



MORNING BRIEFING

August 9, 2018

Robot Advisors & the Magic Kingdom

See the [collection](#) of the individual charts linked below.

(1) New, new thing in passive asset management, robo-advisors. (2) Assets under management growing fast. (3) AI-enabled investment allocation also enables low to no minimums, low to no fees. (4) Big traditional players: “Can’t beat ‘em, join ‘em.” (5) Robo segment hopping with new mergers, partnerships, and offerings. (6) Flavor of the month or here to stay? (7) Let the investor beware: Know what’s under your algorithms’ hood. (8) Vacation-happy consumers shoring up hotel industry stats. (9) Beneficiaries include Marriott and Disney. (10) Even so, S&P 500 Hotel, Resorts & Cruise Lines stock price index is down ytd-undervalued?

Financials: AI-Powered Robo-Advisors. As in most industries, technological innovation is disrupting the money management business. That’s most visible in the remarkable growth of exchange-traded funds (ETFs), which were enabled by the revolution in high-speed data processing and telecommunication.

Since the start of 2001, cumulative inflows into equity ETFs totaled \$2.0 trillion through June of this year ([Fig. 1](#)). From 1990 through the end of 2000, equity mutual funds attracted \$1.8 trillion net inflows ([Fig. 2](#)). Since the start of 2001, they’ve attracted only \$885 billion. Since the start of the current bull market during March 2009, ETFs attracted \$1.5 trillion, while equity mutual funds attracted only \$149 billion. In other words, so-called “passive” asset managers have clearly benefitted from the tech revolution at the expense of “active” managers.

ETFs provided low-cost investment alternatives and pushed existing players to lower their fees on products new and old to remain competitive. Most recently, Fidelity introduced two fee-free index funds. The Fidelity Zero Total Market Index Fund and the Fidelity Zero International Index Fund won’t charge investors any fees regardless of the amount they invest. Zero. Zip. Zilch.

Nevertheless, thanks to the recent bull market, equity mutual funds racked up capital gains totaling \$7.5 trillion through June. Now there is another challenge for traditional active managers. Around 2008 to 2010, a group of upstarts began offering active money management services that used computer programs to decide what and when to buy or sell. Computer programs allocate the funds, rebalance them, and sometimes take tax losses. Human assistance is often available via the phone.

Better known as robo-advisors, firms like Betterment, Wealthfront, and Personal Capital have clients fill out a questionnaire online about their financial status and goals; using that information, a computer places customers’ money in ETFs. Clients benefit from low minimum investments and low fees—often just a quarter or half of a percentage point.

In short order, the big, traditional players took notice and either bought robo-advisors or developed their own AI-empowered offerings. Vanguard, Schwab, Merrill, and other large established companies now offer their own AI-managed funds, often in conjunction with advice from their own financial advisors. I asked Jackie Doherty, our contributing editor, to have a look at recent developments in this growing

corner of money management. Here's her report:

(1) *Numbers getting bigger*. Robo-advisors may have started small, but their assets under management are growing fast. According to estimates in a Juniper Research [study](#) published earlier this year, revenue from robo-advisor technology was about \$1.7 billion in 2017, but it will grow to \$25 billion by 2022 as assets under management expands from about \$330 billion last year to \$4.1 trillion in 2022.

"Juniper found that robo-advisors are broadening the appeal of the wealth management market, with their delivery method via intuitive smartphone apps making the investment process far more convenient, offering a compelling reason for millennials to invest," a company press release stated.

(2) *Big fish buying minnows*. Large money managers have two choices: build or buy. Among those in the buy camp is BlackRock, which purchased a large minority stake in the UK's Scalable Capital; founded in 2014, the firm has clients in the UK, Germany, and Austria. That followed BlackRock's 2015 acquisition of US robo-advisor FutureAdvisor.

Now small financial companies are partnering with FutureAdvisor to offer their own robo-products. US Bancorp has partnered with FutureAdvisor to offer a product called "Automated Investor" that rolled out in June. "The investment portfolios have been created by U.S. Bank wealth management professionals and will have access to 'the same investment content from our investment team' that all wealth management clients receive," Mark Jordahl, president of US Bank Wealth Management, said in a 6/19 *American Banker* [article](#). "The technology seeks to optimize returns and help minimize risk, and automatically rebalances investments as the markets change, he said. Users can receive a free analysis of their investments to see how they are performing and how they can potentially improve." The fee: 50 basis points.

Along the same line, Fifth Third has partnered with Fidelity's digital platform, Automated Managed Platform, to develop a Fifth Third digital wealth management offering. "Fidelity's automated advice platform launched later than offerings from competing firms such as Schwab and BlackRock. However, the firm has more than a dozen clients already live and using Fidelity AMP, with more than 150 firms in the pipeline, including a mix of banks, RIAs and broker-dealers," a 6/5 *American Banker* [article](#) reported.

Meanwhile, some of the minnows have started to offer banking products. In Q2, robo-advisors Acorns and Stash launched checking account and debit card options, according to the Q2 [Robo Report](#) by BackendBenchmarking. SoFi, a fintech lender with a robo-advice product, now offers checking accounts and credit cards. Wealthfront is exploring offering checking and savings accounts.

(3) *Scale matters*. Those robo-advisors who have failed to gain scale or attract a deep-pocketed buyer are closing up shop. Hedgeable, a robo-advisor launched in 2010, announced in July its plans to close. The firm had almost 1,700 clients and \$79.9 million in assets. The news follows the December closing of WorthFM, a robo-advisor focused on female clients.

Hedgeable's "demise indicates that the 'market of independent automated investment services is saturated and the players need either hundreds of thousands of accounts or millions of dollars in order to succeed.' Small digital advisory firms can't afford to survive against the big legacy institutions or Betterment or Wealthfront," said Bill Winterberg, founder of FPPad.com, a technology consulting firm, in a 7/13 Thinkadvisor.com [article](#).

Betterment has \$14.1 billion of assets under management, and Wealthfront has \$10.2 billion. But even those levels are dwarfed by the robo assets that the large money management firms hold. Vanguard

Personal Advisor Services has \$101.0 billion of assets under management in its robo arm, and Schwab Intelligent Portfolio Products has \$33.3 billion, according to the *Robo Report*.

(4) *The report card.* The *Robo Report* has a quarterly ranking of how various robo-advisors fare. The firm opens up and funds accounts at various robo-advisors. In taxable accounts, it seeks a moderate allocation of 60% stocks and 40% bonds for an investor in a high tax bracket.

No one robo-advisor providing equity advice attained a top-three performance position over more than one of the three time periods measured—ytd, one year trailing, and two years trailing—as of Q2's end. Vanguard's Total Portfolio, which can include stocks and bonds, was in third place for the one-year-trailing ranking and in first place for the two-year-trailing ranking. SoFi's fixed-income portfolio was the top performer ytd and in third place for one-year-trailing performance.

None of their blended portfolios matched the returns of the S&P 500 because the portfolios typically include allocations to bonds, foreign equities, and value stocks. Even their equity portfolios, which may include international or value stocks, failed to match the 14.0% one-year-trailing S&P 500 return as of 7/31. Two of the highest one-year-trailing results came from Fidelity Go, 12.2%, and Wealthfront, 12.4%. Fidelity charges 0.35% annually and has no minimum investment, while Wealthfront charges 0.25% and has a \$500 minimum. On the other end of the spectrum, FutureAdvisor and Betterment's equity portfolios had among the lowest one-year returns, 7.8% and 8.0%, respectively.

(5) *Note of caution.* Robo-advisors are undoubtedly the flavor of the month on Wall Street; however, investors should be certain to understand exactly how the robos' algorithms work. Dr. Ed's book [*Predicting the Markets*](#) illustrates why it's important to do so.

He writes: "Gary Smith, a professor of economics at Pomona College, wrote an August 31, 2017 opinion piece for MarketWatch titled 'This Experiment Shows the Danger in Black-Box Investment Algorithms.' Gary was an assistant professor at Yale when I attended the graduate program in economics, and I learned much from him. We remain good professional friends and like-minded about the cluelessness and irrelevance of most macroeconomic research.

"In the article, Gary reported running big-data, black-box investment algorithms to explain the S&P 500 daily for 2015. He let data-mining software loose on 100 variables that might be correlated with the S&P 500 stock price index. His experiment considered all possible combinations of one to five variables, including all 75,287,520 possible combinations of five variables. Several of them worked great but then failed miserably in 2016. He wisely concluded: 'We should not be intimidated into thinking that computers are infallible, that data-mining is knowledge discovery, that black boxes should be trusted. Let's trust ourselves to judge whether statistical patterns make sense and are therefore potentially useful, or are merely coincidental and therefore fleeting and useless.'"

Algorithm suspicion will be important to develop for years to come.

Consumers: Hitting the Road. The Dog Days of Summer have arrived in New York, leaving residents with two options: find air conditioning or travel somewhere with cooler temps. The travel industry has been on strong footing in recent years as the unemployment rate has declined and Boomers and Millennials have shown a proclivity to see the world. Let's take a look at some of the industry's stats and the earnings of industry leaders Marriott International and Walt Disney:

(1) *Not much room at the inn.* The hotel industry is enjoying a strong vacation season. During the week ending 7/28, hotel occupancy rose 1.3% y/y to 78.5%, the average daily rate of hotel rooms increased 2.9% to \$135.94, and RevPAR (revenue per available room) jumped 4.2% y/y to \$106.66, according to

a [press release](#) from STR.

That strength fed into a healthy Q2 for Marriott International, which completed its acquisition of Starwood Hotels in 2016. Marriott's RevPAR increased 3.1% y/y in North America and 3.8% worldwide. Exceedingly strong growth occurred in Asia Pacific, where RevPAR jumped 9% in Q2, including a 10% jump in China. That strength is expected to continue for the remainder of the year, with Marriott forecasting worldwide RevPAR increases of 2.5%-3.0% for both Q3 and Q4.

Overall, the company reported adjusted Q2 earnings per share of \$1.73, above analysts' consensus estimate of \$1.38 a share. Disney raised its 2018 adjusted profit estimate to \$5.81-\$5.91 a share, up from \$5.43-\$5.55.

Some interesting notes from the company's Q2 [conference call](#) included CEO Arne Sorenson's take on trade wars and the company's push into home rentals. So far, he said, there's no indication that the trade spat between the US and China has affected the company's occupancy in China or its ability to develop new hotels in that country.

"Personally, my larger fear about the trade war potential is what it could do to GDP growth in the United States and to some extent what it could do to the cost for construction materials in the United States and in other markets around the world," Sorenson said on the call. The trade war "certainly has not seemed to manifest itself yet in US GDP numbers. It probably is starting to manifest itself in terms of some materials that are used for construction, but it's early on in that process; we'll have to see how it evolves."

Marriott also discussed its new pilot program [Tribute Homes](#), which seems aimed directly at pushing back against Airbnb and other home rental operations. Launched roughly three months ago, Tribute Homes is a program in London where about 200 homeowners have connected their homes to the Marriott system. Those who book a home get the ability to tap into the Marriott loyalty programs, and Marriott provides services, like key delivery and housekeeping, that make the stay more predictable and consistent with the Marriott brand, said Sorenson. He didn't say whether the program would be rolled out to other cities.

(2) *Still the happiest place on Earth.* Results out of Disney's Park and Resorts division are still indicating that consumers are ready and able to spend. The division's fiscal Q3 revenue increased 6%, and operating income jumped 15%, due to growth at domestic and international parks and Disney Cruise Line. Both metrics hit new records.

Attendance at domestic parks rose 1% last quarter, a figure that would have been 2% were it not for the timing of Easter. Nonetheless, park guests opened their wallets. Who can resist a set of Mickey ears? "Per-capita spending at our domestic parks was up 5% on higher admissions, food and beverage, and merchandise spending. Per-room spending at our domestic hotels was up 8%," said Disney CFO Christine McCarthy during the company's [conference call](#). So far in the current quarter, reservations are down 2% y/y, but rates are up 7%.

Despite the strong business environment, the S&P 500 Hotel, Resorts & Cruise Lines stock price index has fallen 7.8% ytd ([Fig. 3](#)). The industry's revenue is forecast to grow 3.0% this year and 7.3% in 2019 ([Fig. 4](#)). That's expected to translate into earnings growth of 20.0% this year and 13.8% next year ([Fig. 5](#)). Despite that strong growth, the industry's forward P/E multiple is a reasonable 15.6 ([Fig. 6](#)).

(3) *Up, up, and away.* The airline industry's strength continued in April, the most recent month for which data is reported. US airlines carried in April 73.8 million domestic and international passengers, a new

high for the seasonally adjusted figure, according to a 7/13 [press release](#) from the US Department of Transportation. The April result is up 0.9% m/m and up 5.0% y/y.

The industry's load factor declined slightly, as the number of new planes coming online grew faster than the number of passengers. April's system-wide load factor, at 83.8%, was down from March's 84.2% and below the all-time seasonally adjusted high of 84.8% reached in October 2015.

The high volume of air travelers hasn't been enough to offset the recent spike in the price of oil. The S&P 500 Airlines stock price index has dropped 6.9% ytd compared to the S&P 500's 6.9% climb ([Fig. 7](#)). The industry is expected to see revenue climb 6.4% this year and 5.2% in 2019, but earnings are estimated to rise 7.4% this year and a much improved 21.2% in 2019 ([Fig. 8](#) and [Fig. 9](#)).

CALENDARS

US. Thurs: Jobless Claims 220k, PPI-FD Total, Core, and Core Less Trade Services 0.3%/0.3%/0.2%, Wholesale Inventories 0.0%, EIA Natural Gas Report, Evans. **Fri:** Headline & Core CPI 2.9%/2.3% y/y, Treasury Budget -\$73.5b, Baker-Hughes Rig Count. (*Wall Street Journal* estimates)

Global. Thurs: Japan GDP (annualized) 1.4% q/q, China CPI & PPI 2.0%/4.5% y/y, Canada Housing Starts 219.5k, Mexico CPI 4.81% y/y, ECB Publishes Economic Bulletin. **Fri:** UK GDP 0.4%q/q/1.3%y/y, UK Total & Manufacturing Industrial Production 0.7%/1.0% y/y, UK Trade Balance -£7500, Canada Employment Change & Unemployment Rate 19k/5.9%, China New Yuan Loans 1200, China Aggregate Financing 1100b, RBA Quarterly Statement on Monetary Policy. (DailyFX estimates)

STRATEGY INDICATORS

Stock Market Sentiment Indicators ([link](#)): Our Bull/Bear Ratio (BBR) edged up this week to 2.95 after edging down the prior two weeks from 2.99 to 2.90. There was little movement in the measures for the third week. Bullish sentiment ticked up 0.4ppt this week to 54.9% after edging down 0.8ppt (to 54.5% from 55.3%) the prior two weeks, while the correction count ticked down 0.2ppt to 26.5% after edging up 0.5ppt (26.7 from 26.2) the previous two weeks. (During the two weeks ending July 17, bullish sentiment jumped 8.2ppt to 55.3%, while the correction count sank 8.1ppt to 26.2%.) Meanwhile, bearish sentiment was little changed at 18.6% this week from 18.8% last week; it has fluctuated in a narrow band between 17.6% and 18.8% the past 10 weeks. The AAll Ratio dropped for the third week last week, from 59.6% to 47.6% over the period. Bullish sentiment fell from 43.1% to 29.1% over the three-week period, while bearish sentiment rose for the second week to 32.1% last week, after falling from 40.8% to 24.9% the previous three weeks.

S&P 500 TCJA Earnings Leaders & Laggards ([link](#)): The 2018 earnings forecast for the S&P 500 has surged 10.5% in the 34 weeks since the TCJA was signed into law on December 22. This outstanding performance has no comparison over the years since consensus earnings forecasts were first derived in 1978. The rate of change in the consensus forecasts has slowed since the Q1 earnings season as analysts appear to have fully incorporated lower tax rates into their estimates. The top sector gainers since the TCJA was passed: Energy (40.7%), Telecom (20.2), Financials (12.6), Materials (12.5), and Industrials (11.2). Consumer Staples is now the smallest gainer, with an increase of 1.2%; also underperforming the S&P 500 are Real Estate (1.4), Utilities (2.2), Consumer Discretionary (7.5), Health Care (8.1), and Tech (8.3). Higher oil prices have contributed heavily to the improvement in Energy's 2018 earnings forecast.

S&P 500 Earnings, Revenues & Valuation ([link](#)): S&P 500 consensus-per-share forecasts for forward revenues and earnings rose to record highs again last week. As more weight is placed on the lower

2019 y/y growth expectations for revenues and earnings, their forward growth rates will likely continue to fall. Indeed, the forward revenues growth forecast edged down 0.1ppt w/w to a nine-week low of 5.9%, and forward earnings growth slipped 0.8ppt to a seven-month low of 13.3%. Forward revenues growth of 5.9% is little changed from an 80-month high of 6.3% at the end of February, and compares to a cyclical low of 2.7% in February 2016. The annual 2018 revenues growth forecast edged up 0.1ppt to 8.1%, and 2019's rose 0.1ppt to 5.1%. Forward earnings growth of 13.3% is down from 16.9% in February, which was the highest since October 2010. Still, that's up 2.2ppts from 11.1% prior to the passage of the TCJA, and up 8.5ppts from the cyclical low of 4.8% in February 2016. Turning to annual earnings growth expectations, the 2018 forecast rose 0.4ppt to 22.9%, and the 2019 forecast was steady at 10.2%. The forward profit margin remained steady at a record high of 12.3%, which is up from 11.1% prior to the passage of the TCJA in December and from a 24-month low of 10.4% in March 2016. The S&P 500 ex-Financials forward revenues growth forecast edged down 0.1ppt to 6.1%, and the forward earnings growth forecast fell 0.7ppt to 12.7%. The S&P 500 ex-Financials forward profit margin remained steady at a record high of 11.4%, and is up from 10.4% before the TCJA. Valuations were lower w/w primarily due to the strong gain in forward estimates. The S&P 500's forward P/E dropped to 16.5 from an 18-week high of 16.9, which compares to a 16-year high of 18.6 at the market's peak in late January and its recent low of 16.0 in early May. The S&P 500 price-to-sales ratio fell 0.03ppt to 2.04 from a 25-week high of 2.07, which compares to late January's record high of 2.16 and early May's low of 1.95.

S&P 500 Sectors Earnings, Revenues & Valuation ([link](#)): Consensus forward forecasts rose w/w for all 11 of the sectors last week. The per-share measures for forward revenues and earnings are at or around record highs for 4/11 sectors: Consumer Discretionary, Health Care, Industrials, and Tech. Forward margins are at record highs for 8/11 sectors, all but Energy, Health Care, and Real Estate. Energy's forward revenues and earnings are back on uptrends after stalling during 2016-2017, and its earnings has about tripled from its 18-year low in April 2016. Looking at last week's readings for forward revenue growth among the 11 sectors, just two had a w/w improvement in their forward revenues growth forecast (Financials and Utilities) as Industrials was steady and the remaining eight sectors fell. STEG revisions activity also tilted heavily toward the downside last week as Real Estate posted the only gain. Forward P/S and P/E ratios are down from their recent highs in early 2018 for all sectors. In the latest week, all but Real Estate and Telecom had both their P/S and P/E ratios weaken. Industrials and Utilities had their P/S ratios edge higher, but their P/E ratios fell. Energy's valuations remain elevated relative to historical levels, but are slowly returning to normal now after soaring in 2016 when revenues and earnings collapsed. Energy's P/S ratio of 1.26 compares to a record high of 1.56 in May 2016, and its P/E of 16.9 is down to a 44-month low now from a record high of 57.5 then. Due to the TCJA, higher margins are expected y/y in 2018 for all sectors but Real Estate, but that sector's forward earnings includes gains from property sales and typically improves as the year progresses. Five sectors had their forward profit margin rise w/w: Consumer Discretionary, Financials, Health Care, Industrials, and Tech; Real Estate was the only decliner among the remaining sectors. Here's how the sectors rank based on their current forward profit margin forecasts: Information Technology (22.9%), Financials (18.9), Real Estate (16.2), Telecom (13.9), Utilities (12.6), S&P 500 (12.3), Materials (11.3), Health Care (10.7), Industrials (10.3), Consumer Discretionary (8.1), Consumer Staples (7.6), and Energy (7.5). Energy's forward profit margin is now the highest since December 2014. Among the remaining 10 sectors, all but two (Real Estate and Health Care) are at or near recent record highs.

S&P 500 Q2 Earnings Season Monitor ([link](#)): With Q2 results in hand for nearly 89% of the S&P 500 companies, we find a higher percentage of companies reporting positive surprises than at the same point during the Q1 earnings season but a lower overall percentage surprise. Year-over-year growth rate metrics for the Q2 reporters to date are close to Q1's historically high levels. More specifically, of the 439 companies in the S&P 500 that have reported through mid-day Wednesday, 80% exceeded industry analysts' earnings estimates by an average of 5.1%; they have averaged a y/y earnings gain of

25.9%. At the same point during the Q1-2018 reporting period, a similar percentage of companies (80%) in the S&P 500 had beaten consensus earnings estimates by a higher 7.2%, and earnings were up a lower 24.7% y/y. On the revenue side, 72% of companies beat their Q2 sales estimates so far, with results coming in 1.6% above forecast and 10.0% higher than a year earlier. At this point in the Q1 season, a higher 76% of reporting companies had exceeded revenue forecasts by a lower 1.1%, and sales had risen by a lower 8.3% y/y. Q2 earnings results are higher y/y for 84% of companies, vs a higher 86% at the same point in Q1, and Q2 revenues are higher y/y for 86% vs a higher 87% a quarter ago. These results are very encouraging, particularly the percentage of companies growing revenues y/y and their Q2 surprise. Q2-2018 should mark the eighth straight quarter of positive y/y earnings growth and among the highest growth since Q4-2010. The strong results are mostly due to lower tax rates and improved business conditions.

GLOBAL ECONOMIC INDICATORS

Global Leading Indicators ([link](#)): The OECD's composite leading indicators (CLIs)—designed to anticipate turning points in economic activity relative to trend six to nine months ahead—for June point tentatively to easing growth momentum in the OECD (99.8) as a whole. That's a change from the long-held stable growth momentum assessment. Among the major economies, the US (100.0) and Japan (99.8) CLIs continued to anticipate stable growth momentum. Meanwhile, easing growth momentum remains the assessment for Canada (99.7), the UK (99.0), and the Eurozone (99.9) as a whole—including Germany (100.1), France (99.7), and Italy (100.1). Among major emerging economies, growth gaining momentum remains the assessment for both India (101.4) and the industrial sector in China (99.8). At the same time, CLIs for both Brazil (103.3) and Russia (100.4) anticipate an easing in growth momentum, a downgrade for the latter, which showed stable growth momentum in May's report.

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