10%	

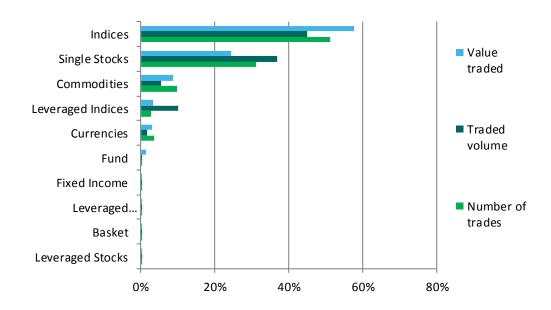


Underlying types

The table below displays the daily averages of traded value, traded volume and number of trades across all Euronext markets per underlying type, as well as the variation over the previous month and the weight of each underlying type over the total of all Euronext markets.

The chart at the bottom of the page represents the weight of each underlying type in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Indices	21.3	-16%	1.4%	57.6%	16.1	-27%	3.8%	44.9%	5,164	-23%	-15%	51.3%
Single Stocks	9.1	-2.6%	15%	24.5%	13.2	-12%	3.3%	36.9%	3,152	-11%	-0.1%	31.3%
Commodities	3.3	-6.7%	-10%	8.9%	1.9	8.9%	15%	5.4%	1,001	-23%	-7.3%	10.0%
Leveraged Indices	1.3	-34%	-29%	3.5%	3.6	26%	-24%	10.2%	273	-32%	-45%	2.7%
Currencies	1.1	19%	78%	3.1%	0.7	-0.1%	56%	1.8%	357	-2.9%	41%	3.6%
Fund	0.6	55%	12%	1.6%	0.1	52%	6.8%	0.2%	18	86%	45%	0.2%
Fixed Income	0.2	-14%	52%	0.4%	0.0	-32%	4.2%	0.1%	43	-15%	0.7%	0.4%
Leveraged Commodities	0.1	-44%	-30%	0.2%	0.1	102%	-73%	0.3%	33	-25%	-14%	0.3%
Basket	0.1	-42%	49%	0.1%	0.0	107%	28%	0.0%	4	39%	34%	0.0%
Leveraged Stocks	0.0	-20%	-24%	0.1%	0.1	149%	-20%	0.2%	12	-25%	-46%	0.1%
Total	36.9	-12%	3.2%		35.8	-16%	0.0%		10,057	-19%	-10%	

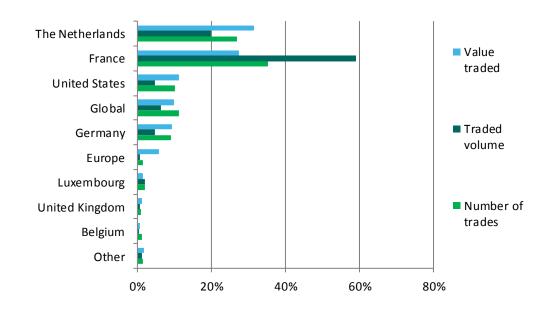


Top 10 underlying countries

The table below displays the daily averages of traded value, traded volume and number of trades across all Euronext markets per country of origin of the underlying, as well as the variation over the previous month and the weight of each underlying country of origin over the total of all Euronext markets.

The chart at the bottom of the page represents the weight of each underlying country of origin in terms of traded value, traded volume and number of trades.

	Value traded Daily Month vs. YTD Marke					Traded	volume		Ν	lumber o	oftrades	
Underlying country	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
The Netherlands	11.6	-17%	3.1%	31.4%	7.1	-26%	1.1%	19.7%	2,721	-23%	-11%	27.0%
France	10.1	-23%	-6.3%	27.3%	21.2	-15%	-1.3%	59.2%	3,559	-21%	-18%	35.3%
United States	4.2	3.3%	27%	11.3%	1.7	-21%	-2.8%	4.8%	1,025	-15%	7.7%	10.2%
Global	3.7	-11%	-7.8%	9.9%	2.3	7.5%	3.3%	6.4%	1,135	-23%	-4.9%	11.3%
Germany	3.4	-16%	-9.2%	9.3%	1.7	-23%	-4.6%	4.8%	906	-16%	-14%	9.0%
Europe	2.1	83%	70%	5.8%	0.2	-4.8%	-0.1%	0.7%	155	46%	44%	1.5%
Luxembourg	0.5	11%	26%	1.5%	0.7	31%	13%	1.9%	216	14%	15%	2.1%
United Kingdom	0.4	3.5%	46%	1.1%	0.3	21%	65%	0.7%	96	0.2%	5.1%	1.0%
Belgium	0.3	5.8%	0.6%	0.8%	0.2	40%	-17%	0.5%	121	10%	6.4%	1.2%
Other	0.6	17%	20%	1.7%	0.5	36%	38%	1.3%	154	6.6%	8.3%	1.5%
Total	37.0	-12%	3.1%		35.8	-16%	0.0%		10,087	-19%	-10%	

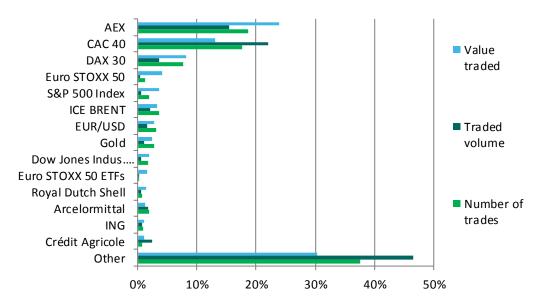


Top 15 underlyings

The table below displays the daily averages of traded value, traded volume and number of trades across all Euronext markets for the top 15 underlyings, as well as the variation over the previous month and the weight of each of the top 15 underlyings over the total of all Euronext markets.

The chart at the bottom of the page represents the weight of each of the top 15 underlyings in terms of traded value, traded volume and number of trades.

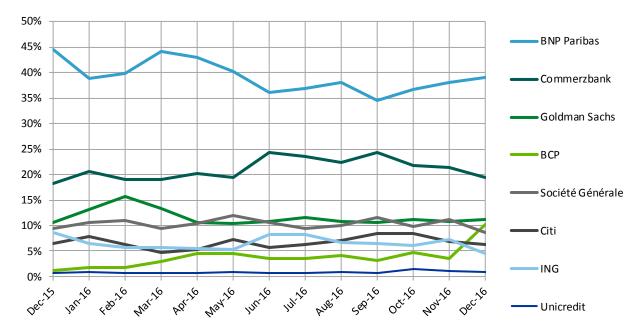
		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
AEX	8.8	-21%	-2.4%	23.9%	5.6	-29%	-2.3%	15.5%	1,890	-26%	-16%	18.7%
CAC 40	4.8	-31%	-11%	13.1%	7.9	-28%	8.3%	22.1%	1,776	-27%	-22%	17.6%
DAX 30	3.0	-18%	-12%	8.2%	1.3	-22%	-2.2%	3.6%	766	-18%	-15%	7.6%
Euro STOXX 50	1.5	116%	125%	4.1%	0.1	26%	-8.1%	0.3%	120	68%	53%	1.2%
S&P 500 Index	1.4	21%	59%	3.7%	0.2	-36%	-30%	0.7%	189	-0.4%	3.0%	1.9%
ICE BRENT	1.2	5.8%	4.3%	3.3%	0.7	34%	41%	2.1%	371	-13%	6.5%	3.7%
EUR/USD	1.0	44%	112%	2.8%	0.6	11%	74%	1.6%	307	6.1%	59%	3.0%
Gold	0.9	-23%	-21%	2.4%	0.4	5.1%	15%	1.2%	274	-31%	-16%	2.7%
Dow Jones Indus. Avg.	0.7	-6.2%	-12%	1.9%	0.2	-16%	-5.2%	0.6%	169	-26%	-8.3%	1.7%
Euro STOXX 50 ETFs	0.6	51%	21%	1.5%	0.1	48%	15%	0.2%	15	59%	63%	0.2%
Royal Dutch Shell	0.5	37%	55%	1.5%	0.2	48%	88%	0.6%	72	-13%	-11%	0.7%
Arcelormittal	0.5	22%	33%	1.3%	0.7	42%	15%	1.8%	189	17%	19%	1.9%
ING	0.4	-9.0%	0.6%	1.1%	0.3	-17%	3.6%	0.7%	89	-31%	-14%	0.9%
Crédit Agricole	0.4	17%	67%	1.0%	0.9	10%	33%	2.4%	68	-3.9%	-9.9%	0.7%
Other	11.2	-12%	1.4%	30.3%	16.7	-6.7%	-7.0%	46.6%	3,795	-16%	-6.7%	37.6%
Total	37.0	-12%	3.1%		35.8	-16%	0.0%		10,090	-19%	-10%	



MARKET TREND: ISSUERS

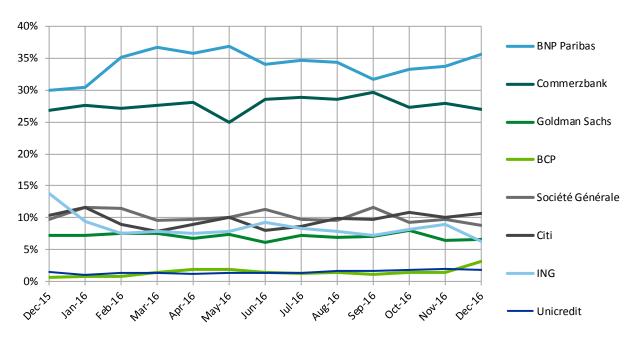
Value traded

The historical graph below displays the weight of the traded value of each issuer over the total traded value across all Euronext markets.



Number of transactions

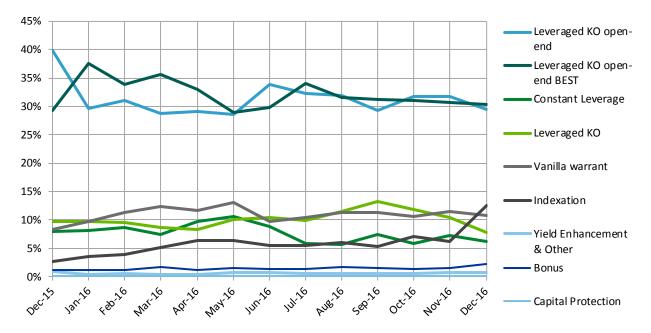
The historical graph below displays the weight of the traded volume of each issuer over the total traded volume across all Euronext markets.



MARKET TREND: PRODUCT TYPES

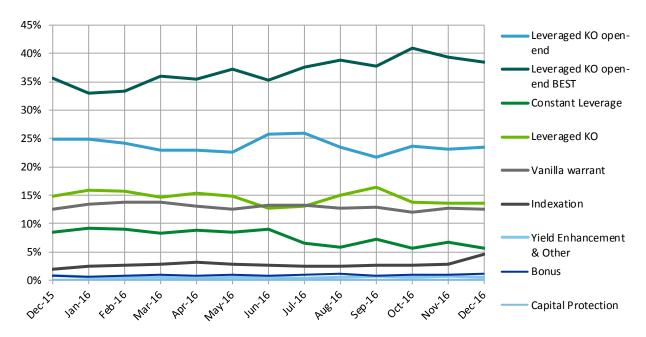
Value traded

The historical graph below displays the weight of the traded value of each product type over the total traded value across all Euronext markets.



Number of transactions

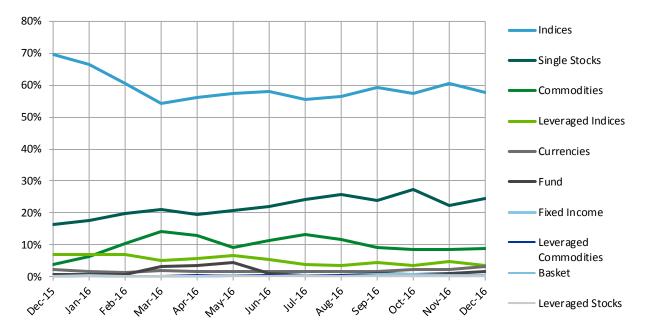
The historical graph below displays the weight of the traded volume of each product type over the total traded volume across all Euronext markets.



MARKET TREND: UNDERLYING TYPES

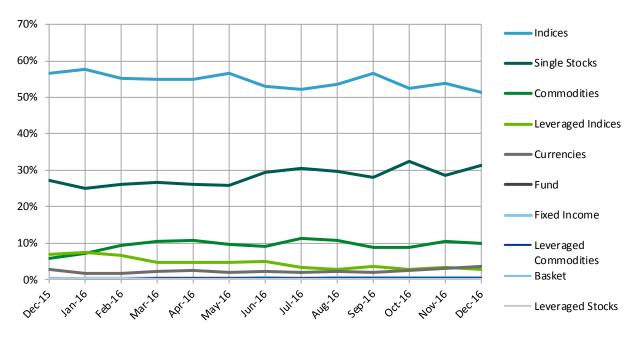
Value traded

The historical graph below displays the weight of the traded value of each underlying type over the total traded value across all Euronext markets.



Number of transactions

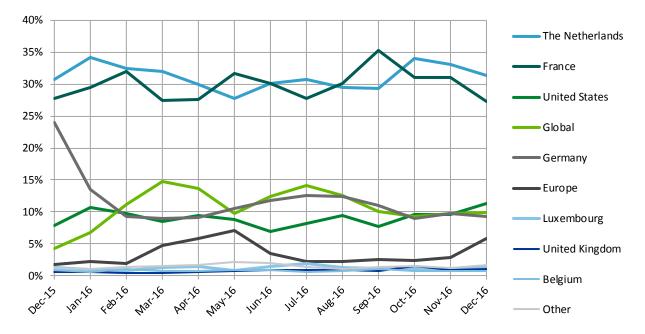
The historical graph below displays the weight of the traded volume of each underlying type over the total traded volume across all Euronext markets.



MARKET TREND: UNDERLYING COUNTRIES

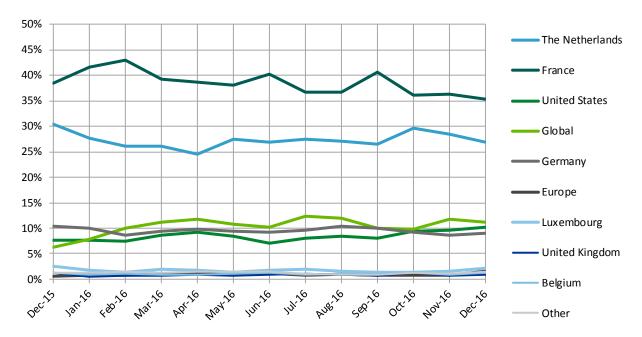
Value traded

The historical graph below displays the weight of the traded value of each underlying country of origin over the total traded value across all Euronext markets.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying country of origin over the total traded volume across all Euronext markets.

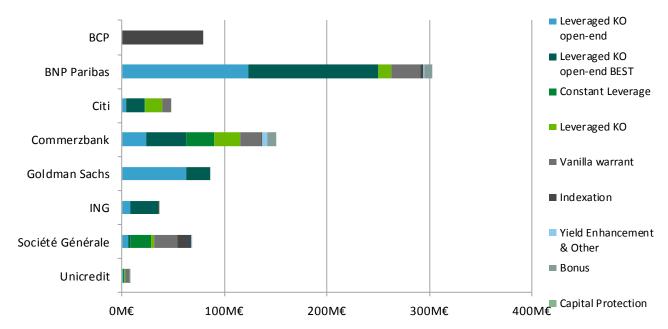


14 Market Activity Report - Warrants & Certificates - Euronext Markets - December 2016

ISSUER ACTIVITY

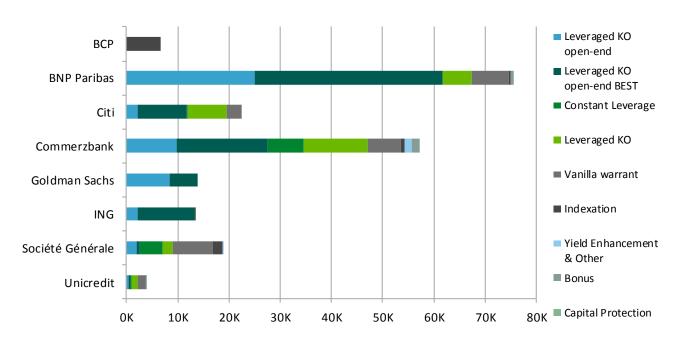
Value traded

The chart below displays the value traded per product type (in million Euros) for each issuer active in an Euronext market.



Number of transactions

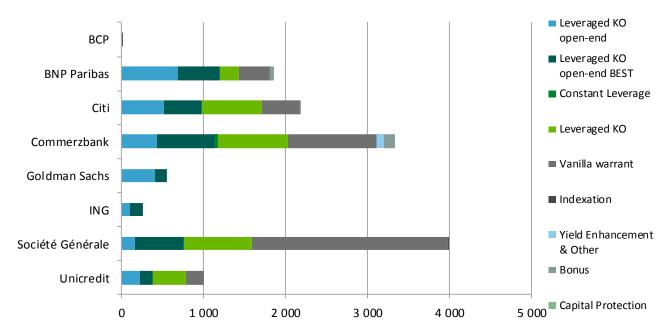
The chart below displays the number of trades per product type for each issuer active in an Euronext market.



ISSUER ACTIVITY: NEW LISTINGS

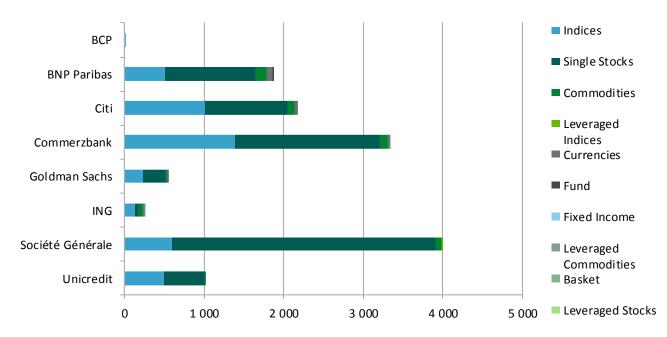
Product types

The chart below displays the number of new product listings during the month per product type for each issuer active in an Euronext market.



Underlying types

The chart below displays the number of new product listings during the month per underlying type for each issuer active in an Euronext market.

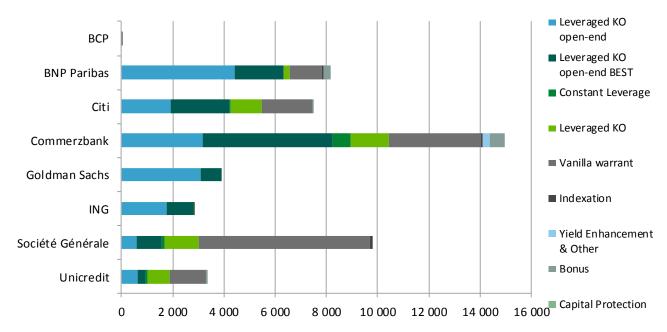


16 Market Activity Report - Warrants & Certificates - Euronext Markets - December 2016

ISSUER ACTIVITY: PRODUCT RANGE

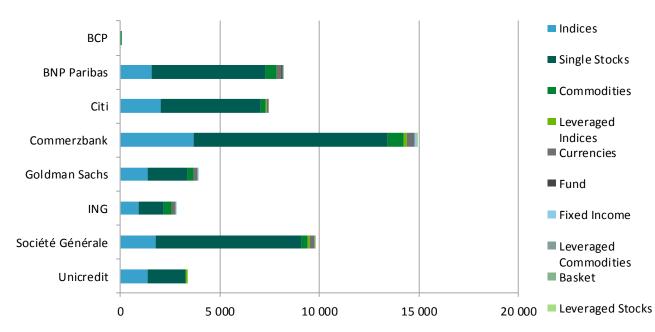
Product types

The chart below displays the number of existing product listings per product type for each issuer active in an Euronext market.



Underlying types

The chart below displays the number of existing product listings per underlying type for each issuer active in an Euronext market.



Market Activity Report - Warrants & Certificates - Euronext Markets - December 2016 17

TOP 50 TRADED PRODUCTS

Top 50 traded products

The table below displays the 50 most traded products (in terms of value traded) across all Euronext markets.

Trading	ISIN Code	Product type	lssuer	Name	Number of	Value traded
symbol					trades	(in K€)
1029P	PTBITAYE0046	Pure indexation	BCP	SP500 PI OPENP	1,767	23,100
1025P	PTBIVRYE0068	Pure indexation	BCP	ESTX PI OPENP	1,695	22,562
1027P	PTBITEYE0034	Pure indexation	BCP	DAX PI OPENP	754	9,378
LV15Z	DE000CD5NZY1	Constant Leverage	Commerzbank	CACF LEVOPENZ	780	9,189
A415H	NL0011927363	Leveraged KO open-end	Goldman Sachs	AEX 438.1TL OPENH	198	8,485
1026P	PTBIYZYE0040	Pure indexation	BCP	DJIND PI OPENP	717	8,433
V005B	NL0011467329	Vanilla warrant	BNP Paribas	ETDD 45.25C 1226B	31	7,385
DQ43B	NL0011262431	Leveraged KO open-end	BNP Paribas	AEX 532TS OPENB	484	7,208
DS47B	NL0011264478	Leveraged KO open-end	BNP Paribas	AEX 505TS OPENB	197	5,576
QI75B	NL0012098982	Leveraged KO open-end BEST	BNP Paribas	AEX 463.2BL OPENB	450	5,415
DQ46B	NL0011262464	Leveraged KO open-end	BNP Paribas	AEX 550TS OPENB	344	5,224
4546H	NL0011239785	Leveraged KO open-end	Goldman Sachs	AEX 504.7TS OPENH	127	4,800
QG22B	NL0012038541	Leveraged KO open-end BEST	BNP Paribas	AEX 453.2BL OPENB	462	3,997
SR15Z	DE000CD22134	Constant Leverage	Commerzbank	CACF SHTOPENZ	1,563	3,682
S10MS	FR0013135753	Constant Leverage	Société Générale	CA10S PI0336S	394	3,542
2124S	FR0010511535	Pure indexation	Société Générale	BRENT PI OPENS	437	3,472
1199H	NL0011036223	Leveraged KO open-end	Goldman Sachs	AEX 538.7TS OPENH	239	3,387
LM15S	FR0013188612	Pure indexation	Société Générale	C15LE PI0736S	554	3,284
SH15Z	DE000CD9F442	Constant Leverage	Commerzbank	CACF SHTOPENZ	732	3,185
QH54B	NL0012039861	Leveraged KO open-end BEST	BNP Paribas	AEX 458.2BL OPENB	245	3,113
NY88B	NL0012031207	Capped Bonus	BNP Paribas	ESTX 4200BOC1217B	52	3,038
NX02B	NL0012029342	Leveraged KO open-end BEST	BNP Paribas	AEX 442.4BL OPENB	300	3,037
1032P	PTBCS1YE0010	Pure indexation	BCP	NIKEI PI OPENP	333	2,842
QH51B	NL0012039838	Leveraged KO open-end BEST	BNP Paribas	AEX 455.2BL OPENB	1,433	2,799
1052P	PTBITTYE0094	Pure indexation	BCP	MSCIW PI OPENP	135	2,491
JU82B	NL0011908447	Leveraged KO open-end BEST	BNP Paribas	AEX 436.BL OPENB	1,150	2,481
1028P	PTBIY1YE0064	Pure indexation	BCP	PSI 2 PI OPENP	327	2,394
1040P	PTBIWKYE0023	Pure indexation	BCP	CAC40 PI OPENP	264	2,321
LG15Z	DE000CZ28ZJ7	Constant Leverage	Commerzbank	CACF LEVOPENZ	784	2,284
QE81B	NL0012037139	Leveraged KO open-end BEST	BNP Paribas	AEX 447.2BL OPENB	385	2,280
U985B	NL0011467246	Vanilla warrant	BNP Paribas	ETDD 42.93C 0426B	125	2,198
58NNZ	DE000CD63SQ1	Leveraged KO open-end BEST	Commerzbank	SHELL22.46TL OPENZ	47	2,153
6940S	FR0011119395	Constant Leverage	Société Générale	CAC7L PI OPENS	154	2,152
QC03B	NL0012034359	Leveraged KO open-end BEST	BNP Paribas	AEX 443.8BL OPENB	292	2,131
QA85B	NL0012033179	Leveraged KO open-end BEST	BNP Paribas	BRENT45.34BL OPENB	155	2,081
QI17B	NL0012040497	Leveraged KO open-end BEST	BNP Paribas	AEX 460.2BL OPENB	235	2,002
W837Z	DE000CD9FEQ0	Vanilla warrant	Commerzbank	CAC40 4650P 0117Z	421	1,954
QA25B	NL0012032577	Leveraged KO open-end BEST	BNP Paribas	OILCR42.33BL OPENB	31	1,919
S15MS	FR0013135720	Constant Leverage	Société Générale	CA155 PI03365	534	1,902
CL15S	FR0013217940	Pure indexation	Société Générale	C15LE PI 1136S	290	1,867
A5TJH	NL0011993035	Leveraged KO open-end	Goldman Sachs	AEX 437.4TL OPENH	14	1,826
NU26B	NL0012026587	Leveraged KO open-end BEST	BNP Paribas	AEX 461.6BS OPENB	426	1,786
GD91B	NL0011532023	Leveraged KO open-end BEST	BNP Paribas	HEINK66.84BL OPENB	196	1,759
CX22B	NL0011091350	Leveraged KO open-end BEST	BNP Paribas	AEX 521.3BS OPENB	339	1,644
L10MS	FR0013101565	Constant Leverage	Société Générale	CA10L PI OPENS	433	1,642
QJ94B	NL0012100150	Leveraged KO open-end BEST	BNP Paribas	AEX 466.3BL OPENB	127	1,635
1050P	PTBIWBYE0057	Pure indexation	BCP	NASDQ PI OPENP	141	1,626
W908B	NL0011676960	Vanilla warrant	BNP Paribas	CAGRI 12C 0317B	119	1,582
1023P	PTBIXRYE0025	Pure indexation	BCP	IBEX PI OPENP	247	1,519
	NL0011998034	Leveraged KO open-end BEST	Goldman Sachs	GOLDF 1200TRSOPENH	114	1,489



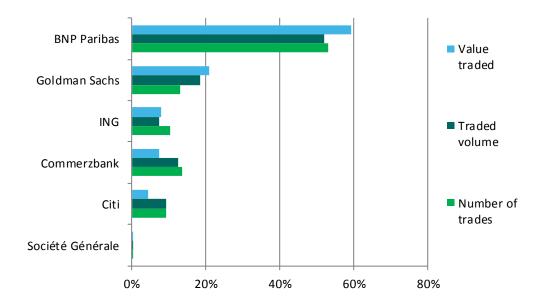
Euronext Amsterdam

Issuers

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Amsterdam per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Amsterdam.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

	Value traded					Traded	volume		Number of trades				
Issuer	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	
	average	on		share	average	on		share	average	on		share	
	(in M€)	month			(in M)	month				month			
BNP Paribas	11.7	-11%	3.6%	59.4%	5.3	-23%	-2.3%	52.1%	2,676	-15%	-6.7%	53.2%	
Goldman Sachs	4.1	-9.5%	-2.8%	20.9%	1.9	-16%	1.7%	18.4%	665	-17%	-16%	13.2%	
ING	1.5	-46%	-25%	7.8%	0.8	-43%	-17%	7.5%	525	-47%	-33%	10.4%	
Commerzbank	1.4	-27%	-22%	7.3%	1.3	-9.1%	-2.1%	12.5%	688	-20%	1.3%	13.7%	
Citi	0.9	5.1%	63%	4.4%	1.0	12%	99%	9.3%	465	-9.0%	51%	9.2%	
Société Générale	0.0	-59%	181%	0.1%	0.0	174%	538%	0.1%	15	0.0%	330%	0.3%	
Total													

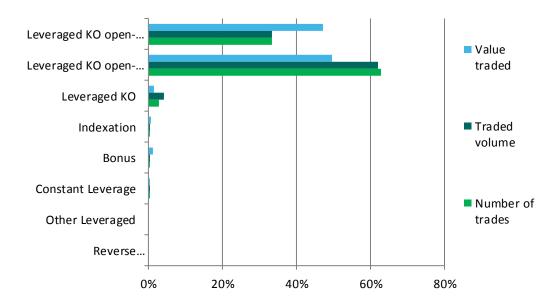


Product types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Amsterdam per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Amsterdam.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		N	lumber o	oftrades	
Product type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Leveraged KO open-end	9.3	-19%	-1.1%	47.3%	3.4	-18%	8.3%	33.3%	1,685	-17%	-11%	33.5%
Leveraged KO open-end BEST	9.8	-13%	-3.5%	49.6%	6.4	-24%	-3.6%	62.2%	3,170	-22%	-6.7%	63.0%
Leveraged KO	0.3	-13%	22%	1.4%	0.4	55%	104%	4.1%	145	-5.3%	52%	2.9%
Indexation	0.1	-26%	8.5%	0.5%	0.0	76%	24%	0.1%	10	-10%	3.2%	0.2%
Bonus	0.2	-9.4%	84%	1.1%	0.0	-11%	11%	0.1%	12	-2.9%	16%	0.2%
Constant Leverage	0.0	-56%	-38%	0.1%	0.0	-7.8%	-61%	0.2%	11	-67%	-51%	0.2%
Total	19.7	-16%	-1.5%		10.2	-20%	2.1%		5,033	-20%	-7.4%	

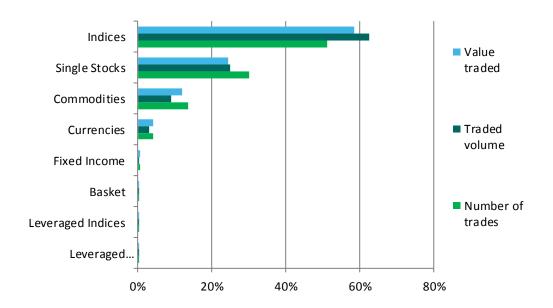


Underlying types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Amsterdam per underlying type, as well as the variation over the previous month and the weight of each underlying type over the total of Euronext Amsterdam.

The chart at the bottom of the page represents the weight of each underlying type in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded v	volume		N	lumber c	oftrades	
Underlying type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Indices	11.5	-25%	-9.8%	58.4%	6.4	-30%	-5.5%	62.6%	2,562	-25%	-17%	51.2%
Single Stocks	4.8	2.0%	23%	24.5%	2.6	-3.8%	13%	25.1%	1,506	-12%	7.7%	30.1%
Commodities	2.3	-5.5%	-14%	11.9%	0.9	29%	15%	9.0%	683	-21%	-8.3%	13.7%
Currencies	0.8	23%	81%	4.2%	0.3	61%	101%	3.1%	208	-11%	34%	4.1%
Fixed Income	0.1	-6.8%	84%	0.6%	0.0	-21%	23%	0.2%	35	-1.0%	33%	0.7%
Basket	0.1	-44%	48%	0.3%	0.0	106%	27%	0.0%	4	40%	30%	0.1%
Leveraged Indices	0.0	-62%	-47%	0.0%	0.0	133%	9.5%	0.1%	5	-54%	-9.6%	0.1%
Leveraged Commodities	0.0	ND	516%	0.0%	0.0	994%	569%	0.0%	1	193%	308%	0.0%
Total	19.7	-16%	-1.4%		10.2	-20%	2.0%		5,003	-20%	-7.6%	

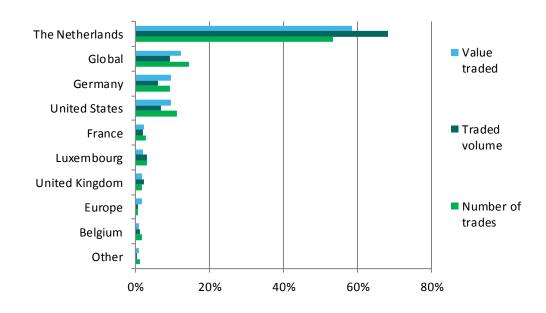


Top 10 underlying countries

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Amsterdam per country of origin of the underlying, as well as the variation over the previous month and the weight of each underlying country of origin over the total of Euronext Amsterdam.

The chart at the bottom of the page represents the weight of each underlying country of origin in terms of traded value, traded volume and number of trades.

	Value traded Daily Month vs. YTD Marke					Traded	volume		N	lumber c	oftrades	
Underlying country	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
The Netherlands	11.5	-17%	3.2%	58.6%	7.0	-26%	1.6%	68.3%	2,687	-23%	-10%	53.4%
Global	2.4	-13%	-14%	12.4%	0.9	25%	16%	9.2%	724	-21%	-6.9%	14.4%
Germany	1.9	-24%	-20%	9.6%	0.6	-29%	-17%	6.1%	473	-19%	-18%	9.4%
United States	1.9	-15%	3.8%	9.6%	0.7	-17%	7.7%	6.8%	569	-20%	5.4%	11.3%
France	0.5	-0.2%	-2.0%	2.4%	0.2	-6.0%	-7.4%	2.0%	139	-19%	-3.5%	2.8%
Luxembourg	0.4	3.9%	13%	2.0%	0.3	28%	1.2%	3.0%	162	14%	19%	3.2%
United Kingdom	0.4	-0.2%	49%	1.9%	0.2	19%	70%	2.3%	89	1.7%	7.9%	1.8%
Europe	0.3	-8.2%	47%	1.7%	0.1	-8.3%	2.7%	0.7%	31	5.1%	-3.1%	0.6%
Belgium	0.2	1.6%	2.1%	1.1%	0.1	41%	-7.7%	1.2%	93	9.0%	12%	1.8%
Other	0.2	-44%	-36%	0.8%	0.0	-31%	-40%	0.5%	66	-19%	-9.8%	1.3%
Total	19.7	-16%	-1.5%		10.2	-20%	2.1%		5,033	-20%	-7.4%	



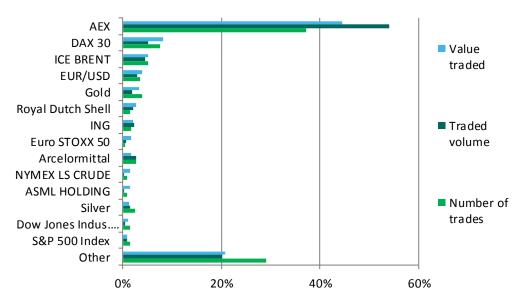
Top 15 underlyings

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Amsterdam for the top 15 underlyings, as well as the variation over the previous month and the weight of each of the top 15 underlyings over the total of Euronext Amsterdam.

The chart at the bottom of the page represents the weight of each of the top 15 underlyings in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
AEX	8.8	-21%	-2.1%	44.6%	5.5	-29%	-1.7%	54.1%	1,875	-26%	-16%	37.2%
DAX 30	1.6	-29%	-26%	8.1%	0.5	-34%	-14%	5.1%	377	-24%	-22%	7.5%
ICE BRENT	1.0	8.2%	4.9%	5.1%	0.5	75%	74%	4.6%	260	-6.7%	11%	5.2%
EUR/USD	0.8	55%	123%	3.9%	0.3	86%	131%	2.9%	178	-6.3%	49%	3.5%
Gold	0.7	-25%	-24%	3.4%	0.2	12%	18%	1.9%	195	-31%	-19%	3.9%
Royal Dutch Shell	0.5	40%	55%	2.7%	0.2	52%	94%	2.2%	71	-12%	-11%	1.4%
ING	0.4	-9.9%	-1.8%	2.0%	0.2	-20%	-2.1%	2.2%	88	-31%	-12%	1.7%
Euro STOXX 50	0.3	0.9%	70%	1.7%	0.1	0.5%	6.6%	0.7%	25	-5.8%	-10%	0.5%
Arcelormittal	0.3	6.7%	15%	1.6%	0.3	30%	0.0%	2.7%	139	17%	23%	2.8%
NYMEX LS CRUDE	0.3	30%	-5.1%	1.4%	0.0	4.6%	-34%	0.4%	40	-53%	-41%	0.8%
ASML HOLDING	0.3	-21%	21%	1.4%	0.0	-50%	-6.1%	0.3%	47	-8.9%	2.2%	0.9%
Silver	0.2	-32%	-40%	1.2%	0.2	-22%	-28%	1.5%	126	-30%	-18%	2.5%
Dow Jones Indus. Avg.	0.2	-48%	-59%	1.1%	0.0	-62%	-69%	0.4%	78	-34%	-24%	1.6%
S&P 500 Index	0.2	-60%	-41%	1.0%	0.1	-49%	-32%	0.9%	71	-8.3%	-17%	1.4%
Other	4.1	-9.5%	11%	20.7%	2.1	-8.7%	5.4%	20.1%	1,463	-12%	7.9%	29.1%
Total	19.7	-16%	-1.5%		10.2	-20%	2.1%		5,033	-20%	-7.4%	

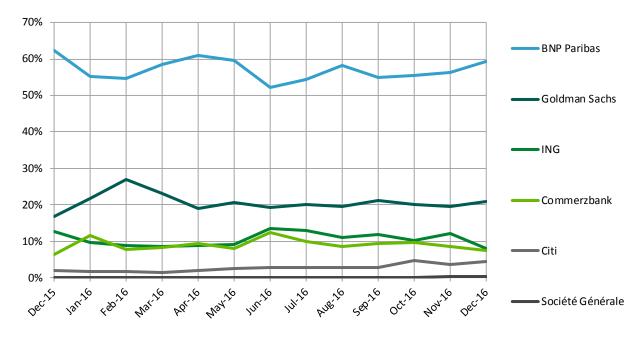




MARKET TREND: ISSUERS

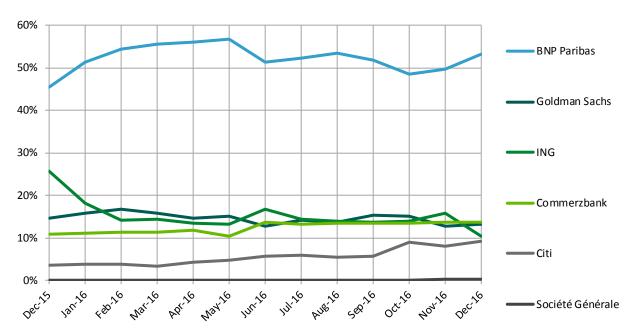
Value traded

The historical graph below displays the weight of the traded value of each issuer over the total traded value on Euronext Amsterdam.



Number of transactions

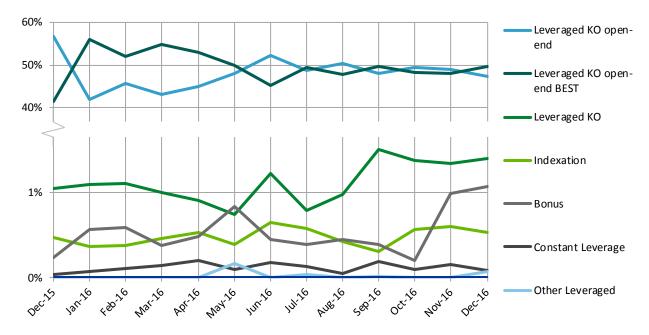
The historical graph below displays the weight of the traded volume of each issuer over the total traded volume on Euronext Amsterdam.



MARKET TREND: PRODUCT TYPES

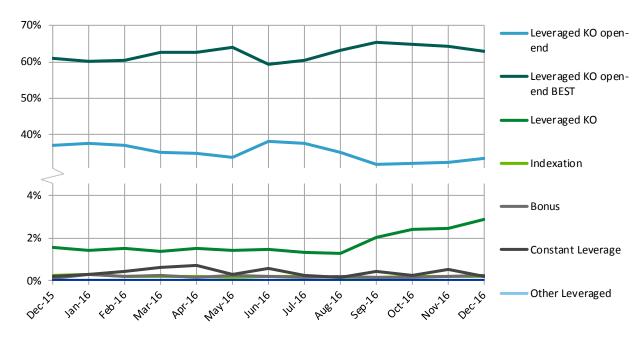
Value traded

The historical graph below displays the weight of the traded value of each product type over the total traded value on Euronext Amsterdam.



Number of transactions

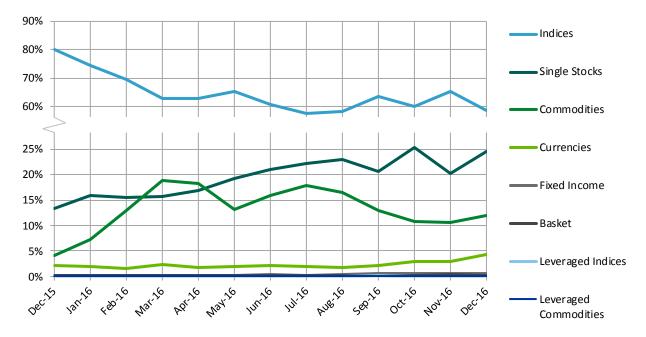
The historical graph below displays the weight of the traded volume of each product type over the total traded volume on Euronext Amsterdam.



MARKET TREND: UNDERLYING TYPES

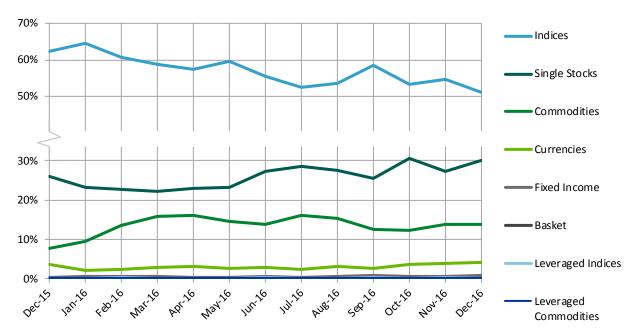
Value traded

The historical graph below displays the weight of the traded value of each underlying type over the total traded value on Euronext Amsterdam.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying type over the total traded volume on Euronext Amsterdam.

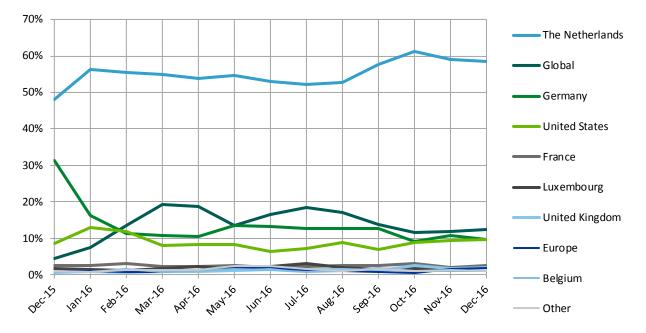


Market Activity Report - Warrants & Certificates - Euronext Amsterdam - December 2016 27

MARKET TREND: UNDERLYING COUNTRIES

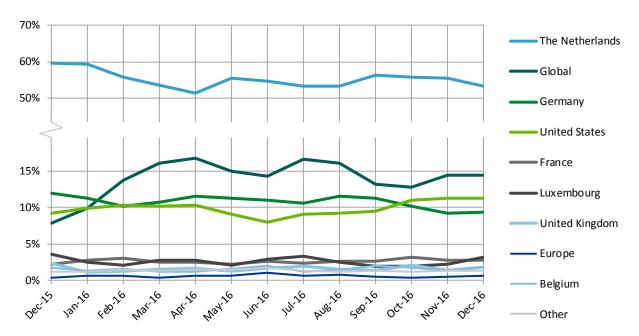
Value traded

The historical graph below displays the weight of the traded value of each underlying country of origin over the total traded value on Euronext Amsterdam.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying country of origin over the total traded volume on Euronext Amsterdam.

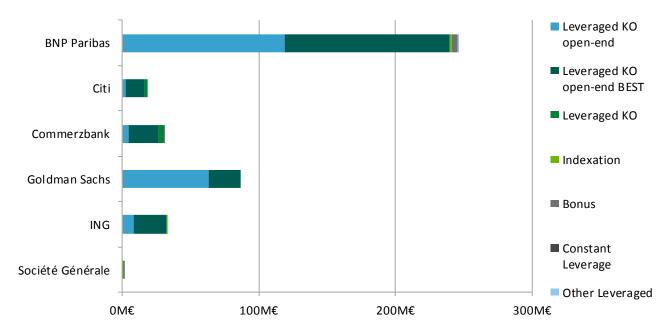


28 Market Activity Report - Warrants & Certificates - Euronext Amsterdam - December 2016

ISSUER ACTIVITY

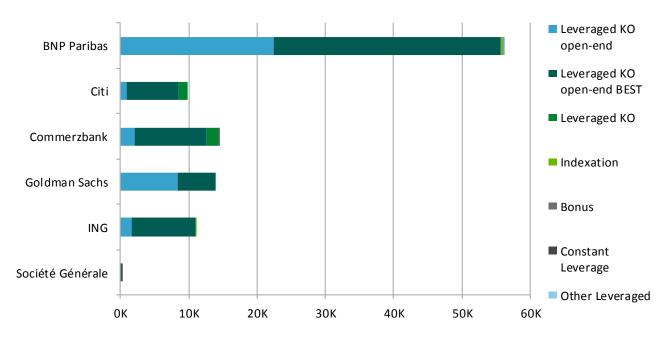
Value traded

The chart below displays the value traded per product type (in million Euros) for each issuer active in an Euronext market.



Number of transactions

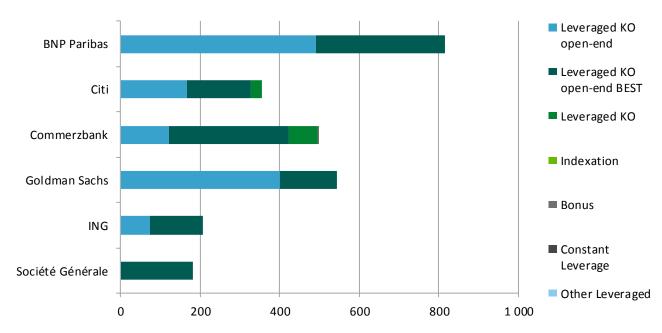
The chart below displays the number of trades per product type for each issuer active in an Euronext market.



ISSUER ACTIVITY: NEW LISTINGS

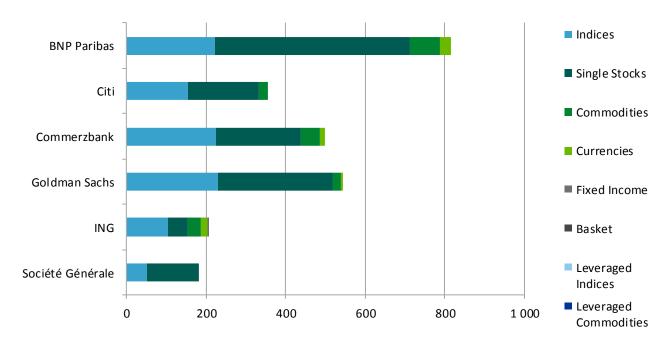
Product types

The chart below displays the number of new product listings during the month per product type for each issuer active in an Euronext market.



Underlying types

The chart below displays the number of new product listings during the month per underlying type for each issuer active in an Euronext market.

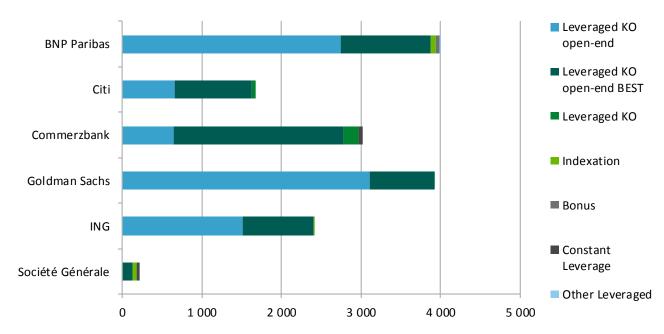


30 Market Activity Report - Warrants & Certificates - Euronext Amsterdam - December 2016

ISSUER ACTIVITY: PRODUCT RANGE

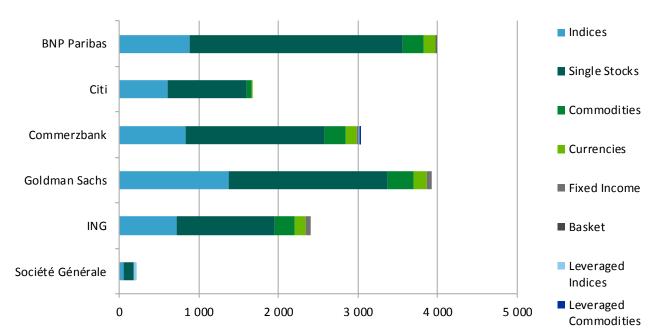
Product types

The chart below displays the number of existing product listings per product type for each issuer active in an Euronext market.



Underlying types

The chart below displays the number of existing product listings per underlying type for each issuer active in an Euronext market.



Market Activity Report - Warrants & Certificates - Euronext Amsterdam - December 2016 31

Top 50 traded products

The table below displays the 50 most traded products (in terms of value traded) on Euronext Amsterdam.

Trading symbol	ISIN Code	Product type	lssuer	Name	Number of trades	Value traded (in K€)
A415H	NL0011927363	Leveraged KO open-end	Goldman Sachs	AEX 438.1TL OPENH	198	8,485
DQ43B	NL0011262431	Leveraged KO open-end	BNP Paribas	AEX 532TS OPENB	484	7,208
DS47B	NL0011264478	Leveraged KO open-end	BNP Paribas	AEX 505TS OPENB	197	5,576
QI75B	NL0012098982	Leveraged KO open-end BEST	BNP Paribas	AEX 463.2BL OPENB	450	5,415
DQ46B	NL0011262464	Leveraged KO open-end	BNP Paribas	AEX 550TS OPENB	344	5,224
4546H	NL0011239785	Leveraged KO open-end	Goldman Sachs	AEX 504.7TS OPENH	127	4,800
QG22B	NL0012038541	Leveraged KO open-end BEST	BNP Paribas	AEX 453.2BL OPENB	462	3,997
1199H	NL0011036223	Leveraged KO open-end	Goldman Sachs	AEX 538.7TS OPENH	239	3,387
QH54B	NL0012039861	Leveraged KO open-end BEST	BNP Paribas	AEX 458.2BL OPENB	245	3,113
NY88B	NL0012031207	Capped Bonus	BNP Paribas	ESTX 4200BOC1217B	52	3,038
NX02B	NL0012029342	Leveraged KO open-end BEST	BNP Paribas	AEX 442.4BL OPENB	300	3,037
QH51B	NL0012039838	Leveraged KO open-end BEST	BNP Paribas	AEX 455.2BL OPENB	1,433	2,799
JU82B	NL0011908447	Leveraged KO open-end BEST	BNP Paribas	AEX 436.BL OPENB	1,150	2,481
QE81B	NL0012037139	Leveraged KO open-end BEST	BNP Paribas	AEX 447.2BL OPENB	385	2,280
58NNZ	DE000CD63SQ1	Leveraged KO open-end BEST	Commerzbank	SHELL22.46TL OPENZ	47	2,153
QC03B	NL0012034359	Leveraged KO open-end BEST	BNP Paribas	AEX 443.8BL OPENB	292	2,133
QA85B	NL0012033179	Leveraged KO open-end BEST	BNP Paribas	BRENT45.34BL OPENB	155	2,081
QI17B	NL0012040497	Leveraged KO open-end BEST	BNP Paribas	AEX 460.2BL OPENB	235	2,001
QA25B	NL0012032577	Leveraged KO open-end BEST	BNP Paribas	OILCR42.33BL OPENB	31	1,919
ASTJH	NL0011993035	Leveraged KO open-end	Goldman Sachs	AEX 437.4TL OPENH	14	1,826
NU26B	NL0012026587	Leveraged KO open-end BEST	BNP Paribas	AEX 461.6BS OPENB	426	1,786
GD91B	NL0011532023	Leveraged KO open-end BEST	BNP Paribas	HEINK66.84BL OPENB	196	1,759
CX22B	NL0011091350	Leveraged KO open-end BEST	BNP Paribas	AEX 521.3BS OPENB	339	1,644
QJ94B	NL0012100150	Leveraged KO open-end BEST	BNP Paribas	AEX 466.3BL OPENB	127	1,635
A67FH	NL0011998034	Leveraged KO open-end BEST	Goldman Sachs	GOLDF 1200TRSOPENH	114	1,489
QB25B	NL0012033575	Leveraged KO open-end	BNP Paribas	EUUSD 1.09TS OPENB	122	1,324
D195N	NL0010659009	Leveraged KO open-end BEST	BNP Paribas	AEX 600BS OPENN	122	1,287
CR74B	NL0011085931	Leveraged KO open-end BEST	BNP Paribas	AEX 550BS OPENB	347	1,286
QI74B	NL0012098974	Leveraged KO open-end BEST	BNP Paribas	AEX 462.2BL OPENB	74	1,257
NB25B	NL0011914874	Leveraged KO open-end	BNP Paribas	ING 9.76TL OPENB	35	1,257
QJ44B	NL0012099659	Leveraged KO open-end BEST	BNP Paribas	AEX 492.7BS OPENB	121	1,255
QE60B	NL0012036925	Leveraged KO open-end	BNP Paribas	DAX 10570TL OPENB	45	1,235
A5N6H	NL0011990742	Leveraged KO open-end	Goldman Sachs	AEX 462.4TS OPENH	50	1,245
NH77B	NL0011921390	Leveraged KO open-end BEST	BNP Paribas	AEX 402.415 OF ENH AEX 475.3BS OPENB	733	1,194
2126H	NL0011045497	Leveraged KO open-end	Goldman Sachs	AEX 548.5TS OPENH	135	1,194
GL81G	NL0011483805	Leveraged KO open-end BEST	ING	DAX 11065SPSOPENG	135	1,171
NY33B	NL0012030654	Leveraged KO open-end	BNP Paribas	SHELL 22.1TL OPENB	82	1,165
QD34B	NL0012035661	Leveraged KO open-end	BNP Paribas	AEX 459TS OPENB	146	1,105
A03ZH	NL0012033001 NL0011705140	Leveraged KO open-end BEST	Goldman Sachs	GOLDF 1090TRLOPENH	140	1,131
QH61B	NL0012039937	Leveraged KO open-end BEST	BNP Paribas	AEX 485.5BS OPENB	615	1,139
JU23B	NL0012039937	Leveraged KO open-end BEST	BNP Paribas	AEX 485.565 OPENB	130	1,123
CK15B	NL0011079405	Leveraged KO open-end	BNP Paribas	AEX 530TS OPENB	130	1,127
JD68B	NL0011079403 NL0011812318	Leveraged KO open-end	BNP Paribas	GOLD 1096TL OPENB	197	1,117
A3BOH	NL0011812318 NL0011888847	Leveraged KO open-end BEST	Goldman Sachs	EUUSF1.144TRSOPENH	31	1,108
NZ53B	NL0011888847 NL0012031850	Leveraged KO open-end	BNP Paribas	AEX 445TL OPENB	130	1,103
JT30B		Leveraged KO open-end	BNP Paribas BNP Paribas	AEX 445TL OPENB	50	1,098
	NL0011906920			AEX 523TS OPENB		
DE28B	NL0011250287	Leveraged KO open-end Leveraged KO open-end	BNP Paribas		171	1,076
NS64B	NL0012024962	Leveraged KO open-end BEST	BNP Paribas BNP Paribas	BRENT 52.6TS OPENB DAX 9844BL OPENB	56	1,064
JV50B	NL0011909122	Leveraged KO open-end BEST Leveraged KO open-end			233	1,043
4775H (Source: Eu	NL0011242078	Leveraged KO open-end	Goldman Sachs	AEX 494.2TS OPENH	40	1,027



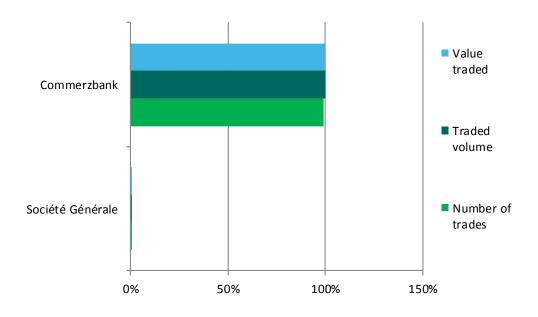
Euronext Brussels

Issuers

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Brussels per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Brussels.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded		Traded volume				Number of trades			
lssuer	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
Commerzbank	219.2	11%	-18%	99.9%	146.3	-21%	-31%	99.9%	94	-12%	-23%	99.2%
Société Générale	0.3	-71%	-88%	0.1%	0.1	-42%	-80%	0.1%	1	-12%	-71%	0.8%
Total	219.4	11%	-18%		146.4	-22%	-31%		95	-12%	-24%	

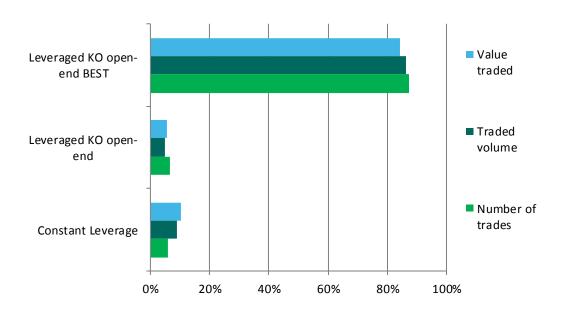


Product types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Brussels per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Brussels.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

	Value traded				Traded volume				Number of trades			
Product type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K€)	month				month		
Leveraged KO open-end BEST	185.0	22%	-20%	84.3%	126.5	17%	-23%	86.4%	83	-5.4%	-25%	87.5%
Leveraged KO open-end	12.1	-36%	-46%	5.5%	6.9	-40%	-53%	4.7%	6	-49%	-32%	6.7%
Constant Leverage	22.4	-18%	50%	10.2%	13.0	-81%	-62%	8.9%	6	-29%	25%	5.9%
Total	219.4	11%	-18%		146.4	-22%	-31%		95	-12%	-24%	

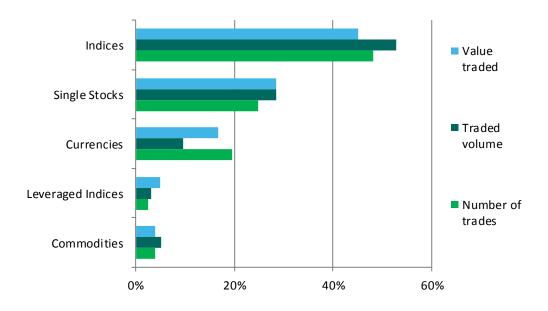


Underlying types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Brussels per underlying type, as well as the variation over the previous month and the weight of each underlying type over the total of Euronext Brussels.

The chart at the bottom of the page represents the weight of each underlying type in terms of traded value, traded volume and number of trades.

	Value traded				Traded volume				Number of trades			
Underlying type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K€)	month				month		
Indices	99.2	10%	-40%	45.2%	77.3	11%	-35%	52.8%	46	-13%	-43%	48.3%
Single Stocks	62.7	21%	11%	28.6%	41.7	22%	-12%	28.5%	24	19%	0.3%	24.8%
Currencies	36.5	274%	81%	16.6%	14.0	111%	30%	9.5%	19	77%	82%	19.6%
Leveraged Indices	10.7	-22%	102%	4.9%	4.4	-41%	11%	3.0%	2	37%	121%	2.6%
Commodities	8.9	-71%	-58%	4.0%	7.6	-88%	-76%	5.2%	4	-82%	-59%	4.0%
Total	219.4	11%	-18%		146.4	-22%	-31%		95	-12%	-24%	

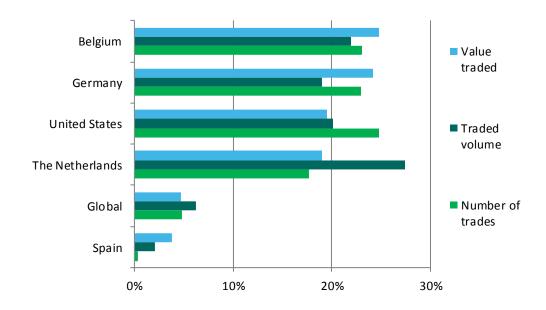


Top 10 underlying countries

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Brussels per country of origin of the underlying, as well as the variation over the previous month and the weight of each underlying country of origin over the total of Euronext Brussels.

The chart at the bottom of the page represents the weight of each underlying country of origin in terms of traded value, traded volume and number of trades.

	Value traded Daily Month vs. YTD Market				Traded	olume		N	lumber c	oftrades		
Underlying country	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
Belgium	54.2	13%	13%	24.8%	32.0	20%	-9.0%	21.9%	22	19%	6.9%	23.0%
Germany	52.8	15%	-38%	24.1%	27.7	21%	-21%	19.0%	22	-10.0%	-31%	23.0%
United States	42.7	175%	75%	19.5%	29.4	69%	56%	20.2%	24	37%	72%	24.7%
The Netherlands	41.6	14%	-38%	19.0%	39.9	5.7%	-45%	27.4%	17	-12%	-56%	17.7%
Global	10.4	-69%	-52%	4.7%	9.0	-87%	-73%	6.2%	5	-80%	-54%	4.8%
Spain	8.4	76%	188%	3.8%	3.0	186%	18%	2.1%	0	110%	93%	0.3%
Other	8.7	-40%	-55%	4.0%	4.8	-59%	-70%	3.3%	6	4.8%	-43%	6.4%
Total	218.8	10%	-19%		145.9	-22%	-31%		95	-12%	-24%	

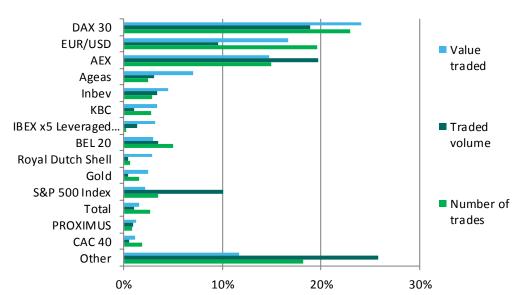


Top 15 underlyings

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Brussels for the top 15 underlyings, as well as the variation over the previous month and the weight of each of the top 15 underlyings over the total of Euronext Brussels.

The chart at the bottom of the page represents the weight of each of the top 15 underlyings in terms of traded value, traded volume and number of trades.

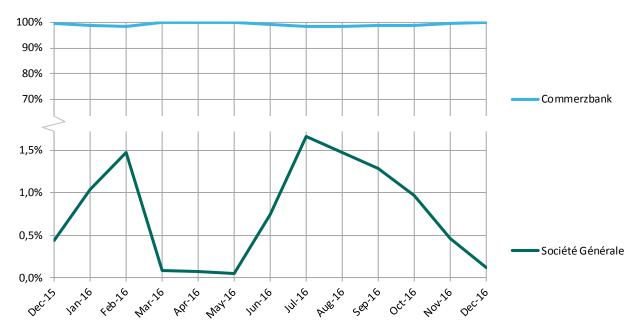
		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
DAX 30	52.8	15%	-38%	24.1%	27.7	21%	-21%	18.9%	22	-10.0%	-31%	23.0%
EUR/USD	36.5	274%	81%	16.6%	14.0	111%	30%	9.5%	19	77%	82%	19.6%
AEX	32.4	38%	-47%	14.8%	28.9	14%	-55%	19.7%	14	-7.4%	-60%	14.9%
Ageas	15.5	74%	199%	7.1%	4.6	87%	122%	3.1%	2	47%	76%	2.5%
Inbev	9.9	129%	478%	4.5%	5.0	116%	226%	3.4%	3	49%	281%	2.9%
КВС	7.4	37%	-30%	3.4%	1.6	-5.3%	-53%	1.1%	3	20%	-25%	2.8%
IBEX x5 Leveraged Index	7.1	52%	229%	3.2%	2.0	89%	212%	1.3%	0	110%	133%	0.2%
BEL 20	6.6	-50%	-46%	3.0%	5.1	-51%	-49%	3.5%	5	-14%	-32%	5.1%
Royal Dutch Shell	6.4	-29%	140%	2.9%	0.6	-45%	117%	0.4%	1	-24%	85%	0.7%
Gold	5.4	-74%	-59%	2.5%	0.7	-88%	-83%	0.5%	1	-86%	-69%	1.6%
S&P 500 Index	4.8	16%	33%	2.2%	14.8	44%	89%	10.1%	3	-41%	18%	3.5%
Total	3.5	110%	24%	1.6%	1.5	173%	74%	1.0%	3	89%	53%	2.7%
PROXIMUS	2.8	ND	362%	1.3%	1.5	ND	748%	1.0%	1	790%	433%	0.9%
CAC 40	2.5	-13%	-22%	1.2%	0.8	33%	-9.4%	0.6%	2	-12%	-39%	1.9%
Other	25.8	-42%	-42%	11.8%	37.8	-61%	-47%	25.8%	17	-35%	-22%	18.2%
Total	219.4	11%	-18%		146.4	-22%	-31%		95	-12%	-24%	



MARKET TREND: ISSUERS

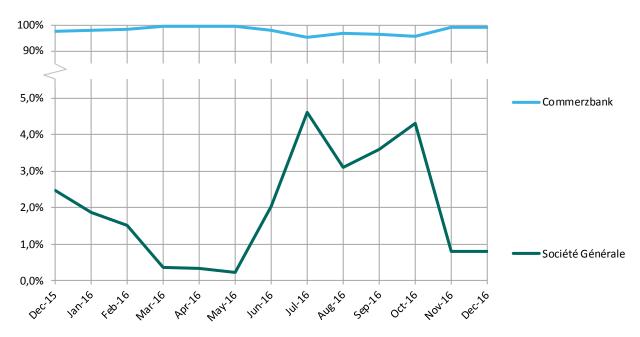
Value traded

The historical graph below displays the weight of the traded value of each issuer over the total traded value on Euronext Brussels.



Number of transactions

The historical graph below displays the weight of the traded volume of each issuer over the total traded volume on Euronext Brussels.



MARKET TREND: PRODUCT TYPES

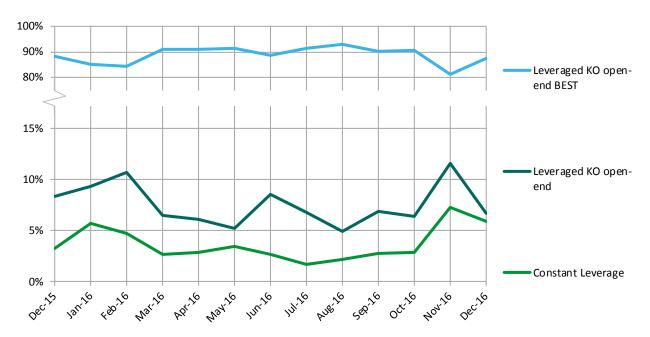
Value traded

The historical graph below displays the weight of the traded value of each product type over the total traded value on Euronext Brussels.



Number of transactions

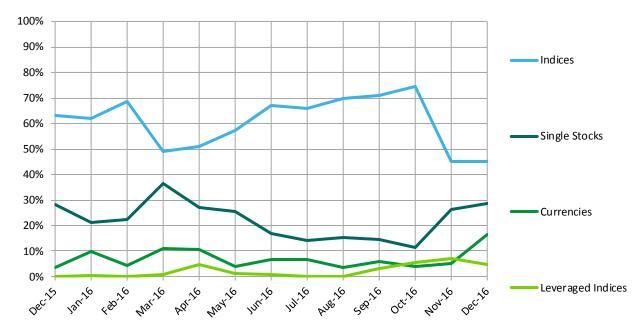
The historical graph below displays the weight of the traded volume of each product type over the total traded volume on Euronext Brussels.



MARKET TREND: UNDERLYING TYPES

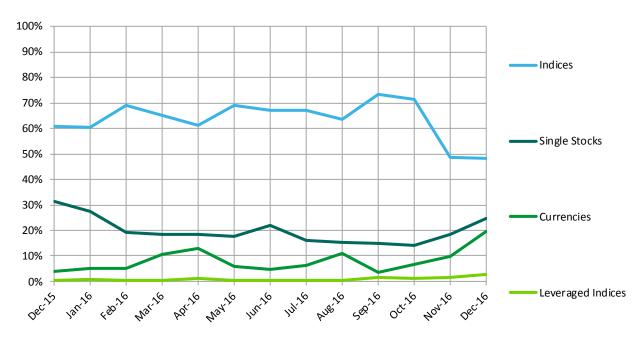
Value traded

The historical graph below displays the weight of the traded value of each underlying type over the total traded value on Euronext Brussels.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying type over the total traded volume on Euronext Brussels.

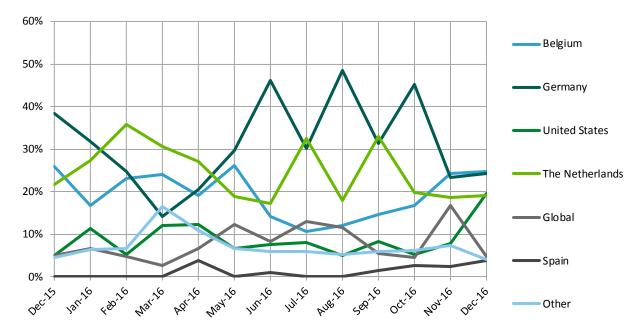


Market Activity Report - Warrants & Certificates - Euronext Brussels - December 2016 41

MARKET TREND: UNDERLYING COUNTRIES

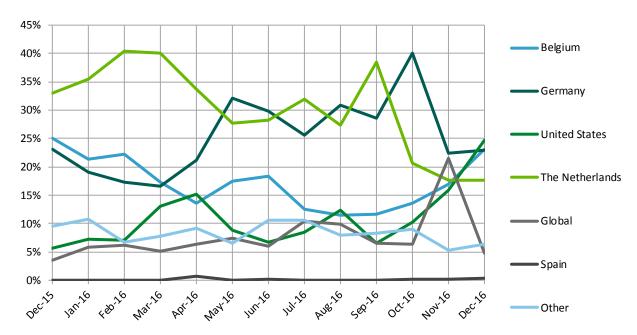
Value traded

The historical graph below displays the weight of the traded value of each underlying country of origin over the total traded value on Euronext Brussels.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying country of origin over the total traded volume on Euronext Brussels.

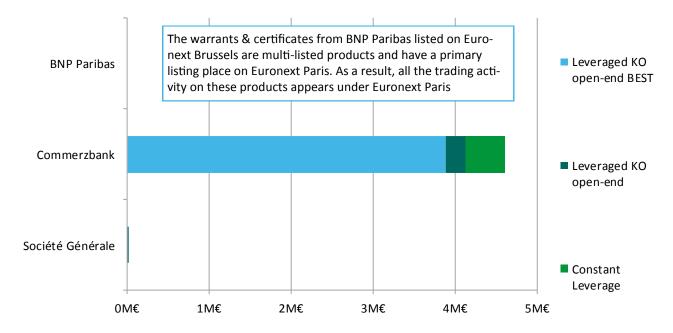


42 Market Activity Report - Warrants & Certificates - Euronext Brussels - December 2016

ISSUER ACTIVITY

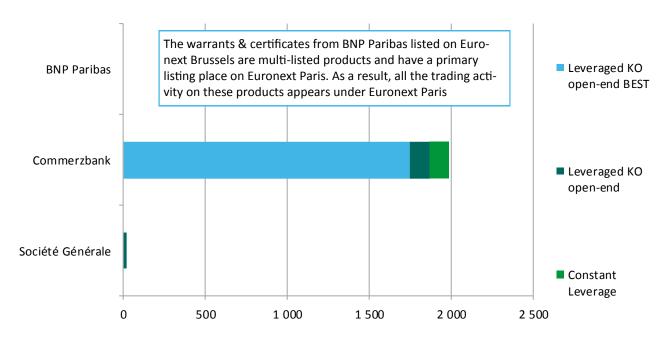
Value traded

The chart below displays the value traded per product type (in million Euros) for each issuer active on Euronext Brussels.



Number of transactions

The chart below displays the number of trades per product type for each issuer active on Euronext Brussels.

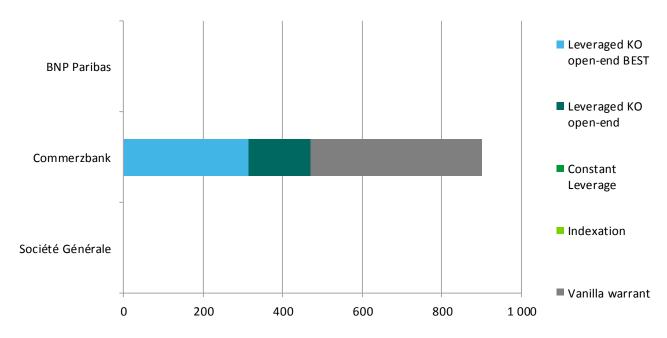


Market Activity Report - Warrants & Certificates - Euronext Brussels - December 2016 43

ISSUER ACTIVITY: NEW LISTINGS

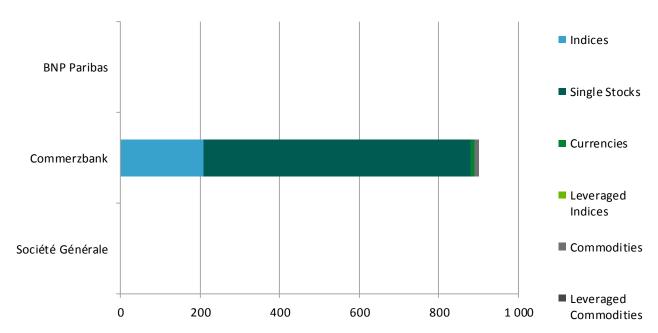
Product types

The chart below displays the number of new product listings during the month per product type for each issuer active on Euronext Brussels.



Underlying types

The chart below displays the number of new product listings during the month per underlying type for each issuer active on Euronext Brussels.

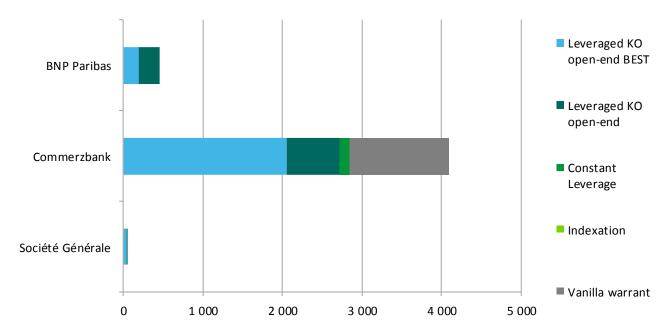


44 Market Activity Report - Warrants & Certificates - Euronext Brussels - December 2016

ISSUER ACTIVITY: PRODUCT RANGE

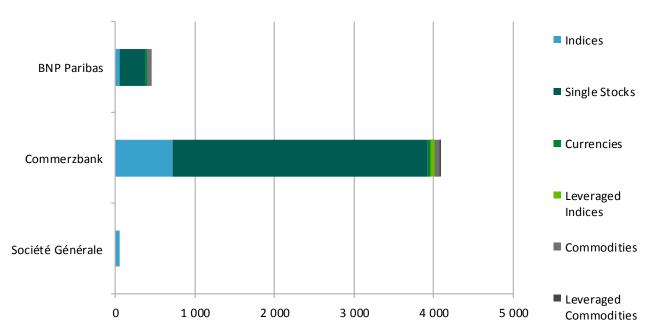
Product types

The chart below displays the number of existing product listings per product type for each issuer active on Euronext Brussels.



Underlying types

The chart below displays the number of existing product listings per underlying type for each issuer active on YSE Euronext Brussels.



Market Activity Report - Warrants & Certificates - Euronext Brussels - December 2016 45

Top 50 traded products

The table below displays the 50 most traded products (in terms of value traded) on Euronext Brussels.

Trading	ISIN Code	Product type	lssuer	Name	Number of	Value traded
symbol					trades	(in K€)
Z838Z	DE000CN90SF6	Leveraged KO open-end BEST	Commerzbank	DAX 11345TL OPENZ	68	320
Z390Z	DE000CN90RX1	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.07TS OPENZ	104	250
Y312Z	DE000CN90QM6	Leveraged KO open-end BEST	Commerzbank	DAX 10741TL OPENZ	23	207
67NGZ	DE000CN90E73	Leveraged KO open-end BEST	Commerzbank	AGEAS30.03TL OPENZ	6	150
44T1Z	DE000CM8MJA0	Constant Leverage	Commerzbank	IBEL5 PI OPENZ	4	149
RD5CZ	DE000CB74SK5	Constant Leverage	Commerzbank	SHELL ACCOPENZ	11	133
35BRZ	DE000CN1W4T8	Leveraged KO open-end BEST	Commerzbank	EUUSD 0.99TL OPENZ	70	115
Z492Z	DE000CN90RZ6	Leveraged KO open-end BEST	Commerzbank	AEX 470.4TL OPENZ	20	105
49A8Z	DE000CM8PEN7	Leveraged KO open-end BEST	Commerzbank	INBEV 70TL OPENZ	14	97
Z495Z	DE000CN90S28	Leveraged KO open-end BEST	Commerzbank	DAX 11244TL OPENZ	29	95
Z4352 Z836Z	DE000CN90SD1	Leveraged KO open-end BEST	Commerzbank	AEX 473.4TL OPENZ	31	87
W618Z		0 1			14	84
	DE000CN90PG0	Leveraged KO open-end BEST	Commerzbank	AGEAS34.47TL OPENZ		
17BUZ	DE000CN1W8R3	Leveraged KO open-end BEST	Commerzbank	DAX 11222TS OPENZ	58	82
42AFZ	DE000CR0KTQ1	Leveraged KO open-end BEST	Commerzbank	DAX 12270TS OPENZ	60	75
33KCZ	DE000CR0KNZ5	Leveraged KO open-end BEST	Commerzbank	TOTAL55.42TS OPENZ	53	73
W629Z	DE000CN90PM8	Leveraged KO open-end BEST	Commerzbank	GOLD 1286TS OPENZ	6	72
54NNZ	DE000CN90P39	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.09TS OPENZ	32	72
66BAZ	DE000CN1VG83	Leveraged KO open-end BEST	Commerzbank	INBEV89.98TL OPENZ	19	71
89AAZ	DE000CR0KKA4	Leveraged KO open-end BEST	Commerzbank	EUUSD 0.92TL OPENZ	33	65
Y467Z	DE000CN90QY1	Leveraged KO open-end BEST	Commerzbank	AEX 458.3TL OPENZ	17	62
Z383Z	DE000CN90RQ5	Leveraged KO open-end BEST	Commerzbank	AEX 467.4TL OPENZ	11	60
Y578Z	DE000CN90R94	Leveraged KO open-end BEST	Commerzbank	AEX 461.3TL OPENZ	16	54
11D6Z	DE000CM8MZF5	Leveraged KO open-end	Commerzbank	KBC 34TCIOPENZ	2	53
Z490Z	DE000CN90S51	Leveraged KO open-end BEST	Commerzbank	PROX 25.49TL OPENZ	14	53
W928Z	DE000CN90PW7	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.13TS OPENZ	6	51
76YMZ	DE000CN90MH5	Leveraged KO open-end BEST	Commerzbank	AEX 445.5TL OPENZ	11	51
93NNZ	DE000CN90NY8	Leveraged KO open-end BEST	Commerzbank	DAX 10526TL OPENZ	15	49
Y468Z	DE000CN90QZ8	Leveraged KO open-end BEST	Commerzbank	DAX 10941TL OPENZ	17	47
66YDZ	DE000CN90B92	Leveraged KO open-end BEST	Commerzbank	SOLVA 82.7TL OPENZ	5	46
Y304Z	DE000CN90QD5	Leveraged KO open-end BEST	Commerzbank	AGEAS36.01TL OPENZ	17	46
Y579Z	DE000CN90RA9	Leveraged KO open-end BEST	Commerzbank	AEX 487.9TS OPENZ	15	45
17Q9Z	DE000CR0K2T8	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.2TS OPENZ	26	44
W465Z	DE000CN90P54	Leveraged KO open-end BEST	Commerzbank	AGEAS33.07TL OPENZ	9	43
25BRZ	DE000CN1W4S0	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.01TL OPENZ	18	42
75XPZ	DE000CN8ZV00	Constant Leverage	Commerzbank	AEXF SHROPENZ	4	40
69KFZ	DE000CR0KUS5	Leveraged KO open-end BEST	Commerzbank	DAX 12066TS OPENZ	15	37
W467Z	DE000CN90P70	Leveraged KO open-end BEST	Commerzbank	KBC 54.31TL OPENZ	12	32
34VXZ	DE000CN1VCB8	Constant Leverage	Commerzbank	BRENT LEVOPENZ	16	32
99AAZ	DE000CR0KKB2	Leveraged KO open-end BEST	Commerzbank	EUUSD 0.96TL OPENZ	28	31
Y429Z	DE000CN90QQ7	Leveraged KO open-end BEST	Commerzbank	SP500 2212TL OPENZ	9	30
Z388Z	DE000CN90RV5	Leveraged KO open-end BEST	Commerzbank	EUUSD 0.97TL OPENZ	11	29
16J8Z	DE000CR0JU26	Leveraged KO open-end BEST	Commerzbank	BPOST18.62TL OPENZ	9	29
Y167Z	DE000CN90Q79	Leveraged KO open-end BEST	Commerzbank	DAX 10541TL OPENZ	9	29
71KBZ	DE000CR0KM15	Leveraged KO open-end BEST	Commerzbank	DAX 103411E OF ENZ	32	29
37MRZ	DE000CN8ZXD6	Leveraged KO open-end BEST	Commerzbank	SILVE14.91TL OPENZ	16	23
43T1Z	DE000CM8ZAD0 DE000CM8MHZ1	Constant Leverage	Commerzbank	IBES3 PI OPENZ	2	27
		0	Commerzbank	BEL20 3117TL OPENZ	2	27
78MIZ	DE000CN8ZNB1	Leveraged KO open-end BEST Leveraged KO open-end				
55K5Z	DE000CM8NGP2	o .	Commerzbank	DELHA43.83TCIOPENZ	4	25
67P8Z	DE000CR0K1F9	Leveraged KO open-end BEST	Commerzbank	EUUSD 1.24TS OPENZ	7	23
73YDZ	DE000CN90B19 ironext)	Leveraged KO open-end BEST	Commerzbank	KBC 42.81TL OPENZ	11	23



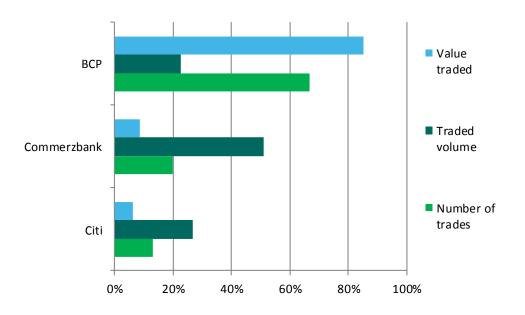
Euronext Lisbon

Issuers

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Lisbon per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Lisbon.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value traded				Traded	volume		Number of trades			
Issuer	Daily	Month	vs. YTD	Market	Daily	Month	vs.YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
ВСР	3,778.5	149%	168%	85.2%	202.6	164%	182%	22.5%	317	87%	94%	66.9%
Commerzbank	379.7	-39%	-16%	8.6%	458.4	-6.8%	-20%	50.9%	95	-39%	-31%	20.0%
Citi	277.2	-8.4%	-3.8%	6.2%	239.0	-39%	-27%	26.6%	62	-37%	-37%	13.1%
Total	4,435.4	82%	106%		900.0	-6.3%	-7.3%		474	12%	19%	

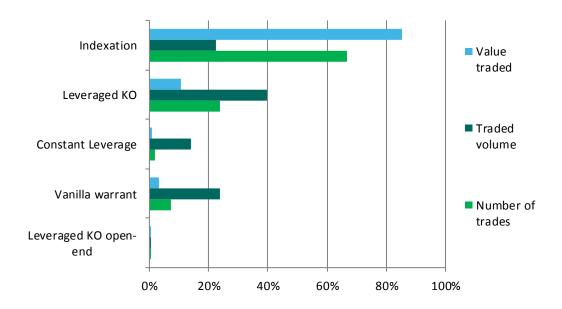


Product types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Lisbon per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Lisbon.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value traded				Traded	volume		Number of trades				
Product type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	
	average	on		share	average	on		share	average	on		share	
	(in K€)	month			(in K€)	month				month			
Indexation	3,778.5	149%	168%	85.2%	202.6	164%	182%	22.5%	317	87%	94%	66.9%	
Leveraged KO	471.1	-38%	-2.6%	10.6%	356.9	-27%	-5.1%	39.7%	113	-41%	-29%	23.9%	
Constant Leverage	36.1	15%	-25%	0.8%	125.2	93%	-20%	13.9%	9	14%	-27%	1.9%	
Vanilla warrant	148.0	16%	-28%	3.3%	214.9	-34%	-41%	23.9%	34	-40%	-48%	7.1%	
Leveraged KO open-end	1.8	-30%	46%	0.0%	0.4	-82%	-48%	0.0%	1	36%	37%	0.2%	
Total	4,435.4	82%	106%		900.0	-6.3%	-7.3%		474	12%	19%		

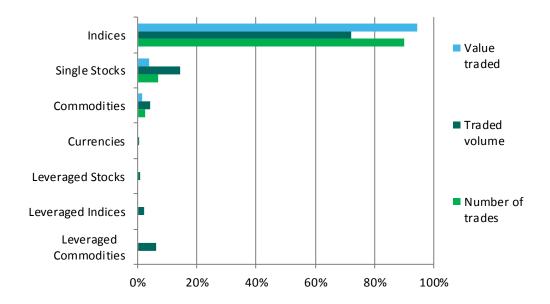


Underlying types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Lisbon per underlying type, as well as the variation over the previous month and the weight of each underlying type over the total of Euronext Lisbon.

The chart at the bottom of the page represents the weight of each underlying type in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K€)	month				month		
Indices	4,185.7	87%	118%	94.4%	644.7	-1.5%	9.9%	72.1%	426	16%	26%	90.1%
Single Stocks	176.0	53%	43%	4.0%	128.6	-47%	-40%	14.4%	33	-12%	-15%	6.9%
Commodities	67.9	-4.9%	2.0%	1.5%	37.4	-34%	19%	4.2%	12	-20%	12%	2.5%
Currencies	2.1	-78%	-62%	0.0%	0.7	-83%	-74%	0.1%	1	-70%	-56%	0.2%
Leveraged Stocks	0.2	11%	-97%	0.0%	6.8	ND	-73%	0.8%	1	ND	-56%	0.2%
Leveraged Indices	0.2	-36%	-99%	0.0%	20.5	ND	-51%	2.3%	0	-16%	-95%	0.0%
Leveraged Commodities	0.1		-98%	0.0%	55.1		-16%	6.2%	0		-71%	0.1%
Total	4,432.3	82%	106%		893.7	-6.7%	-7.6%		473	12%	19%	

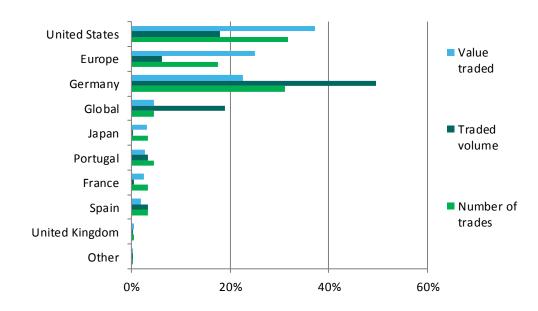


Top 10 underlying countries

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Lisbon per country of origin of the underlying, as well as the variation over the previous month and the weight of each underlying country of origin over the total of Euronext Lisbon.

The chart at the bottom of the page represents the weight of each underlying country of origin in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded v	volume		Ν	lumber o	oftrades	
Underlying country	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
United States	1,647.5	94%	170%	37.1%	160.7	-5.7%	6.4%	17.9%	151	22%	55%	31.8%
Europe	1,105.9	201%	175%	24.9%	56.4	113%	118%	6.3%	83	117%	100%	17.5%
Germany	1,005.1	9.7%	30%	22.7%	445.6	-29%	-20%	49.5%	147	-25%	-21%	31.1%
Global	206.0	168%	132%	4.6%	170.2	182%	59%	18.9%	21	31%	46%	4.5%
Japan	135.5	129%	119%	3.1%	0.7	114%	94%	0.1%	16	81%	42%	3.4%
Portugal	119.0	94%	49%	2.7%	30.5	62%	-43%	3.4%	21	93%	14%	4.5%
France	112.3	98%	71%	2.5%	5.0	-40%	-77%	0.6%	15	20%	23%	3.2%
Spain	82.5	95%	58%	1.9%	30.6	-34%	-38%	3.4%	16	17%	8.1%	3.4%
United Kingdom	20.6	127%	22%	0.5%	0.3	123%	-51%	0.0%	3	79%	17%	0.6%
Other	1.1	ND	179%	0.0%	0.1	ND	-96%	0.0%	0	110%	-78%	0.0%
Total	4,435.4	82%	106%		900.0	-6.3%	-7.3%		474	12%	19%	

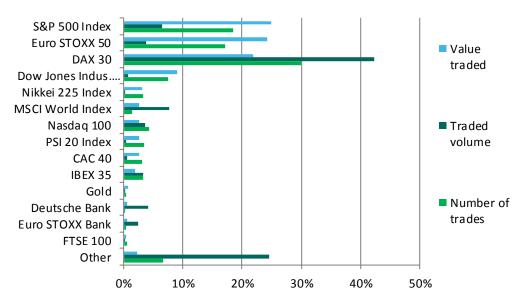


Top 15 underlyings

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Lisbon for the top 15 underlyings, as well as the variation over the previous month and the weight of each of the top 15 underlyings over the total of Euronext Lisbon.

The chart at the bottom of the page represents the weight of each of the top 15 underlyings in terms of traded value, traded volume and number of trades.

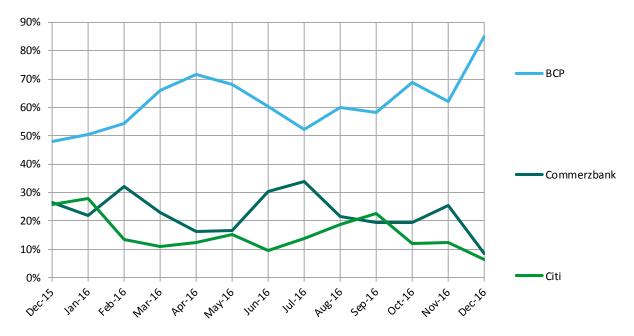
		Value t	raded			Traded v	volume		N	lumber c	oftrades	
Underlying	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in K€)	month			(in K)	month				month		
S&P 500 Index	1,104.2	113%	181%	24.9%	58.2	102%	95%	6.5%	87	53%	81%	18.4%
Euro STOXX 50	1,074.5	211%	178%	24.2%	33.5	194%	153%	3.7%	81	127%	104%	17.1%
DAX 30	969.6	9.6%	32%	21.9%	380.2	-19%	-12%	42.2%	142	-23%	-18%	30.0%
Dow Jones Indus. Avg.	403.4	158%	247%	9.1%	7.4	243%	42%	0.8%	35	103%	160%	7.4%
Nikkei 225 Index	135.5	129%	119%	3.1%	0.7	114%	94%	0.1%	16	81%	42%	3.4%
MSCI World Index	118.6		ND	2.7%	68.7		ND	7.6%	6		ND	1.4%
Nasdaq 100	115.2	-20%	77%	2.6%	32.7	-52%	-21%	3.6%	20	-38%	-14%	4.3%
PSI 20 Index	114.9	102%	92%	2.6%	3.9	187%	115%	0.4%	16	96%	78%	3.4%
CAC 40	112.2	98%	85%	2.5%	4.5	-41%	-6.8%	0.5%	15	22%	39%	3.1%
IBEX 35	82.0	95%	64%	1.8%	29.1	-36%	-23%	3.2%	16	18%	20%	3.3%
Gold	34.1	0.2%	6.6%	0.8%	0.4	-65%	-40%	0.0%	2	-37%	-5.9%	0.5%
Deutsche Bank	26.9	51%	513%	0.6%	37.0	20%	232%	4.1%	1	-19%	44%	0.2%
Euro STOXX Bank	26.0	69%	105%	0.6%	22.6	54%	81%	2.5%	2	-17%	7.1%	0.4%
FTSE 100	20.6	127%	24%	0.5%	0.3	123%	17%	0.0%	3	76%	27%	0.6%
Other	97.8	-3.7%	-33%	2.2%	220.7	-20%	-41%	24.5%	31	-31%	-37%	6.6%
Total	4,435.4	82%	106%		900.0	-6.3%	-7.3%		474	12%	19%	



MARKET TREND: ISSUERS

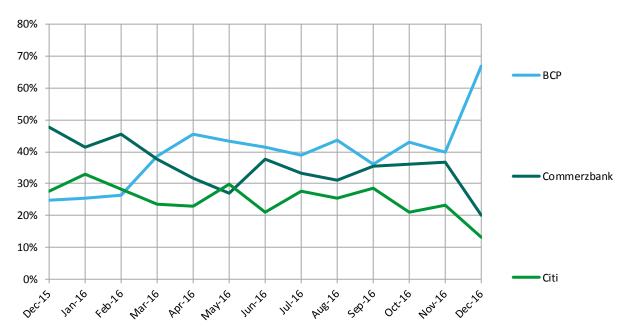
Value traded

The historical graph below displays the weight of the traded value of each issuer over the total traded value on Euronext Lisbon.



Number of transactions

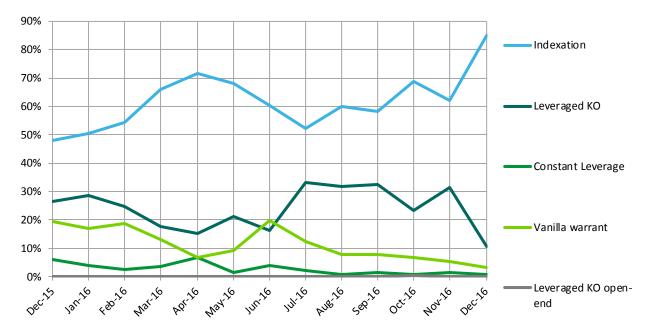
The historical graph below displays the weight of the traded volume of each issuer over the total traded volume on Euronext Lisbon.



MARKET TREND: PRODUCT TYPES

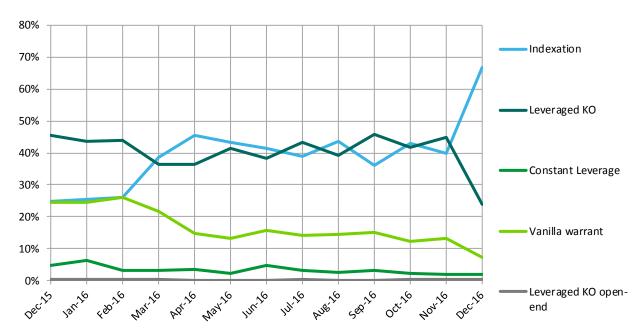
Value traded

The historical graph below displays the weight of the traded value of each product type over the total traded value on Euronext Lisbon.



Number of transactions

The historical graph below displays the weight of the traded volume of each product type over the total traded volume on Euronext Lisbon.

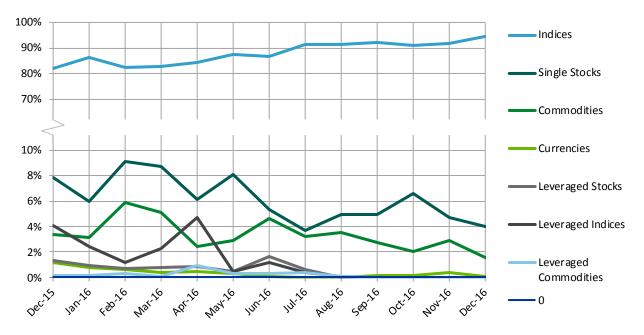


54 Market Activity Report - Warrants & Certificates - Euronext Lisbon - December 2016

MARKET TREND: UNDERLYING TYPES

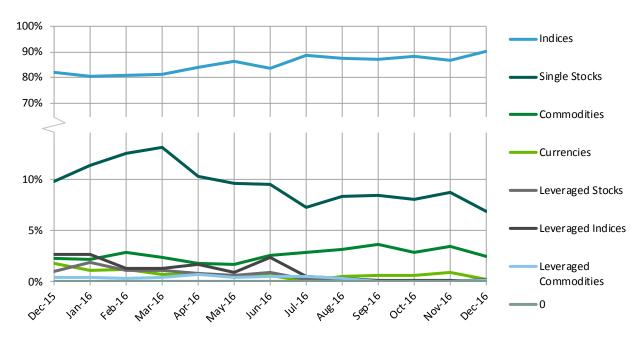
Value traded

The historical graph below displays the weight of the traded value of each underlying type over the total traded value on Euronext Lisbon.



Number of transactions

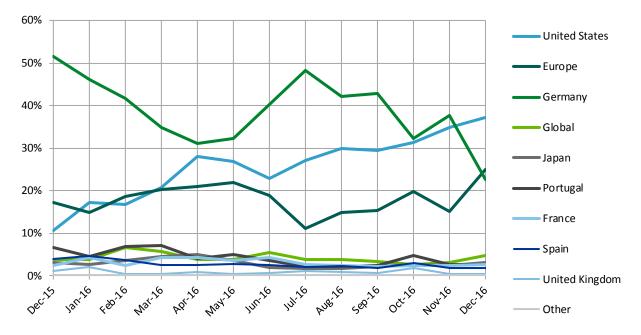
The historical graph below displays the weight of the traded volume of each underlying type over the total traded volume on Euronext Lisbon.



MARKET TREND: UNDERLYING COUNTRIES

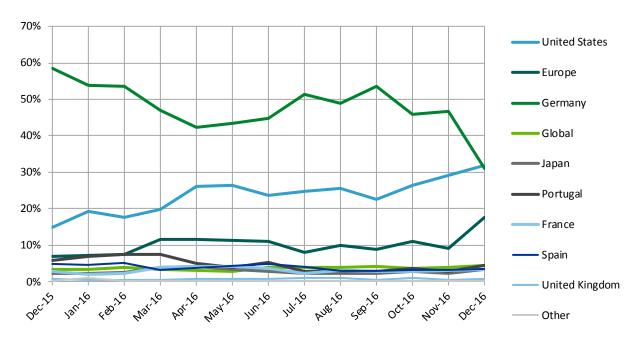
Value traded

The historical graph below displays the weight of the traded value of each underlying country of origin over the total traded value on Euronext Lisbon.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying country of origin over the total traded volume on Euronext Lisbon.

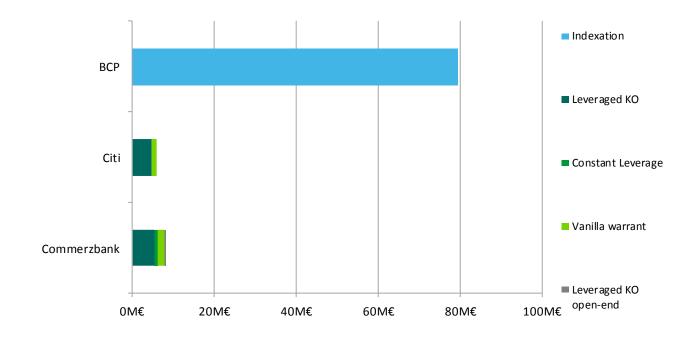


56 Market Activity Report - Warrants & Certificates - Euronext Lisbon - December 2016

ISSUER ACTIVITY

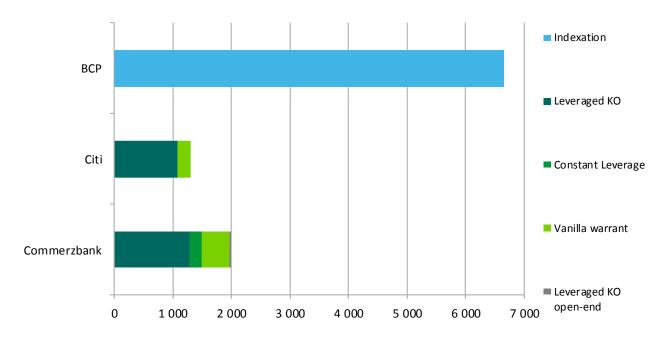
Value traded

The chart below displays the value traded per product type (in million Euros) for each issuer active on Euronext Lisbon.



Number of transactions

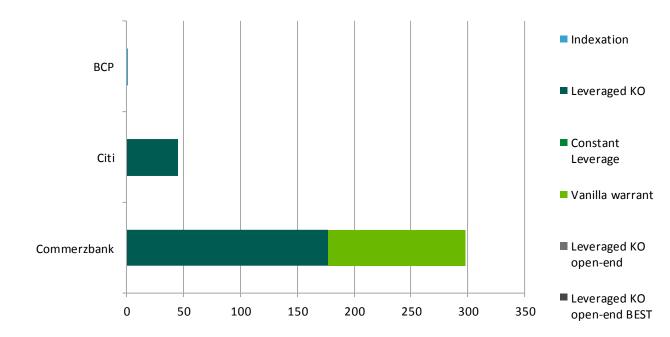
The chart below displays the number of trades per product type for each issuer active on Euronext Lisbon.



ISSUER ACTIVITY: NEW LISTINGS

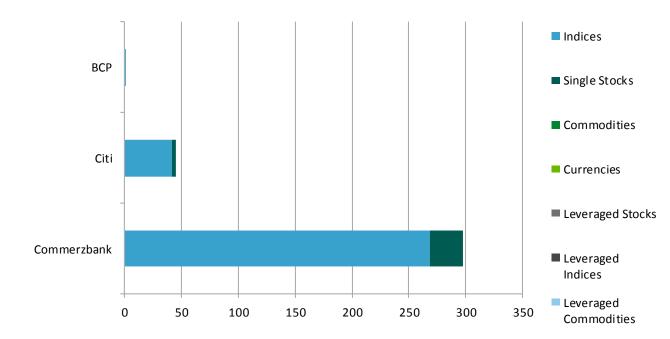
Product types

The chart below displays the number of new product listings during the month per product type for each issuer active on Euronext Lisbon.



Underlying types

The chart below displays the number of new product listings during the month per underlying type for each issuer active on Euronext Lisbon.

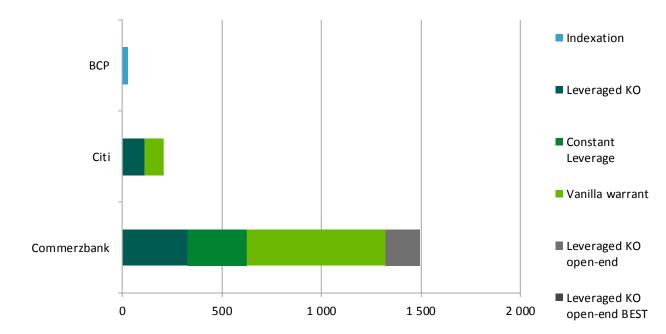


58 Market Activity Report - Warrants & Certificates - Euronext Lisbon - December 2016

ISSUER ACTIVITY: PRODUCT RANGE

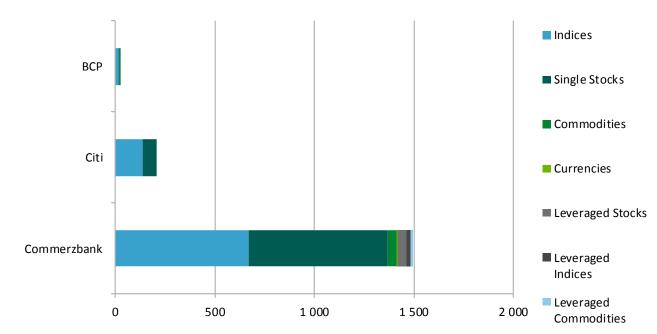
Product types

The chart below displays the number of existing product listings per product type for each issuer active on Euronext Lisbon.



Underlying types

The chart below displays the number of existing product listings per underlying type for each issuer active on Euronext Lisbon.



Market Activity Report - Warrants & Certificates - Euronext Lisbon - December 2016 59

TOP 50 TRADED PRODUCTS

Top 50 traded products

The table below displays the 50 most traded products (in terms of value traded) on Euronext Lisbon.

Trading symbol	ISIN Code	Product type	lssuer	Name	Number of trades	Value traded (in K€)
1029P	PTBITAYE0046	Pure indexation	ВСР	SP500 PI OPENP	1,767	23,100
1025P	PTBIVRYE0068	Pure indexation	BCP	ESTX PI OPENP	1,695	22,562
1027P	PTBITEYE0034	Pure indexation	BCP	DAX PI OPENP	754	9,378
1026P	PTBIYZYE0040	Pure indexation	BCP	DJIND PI OPENP	717	8,433
1032P	PTBCS1YE0010	Pure indexation	BCP	NIKEI PI OPENP	333	2,842
1052P	PTBITTYE0094	Pure indexation	BCP	MSCIW PI OPENP	135	2,491
1028P	PTBIY1YE0064	Pure indexation	BCP	PSI 2 PI OPENP	327	2,394
1040P	PTBIWKYE0023	Pure indexation	BCP	CAC40 PI OPENP	264	2,321
1050P	PTBIWBYE0057	Pure indexation	BCP	NASDQ PI OPENP	141	1,626
1023P	PTBIXRYE0025	Pure indexation	BCP	IBEX PI OPENP	247	1,519
D788C	DE000CX0E1N9	Vanilla warrant	Citi	DAX 10800P 0617C	19	727
1047P	PTBIWWYE0052	Pure indexation	BCP	GOLDF PLOPENP	42	704
P139C	DE000CX0EYA0	Leveraged KO	Citi	DAX 10550TL 0317C	34	704
1043P	PTBCLOYE0028	Pure indexation	BCP	ESTBK PLOPENP	35	545
Y240Z	DE000CN9T3S9	Leveraged KO	Commerzbank	DAX 10750TL 0317Z	67	507
Z141Z	DE000CN9RQQ7	Constant Leverage	Commerzbank	DBANK FACOPENZ	8	470
1024P	PTBIXQYE0026	Pure indexation	BCP	FTSE PLOPENP	° 57	470
1024P 1039P	PTBIZJYE0064	Pure indexation	BCP	BRENT PLOPENP	65	432 397
P382C Y746Z	DE000CX0EYK9	Leveraged KO	Citi	DAX 11000TL 0317C	48	354
-	DE000CN9T433	Leveraged KO	Commerzbank	DAX 11100TL 0317Z	83	347
1578Z	DE000CN9SEB3	Vanilla warrant	Commerzbank	DAX 10500P 0317Z	15	340
1491Z	DE000CN9SBY1	Leveraged KO	Commerzbank	DAX 11500TS 0317Z	89	309
P098C	DE000CX0EX34	Leveraged KO	Citi	DAX 11000TS 0317C	92	303
P048C	DE000CX0EUP6	Leveraged KO	Citi	DAX 11800TS 0317C	27	290
W063Z	DE000CN9SWJ8	Leveraged KO	Commerzbank	DAX 10400TL 0317Z	65	290
Y389Z	DE000CN9RWW3	Leveraged KO	Commerzbank	DAX 10850TS 1216Z	89	278
P100C	DE000CX0EX59	Leveraged KO	Citi	DAX 11400TS 0317C	103	269
O091Z	DE000CN9SRC3	Leveraged KO	Commerzbank	DAX 11700TS 0317Z	22	267
W060Z	DE000CN9SWF6	Leveraged KO	Commerzbank	DAX 10200TL 0317Z	9	261
I581Z	DE000CN9SEE7	Vanilla warrant	Commerzbank	DAX 10800P 0317Z	23	250
P146C	DE000CX0EYH5	Leveraged KO	Citi	DAX 10900TL 0317C	30	237
1254Z	DE000CN9S4T6	Leveraged KO	Commerzbank	DAX 10050TL 0317Z	16	236
1033P	PTBCTFYE0013	Pure indexation	BCP	MSCIE PI OPENP	29	235
W490Z	DE000CN9SX55	Leveraged KO	Commerzbank	DAX 11750TS 0317Z	52	219
Y748Z	DE000CN9T458	Leveraged KO	Commerzbank	DAX 11900TS 0317Z	6	213
P385C	DE000CX0EYN3	Leveraged KO	Citi	DAX 12200TS 0317C	20	212
1549Z	DE000CN9SDG4	Leveraged KO	Commerzbank	DAX 11650TS 0317Z	9	185
P084C	DE000CX0EVR0	Leveraged KO	Citi	AMAZO 720TL 0317C	41	183
P861C	DE000CX0EP75	Leveraged KO	Citi	DAX 10850TS 0317C	63	178
Y745Z	DE000CN9T425	Leveraged KO	Commerzbank	DAX 11050TL 0317Z	8	173
P122C	DE000CX0EXT2	Leveraged KO	Citi	NASDQ 5100TS 0317C	48	152
1894Z	DE000CN9SPM6	Vanilla warrant	Commerzbank	DAX 11000P 0317Z	15	152
Y778Z	DE000CN9T516	Leveraged KO	Commerzbank	NASDQ 4800TL 0317Z	32	149
P047C	DE000CX0EUN1	Leveraged KO	Citi	DAX 11500TS 0317C	71	139
P070C	DE000CX0EVB4	Leveraged KO	Citi	DAX 10400TL0317C	34	134
P912C	DE000CX0EQQ2	Leveraged KO	Citi	FBOOK 110TL 0317C	34	130
P111C	DE000CX0EXG9	Leveraged KO	Citi	DAX 10750TS 0317C	37	128
5786Z	DE000CN9QWV7	Vanilla warrant	Commerzbank	DAX 10500P 0617Z	12	123
1538Z	DE000CN9SD59	Leveraged KO	Commerzbank	DAX 11450TS 1216Z	10	114
P865C	DE000CX0EPB6	Leveraged KO	Citi	DAX 11200TS 0317C	37	114
(Source: Eu		0	-		-	-



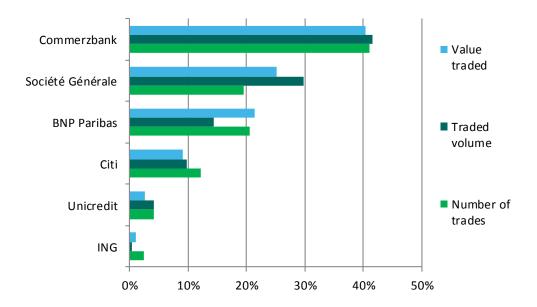
Euronext Paris

Issuers

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Paris per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Paris.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded v	volume		N	lumber c	oftrades	
Issuer	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Commerzbank	5.1	-17%	1.7%	40.4%	10.2	-22%	9.6%	41.6%	1,847	-22%	-16%	41.2%
Société Générale	3.2	-31%	-14%	25.2%	7.3	1.7%	-11%	29.8%	879	-26%	-24%	19.6%
BNP Paribas	2.7	-2.9%	2.7%	21.5%	3.5	-17%	-5.2%	14.4%	925	-14%	-6.2%	20.6%
Citi	1.2	-33%	-26%	9.1%	2.4	-10%	-2.8%	9.8%	544	-15%	-19%	12.1%
Unicredit	0.3	-19%	14%	2.6%	1.0	-17%	36%	4.1%	185	-22%	14%	4.1%
ING	0.1	-19%	-35%	1.1%	0.1	-2.7%	-25%	0.3%	109	-6.6%	-11%	2.4%
Total	12.6	-21%	-6.1%		24.6	-14%	-0.3%		4,488	-20%	-15%	

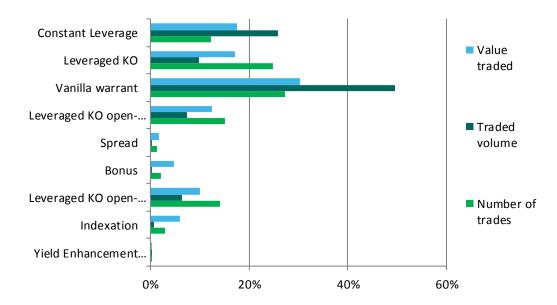


Product types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Paris per issuer, as well as the variation over the previous month and the weight of each issuer over the total of Euronext Paris.

The chart at the bottom of the page represents the weight of each issuer in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded v	olume		Ν	lumber o	oftrades	
Product type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Constant Leverage	2.2	-25%	-17%	17.6%	6.3	2.0%	-2.2%	25.9%	548	-31%	-33%	12.2%
Leveraged KO	2.2	-34%	-25%	17.1%	2.4	-17%	-14%	9.8%	1,112	-18%	-20%	24.8%
Vanilla warrant	3.8	-18%	1.2%	30.2%	12.2	-20%	3.2%	49.6%	1,226	-20%	-12%	27.3%
Leveraged KO open-end	1.6	-14%	1.9%	12.5%	1.8	-15%	5.5%	7.5%	679	-18%	-10%	15.1%
Spread	0.2	-21%	21%	1.8%	0.0	-13%	49%	0.1%	59	-24%	1.1%	1.3%
Bonus	0.6	45%	49%	4.8%	0.0	11%	14%	0.1%	97	-1.2%	9.2%	2.2%
Leveraged KO open-end BEST	1.3	-19%	-4.4%	10.0%	1.6	-15%	7.7%	6.4%	631	-16%	1.0%	14.1%
Indexation	0.8	-21%	16%	6.0%	0.1	13%	-47%	0.6%	134	-25%	-6.6%	3.0%
Yield Enhancement & Other	0.0	135%	117%	0.1%	0.0	284%	153%	0.0%	2	65%	48%	0.0%
Total	12.6	-21%	-6.1%		24.6	-14%	-0.3%		4,488	-20%	-15%	

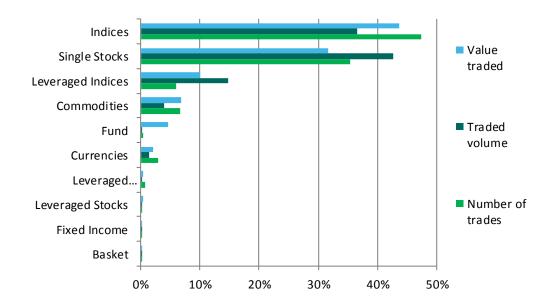


Underlying types

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Paris per underlying type, as well as the variation over the previous month and the weight of each underlying type over the total of Euronext Paris.

The chart at the bottom of the page represents the weight of each underlying type in terms of traded value, traded volume and number of trades.

		Value t	raded			Traded	volume		Ν	lumber c	oftrades	
Underlying type	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
Indices	5.5	-29%	-11%	43.6%	9.0	-26%	12%	36.6%	2,129	-25%	-18%	47.5%
Single Stocks	4.0	-9.1%	5.2%	31.7%	10.5	-13%	2.2%	42.6%	1,591	-11%	-6.2%	35.5%
Leveraged Indices	1.3	-34%	-29%	10.0%	3.6	26%	-24%	14.7%	265	-32%	-46%	5.9%
Commodities	0.9	-8.0%	1.2%	6.7%	1.0	2.8%	19%	4.0%	302	-26%	-4.0%	6.7%
Fund	0.6	55%	12%	4.6%	0.1	52%	6.8%	0.2%	18	86%	45%	0.4%
Currencies	0.3	1.9%	71%	2.2%	0.3	-27%	31%	1.4%	130	8.2%	53%	2.9%
Leveraged Commodities	0.1	-45%	-29%	0.5%	0.1	14%	-83%	0.3%	31	-24%	-14%	0.7%
Leveraged Stocks	0.0	-20%	-9.9%	0.4%	0.1	125%	1.7%	0.3%	11	-31%	-45%	0.2%
Fixed Income	0.0	-33%	-6.0%	0.3%	0.0	-46%	-19%	0.0%	9	-47%	-49%	0.2%
Basket	0.0	739%	53%	0.0%	0.0	810%	194%	0.0%	0	26%	104%	0.0%
Total	12.6	-2 1%	-6.0%		24.5	-14%	-0.3%		4,486	-20%	-15%	

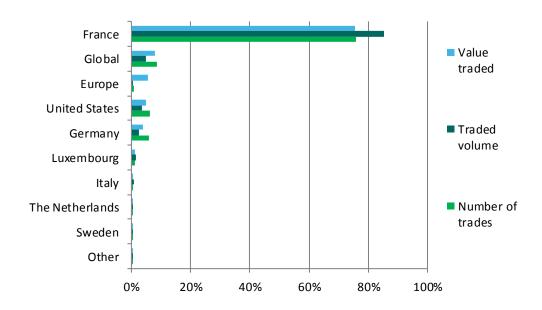


Top 10 underlying countries

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Paris per country of origin of the underlying, as well as the variation over the previous month and the weight of each underlying country of origin over the total of Euronext Paris.

The chart at the bottom of the page represents the weight of each underlying country of origin in terms of traded value, traded volume and number of trades.

	Value traded			Traded volume				Number of trades				
Underlying country	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
France	9.5	-24%	-7.0%	75.5%	21.0	-15%	-1.1%	85.5%	3,400	-21%	-19%	75.8%
Global	1.0	-16%	-1.0%	7.9%	1.2	-6.2%	-7.5%	4.8%	385	-26%	-1.5%	8.6%
Europe	0.7	59%	12%	5.6%	0.1	-24%	-22%	0.5%	41	6.0%	20%	0.9%
United States	0.6	-37%	-28%	4.8%	0.8	-28%	-13%	3.4%	281	-22%	-6.5%	6.3%
Germany	0.5	-23%	-11%	3.8%	0.6	-11%	35%	2.6%	265	-3.7%	1.1%	5.9%
Luxembourg	0.1	33%	92%	1.2%	0.4	33%	28%	1.5%	53	15%	13%	1.2%
Italy	0.0	265%	146%	0.3%	0.2	882%	260%	1.0%	11	95%	53%	0.2%
The Netherlands	0.0	19%	90%	0.3%	0.0	-19%	-0.7%	0.2%	17	15%	30%	0.4%
Sweden	0.0	72%	205%	0.2%	0.1	-33%	91%	0.4%	16	24%	163%	0.4%
Other	0.1	28%	-4.1%	0.5%	0.1	6.1%	-36%	0.2%	17	-22%	-34%	0.4%
Total	12.6	- 2 1%	-6.1%		24.5	-14%	-0.2%		4,485	-20%	-15%	



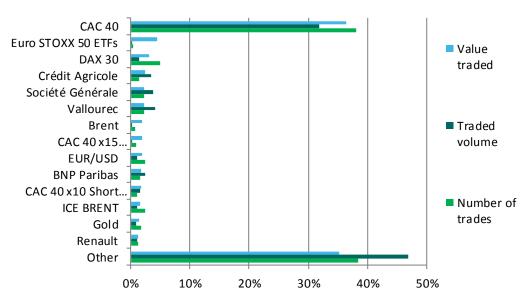
Top 15 underlyings

The table below displays the daily averages of traded value, traded volume and number of trades on Euronext Paris for the top 15 underlyings, as well as the variation over the previous month and the weight of each of the top 15 underlyings over the total of Euronext Paris.

The chart at the bottom of the page represents the weight of each of the top 15 underlyings in terms of traded value, traded volume and number of trades.

	Value traded			Traded volume				Number of trades				
Underlying	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market	Daily	Month	vs. YTD	Market
	average	on		share	average	on		share	average	on		share
	(in M€)	month			(in M)	month				month		
CAC 40	4.6	-31%	-9.8%	36.4%	7.8	-29%	9.2%	31.9%	1,711	-27%	-22%	38.1%
Euro STOXX 50 ETFs	0.6	51%	21%	4.4%	0.1	48%	15%	0.2%	15	59%	63%	0.3%
DAX 30	0.4	-23%	-12%	3.2%	0.4	-2.7%	48%	1.5%	226	-0.5%	3.8%	5.0%
Crédit Agricole	0.3	18%	57%	2.5%	0.8	10%	32%	3.4%	61	-5.1%	-12%	1.4%
Société Générale	0.3	-20%	-17%	2.3%	0.9	-22%	-16%	3.7%	100	-7.0%	-16%	2.2%
Vallourec	0.3	-32%	13%	2.3%	1.0	-39%	-10%	4.1%	105	-26%	2.4%	2.3%
Brent	0.3	2.7%	-6.1%	2.0%	0.0	-25%	-35%	0.1%	33	-34%	-31%	0.7%
CAC 40 x15 Leveraged Index	0.3	-48%	-30%	2.0%	0.0	-52%	-98%	0.0%	43	-35%	-57%	1.0%
EUR/USD	0.2	13%	96%	1.9%	0.3	-23%	40%	1.1%	110	29%	80%	2.4%
BNP Paribas	0.2	3.3%	16%	1.8%	0.6	-16%	5.8%	2.4%	68	16%	-12%	1.5%
CAC 40 x10 Short Index	0.2	41%	33%	1.8%	0.4	49%	109%	1.6%	46	-5.0%	-2.2%	1.0%
ICE BRENT	0.2	-3.6%	1.0%	1.6%	0.3	-4.9%	5.0%	1.1%	107	-23%	-1.6%	2.4%
Gold	0.2	-12%	-11%	1.4%	0.2	2.3%	14%	0.9%	76	-24%	-2.0%	1.7%
Renault	0.2	-22%	-19%	1.2%	0.3	-38%	-41%	1.0%	59	-16%	-28%	1.3%
Other	4.4	-17%	-9.6%	35.2%	11.5	2.3%	-5.0%	46.9%	1,727	-18%	-13%	38.5%
Total	12.6	-21%	-6.1%		24.6	-14%	-0.3%		4,488	-20%	-15%	

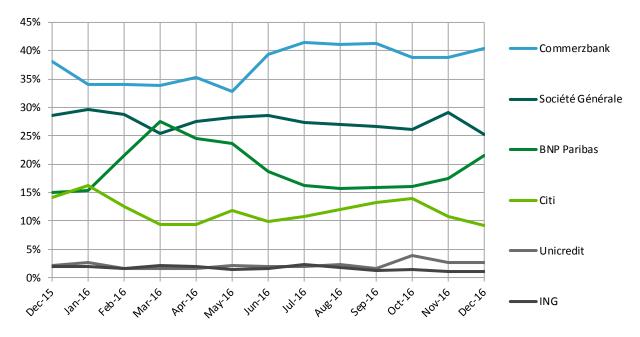




MARKET TREND: ISSUERS

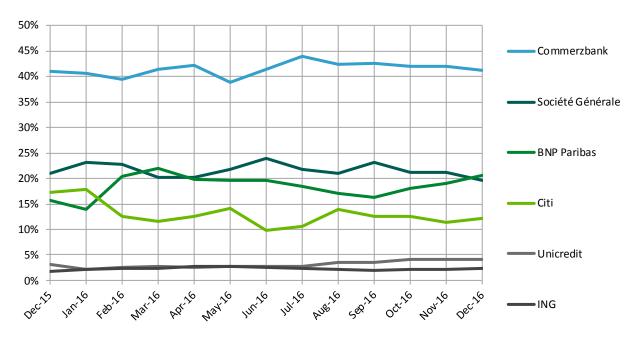
Value traded

The historical graph below displays the weight of the traded value of each issuer over the total traded value on Euronext Paris.



Number of transactions

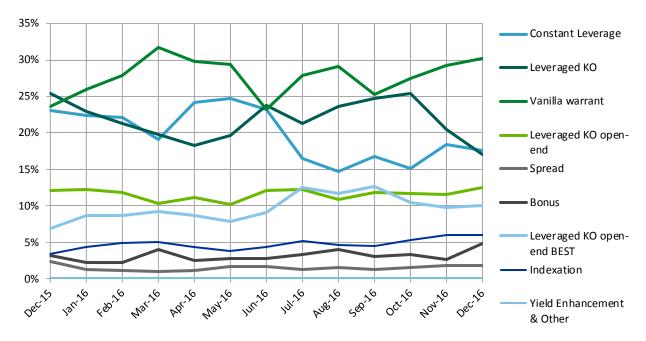
The historical graph below displays the weight of the traded volume of each issuer over the total traded volume on Euronext Paris.



MARKET TREND: PRODUCT TYPES

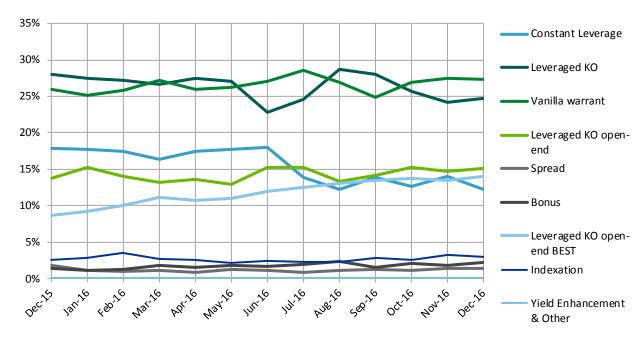
Value traded

The historical graph below displays the weight of the traded value of each product type over the total traded value on Euronext Paris.



Number of transactions

The historical graph below displays the weight of the traded volume of each product type over the total traded volume on Euronext Paris.

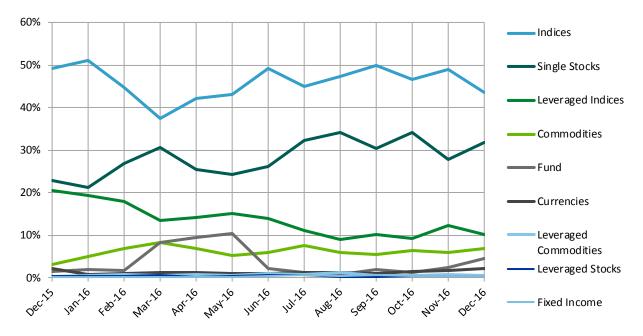


68 Market Activity Report - Warrants & Certificates - Euronext Paris - December 2016

MARKET TREND: UNDERLYING TYPES

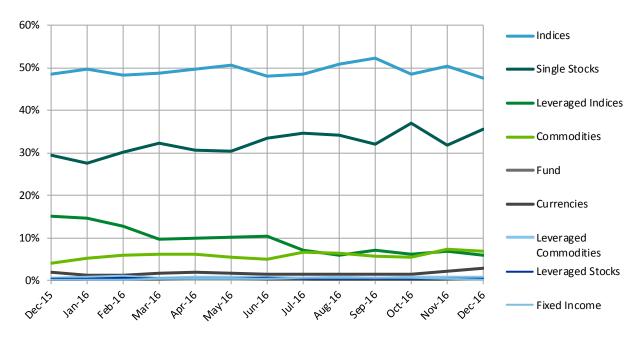
Value traded

The historical graph below displays the weight of the traded value of each underlying type over the total traded value on Euronext Paris.



Number of transactions

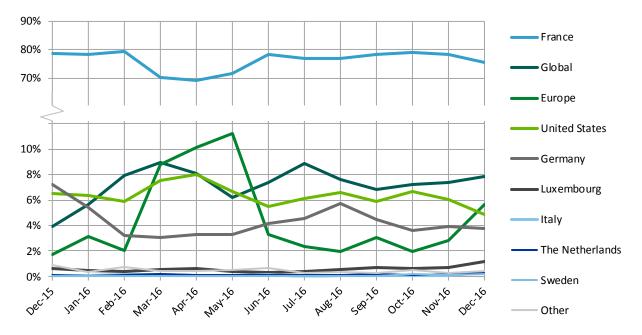
The historical graph below displays the weight of the traded volume of each underlying type over the total traded volume on Euronext Paris.



MARKET TREND: UNDERLYING COUNTRIES

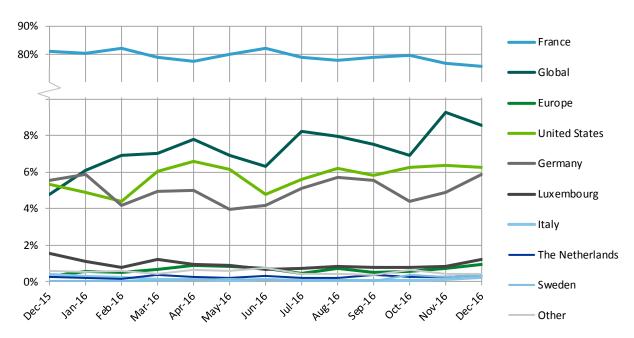
Value traded

The historical graph below displays the weight of the traded value of each underlying country of origin over the total traded value on Euronext Paris.



Number of transactions

The historical graph below displays the weight of the traded volume of each underlying country of origin over the total traded volume on Euronext Paris.

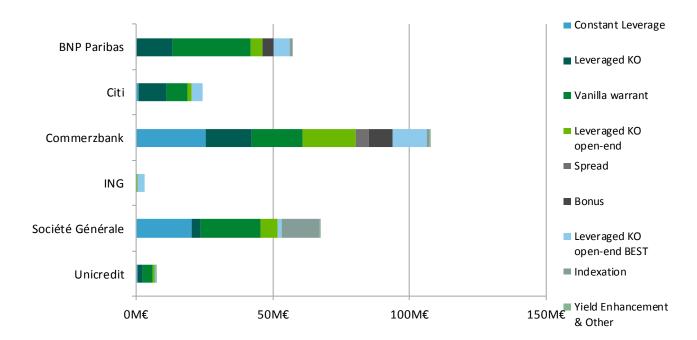


70 Market Activity Report - Warrants & Certificates - Euronext Paris - December 2016

ISSUER ACTIVITY

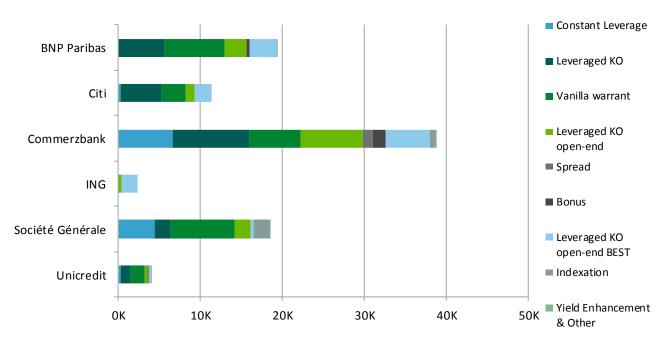
Value traded

The chart below displays the value traded per product type (in million Euros) for each issuer active on Euronext Paris.



Number of transactions

The chart below displays the number of trades per product type for each issuer active on Euronext Paris.

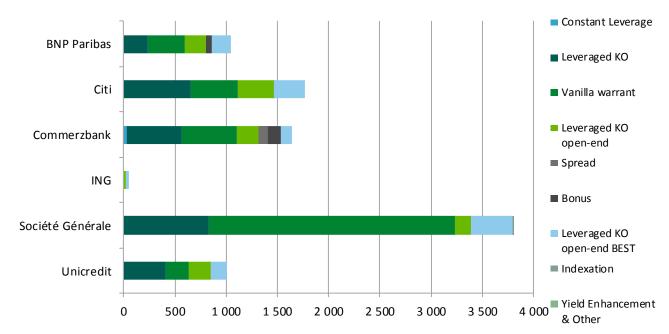


Market Activity Report - Warrants & Certificates - Euronext Paris - December 2016 71

ISSUER ACTIVITY: NEW LISTINGS

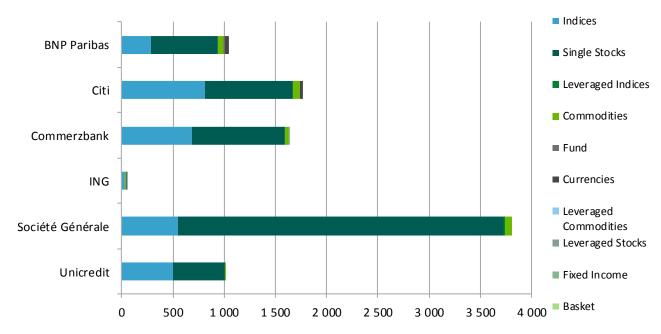
Product types

The chart below displays the number of new product listings during the month per product type for each issuer active on Euronext Paris.



Underlying types

The chart below displays the number of new product listings during the month per underlying type for each issuer active on Euronext Paris.

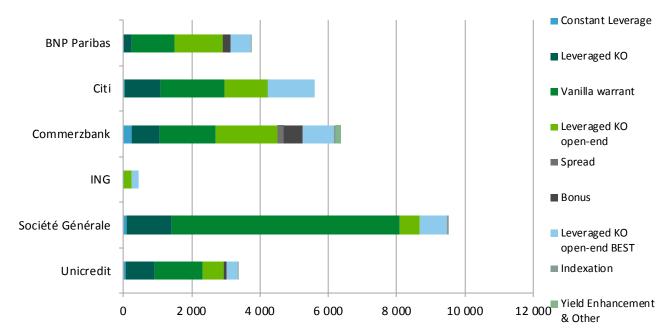


72 Market Activity Report - Warrants & Certificates - Euronext Paris - December 2016

ISSUER ACTIVITY: PRODUCT RANGE

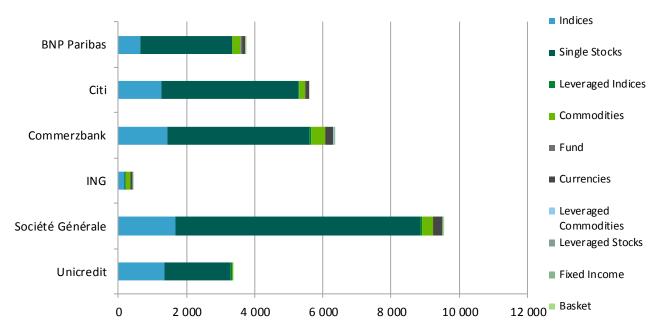
Product types

The chart below displays the number of existing product listings per product type for each issuer active on Euronext Paris.



Underlying types

The chart below displays the number of existing product listings per underlying type for each issuer active on Euronext Paris.



Market Activity Report - Warrants & Certificates - Euronext Paris - December 2016 73

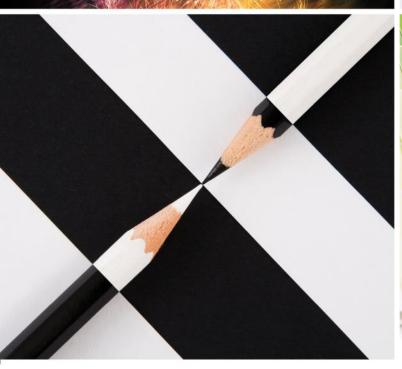
Top 50 traded products

The table below displays the 50 most traded products (in terms of value traded) on Euronext Paris.

LV15Z V005B SR15Z			lssuer	Name	Number of trades	traded (in K€)
	DE000CD5NZY1	Constant Leverage	Commerzbank	CACF LEVOPENZ	780	9,189
SR15Z	NL0011467329	Vanilla warrant	BNP Paribas	ETDD 45.25C 1226B	31	7,385
	DE000CD22134	Constant Leverage	Commerzbank	CACF SHTOPENZ	1,563	3,682
S10MS	FR0013135753	Constant Leverage	Société Générale	CA10S PI0336S	394	3,542
2124S	FR0010511535	Pure indexation	Société Générale	BRENT PI OPENS	437	3,472
LM15S	FR0013188612	Pure indexation	Société Générale	C15LE PI0736S	554	3,284
SH15Z	DE000CD9F442	Constant Leverage	Commerzbank	CACF SHTOPENZ	732	3,185
LG15Z	DE000CZ28ZJ7	Constant Leverage	Commerzbank	CACF LEVOPENZ	784	2,284
U985B	NL0011467246	Vanilla warrant	BNP Paribas	ETDD 42.93C 0426B	125	2,198
6940S	FR0011119395	Constant Leverage	Société Générale	CAC7L PI OPENS	154	2,152
W837Z	DE000CD9FEQ0	Vanilla warrant	Commerzbank	CAC40 4650P 0117Z	421	1,954
S15MS	FR0013135720	Constant Leverage	Société Générale	CA15S PI0336S	534	1,902
CL15S	FR0013217940	Pure indexation	Société Générale	C15LE PI 1136S	290	1,867
L10MS	FR0013101565	Constant Leverage	Société Générale	CA10L PI OPENS	433	1,642
W908B	NL0011676960	Vanilla warrant	BNP Paribas	CAGRI 12C 0317B	119	1,582
S12MS	FR0013135746	Constant Leverage	Société Générale	CA12S PI 0336S	362	1,376
Z679Z	DE000CE4TY57	Leveraged KO open-end BEST	Commerzbank	DAX 11380TL OPENZ	379	1,343
9531C	DE000CX70KX7	Vanilla warrant	Citi	BNP 62C 0317C	70	1,329
8J65Z	DE000CD9CK59	Vanilla warrant	Commerzbank	CAC40 4700C 0117Z	48	1,287
OW47B	NL0012009625	Vanilla warrant	BNP Paribas	ETDD 48.81C 1226B	40	1,177
6D35Z	DE000CD5NPC8	Leveraged KO	Commerzbank	CAC40 4000TL 1216Z	3	1,177
SGQ7S	FR0012143873	Constant Leverage	Société Générale	CAC40 4000 TE 12102 CAC7S PI OPENS	264	1,155
9357S	FR0012143873 FR0011481183	Vanilla warrant	Société Générale	SOGEN 60C 1217S	85	1,143
SH12Z			Commerzbank	CACF SHTOPENZ		
CS16S	DE000CD5NZZ8 FR0012496495	Constant Leverage	Société Générale		306	1,139 1,119
		Constant Leverage		CA10S PLOPENS	455	
9202S	FR0010673350	Pure indexation Quanto	Société Générale	GOLD PIQOPENS	113	1,102
77315	FR0010961078	Constant Leverage	Société Générale	CAC5L PI OPENS	291	1,060
4H34Z	DE000CD9BNT4	Vanilla warrant	Commerzbank	CAC40 4400P 0117Z	264	1,055
I10GS	FR0011630474	Pure indexation	Société Générale	.SGIX PI OPENS	168	1,016
Z000Z	DE000CE4TMD2	Leveraged KO open-end BEST	Commerzbank	DAX 11174TL OPENZ	304	969
0174Z	DE000CD9E7D0	Vanilla warrant	Commerzbank	CAC40 4500P 0117Z	173	900
SHR2Z	DE000CZ28YW3	Constant Leverage	Commerzbank	SHR2Z FACOPENZ	22	886
O410S	LU1428344649	Vanilla warrant	Société Générale	CAC40 4850C 0117S	206	822
PL47B	FRBNPP007LH9	Leveraged KO	BNP Paribas	CAC40 4150TL 0617B	188	817
6E27Z	DE000CD5P5B9	Leveraged KO open-end	Commerzbank	CAC40 4178TCIOPENZ	34	761
6K82Z	DE000CD9D6A9	Spread	Commerzbank	CAC40 4300SWT0117Z	33	759
2185Z	DE000CN1HJL1	Leveraged KO open-end	Commerzbank	LVMH 215.7TPIOPENZ	20	753
1K24Z	FR0013203395	Capped Bonus	Commerzbank	ESTX 3750BOC1217Z	16	738
0861S	LU1451932815	Leveraged KO open-end	Société Générale	CAC40 4335TL OPENS	202	722
2125S	FR0010511543	Pure indexation	Société Générale	WTI PI OPENS	100	720
2277Z	DE000CD20UF0	Leveraged KO open-end	Commerzbank	VALOU 4.47TCIOPENZ	28	719
1K85Z	DE000CD9D6T9	Leveraged KO open-end	Commerzbank	VIX 7.14TCIOPENZ	460	716
6998S	FR0011214527	Constant Leverage	Société Générale	CAC10 PI OPENS	218	692
SGQ5S	FR0012143824	Constant Leverage	Société Générale	CAC5S PI OPENS	208	686
8998C	DE000CX70DY0	Leveraged KO	Citi	CAC40 5500TS 0317C	12	675
LBREZ	DE000CD9BRU3	Constant Leverage	Commerzbank	BRENT LEVOPENZ	235	670
S5L5S	FR0011472463	Constant Leverage	Société Générale	SX5TD PI OPENS	38	670
H874Z	DE000CD07AJ1	Vanilla warrant	Commerzbank	CAC40 4600C 1216Z	232	667
2P60Z	FR0012905248	Capped Bonus	Commerzbank	ORANG 18BOC1216Z	42	648
LWTIZ	DE000CD9BRW9	Constant Leverage	Commerzbank	OILCR LEVOPENZ	130	642

NEW YEAR. NEW FUTURES. WEEKLY FUTURES ON THE CAC 40 AND AEX INDICES

A WINDOW TO A WHOLE NEW WORLD OF OPTIONS. SIX NEW ETF OPTIONS AVAILABLE





FIRST ON-EXCHANGE, FULLY AUTOMATED AND CENTRALLY CLEARED EXCHANGE FOR PHYSICALS MORE CHOICES WITH SINGLE STOCK DIVIDEND FUTURES

FIND OUT MORE ABOUT THESE FOUR RECENT LAUNCHES AND THE WIDE CHOICE OF DERIVATIVES PRODUCTS AT

derivatives.euronext.com



All data as of the date of publication unless stated otherwise. Euronext disclaims any duty to update this information.

Euronext refers to Euronext N.V. and its affiliates. Information regarding trademarks and intellectual property rights of Euronext is located at https://www.euronext.com/terms-use.

© 2017, Euronext N.V. - All rights reserved.

This publication is for information purposes only and is not a recommendation to engage in investment activities. This publication is provided "as is" without representation or warranty of any kind. Whilst all reasonable care has been taken to ensure the accuracy of the content, Euronext does not guarantee its accuracy or completeness. Euronext will not be held liable for any loss or damages of any nature ensuing from using, trusting or acting on information provided. No information set out or referred to in this publication shall form the basis of any contract. The creation of rights and obligations in respect of financial products that are traded on the exchanges operated by Euronext's subsidiaries shall depend solely on the applicable rules of the market operator. All proprietary rights and interest in or connected with this publication shall vest in Euronext. No part of it may be redistributed or reproduced in any form without the prior written permission of Euronext.