# MSCI Europe Market Neutral Barra Momentum Index (EUR)

The **MSCI Europe Market Neutral Barra Momentum Index** targets high exposure to the momentum factor across European developed markets, and low exposure to all other factors including country, industry and other style factors. The index includes long and short equities (with gross leverage of up to 200%) and is derived from the market cap weighted MSCI Europe Index, its parent index, which includes large and mid cap stocks across the developed market countries in Europe\*.

Cumulative Performance - Total Returns (Nov 2003 - Dec 2013)

**MSCI** 



Annu	Annual Performance (%)					
Year	MSCI Europe (EUR)	MSCI Europe Market Neutral Barra Momentum (EUR)	Barra Momentum Factor			
2004	12.65	11.19	7.58			
2005	26.68	8.69	4.82			
2006	20.18	6.39	6.64			
2007	3.17	-0.38	6.47			
2008	-43.29	0.48	0.28			
2009	32.55	-9.50	-11.32			
2010	11.75	7.29	10.15			
2011	-7.51	11.42	8.43			
2012	18.09	7.66	4.38			

Index Performance—Net Returns (%) (Dec 31, 2013)

					Annualized	
Index	1 Mo	3 Mo	1 Yr	3 Yr	5 Yr	Since 11/28/03
MSCI Europe Market Neutral Barra Momentum (EUR)	0.10	1.62	7.19	8.75	2.96	4.49
Barra Momentum Factor	0.02	2.12	6.72	7.24	2.22	4.12
MSCI Europe (EUR)	2.09	5.66	29.39	10.76	2.11	6.58

### Index Risk and Return Characteristics-Net Returns (Nov 28, 2003 - Dec 31, 2013)

		Tracking	Annualized S		Std Dev <sup>1</sup>		Sharpe Ratio <sup>1,2</sup>	
Index	Beta	Tracking Error	3 yr	5 yr	Since 11/28/03	3 yr	5 yr	Since 11/28/03
MSCI Europe Market Neutral Barra Momentum (EUR)	-0.05	16.48%	5.40	7.43	6.29	1.50	0.25	0.40
Barra Momentum Factor	-0.07	15.97%	3.39	4.88	3.73	1.95	0.22	0.58
MSCI Europe (EUR)	1.00	_	12.07	17.42	14.53	0.84	0.06	0.32
			<sup>1</sup> Based on monthly total return data		<sup>2</sup> Based on	BBA EUR EURI	BOR 1M	

The MSCI Europe Market Neutral Barra Momentum Index was launched on June 20, 2013. Data prior to the initial calculation date is back-tested data (i.e., calculations of how the index might have performed over that time period had the index existed).

\* Developed Markets countries in Europe include: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK.

## December 31, 2013

# MSCI Europe Market Neutral Barra Momentum Index (EUR)

#### Index Characterisitics

Index Characterisitics			Top 10 Constituents: MSCI Europe MN Barra Momentum (EUR) Long				
	MSCI Europe MN Barra Momentum	MSCI Europe MN Barra Momentum		Country	Mkt Cap (EUR Millions)	Security Weigl (%)	
	(EUR) Long	(EUR) Short	Royal Dutch Shell B	UK	51,681.2	2.63%	
Number of Constituents	140	144	Ferrovial	Spain	50,698.4	2.58%	
Mkt Cap (EUR Mill	lions)		SSE	UK	42,794.7	2.18%	
Index	1,962.31	1,903.57	Aberdeen Asset Mgmt	UK	40,220.6	2.05%	
Average	14.02	13.22	Diageo	UK	40,120.2	2.04%	
Median	12.59	11.41	Coloplast B	Denmark	35,107.1	1.79%	
Largest	51.68	44.35	Sanofi	France	33,635.4	1.71%	
Smallest	0.11	1.02	Eni	Italy	31,977.0	1.63%	
			Seadrill Ltd	Norway	30,672.6	1.56%	

	Country	Mkt Cap (EUR Millions)	Security Weight (%)
Royal Dutch Shell B	UK	51,681.2	2.63%
Ferrovial	Spain	50,698.4	2.58%
SSE	UK	42,794.7	2.18%
Aberdeen Asset Mgmt	UK	40,220.6	2.05%
Diageo	UK	40,120.2	2.04%
Coloplast B	Denmark	35,107.1	1.79%
Sanofi	France	33,635.4	1.71%
Eni	Italy	31,977.0	1.63%
Seadrill Ltd	Norway	30,672.6	1.56%
Syngenta	Switzerland	28,910.6	1.47%
	Total	385,817.9	19.66%

Top 10 Constituents: MSCI Europe MN Barra Momentum (EUR) Short					
	Country	Mkt Cap (EUR Millions)	Security Weight (%)		
BG Group	UK	44,353.3	2.33%		
Banco Popular Espanol	Spain	40,299.2	2.12%		
Saipem Ord	Italy	38,243.8	2.01%		
Telefonica	Spain	35,205.0	1.85%		
Shire	UK	30,497.2	1.60%		
Air Liquide	France	29,651.9	1.56%		
Danone	France	29,607.4	1.56%		
Vinci	France	29,411.2	1.55%		
GlaxoSmithKline	UK	28,549.5	1.50%		
BAT	UK	27,646.3	1.45%		
	Total	333,464.9	17.52%		

#### Index Sector Weights (%)

	MSCI Europe Market Neutral Barra Momentum (EUR) Long	MSCI Europe Market Neutral Barra Momentum (EUR) Short
Financials	20.85	16.93
Con Staples	10.02	11.21
Health Care	7.01	8.95
Info Tech	4.83	1.78
Telecom Srvcs	4.18	7.03
Cons Discr	14.99	7.97
Utilities	5.93	6.13
Industrials	16.77	19.44
Energy	7.84	9.76
Materials	7.58	10.80

#### Index Country Weights (%)

	MSCI Europe Market Neutral Barra Momentum (EUR) Long	MSCI Europe Market Neutral Barra Momentum (EUR) Short
UK	32.72	29.67
France	12.47	15.04
Germany	10.60	12.00
Switzerland	9.23	9.19
Spain	8.60	6.59
Italy	4.65	7.75
Other	21.73	19.77

#### Index Methodology

The MSCI Market Neutral Barra Factor Indexes aim to track the performance of a specific "target" factor (the benchmark) such as momentum or volatility with high exposure to this target factor and low exposure to all non-target factors. They are comprised of long and short stocks, with gross leverage up to 200% (100% long and 100% short). They are constructed by optimizing an MSCI parent index in conjunction with the relevant Barra Equity Model with specific optimization constraints to:

- 1) control the levels of exposure to all non-target factors; and
- 2) achieve a balance between the objectives of index replicability and investability with moderate index turnover.

The indexes aim to achieve 1 or -1 standard deviation of exposure to the target factor. Non-target style factors are limited to ±0.01 standard deviation of exposure, industry factor and country factor exposures are limited to ±3%. The indexes are comprised of a maximum of 300 constituents, with a maximum constituent weight of ±3%. The indexes are rebalanced monthly with a one-way turnover of 10% (5% for long constituents and 5% for short constituents) and a shorting cost threshold of 100bps.

#### msci.com | clientservice@msci.com

#### About MSCI

MSCI Inc. is a leading provider of investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indexes, portfolio risk and performance analytics, and governance tools.

The company's flagship product offerings are: the MSCI indexes with approximately USD 7.5 trillion estimated to be benchmarked to them on a worldwide basis'; Barra multi-asset class factor models, portfolio risk and performance analytics; RiskMetrics multi-asset class market and credit risk analytics; IPD real estate information, indexes and analytics; MSCI ESG (environmental, social and governance) Research screening, analysis and ratings; ISS corporate governance research, data and outsourced proxy voting and reporting services; and FEA valuation models and risk management software for the energy and commodities markets. MSCI is headquartered in New York, with research and commercial offices around the world

The information contained herein (the "Information") may not be reproduced or redisseminated in whole or in part without prior written permission from MSCI. The Information may not be used to verify or correct other data, to create indexes, risk models, or analytics, or in connection with issuing, offering, sponsoring, managing or marketing any securities, portfolios, financial products or other investment vehicles. Historical data and analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the Information or MSCI index or other product or sterike constitutes an offer to buy or sell, or a promotion or canonandation of, any security, financial instrument or product or trading strategy. Further, none of the Information as mumes the entire risk of any use it may make or permit to be made of the Information. NONE OF the Information as may make or permit to be made of the Information. NONE OF MSCI INCS OR TOPERDATION GOR COMPLICING OR CONPUTED REVIANY THIRD PARTY INVOLVED IN THE MAKING OR COMPLING OF THE INFORMATION (RACH, AN "MSCI PARTY") MARKES ANY WARRANTES OR REPERSION SOR COMPLIANY OF THE SUBSIDARIES OR TIS SUBSIDARIES OR TIS SUBSIDARIES OR THE ROBECT OR NOTIFIES ANY THIRD PARTY INVOLVED WARRANTES, INCLUDING WARRANTES OF MERCHANTARILITY AND FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING ANY OF THE POREGOING AND OT THE MAXIMUM EXTENT PERMITTED BY LANY. THE POREMATION (RACH, AN "MSCI INDIFFECT SECOLA DAW YOF THE POREGOING AND TO THE MAXIMUM EXTENT PERMITTED BY LANY OF THE POREMATION FAIL ANY OF THE MORE ANY OF THE MORE ANY OF THE MORE ANY OF THE MORE CONTROL TO ANY OF THE MORE ANY OF THE MAXIMUM EXTENT PERMITTED BY LANY OF THE MARKES ANY WARRANTES OR INDIFFECT SECOLA DAW OF THE MORE ANY OF THE MORE PARTIES HAVE ANY LIABILITY REGARDING ANY OF THE INFORMATION FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR ANY OTHER DAMAGES EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited.

<sup>1</sup>As of March 31, 2013, as reported on July 31, 2013 by eVestment, Lipper and Bloomberg