

**STOXX**

# MONTHLY INDEX NEWS

October 2018

**INDEX**

**RESEARCH**

**GLOBAL**

**INSIGHT**

**MARKETS**

## Benchmark Indices

### Key points

The STOXX® Global 1800 Index tumbled 7.4% in dollars in October amid concerns that rising US bond yields and a slowdown in China will stymie growth. It was the worst monthly performance for the benchmark in over six years, and its weakest October since the global financial crisis broke out in 2008.

The Global 1800 Index is now 9% below its January high. Its annualized volatility rose to 16.5% in October, from an average 7.4% in the previous five months.

The pan-European STOXX® Europe 600 Index and the Eurozone's EURO STOXX 50® Index retreated more than 5% when measured in euros. The latter has now fallen 11% from a high in November last year.

Elsewhere, the STOXX® North America 600 Index declined 7% in October in dollar terms as some investors took profits from a region that has performed strongly in the past year. The selling came even as the US government reported annual growth of 3.5% in gross domestic product for the third quarter.

The STOXX® Asia/Pacific 600 Index tumbled 8.7% in the month.

### 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	-5.9	-6.5	-10.6	-8.2	-11.7	-13.1	15.5	13.2	12.7	15.8	14.6	13.9	1.7
2. STOXX Europe 600	-5.5	-4.7	-5.9	-7.8	-10.1	-8.5	14.8	11.9	11.3	14.7	13.1	12.4	1.7
3. STOXX North America 600	-4.6	7.9	9.0	-7.0	1.8	6.0	23.1	15.5	14.6	21.8	14.6	13.6	2.8
4. STOXX Asia/Pacific 600	-6.4	-3.2	-2.0	-8.7	-8.6	-4.7	20.0	13.3	12.9	18.2	13.0	12.5	1.1
5. STOXX Global 1800	-5.1	3.1	3.6	-7.4	-2.7	0.7	17.8	11.8	11.2	16.5	11.4	10.6	2.0

Risk and return performance figures for STOXX benchmark indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

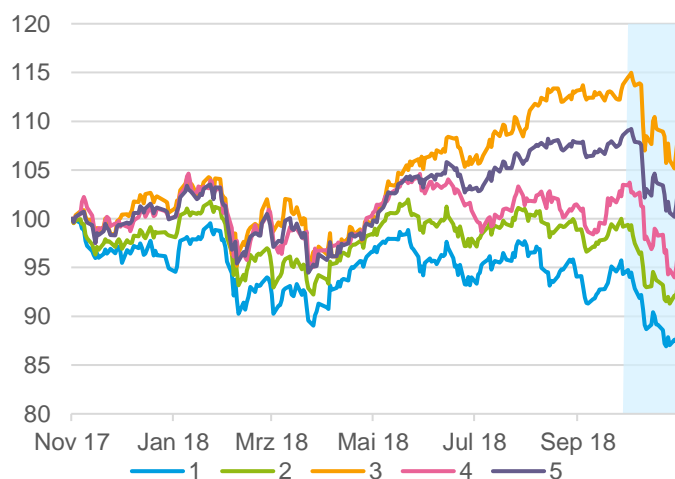


Figure 1: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area: Oct. 2018.  
Source: STOXX Ltd.

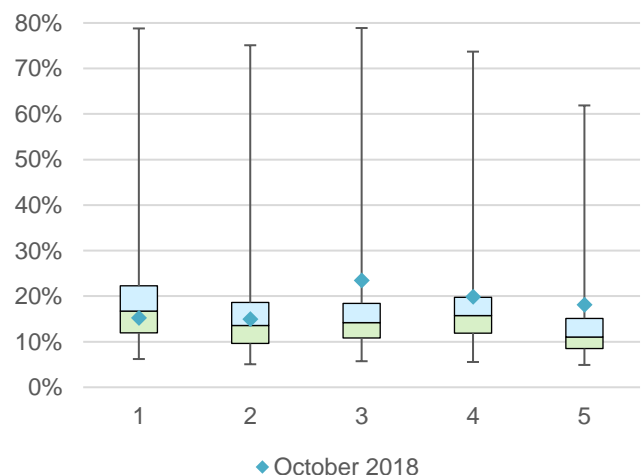


Figure 2: Monthly annualized volatility analysis, EUR Net Return. Jan. 2004 – Oct. 2018.  
Source: STOXX Ltd.

## Thematic Indices – Revenue-Based

### Key points

STOXX’s revenue-based thematic indices underperformed, paced by those exposed to concepts such as digitalization and healthcare that have had strong momentum in the past year.

The iSTOXX® FactSet Breakthrough Healthcare Index led the retreat, shedding 14.1% in dollars. The STOXX® Global Fintech Index, on the other hand, fell the least. On a one-year basis, four of the revenue-based thematic indices have strongly outperformed the Global 1800 Index, while four have lagged behind.

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	-8.5	1.2	1.4	-10.7	-4.5	-1.4	38.9	23.2	22.1	38.0	22.2	21.2	4.2
2. STOXX Global Digital Security	-6.8	-0.1	0.0	-9.1	-5.7	-2.8	22.7	13.4	13.0	21.7	12.6	12.1	3.7
3. STOXX Global Fintech	-4.7	21.0	22.6	-7.0	14.2	19.3	28.9	17.1	16.2	27.7	16.1	15.2	4.3
4. iSTOXX Developed Markets B.R.AI.N	-9.3	13.6	12.3	-11.5	7.2	9.2	30.7	19.8	18.9	29.7	19.1	18.2	4.1
5. iSTOXX FactSet Ageing Population	-6.2	-1.6	-1.3	-8.5	-7.1	-4.0	15.6	10.2	9.9	14.3	10.2	9.7	1.8
6. iSTOXX FactSet Automation & Robotics	-11.5	-8.6	-9.1	-13.6	-13.8	-11.6	27.5	15.9	15.4	26.1	15.6	15.1	4.6
7. iSTOXX FactSet Breakthrough Healthcare	-12.0	7.4	9.6	-14.1	1.3	6.6	23.6	15.7	15.2	22.8	15.8	15.2	4.8
8. iSTOXX FactSet Digitalisation	-7.8	9.5	9.7	-10.1	3.4	6.7	24.5	14.2	13.5	23.2	13.5	12.8	5.5

Risk and return performance figures for STOXX thematic indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

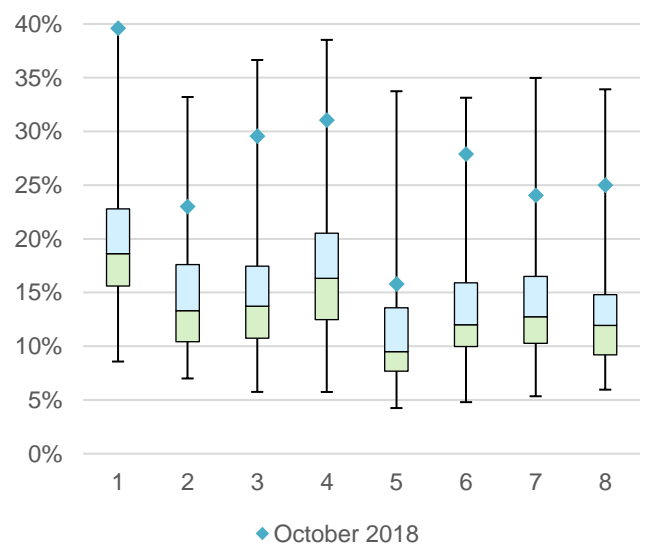
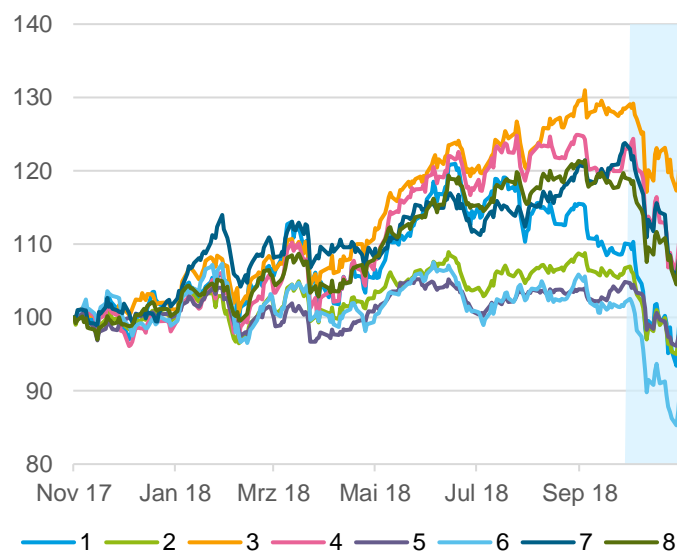


Figure 3: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area Oct. 2018. Source: STOXX Ltd.

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

## Thematic Indices – AI-Driven

### Key points

Among STOXX’s AI-driven thematic indices, the iSTOXX® Yewno Developed Markets Blockchain Index stood out over the month as it outperformed the Global 1800 Index by 260 basis points. The index is now up 9.3% in the past year, compared with a 0.7% gain for the Global 1800 Index.

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 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	-7.1	4.4	4.6	-9.4	-1.5	1.8	20.6	12.7	12.1	19.2	12.0	11.3	2.6
2. STOXX AI Global Artificial Intelligence ADTV5	-7.0	4.6	4.5	-9.3	-1.3	1.6	20.9	12.8	12.2	19.5	12.1	11.4	2.6
3. iSTOXX Yewno Developed Markets Blockchain	-2.4	9.5	12.4	-4.8	3.3	9.3	20.2	14.8	14.4	19.0	14.4	13.7	2.9

Risk and return performance figures for STOXX thematic indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance



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

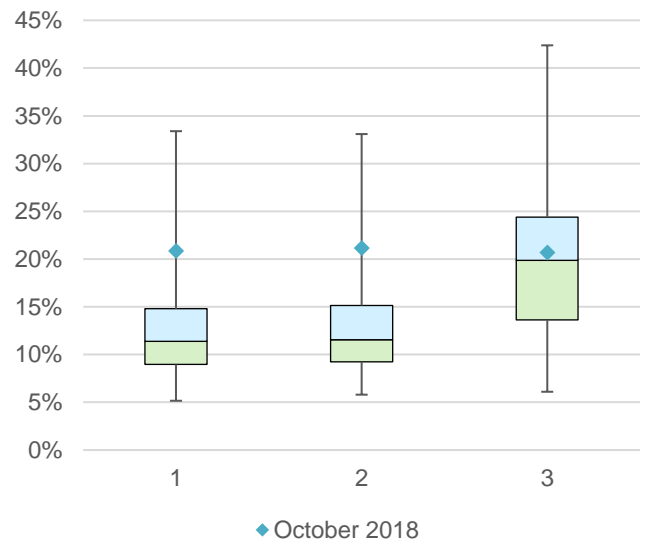


Figure 6: Monthly annualized volatility analysis, EUR Net Return. Apr. 2013 – Oct. 2018. Source: STOXX Ltd.

## Europe Factor Market Neutral Indices

### Key points

All seven iSTOXX® Europe Factor Market Neutral Indices, which hold a short position in futures on the STOXX Europe 600, helped investors neutralize systematic risk and focus on pure factor investing.

The gauges for value and low risk provided the best relative returns. At the other end, the iSTOXX® Europe Size Factor Market Neutral Index, which seeks to extract the risk premium of small-capitalization shares, 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	-1.2	1.1	1.5	-3.6	-4.6	-1.3	5.7	3.6	3.6	6.1	7.4	7.5
2. iSTOXX Europe Low Risk Factor Market Neutral	0.0	2.3	3.3	-2.5	-3.4	0.5	4.6	3.3	3.1	5.5	7.0	6.9
3. iSTOXX Europe Momentum Factor Market Neutral	-0.4	-1.6	0.8	-2.8	-7.1	-2.0	3.3	3.2	3.2	5.2	7.4	7.4
4. iSTOXX Europe Quality Factor Market Neutral	-1.0	-2.1	-1.8	-3.4	-7.6	-4.4	3.9	3.1	3.1	5.2	7.1	7.1
5. iSTOXX Europe Size Factor Market Neutral	-1.8	-2.6	-2.2	-4.2	-8.1	-4.9	5.9	4.4	4.4	6.8	8.2	8.1
6. iSTOXX Europe Value Factor Market Neutral	-0.3	-5.3	-3.8	-2.8	-10.7	-6.5	5.1	4.4	4.3	6.9	8.2	8.1
7. iSTOXX Europe Multi-Factor Market Neutral	-1.2	-4.4	-2.4	-3.6	-9.8	-5.1	4.7	3.8	3.8	6.5	7.9	7.8

Risk and return performance figures for iSTOXX Europe Market Neutral Factor Indices, Net Return. Data as of Oct. 31, 2018. Source: STOXX Ltd.

### Price and volatility performance



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

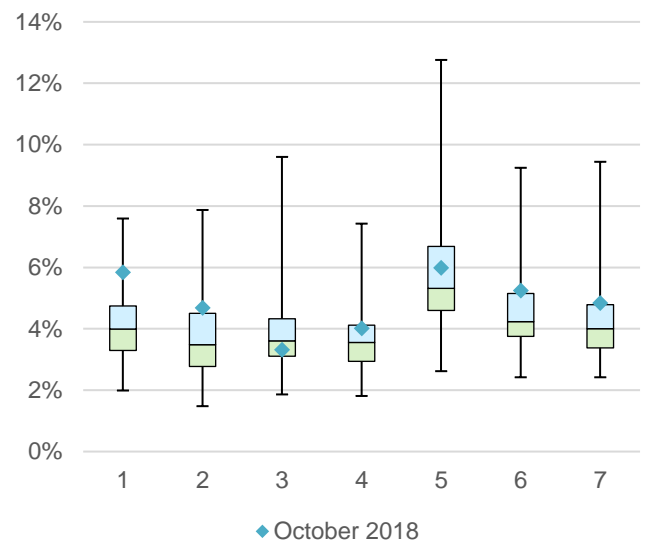


Figure 8: Monthly annualized volatility analysis, EUR Net Return. Aug. 2010 – Oct. 2018. Source: STOXX Ltd.

## Premia Indices

### Key points

The EURO STOXX® Multi Premia® and Single Premium Indices performed roughly in line with the market in October.

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 305 companies, fell 6.6% in the month and is down 9.1% 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	-6.2	-2.1	-0.6	-8.5	-7.6	-3.3	16.6	10.7	10.3	15.9	12.3	11.8
2. EURO STOXX Momentum Premium	-7.4	-0.9	-2.0	-9.7	-6.5	-4.6	21.8	14.3	13.5	20.7	15.3	14.5
3. EURO STOXX Quality Premium	-5.9	-1.1	-1.9	-8.2	-6.7	-4.6	17.9	12.3	11.8	17.3	13.6	12.9
4. EURO STOXX Residual Momentum Premium	-6.0	-2.4	-2.5	-8.3	-7.9	-5.2	19.0	13.1	12.4	18.1	14.3	13.6
5. EURO STOXX Reversal Premium	-5.1	-7.1	-7.0	-7.4	-12.3	-9.5	13.3	10.8	10.5	13.6	12.8	12.4
6. EURO STOXX Size Premium	-6.8	-8.1	-6.4	-9.1	-13.3	-9.0	18.5	12.0	11.4	17.9	13.6	13.0
7. EURO STOXX Value Premium	-6.4	-8.1	-11.6	-8.7	-13.2	-14.1	15.0	12.5	12.2	15.6	14.2	13.8
8. EURO STOXX Multi Premia	-6.2	-4.6	-5.1	-8.5	-10.0	-7.7	16.8	11.8	11.3	16.4	13.3	12.7

Risk and return performance figures for iSTOXX Europe Market Neutral Factor Indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

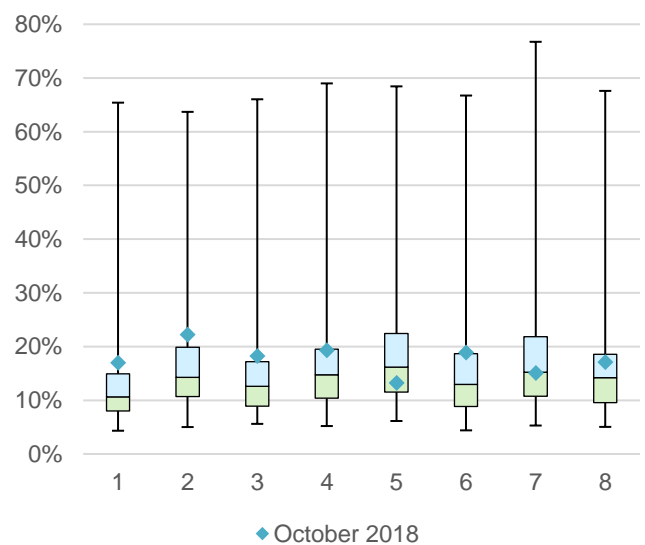


Figure 9: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area: Oct. 2018. Source: STOXX Ltd.

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

## ESG & Sustainable Investing Indices

### Key points

Environmental, social and governance (ESG) strategies performed broadly in line with benchmarks in October. The STOXX® Global ESG Impact Index and the STOXX® Global 1800 Low Carbon Index have posted better returns than the Global 1800 Index in 2018 and in the past year.

STOXX's responsible investing family includes more than 65 ESG/Sustainability and Low Carbon indices. They cover a wide variety of 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.

### 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	-5.4	-4.7	-6.1	-7.8	-10.1	-8.7	14.3	11.7	11.2	14.3	13.0	12.3	1.7
2. STOXX USA ESG Impact	-4.8	8.5	9.8	-7.1	2.4	6.8	23.9	16.1	15.2	22.7	15.2	14.2	3.0
3. STOXX Global ESG Impact	-5.2	4.0	4.4	-7.5	-1.9	1.5	18.9	12.2	11.6	17.6	11.8	11.1	2.2
4. STOXX Europe 600 Low Carbon	-5.5	-4.2	-5.7	-7.9	-9.6	-8.2	14.9	11.9	11.3	14.8	13.1	12.4	1.7
5. STOXX USA Low Carbon	-4.6	9.4	10.3	-7.0	3.2	7.2	24.2	16.1	15.2	23.0	15.2	14.1	2.9
6. STOXX Global 1800 Low Carbon	-5.2	3.8	4.1	-7.6	-2.0	1.3	18.3	11.9	11.3	17.0	11.5	10.7	2.0

Risk and return performance figures for STOXX ESG and Sustainable Investing Indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

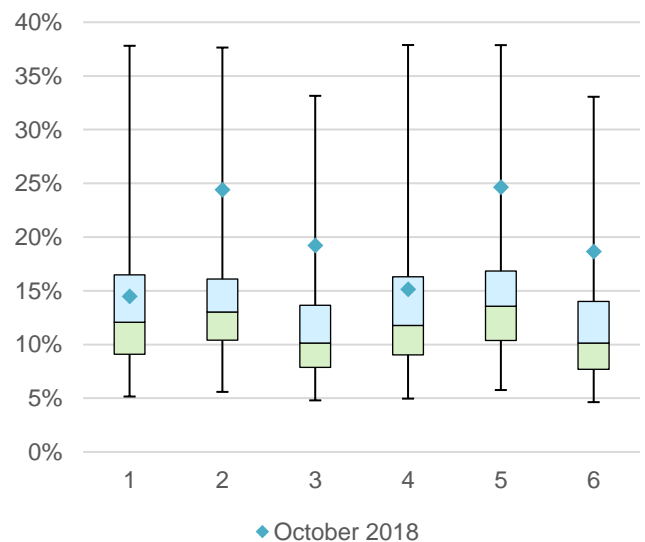


Figure 11: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area: Oct. 2018.  
Source: STOXX Ltd.

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

## Minimum Variance Indices

### Key points

Minimum variance strategies proved their edge in October, outperforming in all regions amid the sell-off.

The STOXX® Global 1800 Minimum Variance Index fell 4.5% and its unconstrained version retreated 4.3%. That compares with the 7.4% retreat for the benchmark STOXX Global 1800.

The STOXX® Europe 600 Minimum Variance Index and its unconstrained version beat the STOXX Europe 600 by 1.3 percentage points. The STOXX® USA 900 Minimum Variance Index and its unconstrained version fared even better: they had an edge over the STOXX® USA 900 Index of more than 3 percentage points.

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	-4.2	-2.4	-2.9	-6.5	-7.9	-5.6	13.9	10.0	9.6	13.5	11.3	10.7	2.1
2. STOXX Europe 600 MV Unconstrained	-4.2	-0.5	-1.1	-6.5	-6.1	-3.8	14.3	10.0	9.7	13.8	11.3	10.8	2.1
3. STOXX USA 900 MV	-1.5	10.1	12.3	-3.9	3.9	9.3	16.3	12.6	12.1	14.7	11.3	10.7	3.1
4. STOXX USA 900 MV Unconstrained	-1.1	9.0	11.4	-3.6	2.9	8.3	14.9	11.6	11.2	13.2	10.3	9.7	2.9
5. STOXX Global 1800 MV	-2.1	4.9	5.4	-4.5	-1.0	2.5	12.6	9.3	9.0	10.8	8.2	7.8	2.2
6. STOXX Global 1800 MV Unconstrained	-1.9	4.7	5.5	-4.3	-1.2	2.7	12.2	8.9	8.7	10.2	7.8	7.5	1.6

Risk and return performance figures for STOXX Minimum Variance Indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

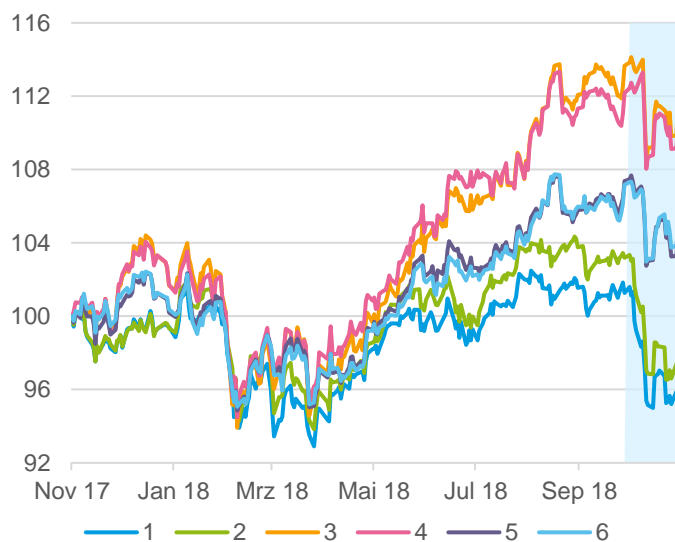


Figure 13: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area: Oct. 2018.  
Source: STOXX Ltd.

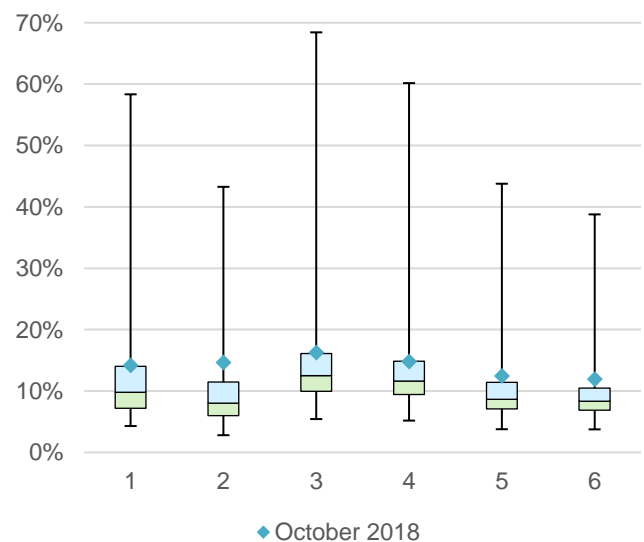


Figure 14: Monthly annualized volatility analysis, EUR Net Return Jan. 2004 – Oct. 2018.  
Source: STOXX Ltd.



## Dividend Indices

### Key points

Counterintuitively, dividend-based strategies outperformed even as bond yields rose. Yields on 10-year US Treasuries topped 3.2% over the month for the first time since 2011.

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	-3.1	-6.3	-7.3	-5.5	-11.6	-9.8	11.7	10.4	10.1	11.5	11.6	11.0	1.1
2. STOXX Global Select Dividend 100	-2.7	-2.4	-2.1	-5.1	-7.9	-4.8	10.7	8.2	7.9	9.7	8.5	8.0	1.7
3. STOXX Global Select 100 EUR	-3.2	-2.5	-3.1	-5.5	-8.0	-5.8	10.5	8.2	7.8	10.2	9.2	8.6	1.2

Risk and return performance figures for STOXX Dividend Indices, Net Return. Data as of Oct. 31, 2018.  
Source: STOXX Ltd.

### Price and volatility performance

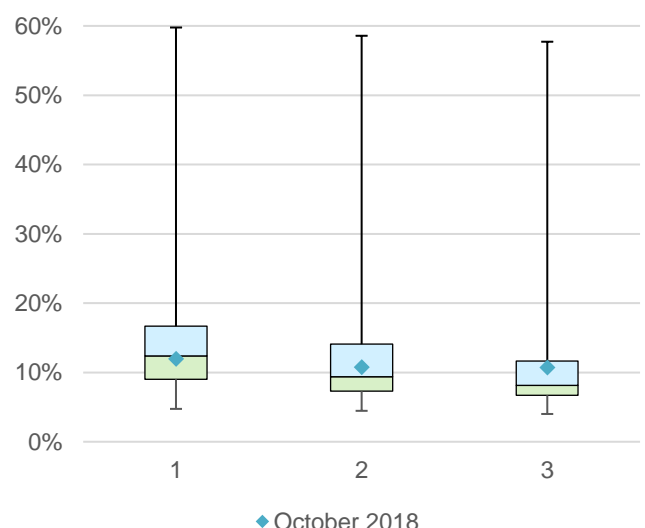


Figure 15: Annual price performance, EUR Net Return. Nov. 2017 – Oct. 2018. Shaded area: Oct. 2018. Source: STOXX Ltd.

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

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