

MONTHLY INDEX NEWS



Newsletter Updates

We regularly update this newsletter to include additional indices and consider layout modifications to the various sections. There are no changes this month.

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Featured Index

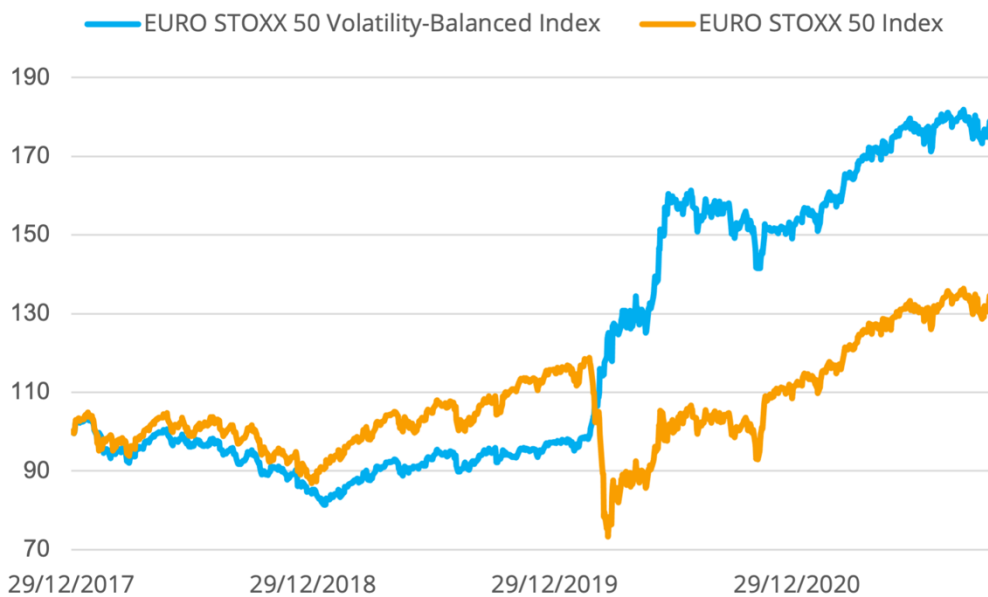
The [EURO STOXX 50® Volatility-Balanced Index](#) finished October near a record high. The index combines a base investment in the benchmark [EURO STOXX 50® Index](#) with a variable allocation to equity volatility by means of the EURO STOXX 50® Volatility (VSTOXX®) Short-Term Futures Index. The strategy dynamically allocates weight away from equities into volatility futures in times of market stress, with each asset's weight determined by the prevailing volatility environment.

The EURO STOXX 50 Volatility-Balanced Index seeks to exploit the historically negative correlation between volatility and the underlying market, allowing the portfolio to profit from market uptrends while providing insurance during volatile periods.

The volatility-hedged index sharply reverted its underperformance to the benchmark during the COVID-19-induced market slump in the first quarter of 2020 (Figure 1). Despite strong market gains since the trough on March 18, 2020, the EURO STOXX 50 has failed to recoup all the ground lost to the EURO STOXX 50 Volatility-Balanced Index during the pandemic. That shows how long-lasting the benefit can be of having a tail-risk hedge in place during a market shock.

The [VSTOXX®](#), the benchmark for European equity volatility, has slumped to 18 from 86 since March 2020 but remains higher than it was before the pandemic hit.

Figure 1 – Volatility-hedged strategy vs. market performance



Source: Qontigo. Both indices display gross returns in euros.

STOXX Benchmark Indices

Key Points

Stocks rebounded strongly from their September losses during October, as companies reported broadly better-than-expected third-quarter earnings despite higher input prices and supply-chain issues.

The [STOXX® Global 1800 Index](#) jumped 5.4% when measured in dollars and including dividends, its best monthly showing since November 2020. The index climbed 5.6% in euros. The benchmark is up 18.9% in dollars this year.

The pan-European [STOXX® Europe 600 Index](#) rose 4.7% in euros to a record during the month, while the Eurozone's [EURO STOXX 50 Index](#) increased 5.2%. The [STOXX® North America 600 Index](#) surged 7% in dollars, also its strongest monthly advance in eleven months. The [STOXX® Asia/Pacific 600 Index](#) bucked the trend by falling 1.5%, hurt by pull-backs in Japan and South Korea.

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	5.2	22.5	47.3	5.0	15.9	46.3	14.2	13.9	15.5	15.6	15.3	16.9	2.4
2. STOXX Europe 600	4.7	22.1	42.6	4.6	15.5	41.7	10.4	11.8	12.7	12.4	13.5	14.3	2.3
3. STOXX Global 1800	5.6	25.7	40.9	5.4	18.9	40.0	9.1	10.8	10.9	9.3	10.8	11.0	2.9
4. STOXX Global 1800 ex USA	2.8	18.5	36.2	2.7	12.1	35.3	7.9	9.8	10.5	9.9	11.5	12.1	1.8
5. STOXX USA 500	7.1	29.8	43.4	7.0	22.7	42.4	12.2	13.8	13.6	11.6	13.1	13.0	4.7
6. STOXX USA 900	7.0	29.4	43.7	6.8	22.4	42.7	12.1	13.8	13.6	11.6	13.2	13.1	4.5
7. STOXX North America 600	7.1	29.9	43.7	7.0	22.9	42.8	11.8	13.5	13.3	11.3	12.9	12.8	4.5
8. STOXX Asia/Pacific 600	-1.3	9.9	24.0	-1.5	3.9	23.2	10.2	12.9	12.9	10.9	13.8	13.9	1.4

Risk and return performance figures for STOXX Benchmark Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

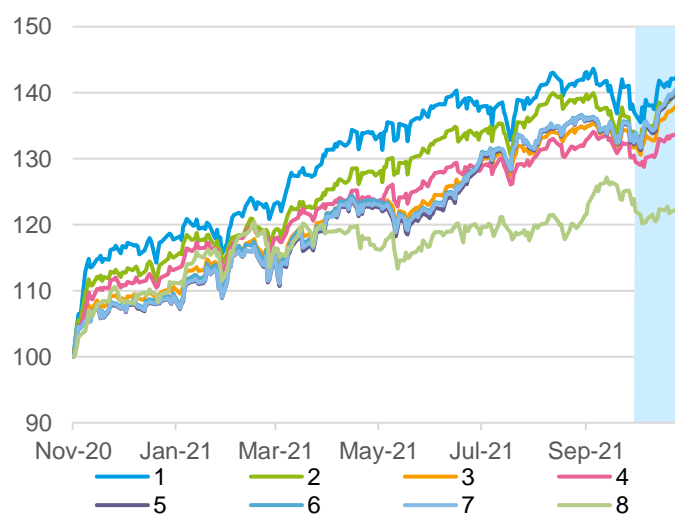


Figure 1: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

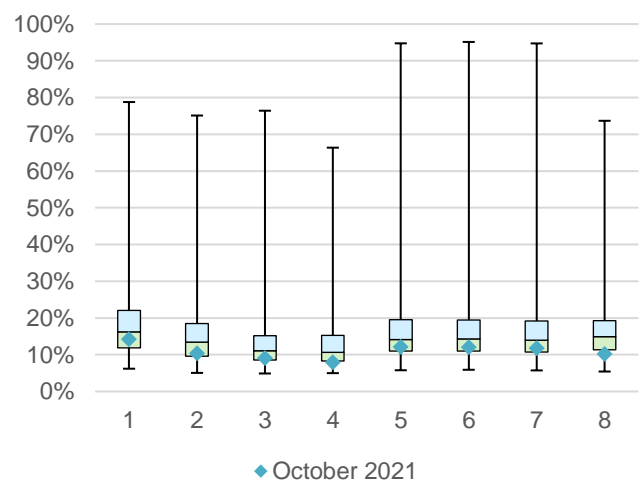


Figure 2: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

DAX Indices

Key Points

Germany's DAX family is led by the blue-chip [DAX®](#). The [MDAX®](#) and [SDAX®](#), respectively, gauge the performance of the country's mid- and small-caps. The [TecDAX®](#) tracks German technology companies. The [HDAX®](#) groups all equities that belong to either the DAX, MDAX or TecDAX. The [DAX® 50 ESG Index](#) and the [DAX® ESG Target Index](#) offer investors a sustainable option for German equities.

All indices showed gains in the month that ended.

Risk and Return Characteristics

	(EUR) Return (%)			(EUR) Annualized volatility (%)		
	1M	YTD	1Y	1M	YTD	1Y
1. DAX	2.8	14.4	35.8	12.9	13.8	15.1
2. DAX 50 ESG	2.9	14.4	35.3	12.5	13.4	14.4
3. DAX ESG Target	3.3	14.4	36.0	12.9	13.6	14.9
3. MDAX	1.4	13.2	35.5	11.4	12.8	12.9
4. SDAX	3.2	15.4	46.6	14.7	15.7	15.9
5. TecDAX	2.2	19.0	35.9	16.9	15.5	15.8
6. HDAX	2.7	14.7	36.6	12.5	13.3	14.4

Risk and return performance figures for DAX Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

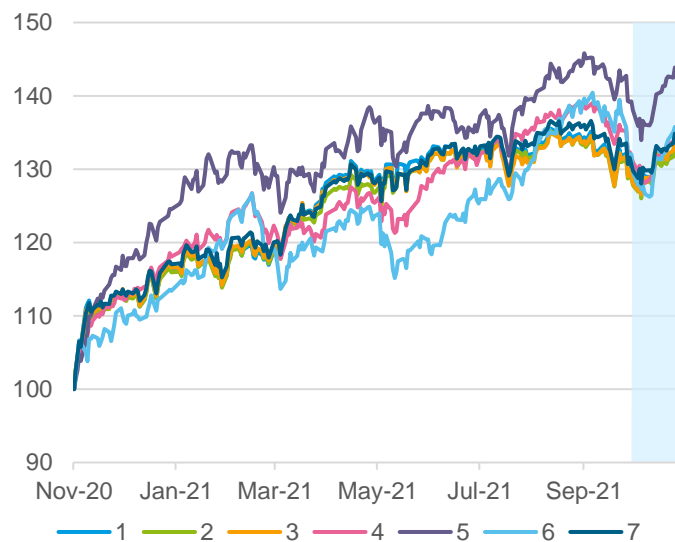


Figure 3: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

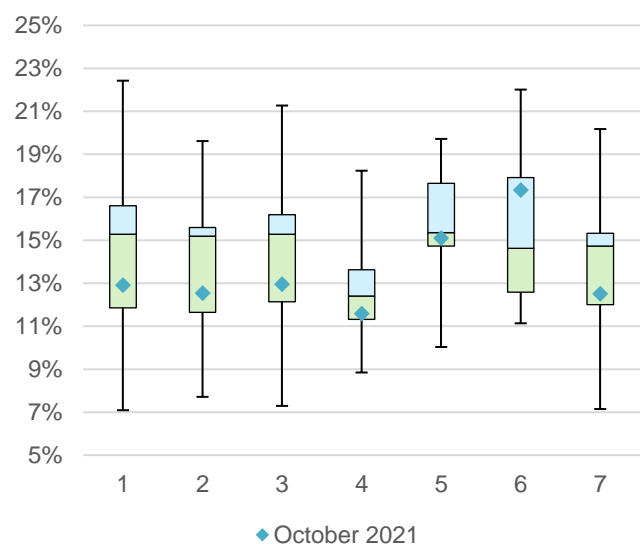


Figure 4: Monthly annualized volatility analysis, EUR gross return. Nov. 2020 – Oct. 2021. Source: Qontigo.

ESG Broad Market Indices

Key Points

The [STOXX ESG Broad Market Indices](#) apply a set of compliance, product involvement and ESG performance exclusionary screens on a starting benchmark universe until only the 80% top ESG-rated constituents remain. Companies that are non-compliant based on the Sustainalytics Global Standards Screening assessment or are involved in controversial weapons are not eligible for selection. Additional filters exclude companies involved in tobacco production, thermal coal and military contracting.

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 ESG Broad Market	4.3	23.2	46.5	4.1	16.6	45.6	12.0	12.6	14.0	13.9	14.2	15.5
2. STOXX Europe 600 ESG Broad Market	5.0	23.8	43.4	4.8	17.1	42.5	10.1	11.5	12.5	12.2	13.2	14.1
3. STOXX Global 1800 ESG Broad Market	5.9	27.0	42.7	5.7	20.1	41.7	9.1	10.7	10.8	9.2	10.8	11.1
4. STOXX North America 600 ESG Broad Market	7.6	31.2	45.6	7.4	24.1	44.7	12.0	13.6	13.4	11.4	13.0	13.0
5. STOXX USA 500 ESG Broad Market	7.4	31.0	45.3	7.3	23.9	44.3	12.4	13.9	13.7	11.8	13.2	13.2
6. STOXX USA 900 ESG Broad Market	7.4	30.8	45.9	7.3	23.7	44.9	12.3	14.0	13.8	11.7	13.3	13.3
7. STOXX Asia/Pacific 600 ESG Broad Market	-1.3	9.4	23.8	-1.4	3.5	23.0	10.3	12.9	12.9	11.0	13.9	14.0
8. STOXX Japan 600 ESG Broad Market	-3.3	7.9	20.4	-3.4	2.1	19.6	13.0	15.4	15.2	13.0	16.0	15.9

Risk and return performance figures for STOXX ESG Broad Market Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

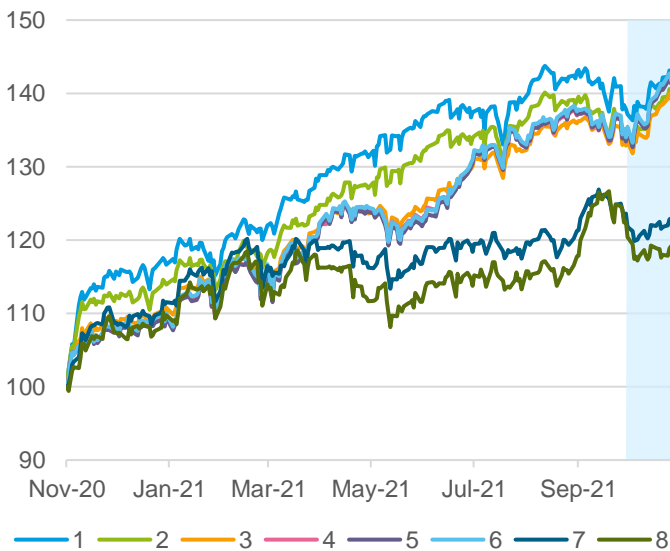


Figure 5: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

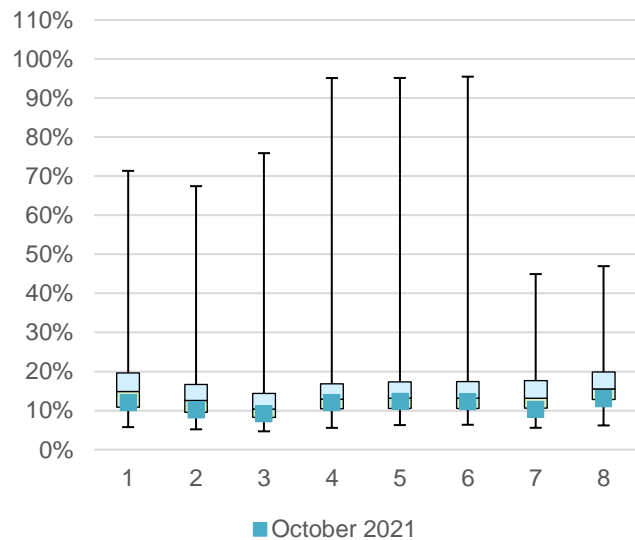


Figure 6: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG Target Indices

Key Points

The [STOXX® ESG Target Indices](#) seek to significantly improve the benchmark portfolio's ESG profile, while mirroring its returns as closely as possible.

The indices follow a similar initial selection methodology as the STOXX ESG Broad Market Indices. From that selection pool they implement, through a series of constraints, an optimization process to maximize the overall ESG score of the portfolio while constraining the tracking error to the benchmark.

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 ESG Target	4.2	22.1	45.4	4.0	15.5	44.5	11.9	12.5	13.9	13.9	14.2	15.5
2. STOXX Europe 600 ESG Target	4.8	23.6	43.9	4.7	16.9	43.0	10.1	11.7	12.8	12.3	13.4	14.4
3. STOXX Global 1800 ESG Target	5.7	27.4	43.0	5.6	20.5	42.1	8.8	10.7	10.7	9.0	10.8	11.0
4. STOXX North America 600 ESG Target	7.7	31.6	45.6	7.5	24.5	44.7	11.7	13.5	13.3	11.1	12.8	12.8
5. STOXX USA 500 ESG Target	7.7	31.3	44.9	7.5	24.2	44.0	12.0	13.7	13.6	11.3	13.0	13.0
6. STOXX USA 900 ESG Target	7.4	31.5	46.1	7.3	24.4	45.2	12.0	13.7	13.5	11.3	13.1	13.1
7. STOXX Asia/Pacific 600 ESG Target	-1.1	10.4	25.6	-1.2	4.4	24.7	10.5	13.1	13.1	11.1	14.0	14.2
8. STOXX Japan 600 ESG Target	-3.0	8.2	20.7	-3.1	2.3	19.9	12.9	15.4	15.2	12.9	16.0	15.9

Risk and return performance figures for STOXX ESG Target Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

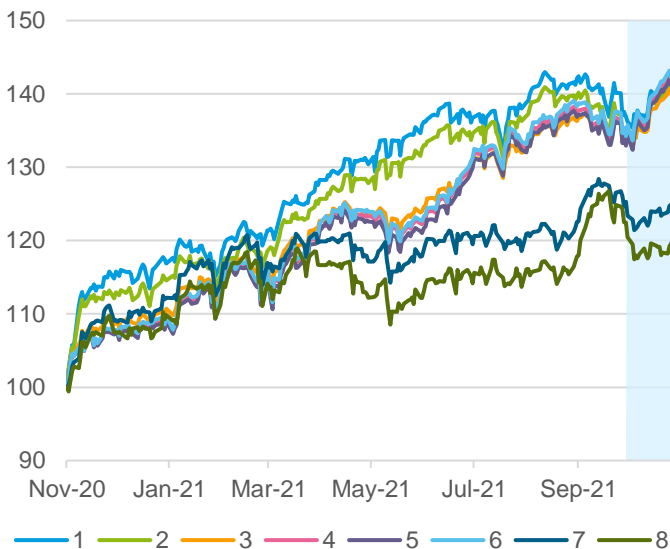


Figure 7: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

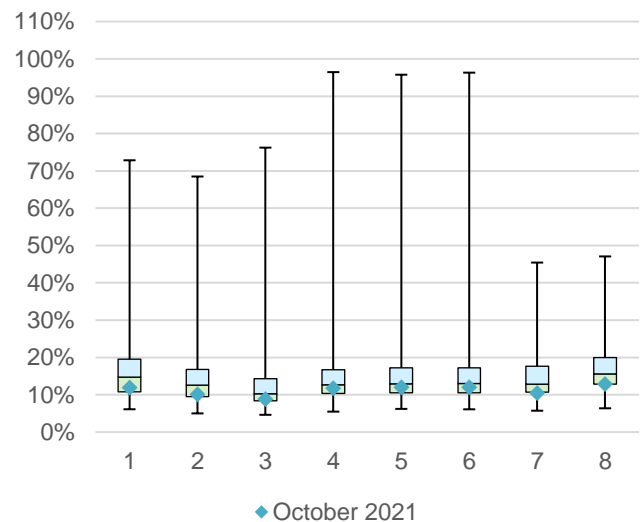


Figure 8: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG Target TE Indices

Key Points

The [STOXX® ESG Target TE Indices](#) follow a similar methodology to the ESG Target Indices, but the optimization imposes a tracking error minimization, subject to a constraint of improving the ESG score of the resulting portfolio.

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 ESG Target TE	4.3	22.7	46.3	4.2	16.1	45.3	11.9	12.5	13.9	13.9	14.2	15.5
2. STOXX Europe 600 ESG Target TE	4.8	23.2	43.2	4.7	16.5	42.3	10.1	11.7	12.7	12.3	13.4	14.3
3. STOXX Global 1800 ESG Target TE	5.8	26.6	41.9	5.6	19.7	40.9	9.1	10.8	10.9	9.2	10.8	11.1
4. STOXX North America 600 ESG Target TE	7.7	30.1	44.3	7.6	23.1	43.4	11.9	13.5	13.4	11.3	12.9	12.9
5. STOXX USA 500 ESG Target TE	7.5	30.6	44.6	7.4	23.5	43.7	12.2	13.8	13.7	11.5	13.1	13.1
6. STOXX USA 900 ESG Target TE	7.3	30.6	45.0	7.1	23.5	44.1	12.2	13.8	13.6	11.6	13.1	13.1
7. STOXX Asia/Pacific 600 ESG Target TE	-1.3	9.7	24.2	-1.5	3.7	23.4	10.3	12.9	12.9	11.0	13.8	14.0
8. STOXX Japan 600 ESG Target TE	-3.2	8.0	20.3	-3.4	2.1	19.5	12.9	15.3	15.1	12.9	15.9	15.8

Risk and return performance figures for STOXX ESG Target TE Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

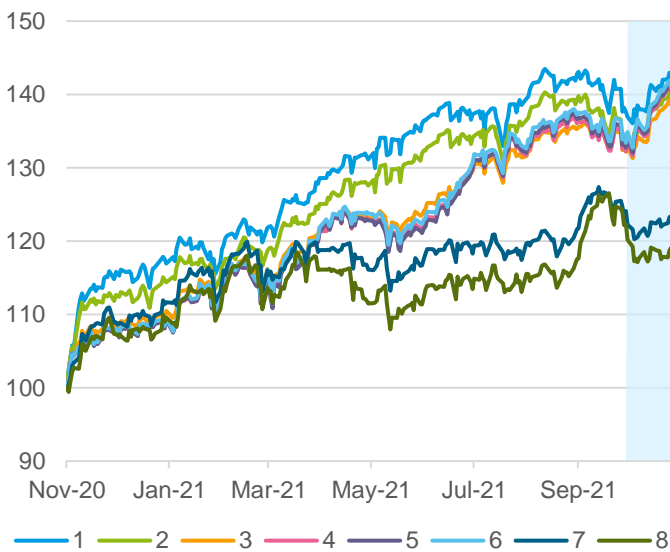


Figure 9: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

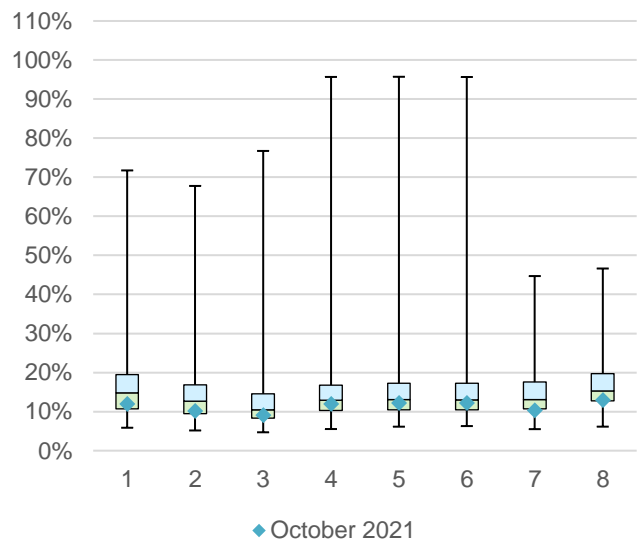


Figure 10: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

SRI Indices

Key Points

The [STOXX® SRI \(Socially Responsible Investing\) Indices](#) apply a set of involvement, carbon emission intensity and compliance screens, and additionally track the best ESG performers in each industry group within a selection of STOXX benchmarks.

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 SRI	4.2	26.5	49.1	4.1	19.7	48.1	12.8	12.8	14.0	14.8	14.4	15.6
2. STOXX Europe 600 SRI	5.0	23.0	40.3	4.8	16.3	39.4	9.8	11.0	11.8	11.8	12.5	13.3
3. STOXX Global 1800 SRI	4.9	26.9	41.2	4.7	20.0	40.3	9.1	10.6	10.8	9.8	10.6	11.0
4. STOXX North America 600 SRI	7.8	33.8	48.5	7.7	26.6	47.6	12.2	14.0	13.9	11.8	13.4	13.4
5. STOXX USA 500 SRI	7.9	33.6	48.4	7.7	26.4	47.4	12.5	14.2	14.0	12.1	13.5	13.5
6. STOXX Asia/Pacific 600 SRI	-0.8	13.1	28.4	-1.0	7.0	27.5	10.9	13.5	13.6	12.1	14.5	14.7
7. STOXX Japan 600 SRI	-3.0	11.7	24.7	-3.1	5.6	23.9	13.5	15.6	15.5	13.5	16.2	16.2

Risk and return performance figures for STOXX ESG SRI Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

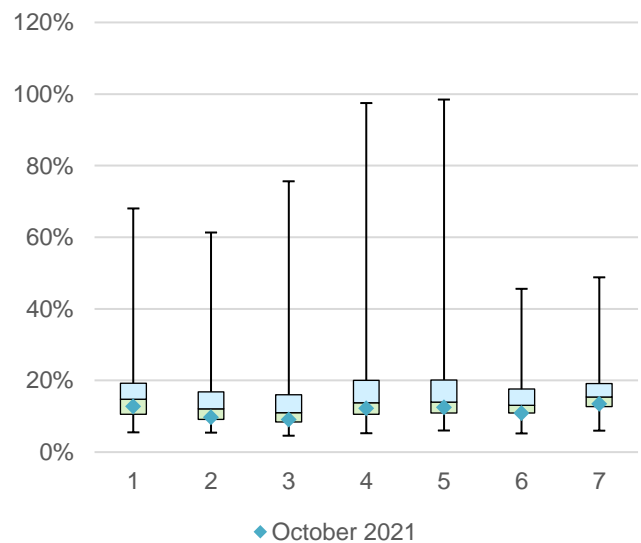
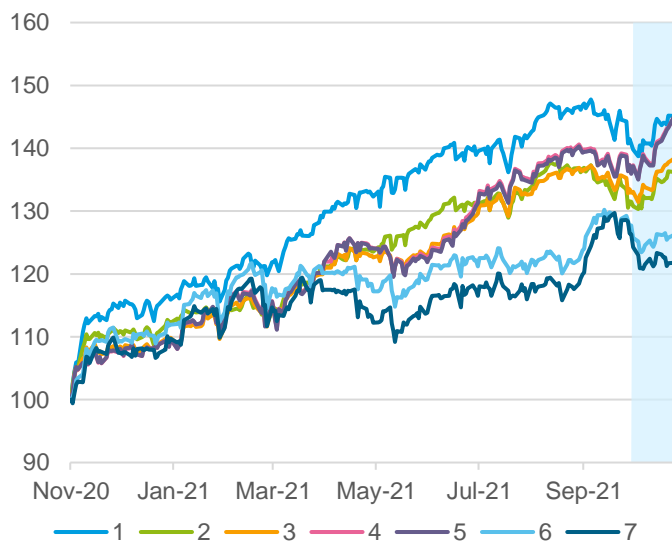


Figure 11: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 12: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG-X Indices

Key Points

The [STOXX 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 ESG principles. Companies are excluded based on data provider Sustainalytics' determination of non-compliance with their Global Standards Screening assessment, involvement in controversial weapons, tobacco production, thermal coal extraction or exploration, or use of thermal coal to generate at least a quarter of power output.

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 ESG-X	5.4	22.9	47.0	5.2	16.3	46.0	14.3	13.8	15.2	15.7	15.2	16.6	2.3
2. STOXX Europe 600 ESG-X	4.8	22.4	42.7	4.7	15.8	41.8	10.4	11.7	12.6	12.4	13.4	14.3	2.3
3. STOXX Global 1800 ESG-X	5.7	25.9	41.1	5.6	19.1	40.2	9.2	10.9	10.9	9.4	10.9	11.2	3.0
4. STOXX USA 500 ESG-X	7.3	30.1	43.7	7.2	23.0	42.7	12.5	14.1	13.9	11.9	13.4	13.3	4.8
5. STOXX North America 600 ESG-X	7.3	30.3	44.1	7.1	23.2	43.1	12.0	13.7	13.6	11.6	13.1	13.1	4.6
6. STOXX Asia/Pacific 600 ESG-X	-1.3	9.8	24.1	-1.5	3.9	23.3	10.4	13.0	13.0	11.1	13.9	14.0	1.4

Risk and return performance figures for STOXX ESG-X Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

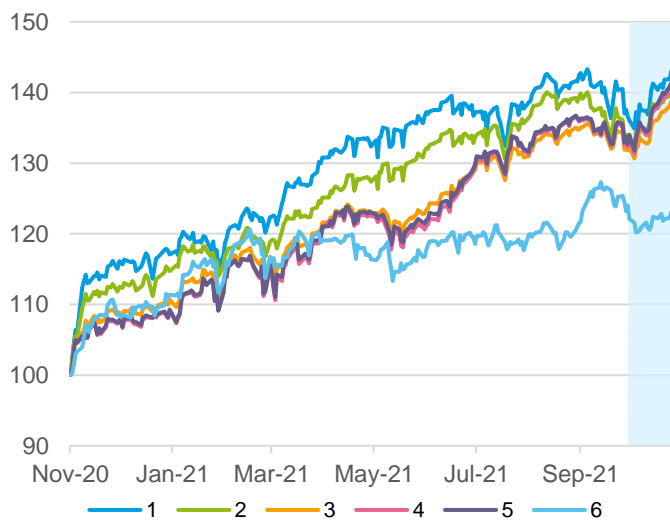


Figure 13: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

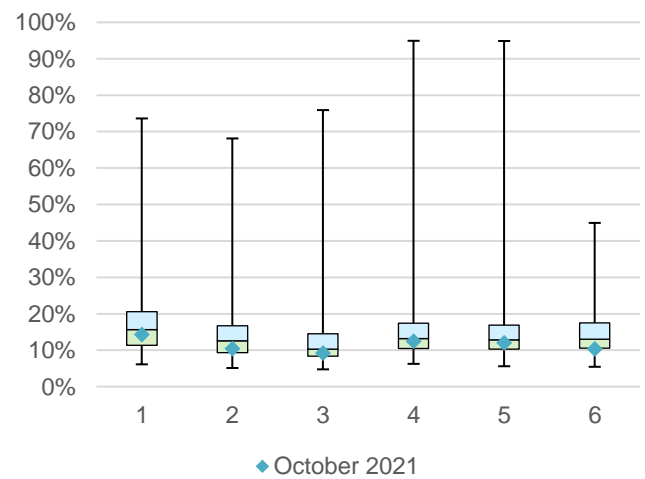


Figure 14: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG and Sustainability Indices

Key Points

Among the STOXX ESG and Sustainability indices, the [EURO STOXX 50® ESG Index](#) had similar returns to its benchmark last month. The ESG index follows standardized ESG exclusions and integrates ESG scoring into stock selection.

The [STOXX® Global ESG Impact Index](#) beat the STOXX Global 1800 by 27 basis points. The STOXX ESG Impact Indices offer a broad market exposure that is tilted towards companies that score better with respect to a small set of environmental, social, and governance key performance indicators.

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 ESG	5.1	24.5	48.7	5.0	17.7	47.7	13.7	13.5	15.1	15.1	15.0	16.5	2.4
2. STOXX Europe Industry Neutral ESG	4.9	23.2	43.8	4.8	16.5	42.8	10.3	11.8	12.8	12.4	13.4	14.4	2.2
3. STOXX North America Industry Neutral ESG	7.2	30.9	44.1	7.0	23.8	43.2	11.3	13.0	13.0	10.9	12.4	12.5	4.3
4. STOXX Global ESG Impact	5.9	28.0	43.8	5.7	21.1	42.8	8.6	10.8	10.9	8.9	10.9	11.2	3.1
5. STOXX USA ESG Impact	7.4	31.9	45.7	7.2	24.8	44.7	11.7	13.4	13.4	11.1	12.7	12.8	5.0
6. STOXX Europe ESG Leaders Select 30	3.9	15.1	24.5				8.1	9.8	10.5				2.0

Risk and return performance figures for STOXX ESG and Sustainability Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

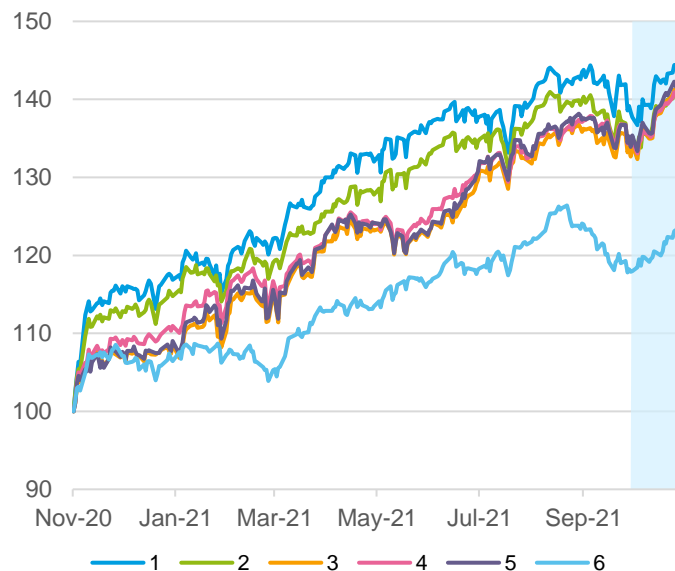


Figure 15: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

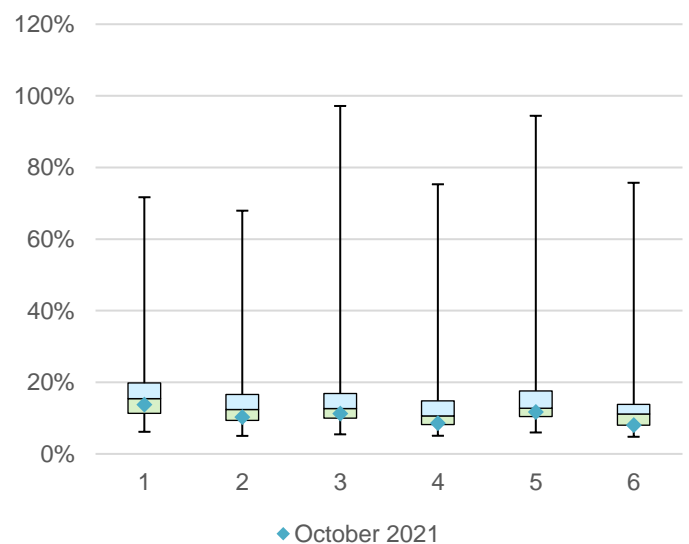


Figure 16: Monthly annualized volatility analysis, EUR gross return. Oct. 2012 – Oct. 2021. Source: Qontigo.

Climate Indices – Paris-Aligned Benchmark Indices

Key Points

The [STOXX Paris-Aligned Benchmark Indices \(PABs\)](#) showed strong relative returns in the month that ended.

The indices are based on liquid securities from a selection of STOXX Benchmark Indices and follow the [EU Paris-aligned Benchmark \(EU PAB\) requirements](#) outlined by the European Commission’s Technical Expert Group (TEG) on climate benchmarks.

Those requirements are designed such that the resulting PAB portfolio’s greenhouse gas (GHG) emissions are aligned with the long-term global warming target of the Paris Climate Agreement. The indices incorporate stringent carbon limitations in the selection of holdings, in line with global commitments to work towards keeping global warming between 1.5°C and 2°C above pre-industrial levels.

We have partnered with Sustainalytics for datasets relating to their Global Standards Screening and controversial weapons, and with ISS ESG for climate-related data such as Scope 1 to Scope 3 emissions, science-based climate targets, and others.

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 PAB	4.6	21.1	41.9	4.5	14.5	41.0	12.6	12.7	13.8	14.5	14.3	15.3
2. EURO STOXX TMI PAB	4.7	20.9	42.3	4.5	14.4	41.4	12.7	12.7	13.8	14.6	14.3	15.4
3. STOXX Europe 600 PAB	5.2	21.3	39.3	5.0	14.7	38.4	10.6	11.5	12.2	12.6	13.1	13.8
4. STOXX Global 1800 PAB	6.8	27.6	42.3	6.6	20.7	41.4	9.7	10.7	10.8	9.7	10.7	11.0
5. STOXX USA 500 PAB	8.5	32.5	46.1	8.3	25.3	45.1	13.3	13.7	13.6	12.4	12.9	12.9
6. STOXX USA 900 PAB	8.3	32.1	46.1	8.1	24.9	45.2	13.1	13.7	13.6	12.3	13.0	13.0

Risk and return performance figures for STOXX Paris-Aligned Benchmark Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

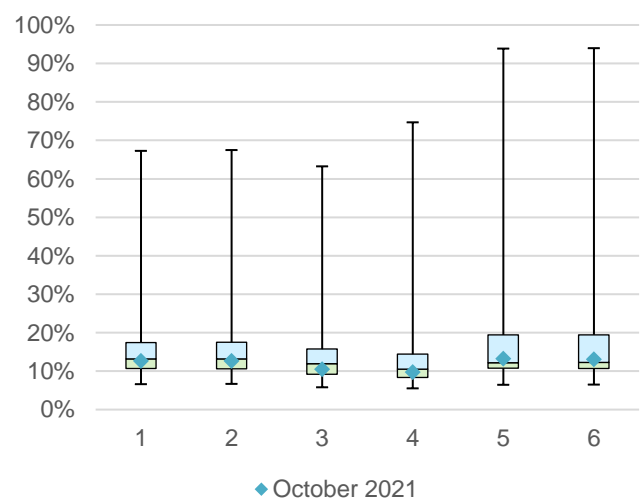
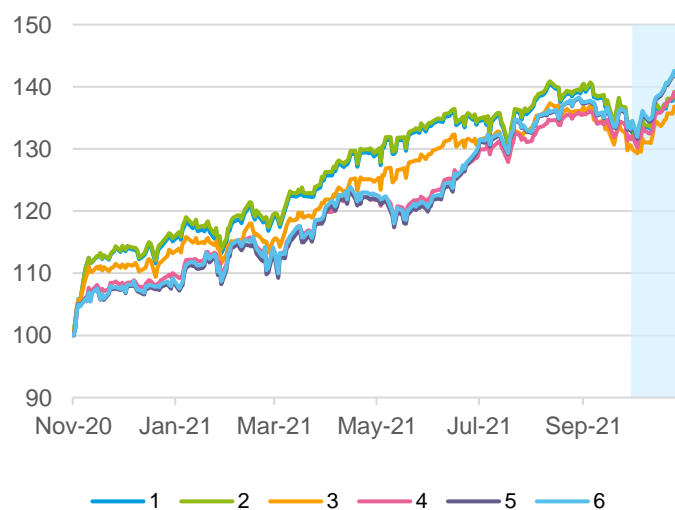


Figure 17: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 18: Monthly annualized volatility analysis, EUR gross return. Apr. 2018 – Oct. 2021. Source: Qontigo.

Climate Indices – Climate Transition Benchmark Indices

Key Points

Most [STOXX Climate Transition Benchmark Indices \(CTBs\)](#) also fared better than their benchmarks in the month that ended. The STOXX CTBs are based on liquid securities from a selection of STOXX Benchmark Indices and follow the [EU Climate Transition Benchmark \(EU CTB\) requirements](#) outlined by the TEG on climate benchmarks. Those requirements are designed such that the resulting CTB portfolio is on a decarbonization trajectory.

As with the Paris-Aligned Benchmarks, we have partnered with Sustainalytics for exclusions datasets, and with ISS ESG for climate-related data, science-based climate targets and others.

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 CTB	4.6	20.6	42.4	4.5	14.1	41.5	12.5	12.6	13.9	14.4	14.2	15.4
2. EURO STOXX TMI CTB	4.7	20.5	42.7	4.5	14.0	41.7	12.5	12.6	13.9	14.4	14.3	15.5
3. STOXX Europe 600 CTB	5.2	20.9	39.8	5.0	14.4	38.9	10.3	11.5	12.3	12.4	13.1	13.9
4. STOXX Global 1800 CTB	6.9	27.6	42.5	6.8	20.7	41.6	9.6	10.7	10.8	9.6	10.6	10.9
5. STOXX USA 500 CTB	8.6	32.5	46.0	8.5	25.3	45.0	13.1	13.6	13.5	12.2	12.8	12.8
6. STOXX USA 900 CTB	8.4	32.1	46.1	8.3	25.0	45.1	12.9	13.6	13.5	12.1	12.9	12.9

Risk and return performance figures for STOXX Climate Transition Benchmark Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

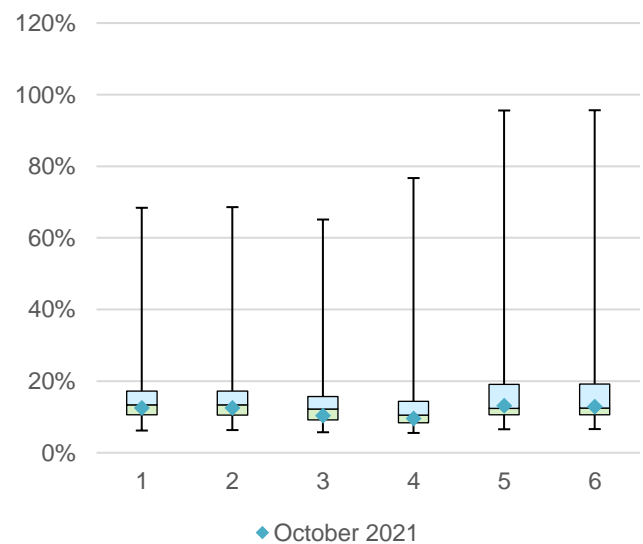
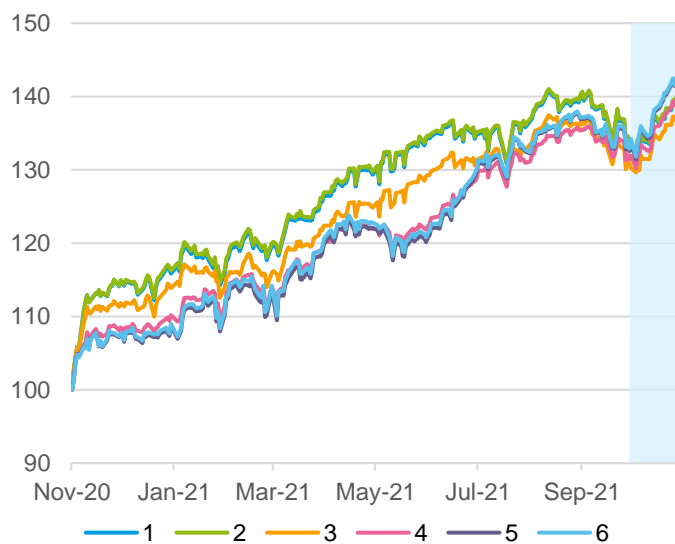


Figure 19: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 20: Monthly annualized volatility analysis, EUR gross return. Apr. 2018 – Oct. 2021. Source: Qontigo.

Climate Indices – Impact, Change Leaders and Awareness Indices

Key Points

Among STOXX's Climate Indices, the [STOXX® Global Climate Change Leaders Index](#) returned 40 basis points more than the STOXX Global 1800 benchmark last month. The Climate Change Leaders index selects corporate pioneers that are publicly committed to reducing their carbon footprint.

The [STOXX® Global Climate Impact Ex Global Compact Controversial Weapons & Tobacco Index](#) topped the benchmark STOXX Global 1800 by 22 basis points. The index includes companies that are leading in terms of climate change as well as those that are managing the effect of climate-related issues. It additionally excludes companies in contravention of global norms, and those involved with coal, tobacco or controversial weapons.

We have partnered with CDP, a leading climate data provider, to track companies that are managing and understanding the effects of climate change.

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 Climate Impact*	4.9	20.6	40.2	4.7	14.0	39.3	10.1	11.6	13.0	12.1	13.1	14.5	2.0
2. STOXX Global Climate Impact*	5.8	26.4	41.3	5.7	19.5	40.4	8.4	10.1	10.5	8.6	10.2	10.7	2.8
3. STOXX North America Climate Impact*	7.1	31.1	44.2	7.0	24.0	43.3	11.8	13.0	13.1	11.3	12.3	12.4	4.6
4. STOXX Asia/Pacific Climate Impact*	-1.8	11.5	26.4	-1.9	5.5	25.5	10.6	13.9	14.0	11.1	14.7	15.0	1.4
5. STOXX Global Climate Change Leaders	6.0	30.6	42.4	5.9	23.5	41.5	7.8	10.3	10.5	8.0	10.3	10.5	3.6
6. IStoxx Europe ESG Climate Awareness Select 50	2.3	16.0	28.6	2.2	9.7	27.7	7.6	9.4	10.6	9.7	10.7	11.8	2.8

Risk and return performance figures for STOXX Climate Indices, gross return. Data as of Oct. 29, 2021. *Indices are the Ex Global Compact Controversial Weapons & Tobacco versions. Source: Qontigo.

Index and Volatility Performance

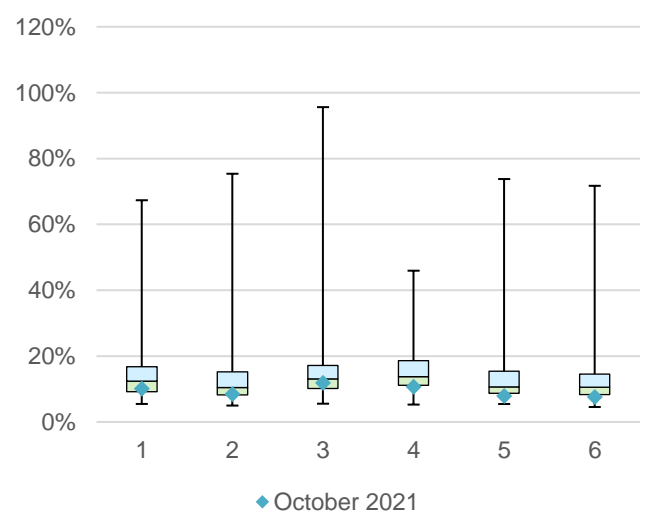
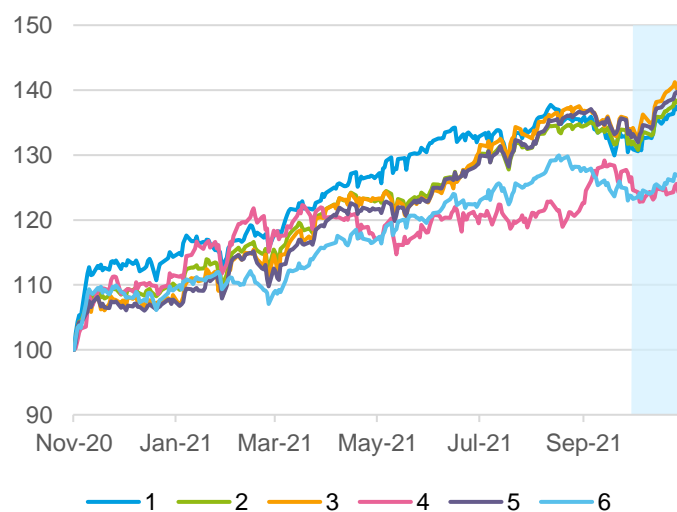


Figure 21: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 22: Monthly annualized volatility analysis, EUR gross return. Jan. 2013 – Oct. 2021. Source: Qontigo.

Low Carbon Indices

Key Points

Among the [STOXX Low Carbon Indices](#), the [EURO STOXX® 50 Low Carbon Index](#) lagged the EURO STOXX 50 by 72 basis points.

The STOXX Low Carbon Indices were designed to help reduce the carbon footprint of portfolios and limit their exposure to climate-related risks. They use data from CDP and ISS ESG.

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 Low Carbon	4.5	22.4	48.8	4.3	15.8	47.8	13.4	13.8	16.1	15.1	15.2	17.4	2.4
2. STOXX Europe 600 Low Carbon	4.8	22.2	43.0	4.7	15.6	42.0	10.4	11.8	12.8	12.5	13.5	14.4	2.2
3. STOXX Global 1800 Low Carbon	5.8	26.0	42.0	5.6	19.2	41.0	9.0	10.8	11.0	9.2	10.9	11.2	2.8
4. STOXX Global 1800 ex Europe Low Carbon	6.1	27.3	42.1	5.9	20.4	41.1	9.9	11.9	11.8	9.5	11.5	11.6	3.0
5. STOXX USA Low Carbon	7.0	30.5	44.9	6.8	23.5	44.0	12.3	13.7	13.7	11.7	13.1	13.1	4.6
6. STOXX Japan Low Carbon	-3.3	7.1	19.4	-3.4	1.3	18.6	13.0	15.4	15.2	13.1	16.0	15.9	1.5

Risk and return performance figures for STOXX Low Carbon Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

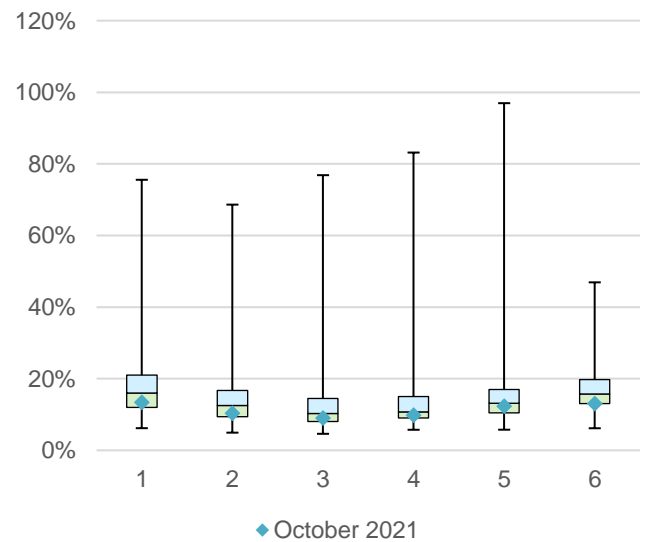
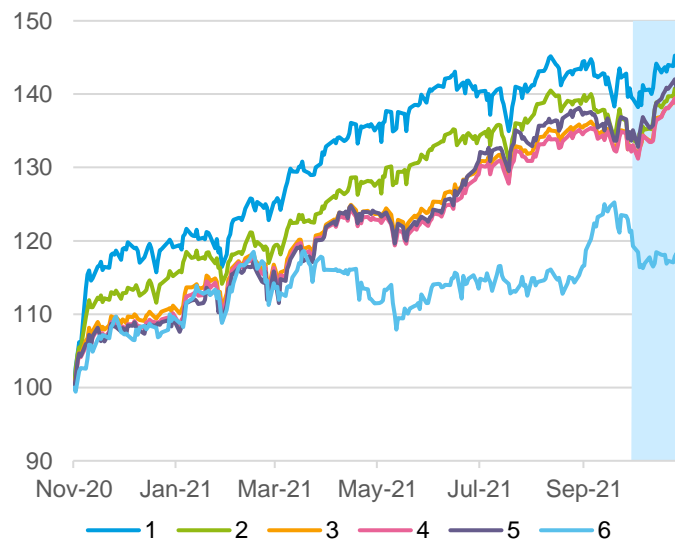


Figure 23: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 24: Monthly annualized volatility analysis, EUR gross return. Jan. 2012 – Oct. 2021. Source: Qontigo.

Thematic Indices – Revenue-Based

Key Points

The [STOXX Thematic Indices](#) seek exposure to the economic upside of disruptive global megatrends. They follow two approaches: revenue-based and artificial-intelligence-driven.

Only six of 22 revenue-based thematic indices beat the STOXX Global 1800 Index during October. The [STOXX® Global Smart Cities Index](#) was the month’s best performer after jumping 12%.

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 Ageing Population	1.2	14.4	33.6	1.1	8.2	32.8	8.7	11.8	12.4	10.4	12.3	12.9	2.1
2. STOXX Global Artificial Intelligence	6.8	33.8	49.7	6.7	26.6	48.7	20.0	22.5	22.1	19.5	22.5	22.2	7.1
3. STOXX Global Automation & Robotics	5.7	24.0	44.6	5.6	17.3	43.7	15.5	17.3	16.7	15.8	17.7	17.3	10.0
4. STOXX Global Breakthrough Healthcare	0.4	4.2	19.4	0.3	-1.4	18.6	14.1	17.5	17.4	15.0	17.7	17.6	6.5
5. STOXX Global Broad Infrastructure	3.4	16.0	24.4	3.3	9.7	23.6	8.4	9.3	9.9	10.3	9.4	10.1	2.4
6. STOXX Global Digital Security	5.5	23.0	46.1	5.4	16.4	45.2	13.0	14.2	14.3	13.1	14.3	14.6	6.0
7. STOXX Global Digitalisation	2.6	14.6	31.6	2.5	8.4	30.7	17.7	16.4	16.3	17.7	16.6	16.7	6.6
8. STOXX Global Electric Vehicles & Driving Technology	6.5	22.5	50.5	6.4	15.9	49.5	12.5	16.0	16.1	13.7	16.7	17.0	2.8
9. STOXX Global Fintech	2.6	13.5	31.6	2.5	7.3	30.8	21.2	16.8	16.7	20.7	16.5	16.5	6.2
10. STOXX Global Health & Weight Loss	5.3	23.1	39.6	5.1	16.5	38.6	13.2	13.4	13.1	12.8	13.7	13.7	10.5
11. STOXX Global Housing Construction	3.7	21.8	38.4	3.5	15.2	37.5	11.9	15.3	15.2	12.8	15.8	15.7	2.8

Risk and return performance figures for STOXX Thematic Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

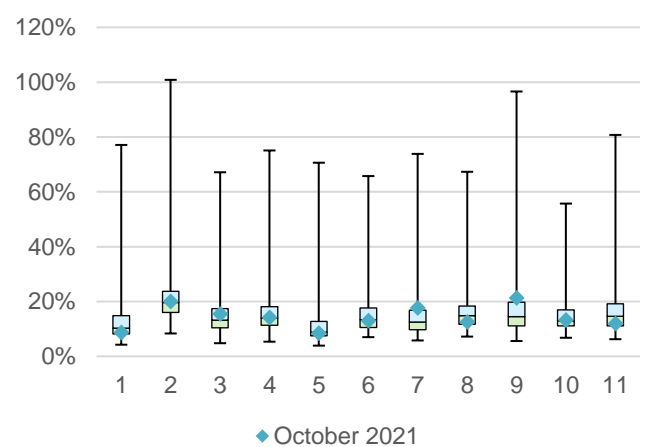
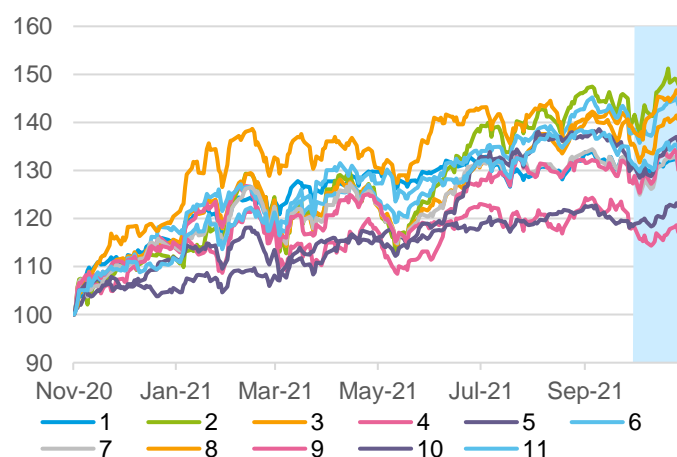


Figure 25: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 26: Monthly annualized volatility analysis, EUR gross return. Jul. 2012 – Oct. 2021. Source: Qontigo.

Thematic Indices – Revenue-Based (cont.)

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	
12. STOXX Global Industry 4.0	5.0	23.6	42.5	4.9	16.9	41.5	15.2	16.7	16.6	15.3	16.8	16.8	5.1
13. STOXX Global Millennials	2.8	12.4	28.0	2.6	6.3	27.2	16.3	17.1	16.6	16.2	17.2	17.0	8.0
14. STOXX Global Next Generation	0.7	10.9	25.7	0.5	4.9	24.9	10.6	11.7	11.7	11.7	11.5	11.8	3.5
15. STOXX Global Pet Care	6.2	20.6	26.2	6.1	14.1	25.4	10.2	11.0	11.5	11.1	10.5	11.0	7.3
16. STOXX Global Sharing Economy	-0.9	4.8	20.6	-1.0	-0.9	19.8	21.1	17.6	17.3	20.6	17.6	17.5	5.9
17. STOXX Global Silver Economy	1.9	14.4	30.2	1.7	8.2	29.4	12.5	14.1	14.5	12.7	14.1	14.6	2.6
18. STOXX Global Smart Cities	12.2	30.8	63.1	12.0	23.7	62.1	18.0	23.0	22.9	17.1	23.0	23.0	8.4
19. STOXX Global Smart City Infrastructure	4.8	26.4	44.7	4.6	19.5	43.7	7.6	10.5	10.6	9.8	11.3	11.5	4.0
20. STOXX Global Smart Factory	3.9	17.1	38.1	3.7	10.7	37.2	17.2	20.9	20.5	17.9	21.2	20.9	4.6
21. STOXX Global Video Gaming & eSports	6.3	19.7	31.0	6.1	13.2	30.2	13.5	15.8	15.7	13.6	16.0	16.1	12.0
22. iSTOXX Developed Markets B.R.A.I.N.	4.4	26.7	36.4	4.3	19.8	35.5	15.2	14.3	14.9	14.6	13.8	14.5	7.0

Risk and return performance figures for STOXX Thematic Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

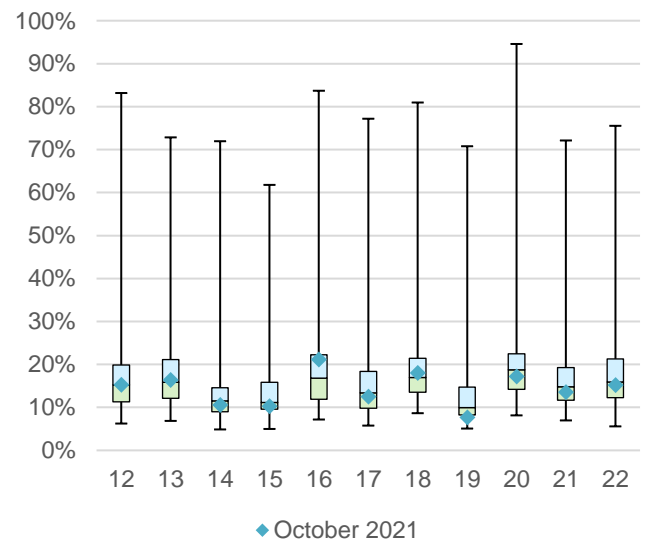
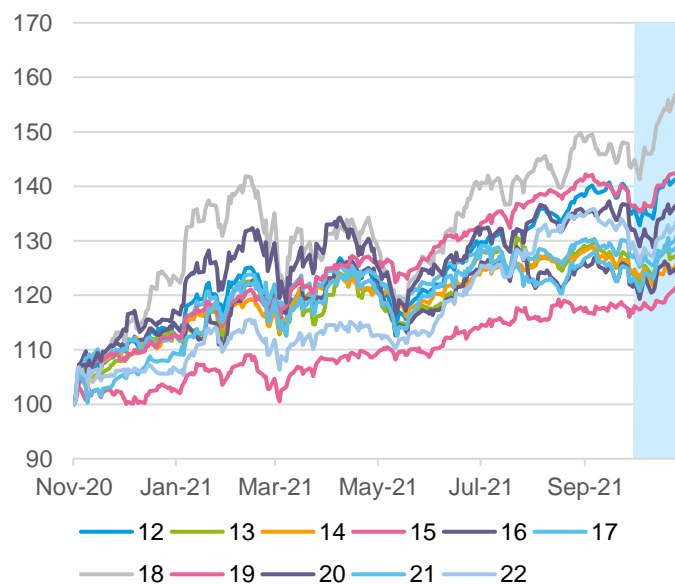


Figure 27: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 28: Monthly annualized volatility analysis, EUR gross return. Jul. 2013 – Oct. 2021. Source: Qontigo.

Thematic Indices – AI-Driven

Key Points

Among the STOXX artificial-intelligence-driven thematic indices, the [STOXX® AI Global Artificial Intelligence Index](#) and its [ADTV5 version](#) underperformed the benchmark. The [iSTOXX® Yewno Developed Markets Blockchain Index](#), on the other hand, outperformed.

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 (%)						P/B
	EUR			USD			EUR			USD			
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	
1. STOXX AI Global Artificial Intelligence	4.5	27.1	50.7	4.3	20.2	49.7	10.7	12.5	12.5	10.8	12.7	12.8	4.6
2. STOXX AI Global Artificial Intelligence	4.5	27.3	50.6	4.4	20.4	49.7	11.0	12.7	12.6	11.0	12.8	12.9	4.6
3. iSTOXX Yewno Developed Markets Blockchain	6.8	34.3	55.5	6.7	27.1	54.5	16.3	14.3	15.5	15.9	14.0	15.3	3.7

Risk and return performance figures for STOXX Thematic Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance



Figure 29: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

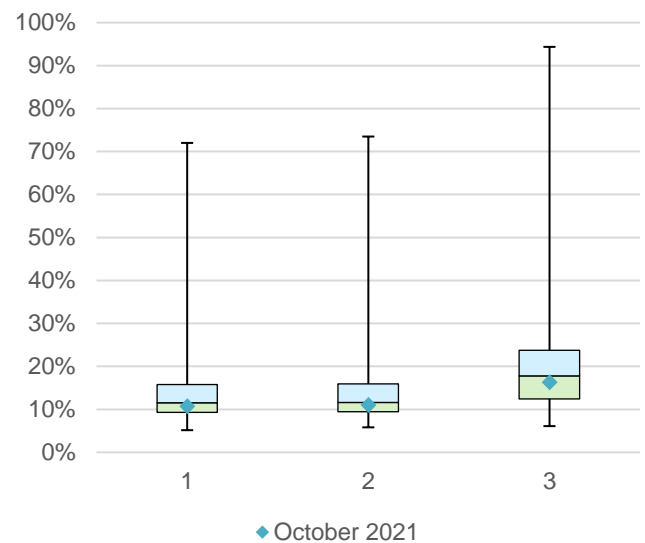


Figure 30: Monthly annualized volatility analysis, EUR gross return. Apr. 2013 – Oct. 2021. Source: Qontigo.

Factor Indices – Global

Key Points

The [STOXX Factor Indices](#) offer robust factor definitions and targeted factor exposures, and ensure the tradability of component stocks. They employ the institutionally tested analytics of Axioma Factor Risk Models.

Overall, factor-based strategies failed to keep up with the broader market's returns last month. Momentum was one of two exceptions, regaining its leadership over other styles during October.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Global 1800 Ax Low Risk	4.5	24.4	32.1	4.3	17.7	31.3	6.3	8.7	8.8	6.1	8.2	8.3
2. STOXX Global 1800 Ax Momentum	7.2	25.4	42.3	7.1	18.6	41.4	12.2	14.4	14.2	12.7	14.7	14.7
3. STOXX Global 1800 Ax Multi-Factor	6.0	32.8	43.5	5.8	25.6	42.5	9.4	11.3	11.3	9.6	11.5	11.6
4. STOXX Global 1800 Ax Quality	5.3	26.5	41.8	5.1	19.7	40.9	11.3	11.4	11.5	11.4	11.5	11.9
5. STOXX Global 1800 Ax Size	3.1	21.0	37.3	2.9	14.5	36.4	8.4	10.6	10.9	9.4	11.1	11.4
6. STOXX Global 1800 Ax Value	1.7	23.7	41.5	1.5	17.0	40.6	10.3	11.5	12.0	10.5	11.5	12.1
7. STOXX Global 1800 ex USA Ax Low Risk	2.0	19.4	27.4	1.8	13.0	26.6	4.3	7.2	7.6	6.6	8.6	9.0
8. STOXX Global 1800 ex USA Ax Momentum	3.3	16.1	32.7	3.1	9.8	31.8	11.6	12.4	12.3	12.9	14.2	14.2
9. STOXX Global 1800 ex USA Ax Multi-Factor	2.1	20.7	35.8	1.9	14.2	34.9	7.0	9.8	9.8	9.0	11.5	11.7
10. STOXX Global 1800 ex USA Ax Quality	2.4	19.6	35.6	2.2	13.1	34.7	8.8	10.9	11.1	11.2	12.7	13.0
11. STOXX Global 1800 ex USA Ax Size	0.8	16.2	33.4	0.7	9.9	32.5	7.9	10.6	11.0	10.7	12.5	12.8
12. STOXX Global 1800 ex USA Ax Value	1.3	21.9	41.8	1.1	15.3	40.8	9.0	10.8	11.8	9.5	12.2	13.2

Risk and return performance figures for STOXX Factor (Global) indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

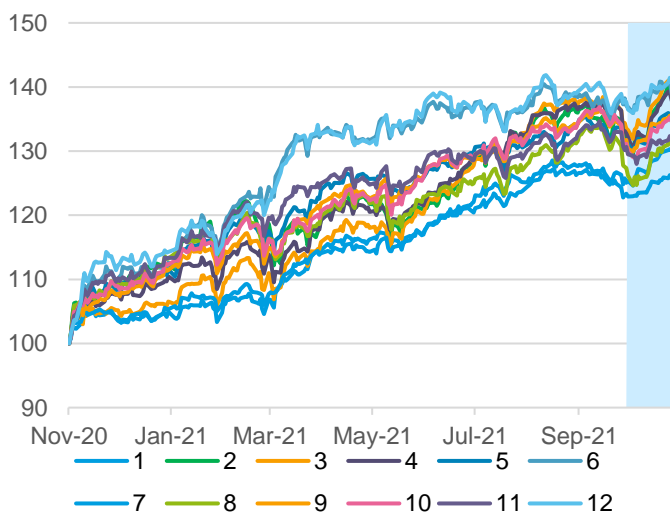


Figure 31: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

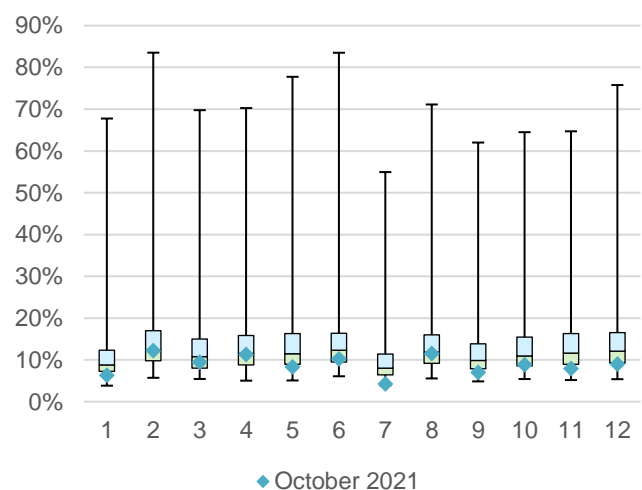


Figure 32: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

Factor Indices – Regional: Europe

Key Points

Momentum also led gains among style factors in Europe during October, according to the STOXX Factor regional indices. Size was the worst-performing signal.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Europe 600 Ax Low Risk	3.9	22.0	32.5	3.8	15.4	31.6	6.0	9.2	9.6	8.5	10.8	11.3
2. STOXX Europe 600 Ax Momentum	6.1	21.2	41.8	6.0	14.6	40.8	13.5	15.0	14.9	15.0	16.9	16.8
3. STOXX Europe 600 Ax Multi-Factor	5.0	29.6	47.7	4.8	22.6	46.8	10.7	12.0	12.1	12.7	13.8	14.0
4. STOXX Europe 600 Ax Quality	4.8	27.1	47.6	4.7	20.2	46.6	11.4	13.0	12.9	13.4	14.8	14.8
5. STOXX Europe 600 Ax Size	2.3	17.2	38.5	2.2	10.8	37.6	10.5	12.4	12.9	13.3	14.4	14.9
6. STOXX Europe 600 Ax Value	2.7	23.5	49.7	2.6	16.8	48.7	11.8	13.0	14.0	13.0	14.5	15.5

Risk and return performance figures for STOXX Factor (Regional) Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

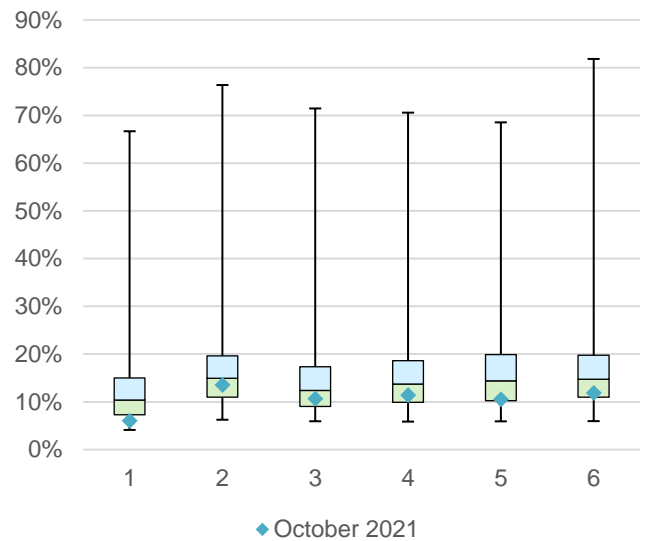
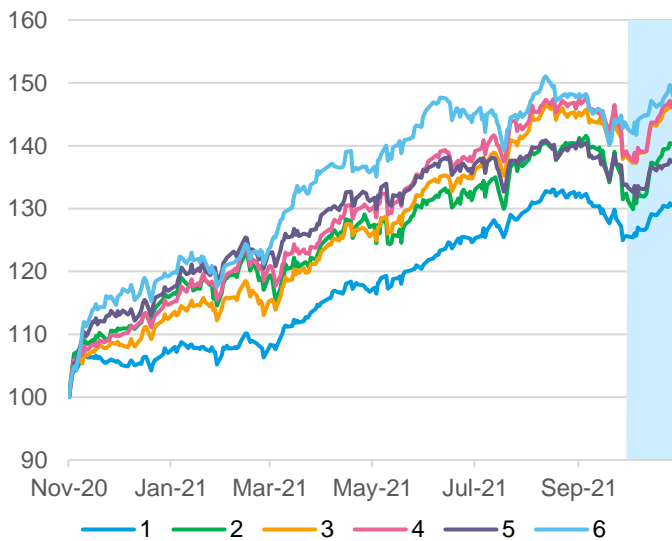


Figure 33: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 34: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

Factor Indices – Regional: US

Key Points

Momentum also paced the advance within US markets last month, while Value trailed.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX USA 500 Ax Low Risk	5.8	24.9	32.5	5.6	18.1	31.6	10.1	12.1	11.9	9.0	10.9	10.8
2. STOXX USA 500 Ax Momentum	8.7	29.8	45.2	8.6	22.7	44.3	13.9	16.5	16.1	13.8	16.2	15.9
3. STOXX USA 500 Ax Multi-Factor	7.9	37.9	47.4	7.8	30.4	46.4	13.5	14.8	14.5	12.9	14.1	14.0
4. STOXX USA 500 Ax Quality	6.6	24.6	34.9	6.5	17.8	34.0	15.7	15.1	15.0	15.4	14.4	14.5
5. STOXX USA 500 Ax Size	6.8	25.7	38.9	6.7	18.9	38.0	12.5	15.0	14.6	12.1	14.4	14.2
6. STOXX USA 500 Ax Value	3.6	28.2	43.0	3.4	21.3	42.1	11.5	13.4	13.7	11.8	12.7	13.2
7. STOXX USA 900 Ax Low Risk	5.6	24.4	32.4	5.4	17.6	31.6	9.8	11.9	11.7	9.0	10.8	10.7
8. STOXX USA 900 Ax Momentum	8.4	27.7	44.7	8.3	20.8	43.7	13.7	17.0	16.6	13.7	16.6	16.5
9. STOXX USA 900 Ax Multi-Factor	7.7	36.3	48.1	7.6	28.9	47.2	13.5	15.0	14.7	13.2	14.6	14.4
10. STOXX USA 900 Ax Quality	6.3	24.2	35.9	6.1	17.5	35.0	15.6	15.2	15.1	15.4	14.7	14.6
11. STOXX USA 900 Ax Size	6.5	29.5	41.1	6.3	22.5	40.1	12.4	14.5	14.2	12.3	13.9	13.8
12. STOXX USA 900 Ax Value	3.9	28.5	43.3	3.7	21.5	42.4	11.5	13.6	13.9	12.0	13.0	13.3

Risk and return performance figures for STOXX Factor (Regional) indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo

Index and Volatility Performance

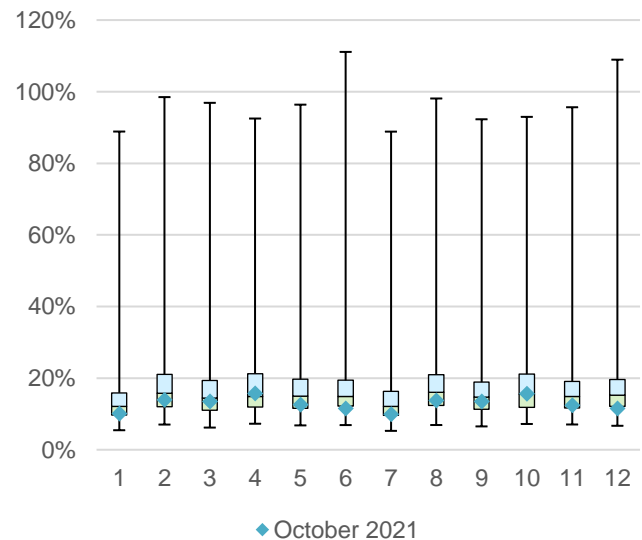
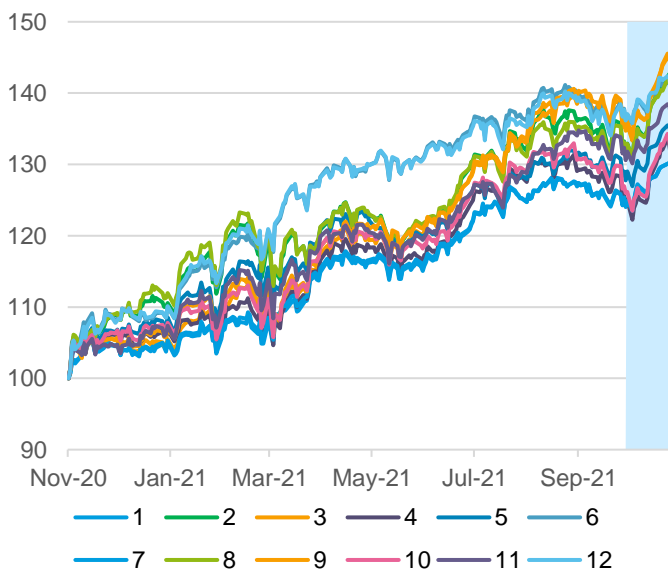


Figure 35: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 36: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

Factor Indices – Regional: Asia/Pacific

Key Points

All factor-based tilts had losses in Asia/Pacific markets last month. In Japan, four of the six factor indices fared better than the [STOXX® Japan 600 Index](#)'s 3.4% retreat in dollars.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Asia/Pacific 600 Ax Low Risk	-1.7	10.6	16.9	-1.8	4.6	16.1	7.5	10.2	10.3	8.0	10.8	11.1
2. STOXX Asia/Pacific 600 Ax Momentum	-1.2	6.0	21.1	-1.3	0.2	20.3	14.6	15.7	15.5	15.1	16.7	16.6
3. STOXX Asia/Pacific 600 Ax Multi-Factor	-1.8	9.0	21.0	-2.0	3.1	20.2	10.8	12.9	12.5	10.2	13.7	13.5
4. STOXX Asia/Pacific 600 Ax Quality	-1.1	11.5	23.3	-1.2	5.4	22.5	11.6	14.0	13.8	12.7	14.9	14.9
5. STOXX Asia/Pacific 600 Ax Size	-1.3	13.1	24.8	-1.4	7.0	24.0	10.4	13.8	13.6	11.7	14.9	14.7
6. STOXX Asia/Pacific 600 Ax Value	-2.4	20.2	32.7	-2.6	13.7	31.9	9.7	14.4	14.6	8.9	15.1	15.3
7. STOXX Japan 600 Ax Low Risk	-4.0	7.5	14.7	-4.1	1.7	13.9	11.4	13.1	12.9	10.9	13.4	13.3
8. STOXX Japan 600 Ax Momentum	-3.1	11.7	24.8	-3.3	5.7	23.9	15.0	17.6	17.1	15.3	18.3	17.9
9. STOXX Japan 600 Ax Multi-Factor	-2.3	12.2	21.9	-2.5	6.1	21.1	13.3	15.2	14.9	12.7	15.8	15.5
10. STOXX Japan 600 Ax Quality	-2.0	11.4	20.9	-2.1	5.4	20.1	12.9	15.5	15.4	13.3	16.1	16.0
11. STOXX Japan 600 Ax Size	-2.3	10.8	21.3	-2.5	4.8	20.5	12.3	14.7	14.8	12.5	15.3	15.4
12. STOXX Japan 600 Ax Value	-3.5	16.8	25.7	-3.7	10.5	24.9	12.4	16.7	16.7	11.2	17.2	17.2

Risk and return performance figures for STOXX Factor (Regional) indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

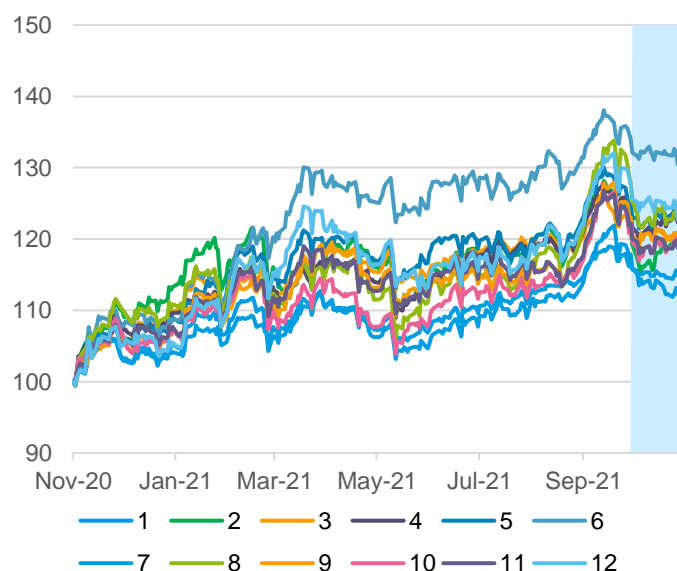


Figure 37: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

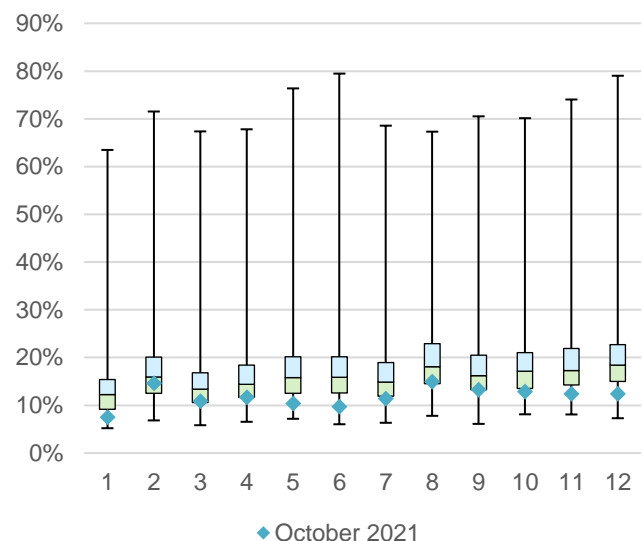


Figure 38: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

ESG-X Factor Indices – Global

Key Points

The [STOXX® ESG-X Factor Indices](#) implement the same factor-based methodology of the STOXX Factor Indices, seeking exposure to five style signals, but do so on slightly smaller universes that exclude stocks based on the responsible policies of leading asset owners.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Global 1800 ESG-X Ax Low Risk	5.1	25.1	32.9	5.0	18.3	32.0	6.3	8.7	8.8	6.2	8.3	8.4
2. STOXX Global 1800 ESG-X Ax Momentum	7.6	24.6	41.0	7.5	17.9	40.0	12.5	14.6	14.4	13.1	14.9	15.0
3. STOXX Global 1800 ESG-X Ax Multi-Factor	5.4	32.0	43.2	5.2	24.9	42.3	9.7	11.6	11.6	9.6	11.7	11.9
4. STOXX Global 1800 ESG-X Ax Quality	5.5	26.7	42.1	5.4	19.9	41.2	11.5	11.5	11.6	11.6	11.7	12.0
5. STOXX Global 1800 ESG-X Ax Size	3.1	20.8	37.5	3.0	14.2	36.6	8.6	10.7	10.9	9.6	11.1	11.4
6. STOXX Global 1800 ESG-X Ax Value	1.5	23.8	41.8	1.3	17.1	40.9	10.5	11.5	11.9	10.5	11.5	12.0

Risk and return performance figures for STOXX ESG-X Factor (Global) Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

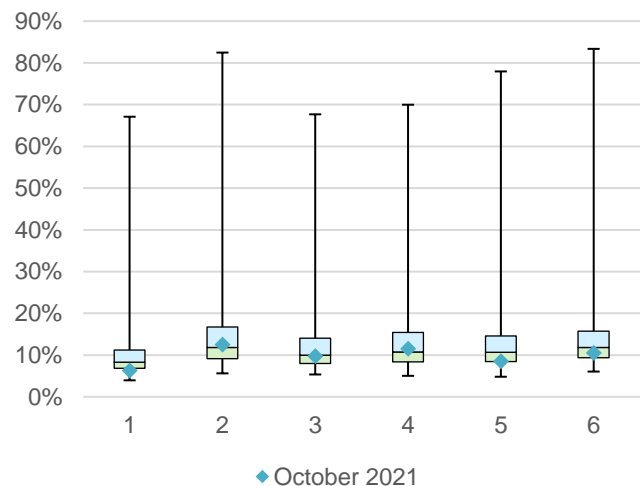
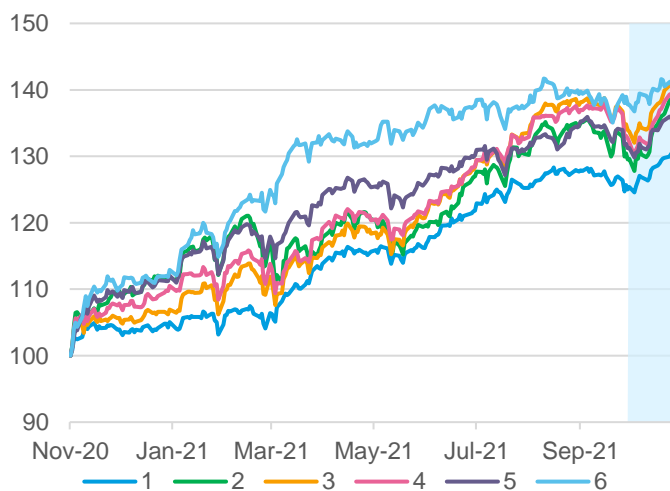


Figure 39: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 40: Monthly annualized volatility analysis, EUR gross return Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG-X Factor Indices – Regional: Europe

Key Points

In Europe, the [STOXX® Europe 600 ESG-X Ax Momentum Index](#) was the best performer among the STOXX ESG-X Factor Indices.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Europe 600 ESG-X Ax Low Risk	3.9	21.6	31.5	3.8	15.1	30.6	6.0	9.2	9.6	8.4	10.8	11.3
2. STOXX Europe 600 ESG-X Ax Momentum	6.3	22.3	43.6	6.1	15.7	42.7	13.7	15.1	14.9	14.9	16.9	16.8
3. STOXX Europe 600 ESG-X Ax Multi-Factor	4.3	28.3	46.4	4.1	21.3	45.4	10.7	11.8	11.9	12.8	13.6	13.8
4. STOXX Europe 600 ESG-X Ax Quality	4.7	26.9	47.1	4.6	20.0	46.1	11.3	13.0	13.0	13.4	14.9	14.8
5. STOXX Europe 600 ESG-X Ax Size	3.2	18.7	40.2	3.1	12.2	39.3	11.5	12.3	13.0	14.3	14.2	14.9
6. STOXX Europe 600 ESG-X Ax Value	3.1	22.5	48.3	3.0	15.9	47.3	11.8	12.9	13.9	13.0	14.5	15.5

Risk and return performance figures for STOXX ESG-X Factor (Regional) Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

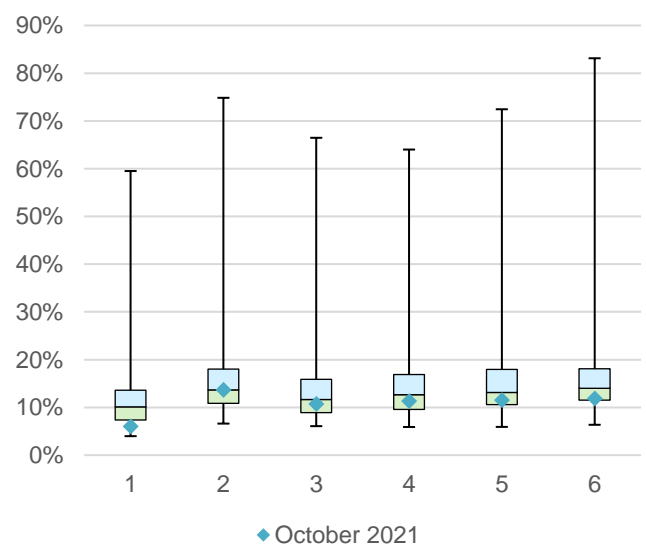
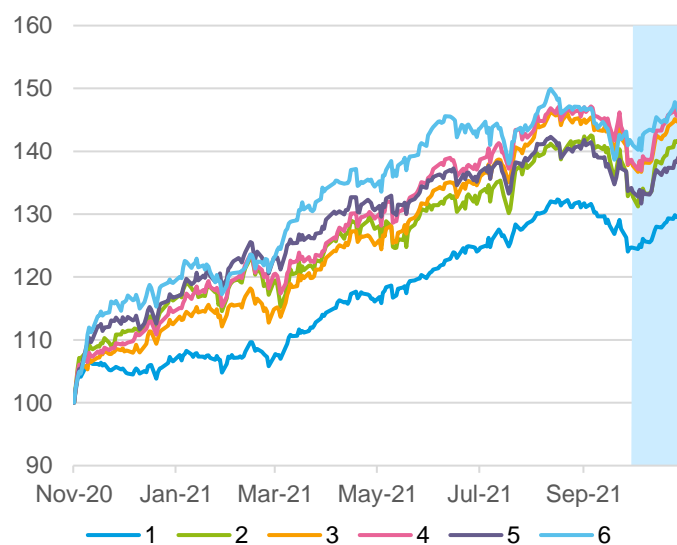


Figure 41: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 42: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG-X Factor Indices – Regional: US

Key Points

Within the [STOXX® USA 500 ESG-X Index](#) and [STOXX® USA 900 ESG-X Index](#) universes, Momentum also showed the strongest returns during October.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX USA 500 ESG-X Ax Low Risk	6.3	25.2	32.1	6.1	18.4	31.2	10.2	12.2	12.1	9.1	11.1	11.0
2. STOXX USA 500 ESG-X Ax Momentum	8.9	29.0	43.9	8.7	22.0	42.9	14.4	17.0	16.7	14.2	16.6	16.6
3. STOXX USA 500 ESG-X Ax Multi-Factor	8.2	35.1	46.6	8.0	27.8	45.7	13.6	15.0	14.8	13.1	14.5	14.4
4. STOXX USA 500 ESG-X Ax Quality	7.5	26.3	37.9	7.3	19.4	37.0	15.9	15.6	15.4	15.6	15.1	15.0
5. STOXX USA 500 ESG-X Ax Size	7.3	27.3	40.6	7.1	20.4	39.7	11.8	14.7	14.4	11.7	14.2	14.0
6. STOXX USA 500 ESG-X Ax Value	3.6	28.0	42.4	3.4	21.1	41.5	11.5	13.5	13.9	11.8	12.8	13.4
7. STOXX USA 900 ESG-X Ax Low Risk	5.8	24.6	32.6	5.7	17.8	31.8	10.1	12.1	11.9	9.1	11.0	10.9
8. STOXX USA 900 ESG-X Ax Momentum	9.1	26.7	43.1	8.9	19.8	42.2	13.5	17.3	17.0	13.4	16.9	16.8
9. STOXX USA 900 ESG-X Ax Multi-Factor	8.0	36.6	49.1	7.8	29.2	48.2	13.3	15.5	15.2	13.1	15.1	14.9
10. STOXX USA 900 ESG-X Ax Quality	7.1	25.3	37.5	6.9	18.5	36.6	15.7	15.7	15.5	15.5	15.2	15.1
11. STOXX USA 900 ESG-X Ax Size	7.0	28.9	41.1	6.8	21.9	40.2	12.7	14.4	14.2	12.7	14.0	13.8
12. STOXX USA 900 ESG-X Ax Value	4.0	29.2	43.5	3.8	22.2	42.5	11.4	13.7	13.9	11.8	13.0	13.4

Risk and return performance figures for STOXX ESG-X Factor (Regional) indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

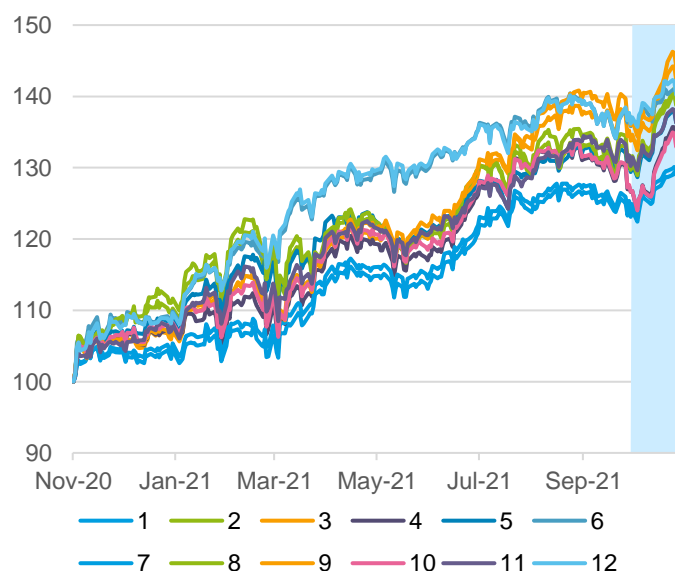


Figure 43: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

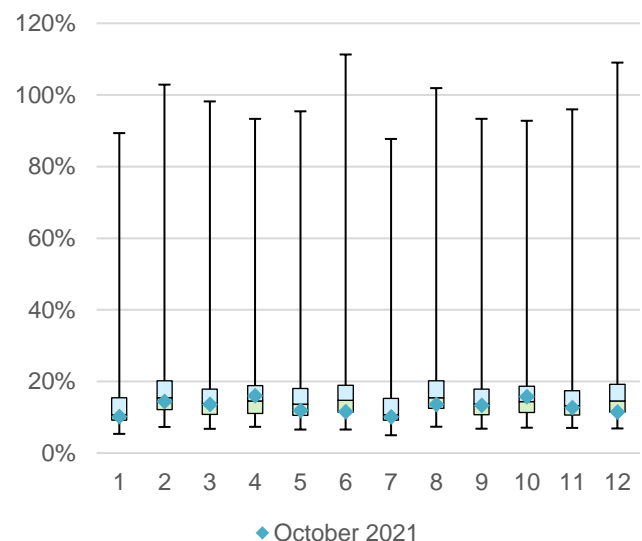


Figure 44: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

ESG-X Factor Indices – Regional: Asia/Pacific

Key Points

As it happened with their standard factor counterparts, all ESG-X Factor Indices covering Asia/Pacific and Japan recorded losses during October.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Asia/Pacific 600 ESG-X Ax Low Risk	-1.6	11.3	17.4	-1.7	5.2	16.6	7.4	10.2	10.4	7.8	10.9	11.1
2. STOXX Asia/Pacific 600 ESG-X Ax Momentum	-1.2	7.5	22.4	-1.4	1.7	21.6	14.8	15.9	15.7	15.2	16.9	16.8
3. STOXX Asia/Pacific 600 ESG-X Ax Multi-Factor	-1.7	9.1	21.7	-1.8	3.2	20.9	11.1	13.0	12.7	10.6	13.9	13.7
4. STOXX Asia/Pacific 600 ESG-X Ax Quality	-1.1	11.5	23.6	-1.3	5.4	22.8	11.7	14.0	13.9	12.7	15.0	15.0
5. STOXX Asia/Pacific 600 ESG-X Ax Size	-2.0	9.0	20.8	-2.1	3.1	20.0	10.3	13.6	13.5	12.0	14.7	14.7
6. STOXX Asia/Pacific 600 ESG-X Ax Value	-2.2	19.1	31.0	-2.3	12.7	30.1	9.6	14.2	14.3	9.0	15.0	15.2
7. STOXX Japan 600 ESG-X Ax Low Risk	-4.0	6.3	13.6	-4.1	0.5	12.9	11.5	13.2	13.1	11.1	13.6	13.5
8. STOXX Japan 600 ESG-X Ax Momentum	-3.5	10.6	23.7	-3.6	4.6	22.9	14.9	17.5	17.1	15.4	18.2	17.8
9. STOXX Japan 600 ESG-X Ax Multi-Factor	-2.3	11.5	21.8	-2.5	5.4	21.0	13.5	15.5	15.1	12.7	16.0	15.8
10. STOXX Japan 600 ESG-X Ax Quality	-2.0	11.5	21.2	-2.1	5.5	20.4	13.0	15.6	15.5	13.4	16.1	16.0
11. STOXX Japan 600 ESG-X Ax Size	-3.6	9.3	19.3	-3.8	3.4	18.5	11.9	14.6	14.7	12.7	15.1	15.2
12. STOXX Japan 600 ESG-X Ax Value	-3.5	17.6	26.8	-3.6	11.2	26.0	12.5	16.9	16.8	11.6	17.4	17.3

Risk and return performance figures for STOXX ESG-X Factor (Regional) indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

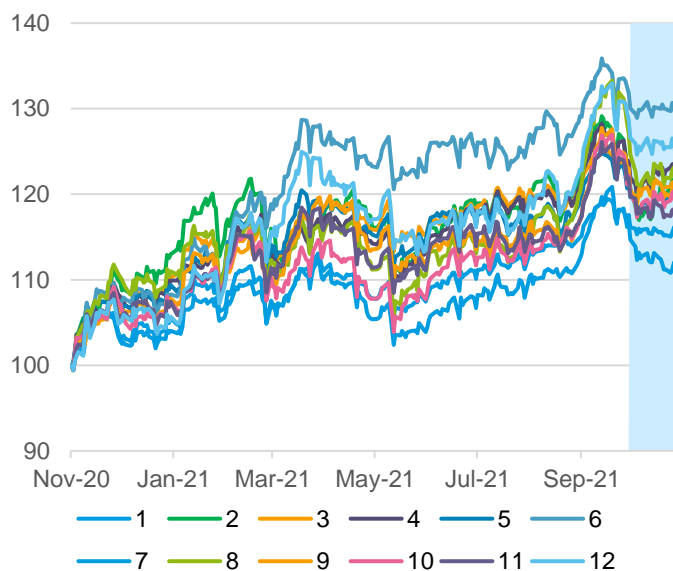


Figure 45: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

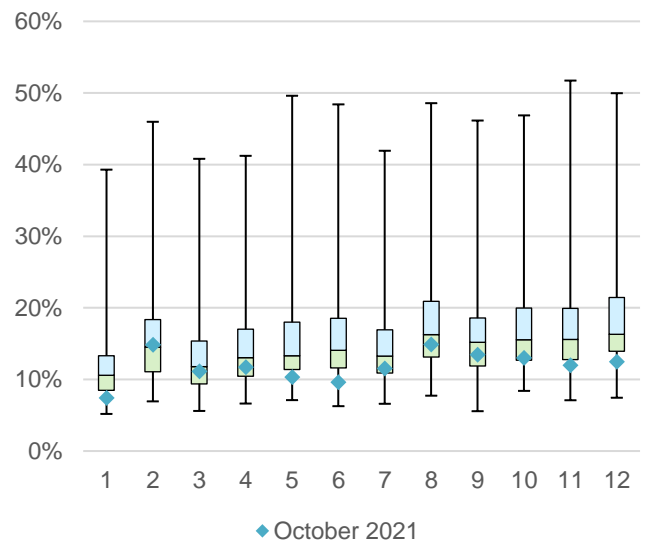


Figure 46: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

Industry Neutral Factor Indices

Key Points

The [STOXX® Industry Neutral Single and Multi-Factor Indices](#) aim to harvest the risk premia of several academically validated style factors — Value, Momentum, Quality, Size and Low Risk — within each ICB industry.

The indices rely on Axioma’s proven factor models and keep the same industry allocation as the respective benchmarks, helping remove unintended industry exposures and enabling access to the ‘pure’ return of the factor.

Risk and Return Characteristics

	Return (%)						Annualized volatility (%)					
	EUR			USD			EUR			USD		
	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y	1M	YTD	1Y
1. STOXX Europe 600 Industry Neutral Ax Low Risk	4.0	20.0	31.2	3.9	13.5	30.4	6.3	9.1	9.7	9.1	10.8	11.3
2. STOXX Europe 600 Industry Neutral Ax Momentum	4.9	22.2	43.0	4.7	15.6	42.1	13.2	14.4	14.2	14.9	16.3	16.2
3. STOXX Europe 600 Industry Neutral Ax Multi-Factor	4.0	26.7	42.7	3.8	19.8	41.7	10.2	11.6	11.7	12.4	13.5	13.7
4. STOXX Europe 600 Industry Neutral Ax Quality	3.9	25.8	45.4	3.8	19.0	44.4	10.9	12.6	12.5	13.0	14.4	14.4
5. STOXX Europe 600 Industry Neutral Ax Size	1.9	19.4	41.5	1.7	12.9	40.5	10.8	12.0	12.6	13.0	14.0	14.6
6. STOXX Europe 600 Industry Neutral Ax Value	2.6	23.5	49.6	2.5	16.8	48.6	11.6	13.1	14.2	13.2	14.7	15.8
7. STOXX USA 500 Industry Neutral Ax Low Risk	6.3	27.0	34.7	6.1	20.1	33.9	9.7	11.9	11.8	8.6	10.7	10.7
8. STOXX USA 500 Industry Neutral Ax Momentum	7.8	31.0	45.6	7.7	23.9	44.6	14.2	16.3	16.0	13.8	16.0	15.8
9. STOXX USA 500 Industry Neutral Ax Multi-Factor	6.5	27.1	37.8	6.4	20.2	36.9	13.3	14.7	14.6	13.2	14.1	14.1
10. STOXX USA 500 Industry Neutral Ax Quality	6.4	26.2	35.1	6.2	19.3	34.2	14.2	14.1	14.2	14.1	13.4	13.7
11. STOXX USA 500 Industry Neutral Ax Size	7.3	28.5	42.7	7.2	21.5	41.8	12.1	14.4	14.1	11.8	13.8	13.7
12. STOXX USA 500 Industry Neutral Ax Value	4.1	30.3	42.3	3.9	23.2	41.4	11.5	13.6	13.9	11.8	13.0	13.4

Risk and return performance figures for STOXX Industry Neutral Factor Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

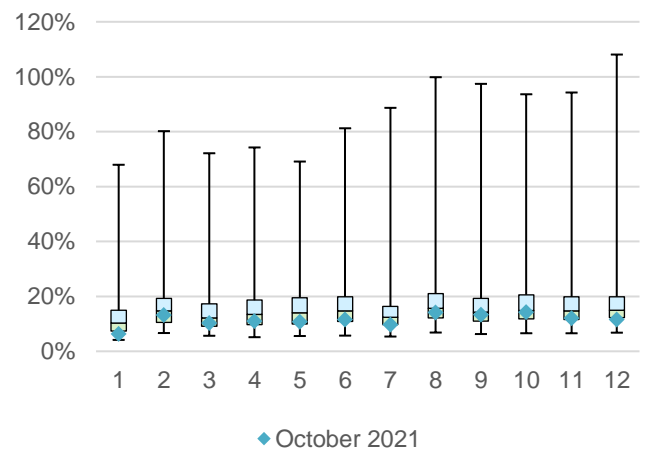
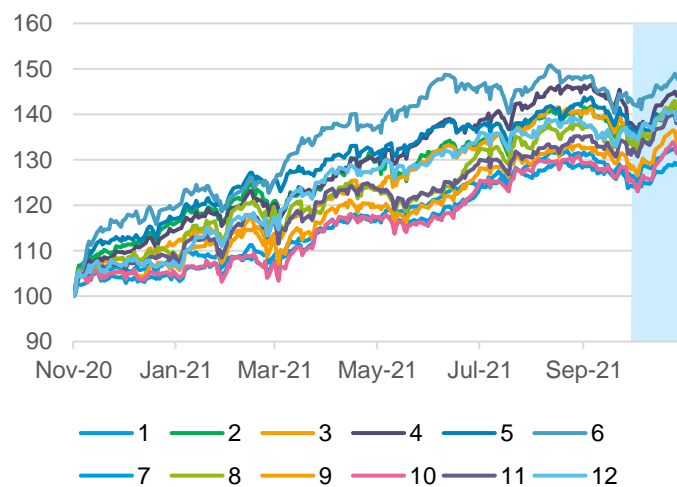


Figure 47: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 48: Monthly annualized volatility analysis, EUR gross return. Apr. 2012 – Oct. 2021. Source: Qontigo.

Europe Factor Market Neutral Indices

Key Points

The [iSTOXX® Europe Factor Market Neutral Indices](#) assume a short position in STOXX Europe 600 futures to help investors neutralize systematic risk and tap exposure to pure factor investing.

Risk and Return Characteristics

	(EUR) Return (%)			(EUR) Annualized volatility (%)		
	1M	YTD	1Y	1M	YTD	1Y
1. iSTOXX Europe Carry Factor Market Neutral	0.2	-1.1	-3.0	3.0	3.6	3.9
2. iSTOXX Europe Low Risk Factor Market Neutral	-0.1	-1.1	-3.6	3.4	3.1	3.2
3. iSTOXX Europe Momentum Factor Market Neutral	-0.8	-3.1	-1.7	4.1	3.4	3.7
4. iSTOXX Europe Quality Factor Market Neutral	-0.1	0.9	1.3	2.6	3.2	3.3
5. iSTOXX Europe Size Factor Market Neutral	-1.7	-1.1	2.4	5.1	5.2	5.3
6. iSTOXX Europe Value Factor Market Neutral	-3.0	-4.5	-2.2	4.6	4.9	5.3
7. iSTOXX Europe Multi-Factor Market Neutral	-1.2	0.0	-0.8	5.0	3.9	4.0

Risk and return performance figures for iSTOXX Europe Factor Market Neutral Indices, net return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

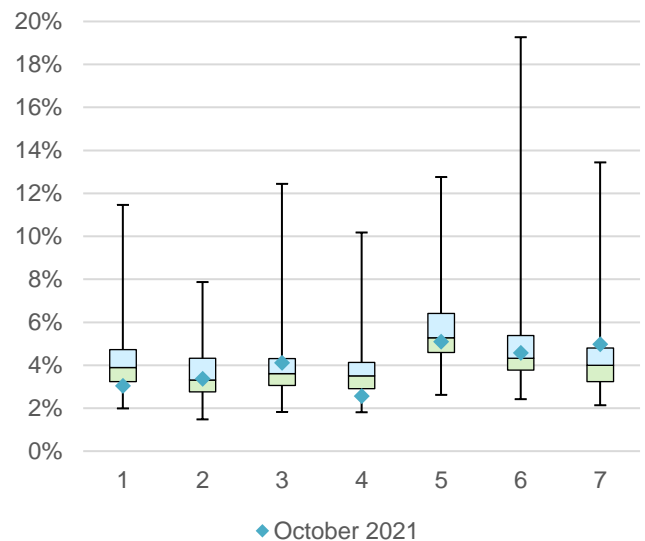
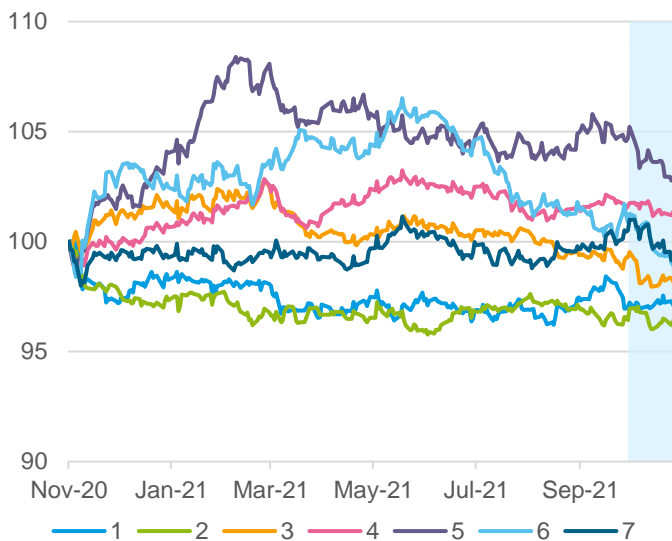


Figure 49: EUR net return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 50: Monthly annualized volatility analysis, EUR net return. Aug. 2010 – Oct. 2021. Source: Qontigo.

Premia Indices

Key Points

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 Multi Premia methodology developed by, and based on academic research from, STOXX's partner Finreon. Their benchmark, the [EURO STOXX® Index](#), rose 4.2% last month.

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	3.7	15.1	24.6	3.6	8.9	23.8	8.3	9.5	10.0	11.2	11.4	11.8
2. EURO STOXX Momentum Premium	3.7	20.8	34.5	3.5	14.2	33.6	13.7	13.9	13.9	15.4	15.8	15.8
3. EURO STOXX Quality Premium	3.9	18.4	30.7	3.7	12.0	29.8	10.7	10.6	10.9	13.0	12.5	12.8
4. EURO STOXX Residual Momentum Premium	2.2	18.4	31.3	2.0	12.0	30.4	11.2	13.7	13.5	13.4	15.6	15.4
5. EURO STOXX Reversal Premium	1.7	20.8	50.0	1.6	14.3	49.1	11.8	14.1	16.7	13.6	15.6	18.1
6. EURO STOXX Size Premium	3.0	18.8	38.1	2.9	12.4	37.2	8.8	10.2	10.9	11.3	12.3	13.0
7. EURO STOXX Value Premium	1.3	20.6	51.4	1.2	14.0	50.5	9.8	11.9	15.5	12.3	13.6	17.0
8. EURO STOXX Multi Premia	2.8	19.0	37.0	2.7	12.5	36.1	9.7	10.9	11.3	12.1	12.9	13.3

Risk and return performance figures for EURO STOXX Premia Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

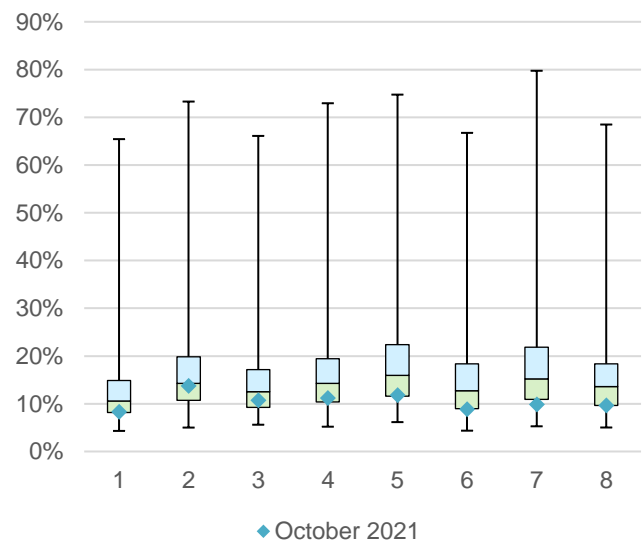
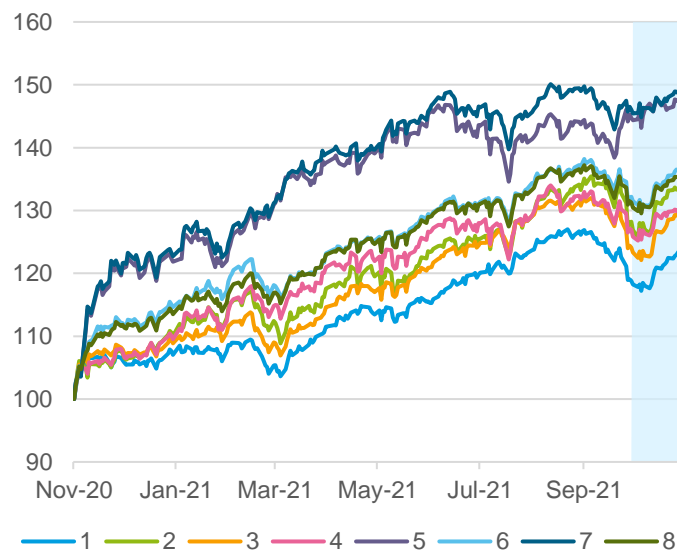


Figure 51: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 52: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

Minimum Variance Indices

Key Points

Minimum variance strategies continued their poor streak of returns in European markets last month, relative to the benchmark. The strategies also underperformed in the US during October.

The STOXX Minimum Variance Indices come in two versions. A constrained version has similar exposure to its market-capitalization-weighted benchmark 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	2.2	16.3	28.8	2.1	10.0	27.9	7.4	9.4	9.9	9.6	11.1	11.6	3.1
2. STOXX Europe 600 MV Unconstrained	1.0	13.8	25.3	0.8	7.6	24.5	7.7	9.2	9.7	9.8	11.0	11.4	3.4
3. STOXX Global 1800 MV	3.8	24.0	33.5	3.6	17.3	32.7	7.3	8.3	8.4	6.5	7.9	8.1	2.9
4. STOXX Global 1800 MV Unconstrained	2.4	11.7	19.5	2.2	5.6	18.8	5.6	7.9	8.3	6.3	8.0	8.6	2.2
5. STOXX USA 900 MV	6.5	20.0	24.0	6.4	13.5	23.2	9.9	11.4	11.4	8.8	10.1	10.2	5.8
6. STOXX USA 900 MV Unconstrained	5.3	15.1	13.8	5.2	8.8	13.0	9.2	10.9	11.1	7.8	9.4	9.7	5.3

Risk and return performance figures for STOXX Minimum Variance Indices, gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

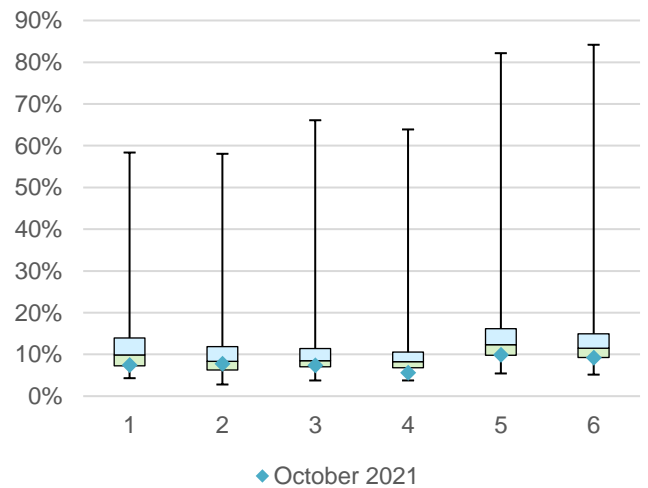
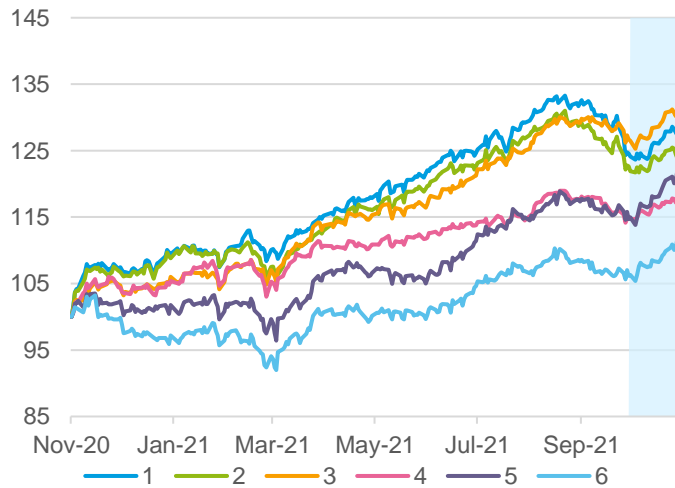


Figure 53: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

Figure 54: Monthly annualized volatility analysis, EUR gross return. Jan. 2004 – Oct. 2021. Source: Qontigo.

Dividend Indices

Key Points

[Dividend strategies](#) also fared poorly on a relative basis during October.

The [STOXX® Global Maximum Dividend 40 Index](#) selects only the highest-dividend-yielding stocks. The [STOXX® Global Select Dividend 100 Index](#), meanwhile, tracks companies with sizeable dividends but also applies a quality filter such as a history of stable payments. The [STOXX® Global ESG-X Select Dividend 100 Index](#) was [introduced last February](#) and targets the highest-yielding stocks within universes screened for responsible investment criteria.

The [STOXX® Global Select 100 EUR Index](#) blends increasing dividend yields with low volatility and is calculated in euros.

Dividend strategies were overall very weak performers in 2020. They had a strong start to 2021 relative to benchmarks but lost their lead in recent months.

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	10.1	26.0	-0.7	4.1	25.1	9.2	11.7	13.0	7.5	12.6	13.8	0.9
2. STOXX Global Select Dividend 100	2.0	18.4	40.8	1.9	12.0	39.9	5.3	9.8	12.4	7.6	10.9	13.4	1.6
3. STOXX Global ESG-X Select Dividend 100	2.2	19.7	43.8	2.0	13.2	42.8	5.6	10.4	13.0	7.6	11.5	14.0	1.4
4. STOXX Global Select 100 EUR	2.0	18.3	25.3				4.6	7.4	8.3				1.3

Risk and return performance figures for STOXX Dividend Indices, gross return except when shown. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

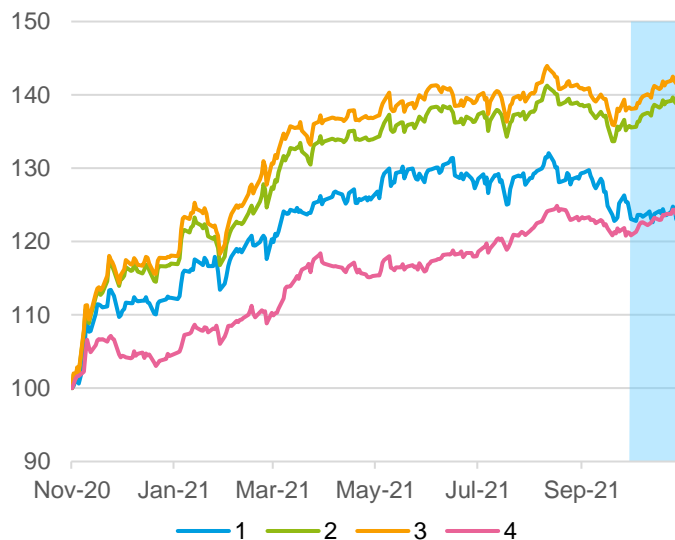


Figure 55: Annual price performance, EUR net return for 1; EUR gross return for 2-4. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

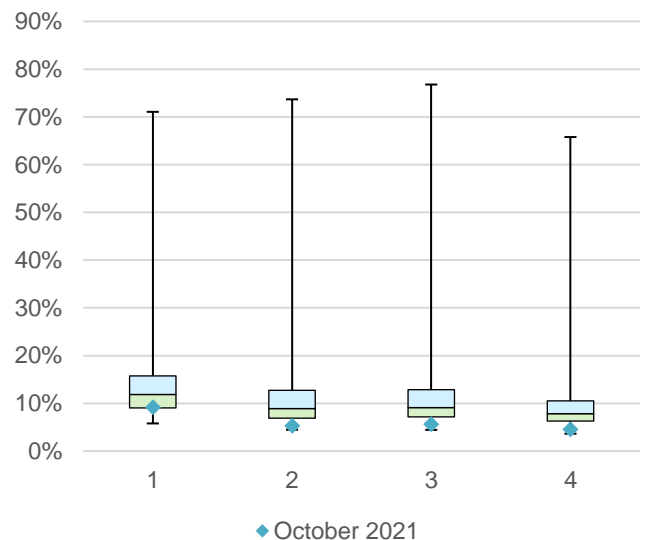


Figure 56: Monthly annualized volatility analysis. EUR net return for 1; EUR gross return for 2-4. Apr. 2012 – Oct. 2021. Source: Qontigo.

¹ EUR net return and USD net return used for STOXX Maximum Dividend 40.

Volatility Indices

Key Points

European equity volatility declined in October, as measured by the [EURO STOXX 50 Volatility \(VSTOXX\) Index](#), [VDAX-New® Index](#) and [EURO STOXX 50® Volatility of Volatility Index \(V-VSTOXX\)](#).

The VSTOXX and VDAX measure the implied volatility of EURO STOXX 50 Index and DAX Index options, respectively, across their entire expiration curve. The V-VSTOXX measures the implied volatility of options on VSTOXX futures, hence reflecting expectations regarding the volatility of volatility. All three are significantly lower than during their March 2020 highs. The VSTOXX, for example, rose to 86 in March last year.

There was a high negative correlation between the VSTOXX and VDAX and share prices last month.

Risk and Return Characteristics

	Index Level			Correlation	
	T	T-1M	T-12M	1M	1Y
1. VSTOXX	17.6	23.2	35.3	-0.9	-0.8
2. V-VSTOXX	95.9	109.6	132.0	-0.7	-0.7
3. VDAX	17.1	23.3	37.9	-0.9	-0.8

Index levels for STOXX and DAX Volatility Indices. Correlation for VSTOXX and V-VSTOXX compared with EURO STOXX 50 price return, and VDAX relative to DAX gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

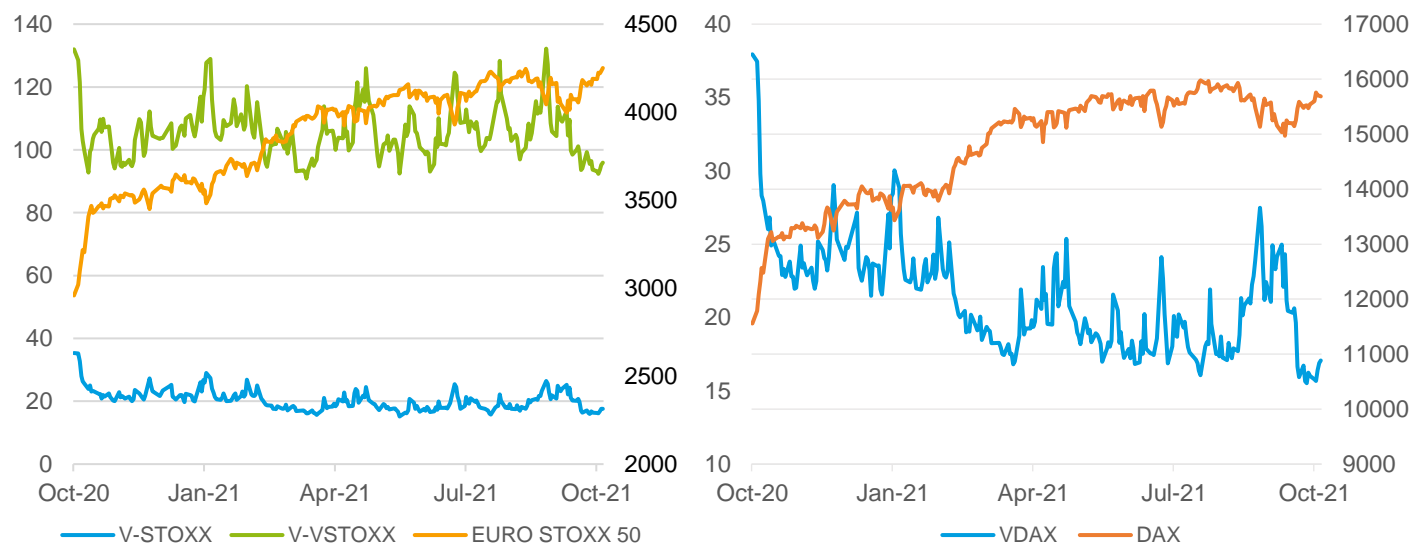


Figure 57: V-STOXX and V-VSTOXX (primary axis). EURO STOXX 50 price return Index (secondary axis). Oct. 2020 – Oct. 2021. Source: Qontigo.

Figure 58: VDAX (primary axis). DAX gross return index (secondary axis). Oct. 2020 – Oct. 2021. Source: Qontigo.

Volatility Strategy Indices

Key Points

The [VSTOXX® Short-Term Futures](#) and [VSTOXX® Mid-Term Futures](#) indices, which track the return from a rolling long position in VSTOXX futures contracts on Eurex, had negative returns in the month that ended. The [EURO STOXX 50® Investable Volatility Index](#), which measures forward implied volatility in the Eurozone equity market, also fell.

The [Dynamic VSTOXX® Index](#) rose 2.9%. The index combines the VSTOXX Short-Term Futures Index and the VSTOXX Mid-Term Futures Index to exploit the superior performance of short-term futures when the volatility forward curve is in backwardation and of mid-term futures when the volatility forward curve is in contango.

Lastly, the EURO STOXX 50 Volatility-Balanced Index swung to a gain during the month, taking its 2021 advance to 18%. As mentioned in the Featured Index section, the index combines investments in the EURO STOXX 50 and in the VSTOXX Short-Term Futures Index.

Risk and Return Characteristics

	(EUR) Return (%)			(EUR) Annualized volatility (%)		
	1M	YTD	1Y	1M	YTD	1Y
1. EURO STOXX 50 Investable Volatility	-13.3	-29.9	-49.4	34.4	47.9	50.0
2. VSTOXX Short-Term Futures	-18.6	-48.3	-61.5	46.9	68.1	67.6
3. VSTOXX Mid-Term Futures	-4.3	-5.7	-17.5	15.6	27.1	28.1
4. Dynamic VSTOXX	2.9	11.2	-5.7	6.6	7.9	12.8
5. EURO STOXX 50 Volatility Balanced	4.1	18.0	28.3	10.6	11.7	12.1

Risk and return performance figures for STOXX Volatility Strategy Indices, EUR gross return. Data as of Oct. 29, 2021. Source: Qontigo.

Index and Volatility Performance

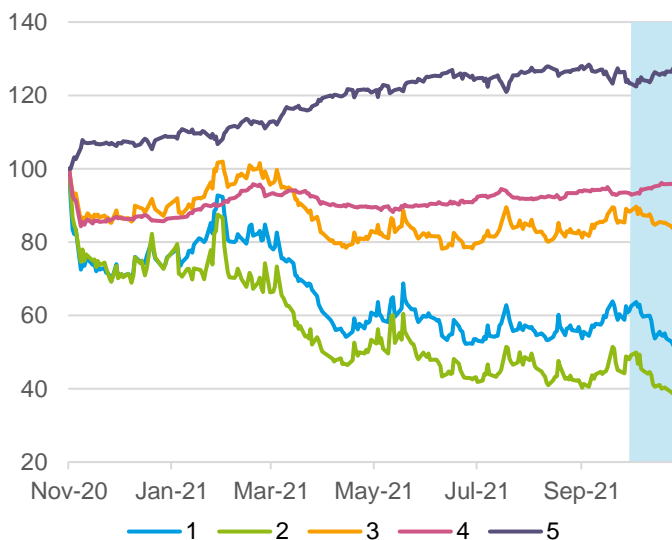


Figure 59: EUR gross return index performance. Nov. 2020 – Oct. 2021. Shaded area: Oct. 2021. Source: Qontigo.

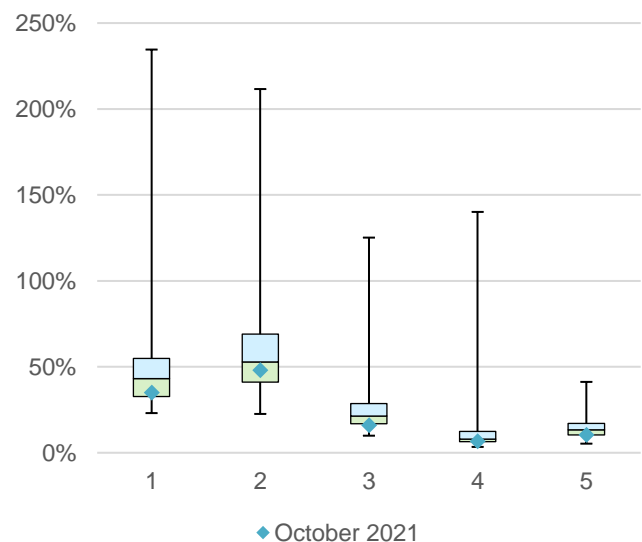


Figure 60: Monthly annualized volatility analysis, EUR gross return. Jun. 2010 – Oct. 2021. Source: Qontigo.

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