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Research (646) 780-8880 research@tigressfp.com

Trading (646) 780-8890 trading@tigressfp.com

Tigress Financial Partners LLC
Member of FINRA / MSRB / SIPC
410 Park Avenue
New York, NY 10022
(212) 430-8700
www.tigressfinancialpartners.com

## Facebook, Inc. Class A (FB-US)

**Internet Software & Services** 

- We reiterate our Strong Buy on FB as the launch of its new Libra cryptocurrency payment platform will be a major game changer as it creates new ways to further engage with FB's over 2.7 billion membership base.
- Growth in Instagram-based advertising, along with increasing user engagement continues to drive accelerating Business Performance trends.
- FB is launching a major cryptocurrency initiative that will be a game changer for both the company and the global cryptocurrency marketplace.
- The ongoing growth in user engagement in its massive user base is driving FB's increasing advertising revenue.
- Video continues to be a significant growth opportunity .
- Increases in mobile continue to drive greater user engagement, and further enhancements in video will continue to drive future advertising growth.
- FB Marketplace, Stories, and Watch will continue to drive incremental growth.
- FB continues to enhance its transparency tools to provide further security for its user base.
- FB's strong balance sheet and cash flow continue to drive new growth initiatives and enhance shareholder returns with ongoing share repurchases.

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## **Company Note**

## Facebook, Inc. Class A (FB-US)

**Internet Software & Services** 

Ivan Feinseth
Director of Research
(646) 780-8901 Direct
ifeinseth@tigressfp.com

Research Action:
Reiterate rating

Rating: Strong Buy
Prior Rating: Strong Buy
Price 06/17/2019: \$189.01
52 Week High / \$218.62
Low: \$123.02

Key Data: (TTM as of Mar-19) **Excess Cash per Share:** \$14.85 **Annual Dividend:** \$0.00 **Dividend Yield:** 0.00% 17.5M Avg. Volume (30 Day): **Shares Outstanding:** 2,854.5M Float: 2.814.6M Short Interest: 20.7M SI % / Float 0.74% **Equity MV:** \$539,536.6M Sales TTM: \$58,949.0M Beta: 1.05 EBITDAR: \$40,176.4M NOPAT: \$20,141.8M **Total Invested Capital:** \$98,911.0M 22.79% Return on Capital: **Cost of Capital:** 6.65% **Economic Profit:** \$14,262.3M Market Value Added: \$375,100.6M

- We reiterate our Strong Buy on FB as the launch of its new Libra cryptocurrency payment platform will be a major game changer as it creates new ways to further engage with FB's over 2.7 billion membership base. FB is collaborating with several leading financial tech and consumer service companies to launch a revolutionary cryptocurrency platform, enabling FB to become a major participant in the \$1.4 trillion e-commerce marketplace. FB's creation of a unified payment system for its user base will drive new business partnerships and long-term growth as it penetrates the e-commerce marketplace and further advances its ability to provide access for advertisers and additional business services. FB continues to benefit from strong mobile ad revenues driven by accelerating growth in Instagram Stories and Facebook News Feed. New Instagram commerce initiatives, alongside the increased adoption of FB's Workplace platform which already has more than two million paid users, will serve as catalysts for growth. FB will continue to drive growth through the ongoing monetization of Instagram, Messenger, Oculus, and WhatsApp platforms along with other new products, including Marketplace, Stories, and Watch. The implementation of augmented reality/virtual reality (AR/VR) and artificial intelligence (AI) technologies will continue to produce better user experiences and provide advertisers with the ability to more effectively target new customers. FB's innovative abilities should further enable it to realize greater revenue opportunities and yields from its massive user base. We believe significant upside exists from current levels and continue to recommend purchase.
- Growth in Instagram-based advertising, along with increasing user engagement continues to drive accelerating Business Performance trends. For the 12 months ending March 2019, Net Sales Revenue increased 32.21% Y/Y from \$44.59 billion to \$58.95 billion. We forecast a further increase of 23.45% to \$72.77 billion over the NTM. Economic Operating Cash Flow (EBITDAR) increased 15.14% Y/Y from \$34.89 billion to \$40.18 billion over the LTM. We forecast a further increase of 34.60 to \$54.08 billion over the NTM. Net Operating Profit After Tax (NOPAT) increased 11.36% Y/Y from \$18.08 billion to \$20.14 billion over the LTM. We forecast a further increase of 32.41% to \$26.67 billion over the NTM. Return on Capital (ROC) declined slightly from 25.71% to 22.79%. We forecast an increase to 23.76% over the NTM. Economic Profit increased 11.93% Y/Y from \$12.74 billion to \$14.26 billion over the LTM. We forecast a further increase of 27% to \$18.11 billion over the NTM. FB's consistent ability to drive increasing Return on Capital and Economic Profit will continue to drive greater shareholder value creation.

Facebook, Inc. Class A (FB-US)

\$302,711.9M

\$171,299.8M

**Current Operations Value:** 

**Future Growth Value:** 

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- FB is launching a major cryptocurrency initiative that will be a game changer for both the company and the global cryptocurrency marketplace. FB is partnering with over 27 companies, nonprofits, and venture partners to create a consortium that will oversee its new digital currency called Libra. Libra will be a "stable coin" that will have its value tied to a basket of global currencies, unlike other cryptocurrencies such as bitcoin, to reduce its volatility and create a more stable value. A newly created FB subsidy called Calibra will manage the new cryptocurrency and be governed by a Swiss nonprofit entity called the Libra Association as part of a decentralized network with its other partners. Initial partners will include fin tech service companies MasterCard (MA-US, Strong Buy Rated), PayPal (PYPL-US, Non-Rated), Stripe and Visa (V-US, Non-Rated) along with consumer service companies including online travel company Booking Holdings (BKNG-US, Strong Buy Rated), Latin American e-commerce site Mercadolibre (MELI-US, Non-Rated) and transportation service provider Uber (UBER-US, Non-Rated). Libra will be part of FB's upcoming e-commerce platform and payment system. Libra would be a currency that users could transfer to each other and use for payment in an e-commerce platform. Card issuers and financial service firms have long been concerned that FB could create a payment option that cuts out their networks. These companies would rather join with FB and share in the upside, from the inside, if this e-commerce and payment platform gains popularity with consumers. A pattern of ecommerce transactions also becomes another valuable pool of data for potential advertisers.
- The ongoing growth in user engagement in its massive user base is driving FB's increasing advertising revenue. The ongoing growth of its user base continues to drive more advertising revenue. Everybody wants to go to where everybody is. Currently, more than 2.7 billion people now use at least one of FB's products every month: Facebook, WhatsApp, Instagram, and Messenger. Also, more than two billion people use one of its services daily. FB continues to benefit from growing advertising revenue as it increases mobile engagement and greater advertising effectiveness on Instagram, and with embedded video ads. FB will drive growth through the ongoing monetization of Instagram, Messenger, Oculus, and WhatsApp platforms along with other new products, including Marketplace, Stories, and Watch. FB's ongoing investment in increased surveillance and compliance will ultimately create a safer and more trustworthy environment that will continue to attract increasing user engagement and advertising revenue. The implementation of augmented reality/virtual reality (AR/VR) and artificial intelligence (AI) technologies will continue to produce better user experiences and provide advertisers with the ability to target new customers more effectively.



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- Video continues to be a significant growth opportunity. FB is best positioned to benefit from the significant gains in watching video on social media platforms and mobile devices as evidenced by the tremendous success of Alphabet's (GOOGL-US, Strong Buy Rated) YouTube. Online video-embedded advertising is the fastest growing and potentially most profitable component of the digital advertising market. Video ads are now generating greater revenue than photo and textbased embedded ads. FB continues to incorporate increasing videooriented content, which is driving an incremental increase in advertising revenue. FB has recently launched Watch, a dedicated tab for video viewing which could also in evolve into a significant video portal platform offering paid content, and at some point, FB original content. Instagram continues to be an increasing driver of revenue as FB recently open the platform to worldwide advertisers and now has over two million active advertisers. FB also recently launched new tools to promote posts and evaluate business performance directly within Instagram. FB is developing video chat, soundtracks, and a new Explore tab on Instagram as part of its ongoing focus on enhancing its functionality.
- Increases in mobile continue to drive greater user engagement, and further enhancements in video will continue to drive future advertising growth. FB continues to experience significant growth in online, and mobile advertising spend. Mobile advertising will continue to be an accelerating driver of added revenue growth. Mobile advertising growth is driven by the fact that mobile ads have a higher recall value than other media, and mobile provides users anywhere on-the-go with access to information, and the ability to update their profiles and interact with their friend bases. FB will continue to drive revenue growth by offering advertisers instant access to its growing mobile user base. DAUs continue to increase with the biggest gains coming from growth in India, Indonesia, and Vietnam. India will continue to be a key driver of user growth as it is the world's second most-populated country with 1.3 billion people, and offers FB significant growth potential, although China is still not a potential market. India is FB's second-largest market after the U.S. and has a well-educated middle class with increasing spending power and growing smartphone penetration, which creates significant potential for FB as it reaches a saturation point in many developed markets.



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- FB Marketplace, Stories, and Watch will continue to drive incremental growth. Facebook Marketplace allows users to search for goods and services available from merchants in their local areas, to allow sellers to connect with the community of potential customers, and is available in almost all countries in which FB users may reside. Facebook Stories is a platform for user-generated photo and video collections that can be viewed up to two times and which disappear after 24 hours. The story format and process are similar to Snapchat (SNAP-US, Non-Rated). Facebook Watch is an on-demand video service which offers original content for FB users. Facebook Watch Party is a shared video environment that allows FB users to watch video and interact with each other. FB also continues to increase functionality on its other platforms, including Instagram, Messenger, WhatsApp, and Oculus. To increase communication between businesses and consumers. FB recently launched Quick Replies on Messenger and made ads available on inbox for advertisers. Currently, more than two billion messages are sent between businesses and customers every month. Click-to-Messenger Ads also offer the potential for advertisers to be in direct contact with consumers. Messenger and WhatsApp combined generate nearly 100 billion messages every day. FB's video and voice calling now log more than three billion minutes per day, making it one of the world's largest video calling networks. FB is starting to run tests of payments in messaging, which will eventually drive commerce over Messenger for businesses.
- FB continues to enhance its transparency tools to provide further security for its user base. FB recently introduced two new advertising transparency tools that let users see the ads running on any page even if the ad is not targeted to the specific user and another tool that archives political or topical issues. Ads are now clearly labeled to indicate sponsorship and how many people have viewed it for up to seven years. FB is increasing the accountability and responsibility of advertisers globally. These tools are focused on politically-oriented and newsoriented advertising and should have little impact on more traditional consumer product-focused advertising. FB continues to increase surveillance and compliance to reduce false advertising and eliminate false accounts as well as getting rid of financial incentives for spammers to create fake news. Further, FB is using AI to prevent fake accounts from being opened that generate the majority of the problematic content in the first place. This increased surveillance and compliance continue to make Facebook a trusted social media platform, which will continue to drive increased membership growth, user engagement, and advertising revenue.



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**Internet Software & Services** 

FB's strong balance sheet and cash flow continue to drive new growth initiatives and enhance shareholder returns with ongoing share repurchases. As of March 2019, FB had \$42.42 billion, \$4.85 per share, in excess cash and we forecast that the company will generate \$54.08 billion in Economic Operating Cash Flow (EBITDAR) over the NTM giving it more than enough resources to continue funding growth initiatives and expansion. FB has made a significant commitment to invest in increased staffing and capabilities to provide better security and further weed out fake news and accounts, in addition to its ongoing investments in the development of its platform, and increasing innovations in Al along with AR/VR technology. In December of last year. FB announced an open market purchase for \$9 billion worth of stock, which followed a similar announcement in April of last year. In November 2016, FB announced its initial \$6 billion open market repurchase. Since 2016, FB has repurchased almost \$13.5 billion worth of stock including \$521.8 million repurchased so far this year.

### **Investment Thesis**

Currently, more than 2.7 billion people now use one of FB's products; Facebook, WhatsApp, Instagram, and Messenger, monthly. Also, more than two billion people use one of its services daily. FB continues to benefit from growing advertising revenue as it increases mobile engagement and greater advertising effectiveness on Instagram, and with embedded video ads.

FB's massive user base, strong brand equity, and incredible innovative ability have made it the world's dominant social platform. FB's competitive advantage is its massive user base of over 2.4 billion MAUs, and 2 billion DAUs. FB's massive userbase provides an attractive marketplace for advertisers to use FB's proprietary tools to more effectively target their best potential customers. FB's massive user base and ongoing enhancements are increasing its ability to better prospective target customers, which will continue to drive increasing value to advertisers. FB is also benefiting from the growth in digital advertising's ongoing migration as advertisers continue to increase the use of social media and continue to allocate more advertising dollars to social media advertising, which continues to drive FB's revenue growth and greater Return on Capital, increasing Economic Profit and further shareholder value creation.



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Facebook, Inc. Class A (FB-US)

**Internet Software & Services** 

### **Company Overview**

Facebook, Inc. (FA-US) is the world's largest social media platform, with over 2.3 billion monthly active users (MAU) and over 2 billion daily active users (DAU). Facebook's web-based portal enables users to interact with their friends, family, co-workers, and people with similar interests to exchange messages, share pictures and videos, play games, listen to music, and interact with their favorite brands. Application developers can create apps and websites on the Facebook platform for users on both a paid and free-use basis. Advertisers can target Facebook's massive user base as it provides the tools to better target customers with the highest level of interest in their products based on a user's likes and interactions. Facebook provides a platform to develop applications and create ads and videos that drive advertising revenue.

Facebook's revenue primarily comes from advertising, but it also earns fees on revenue generated by developers for the use of the apps they create. Facebook provides an interactive platform for advertisers to better target customers with interest in their products by using both user referrals and likes as well as targeting people's interests. Facebook receives revenue from the display of impression-based ads and the delivery of click-based ads on its website. Facebook earns most of its revenues by providing an interactive and engaging platform for advertisers. The company recognizes revenues from the display of impression-based ads and the delivery of click-based ads on its website. Facebook's value-added proposition to advertisers is that it provides tools to target the best potential customers, which dramatically increases an advertiser's ROI. Facebook recently launched the concept of "Communities" to better link people with like interests and further enable advertisers to target people with interest in their products. Facebook also continues to develop artificial intelligence (AI) to help advertisers to better optimize the user experience. Facebooks subsidiaries include photo sharing app, Instagram; WhatsApp; Messenger; and virtual reality (VR) platform, Oculus.

**Facebook reports revenue by two business segments:** Advertising (99% of revenue) and Payments & Other Fees (1% of revenue).

Facebook reports revenue by Five geographic segments: The United States (43% of revenue); Europe (24% of revenue); Asia-Pacific (21% of revenue); Canada (3% of revenue); and Rest of the World (9% of revenue).



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## Facebook, Inc. Class A (FB-US)

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### **Financial Data**

							NERS			
Report Basis Reported Period Ending	LTM 03/31/2014	LTM 03/31/2015	LTM 03/31/2016	LTM 03/31/2017	LTM 03/31/2018	LTM 03/31/2019	NTM 03/31/2020	5 Yr Average	3 Yr Average	Current Trend
portou : orrou =manng	00.00	00//01//2010	00/01/2010	00.02011	00/01/2010	00/01/2010		7.00.0.00	711014130	
Net Sales Revenue	\$8,916.0	\$13,507.0	\$19,766.0	\$30,288.0	\$44,587.0	\$58,949.0	\$72,773.6	\$33,419.4	\$44,608.0	\$65,861.3
Sales Growth	62.43%	51.49%	46.34%	53.23%	47.21%	32.21%	23.45%	46.10%	44.22%	27.83%
Sales Growth Trend	51.83%	55.87%	48.40%	50.48%	49.62%	38.21%	26.96%	48.51%	46.10%	32.58%
Economic Operating Cash Flow (EBITDAR)	\$6,393.1	\$9,716.5	\$14,726.2	\$23,175.3	\$34,893.2	\$40,176.4	\$54,077.9	\$24,537.5	\$32,748.3	\$47,127.2
EBITDAR Margin EBITDAR Growth	71.70% 107.20%	71.94% 51.98%	74.50% 51.56%	76.52% 57.37%	78.26% 50.56%	68.15% 15.14%	74.31% 34.60%	73.87% 45.32%	74.31% 41.03%	71.23% 24.87%
Net Operating Profit Before Tax (NOPBT)	\$3,653.1	\$4,916.5	\$7,490.2	\$14,171.3	\$23,090.2	\$23,931.4	\$33,760.2	\$14,719.9	\$20,397.6	\$28,845.8
NOPBT Margin	40.97%	36.40%	37.89%	46.79%	51.79%	40.60%	46.39%	42.69%	46.39%	43.49%
NOPBT Growth	540.29%	34.58%	52.35%	89.20%	62.94%	3.64%	41.07%	48.54%	51.93%	22.36%
Cash Operating Income Tax	\$1,205.5	\$1,622.5	\$2,471.8	\$2,869.8	\$5,002.7	\$3,789.6	\$7,089.6	\$3,151.3	\$3,887.4	\$5,439.6
Economic Tax Effective Rate	33.00%	33.00%	33.00%	20.25%	21.67%	15.84%	21.00%	24.75%	19.25%	18.42%
Net Operating Profit After Tax (NOPAT)	\$2,447.6	\$3,294.1	\$5,018.4	\$11,301.5	\$18,087.4	\$20,141.8	\$26,670.5	\$11,568.6	\$16,510.2	\$23,406.2
NOPAT Margin	27.45%	24.39%	25.39%	37.31%	40.57%	34.17%	36.65%	32.37%	37.35%	35.41%
NOPAT Growth	540.29%	34.58%	52.35%	125.20%	60.04%	11.36%	32.41%	56.71%	65.53%	21.89%
Cash & Equivalents	\$12,629.0	\$12,413.0	\$20,621.0	\$32,306.0	\$43,956.0	\$45,364.0	\$57,592.1	\$30,932.0	\$40,542.0	\$51,478.1
Total Assets	\$19,028.0	\$42,007.0	\$52,075.0	\$68,714.0	\$88,945.0	\$109,477.0	\$138,987.1	\$72,243.6	\$89,045.3	\$124,232.1
Non - Interest Bearing Liabilities (NIBLs)	\$1,899.0	\$4,122.0	\$4,925.0	\$6,526.0	\$11,227.0	\$15,411.0	\$19,565.1	\$8,442.2	\$11,054.7	\$17,488.1
Net Assets	\$17,129.0	\$37,885.0	\$47,150.0	\$62,188.0	\$77,718.0	\$94,066.0	\$119,422.0	\$63,801.4	\$77,990.7	\$106,744.0
Economic Asset Adjustments	\$398.3	\$886.2	\$778.4	\$711.3	\$96.5	\$4,845.0	\$6,151.1	\$1,463.5	\$1,884.3	\$5,498.0
Net Operating Assets	\$17,527.3	\$38,771.2	\$47,928.4	\$62,899.3	\$77,814.5	\$98,911.0	\$125,573.1	\$65,264.9	\$79,874.9	\$112,242.0
Debt & Debt Equivalents	\$1,261.3	\$1,370.2	\$1,326.4	\$1,727.3	\$4,012.5	\$19.907.0	\$25,273.1	\$5,668.7	\$8.548.9	\$22,590.1
Equity & Equivalents	\$16,737.0	\$1,570.2	\$47,150.0	\$62,188.0	\$77,620.0	\$86,516.0	\$109,836.9	\$62,195.0	\$75,441.3	\$98,176.4
Total Capital - Financing Sources	\$17,998.3	\$38,871.2	\$48,476.4	\$63,915.3	\$81,632.5	\$106,423.0	\$135,110.0	\$67,863.7	\$83,990.3	\$120,766.5
Capital Adjustments	(\$471.0)	(\$100.0)	(\$548.0)	(\$1,016.0)	(\$3,818.0)	(\$7,512.0)	(\$9,536.9)	(\$2,598.8)	(\$4,115.3)	(\$8,524.5)
Net Capital Financing Sources	\$17,527.3	\$38,771.2	\$47,928.4	\$62,899.3	\$77,814.5	\$98,911.0	\$125,573.1	\$65,264.9	\$79,874.9	\$112,242.0
Net Working Capital	\$1,071.8	\$1,833.4	\$2,433.3	\$3,296.4	\$3,803.4	\$2,000.5	\$2,539.7	\$2,673.4	\$3,033.4	\$2,270.1
Cost of Net Working Capital	\$1,071.8 \$85.4	\$1,033.4	\$143.4	\$207.0	\$269.7	\$193.1	\$2,339.1	\$184.1	\$223.3	\$2,270.1
% of Revenue	0.96%	0.80%	0.73%	0.68%	0.60%	0.33%	0.34%	0.63%	0.54%	0.33%
Operational Capital	\$4,528.1	\$6,849.6	\$9,339.7	\$12,757.7	\$19,612.8	\$39,940.5	\$50,706.7	\$17,700.1	\$24,103.7	\$45,323.6
Cost of Operational Capital	\$334.5	\$420.9	\$544.3	\$798.3	\$1,229.6	\$1,981.3	\$2,515.3	\$994.9	\$1,336.4	\$2,248.3
% of Revenue	3.75%	3.12%	2.75%	2.64%	2.76%	3.36%	3.46%	2.92%	2.92%	3.41%
Productive Capital	\$6,210.1	\$28,628.6	\$30,435.7	\$33,243.7	\$39,615.8	\$59,423.5	\$75,441.4	\$38,269.5	\$44,094.3	\$67,432.5
Cost of Productive Capital	\$457.3	\$1,288.8	\$1,985.7	\$2,300.6	\$2,767.5	\$3,294.9	\$4, 183. 1	\$2,327.5	\$2,787.7	\$3,739.0
% of Revenue	5.13%	9.54%	10.05%	7.60%	6.21%	5.59%	5.75%	7.80%	6.46%	5.67%
Total Operating Capital	\$5,344.1	\$27,033.6	\$28,295.7	\$32,107.7	\$36,087.8	\$56,494.5	\$71,722.9	\$36,003.9	\$41,563.3	\$64,108.7
Cost of Total Operating Capital	\$414.1	\$1,197.7	\$1,860.2	\$2,182.3	\$2,590.3	\$3,080.1	\$3,910.4	\$2,182.1	\$2,617.6	\$3,495.2
% of Revenue	4.64%	8.87%	9.41%	7.21%	5.81%	5.23%	5.37%	7.30%	6.08%	5.30%
Non - Operating Capital	\$12,183.2	\$11,737.7	\$19,632.7	\$30,791.6	\$41,726.7	\$42,416.6	\$53,850.2	\$29,261.0	\$38,311.6	\$48,133.4
Cost of Non - Operating Capital % of Revenue	\$824.9 9.25%	\$884.9 6.55%	\$1,054.7 5.34%	\$1,821.7 6.01%	\$2,754.5 6.18%	\$2,799.4 4.75%	\$3,553.9 4.88%	\$1,863.0 5.77%	\$2,458.5 5.65%	\$3,176.6 4.82%
Total Capital	\$17,527.3	\$38,771.2	\$47,928.4	\$62,899.3	\$77,814.5	\$98,911.0	\$125,573.1	\$65,264.9	\$79,874.9	\$112,242.0
Cost of Total Capital	\$1,239.0	\$2,082.6	\$2,914.9	\$4,004.0	\$5,344.9	\$5,879.5	\$7,464.3	\$4,045.2	\$5,076.1	\$6,671.9
% of Revenue	13.90%	15.42%	14.75%	13.22%	11.99%	9.97%	10.26%	13.07%	11.73%	10.12%
Cost of Capital (WACC)	7.72%	7.40%	6.72%	7.23%	7.60%	6.65%	6.65%	7.12%	7.16%	6.65%
Canital Structure										
Capital Structure	64 004 0	¢4 270 0	£4 200 4	¢4 707 0	£4.040.5	\$19.907.0	\$0E 070 4	¢E 000 7	\$8,548.9	£22 F00 4
Debt & Debt Equivalents  Debt & Debt Equivalents % of Market Value	\$1,261.3 1.04%	\$1,370.2 0.74%	\$1,326.4 0.50%	\$1,727.3 0.51%	\$4,012.5 1.04%	\$19,907.0 4.77%	\$25,273.1 4.77%	\$5,668.7 1.78%	\$8, <b>548.9</b> 2.25%	\$22,590.1 4.77%
Preferred Equity	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Preferred Equity % of Market Value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Market Value of Common Equity	\$119,943.3	\$183,860.2	\$261,852.6	\$334,551.6	\$382,844.4	\$397,644.7	\$504,831.9	\$312,150.7	\$371,680.2	\$451,238.3
Common Equity % of Market Value	98.96%	99.26%	99.50%	99.49%	98.96%	95.23%	95.23%	98.22%	97.75%	95.23%
Total Economic Market Value (MV)	\$121,204.6	\$185,230.4	\$263,179.1	\$336,278.9	\$386,856.8	\$417,551.7	\$530,105.0	\$317,819.4	\$380,229.2	\$473,828.4
Total %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Excess Cash	\$12,183.2	\$11,737.7	\$19,632.7	\$30,791.6	\$41,726.7	\$42,416.6	\$53,850.2	\$29,261.0	\$38,311.6	\$48,133.4
Economic Enterprise Value	\$109,021.4	\$173,492.8	\$243,546.4	\$305,487.3	\$345,130.2	\$375,135.2	\$476,254.9	\$288,558.4	\$341,917.6	\$425,695.0
Average Capital	\$16,057.0	\$28,149.3	\$43,349.8	\$55,413.9	\$70,356.9	\$88,362.8	\$112,242.0	\$57,126.5	\$71,377.8	\$100,302.4
Capital $\Delta$	\$2,940.7	\$21,243.9	\$9,157.2	\$14,970.9	\$14,915.1	\$21,096.6	\$26,662.0	\$16,276.7	\$16,994.2	\$23,879.3
Source: Company Data, Financial statements and Tigress	Research									

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC
Research: (646) 780-8880 research@tigressfp.com
410 Park Avenue New York NY, 10022 (212) 430-8700 www.tigressfinancialpartners.com

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## Facebook, Inc. Class A (FB-US)

**Internet Software & Services** 

### **Financial Analysis**

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	03/31/2014	03/31/2015	03/31/2016	03/31/2017	03/31/2018	03/31/2019	03/31/2020	Average	Average	Trend
Return on Market Value (NOPAT / MV) Return on Enterprise Value (NOPAT / EV)	2.02% 2.25%	1.78% 1.90%	1.91% 2.06%	3.36% 3.70%	4.68% 5.24%	4.82% 5.37%	6.12% 6.82%	3.31% 3.65%	4.29% 4.77%	5.47% 6.09%
Return on Capital (NOPAT / EV)  Return on Capital (NOPAT / Average Capital)	15.24%	11.70%	11.58%	20.39%	25.71%	22.79%	23.76%	18.44%	22.97%	23.28%
Cost of Capital (WACC)	7.72%	7.40%	6.72%	7.23%	7.60%	6.65%	6.65%	7.12%	7.16%	6.65%
Economic Return Spread	7.53%	4.30%	4.85%	13.17%	18.11%	16.14%	20.49%	11.32%	15.81%	18.32%
Capital Charge	\$1,239.0	\$2,082.6	\$2,914.9	\$4,004.0	\$5,344.9	\$5,879.5	\$7,464.3	\$4,045.2	\$5,076.1	\$6,671.9
Economic Profit (EP)	\$1,208.6	\$1,211.4	\$2,103.6	\$7,297.5	\$12,742.6	\$14,262.3	\$18,106.8	\$7,523.5	\$11,434.1	\$16,184.6
Economic Profit Improvement (EPI)	\$1,559.5	\$2.8	\$892.1	\$5,193.9	\$5,445.1	\$1,519.7	\$3,844.5	\$2,610.7	\$4,052.9	\$2,682.1
EP Growth	444.47%	0.23%	73.64%	246.91%	74.62%	11.93%	26.96%	81.47%	111.15%	19.44%
Economic Profit Margin on Sales	13.56%	8.97%	10.64%	24.09%	28.58%	24.19%	24.88%	19.30%	25.62%	24.54%
Economic Profit Per Share	\$0.50	\$0.46	\$0.75	\$2.55	\$4.39	\$4.94	\$6.27	\$2.62	\$3.96	\$5.60
GAAP Earnings Per Share	\$0.77	\$1.05	\$1.66	\$3.85	\$6.15	\$6.79	\$8.28	\$3.90	\$5.59	\$7.53
Excess Cash Per Share	\$4.79	\$4.22	\$6.91	\$10.65	\$14.36	\$14.85	\$18.86	\$10.20	\$13.29	\$16.85
Performance Drivers										
Sales Growth	62.43%	51.49%	46.34%	53.23%	47.21%	32.21%	23.45%	46.10%	44.22%	27.83%
Sales Growth Trend (ROC Sales Growth)	51.83%	55.87%	48.40%	50.48%	49.62%	38.21%	26.96%	48.51%	46.10%	32.58%
EBITDAR Margin	71.70%	71.94%	74.50%	76.52%	78.26%	68.15%	74.31%	73.87%	74.31%	71.23%
EBITDAR Growth	107.20%	51.98%	51.56%	57.37%	50.56%	15.14%	34.60%	45.32%	41.03%	24.87%
NOPBT Margin	40.97%	36.40%	37.89%	46.79%	51.79%	40.60%	46.39%	42.69%	46.39%	43.49%
NOPBT Growth	540.29%	34.58%	52.35%	89.20%	62.94%	3.64%	41.07%	48.54%	51.93%	22.36%
NOPAT Margin	27.45%	24.39%	25.39%	37.31%	40.57%	34.17%	36.65%	32.37%	37.35%	35.41%
NOPAT Growth	540.29%	34.58%	52.35%	125.20%	60.04%	11.36%	32.41%	56.71%	65.53%	21.89%
Economic Profit Margin on Sales (EP / Sales)	13.56%	8.97%	10.64%	24.09%	28.58%	24.19%	24.88%	19.30%	25.62%	24.54%
Economic Profit Growth	444.47%	0.23%	73.64%	246.91%	74.62%	11.93%	26.96%	81.47%	111.15%	19.44%
Economic Return Spread (ROC-WACC)	7.53%	4.30%	4.85%	13.17%	18.11%	16.14%	17.11%	11.32%	15.81%	16.62%
Economic Return Ratio ( ROC / WACC)	197.55%	158.17%	172.17%	282.25%	338.41%	342.58%	357.11%	258.72%	321.08%	349.85%
Economic Profit Momentum (ΔΕΡ/Capital) Economic Profit Momentum Margin (ΔΕΡ/Sales)	8.90% 17.49%	0.01% 0.02%	1.86% 4.51%	8.26% 17.15%	7.00% 12.21%	1.54% 2.58%	3.06% 5.28%	3.73% 7.29%	5.60% 10.65%	2.30% 3.93%
Capital Growth	20.16%	121.20%	23.62%	31.24%	23.71%	27.11%	26.96%	45.38%	27.35%	27.03%
Capital Turns	0.51X	0.35X	0.41X	0.48X	0.57X	0.60X	0.58X	0.48X	0.55X	0.59X
EVC Acceleration Margin	28.41%	0.03%	6.60%	26.28%	17.98%	3.41%	6.52%	3.59%	12.13%	6.01%
EVC Acceleration Spread	14.83%	0.02%	3.17%	11.98%	9.83%	2.16%	4.35%	2.33%	7.09%	3.76%
Risk Factors										
Free Cash Flow (NOPAT - Δ Capital)	(\$493.1)	(\$17,949.8)	(\$4,138.8)	(\$3,669.4)	\$3,172.3	(\$954.8)	\$8.5	(\$4,708.1)	(\$484.0)	(\$473.1)
Free Cash Flow Rate (FCF / Capital)	-2.81%	-46.30%	-8.64%	-5.83%	4.08%	-0.97%	0.01%	-11.53%	-0.91%	-0.48%
Free Cash Flow Yield (FCF / MV)	-0.41%	-9.69%	-1.57%	-1.09%	0.82%	-0.23%	0.00%	-2.35%	-0.17%	-0.11%
Total Debt / Total Capital	7.20%	3.53%	2.77%	2.75%	5.16%	20.13%	20.13%	6.87%	9.34%	20.13%
Total Debt / EBITDAR	19.73%	14.10%	9.01%	7.45%	11.50%	49.55%	46.73%	18.32%	22.83%	48.14%
Excess Cash	\$12,183.2	\$11,737.7	\$19,632.7	\$30,791.6	\$41,726.7	\$42,416.6	\$0.0	\$29,261.0	\$38,311.6	\$21,208.3
Financial Leverage ((Total Debt - Excess Cash) /	-9.01%	-5.60%	-6.96%	-8.64%	-9.75%	-5.39%	4.77%	-7.27%	-7.93%	-0.31%
Pension Leverage (Net Pension Liability / MV)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equity Risk Index (S&P 500 = 1.00)	1.13	1.14	1.14	1.13	1.05	1.05	1.05	1.10	1.08	1.05
Stock Price Volatility	7.24	5.18	3.58	3.27	2.99	4.17	4.17	3.84	3.48	4.17
Sales Index (NL Sales) Market Value Index (NL Market Value)	9.10 11.71	9.51 12.13	9.89 12.48	10.32 12.73	10.71 12.87	10.98 12.94	11.20 13.18	10.28 12.63	10.67 12.84	11.09 13.06
Size Index (NL Sales: MV)	10.40	10.82	11.19	11.52	11.79	11.96	12.19	11.46	11.76	12.08
Beta	1.20	1.20	1.21	1.19	1.07	1.07	1.07	1.15	1.11	1.07
TFP Adjusted Beta	1.13	1.14	1.14	1.13	1.05	1.05	1.05	1.10	1.08	1.05
Stock Price Volatility	7.24	5.18	3.58	3.27	2.99	4.17	4.17	3.84	3.48	4.17
Valuation Measures										
Total Economic Market Value (MV)	\$121,204.6	\$185,230.4	\$263,179.1	\$336,278.9	\$386,856.8	\$417,551.7	\$530,105.0	\$317,819.4	\$380,229.2	\$473,828.4
Economic Enterprise Value	\$109,021.4	\$173,492.8	\$243,546.4	\$305,487.3	\$345,130.2	\$375,135.2	\$476,254.9	\$288,558.4	\$341,917.6	\$425,695.0
Equity Market Value Total Capital	\$119,943.3 \$17,527.3	\$183,860.2 \$38,771.2	\$261,852.6 \$47,928.4	\$334,551.6 \$62,899.3	\$382,844.4 \$77,814.5	\$397,644.7 \$98,911.0	\$504,831.9 \$125,573.1	\$312,150.7 \$65,264.9	\$371,680.2 \$79,874.9	\$451,238.3 \$112,242.0
Market Value Created MVC (MV - Capital)	\$17,527.3	\$146,459.2	\$215,250.6	\$273.379.6	\$309,042.4	\$318,640.7	\$404,532.0	\$252,554.5	\$300,354.2	\$361,586.3
MVC Margin (MVC / Sales)	1162.82%	1084.32%	1088.99%	902.60%	693.12%	540.54%	555.88%	755.71%	673.32%	549.01%
MVC Spread (MVC / Capital)	591.52%	377.75%	449.11%	434.63%	397.15%	322.15%	322.15%	386.97%	376.03%	322.15%
Current EVC Value (EP / WACC)	\$15,663.4	\$16,374.0	\$31,284.3	\$100,994.4	\$167,736.6	\$214,349.1	\$272,128.1	\$105,670.4	\$159,722.8	\$243,238.6
Current Operations Value COV	\$31,720.4	\$44,523.3	\$74,634.1	\$156,408.3	\$238,093.5	\$302,711.9	\$384,370.2	\$162,797.0	\$231,100.7	\$343,541.0
Current Operations Value Per Share	\$13.11	\$17.03	\$26.63	\$54.63	\$82.07	\$104.74	\$136.58	\$57.85	\$80.11	\$120.45
Future Growth Value (MVC - EVA Value)	\$89,484.2	\$140,707.1	\$188,544.9	\$179,870.6	\$148,763.3	\$114,839.8	\$145,734.9	\$155,022.4	\$149,128.5	\$130,287.3
Future Growth Value Reliance (FGV / MV)		75.96%	71.64%	53.49%	38.45%	27.50%	27.49%	48.78%	39.22%	27.50%
ratare Growth Value Renarice (1 GV / 101V)	73.83%	<b>#00.00</b>	\$114.10	\$142.05	\$159.79	\$166.69	\$166.69	\$132.97	\$156.18	\$166.69
Share Price	\$60.24	\$82.22		0.000/	0.00%	0.00%				
Share Price Dividend Yield	\$60.24 0.00%	0.00%	0.00%	0.00%						6.73%
Share Price Dividend Yield Total Shareholder Return (TTM)	\$60.24 0.00% 135.50%	0.00% 36.48%	38.78%	24.50%	12.49%	4.32%	0.00%	-20.23%	17.45%	
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio	\$60.24 0.00% 135.50% 6.92X	0.00% 36.48% 4.78X	38.78% 5.49X	24.50% 5.35X	12.49% 4.97X	4.22X	4.22X	4.87X	4.76X	4.22X
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple	\$60.24 0.00% 135.50% 6.92X 17.05X	0.00% 36.48% 4.78X 17.86X	38.78% 5.49X 16.54X	24.50% 5.35X 13.18X	12.49% 4.97X 9.89X	4.22X 9.34X	4.22X 8.81X	4.87X 11.76X	4.76X 10.44X	4.22X 9.03X
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X	0.00% 36.48% 4.78X 17.86X 35.29X	38.78% 5.49X 16.54X 32.52X	24.50% 5.35X 13.18X 21.56X	12.49% 4.97X 9.89X 14.95X	4.22X 9.34X 15.68X	4.22X 8.81X 14.11X	4.87X 11.76X 19.60X	4.76X 10.44X 16.76X	4.22X 9.03X 14.76X
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple EV / NOPAT Multiple	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X 44.54X	0.00% 36.48% 4.78X 17.86X 35.29X 52.67X	38.78% 5.49X 16.54X 32.52X 48.53X	24.50% 5.35X 13.18X 21.56X 27.03X	12.49% 4.97X 9.89X 14.95X 19.08X	4.22X 9.34X 15.68X 18.62X	4.22X 8.81X 14.11X 17.86X	4.87X 11.76X 19.60X 24.94X	4.76X 10.44X 16.76X 20.71X	4.22X 9.03X 14.76X 18.19X
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple EV / NOPAT Multiple EV / NOPAT Multiple EV / PROPAT Multiple EV / PROPAT Multiple	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X 44.54X 90.20X	0.00% 36.48% 4.78X 17.86X 35.29X 52.67X 143.21X	38.78% 5.49X 16.54X 32.52X 48.53X 115.78X	24.50% 5.35X 13.18X 21.56X 27.03X 41.86X	12.49% 4.97X 9.89X 14.95X 19.08X 27.08X	4.22X 9.34X 15.68X 18.62X 26.30X	4.22X 8.81X 14.11X 17.86X 26.30X	4.87X 11.76X 19.60X 24.94X 38.35X	4.76X 10.44X 16.76X 20.71X 29.90X	4.22X 9.03X 14.76X 18.19X 26.30X
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple EV / NOPAT Multiple EV / EP Multiple Future Growth Value (% of MV)	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X 44.54X 90.20X 73.83%	0.00% 36.48% 4.78X 17.86X 35.29X 52.67X 143.21X 75.96%	38.78% 5.49X 16.54X 32.52X 48.53X 115.78X 71.64%	24.50% 5.35X 13.18X 21.56X 27.03X 41.86X 53.49%	12.49% 4.97X 9.89X 14.95X 19.08X 27.08X 38.45%	4.22X 9.34X 15.68X 18.62X 26.30X 27.50%	4.22X 8.81X 14.11X 17.86X 26.30X 27.49%	4.87X 11.76X 19.60X 24.94X 38.35X 48.78%	4.76X 10.44X 16.76X 20.71X 29.90X 39.22%	4.22X 9.03X 14.76X 18.19X 26.30X 27.50%
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple EV / NOPAT Multiple EV / P Multiple FV / EP Multiple FV / EP Multiple Future Growth Value (% of MV) Current Operations Value (% of MV)	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X 44.54X 90.20X 73.83% 26.17%	0.00% 36.48% 4.78X 17.86X 35.29X 52.67X 143.21X 75.96% 24.04%	38.78% 5.49X 16.54X 32.52X 48.53X 115.78X 71.64% 28.36%	24.50% 5.35X 13.18X 21.56X 27.03X 41.86X 53.49% 46.51%	12.49% 4.97X 9.89X 14.95X 19.08X 27.08X 38.45% 61.55%	4.22X 9.34X 15.68X 18.62X 26.30X 27.50% 72.50%	4.22X 8.81X 14.11X 17.86X 26.30X 27.49% 72.51%	4.87X 11.76X 19.60X 24.94X 38.35X 48.78% 51.22%	4.76X 10.44X 16.76X 20.71X 29.90X 39.22% 60.78%	4.22X 9.03X 14.76X 18.19X 26.30X 27.50% 72.50%
Share Price Dividend Yield Total Shareholder Return (TTM) MV to IC Ratio EV / EBITDAR Multiple EV / NOPBIT Multiple EV / NOPAT Multiple EV / EP Multiple Future Growth Value (% of MV)	\$60.24 0.00% 135.50% 6.92X 17.05X 29.84X 44.54X 90.20X 73.83%	0.00% 36.48% 4.78X 17.86X 35.29X 52.67X 143.21X 75.96%	38.78% 5.49X 16.54X 32.52X 48.53X 115.78X 71.64%	24.50% 5.35X 13.18X 21.56X 27.03X 41.86X 53.49%	12.49% 4.97X 9.89X 14.95X 19.08X 27.08X 38.45%	4.22X 9.34X 15.68X 18.62X 26.30X 27.50%	4.22X 8.81X 14.11X 17.86X 26.30X 27.49%	4.87X 11.76X 19.60X 24.94X 38.35X 48.78%	4.76X 10.44X 16.76X 20.71X 29.90X 39.22%	4.22X 9.03X 14.76X 18.19X 26.30X

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June 18, 2019

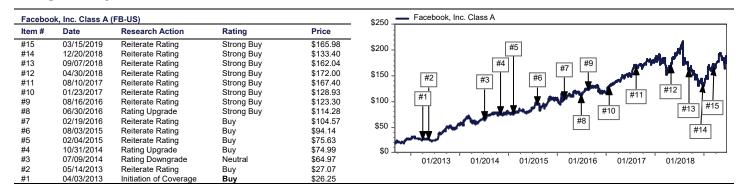


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## Facebook, Inc. Class A (FB-US)

## **Internet Software & Services**

### **Ratings History**



### **Tigress Research Methodology Overview**

We employ proprietary quantitative valuation models combined with dynamic fundamental analysis based on the principles of Economic Profit to formulate timely and insightful investment ratings, analysis, strategies, and recommendations.

We make key adjustments to reported financial data eliminating GAAP-based accounting distortions and measuring all companies on a cash operating basis

Our proprietary research framework is a multi-factor model that scores and ranks companies based on their risk-adjusted ability to create Economic Profit relative to their current market value focusing on three key components:

Business Performance: Measuring economic profitability, growth and operating efficiency.

Risk: Measuring business sustainability, volatility, strength, and consistency.

**Valuation:** Linking business performance to market value. Measuring value created relative to capital employed and enterprise multiples of economic profit and cash flow.

We score and rank 24 key measurements of performance, risk, and value into relative market and industry investment recommendations.

### Glossary of Key Terms and Measures

Excess Cash per Share: Excess Cash per Share is the amount of excess cash divided by basic shares outstanding. Excess Cash consists of all

cash and short-term securities less operating cash needed to run the business. Operating Cash is 5% of TTM net sales

revenue

EBITDAR: Earnings Before Interest, Taxes, Depreciation, Amortization, and Restructuring and Rent Costs. This is especially

important when comparing companies that use a significant amount of leased assets like restaurants and retailers.

NOPAT: Net Operating Profit after Tax represents a company's after-tax cash operating profit excluding financing costs.

Total Invested Capital: Total Invested Capital the total cash investment that shareholders and debt holders have made during the life of the

company

Return on Capital: Return on Capital equals NOPAT divided by Total Invested Capital. It is a key measure of operating efficiency. ROC

quantifies how well a company generates cash flow relative to the capital invested in its business.

Cost of Capital: Is the proportionately weighted cost of each category of capital – common equity, preferred equity and debt.

Economic Profit: Economic Profit is the net operating income after tax less the opportunity cost of the total capital invested. It is the most

important driver of shareholder value.

Current Operations Value: Current Operations Value is the portion of market value based on the discounted present value of the current earnings

stream assuming it remains constant forever.

Future Growth Value: Future Growth Value is the portion of market value based on un-earned Economic Profit

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC
Research: (646) 780-8880 research@tigressfp.com
410 Park Avenue New York NY, 10022 (212) 430-8700 www.tigressfinancialpartners.com

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#### **Contacts**

Ivan Feinseth **Director of Research** (646) 780-8901 Direct ifeinseth@tigressfp.com

**Barney Greengrass** Capital Markets / Sales & Trading (646) 780-8914 Direct bgreengrass@tigressfp.com

Aaron Ju Research Analyst (646) 780-8887 Direct aaronju@tigressfp.com

**Ernest Williams** Capital Markets / Sales & Trading (646) 780-8886 Direct ewilliams@tigressfp.com

Steven Pikowski **Operations / Sales & Trading** (646) 780-8894 Direct spikowski@tigressfp.com

Lily Li Global Wealth Management (646) 780-8903 Direct lilveli@tigressfp.com

### **Analyst Certification**

I, Ivan Feinseth, hereby certify that the views expressed herein accurately reflect my personal views about the subject company and their securities and that I have not been and will not be directly or indirectly compensated for expressing specific recommendations or views in the report.

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### Tigress Research Investment Rating Meanings and Distribution

Tigress Research employs a five-tier rating system for evaluating the investment opportunity and				Rating Distribution (06/17/2019)					
universe. The pote	sociated with owning the common equity of rated firms within our research ential return is measured on a relative basis to the general market which is a S&P 500 and to the subject company's industry peer group as indicated.		Relation Companies Compan Under Coverage Under C			•			
Rating:	Meaning:		#	%	#	%			
Strong Buy:	Expect significant price gains in the price of the stock relative to its industry peer group and general market over the next 12 months.		16	14%	1	15%			
Buy:	Expect out-performance for the price of the stock relative to its industry peer group and general market over the next 12 months.		54	45%	5	70%			
Neutral:	Expect little or no outperformance opportunity over the next 12 months.		44	37%	1	15%			
Underperform:	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.		5	4%	0	0%			
Sell:	Expect price decline or significant relative market and industry underperformance over the next 12 months.		0	0%	0	0%			
Not Rated	No Current Research Rating		NA	NA	65	NA			
Partners LLC or or investment banking	panies under research coverage are companies in which Tigress Financial ne of its affiliates has received compensation for investment banking or nonge services from the company, affiliated entities and / or its employees within the sor expects to do so within the next three months.	Total	119	100%	72	100%			

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Facebook, Inc. Class A (FB-US)	14	

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