



OptionsHawk Monthly Market Brief – February 2020

S&P 500 (SPX) Technicals

Analysis: The S&P pulled back off expected resistance as an extension of prior major tops as well as a key 161.8% Fibonacci extension level which now makes 3,335 a major level of resistance. There would be cause for more concerns if the weekly RSI uptrend was broken but not currently in jeopardy. Some potential retracement levels are the 21 week EMA at 3,135 while a retest back to 3,030 could also occur as volatility continues to rise. There are levels at 3,270/3,235/3210 that also can come into play, currently just a headline driven market with the coronavirus scare. A normal 5-7% correction puts us in the 3100 to 3170 range and overall playing out exactly as predicted in the annual outlook with a strong start to January into resistance followed by weakness the week after OpEx into earnings season while historically a more volatile time into the Primaries. Bonds and Gold have the strongest technical patterns, which is telling and why we moved defensive into the recent highs.



Key Levels

	<u>Support</u>	<u>Resistance</u>
Level 1	3,270	3,335
Level 2	3,235	3,440
Level 3	3,145	3,500
Level 4	3,075	3,537

Fundamental Valuation Bands

	<u>2020</u>		<u>Value</u>	<u>2021</u>		<u>Value</u>
	<u>EPS</u>	<u>Multiple</u>	<u>Level</u>	<u>EPS</u>	<u>Multiple</u>	<u>Level</u>
Bull	175	20X	3500	185	20X	3,700
Neutral	172	17X	2,925	182	17X	3,100
Bear	168	15X	2,520	178	15X	2,670

Market Health/Sentiment Check

Indicator	Level	Implications
Short Term Moving Average Slopes	3,290	Flattening
Long Term Moving Average Slopes	3,185	Rising
8/21 Week EMA Crossover	Above	Bullish
NYSE McClellan Oscillator (NYMO)	-33.8	Slight Oversold
NYSE Summation (NYSI)	952	8 EMA Bear Crossover
NYSE A/D (Cumulative)	220,268	Above 40 EMA - Bullish
NYSE Cumulative TICK	128,198	Bear 20 EMA Crossover
NYSE TRIN 21 MA	1.095	Neutral
NAAIM	93.75	Overly Bullish
AAll Sentiment	45.6% Bull	Overly Bullish
Investors Intelligence Survey	55% Bull	Overly Bullish
CBOE Equity Put/Call 50 MA	0.55	Complacency
VIX:VXV Ratio	0.91	Neutral

Macro Catalyst Watch and Review

Macro Data & Indicators

The Macro data continues to point to a strong US consumer with strength in Retail Sales and Housing data while the Industrial economy continues to struggle. The December ISM Services print came in very strong at 55 while Manufacturing weak at 47.2 and we also had weak Industrial Production and Factory Order numbers. Regional Fed surveys are starting to show a trend upwards and the Eurozone/Asia January Flash PMI numbers came in healthy last week though now concerns moving forward with the impact of the coronavirus.

Central Banks

The ECB held rates steady and launched a review of its policy that will redefine its main goal and how to achieve it. The ECB sees the need continuing for a negative interest rate environment and remains ready to adjust all measures as necessary with risks still tilted to the downside. The BOJ raised its growth forecast and signaled status quo on its policy outlook, seeing it too early to consider scaling down its massive stimulus program. The US Fed will be making a decision on 1/29, expected to remain on hold, but the commentary will be meaningful to markets. Fed Chair Jerome Powell is expected to reinforce that the Fed plans to continue building up its balance sheet with Treasury bill purchases for a while longer.

Bonds & Credit

Bonds continue to flash warning signals to global markets and moved higher last week as investor's craved safety with the concerns rising over the financial/economic impact globally that could occur from a pandemic. US economic growth forecasts are likely too high and could be impacted by Boeing weakness as well as recent softness in labor data and lack of inflation. Bond markets seem concerned that despite Phase 1 of the Trade Deal and an accommodative Fed, the US economy still faces plenty of headwinds. New bond sales by U.S. high-yield and investment-grade companies are on track for one of their biggest Januarys in years. Investment-grade corporate bond issuance has reached \$140 billion this month, the second strongest January in the past decade behind 2017, when companies sold \$182 billion of debt, according to Dealogic. Tightening spreads have also encouraged companies to refinance or reprice their outstanding debt, helping push the total volume of new leveraged loans launched in January to over \$61 billion, according to data compiled by Bloomberg.

Catalyst Watch

<u>Date</u>	<u>Event</u>
2/3/2020	Iowa Caucuses
2/4/2020	State of the Union
2/7/2020	Democratic Debate
2/10/2020	FY21 Budget
2/11/2020	New Hampshire Primary
2/19/2020	Democratic Debate
2/22-2/23/2020	G20 Meeting
2/23/2020	Nevada Caucus
2/25/2020	Democratic Debate
2/29/2020	South Carolina Primary
3/3/2020	Super Tuesday Primaries
3/5/2020	OPEC Meeting

Bull & Bear Flow Monthly Leaderboard

OPTIONSHAWK DATABASE AGGREGATE FLOW BIAS MONTH AHEAD	
BULLISH	GOOGL, AMZN, ATH, NOW, WYNN, UNH, BMY, UTX, LH, MCHP, AMGN, BIIB, EXPE, ZEN, TWLO, TCOM, DCPH, BHVN, TTD, SNAP, EMR, WDC, NTN, QCOM, UNP, GLW, HZNP, UBER, KNX, CRM, CSCO, PLD, SLB, HAL, LYFT, CGNX, GPN, DGX
BEARISH	WMT, IPGP, GTT, LGND, JWN, RAMP, SKT, R, GPRO, TDOC, USNA, ITW, MIDD, RS, BPY, STX, CMPR, IIVI

Hawk Vision – 5 Technical Set-Ups in Quality Fundamental Stocks with Options Flow

*** We highlight these kind of set-ups daily in the OptionsHawk Trading Hub***

Costco (COST) shares with a breakout of a weekly bull flag set-up that targets a move to new highs at \$330 with weekly MACD nearing a bull crossover.



KeySight (KEYS) shares looking to work higher out of its weekly bull wedge that is holding the key 21 week moving average.



LabCorp (LH) working out of a long consolidation pattern and has seen large sized calls bought, expecting a move at least back to 2018 highs.



Dentsply Sirona (XRAY) with recent sized call buys and breaking out on the weekly pattern of a large range.



Wheaton Precious Metals (WPM) with a strong weekly consolidation looking to break to new highs and seen bullish options positioning.



Options Radar Highlights

1/3/2020

Ascendis Pharma (ASND) with one of the largest trades of the day on 1/2/20 with 1000 April \$140 calls opening for \$18, a \$1.8M purchase. ASND also still has more than 4000 January \$115 calls in open interest from buyers and many originally spread versus \$150 calls but most of the short calls were bought back to close. ASND shares are on a strong four week move to new highs and cleared a double top level at \$130, a potential Fibonacci extension target at 161.8 is \$161.75. Shares have been riding the 8 day moving average higher since breaking out on 12/17. The \$6.7B Biotech soared in March 2019 after presenting Phase 3 results for its TransCon Growth Hormone (hGH) for pediatric growth hormone deficiency. ASND is trading 9X cash and expects revenues to start ramping in 2021. ASND plans a BLA for 1H20 for TransCon hGH and also has a Q1 2020 readout due for Phase 2 data in TransCon PTH for hypoparathyroidism. It also has an Oncology pipeline in development and high-value collaborations with Roche/Genentech in ophthalmology and with Sanofi in Diabetes. The growth hormone market is seen ripe for disruption, an estimated \$3.5B market growing at a 2.4% CAGR. Analysts have an average target near \$160 and short interest has steadily moved higher but fairly low at 4.8% of the float. On 12-3 Leerink raised its target to \$152 with confidence in the Q1 2020 data and overall program. Cantor Fitzgerald has a \$185 target seeing investors undervaluing the potential opportunity from its therapies and key programs/filings are all on track. Wells Fargo has a \$176 target and JP Morgan sees a \$2B commercial opportunity for its growth hormone with it positioned to take the most share. Hedge Fund ownership fell 7.65% in Q3 filings, Perceptive selling its stake and Lakewood Capital reducing though RA Capital, Orbimed, and Baker Brothers all have concentrated stakes.

1/8/2020

Allstate (ALL) with a large late day purchase on 1/7 of 5000 April \$115 calls at \$2.55, a name with very little open interest despite its large cap status. There was some selling to open of February \$115 calls in the morning up to 1200X which makes a calendar spread an interesting strategy. ALL shares made a key move in September clearing its 2017 high and been working higher in a tight channel the last few months. The \$95/\$105 flag breakout targets \$115 while \$118.85 is the next Fibonacci extension target. ALL is expected to report earnings 2-4-20 and speak at the CSFB Financial Services Conference on 2-26. The \$36.35B P&C insurance Company trades 10.9X Earnings, 1.6X Book and has a 1.78% dividend yield and a 93.5% combined ratio with ROE at 15.75%. ALL is generating a strong return profile across its core growth businesses while expanding product offerings. Its auto insurance underwriting margins are among the best in the industry. ALL has focused on a strategy to increase market share in personal property-liability and diversify protection offerings. It expects the expense ratio to fall further even as it continues to invest in new technology. ALL sees its shares more fairly valued at \$130/share when comparing its 5-year ROE to P/Book versus peers. Analysts have an average target of \$116 on shares and short interest is low at 1.1% of the float. JP Morgan assumed coverage in November at Overweight with a \$127 target noting ALL is the best combination of a strong franchise, healthy business fundamentals and attractive valuation in the P&C sector. On 12/19 ALL announced its transformative growth plan as it combines the Allstate, Esurance, Encompass and Answer Financial organizations into one business model. Hedge Fund ownership fell 6.1% in Q3 filings with Alyeska adding to its position while Boston Partners reduced its position but remains a top ten holding.

1/15/2020

Knight Swift (KNX) with 10,000 February \$40 calls bought today for \$1.20, stock replacement, and follows buyers of more than 12,000 March \$40 calls, 14,000 June \$40 calls, and 19,000 June \$45/\$55 call spreads which remain in OI. KNX also had 8500 March \$35 puts sold to open recently seeing value on a pullback to the 200-MA. KNX has run a bit lately and potential for a pullback in the short-term to 6-month VPOC around 37. Longer-term, shares are working on a big weekly flag under \$39 that measures out to \$45 on a breakout. The \$6.44B trucking company trades 18.4X earnings and 1.3X sales with a small yield. KNX has taken down estimates quite a bit since early 2019 and now sees a recovery in the trucking market in FY21 as conditions normalize. KNX cut their guidance on 12-19 given a more muted seasonal environment but still expects to see capacity rationalization accelerate in the beginning of 2020. Analysts have an average target for shares of \$40. BAML with a Street High \$45 PT and their top SMID pick given a rebound in spot rates as Knight is the most exposed trucking carrier, primed to take advantage of improving markets. They also note that three key things that have weighed on trucking stocks seem to be abating: 1) a better spot market as a years-long cleaning of

excess supply built during 2018 finally clears; 2) stable demand; and 3) a continued tightening of the driver market that is being aided in 2020 by the new FMCSA regulations and launch of the NDAC on 1/6. Wolfe upgrading to Outperform on 1-7 after checks/survey work showed that full truckload pricing expectations are bottoming and that over-capacity has peaked. KNX short interest is 21%, a pretty cautious signal. Hedge fund ownership rose 23.5% in Q3, a big jump, with ACK Asset Management and Moore Capital notable buys.

1/22/2020

Colgate-Palmolive (CL) continuing to draw bullish flows lately with buyers yesterday for more than 2,500 August \$72.50 calls as well as some \$75 calls which pushed open interest above 2,000. The May \$75 calls have seen accumulation as well with over 26,500 bought and many spread with the \$80 calls. Shares are working back above the 200-day MA and forming the right shoulder of a large nearly 3-year inverted head and shoulders pattern under \$75. A move higher would target \$90-\$100 longer-term and seeing an early weekly MACD crossover recently and strengthening RSI. The \$61.14B company trades 23.84X earnings and nearly 4X sales with a 2.4% yield. They are guiding to 5%+ EPS growth the next two years with 3-4% revenue growth. CL is undergoing a big mix shift towards more premiumization of their portfolio across both consumer brands and pet food and has positive catalysts into 2020 with the launch of more Naturals products and Optic White. One avenue this push could take in 2020 is looking for tack-on deals in skincare where they are looking to grow, one of the more resilient areas in cosmetics in 2019. CL bought Filorga for \$1.66B recently and could buy some of Coty's divested brands. They're also focusing on growth in pet food where they relaunched in 2019 under the Hill's Science Diet label. Analysts have an average target for shares of \$73. BAML downgrading to Neutral in December concerned with its struggles to reverse market share losses in toothpaste as well as the more challenging comps expected in 2020. The firm also thinks 2020 may become another year of "outsized investment." Short interest is 1.6%. Hedge fund ownership fell 5% in Q3 but Alkeon remains a top holder of call options while AQR adding another 2.38M shares.

Trades of the Week

Posted Weekly at OptionsHawk.com <https://www.optionshawk.com/trade-of-the-week/>

Earnings Recap

<u>Strong Beats</u>	<u>Bullish Themes</u>	<u>Weak Outlooks</u>	<u>Bearish Themes</u>
MCHP, TSM, MX, STM, TER, TXN, INTC, SWKS	Semiconductors	CSX, KSU, EXPD, JBHT, HTLD, UNP	Transports – Rail and Trucking
JPM, GS, MS, BAC, C	Banks	PPG, WDFC	Chemicals & Coatings
ISRG, NVCR, DXCM, NVRO	Med-Tech		
AXP, JPM, COF	Credit Cards & Payments		

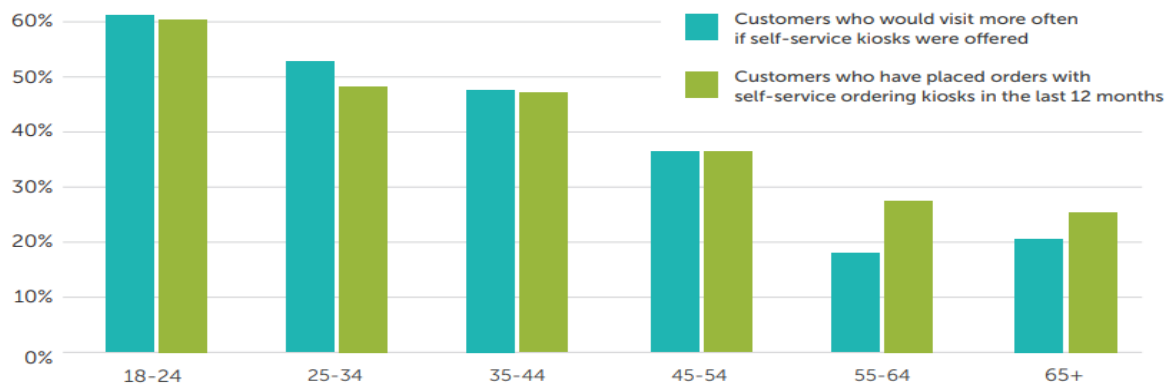
Theme of the Month

QSR Kiosks



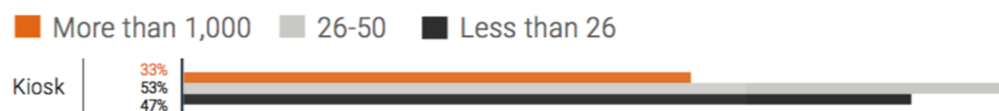
One of the biggest themes for quick-service restaurants in recent years has been the investment in technology that is simplifying transactions, driving ticket size, and overhauling the way many restaurants interact with their customers. This major digitalization push is making life better for both customers and restaurants and there are a number of innovations that are being implemented including mobile apps and ordering, loyalty programs, and delivery. One that is growing in adoption – and will get more attention in 2020 – are digital kiosks. These free-standing, self-contained solutions typically feature an abbreviated menu to expedite the ordering process and are being cited a driver for improved customer experience. It allows for a

more customizable experience that is helping boost average ticket and drive repeat traffic for restaurants. According to a survey by PYMNTS, kiosks can increase check size by 30% as cross-selling, upsell, and more customized options are made readily available. For instance, during a dinner rush **McDonalds (MCD)** can prioritize items like the Big Mac or chicken nuggets on the front-page of the panel versus during breakfast when French toast may be featured. Kiosks are also helping companies that are struggling to hire and retain employees in a tighter labor market. One of the major concerns with kiosks was that it would phase out workers but companies like **MCD** and **Wendy's (WEN)** are finding significant financial benefit to re-purposing the employee into the back-of-house.



The digital kiosk has surged in popularity in the last two years. In fact, in 2018, an MSN poll said that more than 75% of customers said they would prefer a cashier to a digital kiosk. However, new data from QSR tech advisor Tillster indicates a big shift in sentiment. A 2019 study said that 65% of customers surveyed would visit a restaurant with digital kiosks while 25% had used self-ordering of some kind in the previous 90 days. The adoption is being driven by all demographics – Millennials and Gen Z were early adopters but 25% of visitors over the age of 65 had used one as well according to the study. This newfound love of digital ordering has helped push projections for the market to new highs. **MCD** has said that they see digital kiosks helping the company add over \$2.5B in sales. Tillster thinks the self-service kiosk market will hit \$30.8B in transactions by 2024. The runway for adoption is significant with just 33% of restaurants with more than 1,000 locations using them currently.

Figure 11: Percentage of restaurants offering features, by size



McDonalds (MCD) has been a clear leader in the theme with early adoption stretching back to 2016 when former CEO Gregg Easterbrook said he wanted self-serve kiosks in every restaurant by 2020. Their “Experience of the Future” initiative is helping drive growth with 1,000 stores adding kiosks every quarter and expansion into the UK and Canada now. According to the company, 40% of in-store customers use the kiosk now in locations where they’re offered. MCD CEO Chris Kempczinski said last quarter that the company was starting to see a return on investment in late 2019. “I think part of the performance that we’re showing, say through 2019, is a result of some of the technology spend that we’ve invested the last two to three years. As we see the cell phone or kiosk usage increase around the world, we see the average check growth that comes with it.” They also made a deal in early 2019 for a company called Dynamic Yield which specializes on personalization and can change the on-screen look depending on time of day or weather.

Wendy's (WEN) started adding self-ordering kiosks in locations in 2017 with around 300 installed in a push for younger customers and lower labor costs. CEO Todd Penegor said in late 2018 that the move had improved check sizes. The company is also experimenting with bringing digital kiosks to the drive-through lane where they see over 65% of overall sales.

Yum Brands (YUM) took on digital kiosks in early 2019, a late adopter but making a significant push to catch up. They said in February that they plan to have 5,000 KFC restaurants with kiosks by 2020 while Taco Bell has been slowly expanding as part of their “All Access” initiative and expected to be completely done by early 2020. The company has used digital kiosks in both the UK and India where they saw a bump to SSS as well as a ticket size. YUM CEO Greg Creed on the progress, “Our All Access strategy to create a frictionless customer experience is sharper than ever. Taco Bell now has kiosks in over 6,100 restaurants and we launched localized AI-driven product recommendations to efficiently give our customers what they want. The results are encouraging with consistent check list and utilization. We see particularly consumer appeal in urban markets. In fact, in Manhattan, utilization is over 50% of our company cantinas. Digital menu boards are offered in over 1,000 locations with the new simplified menu.”

Burger King (QSR) is another name playing catch-up with a big push to invest in tech in 2018. This follows the creation of a Chief Technology Officer role while unveiling their concept “Burger King of Tomorrow.” They’ve also been testing kiosks at Tim Hortons. **Dunkin (DNKN)** has made digital kiosks a focal point of their next-generation stores that are being unveiled across the country. Others that are employing them are **Subway**, **Panera**, and **Johnny Rockets**.

Industry Snapshot of the Month

Books, Education & Training Services

International Providers: TAL, EDU, GSX, AFYA, HLG, BEDU

US Education Services: LOPE, LAUR, STRA, GHC, ATGE, PRDO, LRN, HMHC, FC, APEI, GPX, UTI, BFAM, ONE, PSO, JW.A, SCHL, RST, ASPU

Education Technology: Constellation Software

Public Comparables

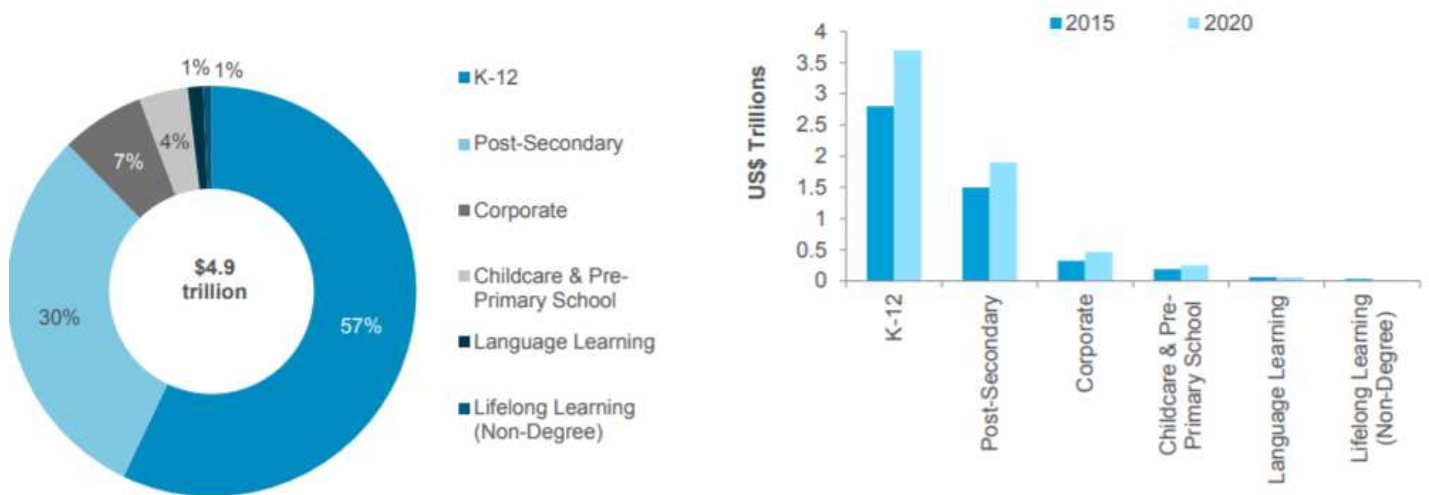
(\$ in millions, except per share data)+D				TEV							
Company ⁽¹⁾	Stock Price	Market Cap	Ent Value	Revenue		EBITDA ⁽²⁾		Rev Growth		EBITDA Margin ⁽²⁾	
	12/31/19			2019E	2020E	2019E	2020E	18A/19E	19E/20E	2019E	2020E
Education Technology											
Oracle Corporation	\$52.98	\$173,316	\$200,416	5.1x	5.0x	10.8x	10.7x	0%	2%	47%	46%
Workday, Inc.	164.45	39,010	38,454	10.6	8.8	NM	NM	28%	20%	21%	21%
Constellation Softw are Inc.	972.34	20,605	21,052	6.0	5.2	22.6	19.2	14%	17%	27%	27%
Tyler Technologies, Inc.	300.02	12,394	12,225	11.2	10.1	NM	NM	17%	11%	28%	29%
GSX Techedu Inc.	21.86	5,153	5,035	17.5	7.0	NM	NM	399%	151%	11%	13%
Chegg, Inc.	37.91	4,863	4,974	12.2	9.6	39.3	30.5	27%	27%	30%	31%
Blackbaud, Inc.	79.60	3,818	4,414	4.9	4.7	24.3	25.0	6%	5%	20%	19%
Pluralsight, Inc.	17.21	2,420	2,541	8.1	6.4	NM	NM	36%	26%	NM	NM
Instructure, Inc. ⁽³⁾	48.21	1,869	1,791	6.9	5.9	NM	NM	23%	18%	NM	NM
2U, Inc.	23.99	1,523	1,664	2.9	2.3	NM	NM	39%	27%	NM	NM
Learning Technologies Group plc	1.89	1,297	1,331	7.8	7.1	22.9	21.0	43%	9%	34%	34%
Sylogist Ltd.	7.59	181	144	4.7	4.4	28.6	8.6	8%	8%	16%	51%
ReadyTech Holdings Limited	1.23	98	111	4.3	3.6	10.9	8.9	NA	20%	40%	41%
Mean				7.9x	6.2x	22.8x	17.7x	53%	26%	27%	31%
Education Services											
Pearson plc	\$8.44	\$6,571	\$8,682	1.7x	1.7x	8.9x	8.8x	(2%)	1%	19%	19%
Graham Holdings Company	638.99	3,421	3,805	NA	NA	NA	NA	NA	NA	NA	NA
John Wiley & Sons, Inc.	48.52	2,728	3,597	1.9	1.9	9.7	9.6	3%	3%	20%	20%
Cengage Learning Holdings II, Inc.	12.75	788	2,797	NA	NA	NA	NA	NA	NA	NA	NA
Houghton Mifflin Harcourt Company	6.25	777	1,378	1.0	1.0	8.7	7.0	6%	2%	11%	14%
Scholastic Corporation	38.45	1,336	1,167	0.7	0.7	8.5	7.5	(1%)	3%	8%	9%
K12 Inc.	20.35	798	682	0.7	0.6	5.5	4.8	5%	3%	12%	13%
Rosetta Stone Inc.	18.14	436	408	2.2	2.1	NM	NM	5%	8%	3%	5%
Aspen Group, Inc.	8.00	164	175	3.9	3.0	NM	31.2	44%	30%	5%	10%
Tribal Group plc	0.82	171	169	1.6	1.5	8.5	7.9	5%	4%	19%	19%
Education Services Median				1.7x	1.6x	8.5x	8.3x	5%	3%	12%	13%

The Educational Services sector comprises 13 subsectors of the US economy, ranging from public schools to testing and educational support operators. Many of the services provided by operators are staples, such as primary and secondary education, whereas others are more discretionary in nature, like business coaching and tutoring services. Operators in the public schools, private schools, community colleges, nonprofit universities and colleges and for-profit universities generate over 90.0% of sector revenue. As a result, the sector has benefited from increases in government funding for primary and secondary education, as well as funding for universities. The education and training services industry is in a transitional phase, as tighter government regulation of for-profit career schools has forced several institutions to close in recent years. At the same time, other career and technical education providers have benefited from growing support for vocational training from high schools, businesses, and government grant programs. Global education and training services companies are increasingly looking to emerging economies for new growth opportunities. Developing nations such as China and India often rely on education and training services to help support economic growth. The US education and training services industry includes about 67,000 establishments (single-location companies and units of multi-location companies) with combined annual revenue of about \$43 billion. The global online education market is expected to reach approximately USD 132.98 billion by 2023, growing at a CAGR of 28.55% from 2017 to 2023.

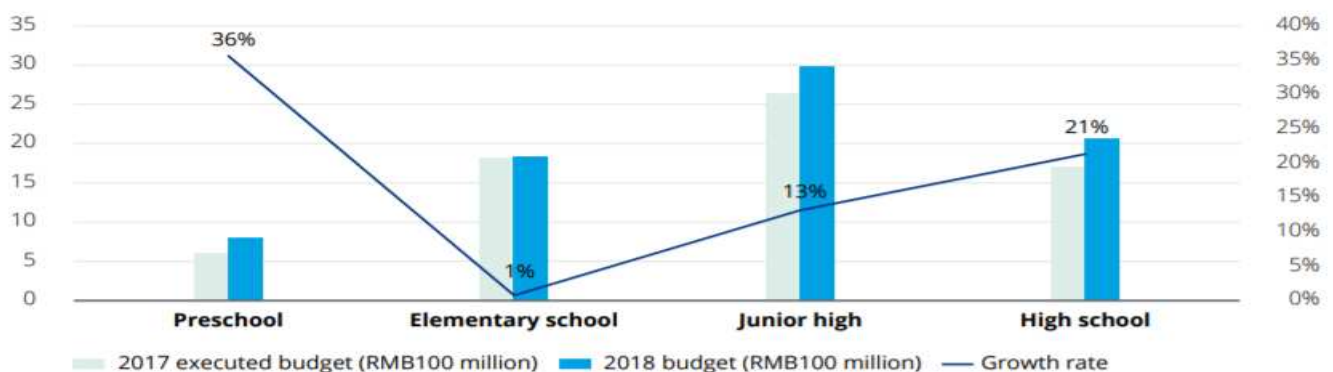


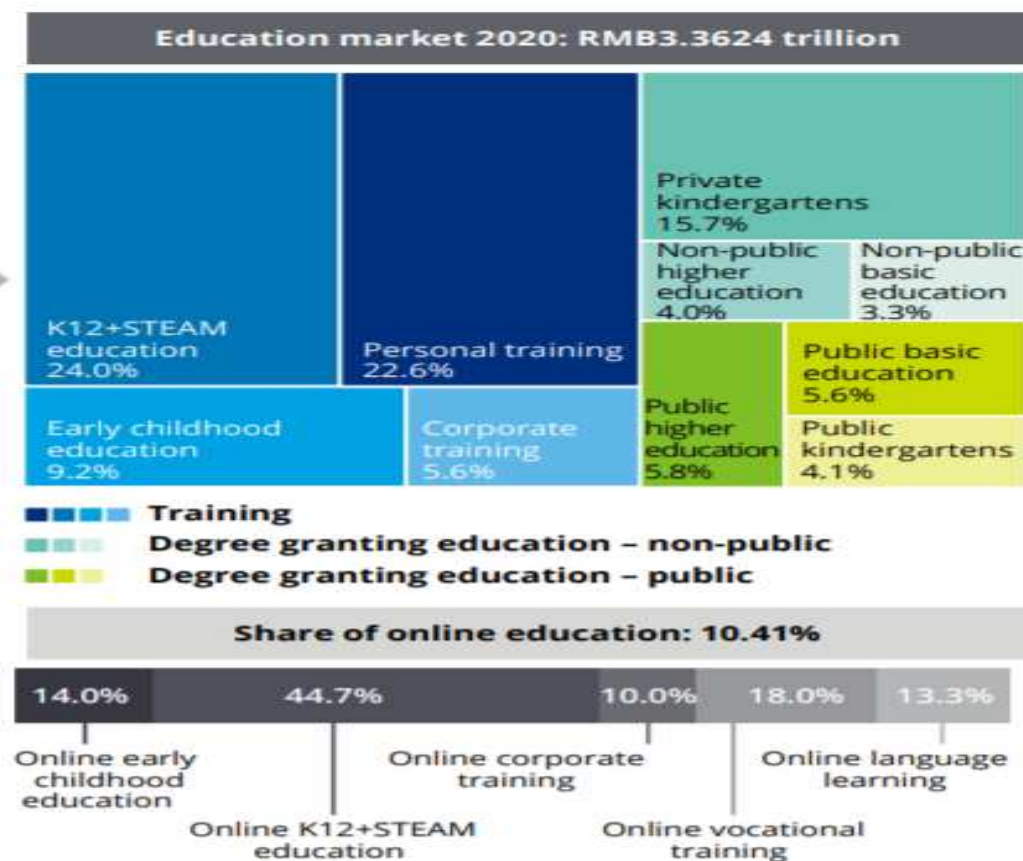
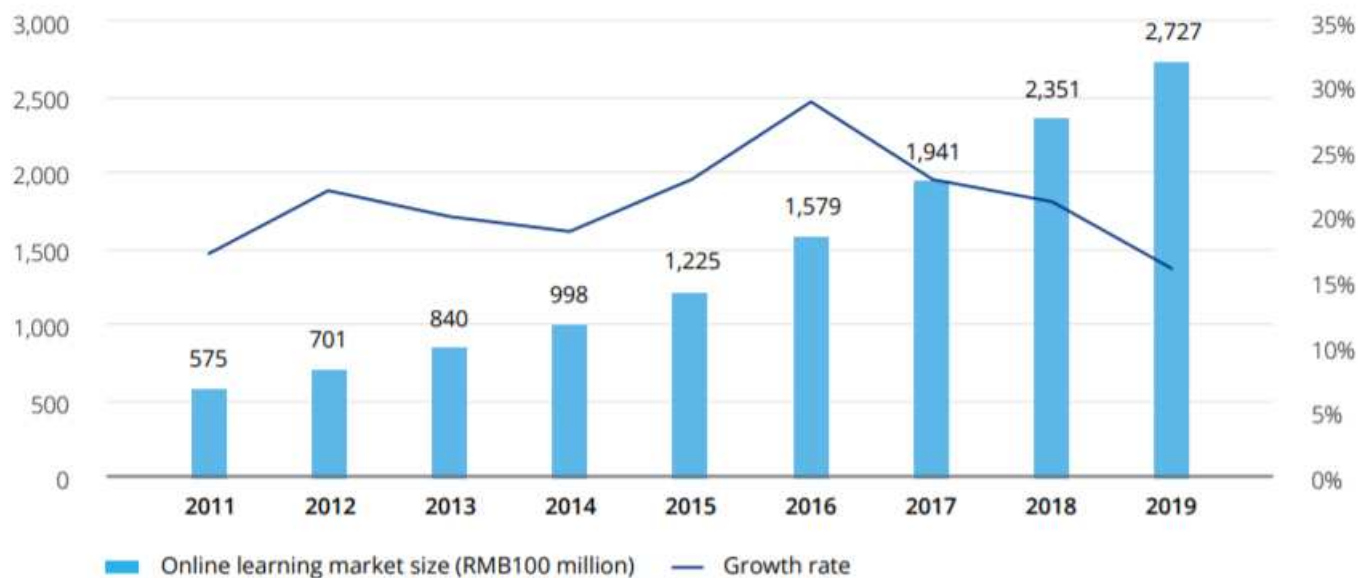
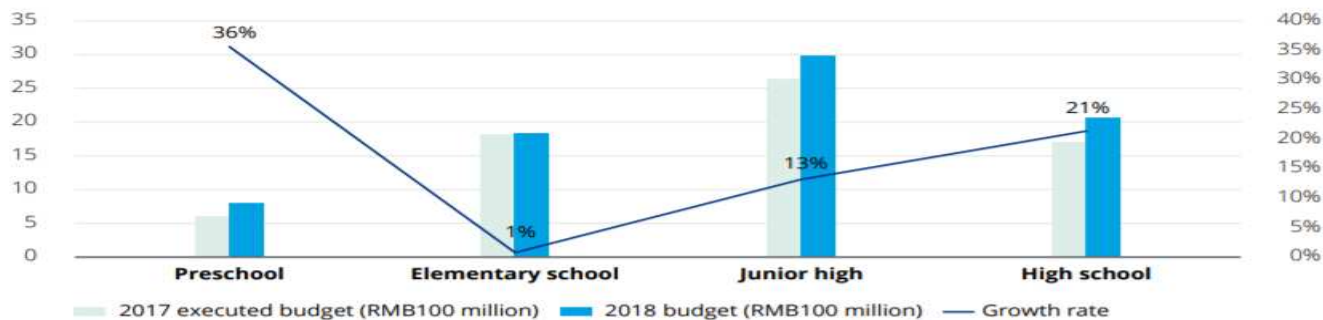
A few of the stronger trends in education include high demand for online education, cloud-based solutions offering lower costs, improved accessibility and faster deployment, increased adoption of video content, virtual instructors, and higher enrollments with an increased focus on quality learning. Education technology (EdTech) is a term used to describe the industry that combines education and technological advances, revolutionizing the conventional landscape of education. According to Holon IQ, the global education market has reached a value of over \$6 trillion with only \$150 billion of market capitalization. Even though digitization only occupies 2.6% of the total educational expenditures as of 2018, indicating \$152 billion of EdTech expenditures, digital spend is expected to increase to a \$342 billion scale, taking 4.4% of total educational expenditures by 2025. Here are a few major segments within the EdTech realm, including early childhood, K-12, higher education and lifelong learning. The K-12 software platform and tools market is the dominant segment within the EdTech industry. This portion of the K-12 market had a market value of \$1.71 billion in

2018 in the U.S., and is expected to be worth more than \$1.83 billion by 2020. Compared to other segments within the U.S., K-12 has occupied 46% of the EdTech market while higher education and lifelong learning together occupy the other 54%.



The Chinese education group has some of the more exciting names boosted by a significant expansion underway in China. The total scale of private education is expected to reach RMB3.36 trillion by 2020 and be close to RMB5 trillion by 2025 with a CAGR of 10.8%. The China youth population is rising with the two-child policy shift in 2015 and the rising standard of living. Based on the statistics of urban household spending on preschool education, the scale of preschool education market is estimated to be RMB800 billion by 2020. With the growth in China's newborns, kindergarten enrollment rate and tuition fee, the overall demand for preschool education for those aged 0-6 is rising sharply, and there is an increase trend for preschool education at a younger age. These trends will result in an imminent upgrading of China's preschool education consumption, which means the parents hope to let their children grow happily and healthily and acquire various skills under a well-rounded and professional pre-education system. In 2018, the central budget disclosed by the Ministry of Finance has shown that the expenditure on education is budgeted at RMB171.122 billion, up by RMB10.501 billion with an increase rate of 6.5% as compared with that in 2017. Among all stages of general education, preschool and high school education show the largest growth in funding, respectively receiving RMB803 million (35.6% increase over actual expenditure in 2017) and RMB2.064 billion (21.5% increase over actual expenditure in 2017). According to iResearch, the size of online learning market is expected to reach RMB235.1 billion in 2018, and RMB272.7 billion in 2019 with an increase of 16%. Based on the current status of China's online learning market, a large user base and underdeveloped technologies create a huge potential for market development in the future. The industry is also very fragmented.





International Education

Tickers	Company Name	Mkt. Cap	EV to Sales	Income CAGR	EBITDA CAGR	Reven. CAGR	EBITDA Margin	ROCE	ROIC	FCF Margin	SG&A as %	Increm. Rev's	Cash Realiz.	Debt to EBITDA
TAL	TAL Education Group	32,250	9.6x	6%	40%	41%	16.79%	17.83%	28.28%	(6.27%)	41.50%	1.95	0.53	0.5x
EDU	New Oriental Education	21,492	5.6x	26%	21%	27%	13.01%	15.96%		17.08%	45.80%	2.17	1.96	0.1x
GSX	GSX Techedu Inc.	7,753	38.3x		-127%	278%	7.37%	(80.96%)	(109.04%)	57.82%	40.61%	5.89	7.40	0.0x
HLG	Hailiang Education Group Inc.	1,743	7.8x	-4%	27%	19%	35.50%	33.11%	33.90%	40.56%	6.46%	43.73	2.19	0.0x
BEDU	Bright Scholar Education	1,246	1.6x	13%	37%	8%	9.58%	11.21%	49.84%	13.84%	13.49%	4.96	2.74	2.2x
AFYA	Afya Ltd	920		82%	83%	57%	31.60%	25.48%	40.12%	17.56%	20.97%	4.78	0.74	0.4x

Afya (AFYA) looks to be an emerging star in Brazil with impressive growth metrics, high margins, strong FCF and leading Return on Capital ratios while carrying little debt. **New Oriental (EDU)** screens cheap to its Chinese counterparts though **Hailiang (HLG)** is a name of interest as a slower grower but superior margins, capital returns, FCF and cost controls.

US Educational Services

Tickers	Company Name	Mkt. Cap	EV to Sales	Income CAGR	EBITDA CAGR	Reven. CAGR	EBITDA Margin	ROCE	ROIC	FCF Margin	SG&A as %	Increm. Rev's	Cash Realiz.	Debt to EBITDA
BFAM	BRIGHT HORIZONS FAMILY SOLUTIONS	9,440	5.2x	14%	14%	9%	18.76%	13.99%	10.55%	10.63%	10.59%	12.83	1.56	3.3x
PSON:LN	Pearson PLC	5,976	1.5x	1%	9%	-4%	16.93%	10.26%	8.80%	6.35%	40.42%	1.28	0.84	1.3x
LOPE	Grand Canyon Education, Inc.	4,702	6.5x	17%	-18%	-4%	35.28%	29.44%	24.23%	(6.78%)	67.11%	(0.45)	0.80	0.2x
LAUR	LAUREATE EDUCATION, INC.	4,252	1.6x		9%	-1%	18.60%	10.22%	(1.26%)	3.79%	15.87%	5.39	0.99	4.7x
STRA	Strategic Education, Inc.	3,577	3.1x	104%	-19%	32%	19.90%	12.86%	8.10%	3.05%	35.91%	2.55	0.62	0.0x
GHC	Graham Holdings Co	3,312	1.1x	148%	38%	6%	13.03%	7.16%	7.34%	7.00%	24.11%	(0.44)	1.13	1.4x
JW.A	John Wiley & Sons Inc	2,313	1.6x	-17%	1%	2%	19.51%	13.63%	6.47%	9.12%	53.53%	0.17	1.47	1.2x
ATGE	Adtalem Global Education Inc.	1,971	1.8x	-11%	-9%	-3%	20.87%	13.02%	15.01%	11.30%	32.30%	0.31	1.23	1.3x
SCHL	SCHOLASTIC CORP	1,276	0.6x		-12%	2%	7.32%	2.58%	(0.60%)	(1.01%)	46.89%	1.49	7.46	0.1x
ONE	One-Smart	1,095	1.9x	-7%	10%	26%	11.92%	19.68%		1.54%	42.40%	2.40	1.24	2.2x
LRN	K12 INC	852	0.7x	14%	6%	6%	13.15%	8.59%	9.83%	9.18%	28.03%	11.53	3.81	0.2x
HMHC	Houghton Mifflin Harcourt Co	789	0.9x	7%	3%	3%	14.53%	(4.27%)	(14.02%)	(4.71%)	49.10%	(0.36)	(0.84)	4.0x
FC	FRANKLIN COVEY CO	465	2.1x		48%	8%	9.14%	8.23%	(0.98%)	10.48%	65.08%	3.46	(29.77)	2.0x
RST	ROSETTA STONE INC	440	2.3x	42%	-115%	2%	0.09%	(40.25%)	49.62%	(3.71%)	73.36%	11.21	(0.49)	13.6x
APEI	AMERICAN PUBLIC EDUCATION INC	437	0.8x	-8%	-7%	-1%	17.38%	13.89%	24.53%	11.67%	44.17%	(0.38)	1.64	0.0x
GPX	GP STRATEGIES CORP	253	0.6x	-29%	-5%	6%	7.36%	10.08%	4.25%	0.94%	11.58%	2.67	1.09	2.4x
UTI	Universal Technical Institute, Inc.	191	0.5x		-124%	5%	1.63%	(4.18%)	(7.86%)	4.61%	76.69%	(1.78)	(1.66)	7.6x
ASPU	ASPEN GROUP, INC.	150	3.7x	-13%	80%	41%	(12.09%)	(25.42%)	(38.81%)	(37.46%)	73.44%	1.39	1.10	(1.4x)
PRDO	CAREER EDUCATION CORP		1.6x	-9%	32%	2%	18.26%	33.59%	22.15%	8.65%	67.21%	1.06	0.86	0.0x

Strategic Education (STRA) screens most favorably among the post-secondary education providers. **Bright Horizons (BFAM)** screens the best in early education. **Adtalem (ATGE)** is an intriguing play for specialty educational services and though revenue growth is lacking it screens cheap with high margins, high FCF, and strong returns on capital. **Graham (GHC)** would be the top choice among the educational materials plays as a provider of prep services and materials see strong profit growth, positive revenue growth, and strong FCF with low costs.

Education Technology

Tickers	Company Name	Mkt. Cap	EV to Sales	Income CAGR	EBITDA CAGR	Reven. CAGR	EBITDA Margin	ROCE	ROIC	FCF Margin	SG&A as %	Increm. Rev's	Cash Realiz.	Debt to EBITDA
CSU:CN	Constellation Software Inc.	21,939	6.7x	14%	30%	18%	25.61%	68.12%	102.70%	20.81%	57.87%	1.52	1.11	0.4x
TYL	TYLER TECHNOLOGIES INC	12,048	11.4x	18%	1%	13%	29.36%	20.46%	17.55%	24.53%	22.20%	2.98	1.30	0.0x
CHGG	CHEGG, INC	5,242	14.0x	87%	293%	27%	25.94%	10.92%	23.56%	13.67%	41.24%	3.94	1.09	1.7x
BLKB	BLACKBAUD INC	4,022	5.1x	2%	2%	6%	23.93%	20.79%	13.74%	17.56%	35.26%	1.73	1.62	2.0x
PS	Pluralsight, Inc.	2,779	9.2x	-23%	79%	33%	(19.84%)	(32.45%)		(7.77%)	89.35%	0.89	0.10	(1.5x)
INST	INSTRUCTURE INC	1,824	6.9x	-25%	-10%	23%	(6.14%)	(23.97%)	(163.29%)	(5.27%)	62.96%	2.20	(0.00)	0.0x
TWOU	2U, Inc.	1,448	2.9x	316%	191%	36%	4.29%	(1.72%)	(1.49%)	(19.50%)	73.83%	1.38	0.89	1.5x

Among the Educational Technology names **Chegg (CHGG)** is an awesome growth story but also reflected in its 14X EV/Sales valuation. **Tyler (TYL)** is a high quality investment though not really a pure play on Education. **Constellation Software (CSU:CN)** is the name that really stands out attractive at 6.7X EV/Sales with impressive growth and FCF. It is also not a pure-play, but attractive none-the-less.

M&A Deal of the Month

Hexcel (HXL) was one of the first large deals of 2020 as **Woodward (WWD)** announced an all-stock deal to acquire the company that valued it at \$6.4B, a modest 4.5% premium to where it traded prior to the announcement. The deal was dubbed a merger of equals and creates a leading Aerospace provider to Boeing and Airbus SE with annual revenues greater than \$5B, and the deal was driven by the pursuit of more-efficient engines with pressure to improve propulsion efficiency, aerodynamics, and light-weighting. The deal was the 9th of at least \$1B in the defense sector over the past year with a trend of consolidation among the aerospace suppliers.

If we look at Hexcel (HXL) to see why it was an attractive target we see a name being valued at 13.2X EBITDA with a 9.9% ROIC and 22.93% EBITDA margins. I have provided a snapshot below of some peers in the small market cap range and HXL clearly was a margin leader, something that tends to attract M&A interest. HXL also had strong FCF ratios and the best OCF/Sales in the group.

Ticker	Company	Mkt Cap	EV to EBITDA	Income CAGR	EBITDA CAGR	P/E	Revenue CAGR	EBITDA Margins	ROIC	EV to FCF	FCF Margin	Debt to EBITDA	FCF to Debt	OCF to Sales
AIR	AAR CORP	1,600	9.9x	21%	11%	17.49x	10%	8.19%	16.84%	26.9x	2.44%	0.9x	0.30	0.03
ATRO	ASTRONICS CORP	668	11.3x	-16%	65%	32.47x	7%	12.29%	8.01%	14.8x	4.86%	2.6x	0.13	0.08
AVAV	AEROVIRONMENT	1,699	28.9x	39%	14%	43.12x	14%	13.20%	13.49%	69.9x	3.30%	0.0x		0.13
DCO	DUCOMMUN	494	7.7x	43%	23%	16.31x	9%	11.23%	2.24%	52.9x	4.55%	3.2x	0.11	0.05
ESLT	ELBIT SYSTEMS LTD	6,723	15.3x	-10%	-5%	24.76x	12%	11.88%	9.11%	(125.1x)	2.43%	1.4x		0.05
MOG.A	MOOG INC.	2,998	10.0x	8%	17%	16.43x	5%	12.74%	7.20%	56.6x	2.17%	2.3x	0.18	0.06
SPR	SPIRIT AERO	6,967	6.5x	3%	37%	10.51x	5%	14.87%	28.18%	11.1x	6.33%	1.4x	0.36	0.11
AJRD	AEROJET ROCKETDYNE	4,181	14.3X	69%	30%	28.55X	3%	16.10%	55.45%	18.2X	11.05%	2X	0.27	0.13
Average		3,166	12.8x	20%	24%	23.01x	8%	12.56%	17.56%	15.3x	4.64%	1.7x	0.22	0.08

Aerojet Rocketdyne (AJRD) screens as a best-in-class name with impressive profitability growth, high margins and leading FCF margins though does carry a higher valuation at 14.3X EBITDA. **AAR Corp (AIR)** screens well at 9.9X EV/EBITDA with strong EBITDA growth, topline growth, a 16.8% ROIC, and one of the best FCF/Debt ratios though the 8.2% EBITDA margins are worst in the group and it is more focused on Services as opposed to the actual products/equipment. **Moog (MOG.A)** may be the best potential M&A target in the group trading cheap at 10X EV/EBITDA with strong profitability growth, solid margins, and in need of better management to improve ROIC. **Mercury Systems (MRCY)** is a favorite in the hot electronics space with a \$4.15B market cap and would be an ideal acquisition target.

Small Cap of the Month

Safehold (SAFE) is a \$2B REIT focused on acquiring ground net leases and sees itself revolutionizing real estate ownership with a better way for owners to unlock value of the land beneath their buildings. The Chairman and CEO was actively acquiring shares in November and December. SAFE is reinventing ground leases to fit modern capital markets with the first and only nationally-scaled platform, a market disruptor. It is providing a solution allowing for value-enhancing to building owners with improved capital efficiency, improved cost efficiency and significant risk reduction. Since its IPO in 2017 the size of its portfolio has growth with a 135% CAGR and market penetration has doubled. The unrealized capital appreciation growth of its portfolio has risen at a 175% CAGR. It is disrupting a \$7 Trillion US institutional real estate market and started out as a radical idea that is now creating one of the fastest growing companies in public markets. Similar to great platform stories in Technology, SAFE is solving a major inefficiency in a massive commercial real estate market. SAFE looks like an amazing opportunity long-term that many investors will not take part in due to a lack of understanding of the inner-workings of the business model, but management lays things out very well and it looks like an exciting opportunity, so I will end with some of management's recent comments.

At the Barclays Conference recently SAFE noted a few interesting points:

“Every CFO or activist investor in the corporate world would tell you, there is no reason to have a high-return operating business tethered to a low-return passive business. They should be separated. They should be held as discrete investments. That's what Safehold is doing for the commercial real estate world. Also, it turns out by doing that well, we create enormous cost efficiencies.”

“So every time that property trades over the next 100 years, we are eliminating about 1/3 of the transaction costs, the transfer taxes, the mortgage recording fees, the survey, the title, the legal, some of the brokerage costs, all disappear. And it turns out that is a very large amount relative to the cost of any property today. So this capital efficiency, this cost efficiency create a far better economic story for building owners and at the same time, we're also reducing the risk.”

“So the traction is picking up. We think there are about 30 markets in the country that we want to play in, the top 30 markets, the NFL markets. We started out in about 1/3 of those. We've doubled our penetration since our IPO. We will eventually get to all 30 markets. And that traction with customers is starting to translate into traction with investors.”

“But what a portfolio of ground leases does that almost no other investment that I've seen in my 30-year career does is it combines AAA principal safety on your investments with a investment return that on the day we close we think we've created significant value, significant accretion and the value of the company and we've created an opportunity for multiples and multiples and multiples of capital appreciation. That combination of safety, value creation and capital appreciation is very hard to replicate, and we just haven't seen anything as good as what we see here.”

“And it really drives the reason that iStar has committed so much capital to this business and continues to commit capital. Now iStar is both the manager and larger shareholder of Safehold. And unlike most externally managed companies, we're buying every share at iStar we can get our hands on. This is not a management fee business, this is a -- we will create enormous principal value, how fast can we scale this business proposition.”

International Stock of the Month

Flutter Entertainment (FLTR:LN) is a worthwhile International stock to look at after its deal for **The Stars Group (TSG)** last year. FLTR has a market cap of \$7.1B and is trading 19.3X EV/EBITDA, 3.7X EV/Sales and has a 2.2% dividend yield. FLTR is a solid operator with gross margins near 70% and EBITDA margins at 24.4%. Revenues have growth 10.5%, 11.2% and 9.2% the last three years. It is one of the limited avenues to play the sports betting theme as well as the strong online gaming theme. The expected completion of the M&A deal is Q2/Q3 2020 and the strategic rationale includes accelerated international growth, more profitable growth in core markets, an enhanced position in US markets, diversifying business, and significant cost and revenue benefits. The gaming market is estimated at \$450B globally and current online penetration is just 11% with a 11% CAGR. FLTR has very attractive economics as well with a large customer base, low-cost customer acquisition, attractive margins with high cash generation and a proven track record of cross-selling its offerings. The combination of FanDuel with Fox-Bet also can result in significant upside optionality on the emerging US opportunity.

Creates a leading online gaming company...

...with best-in-class product offering...

FY 2018

Flutter

STARS GROUP

Combined group²

Active customers
(#)¹

> 6 million

> 7 million

> 13 million

Revenue (£m)

1,873

1,903³

3,777

EBITDA (£m)

451

689^{3,4}

1,140



IPO Watch

Bill.com (BILL) came public in December 2019 as a provider of cloud-based software that targets automation and digitization of back-office financial operations for small businesses. The platform is used to generate and process invoices, send/receive payments, and various other services. The transaction lifecycle—encompassing the processes that enable businesses to pay and get paid—is critical to every business. Businesses begin the transaction lifecycle by creating and mailing invoices, approving bills, and making payments, and end the process by recording and reconciling transactions in an accounting system. The ability to manage this critical set of activities efficiently and effectively is key for any business. Yet, for many businesses, cash flow is managed in a complex, inefficient, and all too often, paper-based manner. BILL estimates the annual addressable market for the services it offers today to be \$30B globally and \$9B domestically. It is estimated that electronic payment adoption in this category is near 25% and likely to move towards 100% in coming years. According to IDC, in 2019 small and lower-midsize businesses will spend approximately \$65 billion on software in the U.S.

For the three months ended September 30, 2019, total revenue increased 57% Y/Y to \$35.2M. BILL's total customers increased to over 81,000 compared to over 67,000 as of September 30, 2018, an increase of approximately 21%. Average subscription revenue and transaction fees per customer increased by 15% and 70%, respectively, during the three months ended September 30, 2019, driven primarily by the increase in customers' usage of its platform and payment activities. Gross margin increased to 74% from 72%, driven

primarily by higher revenue on increased adoption of new product offerings. BILL has favorable unit economics and high retention rates. Further market penetration, strong partnerships, increased monetization of new offerings and up-sell opportunities position BILL as a long-term winner. BILL also has potential to expand to sole proprietors and larger companies, enter international markets, and sell additional solutions via its platform.

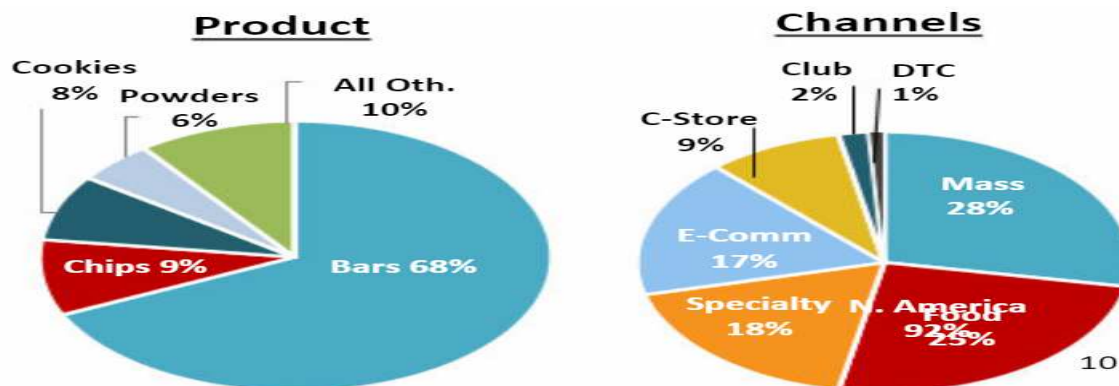
BILL shares have rallied 10% in January after highlighting the technical set-up back near \$38 and shares are not cheap by any means, trading 16.6X FY19 EV/Sales. BILL is a rapid growth name however where valuation is unlikely to play much of a factor, revenues increased 67% in 2019. And in Q1 FY20 posted 56.9% Y/Y growth on those tough comps. FCF margins have a chance to inflect positive in FY20 as well.

Insider Activity Monthly Recap

For Detailed Write-Ups Visit <https://www.optionshawk.com/options-trader/insider-trading-spotlight/>

Filing Date	Trade Date	Ticker	Company	Insider Name	Insider Title	Price	Qty	Owned	ΔOwn	Value
1/17/2020 16:22	1/15/2020	JPM	Jpmorgan Chase & Co	Erdoes Mary E.	CEO Asset, Wealth Management	\$100.00	51,000	51,000	New	\$5,100,000
1/23/2020 15:18	1/16/2020	TRN	Trinity Industries Inc	Boze Brandon B	See Remarks, 10%	\$20.62	186,033	25,198,531	1%	\$3,836,576
1/21/2020 17:24	1/16/2020	TRN	Trinity Industries Inc	Boze Brandon B	See Remarks, 10%	\$20.62	185,433	25,197,931	1%	\$3,824,354
1/15/2020 17:26	1/13/2020	TRN	Trinity Industries Inc	Boze Brandon B	See Remarks, 10%	\$20.72	122,500	25,012,498	0%	\$2,538,104
1/16/2020 16:24	1/15/2020	JPM	Jpmorgan Chase & Co	Hobson Melody L	Dir	\$136.39	14,600	132,682	12%	\$1,991,253
1/8/2020 16:54	1/8/2020	LW	Lamb Weston Holdings, Inc.	Jurgensen William G	Dir	\$92.01	18,000	146,536	14%	\$1,656,189
1/9/2020 16:20	1/9/2020	MOSC	Mosaic Acquisition Corp.	Maura David M	Pres, CEO, 10%	\$10.29	100,000	435,066	30%	\$1,029,000
1/14/2020 16:47	1/14/2020	SMPL	Simply Good Foods Co	Ghez Nomi	Dir	\$23.27	21,275	110,350	24%	\$495,159
1/21/2020 8:52	1/16/2020	CMD	Cantel Medical Corp	Fotiades George L	Pres, CEO	\$61.17	5,000	118,708	4%	\$305,838
1/15/2020 18:53	1/13/2020	LOVE	Lovesac Co	Heyer Andrew R	Dir, 10%	\$12.81	20,000	2,815,296	1%	\$256,256
1/7/2020 20:28	1/7/2020	CRM	Salesforce.Com, Inc.	Wojcicki Susan	Dir	\$175.26	1,100	101,569	1%	\$192,788
1/6/2020 16:58	1/2/2020	AMZN	Amazon Com Inc	Nooyi Indra K	Dir	\$1,875.00	100	368	37%	\$187,500
1/22/2020 14:11	1/17/2020	PNC	Pnc Financial Services Group, Inc	Bunch Charles E	Dir	\$153.11	1,000	4,781	26%	\$153,110

Simply Good Foods (SMPL) with a Director buying 21,275 shares of stock at \$23.27/share for \$495,000 on 1/14/2020. The moves come with shares well off the September 2019 highs in one of the more exciting snacks/nutritional plays in consumer goods. The \$2.32B Company trades 23.75X Earnings, 4.2X Sales and 45.2X FCF with revenues seen rising 65.5% in 2020 and EPS growth of 17.6%. SMPL products align with consumer megatrends such as Snacking, Meal-Replacement, Convenience, and Health & Wellness. The Quest acquisition diversifies its customer and channel mix. SMPL shares sold off on earnings that missed expectations while commentary on a competitive market also hurt the reaction but management has historically been conservative. SMPL remains a superior growth name in its category with margin expansion opportunity.



Sector ETF Set-Up of the Month

First Trust Internet Index (FDN) in focus into earnings season coming out of a nice base to start 2020 and now weekly RSI leading as it looks to clear 2019 highs with the first Fibonacci extension target up above \$160. The top holdings include **AMZN, CSCO, FB, CRM, NFLX, GOOG** and **PYPL**.



Monthly Educational and Insightful Links

10 Must Read Quotes From Stan Druckenmiller : <https://investinghaven.com/investment-ideas/10-must-read-quotes-stan-druckenmiller>

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