

## **Benchmark Indices**

#### Key points

Global stocks extended gains during July, as investors anticipated an interest-rate cut in the US that came on the last day of the month. US and Japanese shares led the advance, while those in the Eurozone struggled despite the European Central Bank signaling there may be rate cuts in the near future.

The STOXX<sup>®</sup> Global 1800 Index recorded a total return of 0.4% in dollars during the month after jumping 6.6% in June. The index reached its highest level for the month on Jul. 24, when it closed 1.7% below its record of January 2018.

The STOXX<sup>®</sup> North America 600 Index was the key driver of gains among the three major regions, adding 1.4% in dollars. The pan-European STOXX<sup>®</sup> Europe 600 Index rose only 0.3% in euros and the STOXX<sup>®</sup> Asia/Pacific 600 Index, meanwhile, fell 0.1% in dollars.

### **Risk and return characteristics**

			Retu	rn (%)				Anr	nualized	volatilit	v (%)		
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. EURO STOXX 50	-0.1	19.1	1.9	-2.3	16.0	-3.0	9.8	12.3	13.2	8.4	13.2	14.8	1.8
2. STOXX Europe 600	0.3	17.5	2.1	-1.9	14.4	-2.9	8.6	10.5	11.9	7.7	11.3	13.3	1.8
3. STOXX North America 600	3.7	24.0	13.5	1.4	20.8	8.0	9.8	12.2	15.9	8.0	11.9	15.5	3.0
4. STOXX Asia/Pacific 600	2.2	13.7	3.5	-0.1	10.7	-1.5	11.4	11.2	13.1	10.5	11.1	12.8	1.0
5. STOXX Global 1800	2.7	21.0	9.3	0.4	17.8	4.0	8.2	9.9	12.0	6.3	9.9	12.0	2.0

Risk and return performance figures for STOXX Benchmark Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

## Index and volatility performance

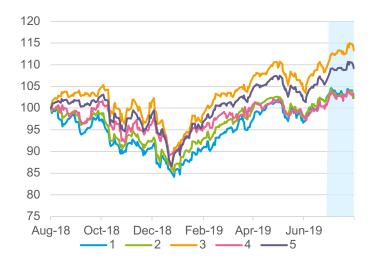


Figure 1: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

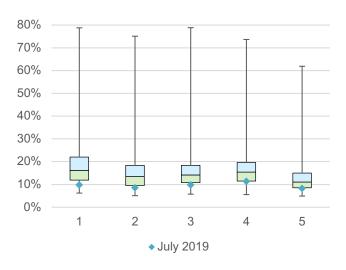


Figure 2: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2004 – Jul. 2019. Source: STOXX Ltd.

## **ESG-X Indices**

### Key points

The STOXX ESG-X Indices performed largely in line with their respective benchmarks during July. The indices are versions of traditional, market-capitalization-weighted benchmarks that observe standard responsible exclusions of leading asset owners.

The ESG-X Indices incorporate basic norm- and product-based exclusion criteria to comply with environmental, social and governance (ESG) principles. Companies are removed based on data provider Sustainalytics' determination of non-compliance with the United Nations Global Compact principles, involvement in controversial weapons, tobacco production, or either deriving revenues from thermal coal extraction or exploration, or using thermal coal to generate at least a quarter of their power output.

The ESG-X Indices are designed to keep a risk-return profile that is similar to that of their respective benchmarks.

#### **Risk and return characteristics**

			Retu	rn (%)									
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. EURO STOXX 50 ESG-X	-0.2	18.2	1.0	-2.4	15.2	-3.8	9.7	12.1	13.0	8.4	13.0	14.6	1.7
2. STOXX Europe 600 ESG-X	0.1	17.0	1.7	-2.1	14.0	-3.2	8.6	10.5	12.0	7.7	11.4	13.4	1.8
3. STOXX USA 500 ESG-X	4.0	25.0	14.4	1.7	21.7	8.9	10.4	12.7	16.3	8.5	12.4	15.9	3.3
4. STOXX North America 600 ESG-X	3.9	24.9	13.9	1.6	21.6	8.4	10.1	12.5	16.2	8.3	12.2	15.9	3.1
5. STOXX Asia/Pacific 600 ESG-X	2.2	14.0	3.9	-0.1	11.0	-1.1	11.4	11.2	13.1	10.5	11.2	12.9	1.0
6. STOXX Global 1800 ESG-X	2.8	21.3	9.5	0.5	18.2	4.2	8.3	10.0	12.2	6.5	10.0	12.2	2.0

Risk and return performance figures for STOXX ESG-X Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

### Index and volatility performance

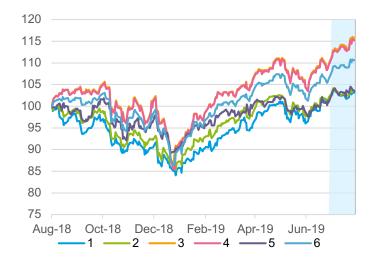


Figure 3: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

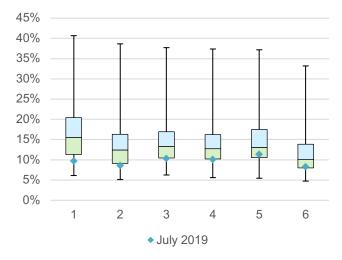


Figure 4: Monthly annualized volatility analysis, EUR Gross Return. Apr. 2012 – Jul. 2019. Source: STOXX Ltd.

## **Thematic Indices – Revenue-Based**

## Key points

The STOXX<sup>®</sup> Thematic Indices seek exposure to the economic upside of disruptive global megatrends and follow two approaches: revenue-based and artificial-intelligence-driven.

Eleven of the 17 STOXX revenue-based thematic indices, which look at companies' sales exposure to sectors closely related to specific trends, outperformed the STOXX Global 1800 Index during July. One, the iSTOXX<sup>®</sup> FactSet Automation & Robotics Index, performed in line.

The STOXX<sup>®</sup> Global Artificial Intelligence Index posted the group's best performance during July, rising 5.3%. The index tracks companies that derive the highest ratio of sales from AI-related technologies.

In the year-to-date period, eleven of the revenue-based thematic indices have beaten the STOXX Global 1800 Index.

### **Risk and return characteristics**

			Retu	rn (%)									
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. iSTOXX Developed Markets B.R.AI.N	2.0	17.8	1.7	-0.3	14.7	-3.3	10.3	16.1	19.3	9.3	15.8	19.1	4.6
2. iSTOXX FactSet Ageing Population	2.1	13.8	1.4	-0.2	10.8	-3.5	8.4	9.5	11.0	6.9	9.6	11.3	1.8
3. iSTOXX FactSet Automation & Robotics	2.7	26.6	5.3	0.4	23.3	0.2	14.5	15.5	17.8	13.1	15.5	17.9	5.0
4. iSTOXX FactSet Breakthrough Healthcare	2.0	9.6	1.0	-0.3	6.7	-3.9	13.4	14.6	16.6	13.0	14.7	16.9	5.3
5. iSTOXX FactSet Digitalisation	3.7	28.2	12.1	1.3	24.9	6.7	9.7	12.2	15.5	8.3	12.2	15.4	6.1
6. STOXX Global Artificial Intelligence	7.7	36.1	11.7	5.3	32.6	6.3	17.3	21.5	24.8	16.5	21.3	24.6	4.5
7. STOXX Global Broad Infrastructure	1.8	21.1	16.4	-0.4	18.0	10.7	7.5	7.4	8.8	6.7	7.3	8.6	2.0
8. STOXX Global Digital Security	5.0	24.8	12.0	2.6	21.5	6.5	10.6	11.9	13.9	9.3	11.8	13.8	4.4
9. STOXX Global Electric Vehicles and Driving Technology	1.2	7.5	-13.7	-1.1	4.7	-17.8	16.1	16.1	15.9	14.9	16.5	16.4	1.4
10.STOXX Global Fintech	5.2	37.6	32.1	2.9	34.0	25.7	11.0	13.5	17.7	9.5	13.3	17.3	5.0
11.STOXX Global Housing Construction	4.1	26.3	6.0	1.8	23.0	0.9	11.7	14.5	15.3	10.8	14.4	15.5	2.2
12.STOXX Global Industry 4.0	4.1	29.0	10.6	1.9	25.6	5.3	13.4	16.0	17.5	12.2	15.8	17.5	4.0
13.STOXX Global Millennials	4.8	30.1	6.5	2.5	26.7	1.4	11.6	15.6	18.7	10.0	15.4	18.5	6.0
14.STOXX Global Sharing Economy	5.0	41.3	17.2	2.6	37.6	11.5	11.6	15.9	20.6	10.0	15.7	20.3	6.3
<u></u>													
15.STOXX Global Silver Economy	3.1	18.4	2.3	0.8	15.3	-2.7	10.5	13.1	15.4	9.1	12.9	15.4	2.1
16.STOXX Global Smart Cities	5.3	20.9	13.8	2.9	17.7	8.3	13.1	16.4	18.0	11.9	16.4	18.0	3.3
17.STOXX Global Smart Factory	5.2	32.1	6.3	2.9	28.7	1.1	19.2	22.4	23.0	18.4	22.3	23.2	3.5

Risk and return performance figures for STOXX Thematic Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

# STOXX RESEARCH

## Index performance

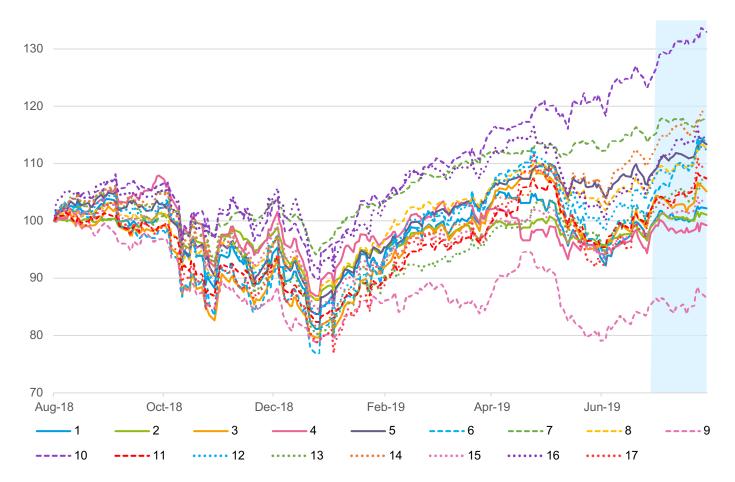


Figure 5: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

## Volatility performance

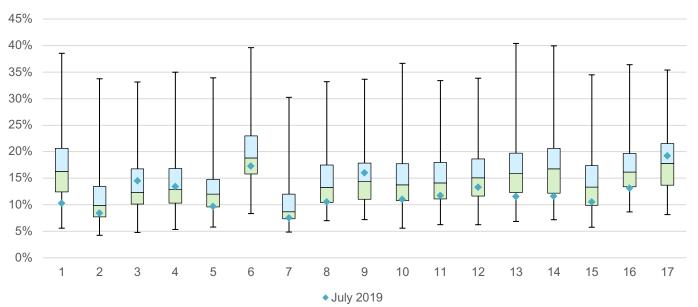


Figure 6: Monthly annualized volatility analysis, EUR Gross Return. Jul. 2012 – Jul. 2019. Source: STOXX Ltd.

## **Thematic Indices – AI-Driven**

### Key points

It was also a positive month for STOXX's artificial-intelligence-driven thematic indices. The iSTOXX<sup>®</sup> Yewno Developed Markets Blockchain Index, STOXX<sup>®</sup> AI Global Artificial Intelligence Index and STOXX<sup>®</sup> AI Global Artificial Intelligence ADTV5 Index comfortably outperformed the STOXX Global 1800 Index.

The indices employ computational systems to select businesses investing in the adoption of intellectual property underpinning the respective theme. Through July-end, all three AI indices were ahead of the benchmark returns for the year.

## **Risk and return characteristics**

	Return (%)							Annualized volatility (%)						
	Return (%) Annualized   EUR USD EUR   1M YTD 1Y 1M YTD 1Y   3.3 23.3 10.4 1.0 20.1 5.1 10.6 11.9 13.7   3.4 23.6 11.2 1.0 20.4 5.9 10.7 12.1 13.9													
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B	
1. STOXX AI Global Artificial Intelligence	3.3	23.3	10.4	1.0	20.1	5.1	10.6	11.9	13.7	8.8	11.8	13.6	2.9	
2. STOXX AI Global Artificial Intelligence ADTV5	3.4	23.6	11.2	1.0	20.4	5.9	10.7	12.1	13.9	8.9	12.0	13.8	2.9	
3. iSTOXX Yewno Developed Markets Blockchain	4.5	22.4	10.7	2.1	19.2	5.3	10.1	11.9	14.4	7.9	11.6	14.1	2.9	

Risk and return performance figures for STOXX Thematic Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

## Index and volatility performance



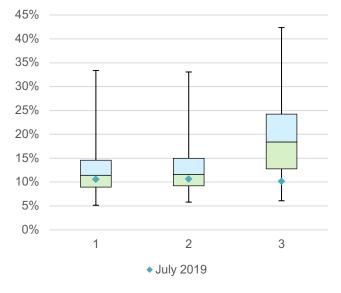


Figure 7: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd. Figure 8: Monthly annualized volatility analysis, EUR Gross Return. Apr. 2013 – Jul. 2019. Source: STOXX Ltd.

## **Europe Factor Market Neutral Indices**

#### Key points

Exposure to pure factor premia continues to yield negative returns. For a second month in a row, all seven iSTOXX<sup>®</sup> Europe Factor Market Neutral Indices, which hold a short position in futures on the STOXX Europe 600 to help investors neutralize systematic risk, fell on a net-return basis.

The iSTOXX<sup>®</sup> Europe Size Factor Market Neutral Index retreated 2.3%, its sixth straight monthly loss. At the other end, the iSTOXX<sup>®</sup> Europe Low Risk Factor Market Neutral Index dropped the least.

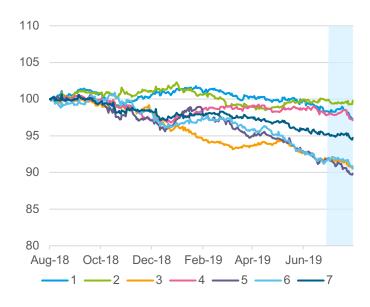
The iSTOXX Europe Factor Market Neutral Indices are designed to offer exposure to factor investing in isolation of the market risk. All indices have declined during 2019.

#### **Risk and return characteristics**

	(	<u>EUR) Return (</u>	%)	(EUR) A	nnualized vola	olatility (%)	
	1M	YTD	1Y	1M	YTD	1Y	
1. iSTOXX Europe Carry Factor Market Neutral	-0.9	-3.9	-2.1	3.5	3.3	3.6	
2. iSTOXX Europe Low Risk Factor Market Neutral	-0.1	-2.5	-0.1	3.1	3.1	3.3	
3. iSTOXX Europe Momentum Factor Market Neutral	-0.9	-5.6	-8.8	2.8	2.8	3.3	
4. iSTOXX Europe Quality Factor Market Neutral	-0.4	-0.4	-2.5	3.2	3.0	3.2	
5. iSTOXX Europe Size Factor Market Neutral	-2.3	-7.8	-10.1	4.0	4.5	4.6	
6. iSTOXX Europe Value Factor Market Neutral	-1.1	-6.4	-9.2	3.7	4.0	4.4	
7. iSTOXX Europe Multi-Factor Market Neutral	-0.3	-3.3	-4.9	3.2	3.0	3.5	

Risk and return performance figures for iSTOXX Europe Factor Market Neutral Indices, Net Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

#### Index and volatility performance





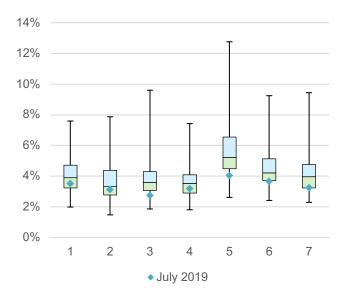


Figure 10: Monthly annualized volatility analysis, EUR Net Return. Aug. 2010 – Jul. 2019. Source: STOXX Ltd.

## **Premia Indices**

### Key points

Factor returns did better during July as measured by the EURO STOXX<sup>®</sup> Multi Premia<sup>®</sup> and Single Premium Indices, which integrate the academic-research-based Multi Premia methodology developed by STOXX's partner Finreon.

The indices track seven distinctive sources of equity risk and returns on a broad and liquid universe of about 300 Eurozone stocks. Unlike the iSTOXX Europe Factor Market Neutral Indices, the EURO STOXX Multi Premia and Single Premium Indices are exposed to the market's systematic risk. Their benchmark, the EURO STOXX<sup>®</sup> Index, gained 0.2% in euros during July.

Only the EURO STOXX<sup>®</sup> Reversal Premium Index and the EURO STOXX<sup>®</sup> Value Premium Index underperformed the benchmark during the month, while the remaining six outperformed.

### **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	0.3	15.4	-0.1	-1.9	12.4	-4.9	8.2	9.1	10.7	8.1	10.1	12.0		
2. EURO STOXX Momentum Premium	1.4	19.8	3.4	-0.8	16.7	-1.6	9.7	10.0	13.1	9.7	11.0	14.4		
3. EURO STOXX Quality Premium	0.7	19.8	5.8	-1.5	16.7	0.7	9.7	11.7	12.6	9.2	12.6	14.0		
4. EURO STOXX Residual Momentum Premium	0.7	15.9	2.7	-1.6	12.9	-2.3	9.5	9.3	11.9	9.6	10.4	13.4		
5. EURO STOXX Reversal Premium	-0.7	6.3	-8.0	-2.9	3.5	-12.5	11.3	11.6	12.1	10.2	12.7	13.8		
6. EURO STOXX Size Premium	0.8	18.4	1.3	-1.4	15.3	-3.6	10.5	12.5	13.3	10.1	13.6	14.9		
7. EURO STOXX Value Premium	-0.3	12.4	-4.5	-2.5	9.5	-9.2	13.1	14.2	14.2	11.9	15.1	15.8		
8. EURO STOXX Multi Premia	0.4	15.2	0.0	-1.8	12.2	-4.9	9.7	10.7	12.0	9.2	11.7	13.6		

Risk and return performance figures for EURO STOXX Multi Premia Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

## Index and volatility performance

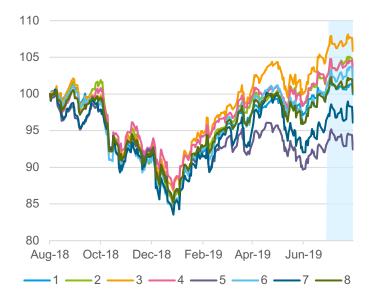


Figure 11: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

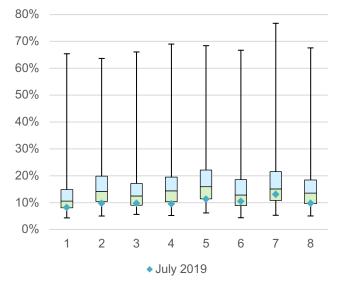


Figure 12: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2004 – Jul. 2019. Source: STOXX Ltd.

## **ESG and Sustainability Indices**

### Key points

The STOXX<sup>®</sup> Global ESG Impact Index, which selects stocks based on key sustainable performance indicators, more than doubled the return of its benchmark during July.

The STOXX<sup>®</sup> USA ESG Impact Index also had a positive month relative to the benchmark STOXX<sup>®</sup> USA 900 Index, which climbed 1.5% during July.

The STOXX<sup>®</sup> Europe ESG Leaders Select 30 Index, however, lagged the STOXX Europe 600 Index. The former tracks the region's leading companies in terms of ESG criteria, based on indicators provided by Sustainalytics, but additionally applies a filter to select stocks with the lowest volatility and highest dividends.

STOXX has advanced sustainable investing since 2001, innovating in ESG, low-carbon and climate-impact strategies with over 150 indices that incorporate best-in-class, exclusionary screens and other strategies.

#### **Risk and return characteristics**

			Retu	rn (%)			Annualized volatility (%)						
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. STOXX Europe Industry Neutral ESG	0.2	17.0	2.0	-2.0	14.0	-2.9	8.6	10.4	11.7	7.7	11.2	13.2	1.8
2. STOXX North America Industry Neutral ESG	3.9	23.0	14.3	1.6	19.8	8.7	10.2	12.0	15.4	8.4	11.7	15.0	3.0
3. STOXX USA ESG Impact	4.5	24.1	14.5	2.2	20.9	9.0	10.5	12.7	16.2	8.7	12.4	15.8	3.1
4. STOXX Global ESG Impact	3.3	22.0	10.3	1.0	18.8	4.9	8.5	10.3	12.4	6.7	10.3	12.5	2.1
5. STOXX Europe ESG Leaders Select 30	-0.6	9.3	-0.5				9.1	9.8	11.2				1.3

Risk and return performance figures for STOXX ESG and Sustainability Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

### Index and volatility performance



40% 35% 30% 25% 20% 15% 10% 5% 0% 1 2 3 4 5 • July 2019

Figure 13: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd. Figure 14: Monthly annualized volatility analysis, EUR Gross Return. Oct. 2012 – Jul. 2019. Source: STOXX I td

## **Climate Indices**

### Key points

Among the STOXX Climate Indices, the STOXX<sup>®</sup> North America Climate Impact Ex Global Compact Controversial Weapons & Tobacco Index stood out during the month for its outperformance to the STOXX North America 600 Index.

At the other end, the iSTOXX<sup>®</sup> Europe ESG Climate Awareness Select 50 Index lagged behind the STOXX Europe 600 Index. The former tracks the performance of 50 companies that have considered the implications of climate change for their businesses and also applies low-volatility and high-dividend-yield screens.

STOXX has partnered with CDP, a leading climate data provider, to track companies taking action on, managing and understanding the effects of climate change.

### **Risk and return characteristics**

Return (%)							Annualized volatility (%)							
	EUR			USD			EUR			USD				
1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B		
0.1	16.4	3.1	-2.1	13.3	-1.9	8.8	10.0	11.4	7.8	10.7	12.8	1.8		
4.6	23.8	15.0	2.3	20.5	9.5	10.6	12.4	15.8	8.7	12.1	15.4	3.1		
2.2	13.0	2.6	-0.1	10.0	-2.4	11.9	11.6	13.6	11.1	11.7	13.3	1.3		
3.1	20.9	10.3	0.8	17.7	5.0	8.4	9.9	11.6	6.5	9.9	11.6	2.2		
1.0	20.6	9.9	-1.3	17.4	4.5	9.1	10.5	12.0	8.5	10.6	12.1	2.9		
-0.8	11.5	2.4	-3.0	8.6	-2.5	8.4	9.1	10.4	7.9	10.2	11.8	1.5		
	0.1 4.6 2.2 3.1 1.0	1M YTD   0.1 16.4   4.6 23.8   2.2 13.0   3.1 20.9   1.0 20.6	EUR   1M YTD 1Y   0.1 16.4 3.1   4.6 23.8 15.0   2.2 13.0 2.6   3.1 20.9 10.3   1.0 20.6 9.9	EUR   1M YTD 1Y 1M   0.1 16.4 3.1 -2.1   4.6 23.8 15.0 2.3   2.2 13.0 2.6 -0.1   3.1 20.9 10.3 0.8   1.0 20.6 9.9 -1.3	EUR USD   1M YTD 1Y 1M YTD   0.1 16.4 3.1 -2.1 13.3   4.6 23.8 15.0 2.3 20.5   2.2 13.0 2.6 -0.1 10.0   3.1 20.9 10.3 0.8 17.7   1.0 20.6 9.9 -1.3 17.4	EUR USD   1M YTD 1Y 1M YTD 1Y   0.1 16.4 3.1 -2.1 13.3 -1.9   4.6 23.8 15.0 2.3 20.5 9.5   2.2 13.0 2.6 -0.1 10.0 -2.4   3.1 20.9 10.3 0.8 17.7 5.0   1.0 20.6 9.9 -1.3 17.4 4.5	EUR USD   1M YTD 1Y 1M YTD 1Y 1M   0.1 16.4 3.1 -2.1 13.3 -1.9 8.8   4.6 23.8 15.0 2.3 20.5 9.5 10.6   2.2 13.0 2.6 -0.1 10.0 -2.4 11.9   3.1 20.9 10.3 0.8 17.7 5.0 8.4   1.0 20.6 9.9 -1.3 17.4 4.5 9.1	EUR USD EUR   1M YTD 1Y 1M YTD 1Y 1M YTD   0.1 16.4 3.1 -2.1 13.3 -1.9 8.8 10.0   4.6 23.8 15.0 2.3 20.5 9.5 10.6 12.4   2.2 13.0 2.6 -0.1 10.0 -2.4 11.9 11.6   3.1 20.9 10.3 0.8 17.7 5.0 8.4 9.9   1.0 20.6 9.9 -1.3 17.4 4.5 9.1 10.5	EUR USD EUR   1M YTD 1Y 1M YTD 1Y 1M YTD 1Y   0.1 16.4 3.1 -2.1 13.3 -1.9 8.8 10.0 11.4   4.6 23.8 15.0 2.3 20.5 9.5 10.6 12.4 15.8   2.2 13.0 2.6 -0.1 10.0 -2.4 11.9 11.6 13.6   3.1 20.9 10.3 0.8 17.7 5.0 8.4 9.9 11.6   1.0 20.6 9.9 -1.3 17.4 4.5 9.1 10.5 12.0	EUR USD EUR   1M YTD 1Y 1M 1M YTD 1Y 1M YTD 1Y 1M YTD 1Y 1M YTD 1Y 1M YTD 1X 1A 7.8 8.8 10.0 11.4 7.8 8.7 2.2 13.0 2.6 -0.1 10.0 -2.4 11.9 11.6 13.6 11.1 3.1 20.9 10.3 0.8 17.7 5.0 8.4 9.9 11.6 6.5   1.0 20.6 9.9 -1.3 17.4	EUR USD EUR USD   1M YTD 1Y 1M YTD 1X 1A 7.8 10.7 14.6 12.4 15.8 8.7 12.1 12.2 13.0 2.6 -0.1 10.0 -2.4 11.9 11.6 13.6 11.1 11.7 3.1 20.9 10.3 0.8 17.7 5.0 8.4 9.9 11.6 6.5 9.9	EUR USD EUR USD   1M YTD 1Y 1X 1A 7.8 10.7 12.8 8.7 12.1 15.4 15.4 2.2 13.0 2.6 -0.1 10.0 -2.4 11.9 11.6 13.6 11.1 11.7 13.3 3.1 20.9 10.3 0.8 17.7 5.0		

Risk and return performance figures for STOXX Climate Indices, Gross Return. Data as of Jul. 31, 2019. \* Indices are the Ex Global Compact Controversial Weapons & Tobacco versions.

Source: STOXX Ltd.

## Index and volatility performance



Figure 15: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

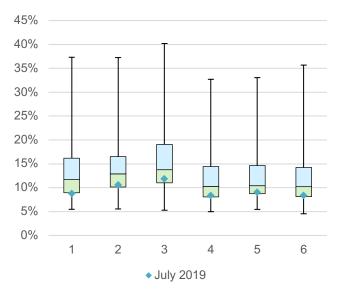


Figure 16: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2013 – Jul. 2019. Source: STOXX Ltd.

## **Low Carbon Indices**

## Key points

STOXX's low-carbon equity indices, which seek to significantly lower the carbon footprint of portfolios, performed broadly in line with their benchmarks during July.

The STOXX<sup>®</sup> Global 1800 Low Carbon Index matched the return of the STOXX Global 1800 Index and is tracking its benchmark closely for the past year.

The STOXX Low Carbon Indices use data from CDP and ISS ESG.

#### **Risk and return characteristics**

			Retu	rn (%)									
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. EURO STOXX 50 Low Carbon	0.0	19.1	1.1	-2.2	16.0	-3.8	10.0	12.6	13.5	8.6	13.5	15.1	1.8
2. STOXX Europe 600 Low Carbon	0.2	17.3	2.3	-2.1	14.3	-2.7	8.7	10.5	12.0	7.7	11.4	13.4	1.8
3. STOXX USA Low Carbon	4.0	24.9	14.0	1.6	21.7	8.5	10.4	12.8	16.6	8.5	12.4	16.2	3.1
4. STOXX Japan Low Carbon	2.7	11.9	1.4	0.4	9.0	-3.5	14.0	14.0	15.6	13.0	13.9	15.2	1.2
5. STOXX Global 1800 Low Carbon	2.7	21.2	9.2	0.4	18.1	3.9	8.3	10.1	12.3	6.5	10.1	12.3	2.1
6. STOXX Global 1800 ex Europe Low Carbon	3.6	22.7	11.6	1.2	19.5	6.2	9.1	10.7	14.0	7.2	10.4	13.6	2.2

Risk and return performance figures for STOXX Low Carbon Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

## Index and volatility performance

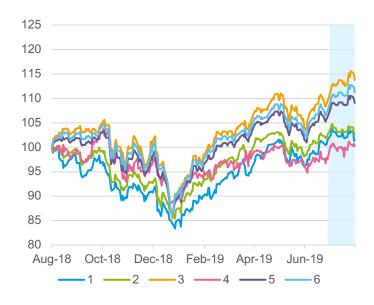


Figure 17: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

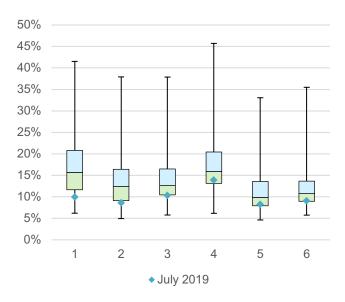


Figure 18: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2012 – Jul. 2019. Source: STOXX Ltd.

## **Minimum Variance Indices**

### Key points

The STOXX<sup>®</sup> Global 1800 Minimum Variance Index beat the STOXX Global 1800 Index during July, extending an all-time high. Minimum-variance strategies came slightly behind benchmarks in Europe and the US.

The STOXX<sup>®</sup> Minimum Variance Indices come in two versions: constrained and unconstrained. The former has a similar exposure to a market-capitalization-weighted 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.

The STOXX<sup>®</sup> Europe 600 Minimum Variance Index added 0.2%, while its unconstrained version rose 0.1%. That compares with the 0.3% advance for the benchmark STOXX Europe 600 Index. The STOXX<sup>®</sup> USA 900 Minimum Variance Index increased 1.2%, while its unconstrained version added 1%, compared with the 1.5% gain for the STOXX<sup>®</sup> USA 900 Index.

### **Risk and return characteristics**

			Retu	rn (%)									
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. STOXX Europe 600 MV	0.2	14.7	4.0	-2.0	11.7	-1.0	7.6	7.6	9.4	7.6	8.6	10.6	2.2
2. STOXX Europe 600 MV Unconstrained	0.1	14.7	3.7	-2.1	11.8	-1.3	7.8	7.4	9.3	7.9	8.5	10.6	2.2
3. STOXX USA 900 MV	3.5	24.9	20.9	1.2	21.6	15.1	8.7	9.1	12.2	7.3	8.6	11.4	3.1
4. STOXX USA 900 MV Unconstrained	3.3	20.0	16.5	1.0	16.8	10.8	8.8	8.3	11.2	7.3	7.7	10.2	2.8
5. STOXX Global 1800 MV	2.8	18.2	15.4	0.5	15.2	9.8	7.7	6.9	8.8	6.0	6.5	7.9	2.1
6. STOXX Global 1800 MV Unconstrained	2.5	17.3	14.6	0.2	14.2	9.1	6.7	6.5	8.2	5.4	6.2	7.3	1.6

Risk and return performance figures for STOXX Minimum Variance Indices, Gross Return. Data as of Jul. 31, 2019 Source: STOXX Ltd.

## Index and volatility performance



Figure 19: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

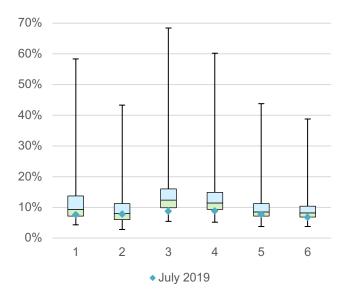


Figure 20: Monthly annualized volatility analysis, EUR Gross Return Jan. 2004 – Jul. 2019. Source: STOXX Ltd.

## **Dividend Indices**

### Key points

Dividend strategies struggled during July. The STOXX<sup>®</sup> Global Maximum Dividend 40 Index, which selects the highest-dividend-yielding stocks, fell 2.3% on a net-return basis, compared with a 0.4% advance for the STOXX Global 1800 Index.

The STOXX<sup>®</sup> Global Select Dividend 100 Index, which tracks companies with sizeable dividends but also applies a quality filter such as a history of stable payments, lost 1.3%.

The STOXX<sup>®</sup> Global Select 100 EUR Index, which is measured in euros, benefitted from a 2.2% decline in the common currency against the greenback during the month. The index blends increasing dividend yields with low volatility.

### **Risk and return characteristics**

			Retu	rn (%)			Annualized volatility (%)						
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. STOXX Global Maximum Dividend 40 <sup>1</sup>	-0.1	11.7	1.7	-2.3	8.8	-3.2	9.4	11.6	11.2	8.3	12.2	12.0	1.6
2. STOXX Global Select Dividend 100	0.9	15.1	7.0	-1.3	12.1	1.8	7.6	7.6	8.2	6.3	7.9	8.6	1.6
3. STOXX Global Select 100 EUR	1.0	16.3	8.6				6.3	6.5	7.7				1.4

Risk and return performance figures for STOXX Dividend Indices, Gross Return. Data as of Jul. 31, 2019. Source: STOXX Ltd.

## Index and volatility performance



Figure 21: Annual index performance, EUR Gross Return. Aug. 2018 – Jul. 2019. Shaded area: Jul. 2019. Source: STOXX Ltd.

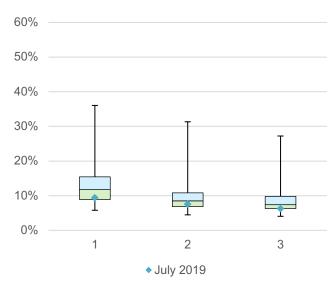


Figure 22: Monthly annualized volatility analysis, EUR Gross Return. Jul. 2004 – Jul. 2019. Source: STOXX Ltd.

<sup>&</sup>lt;sup>1</sup> EUR NR and USD NR used for STOXX Maximum Dividend 40.

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#### About STOXX

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