

STOXX

MONTHLY INDEX NEWS

November 2018

INDEX

RESEARCH

GLOBAL

INSIGHT

MARKETS

Benchmark Indices

Key points

The STOXX[®] Global 1800 Index rebounded 1.1% in November, in dollars, from October's 7.4% decline, helped by gains in US and Asian shares. The global index is now 8% below its January high and remains poised for its worst annual performance since 2011.

The STOXX[®] North America 600 Index advanced 1.9% in November as the US economy created more jobs and expectations reportedly rose that the Federal Reserve's series of interest-rate hikes may end sooner than previously thought. The STOXX[®] Asia/Pacific 600 Index gained 1.4% in the month, also in dollars.

The pan-European STOXX[®] Europe 600 Index and the Eurozone's EURO STOXX 50[®] Index, however, extended their losses for 2018. The indices dropped 1% and 0.7% in euros respectively, as data releases pointed to a further economic slowdown in the region.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. EURO STOXX 50	-0.7	-7.1	-8.7	-0.8	-12.4	-13.3	11.5	13.0	12.9	15.3	14.6	14.4	1.6
2. STOXX Europe 600	-1.0	-5.6	-4.9	-1.1	-11.0	-9.7	11.1	11.8	11.6	14.7	13.2	13.0	1.7
3. STOXX North America 600	1.9	9.9	10.5	1.9	3.7	5.0	17.7	15.7	15.3	18.4	15.0	14.5	2.9
4. STOXX Asia/Pacific 600	1.5	-1.7	-0.9	1.4	-7.3	-5.9	14.2	13.4	13.0	12.6	12.9	12.7	1.1
5. STOXX Global 1800	1.2	4.3	5.0	1.1	-1.6	-0.3	12.7	11.9	11.6	13.9	11.6	11.3	2.0

Risk and return performance figures for STOXX benchmark indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance

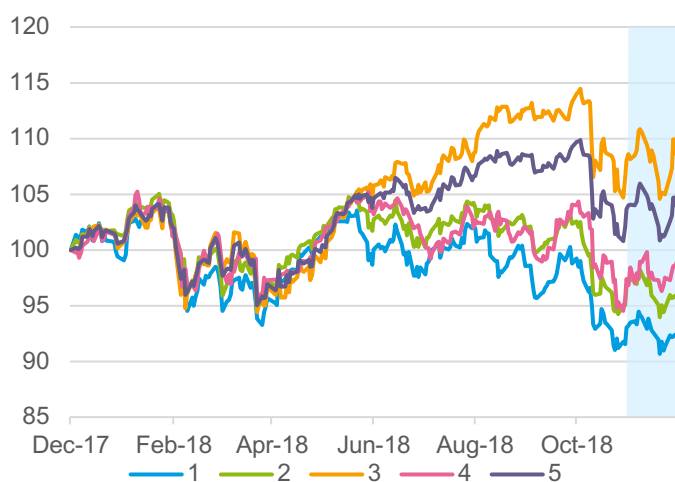


Figure 1: Annual price performance, EUR Net Return.
Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018.
Source: STOXX Ltd.

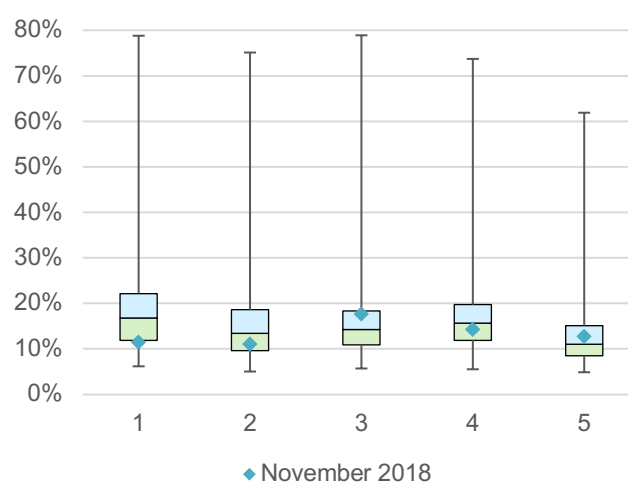


Figure 2: Monthly annualized volatility analysis, EUR Net Return.
Jan. 2004 – Nov. 2018.
Source: STOXX Ltd.

Thematic Indices – Revenue-Based

Key points

It was a positive month for STOXX’s revenue-based thematic indices, with all but two of them beating the STOXX Global 1800 Index.

The iSTOXX® FactSet Breakthrough Healthcare Index gained the most in the month, after leading October’s retreat. The iSTOXX® FactSet Automation & Robotics Index was November’s second-best performer, adding 3.9% in dollars. The STOXX® Global Artificial Intelligence Index came last, although it posted a positive return of 0.2%.

The indices are compiled by looking at companies’ revenue exposure to sectors closely related to the specific global megatrend.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX Global Artificial Intelligence	0.2	1.4	2.3	0.2	-4.4	-2.9	29.7	23.8	23.2	30.2	23.0	22.5	3.9
2. STOXX Global Digital Security	1.7	1.6	1.9	1.6	-4.2	-3.2	14.2	13.4	13.1	15.3	12.9	12.6	4.1
3. STOXX Global Fintech	1.5	22.8	23.0	1.4	15.8	16.8	22.7	17.7	17.1	22.6	16.8	16.3	5.1
4. iSTOXX Developed Markets B.R.AI.N	1.6	15.5	15.5	1.6	8.9	9.7	22.0	20.0	19.5	22.3	19.4	18.9	4.1
5. iSTOXX FactSet Ageing Population	2.6	1.0	1.6	2.6	-4.8	-3.5	11.8	10.3	10.1	13.7	10.6	10.3	1.8
6. iSTOXX FactSet Automation & Robotics	4.0	-5.0	-6.1	3.9	-10.4	-10.8	18.7	16.2	15.8	20.0	16.1	15.8	4.0
7. iSTOXX FactSet Breakthrough Healthcare	4.7	12.4	13.5	4.7	6.0	7.7	17.8	15.9	15.7	20.9	16.4	16.1	5.2
8. iSTOXX FactSet Digitalisation	0.9	10.6	11.9	0.9	4.3	6.2	18.6	14.6	14.2	19.6	14.2	13.7	5.9

Risk and return performance figures for STOXX thematic indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance



Figure 3: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area Nov. 2018. Source: STOXX Ltd.

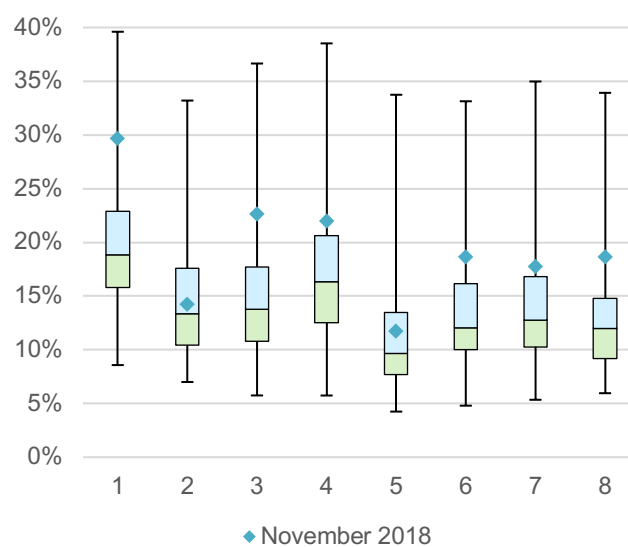


Figure 4: Monthly annualized volatility analysis, EUR Net Return. Jul. 2012 – Nov. 2018. Source: STOXX Ltd.

Thematic Indices – AI-Driven

Key points

STOXX’s AI-driven thematic indices also had a positive month, with all three beating the STOXX Global 1800 benchmark. The iSTOXX® Yewno Developed Markets Blockchain Index was the best-performing index in the group, taking this year’s gain to 5.6% and the advance in the past year to 9.1%.

The other two gauges in the AI-driven thematic family, the STOXX® AI Global Artificial Intelligence Index and the STOXX® AI Global Artificial Intelligence ADTV5, have also outperformed in 2018 and in the past 12 months. The latter differs from the former in having a higher liquidity filter.

The indices employ artificial intelligence to detect businesses investing in the adoption of intellectual property underpinning the theme.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX AI Global Artificial Intelligence	1.6	6.1	6.7	1.5	0.0	1.3	14.5	12.8	12.5	15.0	12.3	11.9	2.6
2. STOXX AI Global Artificial Intelligence ADTV5	1.7	6.4	6.8	1.7	0.3	1.4	14.6	12.9	12.6	15.1	12.4	12.0	2.6
3. iSTOXX Yewno Developed Markets Blockchain	2.3	12.0	14.9	2.2	5.6	9.1	17.1	15.0	14.9	17.4	14.7	14.4	3.0

Risk and return performance figures for STOXX thematic indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance

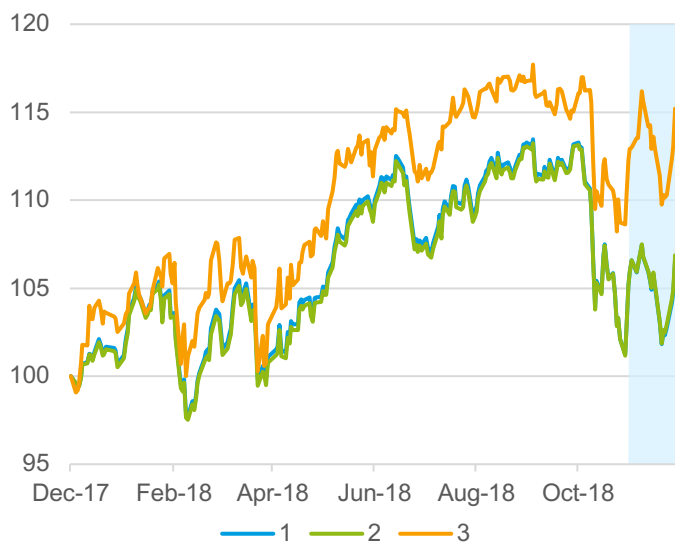


Figure 5: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area Nov. 2018. Source: STOXX Ltd.

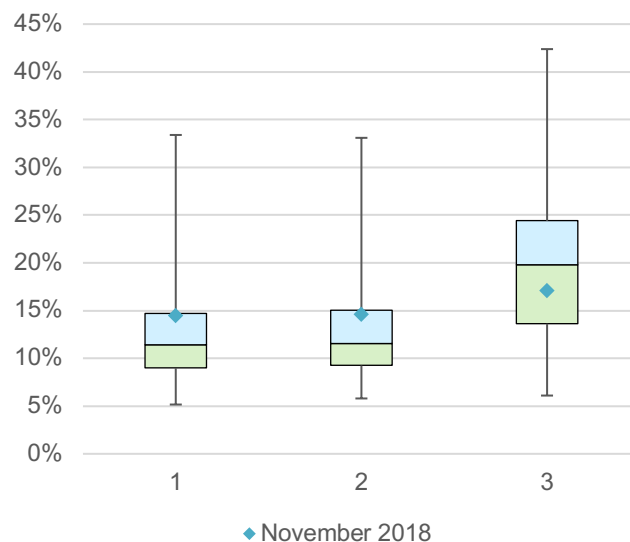


Figure 6: Monthly annualized volatility analysis, EUR Net Return. Apr. 2013 – Nov. 2018. Source: STOXX Ltd.

Europe Factor Market Neutral Indices

Key points

All but one of the seven iSTOXX® Europe Factor Market Neutral Indices, which hold a short position in futures on the STOXX Europe 600, helped investors fend off part of the market's decline during the month.

The gauges for carry and low risk provided positive returns, extending their lead in the past year, as did the multi-factor index. Indices tracking momentum, size and value outperformed the STOXX Europe 600 Index even though they posted a loss. At the bottom, the iSTOXX® Europe Quality Factor Market Neutral Index fell 1.8%.

Investing in factors in isolation of the market risk has been a winning proposition in the past year, with all iSTOXX Europe Factor Market Neutral Indices outperforming the STOXX Europe 600. The iSTOXX® Europe Low Risk Factor Market Neutral Index has been the best performer in the period, while the iSTOXX® Europe Value Market Neutral Index has had the poorest results.

Risk and return characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. iSTOXX Europe Carry Factor Market Neutral	1.1	2.3	3.2	1.1	-3.6	-2.0	2.3	3.6	3.5	8.2	7.5	7.5
2. iSTOXX Europe Low Risk Factor Market Neutral	0.3	2.7	3.6	0.3	-3.2	-1.6	2.6	3.3	3.2	7.5	7.0	7.0
3. iSTOXX Europe Momentum Factor Market Neutral	-0.4	-2.0	-0.8	-0.5	-7.6	-5.8	4.2	3.3	3.3	8.4	7.5	7.5
4. iSTOXX Europe Quality Factor Market Neutral	-1.8	-3.8	-2.2	-1.8	-9.3	-7.1	2.8	3.1	3.1	8.6	7.2	7.2
5. iSTOXX Europe Size Factor Market Neutral	-0.6	-3.1	-1.8	-0.7	-8.7	-6.8	4.6	4.4	4.5	10.3	8.4	8.4
6. iSTOXX Europe Value Factor Market Neutral	-0.7	-6.0	-4.2	-0.8	-11.4	-9.0	4.0	4.3	4.3	9.8	8.3	8.3
7. iSTOXX Europe Multi-Factor Market Neutral	0.3	-4.2	-2.7	0.2	-9.6	-7.6	2.9	3.7	3.8	8.7	7.9	8.0

Risk and return performance figures for iSTOXX Europe Market Neutral Factor Indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance

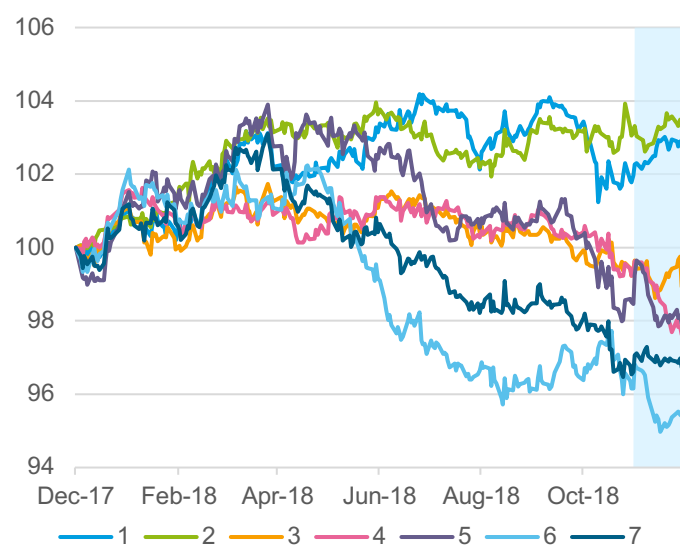


Figure 7: Annual price performance, EUR Net Return.
Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018.
Source: STOXX Ltd.

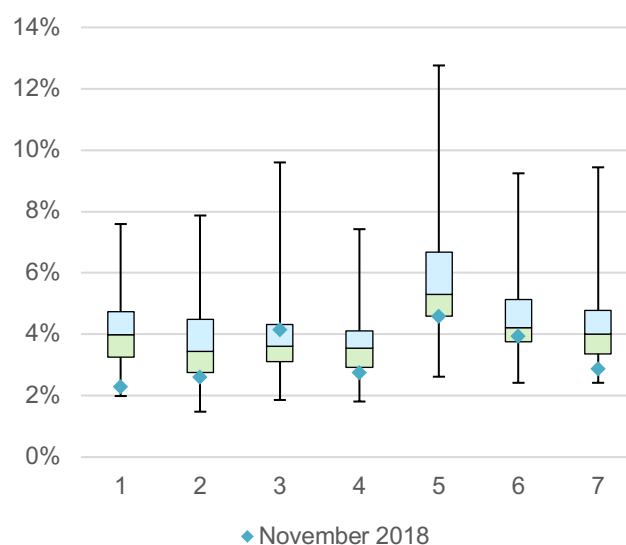


Figure 8: Monthly annualized volatility analysis, EUR Net Return.
Aug. 2010 – Nov. 2018.
Source: STOXX Ltd.

Premia Indices

Key points

Five of the eight EURO STOXX® Multi Premia® and Single Premium Indices performed worse than the benchmark EURO STOXX® Index over November.

The indices integrate the academic research-based methodology of STOXX's partner Finreon. They track seven distinctive sources of equity risk and returns on the broad and liquid universe of Eurozone equities that is the EURO STOXX Index.

The EURO STOXX, which currently includes 306 companies, fell 1.1% in the month and is down 8.3% in the past year.

All but one of the factor premia – value – have outperformed in the past year.

Risk and return characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. EURO STOXX Low Risk Premium	-1.8	-3.8	-2.9	-1.8	-9.3	-7.8	9.9	10.6	10.5	13.4	12.4	12.2
2. EURO STOXX Momentum Premium	-3.1	-4.0	-3.7	-3.2	-9.5	-8.5	13.2	14.2	13.9	16.7	15.4	15.1
3. EURO STOXX Quality Premium	-1.5	-2.6	-2.6	-1.5	-8.1	-7.5	11.7	12.3	12.0	15.8	13.8	13.5
4. EURO STOXX Residual Momentum Premium	-1.6	-4.0	-3.6	-1.7	-9.5	-8.5	12.1	13.0	12.7	15.8	14.5	14.2
5. EURO STOXX Reversal Premium	-0.5	-7.6	-6.5	-0.6	-12.9	-11.2	11.3	10.8	10.7	15.7	13.1	12.9
6. EURO STOXX Size Premium	-1.1	-9.1	-7.4	-1.2	-14.3	-12.0	12.8	12.0	11.8	17.1	13.9	13.6
7. EURO STOXX Value Premium	-0.1	-8.2	-10.9	-0.2	-13.4	-15.4	12.7	12.5	12.5	16.8	14.5	14.4
8. EURO STOXX Multi Premia	-1.4	-5.9	-5.8	-1.4	-11.3	-10.5	11.6	11.7	11.5	15.7	13.5	13.3

Risk and return performance figures for iSTOXX Europe Market Neutral Factor Indices, Net Return. Data as of Nov. 30, 2018. Source: STOXX Ltd.

Price and volatility performance

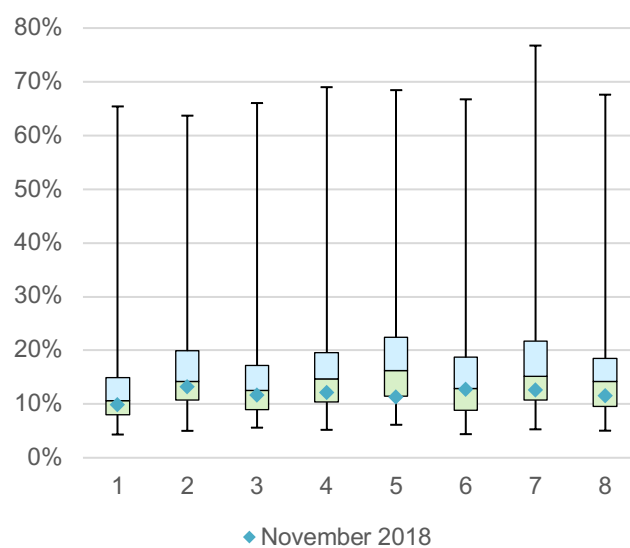


Figure 9: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018. Source: STOXX Ltd.

Figure 10: Monthly annualized volatility analysis, EUR Net Return. Jan. 2004 – Nov. 2018. Source: STOXX Ltd.

ESG & Sustainable Investing Indices

Key points

Global environmental, social and governance (ESG) strategies underperformed their benchmark in November. Still, the STOXX® Global ESG Impact Index and the STOXX® Global 1800 Low Carbon Index have posted better returns than the Global 1800 Index for 2018 and in the past year.

STOXX’s responsible investing family includes more than 65 ESG/Sustainability and Low Carbon indices. They cover many approaches – from tracking sustainability pioneers to those companies making the most progress towards a low-carbon economy – and include negative exclusion criteria as well as positive scoring.

In November, STOXX launched the STOXX® Europe 600 ESG-X Index, a version of Europe’s flagship benchmark that excludes companies based on norm- and product-based screenings. The ESG-X index shares its benchmark’s rules, sector composition and methodology while aiming to comply with typical exclusion screens based on responsible policies of leading asset owners.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX Europe Industry Neutral ESG	-0.8	-5.5	-5.0	-0.9	-10.9	-9.8	10.8	11.6	11.4	14.3	13.1	12.8	1.7
2. STOXX USA ESG Impact	2.0	10.7	11.5	2.0	4.4	5.8	18.8	16.3	15.8	19.5	15.7	15.1	3.1
3. STOXX Global ESG Impact	0.6	4.6	5.4	0.5	-1.3	0.1	14.2	12.4	12.1	15.3	12.2	11.8	2.2
4. STOXX Europe 600 Low Carbon	-1.0	-5.2	-4.6	-1.1	-10.6	-9.4	11.0	11.8	11.6	14.5	13.2	12.9	1.7
5. STOXX USA Low Carbon	1.6	11.1	11.4	1.5	4.8	5.8	18.9	16.3	15.9	19.5	15.6	15.1	3.0
6. STOXX Global 1800 Low Carbon	0.8	4.7	5.2	0.7	-1.3	-0.1	13.2	12.0	11.7	14.4	11.8	11.4	2.0

Risk and return performance figures for STOXX ESG and Sustainable Investing Indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance

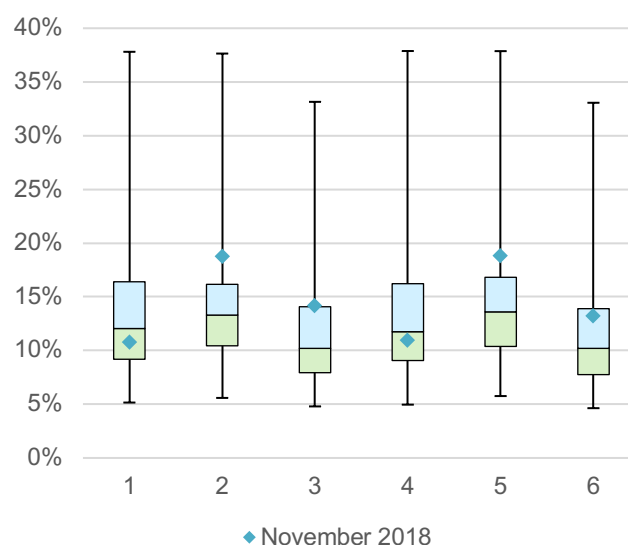
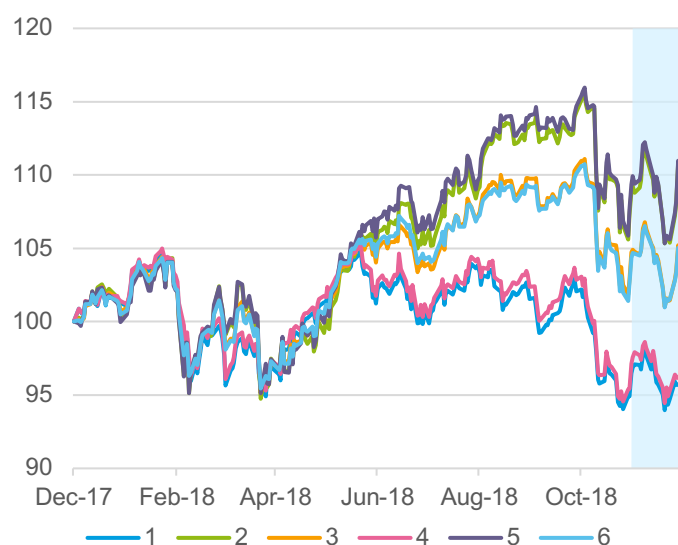


Figure 11: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018. Source: STOXX Ltd.

Figure 12: Monthly annualized volatility analysis, EUR Net Return. Oct. 2012 – Nov. 2018. Source: STOXX Ltd.

Minimum Variance Indices

Key points

There was a strong showing from minimum-variance strategies over November, a sign that investors who returned to the market favored those companies with the smallest potential drawdowns.

The STOXX® Global 1800 Minimum Variance Index rose 4% and its unconstrained version advanced 3.4%. That compares with the 1.1% gain for the benchmark STOXX Global 1800.

The STOXX® Europe 600 Minimum Variance Index posted a 0.4% gain, in euros, while its unconstrained version was little changed. That compares with the 1% drop for the benchmark STOXX 600. The STOXX® USA 900 Minimum Variance Index and its unconstrained version climbed 2.6% and 2.1%, respectively. That beat the STOXX® USA 900 Index's 2% return.

The STOXX Minimum Variance Indices come in two versions: constrained and unconstrained. The former has a similar exposure to a market-cap index but with lower risk. The unconstrained version, on the other hand, has more freedom to fulfill its minimum variance mandate within the same universe of stocks.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX Europe 600 MV	0.4	-2.0	-1.5	0.4	-7.6	-6.5	9.3	9.9	9.8	12.3	11.3	11.2	2.0
2. STOXX Europe 600 MV Unconstrained	0.0	-0.4	-0.1	0.0	-6.1	-5.1	8.5	9.9	9.8	11.3	11.3	11.1	2.1
3. STOXX USA 900 MV	2.7	13.1	13.1	2.6	6.6	7.4	12.7	12.5	12.3	12.3	11.4	11.1	3.1
4. STOXX USA 900 MV Unconstrained	2.2	11.4	11.4	2.1	5.1	5.8	11.6	11.5	11.3	10.4	10.3	10.0	2.9
5. STOXX Global 1800 MV	4.1	9.3	8.9	4.0	3.0	3.4	8.9	9.3	9.1	7.5	8.2	7.9	2.2
6. STOXX Global 1800 MV Unconstrained	3.5	8.4	7.7	3.4	2.2	2.3	8.9	8.9	8.7	6.6	7.7	7.6	1.6

Risk and return performance figures for STOXX Minimum Variance Indices, Net Return. Data as of Nov. 30, 2018.

Source: STOXX Ltd.

Price and volatility performance

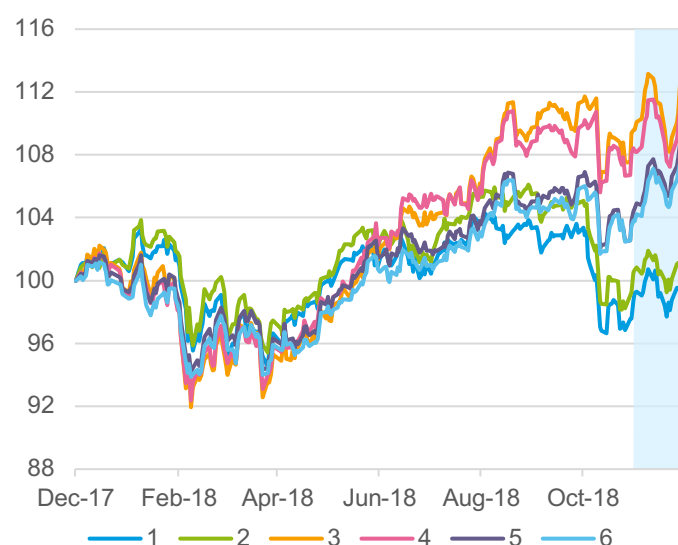


Figure 13: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018. Source: STOXX Ltd.

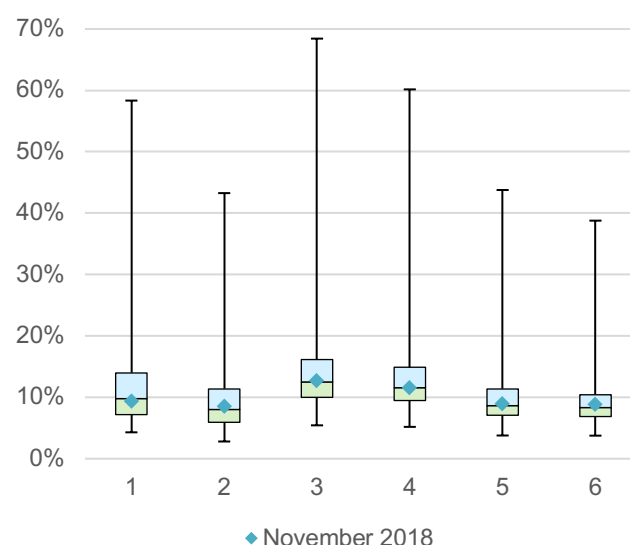


Figure 14: Monthly annualized volatility analysis, EUR Net Return. Jan. 2004 – Nov. 2018. Source: STOXX Ltd.

Dividend Indices

Key points

Many dividend-based strategies outperformed as bond yields dropped. Yields on 10-year US Treasuries fell to 3% at the end of November from 3.13% at the start of the month.

The STOXX® Global Maximum Dividend 40 Index, STOXX® Global Select Dividend 100 Index and STOXX® Global Select 100 EUR Index are all derived from the Global 1800 Index and track different income approaches.

The STOXX Global Maximum Dividend 40 Index focuses on high dividend-yielding stocks. The STOXX Global Select Dividend 100 Index tracks companies with sizeable dividends but also applies a quality filter such as a history of stable payments. Finally, the STOXX Global Select 100 EUR Index blends increasing dividend yields with low stock price volatility.

Income strategies have struggled in the past year as the US Federal Reserve raises interest rates, increasing the appeal of bond payments relative to dividends.

Risk and return characteristics

	Return (%)						Annualized volatility (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX Global Maximum Dividend 40	1.0	-5.3	-3.9	0.9	-10.7	-8.7	8.2	10.2	10.1	9.4	11.4	11.2	1.1
2. STOXX Global Select Dividend 100	2.2	-0.2	0.7	2.1	-5.9	-4.4	7.8	8.2	8.0	9.1	8.6	8.4	1.7
3. STOXX Global Select 100 EUR	1.6	-1.0	-0.9	1.5	-6.6	-5.9	8.7	8.2	8.0	10.8	9.3	9.1	1.2

Risk and return performance figures for STOXX Dividend Indices, Net Return. Data as of Nov. 30, 2018.
Source: STOXX Ltd.

Price and volatility performance

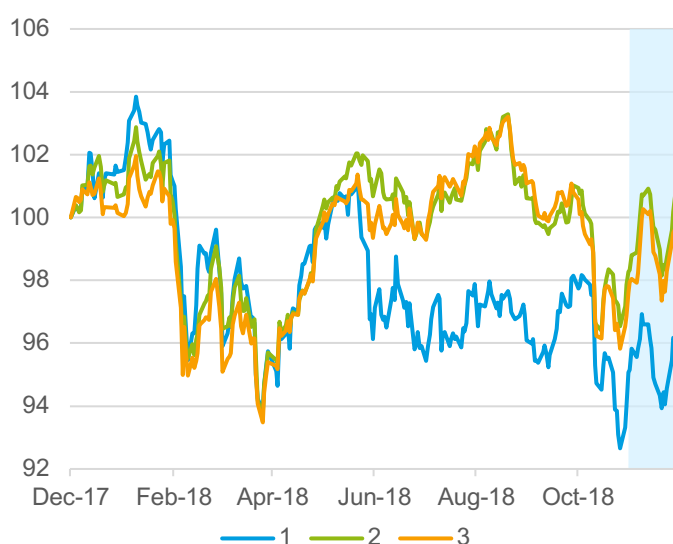


Figure 15: Annual price performance, EUR Net Return. Dec. 2017 – Nov. 2018. Shaded area: Nov. 2018. Source: STOXX Ltd.

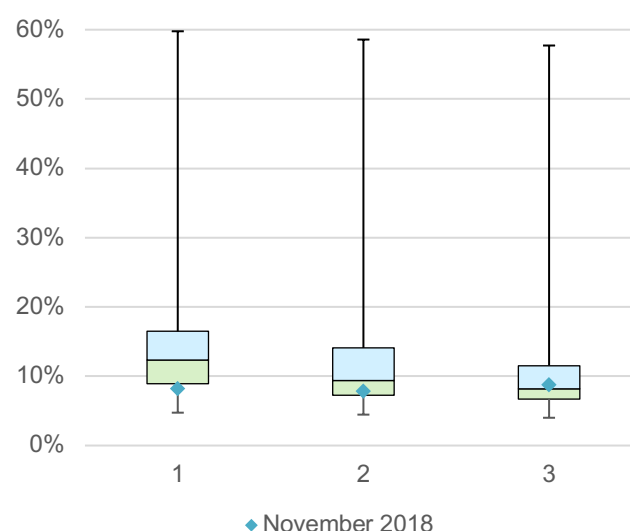


Figure 16: Monthly annualized volatility analysis, EUR Net Return. Jul. 2004 – Nov. 2018. Source: STOXX Ltd.

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