Jefferies Prime Services Monthly

JUNE 2018

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The Thing We Should Always Be Asking Is…. What Else Is Possible?

Summer is here. Nearly half the year is over. We’re between the French Open & Wimbledon. The World Cup just introduced us to the idea of “man made earthquakes.”

It’s not the time to get tired, complacent or in a rut. Here are some of the things at the top of our minds as we look to the second half of the year.

Of note:

1. Implications of the September GICS Overhaul: Only continuing to underscore the importance of content, the September 28th GICS reclassification will put Facebook, Netflix, Google’s parent Alphabet, Twitter and Snapchat alongside AT&T, Verizon and Comcast in the Communications Services Sector. Given the record assets that continue to flow into passive products, we’re keeping an eye on how this reclassification – inclusive of some of the world’s largest market cap companies – could impact positioning and portfolios.

2. Supercomputing isn’t Sci-Fi Anymore. When ENI’s supercomputer is faster than Facebook’s or NASA’s, it’s fair to say supercomputing has gone mainstream. On the back of IBM and Nvidia’s announcement that they have completed testing the world’s fastest supercomputer – get ready to hear more about ‘petaflops,’ GPUs and deep neural networks (DNNs). This supercomputer, named Summit, can conduct 200,000 trillion calculations per second. This new frontier has massive implications for data processing and analysis, and poses the question – what does the inevitable cheaper, commercial version of this look like?

3. A Trip to Israel’s Tech Trek Raised the Bar. We spent time with the leading public, private and emerging companies in Israel over the course of the Jefferies June Tech Trek, with particular highlights
   • Over $50 billion in market cap represented
   • More than 200 investor attendees from across the globe
   • Three days of innovative and thought provoking content
   • And a fantastic overview of some of the trends, themes and products that could shape the next 10 years

It’s been an interesting first half, and we look forward to see what’s next.

What We’re Reading & Listening To This Summer

We wanted to offer a humble list in the event you were coming up short for beach reading, plane reading, train reading or - reading in the office while you’re colleagues are parked on one of the previous.

FOR LONGER FLIGHTS OR THE CAR RIDE TO WALLYWORLD

1. For longest haul flights or those who are looking for a book to graze on over the whole summer…
   Enlightenment Now. Stephen Pinker
   This nearly 500-page tome by optimist and Harvard psychologist Stephen Pinker painstakingly lays out why the world is not going to heck in a handbasket…no matter what the headlines seem to say.

2. For those looking for a weeper on the beach or another reason to look at life from a glass half full perspective…
   When Breath Becomes Air. Paul Kalanithi
   This one has been out for a while, but some colleagues report revisiting recently. Terminally ill Dr. Paul Kalanithi (with the help of his wife Lucy), writes not on dying – but about life, how to live a good one, and why that matters.

3. For those trying to develop an athletic crystal ball during the All-Star break…
   Astroball. Ben Reiter
   Back to the Future II may have predicted the Chicago Cubs’ participation in the 2015 World Series, but in 2014, a Sports Illustrated journo named Ben Reiter correctly predicted the Houston Astros would win the 2017 series. In Astroball, he chronicles their data driven road to victory.

4. For those looking for a laugh
   Look Alive Out There. Sloane Crosley
   Universal truths wrapped in humorous essays.

   Worth revisiting.

Honorable Mentions: Michael Pollan’s How to Change Your Mind, Ken Auletta’s Frenemies and Edward Tenner’s The Efficiency Paradox: What Big Data Can’t Do

FOR SHORTER FLIGHTS OR ATTENTION SPANS

1. The NBA’s Secret Addiction. ESPN magazine. Baxter Holmes
   This James Beard award winning article details how the humble PB&J rose to the top of players’ pregame rituals. If you can read this and not crave a PB&J after, we salute you.

2. How to Be Happy. New York Magazine. Adam Sternbergh
   Just what the title says – but backed up with data.

FOR THOSE WHO READ WITH THEIR EARS: PODCASTS

1. Gimlet Media’s Science Vs. or The Habitat
2. Malcolm Gladwell’s Revisionist History
3. 30 for 30 Podcasts (esp. The Reckoning of a Yoga Empire

FOR ANYONE WHO WANTS TO GO BACK TO SUMMER SCHOOL

Introduction to Computer Science and Programming, MIT online courseware (OCW)
The Minneapolis investor base is and given the industry’s complexity, potential volatility, and explores the backdrop for these investments and digs into the broad and diverse levers that can convert interest into allocation. In the first half of 2018, the Jefferies Capital Intelligence team conducted deep dive interviews with or research of nearly 70 firms with active healthcare specialist allocations, and we share the findings of that work here.

Of particular note:

Healthcare has become too large a sector for many alternatives allocators to ignore – and given the industry’s complexity, potential volatility, and technical nature, they often report seeking exposure via active management. Checking the Pulse explores the backdrop for these investments and digs into the broad and diverse levers that can convert interest into allocation. In the first half of 2018, the Jefferies Capital Intelligence team conducted deep dive interviews with or research of nearly 70 firms with active healthcare specialist allocations, and we share the findings of that work here.

Healthcare is one of the few sectors in the U.S. with anticipated growth across multiple drivers over the next decade, with the Department of Labor and the Centers for Medicare and Medicaid expecting spend, percent contribution of GDP, job growth and wage growth all to increase.

And healthcare appears to be one corner of the alternatives industry where allocators are less fee sensitive. Many reported expecting – and are willing to pay – higher headline fees, assuming performance is there. A number of respondents reported viewing healthcare specialists as a “higher cost, higher value product,” and one where they were willing to pay higher fees upon allocating.

To access the full piece, please click here.

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CAPITAL INTELLIGENCE: MINNESOTA TOUR

Minneapolis. Headquarters for Target, birthplace of Bob Dylan and home to Prince and Minneapolis Fed President/global financial crisis Treasury aide Neel Kashkari.

At the end of May, the Jefferies Capital Introductions team traveled to Minneapolis to meet with an array of investors, including foundations, consultants, and wealth managers.

Of particular note:

- The Minneapolis investor base is relatively diversified across allocator vertical, but leans more towards institutional endowments, pensions, and foundations and consultants (fund of hedge funds or advisors) and fewer family offices and wealth managers.

- Institutional allocators in Minneapolis tend to be more active than family offices and tend to have larger alternatives portfolios, upgrading their books tactically around market opportunities or due to redemption replacements. Family offices tend to have a mature portfolio of core hedge fund allocations that may be tweaked around the edges but have been fairly consistent over a number of years. The RIAs are also less active in alternatives (and hedge funds specifically) either having built out their portfolios or not investing in alternatives at all (or thinking about dipping their toes in).

- Most investors in the region have mature portfolios and tend to more one in / one out in their approach to hedge funds.

The only consistency across allocator verticals in Minneapolis seems to be in the profile of manager and the attribution of returns:

- At a minimum: most allocators in Minneapolis prefer managers with at least $100mm to $250mm in AUM and at least a 3 year track record, seeking business stability. Many have underlying clients that do not want to unwrite the business risk of a new launch or smaller manager.

- Outside the U.S.: Many allocators in the region have been spending time tweaking their non-US portfolios across all structures including rotating capital to long only equities, privates, and liquid alternatives that provide international exposure (although a couple of RIA’s have been focused on upgrading their US equity external manager offering, which differs not only in MN but across the U.S.). Some have been underweight international equities, which drove portfolio returns over the past year or two, others are focused on upgrading their manager line up as allocators see the value in more active management in the space given inefficient markets.

- Institutional clients also have been looking more closely at adding yield-oriented investments that can clip 50bps to 100bps a month (targeting 8% to 12% a year) in order to add more stability in anticipation of market volatility in the next few years. These organizations may have longer time horizons, but need to be thoughtful about annual performance as well. As such, this has increased allocator interest in strategies like direct lending, loan origination, and asset backed leasing strategies among other idiosyncratic opportunities (given the make-up of the manager community in Minneapolis, the fluency of and familiarity with this space tends to be higher, decreasing the amount of education needed and increasing the actionability of these searches).

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To access the full piece, please click here.

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Top Jefferies Research Reads in recent weeks

Leaders of the Pack:
- Jefferies 2018 Consumer Conference: Key Debates
- VIDEO: Jefferies 2018 Healthcare Conference Recap
- Jefferies 2018 Healthcare Conference Recap – Highlighting the Incremental
- JEF’S SMID-Cap Strategy: All Over But the Shouting...Russell Recon Lists Are Out
- T/TWX Ruling: Far Reaching Implications

Jefferies Global Equity Strategy:
Global Asset Fund Flows Tracker - Sharp DM Equities
Preference Over EM Equities

Over the past week (7-13 June), investors continued to focus on US (+US$10bn, a 13-week high) and Chinese domestic (+US$1.9bn via northbound) equities, IT stocks (+US$2.1bn) and lately healthcare (+US$1.6bn) stocks. In contrast, investors were generally cautious on EM equities (-US$952mn). In the bond markets, while EM bonds (-US$1.3bn) extended their outflow streak, others such as investment-grade corporate, high yield, inflation-protected and government-related bonds all recorded redemptions. In the US money markets, there was a sharp unwinding (-US$38bn).

- **Global Equities.** With EM currencies slipping (the MSCI EM currency index slipped 0.43% w-w), investors pulled out US$952mn from EM equities and injected US$6.9bn into DM equities. The EM currency index peaked in April. EM equities started to feel the heat in early May. Since then, investors withdrew US$2.8bn (-0.21% of AUM) from EM equities and added US$28bn (+0.29% of AUM) into DM equities (see RHS chart). By sector, while IT (latest: +US$2.1bn; YTD: +US$40bn) remained investors’ key preference (see The Global Asset Fund Flows Tracker - Equity Investors Enthralled By IT), healthcare (+US$1.6bn, a 4-week high) and consumer discretionary (+US$1.2bn) have also experienced solid interest lately.

- **US and European Equities.** Investors pumped a net US$10bn (a 13-week high) into US equities. Small caps have captured majority of the interest (+US$5.7bn) of late as well as YTD (+US$12bn). Correspondingly, small caps have led large and mid caps by a significant margin in performance terms.

- **Asian Equities.** Foreign investors stayed cautious for the fourth week while mutual fund/ETF investors turned net sellers for the first time in three weeks. Foreign selling was more significant in Indonesia (-US$183mn) and Thailand (-US$410mn). Last week, the two markets retreated noticeably following recent rebounds.

- **Global Bonds.** EM bond outflows remained intact (-US$1.3bn, the 8th week of liquidation).

**Full note available here**

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Software

Identity & Access Primer: Materially Underestimated Opportunity

We offer this report as a primer on the Identity and Access Management (IAM) market. We address: specific technologies in the market and how they relate to each other, in addition to their differences; our assessment of the size and likely growth of the market, which is materially greater than that currently anticipated, driven by increased reach and new use cases; and potential future developments as well as logical extensions that have yet to materialize.

**Underestimated Market.** Cloud has increased the relevance of the Identity and Access Management (IAM) market, likely already resulting in a positive inflection point in growth. Industry analysts' aggregate 2017 market size of $7.9B growing at an 8% CAGR to $10.5B in 2021 does not reflect this; we estimate a more accurate market forecast at more than twice that CAGR, or about 22% with a realized 2017 market of $8.0B growing to $17.6B in 2021.

**Beneficiaries:** Modern Solutions. Within our coverage universe, we expect the major beneficiary of these trends to be SAIL and raise our PT to $33 from $30. SAIL has increased license revenue growth to 46% in 2017 from 23% in 2016, with growth of 54% in the past 3 Qs. We believe that there could be upside to the Street’s implied 16% license revenue growth in both 2018 and 2019. OKTA (NC) and CYBR (NC) also offer modern solutions.

**Traditional Players** (e.g., ORCL, CA, IBM, Dell) may see pressure as modern products take share, but a rising market tide may also help lift these ships, even if by only a fraction of our expected 22% market growth. Some, such as CA with its Xceedium acquisition do provide some modern products. MSFT may see more benefit than some traditional players given the ubiquity of Active Directory and its utilization by most identity technologies.

**Future Outlook.** Hyper-distributed architectures increase IAM’s relevance, while SaaS solutions expand scope and growth of the market beyond that expected by industry analysts, as solutions become available to a broader audience and new opportunities emerge, driven by eCommerce (e.g., CIAM) and IoT. Consolidation of currently distinct Identity segments could ensue, mirroring similar trends in other software segments as they mature. IAM could naturally expand through the utilization of more contextual user activity information and into adjacencies, such as Data Access Governance (DAG) or DLP.

You may access the full note here

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Asia
Client activity has been up across the board but positioning was relatively light ahead of the US / North Korea summit. We saw a lot of activity in Apple related plays, on their announcement they would ship ~20% fewer iPhones than expected this year, hitting the Apple supply chain. Otherwise the month was dominated by the well documented MSCI rebalance that saw the inclusion of yuan denominated China A-shares, getting added to the MSCI EM index for the first time. Whilst only a small relative addition, there was a lot of positioning and activity around the event as deletion names tightened where they were well shorted and addition names were closely watched. The event saw a lot of the borrow market caught off-guard on outflow names, not necessarily outright deletions, as MSCI trackers sold on the close.

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U.S.: Gross short exposure has increased on the book by about 8% month over month. Relative reduction of the use of ETFs as hedge to long books, and more single name shorts. Increase in short exposure to Technology and Financial sectors. The dutch auctions in May had limited arb interest with the exception of Herbalife. With the AT&T ruling, it is expected to see an increase in M&A deals for the second half of 2018.

U.S. Largest Increases/Decreases of Hard to Borrow Interest

<table>
<thead>
<tr>
<th>Ticker</th>
<th>Utilization</th>
<th>Quantity on Loan (mm)</th>
<th>SI 30 Day Delta</th>
<th>Indicative Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP</td>
<td>92.88%</td>
<td>141,330,880</td>
<td>34,774,208</td>
<td>-25.00</td>
</tr>
<tr>
<td>JCP</td>
<td>81.99%</td>
<td>124,961,008</td>
<td>17,166,176</td>
<td>-16.50</td>
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<tr>
<td>TXMD</td>
<td>82.72%</td>
<td>60,699,544</td>
<td>6,088,500</td>
<td>-3.41</td>
</tr>
<tr>
<td>TRXC</td>
<td>96.95%</td>
<td>18,700,800</td>
<td>4,915,944</td>
<td>-88.89</td>
</tr>
<tr>
<td>MDXG</td>
<td>88.23%</td>
<td>50,550,412</td>
<td>3,085,760</td>
<td>-19.00</td>
</tr>
<tr>
<td>QD</td>
<td>80.52%</td>
<td>14,619,375</td>
<td>3,074,507</td>
<td>-20.00</td>
</tr>
<tr>
<td>SPWR</td>
<td>91.73%</td>
<td>25,949,626</td>
<td>3,074,174</td>
<td>-50.00</td>
</tr>
<tr>
<td>PLUG</td>
<td>74.36%</td>
<td>45,264,180</td>
<td>2,749,504</td>
<td>-13.00</td>
</tr>
<tr>
<td>AMPE</td>
<td>68.60%</td>
<td>6,816,829</td>
<td>2,073,275</td>
<td>-6.00</td>
</tr>
<tr>
<td>SRDL</td>
<td>99.80%</td>
<td>23,113,740</td>
<td>1,696,560</td>
<td>-309.01</td>
</tr>
<tr>
<td>SIRI</td>
<td>87.30%</td>
<td>336,685,984</td>
<td>(13,222,720)</td>
<td>-4.00</td>
</tr>
<tr>
<td>SGRY</td>
<td>64.87%</td>
<td>51,563,000</td>
<td>(9,078,472)</td>
<td>-2.00</td>
</tr>
<tr>
<td>HIMX</td>
<td>89.93%</td>
<td>20,407,242</td>
<td>(4,248,378)</td>
<td>-7.06</td>
</tr>
<tr>
<td>SGYP</td>
<td>71.34%</td>
<td>57,046,752</td>
<td>(4,135,816)</td>
<td>-19.00</td>
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<tr>
<td>TROV</td>
<td>62.12%</td>
<td>364,282</td>
<td>(3,713,229)</td>
<td>-60.00</td>
</tr>
<tr>
<td>TSLA</td>
<td>79.09%</td>
<td>37,462,512</td>
<td>(3,289,852)</td>
<td>-2.50</td>
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<tr>
<td>GOGO</td>
<td>68.90%</td>
<td>15,603,155</td>
<td>(3,010,197)</td>
<td>-14.00</td>
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<tr>
<td>FRED</td>
<td>77.13%</td>
<td>9,122,235</td>
<td>(2,439,863)</td>
<td>-6.86</td>
</tr>
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<td>NPTN</td>
<td>75.52%</td>
<td>8,086,965</td>
<td>(2,301,432)</td>
<td>-5.00</td>
</tr>
<tr>
<td>DDD</td>
<td>69.68%</td>
<td>33,041,520</td>
<td>(2,285,628)</td>
<td>-9.00</td>
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Source: Markit/Jefferies
# JEFFERIES UPCOMING EVENTS

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<th>Upcoming Conferences &amp; Events</th>
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<td><strong>June 18 &amp; 20</strong></td>
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<td><strong>June 19</strong></td>
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