Group Selection

Priced as of November 20, 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
Table of Contents

3. Sector View
4. Strength Changes Last Session
5. Resource Summary
6. Energy
7. Materials
8. Industrials
9. Consumer Discretionary
10. Consumer Staples
11. Health Care
12. Financials
13. Information Technology
14. Telecom
15. Utilities
16. Real Estate
17. User Guide
Sector View

Sector Relative Strength Profiles*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>19% / 21% / 20%</td>
<td>/ / -8% / -9% / -4%</td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td>37% / 39% / 39%</td>
<td>/ / -2% / -2% / 4%</td>
<td></td>
</tr>
<tr>
<td>Industrials</td>
<td>43% / 46% / 46%</td>
<td>/ / 4% / 5% / 10%</td>
<td></td>
</tr>
<tr>
<td>CMR Disc</td>
<td>40% / 45% / 43%</td>
<td>/ / -1% / 0% / 5%</td>
<td></td>
</tr>
<tr>
<td>CMR Stap</td>
<td>40% / 42% / 43%</td>
<td>/ / -4% / -4% / 2%</td>
<td></td>
</tr>
<tr>
<td>Hlth Care</td>
<td>33% / 36% / 36%</td>
<td>/ / 13% / 13% / 16%</td>
<td></td>
</tr>
<tr>
<td>Financials</td>
<td>35% / 41% / 42%</td>
<td>/ / 1% / 0% / 7%</td>
<td></td>
</tr>
<tr>
<td>Info Tech</td>
<td>51% / 55% / 55%</td>
<td>/ / 7% / 8% / 13%</td>
<td></td>
</tr>
<tr>
<td>Comm Srv</td>
<td>32% / 37% / 39%</td>
<td>/ / -2% / -3% / 4%</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>45% / 50% / 53%</td>
<td>/ / -11% / -11% / -4%</td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>51% / 56% / 57%</td>
<td>/ / -4% / -5% / 0%</td>
<td></td>
</tr>
</tbody>
</table>

*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 (rising / flat 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.
Momentum

November 20, 2019

Mark Steele (416) 359-4641

Information Technology

- SystmSwr: 39 stocks, $1588bn
- ApplicSwr: 113 stocks, $1206bn
- InetSrv&In: 16 stocks, $135bn
- DataProc: 48 stocks, $1329bn
- ElecComp: 41 stocks, $348bn
- TechDist: 14 stocks, $666bn
- ComEquip: 42 stocks, $381bn
- EMS: 18 stocks, $167bn
- SemiEpp: 42 stocks, $363bn
- Semi: 49 stocks, $1565bn
- ElecInstr: 44 stocks, $340bn
- HdwrSt&P: 29 stocks, $1748bn

- ITConsult: 49 stocks, $765bn
- ApplicSwr: 113 stocks, $1206bn
- DataProc: 48 stocks, $1329bn
- ElecComp: 41 stocks, $348bn
- TechDist: 14 stocks, $666bn
- ComEquip: 42 stocks, $381bn
- EMS: 18 stocks, $167bn
- SemiEpp: 42 stocks, $363bn
- Semi: 49 stocks, $1565bn
- ElecInstr: 44 stocks, $340bn
- HdwrSt&P: 29 stocks, $1748bn
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 group's members are outperforming
2. How consistent that outperformance is
3. How the members are 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).
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.
IMPORTANT DISCLOSURES

Analyst’s Certification
I, Mark Steele, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities or issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Analysts who prepared this report are compensated based upon (among other factors) the overall profitability of BMO Capital Markets and their affiliates, which includes the overall profitability of investment banking services. Compensation for research is based on effectiveness in generating new ideas and in communication of ideas to clients, performance of recommendations, accuracy of earnings estimates, and service to clients.

Analysts employed by BMO Nesbitt Burns Inc. and/or BMO Capital Markets Limited are not registered as research analysts with FINRA. These analysts may not be associated persons of BMO Capital Markets Corp. and therefore may not be subject to the FINRA Rule 2241 and 2242 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

ETF Related Disclosures
As an authorized participant or otherwise, BMO Capital Markets acquires securities from the issuers for the purposes of resale. BMO Capital Markets and its affiliates seek to provide brokerage services to, and do other business with, ETFs covered by this report. BMO Capital Markets and its affiliates seek to enter into securities and other transactions on a principal basis with, and may borrow securities from, ETFs covered by this report. BMO Capital Markets makes a market in this security. The BMO ETFs issue, or will issue, Units directly to Designated Brokers and Underwriters. The initial issuance of Units of a BMO ETF will not occur until it has received, in aggregate, subscriptions sufficient to satisfy the TSX’s original listing requirements. BMO Nesbitt Burns Inc., an affiliate of the Manager, will act as a Designated Broker for the BMO ETFs. Units of each of the BMO ETFs are issued and sold on a continuous basis and there is no maximum number of units that may be issued. BMO Asset Management is the trustee, manager, portfolio manager, promoter and valuation agent of the BMO ETFs and is responsible for the administration of the BMO ETFs. Unitholders may redeem Units for cash, subject to a redemption discount. Unitholders may also exchange a Prescribed Number of Units (or integral multiple thereof) for Baskets of Securities of the Constituent Issuers held by each BMO ETF and cash, or, with respect to certain BMO ETFs, cash only.

Securities legislation in certain Canadian provinces prohibits registrants from recommending, or cooperating with any other person in recommending, in any circular, pamphlet or similar publication that is distributed with reasonable regularity in the ordinary course of its business, that securities of the registrant or a related issuer, or in the case of a distribution, that securities of a connected issuer, be purchased, sold or held unless such publication contains a statement of the relationship or connection between the registrant and the issuer. BMO Nesbitt Burns Inc. is an indirect wholly-owned subsidiary of Bank of Montreal. Accordingly, Bank of Montreal is a related and connected issuer of BMO Nesbitt Burns Inc. TO U.S. RESIDENTS: This publication, to the extent it refers to Bank of Montreal securities, has not been approved or distributed by BMO Capital Markets Corp. or BMO Nesbitt Burns Securities Ltd. and affiliates of BMO Nesbitt Burns Inc. It is intended for distribution in the U.S. by BMO Nesbitt Burns Inc. only to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6 under the Securities Exchange Act of 1934, as amended).
Investors should consider the investment objectives, risks, and charges and expenses of the investment company carefully before investing. The prospectus for the ETF contains this and other information about the investment company and should be read carefully before investing. Clients may obtain prospectuses for the ETFs mentioned in this report from the ETF distributor or the exchange upon which it is listed. This report is not a prospectus or an offer to buy or sell any security, or to participate in any trading strategy.

For a complete list of ETFs mentioned in this report, please contact the research analyst directly.

Investors in ETFs with international securities may assume currency and political risk. Sector and commodity specific ETFs are not diversified and may focus their investments entirely in a single sector, commodity, or basket of commodities. As a result, the ETFs will involve a greater degree of risk than an investment in other diversified fund types.

ETFs designed to track an index or asset may experience a discrepancy between the ETF’s performance and the performance of its target index known as tracking error. A variety of factors can create a performance gap between ETF and its target index such as the impact of transaction fees and expenses incurred by the ETF, changes in composition of the underlying index/assets, the ETF portfolio manager’s replication strategy and sampling techniques, and the timing of purchases and redemptions of ETF’s shares. Inverse and Leveraged ETFs: Most leveraged ETFs seek to provide a multiple of the investment returns of a given index or benchmark on a daily basis. Inverse ETFs seek to provide the opposite of the investment returns, also daily, of a given index or benchmark, either in whole or by multiples. Due to the effects of compounding and possible correlation errors, leveraged and inverse ETFs may experience greater losses than one would ordinarily expect.

**Company Specific Disclosures**


**Distribution of Ratings (March 31, 2017)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy</td>
<td>Outperform</td>
<td>43.2%</td>
<td>22.8%</td>
<td>57.4%</td>
<td>44.1%</td>
<td>57.0%</td>
<td>52.8%</td>
</tr>
<tr>
<td>Hold</td>
<td>Market Perform</td>
<td>53.2%</td>
<td>13.1%</td>
<td>40.6%</td>
<td>52.6%</td>
<td>41.1%</td>
<td>41.6%</td>
</tr>
<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>
</tr>
</tbody>
</table>

* Reflects rating distribution of all companies covered by BMO Capital Markets Corp. equity research analysts.

** Reflects rating distribution of all companies from which BMO Capital Markets Corp. has received compensation for Investment Banking services as percentage within ratings category.

*** Reflects rating distribution of all companies from which BMO Capital Markets Corp. has received compensation for Investment Banking services as percentage of Investment Banking clients.

**** Reflects rating distribution of all companies covered by BMO Capital Markets equity research analysts.

***** Reflects rating distribution of all companies from which BMO Capital Markets has received compensation for Investment Banking services as percentage of Investment Banking clients.
**Ratings Key (as of October 2016)**

We use the following ratings system definitions:

- **OP** = Outperform - Forecast to outperform the analyst’s coverage universe on a total return basis;
- **Mkt Perform** = Market Perform - Forecast to perform roughly in line with the analyst’s coverage universe on a total return basis;
- **Und** = Underperform - Forecast to underperform the analyst’s coverage universe on a total return basis;
- **(S)** = Speculative investment;
- **Spd** = Suspended - Coverage and rating suspended until coverage is reinstated;
- **NR** = No Rated - No rating at this time; and
- **R** = Restricted - Dissemination of research is currently restricted.

BMO Capital Markets’ seven Top 15 lists guide investors to our best ideas according to different objectives (CDN Large Cap, CDN Small Cap, US Large Cap, US Small Cap, Income, CDN Quant, and US Quant have replaced the Top Pick rating).

**Prior BMO Capital Markets Rating System**

**(April 2013 - October 2016)**


**(January 2010 - April 2013)**


**Other Important Disclosures**

For Important Disclosures on the stocks discussed in this report, please go to [http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx](http://researchglobal.bmocapitalmarkets.com/Public/Company_Disclosure_Public.aspx) or write to Editorial Department, BMO Capital Markets, 3 Times Square, New York, NY 10036 or Editorial Department, BMO Capital Markets, 1 First Canadian Place, Toronto, Ontario, M5X 1H3.

**Dissemination of Research**

BMO Capital Markets Equity Research is available via our website [https://research-ca.bmocapitalmarkets.com/Public/Secure/Login.aspx?ReturnUrl=/Member/Home/ResearchHome.aspx](https://research-ca.bmocapitalmarkets.com/Public/Secure/Login.aspx?ReturnUrl=/Member/Home/ResearchHome.aspx). Institutional clients may also receive our research via Thomson Reuters, Bloomberg, FactSet, and Capital IQ. Research reports and other commentary are required to be simultaneously disseminated internally and externally to our clients.

~ Research distribution and approval times are provided on the cover of each report. Times are approximations as system and distribution processes are not exact and can vary based on the sender and recipients’ services. Unless otherwise noted, times are Eastern Standard and when two times are provided, the approval time precedes the distribution time.

BMO Capital Markets may use proprietary models in the preparation of reports. Material information about such models may be obtained by contacting the research analyst directly. There is no planned frequency of updates to this report.

General Disclaimer
“BMO Capital Markets” is a trade name used by the BMO Investment Banking Group, which includes the wholesale arm of Bank of Montreal and its subsidiaries BMO Nesbitt Burns Inc., BMO Capital Markets Limited in the U.K. and BMO Capital Markets Corp. in the U.S. BMO Nesbitt Burns Inc., BMO Capital Markets Limited and BMO Capital Markets Corp are affiliates. Bank of Montreal or its subsidiaries (“BMO Financial Group”) has lending arrangements with, or provide other remunerated services to, many issuers covered by BMO Capital Markets. The opinions, estimates and projections contained in this report are those of BMO Capital Markets as of the date of this report and are subject to change without notice. BMO Capital Markets endeavours to ensure that the contents have been compiled or derived from sources that we believe are reliable and contain information and opinions that are accurate and complete. However, BMO Capital Markets makes no representation or warranty, express or implied, in respect thereof, takes no responsibility for any errors and omissions contained herein and accepts no liability whatsoever for any loss arising from any use of, or reliance on, this report or its contents. Information may be available to BMO Capital Markets or its affiliates that is not reflected in this report. The information in this report is not intended to be used as the primary basis of investment decisions, and because of individual client objectives, should not be construed as advice designed to meet the particular investment needs of any investor. This material is for information purposes only and is not an offer to sell or the solicitation of an offer to buy any security. BMO Capital Markets or its affiliates will buy from or sell to customers the securities of issuers mentioned in this report on a principal basis. BMO Capital Markets or its affiliates, officers, directors or employees have a long or short position in many of the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. The reader should assume that BMO Capital Markets or its affiliates may have a conflict of interest and should not rely solely on this report in evaluating whether or not to buy or sell securities of issuers discussed herein.

Additional Matters
To Canadian Residents: BMO Nesbitt Burns Inc. furnishes this report to Canadian residents and accepts responsibility for the contents herein subject to the terms set out above. Any Canadian person wishing to effect transactions in any of the securities included in this report should do so through BMO Nesbitt Burns Inc.

The following applies if this research was prepared in whole or in part by Alexander Pearce, David Round, Edward Sterck or Brendan Warn: This research is not prepared subject to Canadian disclosure requirements. This research is prepared by BMO Capital Markets Limited and subject to the regulations of the Financial Conduct Authority (FCA) in the United Kingdom. FCA regulations require that a firm providing research disclose its ownership interest in the issuer that is the subject of the research if it and its affiliates own 5% or more of the equity of the issuer. Canadian regulations require that a firm providing research disclose its ownership interest in the issuer that is the subject of the research if it and its affiliates own 1% or more of the equity of the issuer that is the subject of the research. Therefore BMO Capital Markets Limited will disclose its and its affiliates’ ownership interest in the subject issuer only if such ownership exceeds 5% of the equity of the issuer.

To E.U. Residents: In an E.U. Member State this document is issued and distributed by BMO Capital Markets Limited which is authorised and regulated in the UK and operates in the E.U. on a passported basis. This document is only intended for Professional Clients, as defined in Annex II to “Markets in Financial Instruments Directive” 2004/39/EC (“MiFID”).

To U.S. Residents: BMO Capital Markets Corp. furnishes this report to U.S. residents and accepts responsibility for the contents herein, except to the extent that it refers to securities of Bank of Montreal. Any U.S. person wishing to effect transactions in any security discussed herein should do so through BMO Capital Markets Corp.
To U.K. Residents: In the UK this document is published by BMO Capital Markets Limited which is authorised and regulated by the Financial Conduct Authority. The contents hereof are intended solely for the use of, and may only be issued or passed on to, (I) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (II) high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons together referred to as "relevant persons"). The contents hereof are not intended for the use of and may not be issued or passed on to retail clients.

Unauthorized reproduction, distribution, transmission or publication without the prior written consent of BMO Capital Markets is strictly prohibited.
Click here for data vendor disclosures when referenced within a BMO Capital Markets research document.