



SMART BETA INVESTING IN A SUSTAINABLE WAY

Koen Van de Maele, CFA, Global Head of Investment Solutions

DECEMBER 2018





Introduction to ESG

Smart Beta vs Market-Cap investing

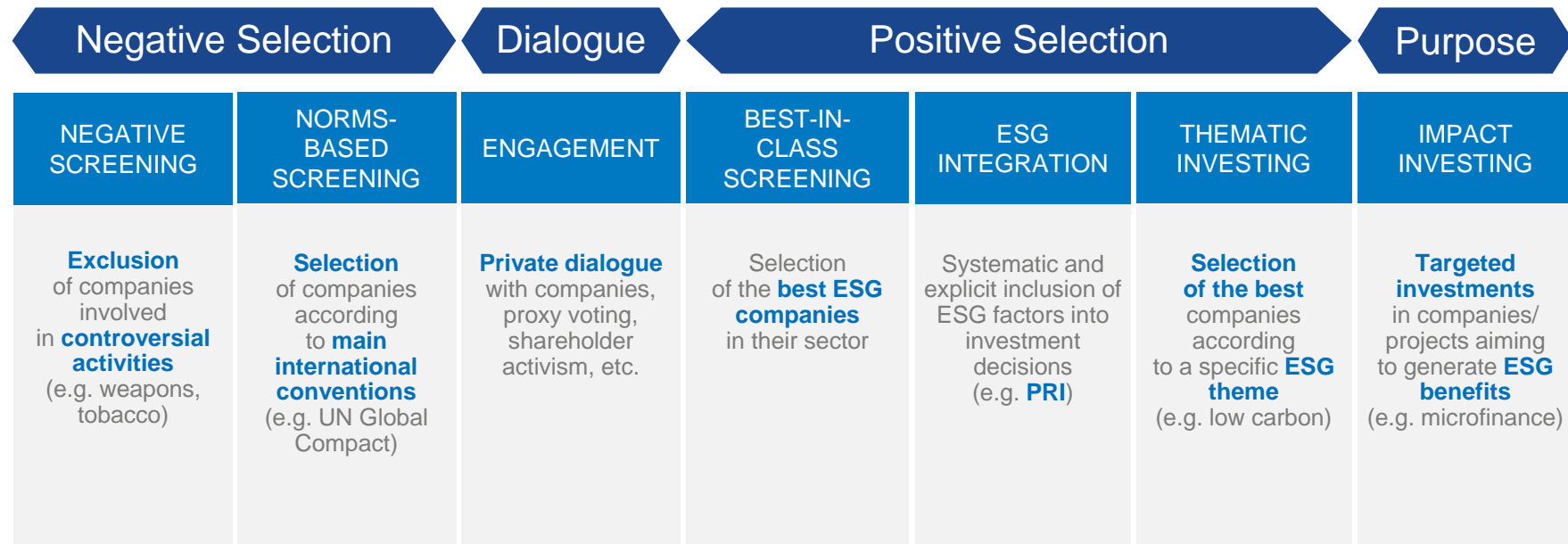
Blending ESG with Smart Beta

Conclusion

Introduction to ESG

Definitions

- **Sustainable and Responsible Investing** is the **systematic** consideration of Environmental, Social and Governance (ESG) issues when analyzing companies and making investment decisions
- Sustainable investing covers many different kind of approaches



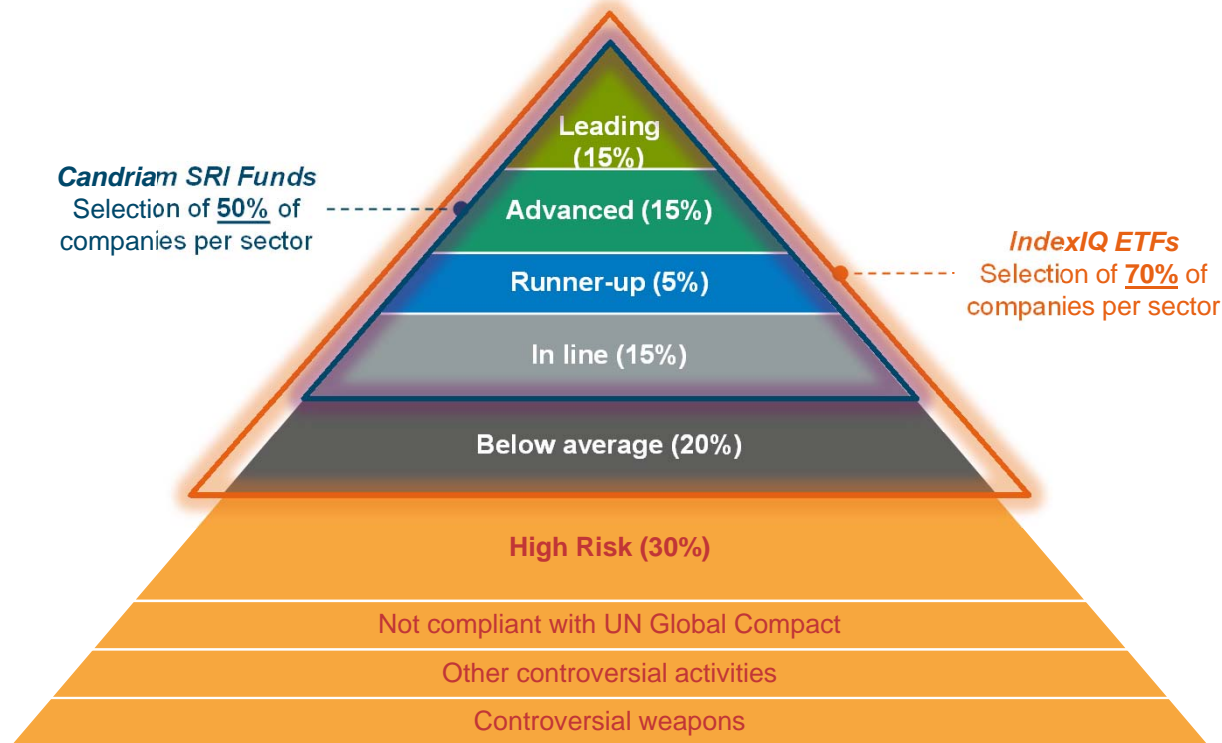
Introduction to ESG

Broad and flexible SRI offering



Best-in-Class analysis

Ranking of companies by sustainability



ESG score
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Introduction to ESG

Smart Beta vs Market-Cap investing

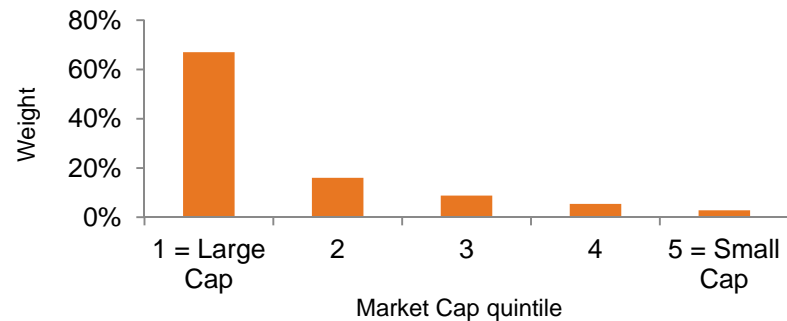
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Smart Beta vs Market-Cap investing

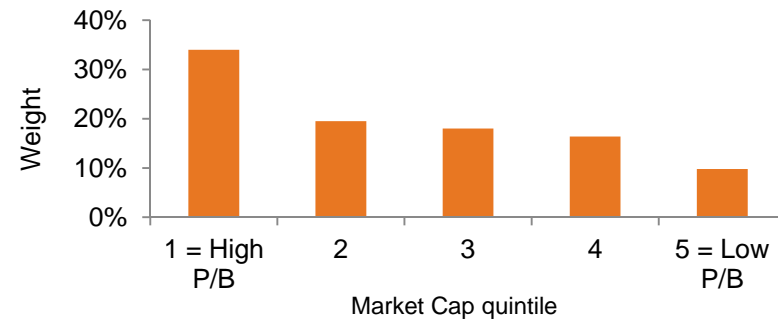
Characteristics of Market-Cap weighted indices

Large Cap concentration



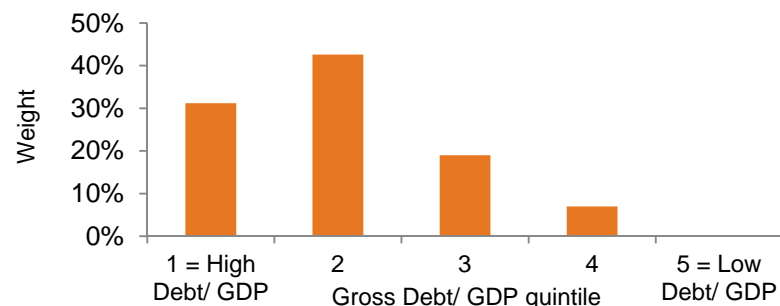
Sources: MSCI, Bloomberg. MSCI World as at end of July 2018.

Overweight expensive stocks



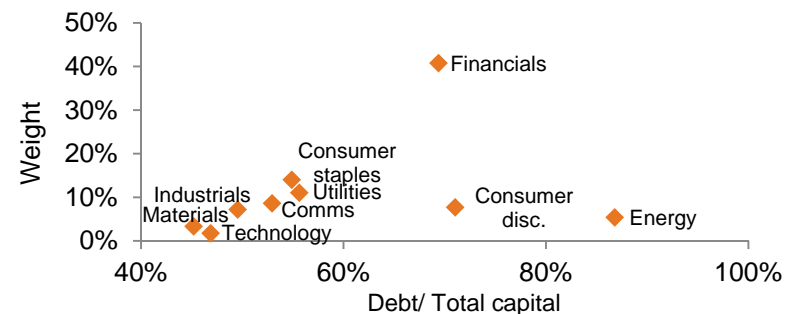
Sources: MSCI, Bloomberg. MSCI AC World as at end of July 2018.

European government bonds



Sources: ICE BofAML, Bloomberg. ICE BofAML Euro Government index as at the end of July 2018.

European credits

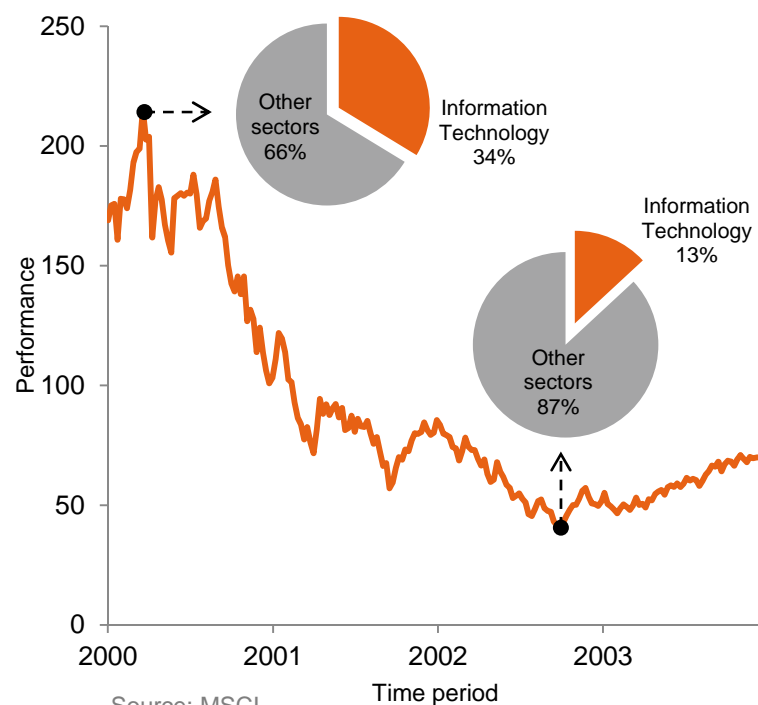


Sources: ICE BofAML, Bloomberg. ICE BofAML Euro Corporate index as at the end of July 2018.

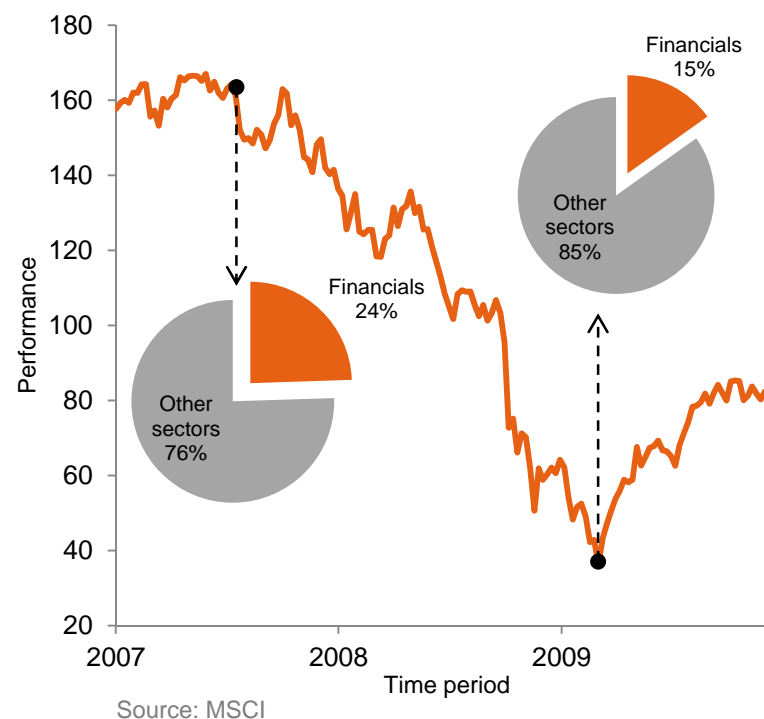
Smart Beta vs Market-Cap investing

Characteristics of Market-Cap weighted indices

IT sector

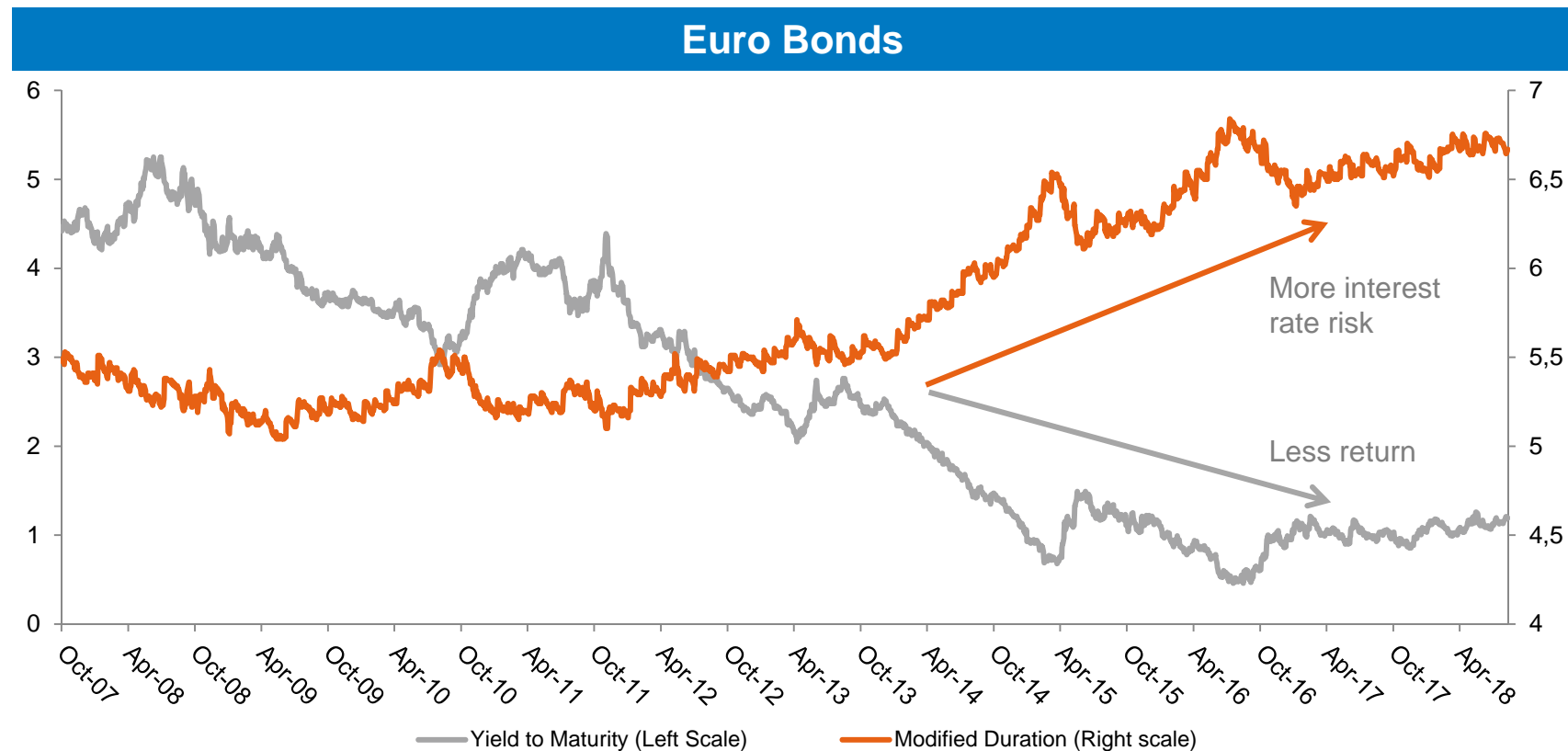


Financials sector



Smart Beta vs Market-Cap investing

Characteristics of Market-Cap weighted indices



Sources: iBoxx, Bloomberg. iBoxx Euro Overall as at 3 September 2018.

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Smart Beta vs Market-Cap investing

Characteristics of Market-Cap weighted indices

Investing in market-cap
weighted indices

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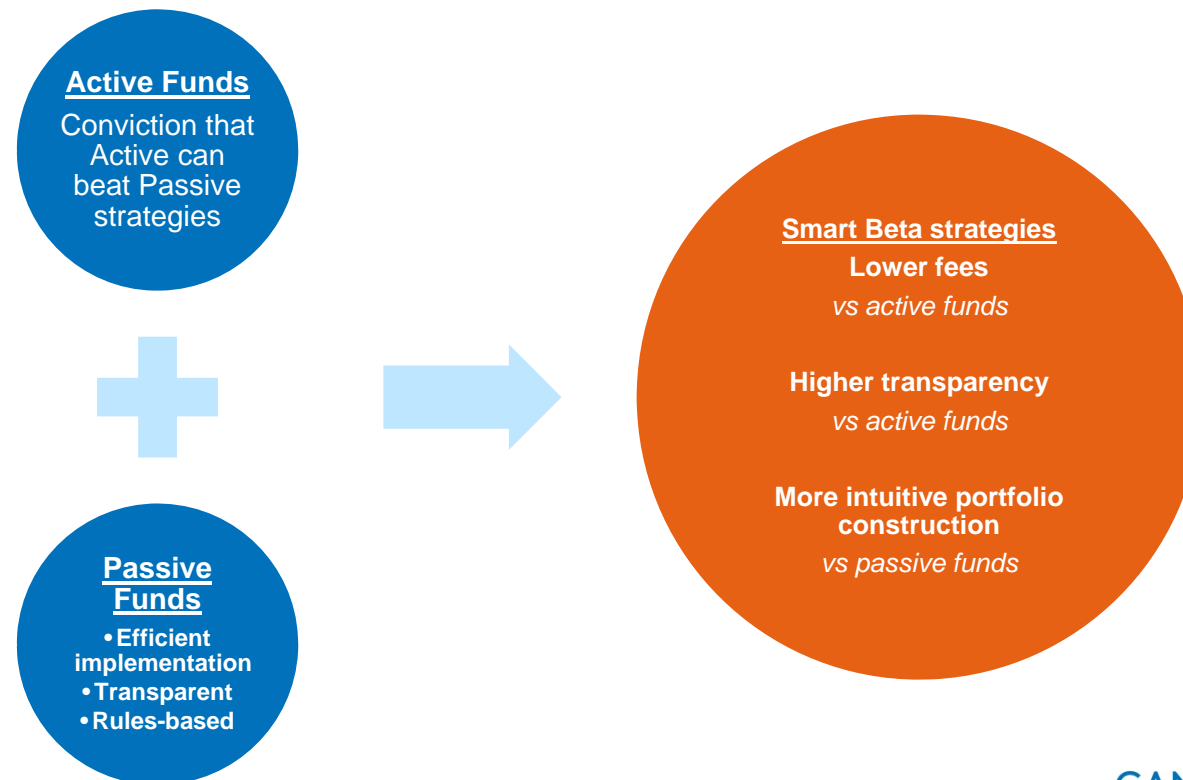
Active decision



Blending ESG with Smart Beta investing

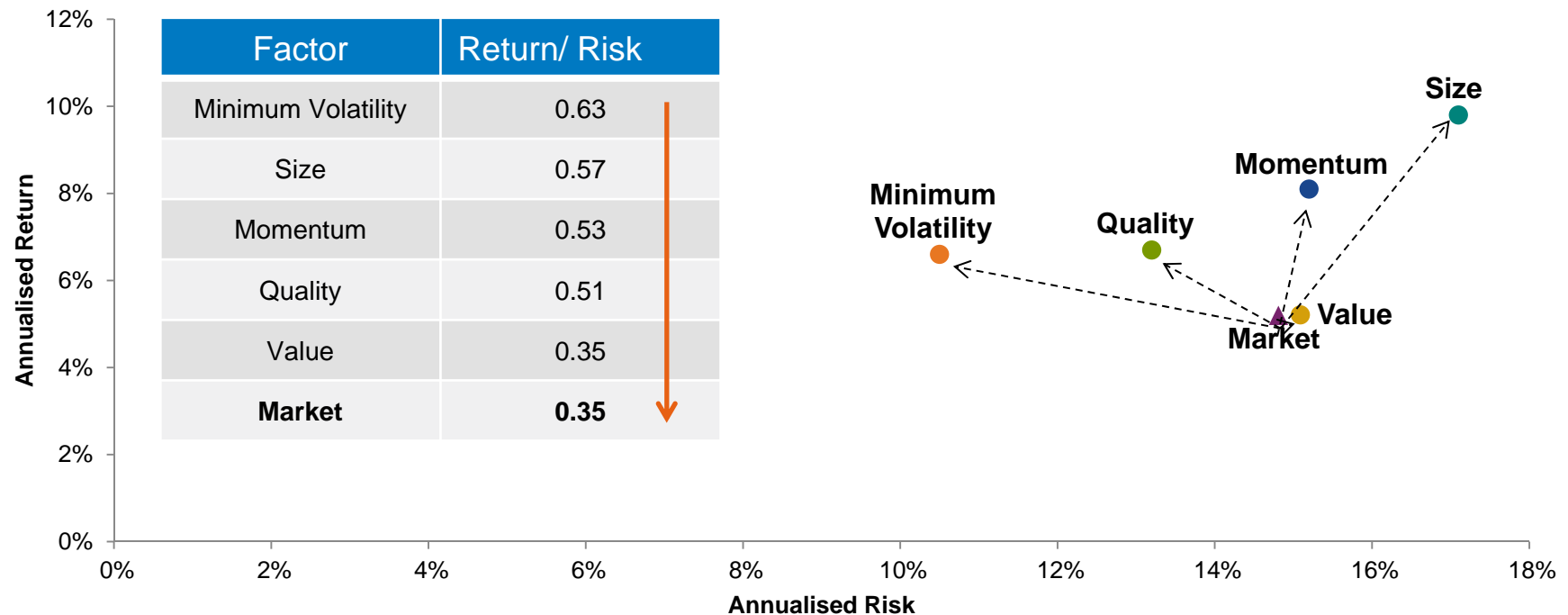
Benefits of Smart Beta strategies

Smart Beta strategies are suitable for both passive and active investors



Smart Beta vs Market-Cap investing

Style factor returns



Sources: MSCI, Bloomberg. Data from 12/1998 up to and including 08/2018. MSCI World Net Total Return USD index, MSCI World Minimum Volatility Net Total Return USD index, MSCI World Momentum Net Total Return USD index., MSCI World Value Net Total Return USD index, MSCI World Small Cap Net Total Return USD index, MSCI World Quality Net Total Return USD Net Total Return index, MSCI World Diversified Multi-Factor USD Net Total Return Index.

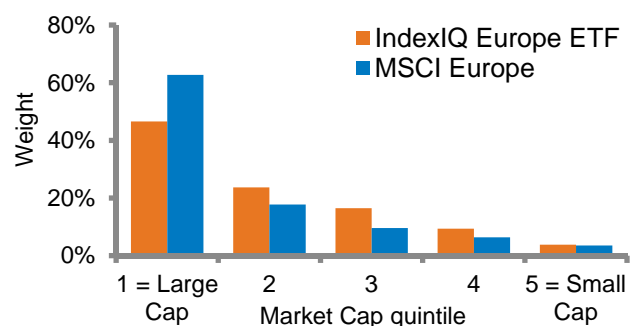
Smart Beta vs Market-Cap investing

Smart Beta has advantages

1

More Diversified Portfolio

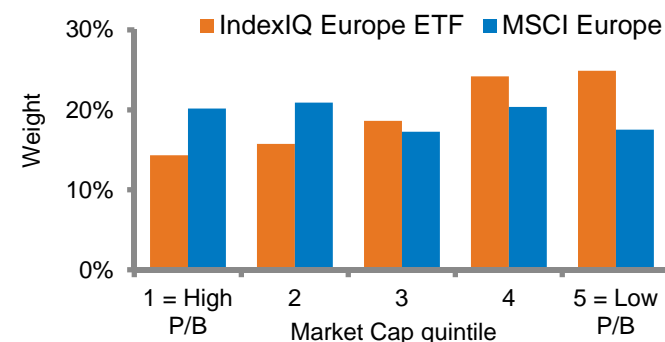
Less large cap bias



2

Less Expensive Portfolio

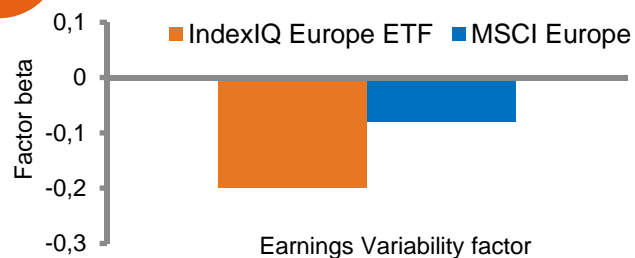
Exposure to undervalued companies



3

More Stable Portfolio

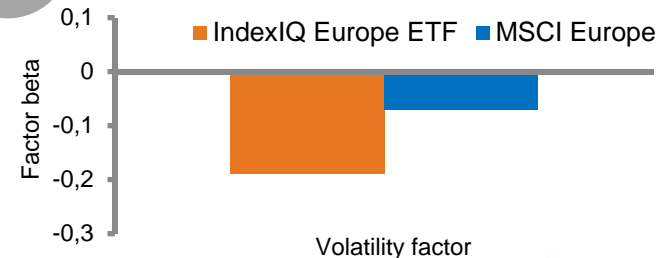
Exposure to quality companies



4

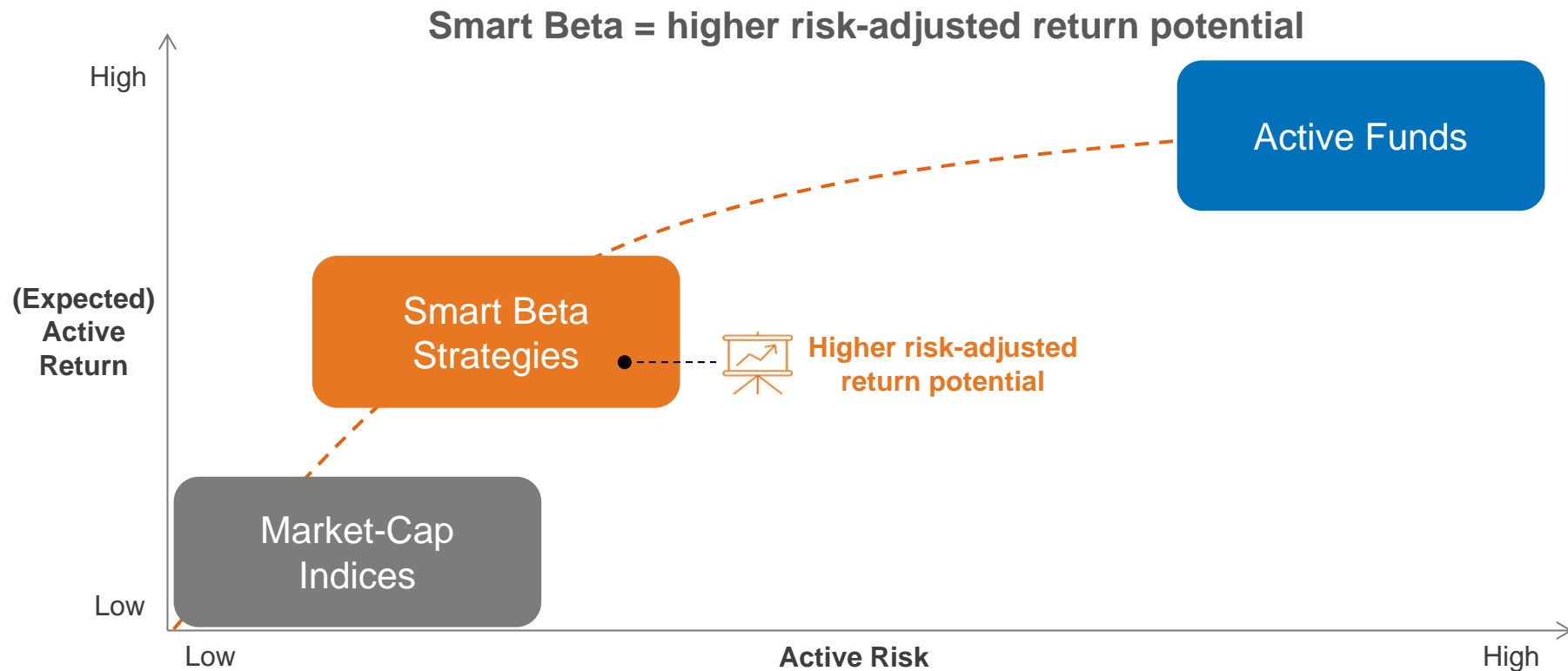
Safer Portfolio

Exposure to low-volatility companies



Smart Beta vs Market-Cap investing

Risk-Return profile





Introduction to ESG

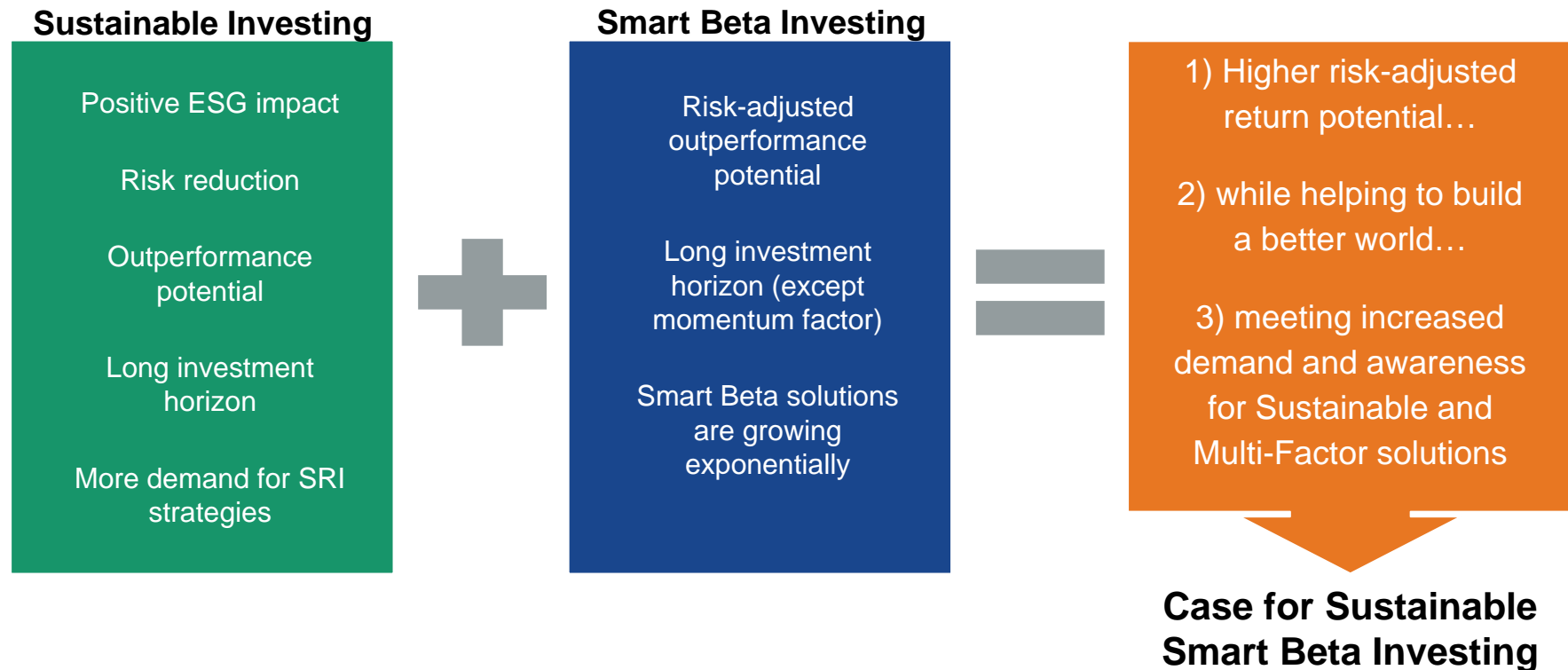
Smart Beta vs Market-Cap investing

Blending ESG with Smart Beta

Conclusion

Blending ESG with Smart Beta

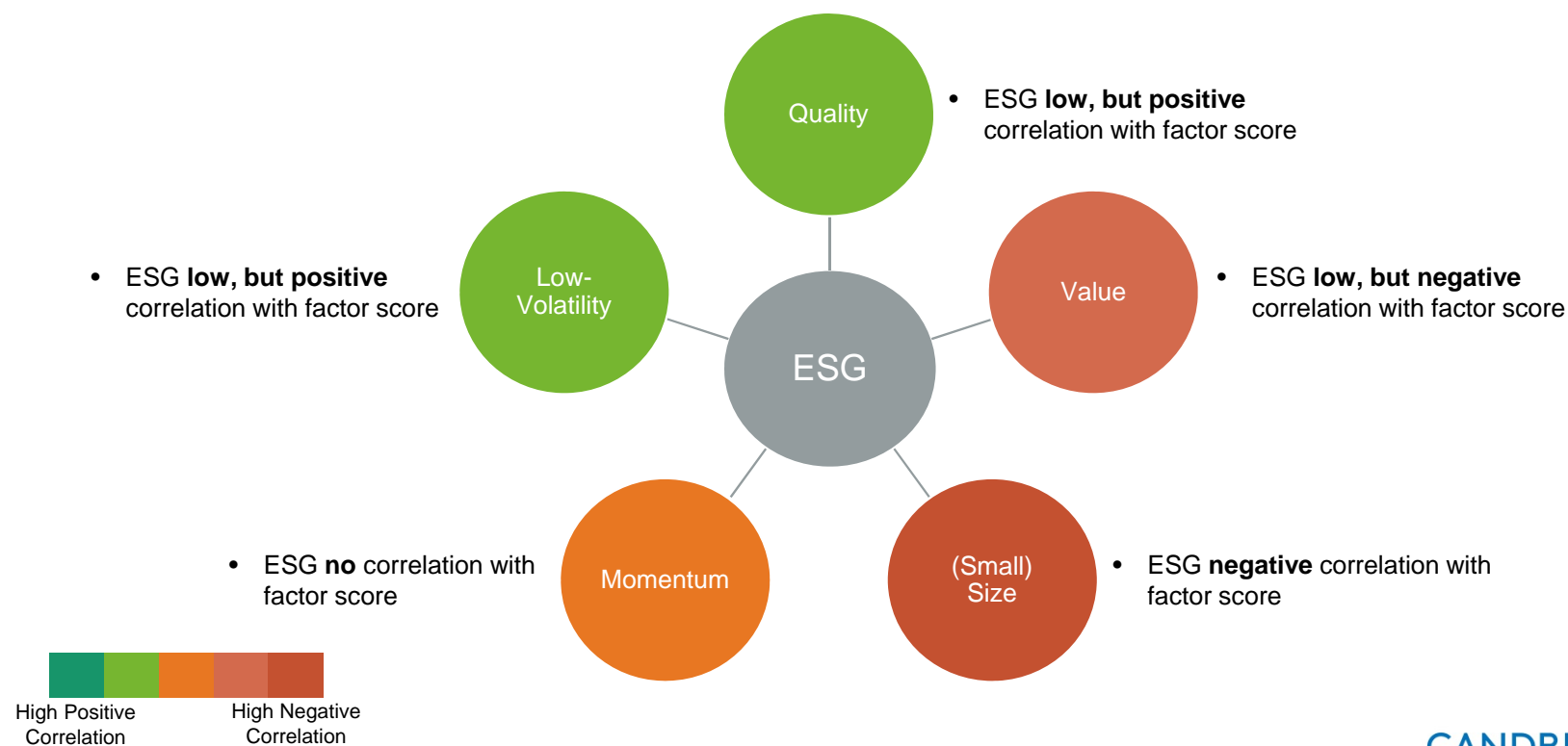
Sustainable and Smart Beta Investing combined



Blending ESG with Smart Beta

Which style factors work well with ESG

ESG combined with Factors provide diversification benefits



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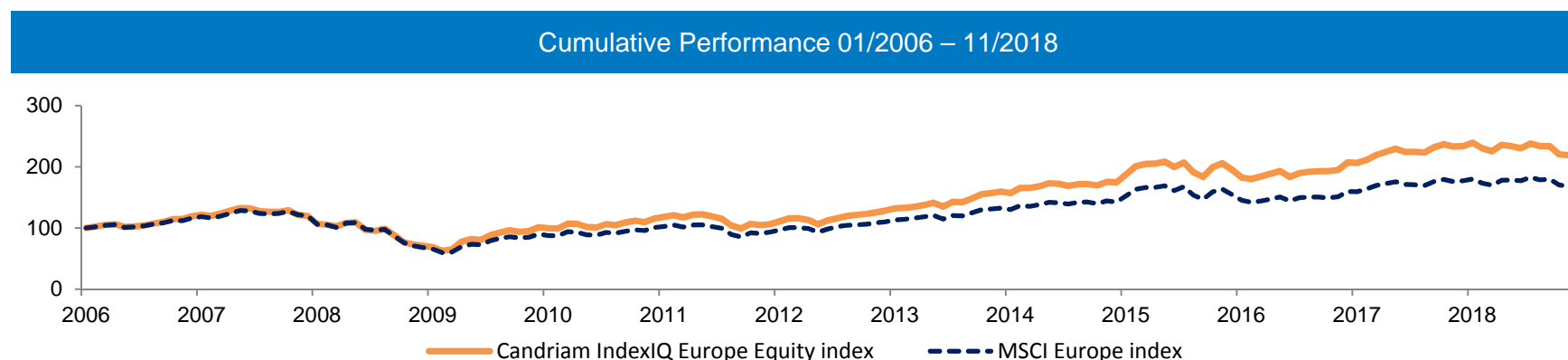
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Case study – Candriam IndexIQ Europe Equity

Blending ESG with Smart Beta

Financial performance Candriam IndexIQ Europe Equity index



01/2006 - 11/2018	Candriam IndexIQ Europe Equity index	MSCI Europe index
Gross Return		
Cumulative Total Return	119.0%	68.7%
Annualized Return	6.3%	4.2%
Risk		
Tracking Error (ann.)	2.3%	
Volatility (ann.)	14.8%	14.2%
Maximum Drawdown of Excess Return	5.9%	
Beta	1.03	
Ratios		
Sharpe Ratio	0.43	0.29

Sources: Bloomberg. Data as at 30.11.2018. Backtested data from 01/2006 to 12/2015, live data thereafter. Gross total return in Euro.

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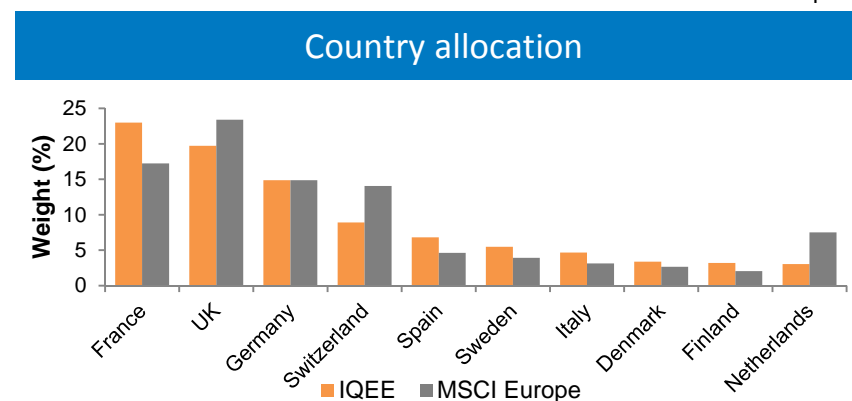
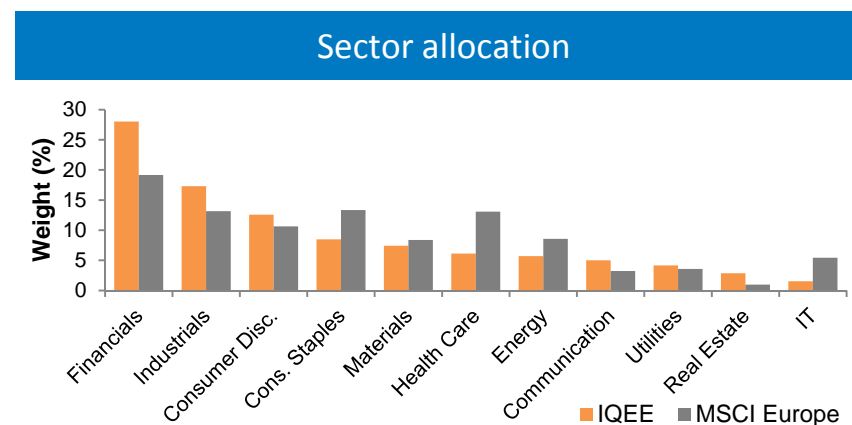
Blending ESG with Smart Beta

Characteristics IndexIQ Europe Equity ETF

Portfolio characteristics			
		IQEE	MSCI Europe
Holdings	# of securities	283	445
	Top 10 Holdings	15.3%	18.2%
	Dividend Yield	3.91%	3.50%
Valuation	Price/ Earnings	14.0	15.9
	Price/ Cash Flow	9.7	12.8
	EV/ Sales	1.2	1.5
Profitability	ROE	11.6%	12.3%
Volatility	12M SD (ann.)	9.9%	10.4%
	Beta	0.98	1.00

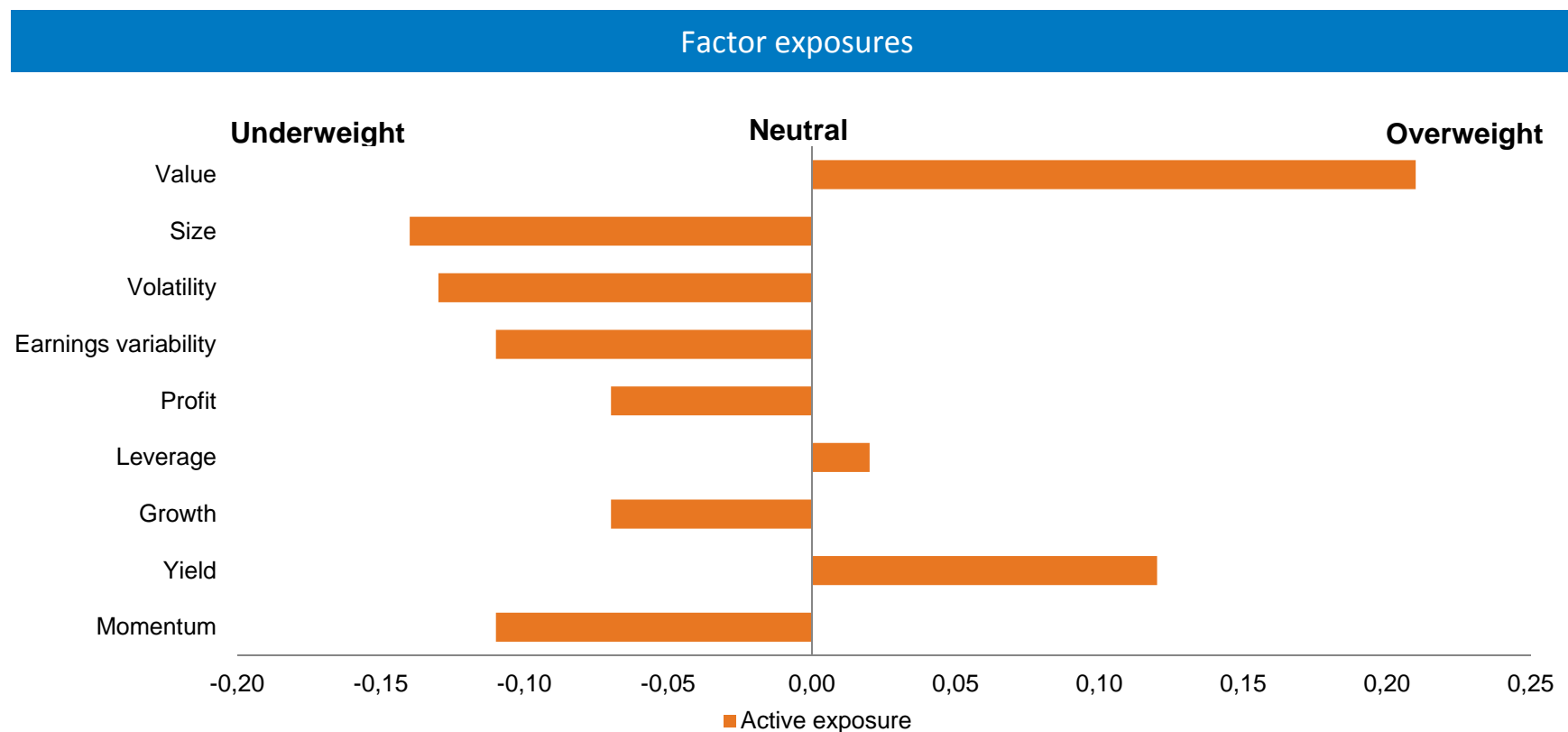
Source: Bloomberg. Holdings data as at 28.09.2018.

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Blending ESG with Smart Beta

Active factor exposure IndexIQ Europe Equity ETF

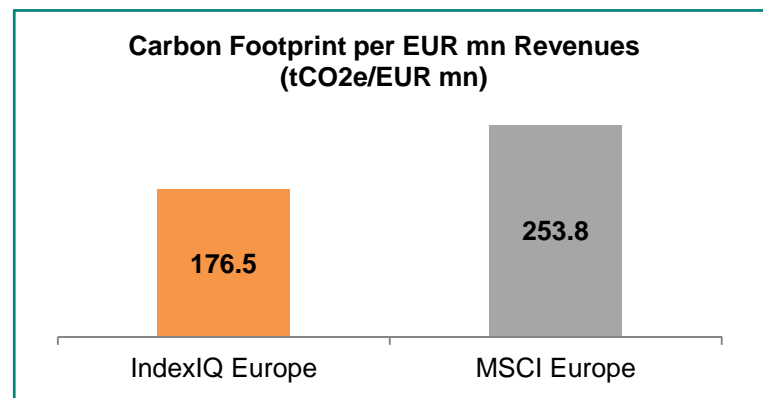


Source: Bloomberg. Data as at 28.09.2018. IndexIQ Europe ETF vs MSCI Europe.

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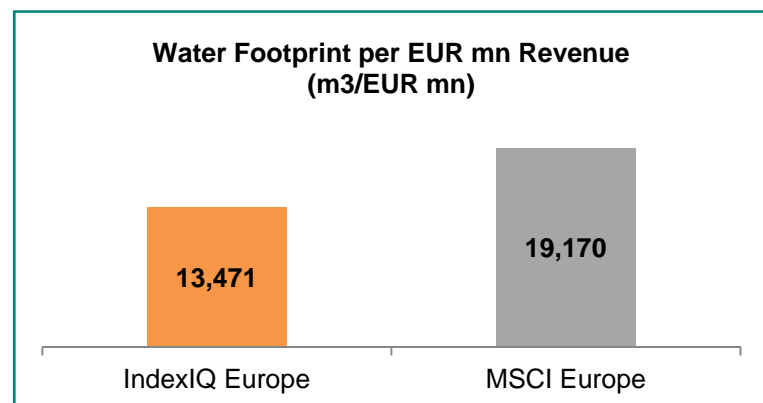
Blending ESG with Smart Beta

Impact Indicators IndexIQ Europe Equity ETF



Carbon Intensity (Scope 1 and 2)

The carbon footprint measures the quantity of greenhouse gas emissions in CO₂ equivalent (CO₂ eq.) generated by a company or organisation's activities. The carbon footprint can also be calculated for the investments making up a portfolio.



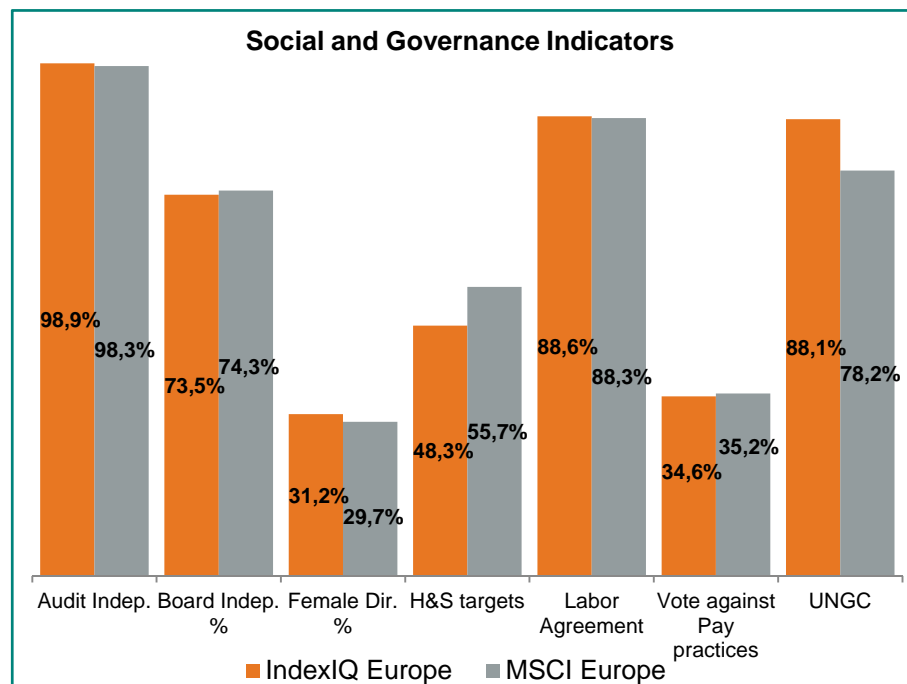
Water Intensity

The water footprint aims to measure water consumption by portfolio companies. Thus, by combining the different companies' water footprint, we determine the portfolio's water footprint. Water is becoming an increasingly scarce resource and companies have a responsibility to maximise their efforts to reduce their consumption and use as much recycled water as possible in their own production process.

Sources: Candriam, Trucost, MSCI. Data as at 31.03.2018.

Blending ESG with Smart Beta

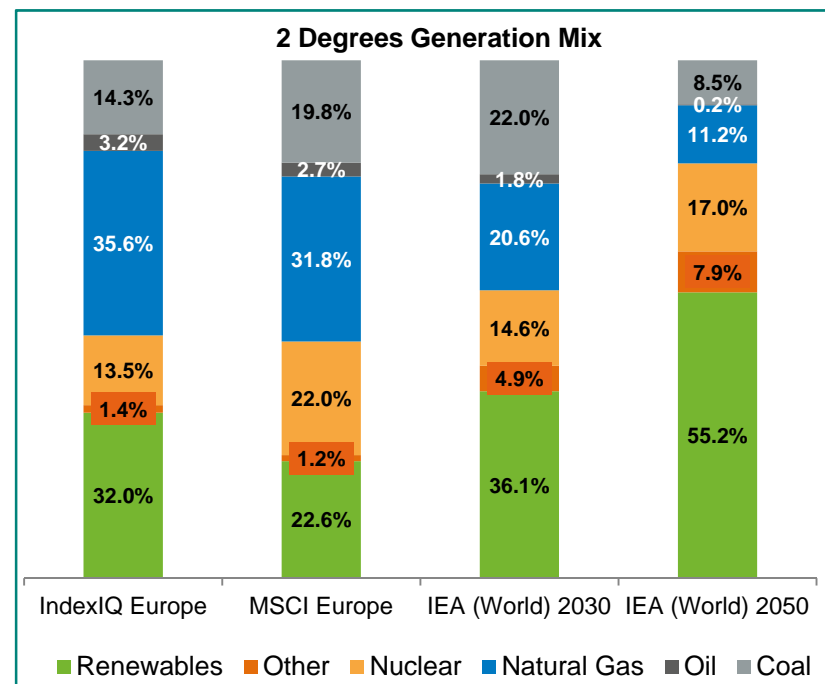
Impact Indicators IndexIQ Europe Equity ETF



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Coal: **-28%**

Nuclear: **-39%**

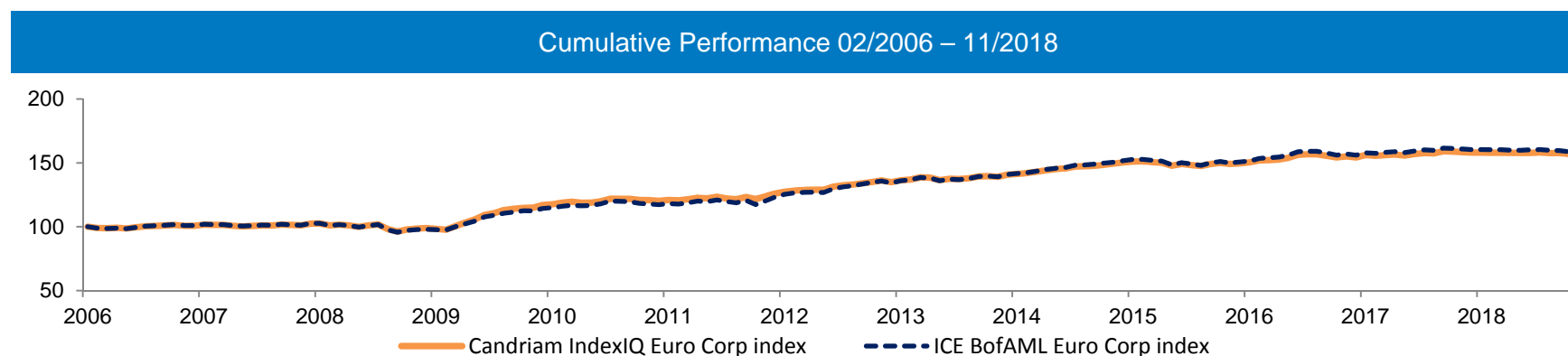
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Case study – Candriam IndexIQ Euro Corporate

Blending ESG with Smart Beta

Financial performance Candriam IndexIQ Euro Corp index



02/2006 - 11/2018	Candriam IndexIQ Euro Corp index	ICE BofAML Euro Corp index
Gross Return		
Cumulative Total Return	57.0%	58.7%
Annualized Return	3.6%	3.7%
Risk		
Tracking Error (ann.)	0.8%	
Volatility (ann.)	3.1%	3.5%
Maximum Drawdown of Excess Return	6.5%	
Beta	0.87	
Ratios		
Sharpe Ratio	1.15	1.06

Sources: Bloomberg. Data as at 30.11.2018. Backtested data from 01/2006 to 12/2015, live data thereafter. Gross total return in Euro.

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Blending ESG with Smart Beta

Characteristics IndexIQ Euro Corporate ETF

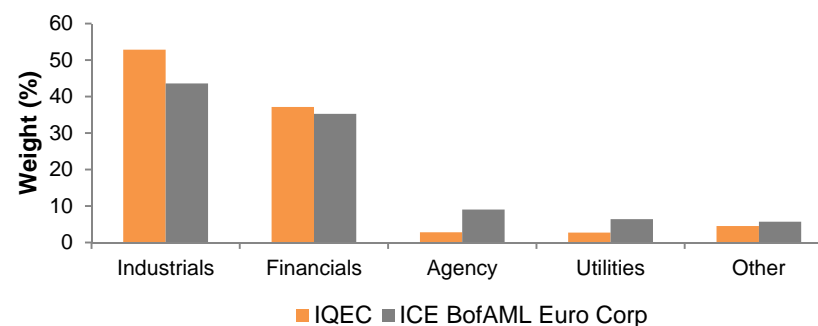
Portfolio characteristics

		IQEC	ICE BofAML Euro Corp
Holdings	# of bonds	268	2,894
	Top 10 Holdings	9.1%	1.4%
	Bond max. weight	1.39%	0.17%
General	Coupon	1.7	2.0
	Quality	A-	A-
	Time to Maturity	5.8	7.5
Duration	Modified Duration	4.1	5.1
Yield	Yield to Maturity	0.89%	1.12%
Spread	OAS (bps)	90.9	111.7
Volatility	12M SD (ann.)	1.2%	1.4%

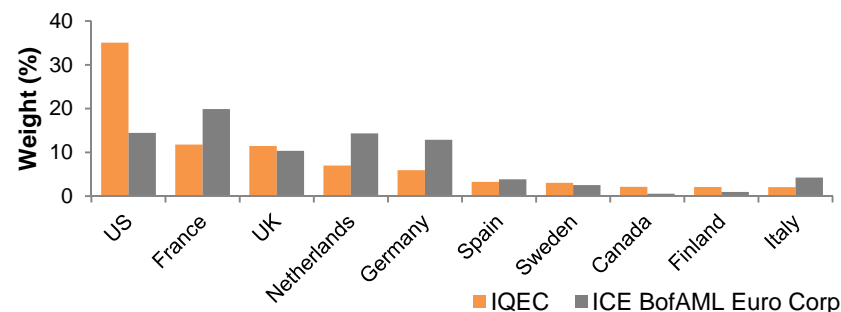
Source: Bloomberg. Holdings data as at 28.09.2018.

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Sector allocation



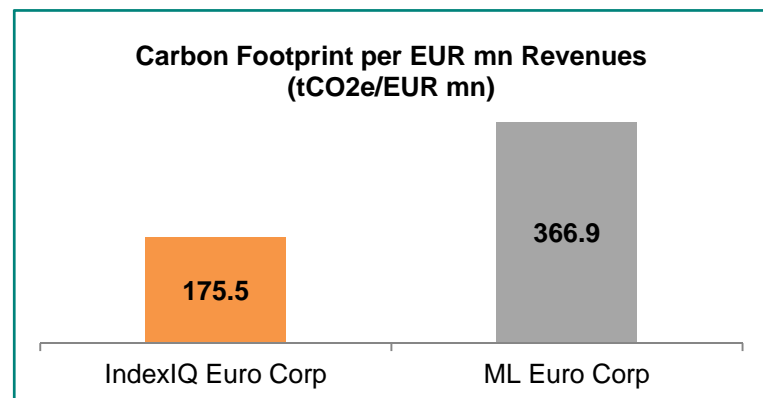
Country allocation



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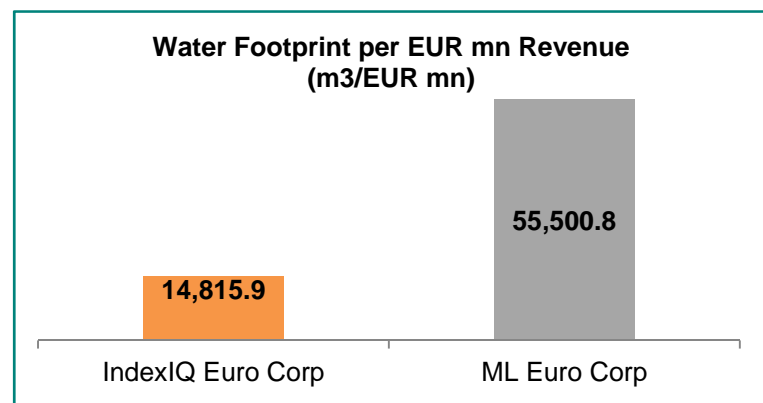
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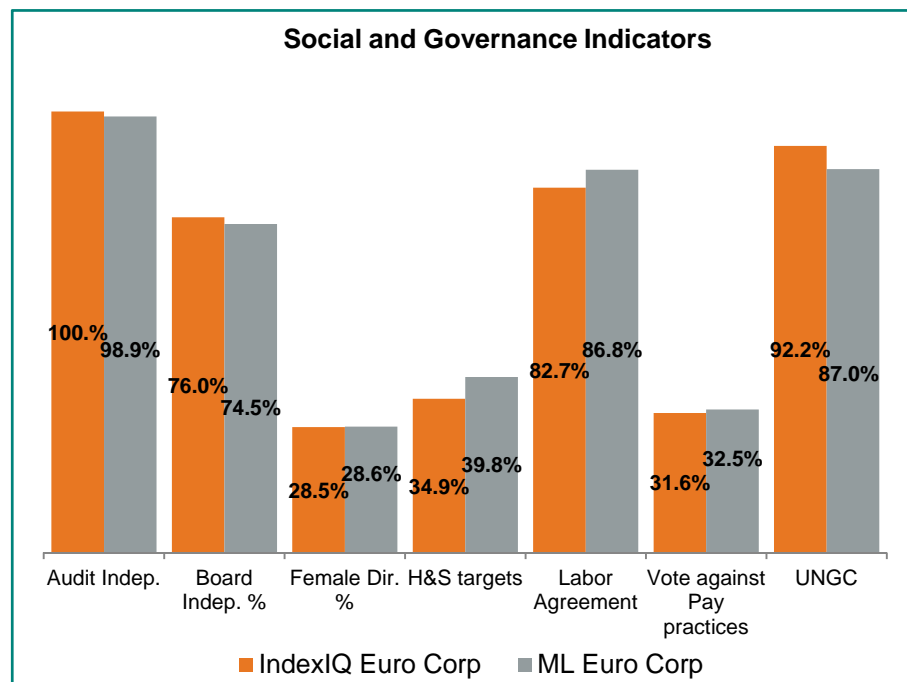
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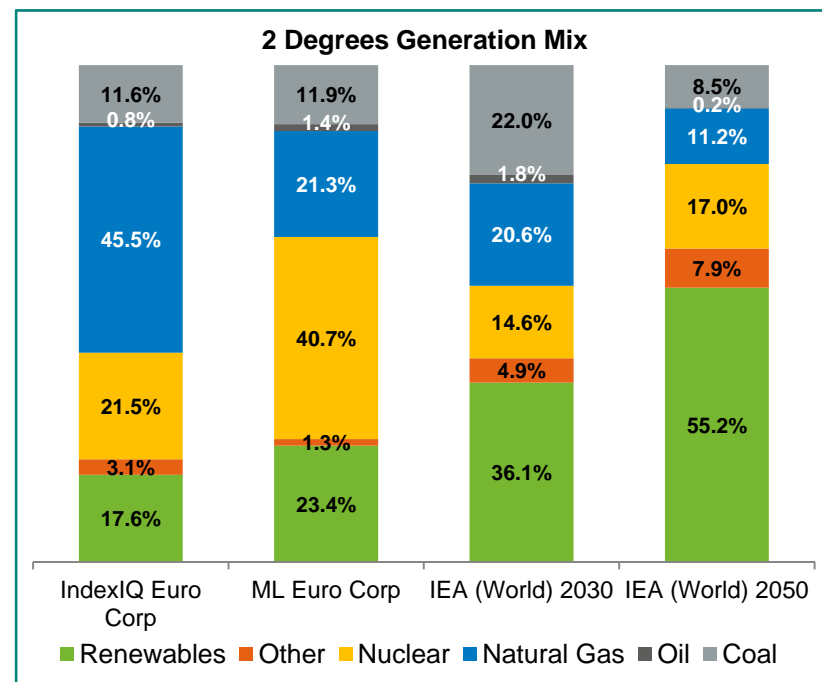
Impact Indicators IndexIQ Euro Corporate ETF



Sources: Candriam, Trucost, MSCI. Data as at 31.03.2018.

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Coal: **-2%**
Nuclear: **-47%**

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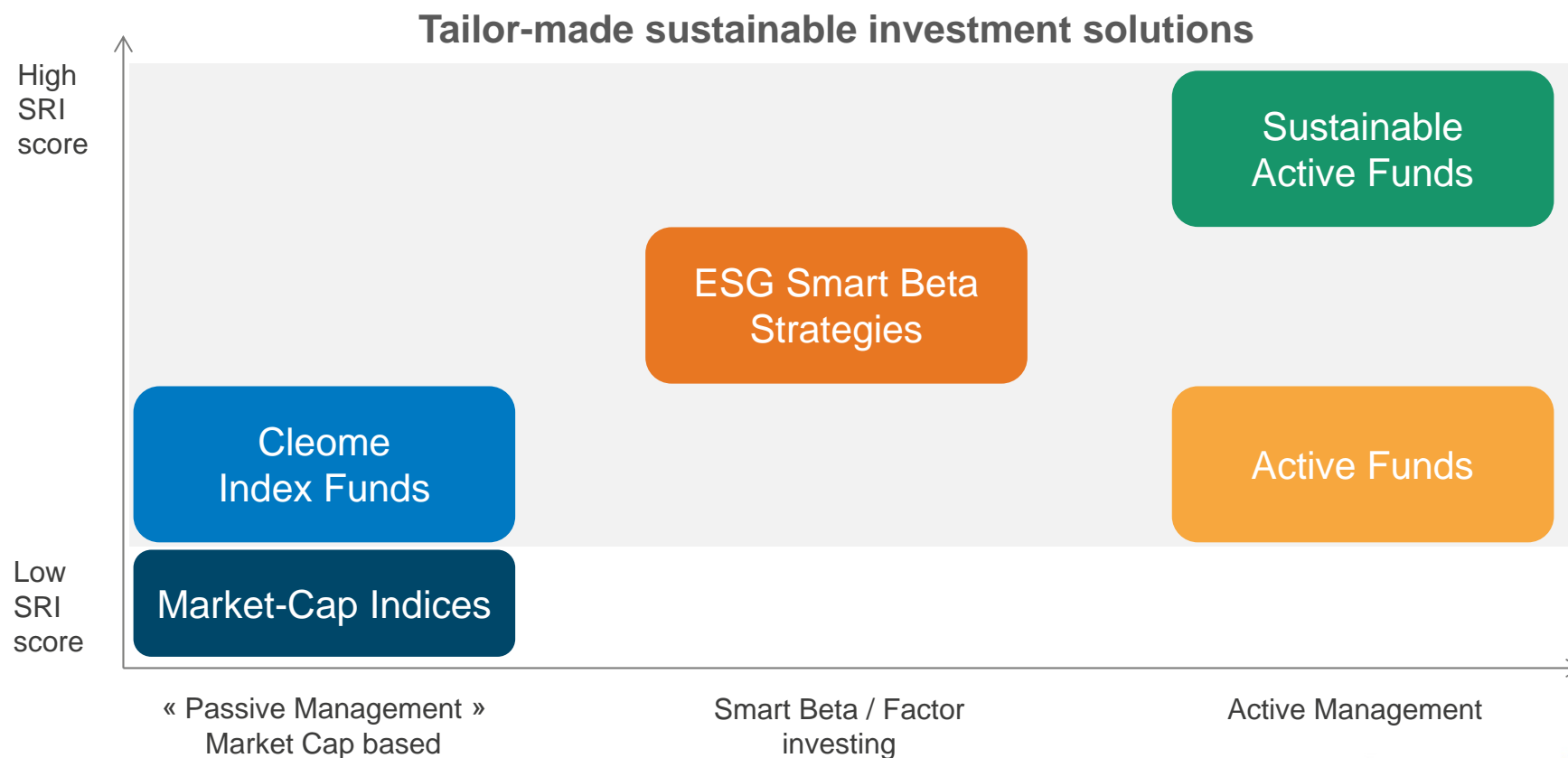
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Conclusion

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Factors and ESG combined in Fixed Income ETFs



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