Quantitative/Technical Package

<table>
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<tr>
<th>Market Elements</th>
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<thead>
<tr>
<th>Trends &amp; Inflection Points</th>
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<td>Trainspotting</td>
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<td>August 20, 2019</td>
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<td>Blue Drag</td>
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This report was prepared by an analyst(s) employed by BMO Nesbitt Burns Inc., and who is (are) not registered as a research analyst(s) under FINRA rules. For disclosure statements, including the Analyst's Certification, please refer to pages 38 to 41.
The ChiNext rose 2.7% to lead most Asian indices at least 1% higher; the DAX rose 1.3%; (breaking out of a 2m churn) to lead most European markets to lesser (sub 1%) gains; the NASDAQ rose 80bps to lead all North American markets higher; global technology rose 1.2%, outstripping other sectors, which were flat to 60bps higher.

The U.S. 30y rose to a 5d high, then retreated 4bps after a strong auction; the U.S. 2y yield added to Wednesday’s sharp rise, hitting a 7d high before retreating to end slightly lower; European 10y yields rose 1-2bps; the German 2y yield rose 1bps, rising above -60bps for the first time in 8m; U.S. inflation expectations fell; corporate credit risk indices continued to narrow sharply.

Gold continued to retreat from the $1,600 spike high; the BBG USD index rose 15bps, its fifth gain of the past 6d; high yield commodity currencies (BRL, NZD) fell 50bps to lead decliners; the yen fell 40bps, retreating back towards a 7m weak; the renminbi added to gains; sending the Asia dollar index to a new 5m high.

WTI churned near a 1m low, holding just above its rising 50d MA.

Source for all data and graphics in this publication: BMO Capital Markets, Bloomberg, Thomson

BMO Capital Markets

January 9, 2020

Market Elements

- The ChiNext rose 2.7% to lead most Asian indices at least 1% higher; the DAX rose 1.3%; (breaking out of a 2m churn) to lead most European markets to lesser (sub 1%) gains; the NASDAQ rose 80bps to lead all North American markets higher; global technology rose 1.2%, outstripping other sectors, which were flat to 60bps higher.
- The U.S. 30y rose to a 5d high, then retreated 4bps after a strong auction; the U.S. 2y yield added to Wednesday’s sharp rise, hitting a 7d high before retreating to end slightly lower; European 10y yields rose 1-2bps; the German 2y yield rose 1bps, rising above -60bps for the first time in 8m; U.S. inflation expectations fell; corporate credit risk indices continued to narrow sharply.
- Gold continued to retreat from the $1,600 spike high; the BBG USD index rose 15bps, its fifth gain of the past 6d; high yield commodity currencies (BRL, NZD) fell 50bps to lead decliners; the yen fell 40bps, retreating back towards a 7m weak; the renminbi added to gains; sending the Asia dollar index to a new 5m high.
- WTI churned near a 1m low, holding just above its rising 50d MA; base metals and bulks were mixed; lumber pulled back to a 3w low.
Daily Charts
3-Month View with 26-Day Bollinger Bands and 150-, 200- and 50-Day Moving Averages
Intra Day Charts
2-Day 1-Minute View

Currencies
Bloomberg Dollar Spot Index

Commodities
Gold (Spot)

Bonds
U.S. 2-Yr Bond

Equities
MSCI World Index

- Euro
- Crude Oil (Brent)
- Crude Oil (WTI)
- Natural Gas (NMX)
- Canadian Dollar
- Copper (CMA)
- German 10-Yr Bund
- Canadian 10-Yr Bond
- VIX
- CDX North American Inv. Grade Index
- Italian 10-Yr Bond
- S&P/TSX Composite
- MSCI World Index
- S&P 500
- U.S. 10-Yr Breakeven
- Chinese Yuan (CNH)
- Nickel (LME 3Mo)
- Ave. Prime Broker 5yr CDS

Market Elements | Page 3
January 9, 2020
Daily Sector Charts (U.S., Canadian, European)
3-Month View with 26-Day Bollinger Bands and 150-, 200- and 50-Day Moving Averages
## Market Movers – Largest Daily Percentage Moves

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<td>386 HK</td>
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<tr>
<td>Ecopetrol SA</td>
<td>EC US</td>
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<td>Petrobras</td>
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<tr>
<td>Old Search</td>
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<td>JXN Holdings Inc</td>
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<td>Inpex Corp</td>
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<td>JFE Holdings Inc</td>
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<td>Newcrest Mining</td>
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<td>SMC</td>
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<td>CCED93 BR</td>
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**Bold** = move of more than 5%
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**Consumer Discretionary Symbol**

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**Consumer Staples Symbol**

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H/L - at a new closing 52-wk High/Low; Low/; • - within 10% of the 52-wk High/Low; Blue • - S&P500/TSX 60 member, Italics • - ETF; Bold • move of 5% or more; stocks are sorted by GICS Subindustry (grey lines) and market capitalization
After four days of what to sell, we figure you get the picture, so happy Friday, and let’s look at what we think you should be funding with that cash. The current standalone sector that is (1) driving new highs in market cap weighted indices, but also (2) has the equal-weighted underlying breadth to support the move, is IT – Exhibit 1.

What is driving that performance is a very fat tail of stocks with consistent uptrends. That’s something to marvel at, and to enjoy in one’s portfolio, but for an analyst, who needs to fish out new buy ideas, it does not offer much – Exhibit 2.

Rather, we point our clients towards the breakouts in these types of charts – Exhibit 3.

And of course there is a master filter to find these breakouts – Exhibit 4.

Exhibit 1: ACWI Technology Index (Rel Strength Heat Map in Insert)

Exhibit 2: Price Trends on Largest 75 Global Technology Stocks

Exhibit 3: ServiceNow (NOW US) Trend (Similar OP Rated Stocks Here)

Exhibit 4: Top of Long Term +ve, Breaking Out of Flat-/ve Trend List

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit

It’s a rebirth. It’s a rebirth.

Carlos Ghosn
Trends & Inflection Points

Hear This

- Our theme this week has been what NOT to own (a good deal of this comes down to what to own is rather overbought). With so much happening on the political front and the massive intraday melt-down/melt-up market gymnastics of the past few sessions, we didn’t think you heard this tree fall in the forest. But there you go; trees, which are the best part of the materials sector, (which you should be underweight in – Exhibit 1) just fell – Exhibit 2.
  - At the stock level, here are the most consistently underperforming material stocks that should not be in your long portfolio – Exhibit 3.

Exhibit 1: Materials vs MSCI World

Exhibit 2: P&F vs MSCI World (Other Material Industries in Insert)

Exhibit 3: Consistently Underperforming Materials vs MSCI World & Materials Sector in Weakest Subindustries

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
**Trends & Inflection Points**

**Why Staples Suffer**

- Remember when staples were doing great? It really was not too long ago. Yet since the peak in September, staples have been underperforming very consistently at double-digit rates – Exhibit 1.
  - But that’s not the message we want to deliver.

- The reason we rarely write about staples, is that they spend the majority of the time with a quantitative reading of “blah”. It’s rare that they break out of that range, but indeed they have done so just now…to the downside – Exhibit 2.

- So what would it take to rebound back to blah? Or even to pivot to the other extreme, which actually happens with decent regularity (why you should own outperformers):
  - Lower oil would help. It’s not the driver now, but it’s important – Exhibit 3.
  - Higher credit risk is needed. It’s up off of the low, but then again high oil is probably keeping staples subdued – Exhibit 4.

- Not all staples have a weak reading. If you do some reconnaissance down at the subindustry level, drug retail improved to a top decile position in Q4, and is holding there. More recently, agricultural products have shown some glitter.

*And now, adding color, a group of anonymous Latin-American Meat packing glitterati*

**Exhibit 1: Staples vs MSCI World – Short-Term Trend**

**Exhibit 2: Staples Relative Strength Breadth Z-Score**

**Exhibit 3: Staples vs MSCI World, 12m WTI, Fit of Returns**

**Exhibit 4: Staples vs MSCI World, NAmer IG CDS Index, Fit of Returns**

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit

Trends & Inflection Points

**BMO Capital Markets**

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Trends & Inflection Points

Strategic Sells Part 2

- It’s like night follows day. As global real rates and then US inflation expectations (barely so far, but that’s our key watch) roll over, banks relative performance does as well – Exhibit 1.
- Why is it strategic? That counter-trend rally is actually the top of the channel for the price trend. So either you expect acceleration, or continuation (2017, 2018), or you sell, trim, reallocate – Exhibit 2.
- The picture of banks vs the market is a full spectrum, so there are stocks to own. It’s just that spectrum is tilted to the negative, and rates rolling over (bond pricing breaking out) would further tilt that spectrum in that negative direction, so there are more stocks not to own. We can filter those out here – Exhibit 3.

Exhibit 1: Banks vs MSCI World

Exhibit 2: Banks – Dividend-Adjusted Price Trend

Exhibit 3: Largest 15 Diversified Banks in Underperforming Trends vs MSCI World & Global Industry – Full List Here

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Strategic Sells

- Portfolio management is much to do with what you sell. We trust our buy ideas, which comprise the bulk of our recent notes, are clear. It’s time to consider some strategic sells. So we ask you – Exhibit 1.
  - We are “struck” with how that mining-ex gold and silver equity bucket looks quite a bit like US inflation expectations. We trust we are clear here; our call is that Friday was the peak – Exhibit 2.
    - Here’s the math behind “struck” – Exhibit 3.
    - Here are the stocks you don’t need. Mind the gaps – Exhibit 4.

Exhibit 1: ACWI Mining ex Gold & Silver Index

Exhibit 2: US 5y5y Forward Inflation Expectations

Exhibit 3: Rolling 30w Fit of Returns: Miners & US 5y5y

Exhibit 4: Largest 10 Mining Stocks in Downtrends – Full List Here

The bright glow of optimism abandoned me somehow
BU2B, Rush

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
**Embrace the Resurrection**

- **Inflation expectations at 5m highs**, yet **US treasuries well bid?** Wait a minute. **We know this script!** Go **gold**, and let **reality slide to the negative**—Exhibit 1!
- Ah, but what about the rest of the world? We are pleased to **update**, Global ex US real rates are still very much in negative territory, and at the top end of a declining channel. So this is exactly the time where one needs to decide if the **20m downtrend** will continue, or with real rates break higher, and issue in another **quarter of underperformance for bonds**. We are in the former camp—Exhibit 2.
- And what about **US inflation expectations**, the key risk/reward for long duration treasuries? It’s timely you should ask. We just received the **key inflection point we were watching for yesterday**—Exhibit 3.
  - This is either time to dump treasuries, as inflation is finally rearing its ugly head, or time to embrace treasuries, as that head is about to get whacked as it has twice before in the past two years. Our call is to embrace treasuries (**reiterated** today).
  - Treasuries are very very quiet, but we see **volatility** as mean reverting, and **given an excuse**, we believe that it will expand to the upside, along with pricing—Exhibit 4.

*The preacher asked if I’d embrace the resurrection*

This Cowboy Song, Sting

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**Exhibit 1: US 5y TIPS Bond Yield** (Real Rate, Full Spectrum in Insert)

**Welcome Back Negative Real Rates**

**Exhibit 2: Global ex US Inflation Linked Bond Yield (All Maturities)**

**Exhibit 3: US 5y5y Forward Breakeven Rate**

Our Call is That This is a Time to Add to Long-Duration, as We Expect that the Trend Will Continue

**Exhibit 4: Barclays US Treasury Index**

Expect Upside Breakout, As Seen in Gold (Pre-Breakout View Shown)

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Another Long Duration Breakout

- Late last year, we captured the breakout in gold (here and here), and also highlighted our expectation that aggregate treasury prices will follow US short duration bond pricing and breakout to new highs. If gold were a sector on its own, it would cozy up to the other sector that just overtook technology in the most favoured quadrant in our group selection report. That sector would be real estate – Exhibit 1.

- The comparison of real estate to technology in terms of market favoritism is a good one. In the US, technology is outperforming at 10%/year, and real estate is performing just shy of that, at 9%/year. The outperformance in real estate just comes with a lot more volatility, which if timed right, can add to performance – Exhibit 2.

- On a timing basis, it looks like US real estate is front-running a potential breakout in bonds – Exhibit 3.
  - Or perhaps, it’s just following the benchmark for global real estate as it broke out to a new high – Exhibit 4.

Exhibit 1: Global Relative Strength Sector Heat Map (Gold View Here)

And if Gold Were a Sector, It Would Be Here

Exhibit 2: Real Estate vs S&P 500 (Other Sectors in Insert)

Trend / Width 9%/14% 0.6
Trend Length 24 mo

Similar Slope of Outperformance to Technology, Albeit With Much More Volatility

Exhibit 3: US Real Estate, Barclays Agg., Rolling 30d Fit of Returns

US Real Estate Acting Like Bond Prices Are Going to Break Out to the Upside, or...

Exhibit 4: FTSE EPRA/NAREIT Global Index

...It’s Just Following Global Real Estate Which Just Broke Out to New Highs

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trends & Inflection Points

Last Call

- If you own a US short-term bond ETF, it’s overbought at a new high.
  - In terms of yield, and seemingly missing in market commentary, US rates most in tune with what the FED will be doing in the future, are falling, not rising – Exhibit 1.
- If you own the German short-term bond ETF (RXP1EX GY), it's rather oversold and priced at a new low. The slow and steady suffrage (in price terms, falling at 1%/year) comes both from both the rate and more recently some capital depreciation from rising rates. So on yesterday’s “breakout” in the German 2y yield, where do we see it technically in 2020? Still in negative territory – Exhibit 2.
- Those are completely different bond market trends and pricing. How does it look in aggregate if you take all bonds from all maturities together? Rather quiet. We end 2019 continuing to expect an upward breakout in the direction of the main price trend, which is higher – Exhibit 3.
  - If you are looking for a long duration asset that is leading bonds, and thus has already broken out, look to gold. And for your equity consideration, look to gold stocks, which are outperforming both bullion and global equity markets – Exhibit 4.

My friend, I’ll say it clear, I’ll state my case, of which I’m certain
My Way, Frank Sinatra

Exhibit 1: US 2Y Bond Yield (Short-Term Bond Price Trend Here)

Exhibit 2: German 2y Bond Yield

Exhibit 3: Global Agg Treasuries Index, Unhedged in USD

Exhibit 4: Gold Miners vs. MSCI World

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
As we highlighted last week in “Gift of Understanding”, we are paying a lot of attention to currencies (Renminbi finally rallying off of the 7 mark today), and in particular their influence on commodity pricing – Exhibit 1.

But for the most part, our clients are equity investors, and are either generalists, or specialists, looking for shifts in/out of their sector. If one gears the math more towards the investment decisions that matter for our clients, the picture is less clear. Does this morning’s breakout in the Asia dollar index to a 5m high matter to the overweight/underweight decision on natural resources? Sometimes. But it’s unreliable. The most positive signal we see for natural resources regarding their fit to currencies is the large non-confirm of the natural resources low this month – Exhibit 2.

So what does one do with a group that has been consistently underperforming for almost two years as it approaches the key inflection point? – Exhibit 3. Buy some energy, which we have highlighted this month. Consider the outperformers for your portfolio – Exhibit 4.
Trends & Inflection Points

Breakouts

- **Amazon** (AMZN US) broke above underperforming trends *vs. the S&P 500* and *ACWI IT indices* yesterday. That signalling is timely. We highlight the pre-breakout view on the stock below – Exhibit 1.

- About 10% of our **global real estate universe** has broken out to new 52-week highs. We see this segment as the leadership. The balance, at the relative strength breadth level, is rebounding from the zero mark, which we see as the time to buy real estate – Exhibit 2.

- We highlighted the **charts of gold and silver breaking out of consolidation patterns** in our last note. Following up today, we note that (1) gold broke out to a new high in yen terms yesterday and (2) gold is nicely correlated to real return bonds, and we observe a breakout here too – Exhibits 3, 4.

---

**Exhibit 1: Amazon (AMZN US) Price Trend (vs. SPX Here)**

**Exhibit 2: Global Relative Strength Breadth Heat Map**

Pullback to Zero
Mark is The
Time to Buy
Still Leading
Best Short

**Exhibit 3: Gold in Yen (Gold in Other Major Crosses Here)**

**Exhibit 4: DB International TIPS Bond ETF (WIP US) Price Trend**

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit

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December 27, 2019
Silver and Gold

Silver and gold, silver and gold, mean so much more when I see silver and gold decorations on ev'ry Christmas tree

Burl Ives

Exhibit 1: Silver ETF (SLV US)

Exhibit 2: Gold ETF (GLD US)

Exhibit 3: Gold Equity ETFs With Full Technicals – Positive and Not Overbought – Across the Board

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
**Trends & Inflection Points**

**Gift of Understanding**

- That pop in the CRB Raw Industrials, which we use as a key barometer of global growth expectations was a surprise to us.
  - When it comes to investing, we don’t like surprises.
- The key for us is then is to unpack the surprise until one attains understanding. The pop was timed around the China-US phase one deal. The move appears to be a catch-up to the strength of the Renminbi, which had been in place for a few months. The correlation of the two time series, which was pure noise a few years ago, is now impressively signal – Exhibit 1.
  - So rather than focus of the lack of pattern in the CRB Raw Industrials, we will focus on the Renminbi, it’s nascent uptrend, and the consolidation around the 7 mark which can break in either direction.

Exhibit 1: China Renminbi (CNY), CRB Raw Industrials, Rolling 30d Correlation of Returns

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Christmas Shopping Dos

- Starting broad, then narrowing in:
  - Large Cap technology – Exhibit 2.
  - At the aggregate level, it’s a bit pricey, with an RSI at 70, and at the top of the channel – Exhibit 3.

- But at the stock level, we can tune out the overbought stocks to come up with a pretty good shopping list for the portfolio – Exhibit 4.

Exhibit 1: MSCI North America vs. MSCI World

Exhibit 2: Technology vs. S&P 500

Exhibit 3: US Technology ETF (XLK US) Price Trend

Exhibit 4: North American Technology Momentum Buys

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
**Trends & Inflection Points**

**Christmas Shopping Don’ts**

- In line with our call to bottom fish in energy and take the capital from staples, we focus on the later today. Staples, breaking down in our system, has really been underperforming at a rate of 23%/year over the past 17w. There are better places to invest – Exhibit 1.

- We can twin the energy/staples call nicely using our relative strength breadth work. When energy rises/falls, staples are the counterbalance of this move, falling/rising in tandem – Exhibit 2.

- So no soap on-a-rope under the tree this Christmas – Exhibit 3.
  - And any more household products you can think of are off the list as well – Exhibit 4.

**Exhibit 1: Staples vs. MSCI World** (Short-Term Trend in Insert)

**Exhibit 2: Energy & Staples Breadth Relative Strength Z-Score**

**Exhibit 3: Procter & Gamble Co (PG US) vs. ACWI**

**Exhibit 4: Largest (10th Decile) Household Products Stocks vs. ACWI**

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Commodities in 2020

- Commodities in 2020 will be just like commodities in 2019, and 2018, and...they will continue to be intimately related to Asia, the growth engine of the world. The best real-time indication of Asian growth optimism/pessimism is found in currency markets – Exhibit 1.
- So what do we do with yesterday’s inflection point – Exhibit 2?
- The key to the Asia dollar index is China, where the currency underwent a positive inflection point on December 12, and started to retrace that on December 13 – Exhibit 3.
- We were going to leave you with the chart of basic materials vs ACWI to highlight how much capital we we think you should allocate there, but the answer is pretty simple, so we will let the chart speak for itself.
  - Instead, as we’ve handled energy quite a bit recently, we’ll cover the other basic resources sector, with the declaration that tis not the season to be thinking about material things, at least relative to the broader equity opportunity set – Exhibit 4.

Exhibit 1: Asia Dollar, BBG Commodity, Rolling 30d Fit of Returns

- Asia Dollar Index (ADX)(R1)
- BBG Commodity Index (BCOM) (R2)

Exhibit 2: Bloomberg Commodity Index

- Trend / Width -4% / 6%
- Trend Length 11 mo

Exhibit 3: Offshore Chinese Renminbi (CNYUSDx10)

- Trend / Width -7% / 4%
- Trend Length 11 mo

Exhibit 4: Materials vs MSCI World (same Trend Elsewhere, Except in Canada and US SmallCaps)

- Trend / Width -4% / 5%
- Trend Length 12 mo

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Christmas Card From the SMID Energy Sector

- One week ago, Canada (being closer to the North Pole) received the relative strength Santa Claus call to buy energy. Yesterday, that signal reached south of the border, for US Small Caps. We suggest that you use funds from staples for the purchase – Exhibits 1, 2.
- This same messaging can be seen elsewhere, including Russell MidCaps, and Global SmallCaps, but not for Europe or EAFE.
- Not a lot of light has shone upon the energy space this year. It’s been absolutely horrible, which has been fantastic for the “underweight energy” call that has played itself out beautifully. But alas, winter solstice is at hand, and we see (selected) evidence of the birth of new optimism – Exhibit 3.
  - For the stock picker, the choices are here or here for the global SmallCap manager – Exhibit 4.

Hey Charley I think I’m happy for the first time since my accident

Tom Waits

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Chinese Inflection Points

- On Friday, MSCI China was lauded above the top end of a rising channel, but more important for us technically, is that it broke a two-year downtrend. When Chinese stocks rally, they can rally very hard, so it’s the inflection point which matters, and it’s here – Exhibit 1.

- For a tactical asset allocation fund, the Hang Seng has been the absolute worst place to allocate funds. That inflection point also arrived on Friday – Exhibit 2.

- We never look at China, without looking at bank credit risk. That signals here are all bright green – Exhibit 3.

- We highlight price trends on the largest 15 Chinese stocks, to detail – Exhibit 4:
  - A number of stocks appear overbought, but in every case, this is in a “low volatility environment (circled),” so it’s more of a breakout signal, than an overbought “time out” signal.
  - With Tencent breaking out, China Mobile (Telecom, our new least favourite sector), is the only decent mega-cap short.

Exhibit 1: MSCI China (Other Chinese & EM Indices in Insert)

Exhibit 2: Hang Seng vs MSCI World (Other Global Markets in Insert)

Exhibit 3: Chinese Bank CDS Average (939, 1398, 3988)

Exhibit 4: Price Trends on Largest 15 Stocks – Full Spectrum Here

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
New Best Sector?

- New best sector? We are always on the lookout, but in a similar fashion to the US-China phase 1 trade deal at pixel time, we don’t have one. For many regions, it’s still technology – Exhibit 1.
- We’ve noted the bifurcation of the sector a month ago, and that’s still the case today (Exhibit 2), and the longer that exists, the more we see it as labeled (bifurcated), and not the one set of subindustries leading the other set down. With health care pulling back, technology continues to lead in our global relative strength breadth reading. So in total, the highest concentration of outperformance (for momentum managers), or severed underperformers (for bottom fishing managers) continues to be found in technology.
  - Taking the cue from the bifurcation, investors should look to the best subindustries for buy candidates, and the weak side for their avoids, or shorts if you do that – Exhibits 3, 4.

Exhibit 1: Technology vs MSCI World (IT vs Local Markets in Insert)

Exhibit 2: Technology SubIndustry Relative Strength Breadth Heat Map

Exhibit 3: Largest 10 Technology (in Strong SubIndustries) Momentum Buy List – Full List Here

Exhibit 4: Largest 5 Technology (in Weak SubIndustries) Momentum Sell List – Full List Here

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Today we follow up our call on communication services as “New Best Underweight” with more granularity. First, by country – Exhibit 1.

- The only place where the sector is outperforming (at an extremely modest pace), above rising moving averages, is in the US. Here, there is a short momentum buy list, and a larger collective, wrapped up in an ETF, which one can consider as a funding short – Exhibit 2.

- From a timing perspective, we note:
  - Canadian TELUS (T CN) has been trending higher at a dividend-included rate of 9%/year, with a band width that is wider than that. The market is doing better. As TELUS is near the top of a channel, it’s a good time to move to an underweighted position vs the TSX – Exhibit 3.
  - When we tune the RSI up in our communication services momentum sell list to hunt out the stocks where one has a decent bid to sell into, we spot Television Francaise 1 SA (TFI FP) – Exhibit 4.

**But if you want to take the short cut I know the way**

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**Exhibit 1: Communication Services vs Local Benchmarks**

<table>
<thead>
<tr>
<th>Name</th>
<th>Reward/Risk</th>
<th>Trend Slope</th>
<th>RS Lo (%)</th>
<th>%Chg wrt 50d RS MA</th>
<th>%Chg wrt 200-d RS HA Trend</th>
<th>%Chg wrt 200-d RS HA Trand</th>
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<td>S&amp;P 500</td>
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<td>2%</td>
<td>0.1%</td>
<td>Above Rising</td>
<td></td>
<td></td>
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<td>1%</td>
<td>-0.2%</td>
<td>Below Falling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI Switzerland</td>
<td></td>
<td>1%</td>
<td>0.1%</td>
<td>Above Falling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSCI EAFE</td>
<td></td>
<td>-1%</td>
<td>12.0%</td>
<td>Below Falling</td>
<td>-2.9%</td>
<td>Below Falling</td>
</tr>
<tr>
<td>S&amp;P/TSX Composite</td>
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<td>0.4%</td>
<td>Above Falling</td>
<td>-0.4%</td>
<td>Below Falling</td>
</tr>
<tr>
<td>MSCI Europe</td>
<td></td>
<td>-5%</td>
<td>14.5%</td>
<td>Below Falling</td>
<td>-4.7%</td>
<td>Below Falling</td>
</tr>
<tr>
<td>MSCI EM</td>
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<td>Below Falling</td>
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<td>MSCI AC Asia</td>
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<td>MSCI China</td>
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<tr>
<td>MSCI World Small Cap</td>
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<td>-12%</td>
<td>-1.2%</td>
<td>Below Falling</td>
<td>-3.8%</td>
<td>Below Falling</td>
</tr>
</tbody>
</table>

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**Exhibit 2: US Telecom ETF (IYZ US) Price Trend – Funding Short**

**Exhibit 3: TELUS Corp (T CN) vs TSX – Underweight**

Nice Time To Let It Go

**Exhibit 4: Television Francaise 1 SA (TFI FP) – Timing Short**

Consistent, and Steep Downtrend, With a Bid to Sell Into

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Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
New Best Underweight

- We’ve put out two positive notes on energy in the past two days (here and here), and we have seen energy’s relative strength breadth reading move from horrible to just bad over the very short term (it has the highest positive “short-term” momentum in our Group Selection report). We trust you get the picture. Now...
- ...at the polar opposite end of our relative strength breadth momentum scale, we find communication services, which has just been crowned worst sector by our RS breadth z-Score reading – Exhibit 1.
- When you look down at the more granular GICS level 4 level, you see why our reading at the sector (level 1) basis looks so bad – Exhibit 2.
  - For clients who need to have some weight in communication, we detail the few – Exhibit 3.
  - For clients who should be doing a year-end clean-up, we detail the many – Exhibit 4.

But maybe it’s fair to say it was a lack of communication

Enid, Barenaked Ladies

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
We have to update the picture on oil. Not prompt, which does not really matter unless you need to take delivery, but 12m oil, which is more important for stocks with long duration plans. In that regard, we were not stirred when this year’s attack on Saudi facilities failed to impress long-dated oil. Strangely enough, however, the subsequent slightly upward sloping meander was enough to take out the downtrend. Oil continues to fall at 20%/year = energy stocks continue to be the world’s most liquid short. Change that pattern, and energy deserves a fresh look – Exhibit 1.

- For corporations that need such a pullout in oil’s downtrend to survive, and for whose credit survival is in question, this provides great leverage. We highlight a key inflection point on the count of three – Exhibit 2.
  - Which leads to this equity inflection point – Exhibit 3.
  - Which is repeated here – Exhibit 4.

- High leverage is not for the faint of heart. Get it wrong, and these are widow maker trades. But get it right and your portfolio thanks you.
  
  Four shalt thou not count, neither count thou two, excepting that thou then proceed to three.

Brother, Monty Python and the Holy Grail

Exhibit 1: Brent Oil, 12m Future Continuation Series (12M WTI Here)

Exhibit 2: Transocean 5y CDS (Equity/CDS Overlay Here)

Exhibit 3: Transocean (RIG US) Price Trend

Exhibit 4: Nabors Industries (NBR US) Price Trend (CDS Trend in Insert)

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trends & Inflection Points

Semi-Annual Energy: Made You Look

- OK, perhaps our title is too caustic, but energy continues to have the weakest relative strength breadth score, and it took a pretty sharp weekly rally in oil (curiously lined up by OPEC and the Saudi Aramco IPO) to cause the positive severed trends we are seeing on an absolute level, and in Canada (with weak banks) from a relative perspective as well – Exhibit 1.
- In Canada, there is some pretty good “rotation in” signaling – Exhibit 2.
- So we highlight the technicals on a large cap and SMID player – Exhibits 3, 4.

Exhibit 1: S&P/TSX Energy vs. TSX Composite

Exhibit 2: Energy Stocks vs S&P/TSX Composite

Heavily Stacked to the Negative, With Decent Rotation In Signaling

Exhibit 3: Suncor (SU CN) Dividend Adjusted Price Trend

Exhibit 4: ARC Resources (ARX CN) Dividend Adjusted Price Trend

Note: BMO Capital Markets is Restricted on PPL.
This is our third and final look at the technicals on biotech.

- The last of the macro charts is here – Exhibit 1.
- The reason we don’t run technicals on SMID biotech stocks is there – Exhibit 2.
- We add value when investors combine our math with their fundamental perspective by asking these questions – Exhibit 3.

...Dear, when thou has finished thy task (parsley, sage, rosemary and thyme), come to me, my hand for to ask Scarborough Fair; Simon & Garfunkel

Exhibit 1: Global Biotechnology vs. Health Care

Exhibit 2: Sage Therapeutics Price Trend

Exhibit 3: Who Else Can Give You a Technical Perspective on Price Trends on 121 Biotechnology Stocks in Such a Compressed View?
Biotech Blues or Breakout?

- We feel obligated to go back to health care, as it has improved to take second place in our relative strength breadth heat map. We provide context within the other sector opportunities in our updated view below – Exhibit 1.

- In our coverage of the overbought state of biotechnology yesterday, we missed a very impressive chart. You will find very few four-year trends in our work, yet that’s our upper limit. Biotechnology has reached the limit in terms of duration, and also the limit in terms of being at the top of the channel. From this technical perspective, there is no question, it’s a sell. If you look at the preceding four years, that perspective does a 180. Was the past four years just a retracement of the preceding fantastic run, and is this the breakout? Our system asks the right questions at the right time. This is it – Exhibit 2.

- Then there is the perspective of pharmaceuticals from both a relative and absolute perspective – Exhibits 3, 4.

- So it all comes down to the biotechnology call. Get it right.

Exhibit 1: Global Relative Strength Breadth Heat Map

Exhibit 2: Biotechnology vs MSCI World (Longer Term Trend in Insert)

Exhibit 3: Global Pharmaceuticals vs MSCI World

Exhibit 4: Global Pharmaceuticals Absolute Price Trend

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trends & Inflection Points

Immunity?

- We’re very used to the on/off trade rhetoric which ends up slamming stocks one day, and lifting them another depending on which way the message winds blow. This morning we looked for a group which was largely immune from this in the current round, and we found US biotechnology.

- On a market cap weighted basis, the run has been fantastic. So fantastic, that the only prescription we have is to find trim candidates – Exhibit 1.

- From an equal weighted breadth perspective, we know that the group is typically a heterogeneous bunch of stocks, somewhat randomly pivoting from a high to low decile, and beneath this, always exhibiting a bell shape curve of trends – Exhibit 2.

- At the ETF level, the group has never been so overbought. Never – Exhibit 3.

- At the stock level, when we look at the list of large cap overbought stocks (less immune to individual drug outlook pops/dumps), we point out the pre-MACD sell chart on Amgen – Exhibit 4.

Exhibit 1: S&P 1500 Biotechnology Total Return Index

Exhibit 2: Biotechnology Relative Strength Breadth Z-Score

Exhibit 3: NASDAQ Biotechnology ETF (IBB US) DVD Adj Price Trend

Exhibit 4: Amgen (AMGN US) Dividend Adjusted Price Trend

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trends & Inflection Points

Why Not Cash?

- **US short-term paper offers a juicy 1.6%ish yield**, which is 1) quite generous relative to most of the past decade, and 2) **while stalled out as of late, has fallen, making the total return of owning said instrument a 5% annualized rate of total return over the past 15m**. Further, when compared with equities, which have been on top (the top performance, yet also, as we have noted, at the top of the channel) lately, cash looks ominously positioned at the bottom of a channel, which has spiked higher on a semi-regular basis over the past two years – Exhibit 1.

- In a **treasury portfolio**, cash has made **relative strength** higher highs and lows for more than a quarter now, and one can argue that a trend of outperformance has been established – Exhibit 2.
  - Yet, we see the largest component of this outperformance to be related to the longer duration of the **denominator**, and the major factor here has not been a detrimental rise of **inflation**, but rather the **barking dog of real rates**. Importantly, the barks are **quieting down** – Exhibit 3.

- So when cash comes knocking and long duration gets knocked down, as were **yesterday’s key inflection points in bondland**, we see it as an opportunity to own long duration as we expect performance to come both via the trend, and the volatility – Exhibit 4.

Exhibit 1: **US Short-Term Bond TRI vs S&P 500 TRI**

Exhibit 2: **US Short-Term Bond TRI vs. Barclays US Treasury Index**

Exhibit 3: **US Inflation Linked Bond Yield (All Maturities)**

Exhibit 4: **Long Duration vs Barclays US Treasuries** (Spectrum in Insert)

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trends & Inflection Points

Charge

- We are keeping with Friday's shopping theme, yet moving to the micro level. A subindustry, which has been positive and at worst neutral for years, is Data Processing & Outsourced Services, the home of bellwethers Visa & MasterCard. These two large stocks dominate the market-cap weighted trends: 1) the relative is just exiting a correction phase, and 2) the absolute price chart is exiting a consolidation pattern – Exhibits 1, 2.
  - Our positive relative strength breadth reading is more a function of the SMID stocks in the group, which provide opportunity for the momentum investor and the bottom fisher alike – Exhibit 3.

Exhibit 1: Data Processing & …(in Reality, V & MA) vs S&P 1500

Exhibit 2: S&P 1500 Data Processing Outsourced Services Price Trend

Exhibit 3: Data Processing Outsourced Services Stocks vs ACWI (vs S&P 500 Here, Price Trends Here)

Core Set of Outperformers

Many Underperformers Breaking Above These Trends

Source: All charts/tables BMO Capital Markets, Bloomberg, Thomson, Markit
Trainspotting

- **It’s the question that drives us.** Once the answer is fully known we expect asset prices could be rather different. One pays for answers with performance.
- US bank CDS hit a low on Friday September 13, and started pivoting higher (and remains near a 7w wide) when the US O/N repo rate surged, causing the FED to start to open up a spigot of liquidity to fix some sort of “plumbing problem”.
- We’ve always pointed to the 2017-2018 transition from low to high volatility (which is intimately related to counterparty risk), as a new era. In hindsight, we now expect that the transition was related to the reduction of the FED balance sheet, which has now been forced to expand quite aggressively. We might as well label the start of FED balance sheet expansion, as the second leg of this train ride, where volatility and bank risk are passengers.
- The questions are: (1) What is the counterparty, whose lust for life is causing such an expansion in US central bank reserves? (2) Is this inducing the largest spike in counterparty risk since the December-January period? (3) Will it end in a train wreck?

All on a Government Loan

Lust for Life, Iggy Pop

Exhibit 1: US Bank CDS; US Overnight Repo Rate; US Federal Reserve Balance Sheet; Average Stocks, Bond and Commodity Volatility

Source: All charts/tables BMO Capital Markets, Bloomberg
Blue Drag

- We had a tough time deciding on the lyrics to this note, but came up with a cool depression era tune, Blue Drag. It’s a note about yield curves, and central banks, and inflation, and globalization, and all the mystery about how economies in North America, being so good, can dish out recession signals seeming to indicate that it’s really so bad. The “seeming” bit is incorrect, yet it will become important.

- The US yield curve inverted last week (a few months behind Canada), and will continue to trend towards inversion. Why? Because the US economy is so strong. Say what??
  - Think like a chemist, and break the yield curve into its two market elements, (1) where the FED will be in two years, and (2) why own the 10-year bond?
    - The FED rate will be lower in two years. That’s what the market tells the FED. But the FED is sticky, because things are so good, and, importantly, the FED does not want to fight an asset bubble (a great president resides here). Very true.
    - The long end rallies and this is the key part, which is how the yield curve inverts, because there is not enough global economic growth to sustain the pricing of basic commodities, and thus inflation expectations. Inflation expectations fall, and so does the fear of owning the long end of the curve, so it’s bought because that’s where the leverage is.
  - Oh yeah, and banks do poorly in this environment. That blue line drags the black one down. That’s been the case since the last great recession – Exhibit 1.
    - Why? Because the inversion will induce a bank profitability recession. Ultimately, this could tighten up conditions as banks tighten credit to remain profitable.
      - Or central banks can just continue to ease and not fight this holy Armageddon.

"Oh, the rhythm, the rhythm has got me into this mysterious craze"

Blue Drag, Josef Myrow 1932

Exhibit 1: Relative Strength of Global Banks vs. MSCI World, US 5y5y Inflation Expectations, Rolling 30w Correlation of Returns

Source: All charts/tables BMO Capital Markets, Bloomberg
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<td>24.1 %</td>
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<td>Sell</td>
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