Relative Strength Filter
Global Summary

Group Selection
Priced as of January 23, 2019

Note: Group tickers incorporate hyperlinks to decile charts, and then a link to our Toolkit of the group members.

See back pages for user guide and disclaimer.
Sources for all charts: BMO Capital Markets
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*Three terms define the relative performance Z-Score rating versus the markets (US = S&P 500; GBL = MSCI AC World; CDA = S&P/TSX Composite)
(a) % Outperforming - what percentage of sector members is outperforming the market,
(b) Reward/Risk - how consistent is the median relative strength performance of the sector membership ( / ranking),
(c) Trend Psn - what is the net percentage of the sector members which are breaking above/below relative strength channels.
The strength z-Score is weighted 60% towards the trend parameters (% outperforming and reward/risk ratios) and 40% towards the trend positions (reversals of trends). Gridlines are placed at 0.5 increments.

See Help Pages for further details.
January 23, 2019

**Coal & Uran**
21 stocks; $71bn

**Int O&G**
31 stocks; $170bn

**OG RfMkt**
39 stocks; $482bn

**OG Equip**
58 stocks; $202bn

**OG StTr**
72 stocks; $591bn

**OG E&P**
105 stocks; $722bn

**OG Drill**
12 stocks; $23bn
Momentum
Strength

Materials

January 23, 2019
Mark Steele (416) 359-4641

PapProd
24 stocks; $98bn

Copper
14 stocks; $79bn

DiversChm
22 stocks; $327bn

CstrMat
28 stocks; $209bn

Alumin
10 stocks; $35bn

PaperPkg
17 stocks; $102bn

SpecChm
67 stocks; $494bn

MtGlsCnt
14 stocks; $65bn

Steel
29 stocks; $374bn

IndusGas
7 stocks; $165bn

ComdChm
43 stocks; $375bn

PrecMet
15 stocks; $44bn

FrstPrd
11 stocks; $23bn

Silver
10 stocks; $18bn

Fert&Ag
29 stocks; $143bn

Gold
66 stocks; $183bn
January 23, 2019

**Financials**

- **FnlExchDt**: 31 stocks; $383bn
- **InvBnkBnk**: 36 stocks; $354bn
- **RegionBnk**: 139 stocks; $609bn
- **P&C Insur**: 36 stocks; $474bn
- **DivCpMkt**: 9 stocks; $159bn
- **AsstMgmt**: 81 stocks; $501bn
- **Multi-LnIns**: 30 stocks; $478bn
- **139 stocks; $609bn
- **Reinsuran**: 71 stocks; $298bn
- **SpecialFin**: 9 stocks; $167bn
- **11 stocks; $128bn
- **InsurBrkers**: 7 stocks; $123bn
- **OthrDivFS**: 1 stocks; $58bn
- **DiversBnk**: 160 stocks; $491bn
- **MltSecHld**: 22 stocks; $406bn
- **Thrft&Mtg**: 41 stocks; $134bn
- **ConsmrFin**: 37 stocks; $264bn
- **LifeHthIns**: 47 stocks; $807bn
- **MortgREIT**: 22 stocks; $64bn
- **LifeHthIns**: 47 stocks; $807bn
Information Technology

January 23, 2019

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Momentum

Strength

ApplicSwr
96 stocks; $901bn
DataProc
47 stocks; $1022bn

ElecInstr
44 stocks; $228bn
EMS
18 stocks; $397bn

ITConsult
49 stocks; $679bn
SemiEqp
42 stocks; $230bn

44 stocks; $228bn
18 stocks; $97bn
49 stocks; $679bn
42 stocks; $230bn

InetSrv&In
12 stocks; $82bn
Semi
74 stocks; $1164bn

36 stocks; $1221bn
13 stocks; $44bn
74 stocks; $1164bn

SystmSwr
96 stocks; $1221bn
TechDist
13 stocks; $44bn

40 stocks; $377bn
41 stocks; $1229bn
37 stocks; $242bn
41 stocks; $1229bn

ComEquip
40 stocks; $377bn
HdwrSt&P
41 stocks; $1229bn
User Guide 1 - Definitions & Dataset

Group Strength
Our Global Group analysis is based on bottom-up equity relative strength analysis as opposed to industry group (index) relative strength analysis.

Strength Decile Defined By
1. What percentage of a groups members are outperforming
2. How consistent that outperformance is
3. How the are members positioned (above/below) vs. their trend channels.

Momentum Decile
Rate of change of strength (change in 5-day moving average)

The Underlying Equity Relative Strength Analysis
Each day, for every equity we cover, our relative strength system assesses the best fit trend from a spectrum which covers a minimum trend duration of six months, and a maximum of 4-years. The "best fit" is the trend which maximizes duration, and minimizes deviation from the trend. Our process is flexible, thorough, and because it is run daily, timely.

The Dataset:
- Over 5,700 securities.
- Groups have a:
  ...Median depth of 28
  ...Average depth of 36

Heat Map Colour and Symbol Guide
Strength is highlighted by the background of the group title
- Bright green = best (1st decile) transitions towards...
- Bright red = worst (10th decile)
Momentum is highlighted in the border of the group title
- Colour map for momentum is the same as strength
Symbols to the right of the group ticker show where a group moved from in the previous session. Below the group symbol we highlight the number and total market capitalization of the members in a group. Clicking on the group, which brings up the chart via a hyperlink, will help to clarify the moves.
Our Goals:
- To buy outperforming stocks in favoured groups
- To avoid underperforming stocks in unfavoured groups
- To be alerted of and act on the changes

#1 Rule of Momentum: You can use it only if it exists

- In stable/trending markets, one can buy stocks with high strength and momentum and hold them as long as momentum does not turn negative (trend following).

- In very rotational markets (e.g., where credit, currency, commodity conditions are choppy/changing):
  - Buying high strength and high momentum may be dangerous (buying yesterday’s winners).
  - One is better off buying stocks with moderate strength and high momentum (bottom fishing).
User Guide 3 - Buy/Hold/Sell

Buy
- Groups with high strength and high positive momentum (top left) - “In Favour”
- Groups with moderate strength and high positive momentum - “Transitioning to Positive”
- Groups with mediocre strength and high positive momentum - “Gaining Favour”

Buy/Hold
- Groups with high strength and neutral momentum (middle left) - “Maintaining Favour”

Sell
- Groups with low strength and high negative momentum (bottom right) - “Out of Favour”
- Groups with moderately negative strength and high negative momentum - “Transitioning to Negative”
- Groups with mediocre strength and high negative momentum - “Losing Favour”
- Each group is hyperlinked to a chart that shows the relative strength decile as a function of time, and the moving average (momentum).

- Each chart is hyperlinked to the group membership, in our RS Filter Toolkit.
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<td>Buy</td>
<td>Outperform</td>
<td>43.2%</td>
<td>22.8%</td>
<td>57.4%</td>
<td>44.1%</td>
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<tr>
<td>Hold</td>
<td>Market Perform</td>
<td>53.2%</td>
<td>13.1%</td>
<td>40.6%</td>
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<td>41.1%</td>
<td>41.6%</td>
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<tr>
<td>Sell</td>
<td>Underperform</td>
<td>3.7%</td>
<td>9.5%</td>
<td>2.0%</td>
<td>3.2%</td>
<td>1.6%</td>
<td>5.5%</td>
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* Reflects rating distribution of all companies covered by BMO Capital Markets Corp. equity research analysts.
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