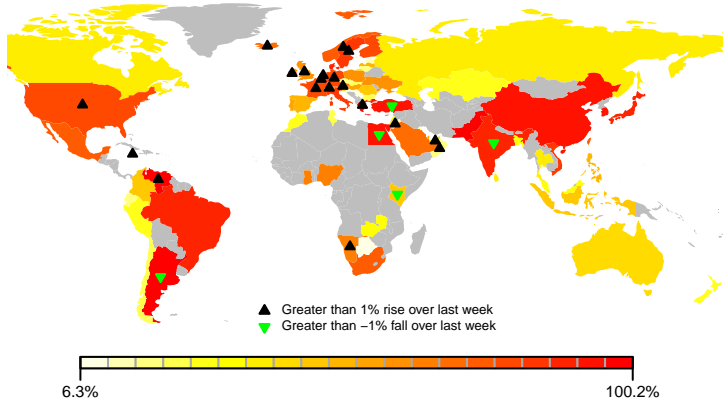
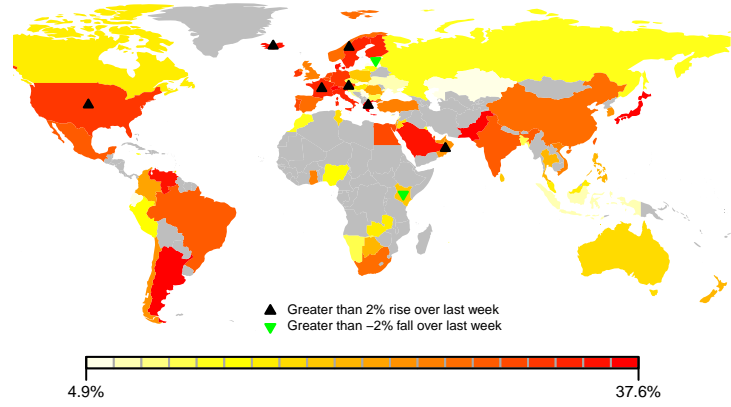


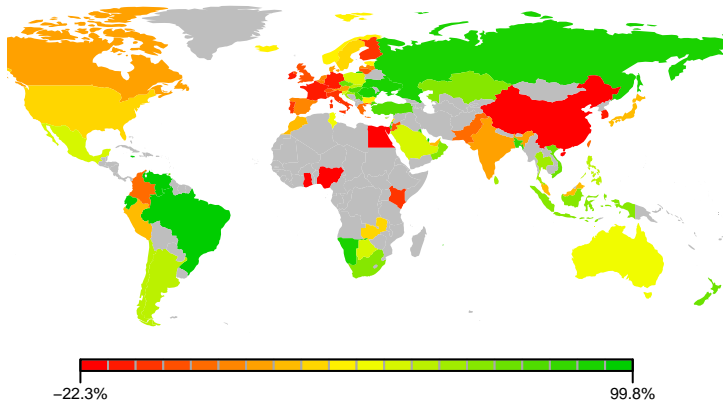
**1. Global volatility hotspots**



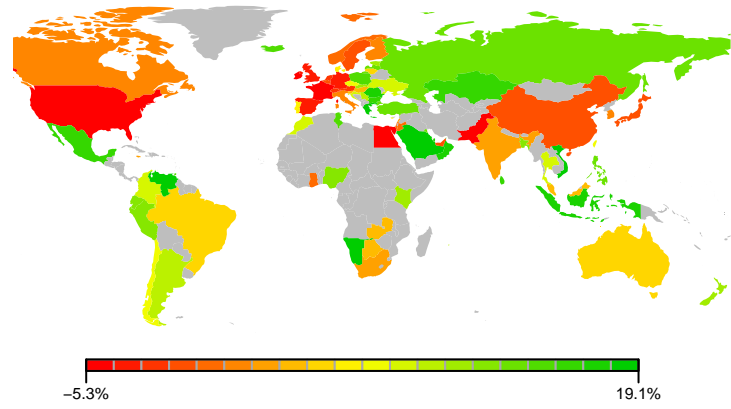
**2. Global correlation hotspots**



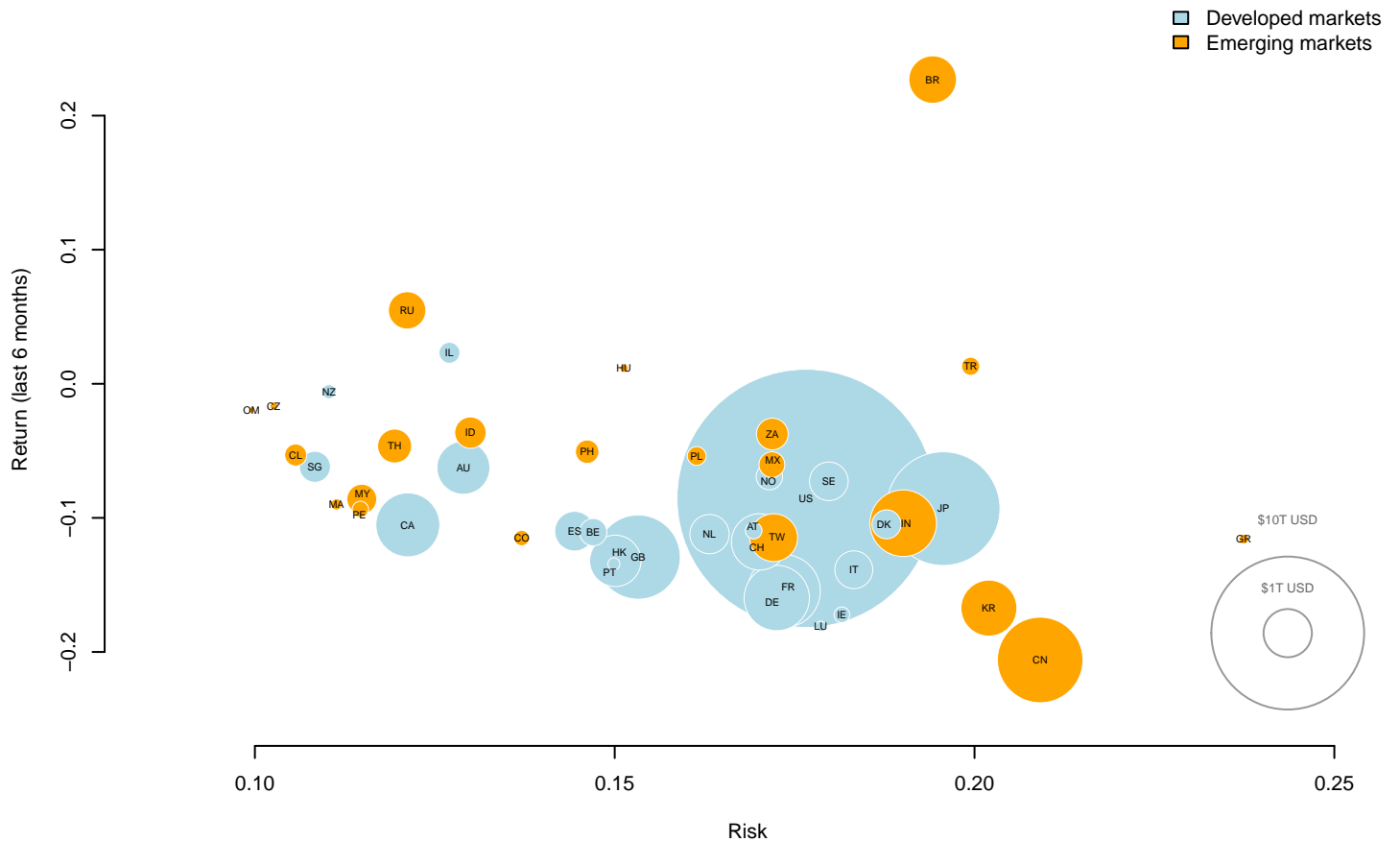
**3. Global market returns (6 months)**



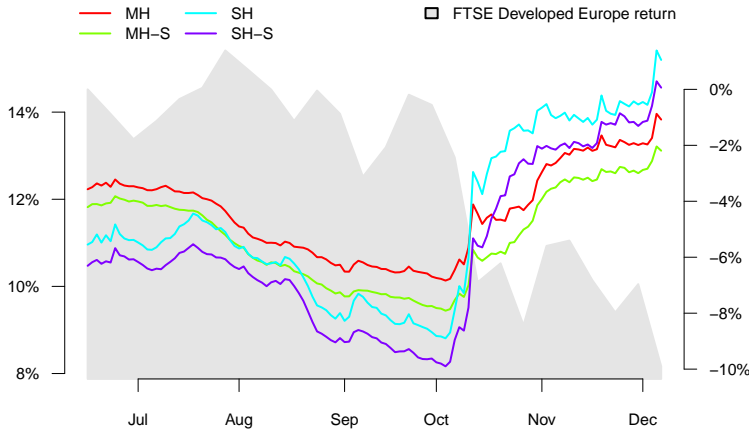
**4. Global market returns (1 week)**



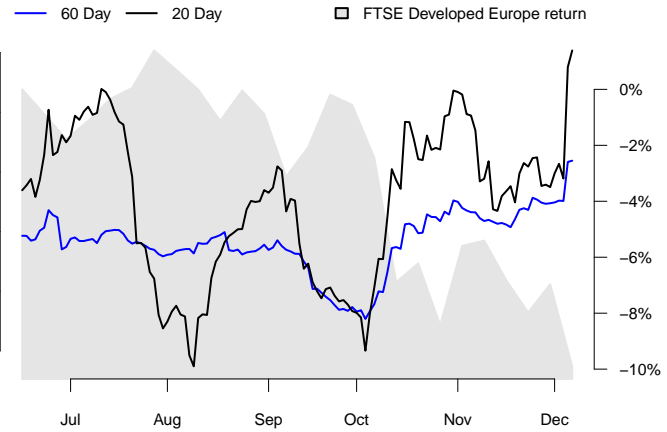
**5. Global Market Risk and Return**



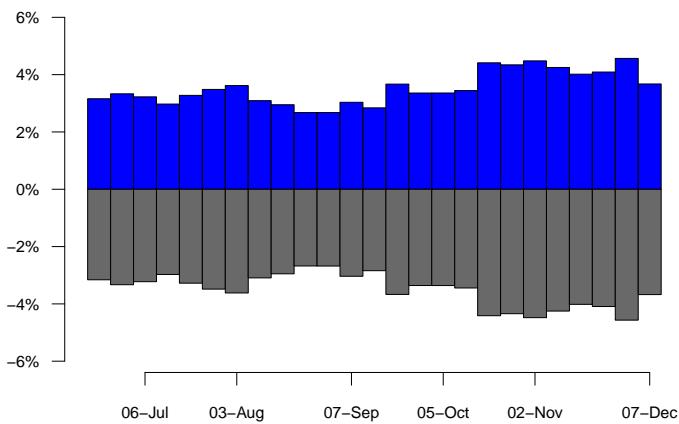
### 6. FTSE Developed Europe predicted risk



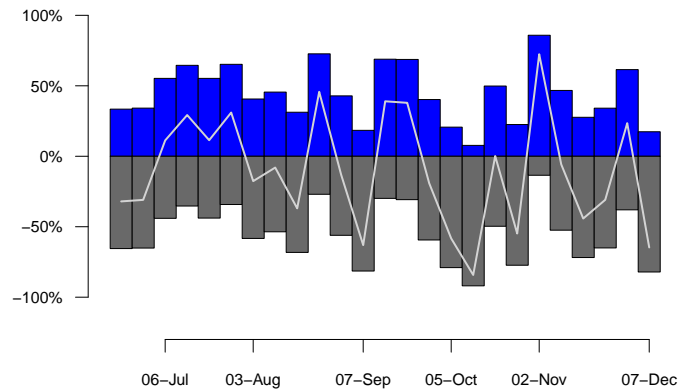
### 7. Rolling average asset correlations



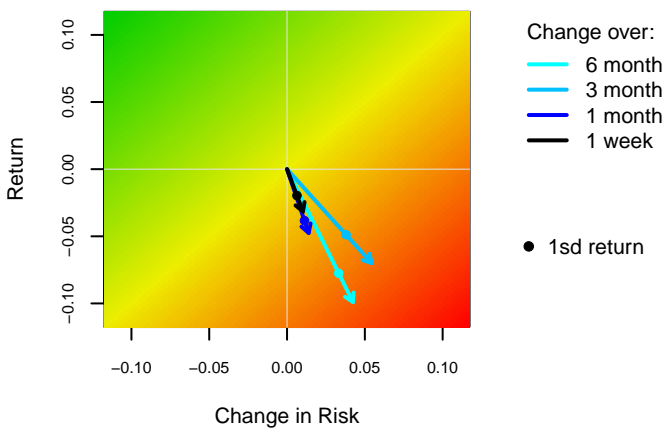
### 8. Weekly asset return dispersion



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



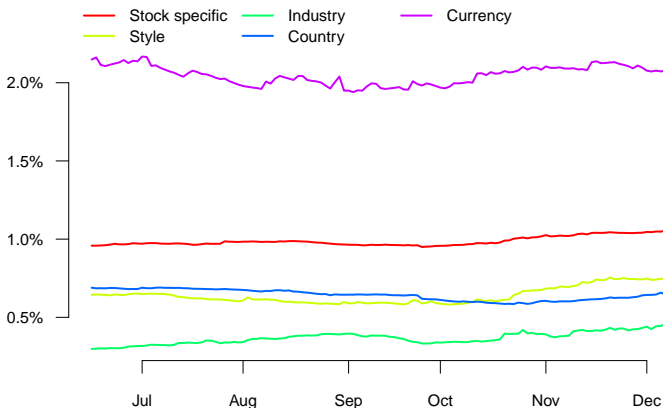
### 10. Risk Watch – FTSE Developed Europe



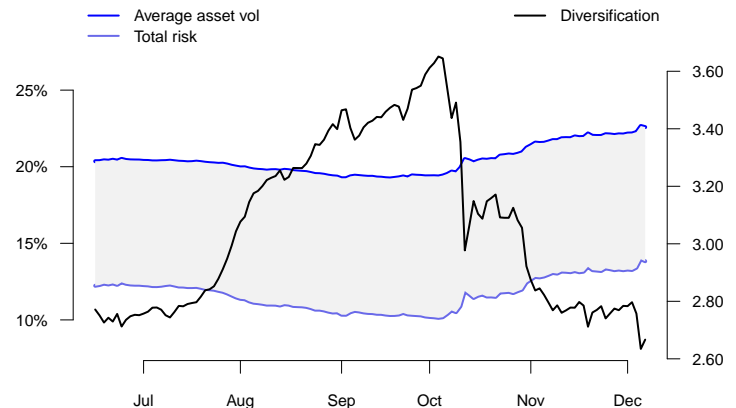
### 11. Risk change decomposition

	1 week	1 month	3 months	6 months
<b>Factor level</b>				
Initial risk	14.14	13.81	9.74	10.96
Portfolio composition	-0.02	-0.06	-0.07	-0.11
Stock characteristics	0.06	0.09	-0.03	0.00
Stock specific volatility	0.00	0.00	0.01	0.01
Factor volatility	1.10	1.37	5.79	5.05
Factor correlations	0.05	0.14	-0.11	-0.57
Total change	1.20	1.53	5.60	4.38
<b>Final risk</b>	15.34	15.34	15.34	15.34
<b>Stock level</b>				
Initial risk	14.14	13.81	9.74	10.96
Portfolio composition	-0.02	-0.06	-0.07	-0.11
Stock volatility	0.60	0.93	3.53	2.96
Stock correlations	0.62	0.67	2.13	1.53
Total change	1.20	1.53	5.60	4.38
<b>Final risk</b>	15.34	15.34	15.34	15.34

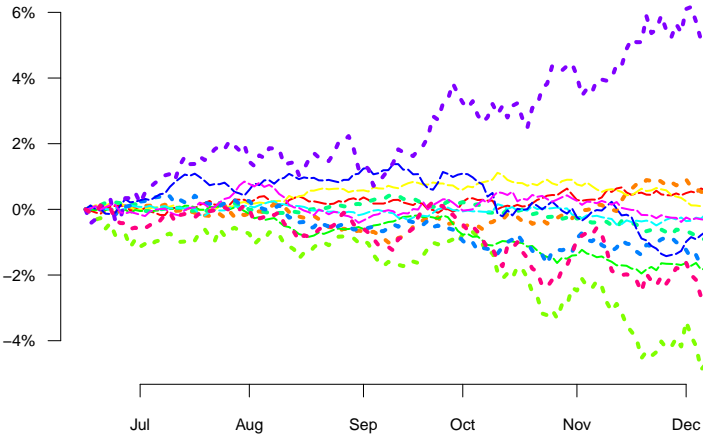
### 12. Components of FTSE Developed Europe risk



### 13. FTSE Developed Europe diversification

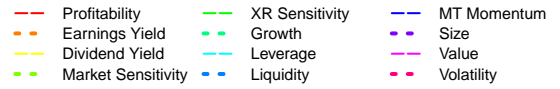


### 14. Style factor performance

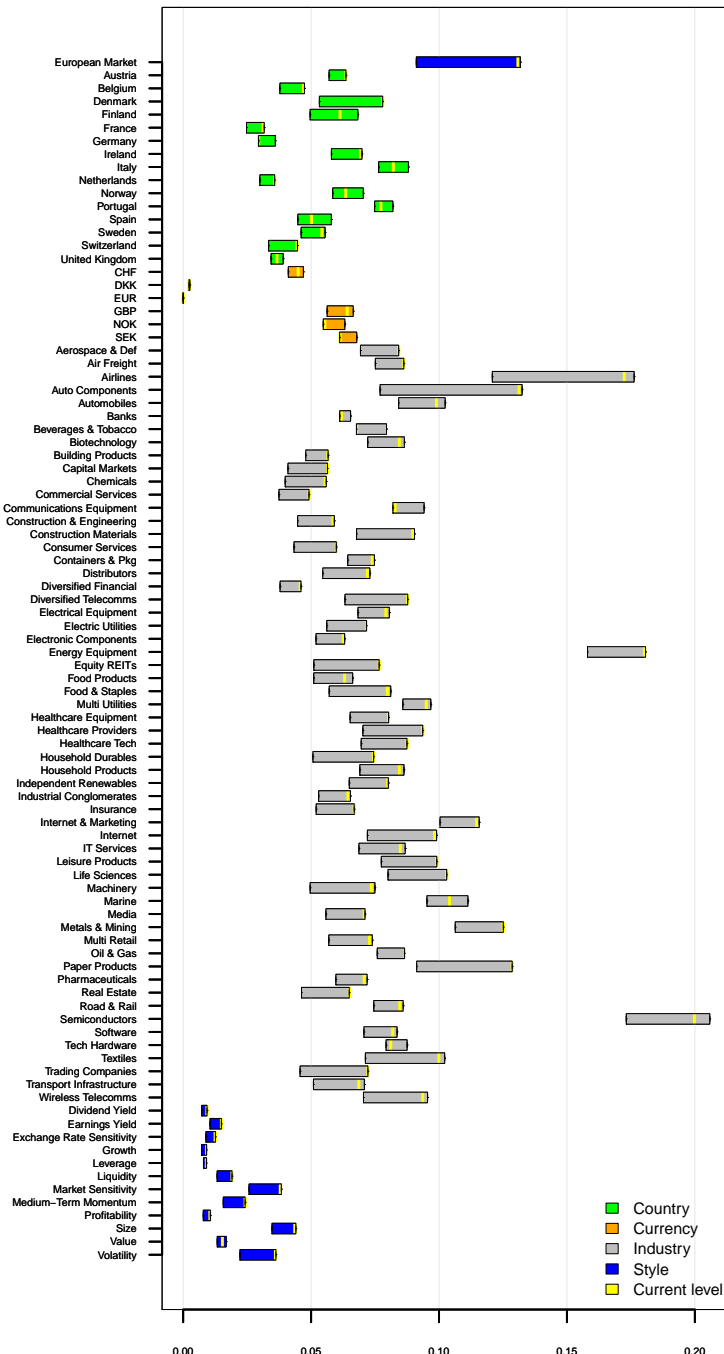


### 15. Style factor returns

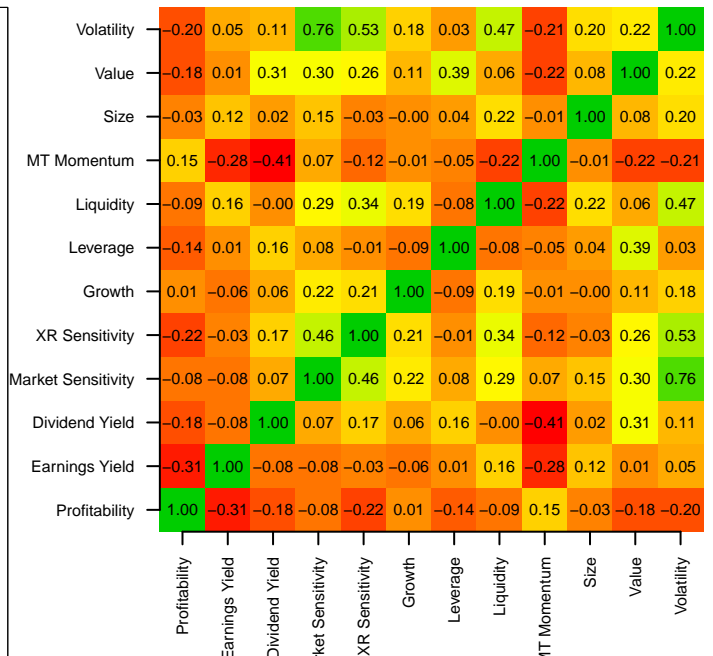
	1w	1m	3m	6m
Profitability	0.14	0.20	0.28	0.57
Earnings Yield	-0.32	0.35	1.57	0.48
Dividend Yield	-0.22	-0.40	-0.54	0.13
Market Sensitivity	-0.56	-2.42	-3.07	-4.71
XR Sensitivity	-0.11	-0.37	-1.44	-1.80
Growth	-0.28	-0.55	-1.37	-0.92
Leverage	0.11	0.10	-0.02	-0.14
Liquidity	-0.71	-0.68	-1.32	-1.76
MT Momentum	0.60	-0.64	-2.03	-0.68
Size	-0.15	1.22	3.75	5.22
Value	0.06	-0.58	-0.26	-0.32
Volatility	-0.90	-1.97	-1.48	-2.72



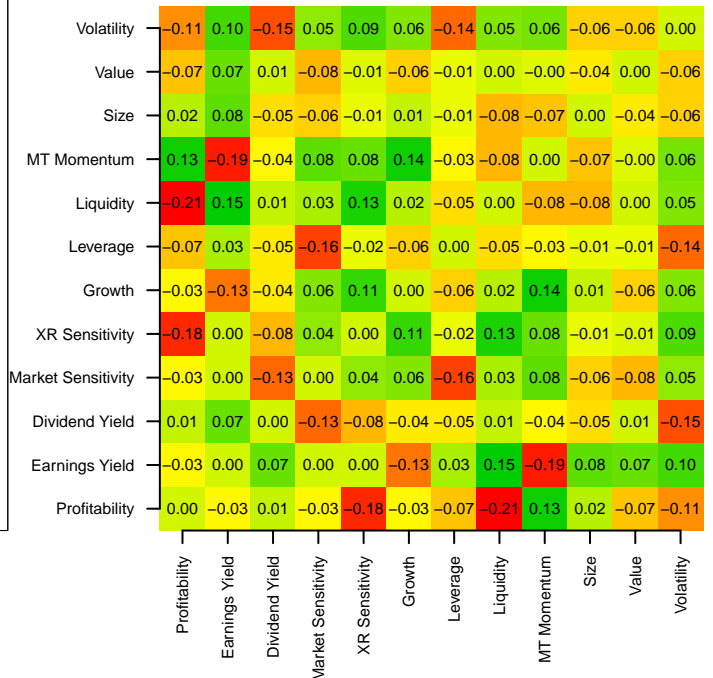
### 16. Factor volatility range (6 month)



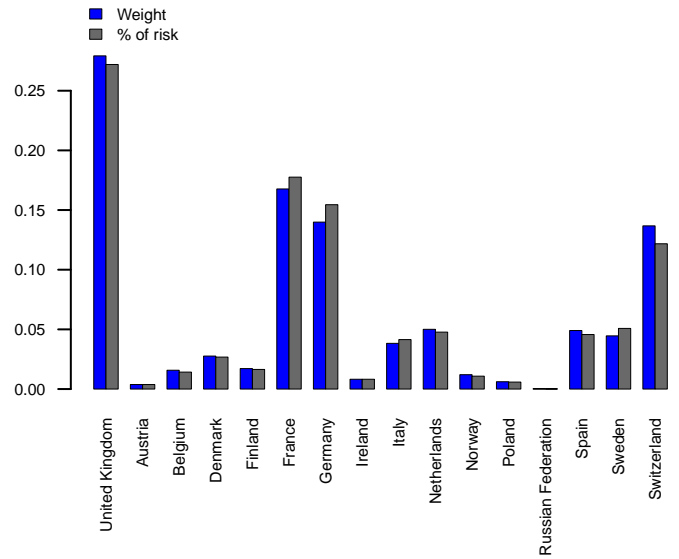
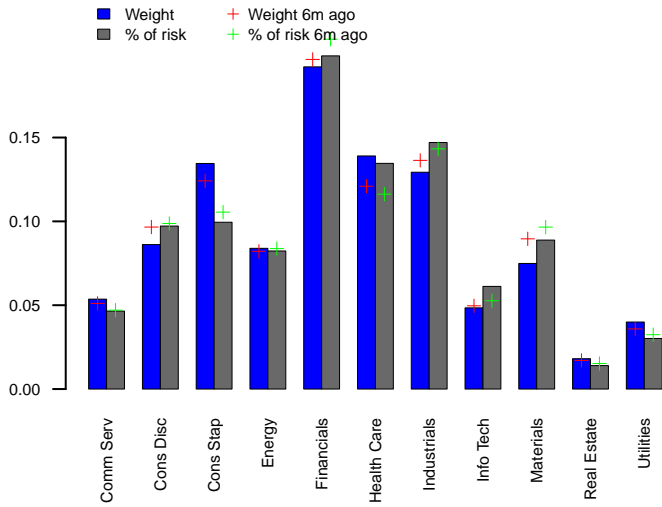
### 17. Style correlations



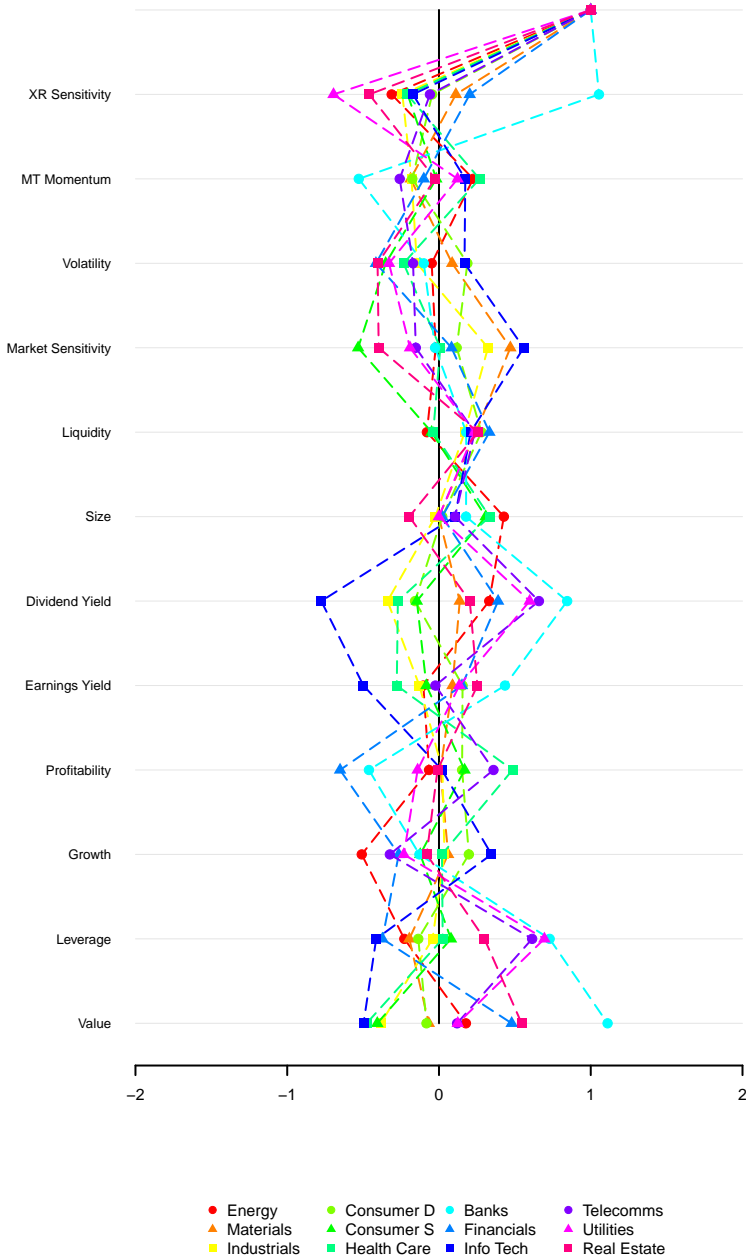
### 18. Change in style correlations (6 month)



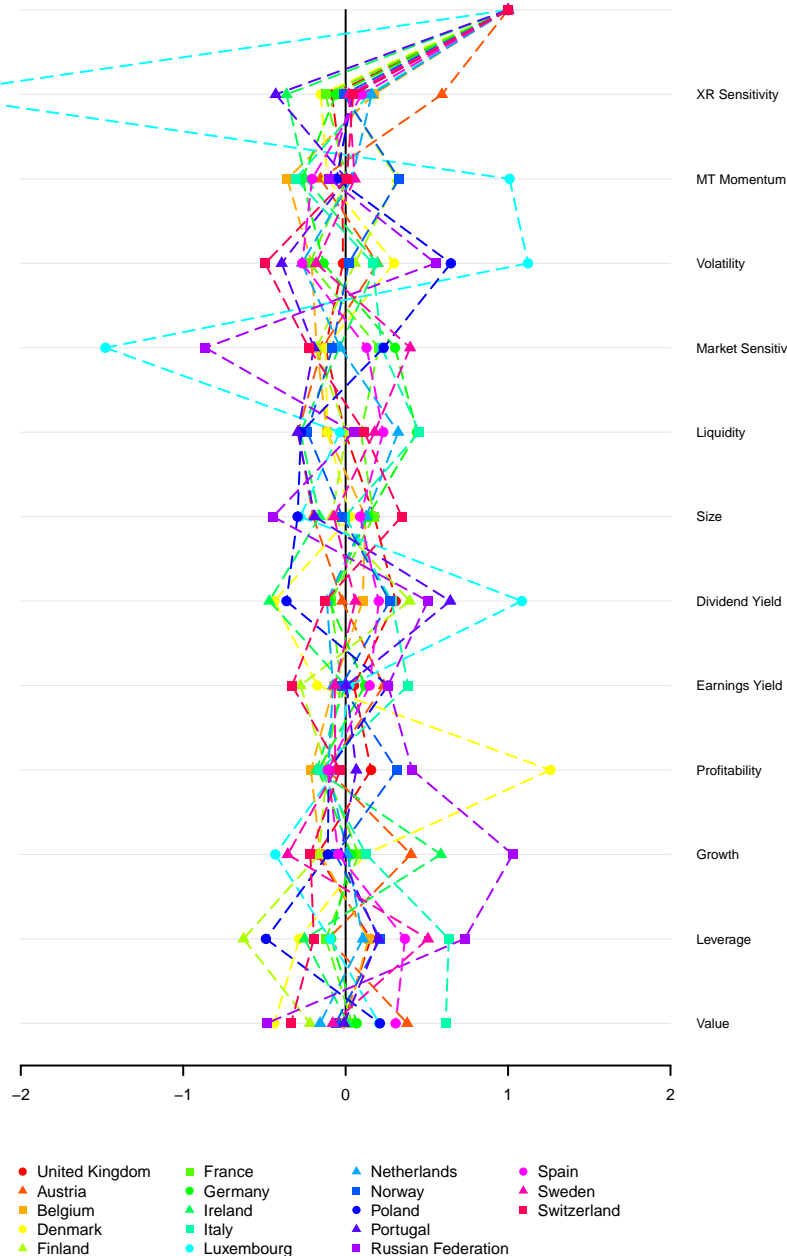
19. FTSE Developed Europe GICS 2018 weights and % of risk 20. FTSE Developed Europe country weights and % of risk



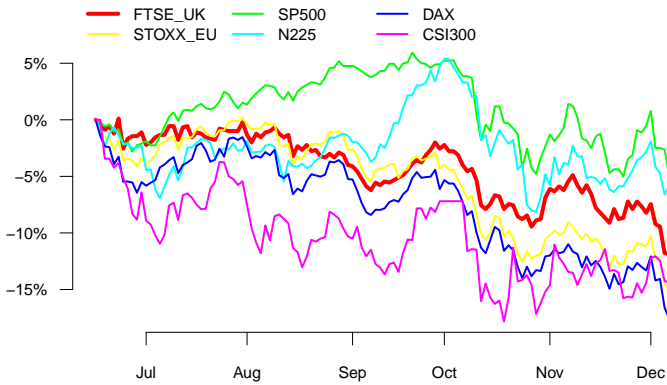
21. FTSE Developed Europe sector style exposures



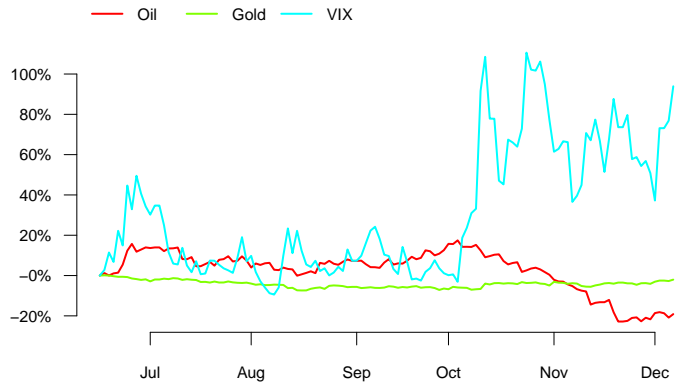
22. FTSE Developed Europe country style exposures



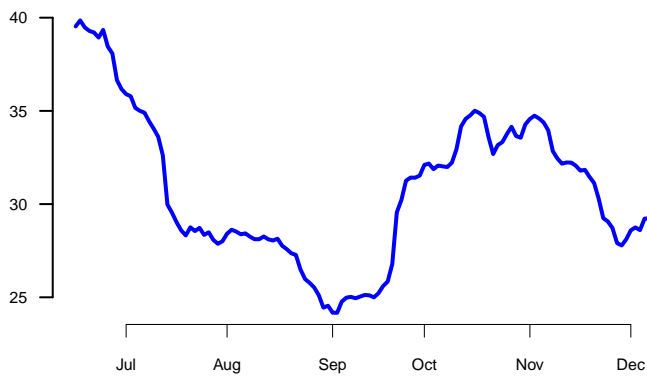
### 23. Returns for popular benchmarks



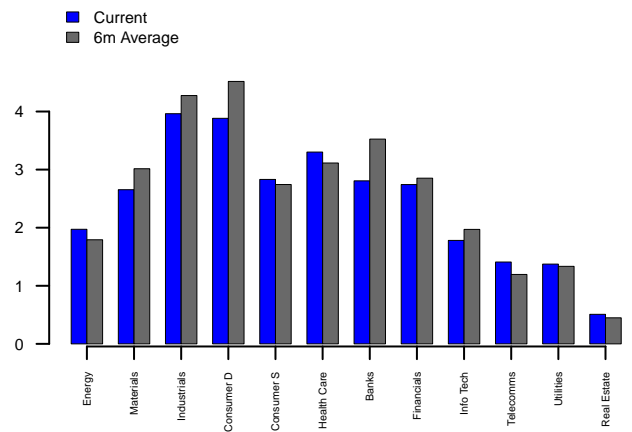
### 24. Returns for popular indicators



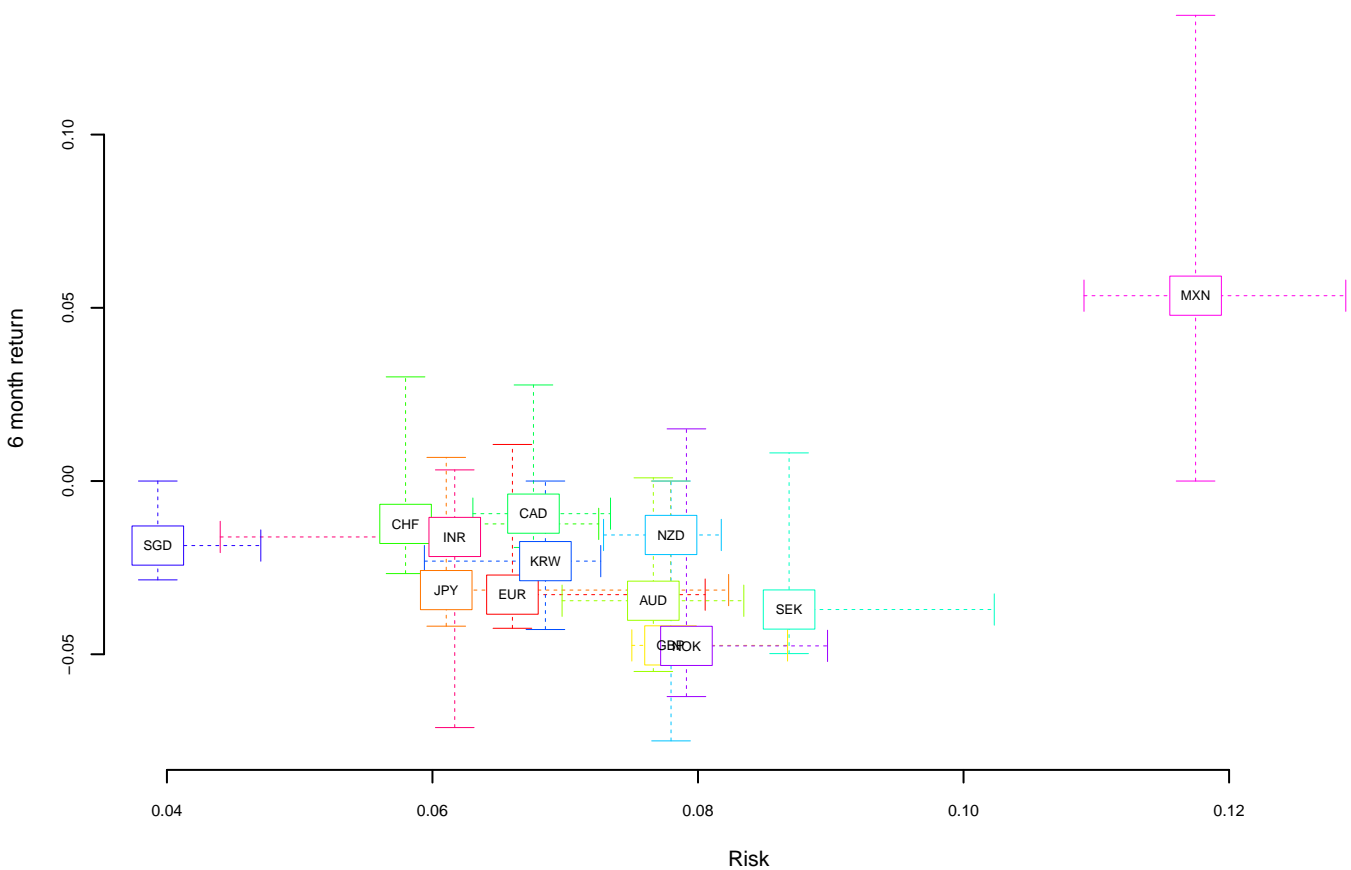
### 25. FTSE Developed Europe rolling ADV (USD billions)



### 26. FTSE Developed Europe ADV by sector



### 27. Currency risk and return vs USD



## 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 Developed Europe predicted risk

Forecast risk estimate for the FTSE Developed Europe measured by the four Axioma Europe model variants. MH = medium horizon, SH = short, -S = statistical model.

Right hand axis shows FTSE Developed Europe return.

### 7. Rolling average asset correlations

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

### 8. Weekly asset return dispersion

Cross sectional volatility of weekly asset returns over FTSE Developed Europe stocks.

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

Weekly count of number of stocks with positive returns vs number of stocks with negative returns for FTSE Developed Europe stocks.

### 10. Risk watch – FTSE Developed Europe

Change in FTSE Developed Europe risk vs total return over indicated period. Risk is measured by Axioma short horizon Europe 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 Developed Europe risk over 1 week, 1 month, 3 months and 6 months. For more details contact your Axioma representative.

### 12. Components of FTSE Developed Europe risk

FTSE Developed Europe 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 Developed Europe diversification

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

### 14. Style factor performance

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

### 15. Style factor returns

Return of the Axioma Europe 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 Europe 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 Europe medium horizon fundamental model

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

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

### 19. FTSE Developed Europe sector weights and % of risk

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

### 20. FTSE Developed Europe country weights and % of risk

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

### 21. FTSE Developed Europe country style exposures

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

### 22. FTSE Developed Europe country style exposures

The weighted average exposure to Axioma Europe country factors for top level sectors in the FTSE Developed Europe 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 owners.

### 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 Developed Europe rolling ADV (USD billions)

Daily sum of 20-day average USD daily trading value for assets in FTSE Developed Europe.

### 26. FTSE Developed Europe ADV by sector

Current and 6 month average 20-day average USD daily trading value for assets in FTSE Developed Europe, 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

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