# **Axioma Risk Monitor**

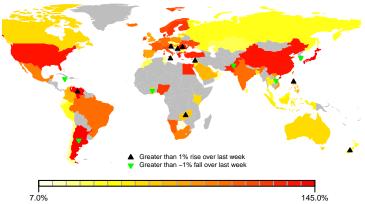
EM4 Edition - 17 January 2019



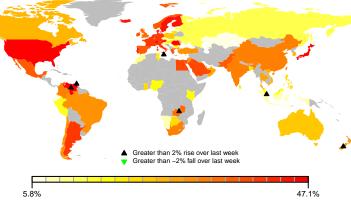
US & Canada: +1 212-991-4500 Europe: +44 (0)20-7856-2424

+852 8203-2790





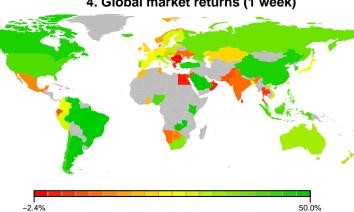




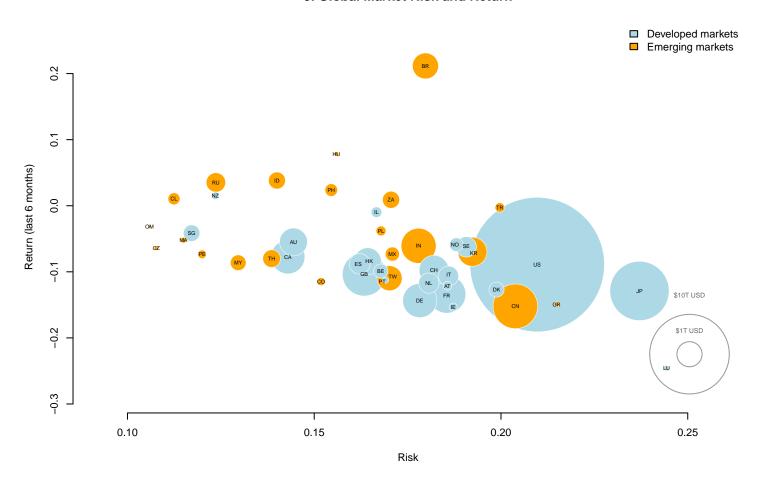
# 3. Global market returns (6 months)



# 4. Global market returns (1 week)



# 5. Global Market Risk and Return

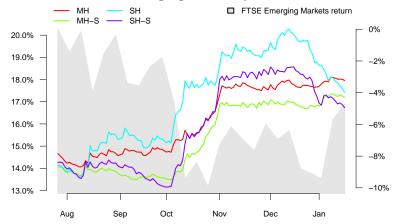




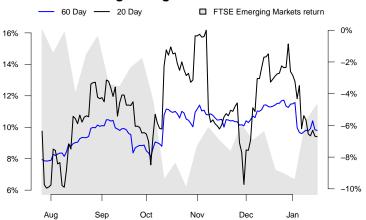
US & Canada: +1 212-991-4500 +44 (0)20-7856-2424

Europe: +852 8203-2790

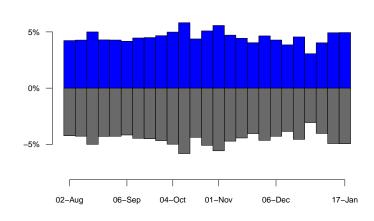
# 6. FTSE Emerging Markets predicted risk



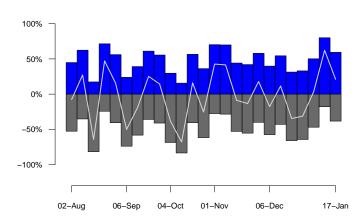
# 7. Rolling average asset correlations



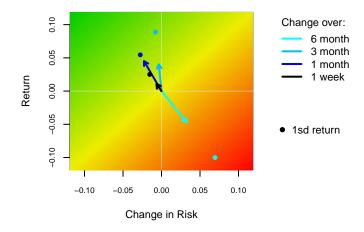
### 8. Weekly asset return dispersion



## 9. Weekly asset return proportion up/down



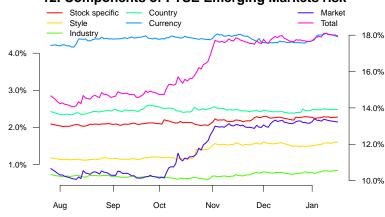
# 10. Risk Watch - FTSE Emerging Markets



# 11. Risk change decomposition

	1 week	1 month	3 months	6 months
Factor level				
Initial risk	18.07	19.69	17.77	14.14
Portfolio composition	0.03	0.12	0.08	-0.16
Stock characteristics	-0.13	-0.27	0.05	0.30
Stock specific volatility	0.00	0.00	0.01	0.05
Factor volatility	-0.40	-1.85	-0.47	3.02
Factor correlations	-0.15	-0.27	-0.03	0.06
Total change	-0.66	-2.27	-0.36	3.27
Final risk	17.41	17.41	17.41	17.41
Stock level				
Initial risk	18.07	19.69	17.77	14.14
Portfolio composition	0.03	0.12	0.08	-0.16
Stock volatility	-0.37	-0.93	-0.20	1.90
Stock correlations	-0.32	-1.47	-0.23	1.53
Total change	-0.66	-2.27	-0.36	3.27
Final risk	17.41	17.41	17.41	17.41

# 12. Components of FTSE Emerging Markets risk

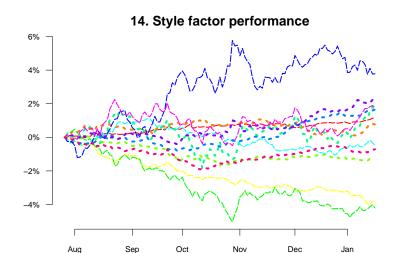


# 13. FTSE Emerging Markets diversification



US & Canada: +1 212-991-4500 +44 (0)20-7856-2424

Europe: Asia: +852 8203-2790



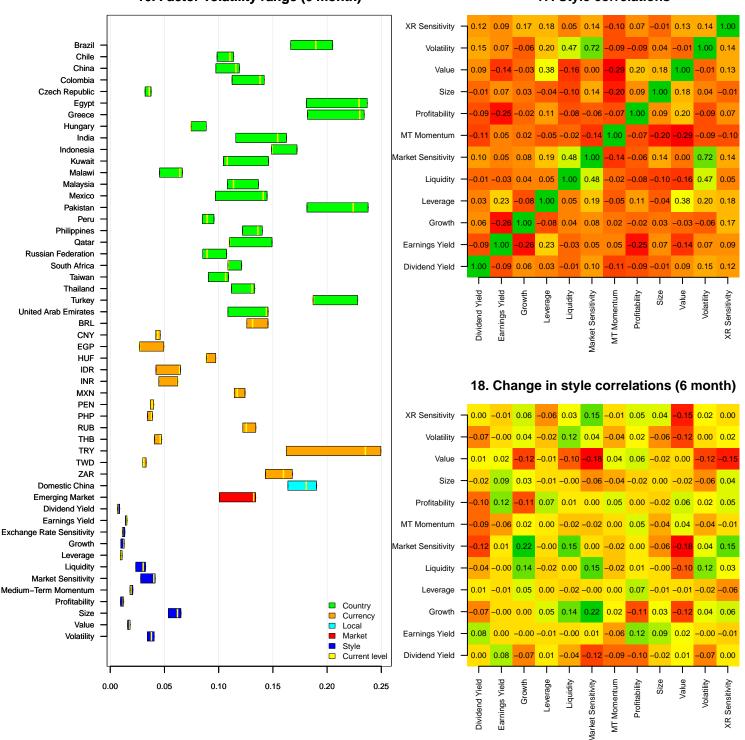
### 15. Style factor returns

	1w	1m	3m	6m
Dividend Yield	0.21	0.31	0.44	1.17
Earnings Yield	0.47	0.62	-0.02	0.76
Growth	-0.22	-0.92	-1.41	-3.85
Leverage	0.07	-0.25	0.30	-1.30
Liquidity	0.14	-0.13	-0.69	-4.21
Market Sensitivity	0.60	1.30	2.49	1.63
MT Momentum	0.07	0.43	-0.70	-0.50
Profitability	0.22	0.45	2.15	1.65
Size	-0.72	-1.44	0.81	3.78
Value	0.22	0.61	2.28	2.29
Volatility	0.32	1.51	1.61	1.81
XR Sensitivity	0.22	-0.06	0.84	-0.71
			-	
Dividend Yield ——	Liquidity		— Size	

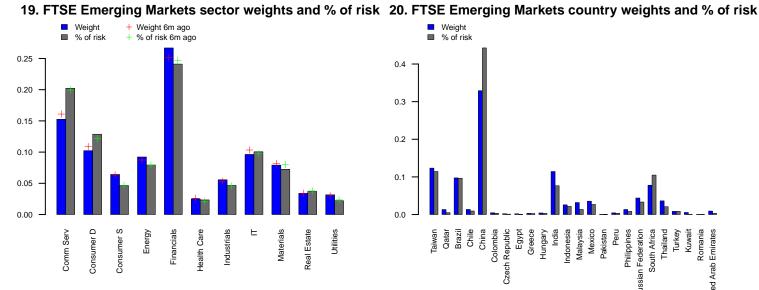


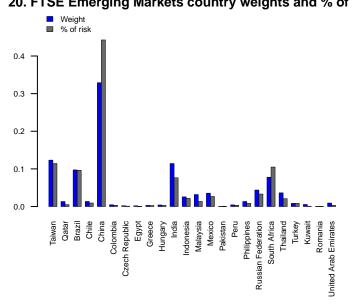


### 17. Style correlations



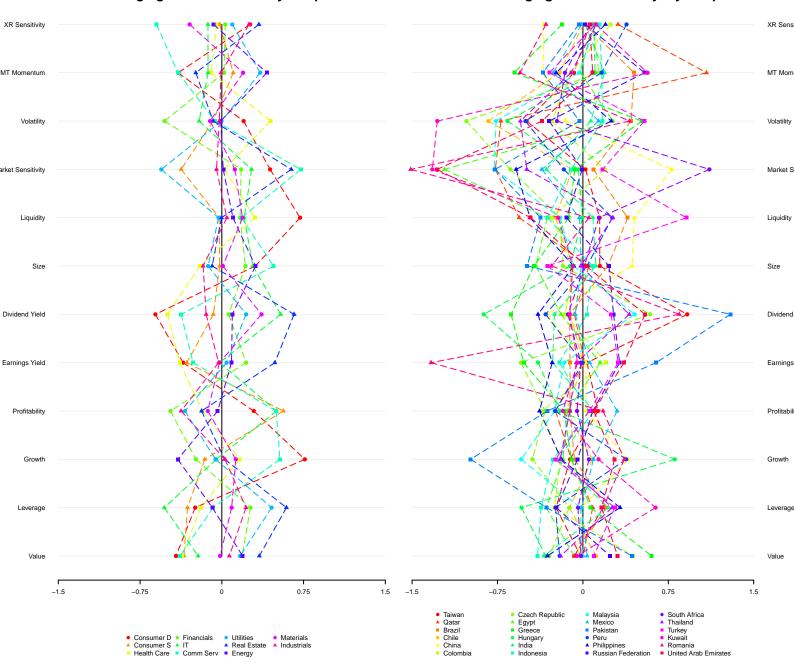
US & Canada: +1 212-991-4500 Europe: +44 (0)20-7856-2424 +852 8203-2790





## 21. FTSE Emerging Markets sector style exposures

# 22. FTSE Emerging Markets country style exposures

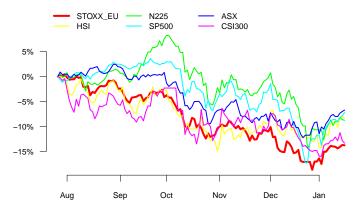




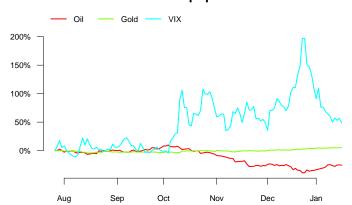
US & Canada: +1 212-991-4500 Europe: +44 (0)20-7856-2424

+852 8203-2790

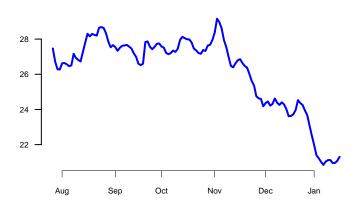
# 23. Returns for popular benchmarks



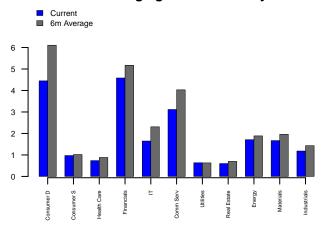
## 24. Returns for popular indicators



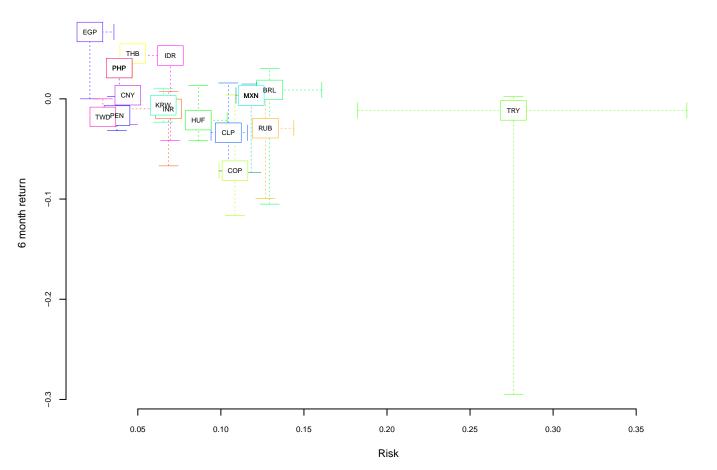
# 25. FTSE Emerging Markets rolling ADV (USD billions)



# 26. FTSE Emerging Markets ADV by sector



# 27. Currency risk and return vs USD





US & Canada: +1 212-991-4500 Europe: +44 (0)20-7856-2424

+852 8203-2790

### **Explanatory notes**

### 1. Global volatility hotspots

Volatility for global markets measured by the Axioma World short horizon fundamental model based on Axioma model estimation universe (USD perspective).

### 2. Global correlation hotspots

Average asset correlation for global markets measured using the Axioma World short horizon fundamental model based on Axioma model estimation universe (USD perspective).

### 3. Global market returns (6 months)

Total market return in local currency over the last 6 months based on the Axioma estimation universe.

### 4. Global market returns (1 week)

Total market return in local currency over the last week based on the Axioma estimation universe

#### 5. Global market risk and return

Total return over the last 6 months vs current market volatility estimated by Axioma short horizon world model, based on the Axioma estimation universe. Circle size represents market cap.

#### 6. FTSE Emerging Markets predicted risk

Forecast risk estimate for the FTSE Emerging Markets measured by the four Axioma Emerging Markets model variants. MH = medium horizon, SH = short, -S = statistical model. Right hand axis shows FTSE Emerging Markets return.

### 7. Rolling average asset correlations

Average correlation amongst FTSE Emerging Markets stocks over trailing 20 and 60 day window. Right hand axis shows FTSE Emerging Markets return.

### 8. Weekly asset return dispersion

Cross sectional volatility of weekly asset returns over FTSE Emerging Markets stocks.

#### 9. Weekly asset return proportion up/dowr

Weekly count of number of stocks with positive returns vs number of stocks with negative returns for FTSE Emerging Markets stocks.

### 10. Risk watch - FTSE Emerging Markets

Change in FTSE Emerging Markets risk vs total return over indicated period. Risk is measured by Axioma short horizon Emerging Markets model. A one standard deviation move based on risk forecast at the time is indicated by the colored dot.

### 11. Risk change decomposition

Breakdown of the causes of change in FTSE Emerging Markets risk over 1 week, 1 month, 3 months and 6 months. For more details contact your Axioma representative.

### 12. Components of FTSE Emerging Markets risk

FTSE Emerging Markets stock specific risk and risk from industry, measured daily over the last 6 months using Axioma medium horizon model. Does not include covariance between industry and style. 13. FTSE Emerging Markets diversification

Diversification is measured as the ratio of weighted average asset variance to total FTSE Emerging Markets variance, measured by the Axioma medium horizon Emerging Markets model.

#### 14. Style factor performance

Cumulative performance of the Axioma Emerging Markets fundamental model style factors over the last 6 months

### 15. Style factor returns

Return of the Axioma Emerging Markets fundamental model style factors over the last 1 week, 1 month, 3 months and 6 months.

### 16. Factor volatility range

The range in volatility for style and industry factors in the Emerging Markets medium horizon fundamental model over the last 6 months. Current volatility is indicated by the yellow line.

### 17. Style correlations

Correlations between style factors from the Emerging Markets medium horizon fundamental model

## 18. Change in style correlations (6 month)

The change in correlation between style factors from the Emerging Markets medium horizon fundamental model over the last 6 months.

### 19. FTSE Emerging Markets sector weights and % of risk

The weight and contribution to risk of top level sectors in the FTSE Emerging Markets index. Risk is measured using the Axioma medium horizon fundamental model.

### 20. FTSE Emerging Markets country weights and % of risk

The weight and contribution to risk of countries in the FTSE Emerging Markets index. Risk is measured using the Axioma medium horizon fundamental model

### 21. FTSE Emerging Markets country style exposures

The weighted average exposure to Axioma Emerging Markets style factors for top level sectors in the FTSE Emerging Markets index.

### 22. FTSE Emerging Markets country style exposures

The weighted average exposure to Axioma Emerging Markets country factors for top level sectors in the FTSE Emerging Markets index.

### 23. Returns for popular benchmarks Cumulative returns in local currency over the last 6 months for popular global equity benchmarks as measured by a corresponding ETF. Each of these benchmarks are registered trademarks of their respective

24. Returns for popular indicators Cumulative returns over the last 6 months for WTI, spot gold and VIX. VIX is a registered trademark of the Chicago Board Options Exchange.

25. FTSE Emerging Markets rolling ADV (USD billions)

### Daily sum of 20-day average USD daily trading value for assets in FTSE Emerging Markets. 26. FTSE Emerging Markets ADV by sector

Current and 6 month average 20-day average USD daily trading value for assets in FTSE Emerging Markets, split by top level sector.

### 27. Currency risk and return vs USD

Currency volatility and 6-month return vs USD. Dotted lines show range in return and volatility over the last 6 months.

### Country legend

AT=Austria, AU=Australia, BE=Belgium, BR=Brazil, CA=Canada, CH=Switzerland, CL=Chile, CN=China, CO=Colombia, CZ=Czech Republic, DE=Germany, DK=Denmark, ES=Spain, FR=France GB=United Kingdom,GR=Greece,HK=Hong Kong,HU=Hungary,ID=Indonesia,IE=Ireland,IL=Israel,IN=India,IT=Italy,JP=Japan,KR=Korea,LU=Luxembourg,MA=Morocco,MX=Mexico MY=Malaysia,NL=Netherlands,NO=Norway,NZ=New Zealand,OM=Oman,PE=Peru,PH=Philippines,PL=Poland,PT=Portugal,RU=Russian Federation,SE=Sweden,SG=Singapore TH=Thailand,TR=Turkey,TW=Taiwan,US=United States,ZA=South Africa

### **Disclaimer**

The information contained in this analysis is the proprietary property of Axioma Inc., is provided solely for informational purposes, and has been compiled or arrived at based upon information obtained from sources believed to be reliable and in good faith, but is not guaranteed as being accurate. Axioma Inc. is not, and does not represent itself to be, an investment advisor and the information provided by Axioma Inc. in this analysis does not constitute nor should be taken to constitute investment advice. The "[Axioma]" symbol and "Flexible is Better" are trademarks and service marks of Axioma Inc. Copyright 2012, All rights reserved.