# STOXX

# MONTHLY INDEX NEWS

August 2019



#### Benchmark Indices

#### **Key points**

Stocks fell in August as the trade war between the US and China escalated and economic reports pointed to a continued slowdown in several parts of the world. The yield on 10-year US Treasuries went below the yield on two-year notes during the month for the first time since 2007, an event that many economists say is a harbinger of recessions.

The STOXX® Global 1800 Index fell 1.8% in dollar terms from a record high in July. The index lost as much as 4.5% through Aug. 15, before rebounding 2.8% in the month's second half.

The gauge's annualized volatility jumped to 17% in August, the highest monthly reading this year. The volatility of all other regions also jumped to their highest levels for 2019. The EURO STOXX 50<sup>®</sup> Index's annualized volatility spiked to the highest since June 2016.

All three major regions posted a loss during August.

#### 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	-1.1	17.8	4.7	-2.1	13.5	-0.9	21.1	13.6	14.1	19.6	14.1	15.0	1.8
2. STOXX Europe 600	-1.3	15.9	2.9	-2.4	11.7	-2.6	18.1	11.7	12.8	16.4	12.1	13.5	1.8
3. STOXX North America 600	-0.4	23.5	8.9	-1.5	19.0	3.0	24.4	14.3	17.2	22.5	13.7	16.7	2.9
4. STOXX Asia/Pacific 600	-1.3	12.2	2.0	-2.4	8.1	-3.5	16.8	12.0	13.6	14.7	11.6	13.1	1.0
5. STOXX Global 1800	-0.8	20.1	6.5	-1.8	15.7	0.8	19.2	11.5	13.2	17.0	11.0	12.8	1.9

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





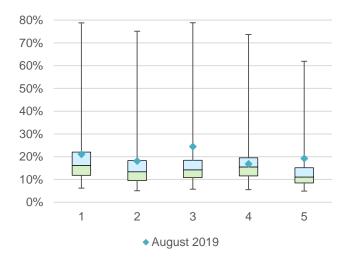


Figure 2: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2004 – Aug. 2019. Source: STOXX Ltd.

#### **ESG-X Indices**

#### **Key points**

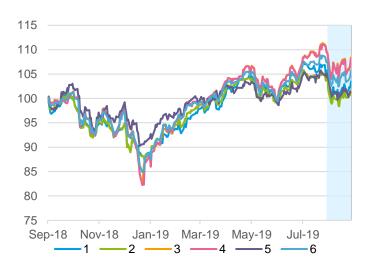
The STOXX ESG-X Indices performed largely in line with their benchmarks during August. The STOXX® Global 1800 ESG-X Index underperformed marginally, by 10 basis points. The STOXX® North America 600 ESG-X Index underperformed by 16 basis points, whereas the STOXX® Asia/Pacific 600 ESG-X Index came ahead of its benchmark by 8 basis points and the STOXX® Europe 600 ESG-X Index beat its benchmark by 2 basis points.

The ESG-X indices are versions of traditional, market-capitalization-weighted benchmarks that observe standard responsible exclusions of leading asset owners. They 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, thermal coal extraction or exploration, or use of thermal coal to generate at least a quarter of their power output.

#### 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. EURO STOXX 50 ESG-X	-1.1	17.0	4.0	-2.1	12.7	-1.5	20.8	13.4	13.9	19.2	13.9	14.7	1.7	
2. STOXX Europe 600 ESG-X	-1.3	15.5	2.5	-2.4	11.2	-3.0	18.2	11.8	12.8	16.4	12.1	13.5	1.7	
3. STOXX USA 500 ESG-X	-0.6	24.2	9.1	-1.7	19.7	3.2	25.7	15.0	17.8	23.8	14.3	17.2	3.2	
4. STOXX North America 600 ESG-X	-0.6	24.1	8.9	-1.7	19.6	3.0	25.0	14.6	17.6	23.1	14.0	17.1	3.1	
5. STOXX Asia/Pacific 600 ESG-X	-1.2	12.5	2.4	-2.3	8.4	-3.1	16.9	12.0	13.7	14.8	11.7	13.2	1.0	
6. STOXX Global 1800 ESG-X	-0.9	20.3	6.4	-1.9	15.9	0.7	19.4	11.6	13.3	17.2	11.2	12.9	2.0	

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



45% 40% 35% 30% 25% 20% 15% 10% 5% 0% 2 1 3 4 5 6 August 2019

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

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

# Thematic Indices - Revenue-Based

#### **Key points**

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

Thirteen of the 17 STOXX revenue-based thematic indices, which look at companies' sales exposure to sectors closely related to specific trends, underperformed the STOXX Global 1800 Index during the month.

The iSTOXX® FactSet Breakthrough Healthcare Index had the group's worst performance during the month, at a 6.2% loss. The STOXX® Global Broad Infrastructure Index was the best performer, posting a 0.8% advance.

#### Risk and return characteristics

			Retu	n (%)			Annualized volatility (%)						
		EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
1. iSTOXX Developed Markets B.R.Al.N	1.7	19.8	-1.1	0.6	15.4	-6.4	21.2	16.7	20.1	18.7	16.1	19.6	4.5
2. iSTOXX FactSet Ageing Population	-3.7	9.5	-3.2	-4.8	5.5	-8.4	19.1	11.2	12.2	16.8	10.9	12.1	1.7
3. iSTOXX FactSet Automation & Robotics	-3.3	22.4	-1.5	-4.4	17.9	-6.7	22.2	16.5	18.6	19.7	16.1	18.4	4.7
4. iSTOXX FactSet Breakthrough Healthcare	-5.2	3.9	-10.2	-6.2	0.1	-15.0	25.5	16.4	17.9	23.2	16.1	17.9	5.1
5. iSTOXX FactSet Digitalisation	-4.4	22.6	2.0	-5.4	18.1	-3.4	22.9	14.1	16.6	20.4	13.6	16.3	5.9
6. STOXX Global Artificial Intelligence	-0.8	35.1	7.2	-1.8	30.1	1.4	31.7	22.9	26.3	29.4	22.4	25.8	4.3
7. STOXX Global Broad Infrastructure	1.9	23.4	18.7	0.8	18.9	12.4	13.0	8.2	9.4	10.7	7.7	8.9	2.1
8. STOXX Global Digital Security	-4.1	19.7	3.8	-5.1	15.3	-1.7	22.4	13.7	15.2	19.8	13.2	14.8	4.1
9. STOXX Global Electric Vehicles and	<b>5</b> 0	0.4	47.0	0.4	4.7	04.0	20.5	40.7	40.7	40.0	40.0	40.0	4.0
Driving Technology	-5.0	2.1	-17.2	-6.1	-1.7	-21.6	20.5	16.7	16.7	18.0	16.8	16.8	1.3
10.STOXX Global Fintech	1.3	39.4	24.2	0.2	34.3	17.5	25.7	15.5	19.0	23.2	14.8	18.4	5.0
11.STOXX Global Housing Construction	-1.1	25.0	3.7	-2.1	20.4	-1.8	21.4	15.5	16.4	19.1	15.1	16.1	2.1
12.STOXX Global Industry 4.0	-2.8	25.3	2.6	-3.9	20.7	-2.9	25.6	17.5	18.9	23.2	16.9	18.5	3.8
13.STOXX Global Millennials	-1.8	27.8	-1.6	-2.8	23.1	-6.9	26.4	17.3	20.0	24.3	16.8	19.5	5.7
14.STOXX Global Sharing Economy	-1.7	38.9	8.4	-2.8	33.8	2.6	27.0	17.7	21.8	24.8	17.1	21.3	6.0
15.STOXX Global Silver Economy	-1.1	17.1	-1.9	-2.2	12.8	-7.2	21.9	14.5	16.5	19.7	13.9	16.2	2.1
16.STOXX Global Smart Cities	-3.9	16.1	1.6	-5.0	11.9	-3.9	25.3	17.8	19.0	23.2	17.4	18.8	3.1
17.STOXX Global Smart Factory	-2.1	29.3	0.7	-3.2	24.6	-4.7	28.2	23.2	24.2	26.0	22.8	24.0	3.4

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

#### Index performance

STOXX

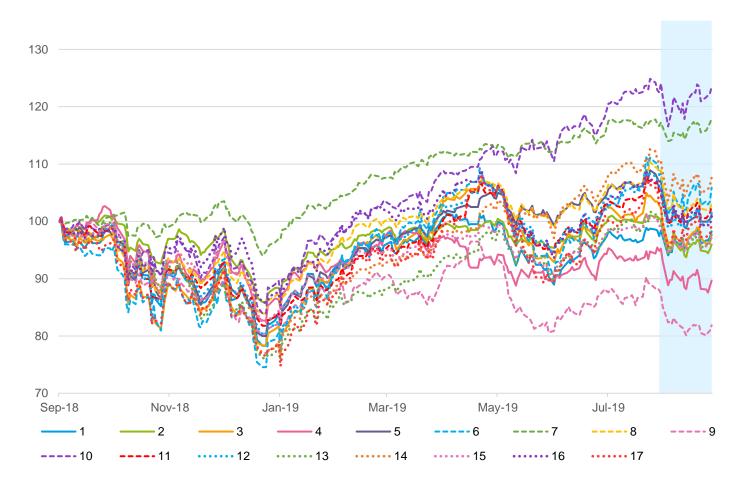


Figure 5: Annual price performance, EUR Gross Return. Sep. 2018 – Aug. 2019. Shaded area: Aug. 2019. Source: STOXX Ltd.

# **Volatility performance**

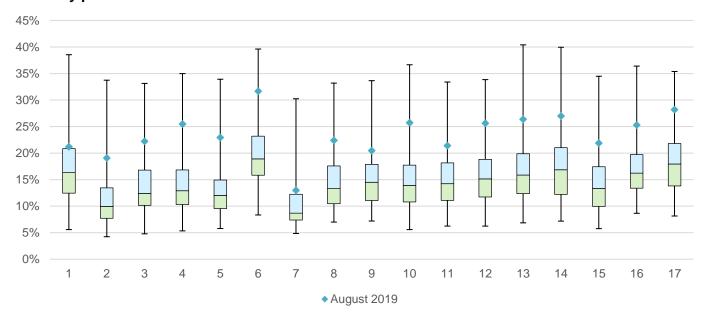


Figure 6: Monthly annualized volatility analysis, EUR Gross Return. Jul. 2012 – Aug. 2019. Source: STOXX Ltd.

#### Thematic Indices - Al-Driven

#### **Key points**

STOXX's artificial-intelligence-driven thematic indices also had a difficult month, with all three underperforming the STOXX Global 1800 Index.

Through August-end, the two Artificial Intelligence indices were ahead of the benchmark's returns for the year. The Blockchain index, however, has now fallen behind its benchmark for 2019 after being ahead through July.

The AI-driven thematic indices employ computational systems to select businesses investing in the adoption of intellectual property underpinning the respective theme.

#### 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	
1. STOXX AI Global Artificial Intelligence	-2.0	20.8	4.4	-3.1	16.4	-1.2	20.2	13.2	14.8	17.7	12.7	14.3	2.8	
2. STOXX AI Global Artificial Intelligence ADTV5	-1.9	21.3	5.2	-3.0	16.8	-0.4	20.6	13.4	15.0	18.2	12.9	14.5	2.8	
3. iSTOXX Yewno Developed Markets Blockchain	-1.9	20.0	6.6	-3.0	15.6	0.9	22.0	13.5	15.7	19.8	12.9	15.0	2.8	

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





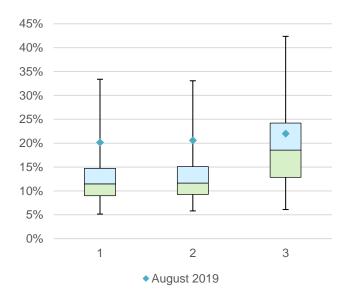


Figure 8: Monthly annualized volatility analysis, EUR Gross Return. Apr. 2013 – Aug 2019. Source: STOXX Ltd.

# **Europe Factor Market Neutral Indices**

#### **Key points**

Exposure to pure factor premia paid off during August. All but one of the seven iSTOXX® Europe Factor Market Neutral Indices, which hold a short position in futures on the STOXX Europe 600 to help investors neutralize systematic risk, generated positive returns during the month.

The exception was the iSTOXX® Europe Value Factor Market Neutral Index, which has now posted a negative return for seven consecutive months, its longest negative streak since data starts in November 2010.

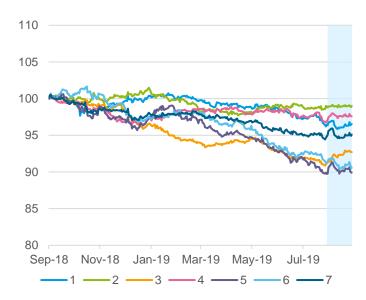
Momentum had the widest edge in the most recent month. The iSTOXX® Europe Momentum Factor Market Neutral Index advanced 1.6%.

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

#### Risk and return characteristics

	(	EUR) Return (	%)	(EUR) A	nnualized vol	atility (%)
	1M	YTD	1Y	1M	YTD	1Y
iSTOXX Europe Carry Factor Market Neutral	0.1	-3.8	-3.2	4.2	3.4	3.7
2. iSTOXX Europe Low Risk Factor Market Neutral	0.1	-2.4	-1.1	2.3	3.0	3.2
3. iSTOXX Europe Momentum Factor Market Neutral	1.6	-4.1	-7.3	3.1	2.9	3.3
4. iSTOXX Europe Quality Factor Market Neutral	0.6	0.2	-2.5	3.2	3.1	3.2
5. iSTOXX Europe Size Factor Market Neutral	0.2	-7.6	-10.1	6.0	4.7	4.8
6. iSTOXX Europe Value Factor Market Neutral	-0.7	-7.1	-9.4	5.0	4.1	4.4
7. iSTOXX Europe Multi-Factor Market Neutral	0.3	-3.0	-4.9	4.4	3.2	3.5

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





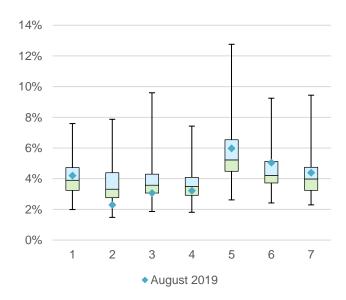


Figure 10: Monthly annualized volatility analysis, EUR Net Return. Aug. 2010 – Aug. 2019. Source: STOXX Ltd.

#### Premia Indices

#### **Key points**

Factor returns had a mixed performance as measured by the EURO STOXX® Multi Premia® and Single Premium Indices, which are exposed to the market's systematic risk.

Five of the eight indices did better than their benchmark, the EURO STOXX<sup>®</sup> Index, which shed 1.3% in euros during August. The remaining three underperformed. Through the end of August, the EURO STOXX<sup>®</sup> Momentum Premium Index has had the best performance of all the premia indices during 2019.

The EURO STOXX Multi Premia and Single Premium Indices track seven distinctive sources of equity risk and returns on a broad and liquid universe of about 300 Eurozone stocks. They integrate the academic-research-based Multi Premia methodology developed by STOXX's partner Finreon.

#### Risk and return characteristics

			Retu	rn (%)			Annualized volatility (%)						
	EUR				USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. EURO STOXX Low Risk Premium	0.8	16.3	0.1	-0.3	12.1	-5.3	15.9	10.2	11.5	14.5	10.7	12.2	
2. EURO STOXX Momentum Premium	0.3	20.1	3.3	-0.8	15.7	-2.2	19.9	11.7	14.0	18.4	12.1	14.6	
3. EURO STOXX Quality Premium	-0.3	19.5	4.5	-1.4	15.1	-1.1	19.8	12.9	13.7	18.3	13.4	14.4	
4. EURO STOXX Residual Momentum Premium	0.3	16.2	3.7	-0.8	12.0	-1.8	17.6	10.7	12.6	16.1	11.3	13.3	
5. EURO STOXX Reversal Premium	-1.5	4.7	-5.9	-2.5	0.9	-10.9	18.9	12.7	13.0	17.9	13.4	14.0	
6. EURO STOXX Size Premium	-1.6	16.4	-0.4	-2.7	12.2	-5.7	18.2	13.4	14.2	17.1	14.1	15.2	
7. EURO STOXX Value Premium	-2.3	9.8	-3.4	-3.4	5.8	-8.5	20.4	15.1	15.1	19.1	15.7	16.1	
8. EURO STOXX Multi Premia	-0.7	14.4	0.2	-1.7	10.2	-5.1	18.3	11.9	12.9	16.9	12.5	13.8	

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





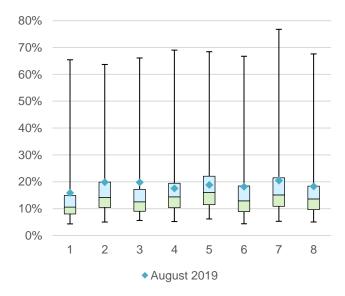


Figure 12: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2004 – Aug. 2019. Source: STOXX Ltd.

# ESG and Sustainability Indices

#### **Key points**

Among STOXX's ESG and sustainability indices, the STOXX® Global ESG Impact Index fared worse than its benchmark during August. The index selects stocks based on key sustainable performance indicators.

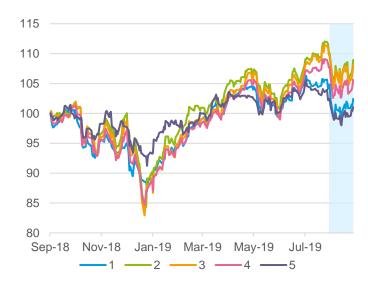
The STOXX® Europe ESG Leaders Select 30 Index, however, did better than the STOXX Europe 600 Index. The former tracks the region's leading companies in terms of ESG criteria, based on indicators provided by Sustainalytics, but additionally applies a filter to select stocks with the lowest volatility 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	<u>rn (%)</u>									
	EUR				USD	_		EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
STOXX Europe Industry Neutral ESG	-1.1	15.7	3.2	-2.2	11.5	-2.3	18.1	11.6	12.6	16.3	12.0	13.3	1.7
2. STOXX North America Industry Neutral ESG	-0.5	22.3	9.7	-1.6	17.8	3.8	24.4	14.1	16.8	22.5	13.5	16.3	2.9
3. STOXX USA ESG Impact	-1.1	22.7	8.6	-2.2	18.2	2.8	25.6	14.9	17.6	23.7	14.3	17.1	3.0
4. STOXX Global ESG Impact	-1.2	20.6	6.4	-2.3	16.1	0.7	20.2	12.0	13.6	18.0	11.5	13.3	2.1
5. STOXX Europe ESG Leaders Select 30	-0.7	8.6	1.7				13.8	10.4	11.6				1.3

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



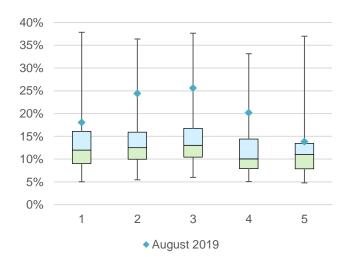


Figure 13: Annual price performance, EUR Gross Return. Sep. 2018 – Aug. 2019. Shaded area: Aug. 2019. Source: STOXX Ltd.

Figure 14: Monthly annualized volatility analysis, EUR Gross Return. Oct. 2012 – Aug. 2019. Source: STOXX Ltd.

#### Climate Indices

#### **Key points**

There was strong outperformance during August from STOXX's Climate Indices covering the European region.

The STOXX® Europe Climate Impact Ex Global Compact Controversial Weapons & Tobacco Index beat the STOXX Europe 600 Index by 66 basis points. The iSTOXX® Europe ESG Climate Awareness Select 50 Index did so by 1 percentage point. The latter tracks the performance of 50 companies that have considered the implications of climate change 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

		Retu	rn (%)				Ann	ualized	volatilit	v (%)		
	EUR			USD			EUR			USD		
1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	P/B
-0.7	15.6	4.9	-1.8	11.4	-0.7	17.5	11.2	12.2	15.6	11.5	12.9	1.8
-0.3	23.4	10.4	-1.4	18.8	4.5	25.0	14.6	17.2	23.1	13.9	16.6	3.1
-1.2	11.6	0.9	-2.3	7.5	-4.5	17.2	12.4	14.1	15.2	12.1	13.6	1.2
-0.6	20.1	7.6	-1.7	15.7	1.9	19.0	11.5	12.7	16.8	11.0	12.4	2.1
-1.5	18.8	5.9	-2.6	14.5	0.2	16.2	11.3	12.7	13.9	11.1	12.5	2.8
-0.3	11.1	4.8	-1.4	7.0	-0.8	14.2	9.9	11.0	12.9	10.6	11.8	1.4
	-0.7 -0.3 -1.2 -0.6 -1.5	1M YTD   -0.7 15.6   -0.3 23.4   -1.2 11.6   -0.6 20.1   -1.5 18.8	EUR   1M YTD 1Y   -0.7 15.6 4.9   -0.3 23.4 10.4   -1.2 11.6 0.9   -0.6 20.1 7.6   -1.5 18.8 5.9	1M YTD 1Y 1M   -0.7 15.6 4.9 -1.8   -0.3 23.4 10.4 -1.4   -1.2 11.6 0.9 -2.3   -0.6 20.1 7.6 -1.7   -1.5 18.8 5.9 -2.6	EUR USD   1M YTD 1Y 1M YTD   -0.7 15.6 4.9 -1.8 11.4   -0.3 23.4 10.4 -1.4 18.8   -1.2 11.6 0.9 -2.3 7.5   -0.6 20.1 7.6 -1.7 15.7   -1.5 18.8 5.9 -2.6 14.5	EUR USD   1M YTD 1Y 1M YTD 1Y   -0.7 15.6 4.9 -1.8 11.4 -0.7   -0.3 23.4 10.4 -1.4 18.8 4.5   -1.2 11.6 0.9 -2.3 7.5 -4.5   -0.6 20.1 7.6 -1.7 15.7 1.9   -1.5 18.8 5.9 -2.6 14.5 0.2	EUR USD   1M YTD 1Y 1M YTD 1Y 1M   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2	EUR USD EUR   1M YTD 1Y 1M YTD 1Y 1M YTD   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5 11.2   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0 14.6   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2 12.4   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0 11.5   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2 11.3	EUR USD EUR   1M YTD 1Y 1M YTD 1Y 1M YTD 1Y   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5 11.2 12.2   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0 14.6 17.2   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2 12.4 14.1   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0 11.5 12.7   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2 11.3 12.7	EUR USD EUR   1M YTD 1Y 1M YTD 1Y 1M YTD 1Y 1M   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5 11.2 12.2 15.6   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0 14.6 17.2 23.1   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2 12.4 14.1 15.2   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0 11.5 12.7 16.8   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2 11.3 12.7 13.9	EUR USD EUR USD   1M YTD 1Y 1M YTD 1 <td>EUR USD EUR USD   1M YTD 1Y   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5 11.2 12.2 15.6 11.5 12.9   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0 14.6 17.2 23.1 13.9 16.6   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2 12.4 14.1 15.2 12.1 13.6   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0 11.5 12.7 16.8 11.0 12.4   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2 11.3 12.7 13.9 11.1 12.5</td>	EUR USD EUR USD   1M YTD 1Y   -0.7 15.6 4.9 -1.8 11.4 -0.7 17.5 11.2 12.2 15.6 11.5 12.9   -0.3 23.4 10.4 -1.4 18.8 4.5 25.0 14.6 17.2 23.1 13.9 16.6   -1.2 11.6 0.9 -2.3 7.5 -4.5 17.2 12.4 14.1 15.2 12.1 13.6   -0.6 20.1 7.6 -1.7 15.7 1.9 19.0 11.5 12.7 16.8 11.0 12.4   -1.5 18.8 5.9 -2.6 14.5 0.2 16.2 11.3 12.7 13.9 11.1 12.5

Risk and return performance figures for STOXX Climate Indices, Gross Return. Data as of Aug 31, 2019.

### Source: STOXX Ltd.





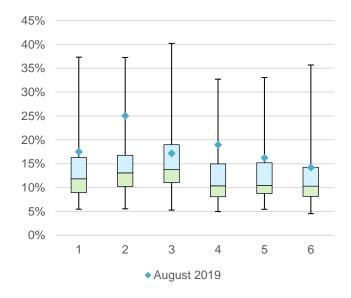


Figure 16: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2013 – Aug. 2019. Source: STOXX Ltd.

<sup>\*</sup> Indices are the Ex Global Compact Controversial Weapons & Tobacco versions.

# Low Carbon Indices

#### **Key points**

STOXX's low-carbon equity indices, which seek to significantly lower the carbon footprint of portfolios, underperformed their benchmarks during August.

For 2019, the STOXX® Global 1800 Low Carbon Index is in line with its benchmark's performance.

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

#### 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	
1. EURO STOXX 50 Low Carbon	-1.4	17.5	3.4	-2.5	13.2	-2.1	21.6	14.0	14.5	20.0	14.4	15.3	1.8	
2. STOXX Europe 600 Low Carbon	-1.4	15.7	2.7	-2.5	11.4	-2.8	18.1	11.7	12.8	16.3	12.1	13.5	1.8	
3. STOXX USA Low Carbon	-0.8	24.0	8.6	-1.9	19.4	2.8	25.5	15.0	18.0	23.6	14.3	17.4	3.0	
4. STOXX Japan Low Carbon	0.0	11.9	0.6	-1.1	7.8	-4.8	19.0	14.7	16.1	17.1	14.3	15.5	1.2	
5. STOXX Global 1800 Low Carbon	-1.0	20.1	6.0	-2.0	15.7	0.3	19.4	11.7	13.4	17.2	11.2	13.1	2.0	
6. STOXX Global 1800 ex Europe Low Carbon	-0.9	21.6	7.2	-1.9	17.2	1.5	20.6	12.4	15.0	18.3	11.7	14.4	2.1	

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





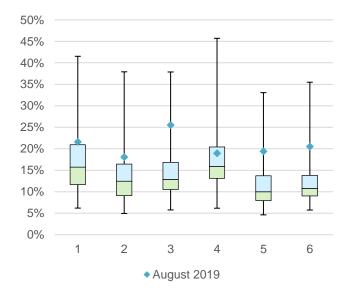


Figure 18: Monthly annualized volatility analysis, EUR Gross Return. Jan. 2012 – Aug. 2019. Source: STOXX Ltd.

#### Minimum Variance Indices

#### **Key points**

Minimum variance strategies provided the month's standout performance, by posting strong returns even as the market retreated. The STOXX® Global 1800 Minimum Variance Index rose 1%, while its unconstrained version added 0.7%.

The STOXX® Europe 600 Minimum Variance Index added 1.7%, while its unconstrained version climbed 2.2%. That compares with the 1.3% loss for the benchmark STOXX Europe 600 Index.

The <u>STOXX® Minimum Variance Indices</u> 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.

#### 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 600 MV	1.7	16.6	6.2	0.6	12.4	0.5	13.9	8.6	10.0	12.3	9.1	10.7	2.2
2. STOXX Europe 600 MV Unconstrained	2.2	17.3	5.8	1.1	13.0	0.1	13.6	8.4	9.9	12.3	9.0	10.6	2.2
3. STOXX USA 900 MV	2.7	28.3	20.1	1.6	23.6	13.7	18.7	10.7	13.1	16.9	10.0	12.3	3.1
4. STOXX USA 900 MV Unconstrained	1.9	22.2	15.4	0.7	17.7	9.2	16.9	9.7	11.9	14.8	8.8	11.0	2.9
5. STOXX Global 1800 MV	2.1	20.8	16.4	1.0	16.4	10.2	13.0	7.9	9.3	10.8	7.2	8.4	2.1
6. STOXX Global 1800 MV Unconstrained	1.8	19.4	14.9	0.7	15.0	8.7	11.3	7.2	8.6	8.8	6.5	7.6	1.8

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



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

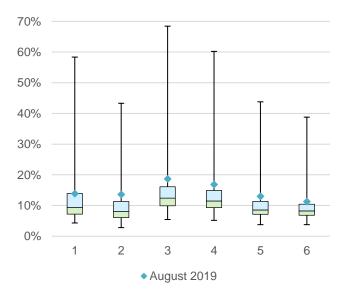


Figure 20: Monthly annualized volatility analysis, EUR Gross Return Jan. 2004 – Aug. 2019. Source: STOXX Ltd.

#### **Dividend Indices**

#### **Key points**

Dividend strategies also struggled during August even as bond yields fell, making dividend payments relatively more attractive.

The STOXX® Global Maximum Dividend 40 Index, which selects the highest-dividend-yielding stocks, fell 5.5% in dollars on a net-return basis, extending July's 2.3% drop.

The STOXX® 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 3.2%.

The STOXX® Global Select 100 EUR Index, which is measured in euros, benefitted from a 1.1% decline in the common currency against the greenback during the month and lost only 0.1%. The index blends increasing dividend yields with low volatility.

#### 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 Global Maximum Dividend 40 <sup>1</sup>	-4.5	6.7	-1.0	-5.5	2.8	-6.3	16.1	12.3	12.0	14.1	12.5	12.3	1.5
2. STOXX Global Select Dividend 100	-2.1	12.6	6.2	-3.2	8.5	0.6	14.1	8.7	8.9	11.9	8.6	8.9	1.6
3. STOXX Global Select 100 EUR	-0.1	16.2	9.7				10.5	7.1	8.1				1.3

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



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

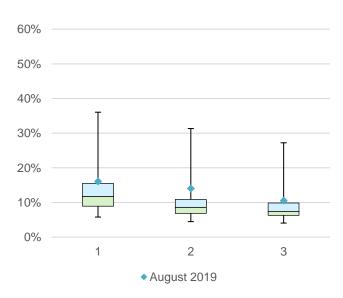


Figure 22: Monthly annualized volatility analysis, EUR Gross Return. Jul. 2004 – Aug. 2019. Source: STOXX Ltd.

<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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