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Facebook, Inc. Class A (FB-US)

Internet Software & Services

- We reiterate our Strong Buy rating as FB reports another record quarter driven by ongoing increases in new users and user engagements and adds \$25 billion to its share repurchase authorization.
- Digital advertising growth, increasing users, and growing user engagement will continue to drive accelerating Business Performance.
- Ongoing innovation and new product launches will continue to drive increasing user growth and engagement.
- FB continues to innovate its e-commerce offerings with Facebook Shops, helped by its new AI-driven product recognition technology.
- International expansion continues to be a key growth opportunity.
- FB's strong balance sheet and cash flow continue to drive new growth initiatives, fund strategic acquisitions, and enhance shareholder returns through ongoing share repurchases.

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Company Note
Facebook, Inc. Class A (FB-US)

Internet Software & Services

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Research Action:

Reiterate rating

Rating: Strong Buy

Prior Rating: Strong Buy

Price 02/09/2021: \$269.45

52 Week High / \$304.67

Low: \$137.10

Key Data: (TTM as of Dec-20)
Excess Cash per Share: \$22.55

Annual Dividend: \$0.00

Dividend Yield: 0.00%

Avg. Volume (30 Day): 22.7M

Shares Outstanding: 2,847.7M

Float: 2,380.7M

Short Interest: 23.3M

SI % / Float 0.98%

Equity MV: \$767,305.1M

Sales TTM: \$85,966.0M

Beta: 0.97

EBITDAR: \$60,550.7M

NOPAT: \$29,497.0M

Total Invested Capital: \$141,742.0M

Return on Capital: 23.18%

Cost of Capital: 5.46%

Economic Profit: \$22,554.3M

Market Value Added: \$526,102.8M

Current Operations Value: \$540,668.7M

Future Growth Value: \$127,176.0M

- We reiterate our Strong Buy rating as FB reports another record quarter driven by ongoing increases in new users and user engagements and adds \$25 billion to its share repurchase authorization.** FB reported strong Q4 results with revenue increasing 33% Y/Y to a record \$28.07 billion and beating consensus on all metrics. FB continues to benefit from the COVID-19 pandemic driving greater online interaction, increased average daily and average monthly users, and increased user engagement. FB also continues to benefit from ongoing digital advertising growth, increasing users, and growing user engagement through its ongoing innovation and platform expansion into e-commerce and more interactive application capabilities. The ongoing growth in e-commerce and direct response advertising drove a significant increase in quarterly revenue growth. It was also helped by strong holiday sales driven by the ongoing e-commerce shift. FB saw strong user growth across all regions, with the biggest increase in Asia-Pacific. Increasing engagement for key applications, including Instagram, Messenger, and WhatsApp, continue to be significant growth drivers. E-commerce initiatives, including Facebook Shops and the new Shops tab on FB's main app, along with new gaming initiatives and the integration of chat across all of its applications, will continue to drive increasing user growth and user engagement as it monetizes its over 2.7 billion monthly active users (MAUs). FB will continue to focus on the increasing integration of payment capabilities throughout its platform. FB has a significant upside driven by the ongoing potential to monetize many of its critical applications and technologies, including Instagram, Messenger, WhatsApp, and Oculus. FB continues to invest its massive balance sheet and cash flow in enhancing shareholder value through innovation and strategic acquisitions along with ongoing share repurchases, having recently announced a new \$25 billion share repurchase authorization, up significantly from its prior \$10 billion share repurchase announcement. We believe significant upside exists from current levels and continue to recommend purchase.

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- **Digital advertising growth, increasing users, and growing user engagement will continue to drive accelerating Business Performance.** For the 12 months ending December 2020, Net Sales Revenue increased 21.60% Y/Y from \$70.70 billion to \$85.97 billion. We forecast a further increase of 27.84% to \$109.90 billion over the NTM. Economic Operating Cash Flow (EBITDAR) increased 19.09% Y/Y from \$50.84 billion to \$60.55 billion over the LTM. We forecast a further increase of 30.89% to \$79.25 billion over the NTM. Net Operating Profit After Tax (NOPAT) increased 31.09% Y/Y from \$22.50 billion to \$29.50 billion over the LTM. We forecast a further increase of 33.61% to \$39.41 billion over the NTM. Return on Capital (ROC) increased from 21.80% to 23.18% over the LTM. We forecast a further increase to 25.14% over the NTM. Economic Profit increased 37.29% Y/Y from \$16.43 billion to \$22.55 billion over the LTM. We forecast a further increase of 25.34% to \$28.27 billion over the NTM. FB's ongoing ability to increase Return on Capital and grow Economic Profit will continue to drive greater shareholder value creation. The ongoing trends driving significant digital advertising growth will continue long after the COVID-19 pandemic is over, providing further upside to our current expectations.
- **Ongoing innovation and new product launches will continue to drive increasing user growth and engagement.** FB is expected to launch a new video service to let members pay content creators and celebrities for live broadcast interaction. FB continues to launch new ways to further engage and monetize its userbase, creating a new service called Super to enable content creators, celebrities, or other influencers and entrepreneurs to host live interactive video events. The service looks to be similar to the web-based Patreon that lets content creators and performers create a subscription-based fanbase, giving them exclusive access to a created community and content. Super is a new service created by FB's New Product Experimentation team that builds standalone applications and other products. FB looks to continue to add new content to keep members engaged and provide entertainment as the COVID-19 pandemic prohibits large entertainment gatherings and has reduced personal interaction. There is an opportunity for Super to be a standalone application or integrated within the Facebook platform. FB continues to meet increasing communication demands as well as drive increased engagement and enhanced user experiences through expanded messaging capabilities.

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- **FB continues to innovate its e-commerce offerings with Facebook Shops, helped by its new AI-driven product recognition technology.** FB is launching its most significant e-commerce initiative, yet: Facebook Shops makes it easy for businesses to set up a single online store with access to both Facebook and Instagram. The platform is free and easy to use, and businesses can upload their catalog of products and services as well as customize the look and feel of their online storefront. Over time, additional features and technology will be integrated into Facebook Shops from across FB's apps like Instagram Shop and Live Shopping. The new Shop tab allows users to search for products and purchase them within the app. FB continues to increase functionality that will continue to drive increased user engagement along with greater advertising and e-commerce revenue. FB will also integrate an AI (Artificial Intelligence)-driven universal product recognition model capable of identifying all types of consumer products. FB's shopping AI will identify manufacturers of products embedded in images and provide links to various retailers. Facebook Shops should be an instant success as it offers access to FB's over 3 billion total members. FB is also working closely with other e-commerce platform providers, including Shopify (SHOP-US, Non-Rated) and Channel Advisor, to provide small businesses additional support. Facebook Shops' launch should also drive increased engagement by FB's user base, helping FB further monetize its massive user base and extensive social media platform.
- **International expansion continues to be a key growth opportunity.** In April last year, FB invested \$5.7 billion in India's Reliance Jio Internet platform for a 9.9% stake. The investment in Jio gives FB access to 400 million Jio Internet users and 30 million Jio India-based businesses, significantly ramping up its e-commerce opportunities in the world's second-largest country by population with nearly 1.4 billion people. FB joins Amazon (AMZN-US, Buy Rated) and Walmart (WMT-US, Neutral Rated) in one of the world's largest yet most competitive e-commerce markets. Amazon has invested more than \$6.5 billion in India, and Walmart acquired India's biggest e-commerce company, Flipkart, for \$16 billion in 2018. FB is estimated to have over 330 million members in India. The investment will both increase its membership base and create new e-commerce-based revenue opportunities. Currently, India's e-commerce retail market is estimated to be \$800 billion and is expected to reach \$1.3 trillion by 2025.

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- **FB's strong balance sheet and cash flow continue to drive new growth initiatives, fund strategic acquisitions, and enhance shareholder returns through ongoing share repurchases.** As of December 2020, FB had \$64.27 billion, \$22.55 per share, in excess cash. FB's excess cash, along with an expected generation of \$79.25 billion in Economic Operating Cash Flow (EBITDAR) over the NTM, gives it significant resources to fund new growth initiatives along with strategic acquisitions to further enhance its services and capabilities, extend its brand, and penetrate its massive user base. FB continues to invest in innovation and make strategic acquisitions to expand the capabilities of its platform. In 2020, FB acquired customer engagement management platform, Kustomer, Animation and visual effects creator and distributor Weta Digital, Mobile software developer Mobile Motion GmbH, videogame developer Ready at Dawn Studios, photo and image software services platform manager Mapillary AB, graphics application developer Giphy, and sensor semiconductor manufacturer Plessey Semiconductors. In 2020, FB also acquired a 9.9% minority interest in Indian Internet and wireless communication service provider Jio Platforms Limited for \$5.7 billion. FB continues to return its excess cash and cash flow to shareholders through ongoing share repurchases and announced an additional \$25 billion repurchase authorization last month. For the full year of 2020, FB repurchased \$6.3 billion worth of stock and currently has \$8.6 billion remaining on its prior \$10 billion share repurchase authorization. In 2019, FB repurchased \$4.2 billion worth of stock.

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Investment Thesis

FB's massive user base, strong brand equity, and incredible innovative ability have made it the world's dominant social media platform. More than 2.75 billion people use one of FB's products monthly, including Facebook, WhatsApp, Instagram, and Messenger. FB continues to benefit from growing advertising revenue as it increases mobile engagement and greater advertising effectiveness on Instagram, aided by embedded video ads. FB's competitive advantage is its massive user base. FB's ever-growing user base and ongoing enhancements provide an attractive marketplace for advertisers to use FB's proprietary tools to target their best potential customers more effectively, which will continue to drive increasing value. FB is benefiting from the growth in digital advertising and secular migration to its platforms as advertisers continue to increase social media use and further allocate more advertising dollars to social media advertising. In addition to increasing digital-based advertising revenues, FB continues to expand ways to further monetize its massive user base, increasing penetration by offering additional services, including e-commerce, as well as further embedded advertising. FB's advertising and e-commerce services, in combination with the continued addition of new apps and services, will continue to drive revenue growth and greater Return on Capital (ROC), increasing Economic Profit and further shareholder value creation. FB also continues to return significant amounts of cash to shareholders through ongoing share repurchases.

Company Overview

Facebook, Inc. (FA-US) is the world's largest social media platform, with over 2.80 billion monthly active users (MAU) and over 1.85 billion daily active users (DAU). Facebook has helped over 200 million businesses to grow and interact with their client bases. 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, along with new services, including news, dating, payments, and enhanced messaging. 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.

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Facebook's revenue primarily comes from advertising, but it also earns fees on revenue generated by developers to use 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 related 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 delivers a value-added proposition to advertisers, providing tools to target the best potential customers to dramatically increase ROI. Facebook recently launched the concept of "Communities" to better link people with similar interests and further enable advertisers to target people interested in their products. Facebook also continues to develop new applications, including new services and payment processing services, along with ongoing integration of artificial intelligence (AI) to help advertisers better optimize the user experience. Facebook's subsidiaries include the photo-sharing app, Instagram; WhatsApp; Messenger; and the virtual reality (VR) platform, Oculus. Facebook also continues to ramp up its e-commerce and payment capabilities with the recent launch of Facebook Shops.

Facebook reports revenue by two Business Segments: Advertising (98% of revenue) and Payments & Other Fees (2% of revenue).

Facebook reports revenue by Five Geographic Segments: The United States (42% of revenue); Europe (24% of revenue); Asia-Pacific (23% of revenue); Canada (3% of revenue); and the Rest of the World (9% of revenue).

Facebook, Inc. Class A (FB-US)
Internet Software & Services
Financial Data

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	Average	Average	Trend
Net Sales Revenue	\$17,927.0	\$27,638.0	\$40,653.0	\$55,838.0	\$70,697.0	\$85,966.0	\$109,895.0	\$56,158.4	\$70,833.7	\$97,930.5
Sales Growth	43.81%	54.17%	47.09%	37.35%	26.61%	21.60%	27.84%	37.36%	28.52%	24.72%
Sales Growth Trend	49.63%	50.02%	49.92%	41.25%	30.91%	23.60%	25.34%	39.14%	31.92%	24.47%
Economic Operating Cash Flow (EBITDAR)	\$13,259.1	\$21,211.7	\$31,977.5	\$41,321.5	\$50,843.8	\$60,550.7	\$79,254.8	\$41,181.0	\$50,905.3	\$69,902.8
EBITDAR Margin	73.96%	76.75%	78.66%	74.00%	71.92%	70.44%	72.12%	74.35%	72.12%	71.28%
EBITDAR Growth	46.91%	59.98%	50.75%	29.22%	23.04%	19.09%	30.89%	36.42%	23.79%	24.99%
Net Operating Profit Before Tax (NOPBT)	\$6,386.1	\$12,758.7	\$20,940.5	\$26,104.5	\$30,203.8	\$33,580.7	\$47,084.9	\$24,717.6	\$29,963.0	\$40,332.8
NOPBT Margin	35.62%	46.16%	51.51%	46.75%	42.72%	39.06%	42.85%	45.24%	42.85%	40.95%
NOPBT Growth	27.38%	99.79%	64.13%	24.66%	15.70%	11.18%	40.21%	43.09%	17.18%	25.70%
Cash Operating Income Tax	\$2,107.4	\$3,075.4	\$4,739.4	\$3,343.2	\$7,701.9	\$4,083.7	\$7,674.8	\$4,588.7	\$5,042.9	\$5,879.3
Economic Tax Effective Rate	33.00%	24.10%	22.63%	12.81%	25.50%	12.16%	16.30%	19.44%	16.82%	14.23%
Net Operating Profit After Tax (NOPAT)	\$4,278.7	\$9,683.3	\$16,201.1	\$22,761.3	\$22,501.9	\$29,497.0	\$39,410.1	\$20,128.9	\$24,920.1	\$34,453.5
NOPAT Margin	23.87%	35.04%	39.85%	40.76%	31.83%	34.31%	35.86%	36.36%	35.63%	35.09%
NOPAT Growth	27.38%	126.31%	67.31%	40.49%	-1.14%	31.09%	33.61%	52.81%	23.48%	32.35%
Cash & Equivalents	\$18,434.0	\$29,449.0	\$41,711.0	\$41,219.0	\$55,055.0	\$68,566.0	\$85,940.9	\$47,200.0	\$54,946.7	\$77,253.4
Total Assets	\$49,407.0	\$64,961.0	\$84,524.0	\$97,334.0	\$133,376.0	\$159,316.0	\$199,687.3	\$107,902.2	\$130,008.7	\$179,501.6
Non - Interest Bearing Liabilities (NIBLs)	\$4,401.0	\$5,131.0	\$9,329.0	\$11,504.0	\$19,544.0	\$17,240.0	\$21,608.7	\$12,549.6	\$16,096.0	\$19,424.3
Net Assets	\$45,006.0	\$59,830.0	\$75,195.0	\$85,830.0	\$113,832.0	\$142,076.0	\$178,078.6	\$95,352.6	\$113,912.7	\$160,077.3
Economic Asset Adjustments	\$1,382.7	\$628.5	\$1,367.4	\$6,403.2	\$3,251.9	(\$334.0)	(\$418.7)	\$2,263.4	\$3,107.0	(\$376.4)
Net Operating Assets	\$46,388.7	\$60,458.5	\$76,562.4	\$92,233.2	\$117,083.9	\$141,742.0	\$177,659.9	\$97,616.0	\$117,019.7	\$159,700.9
Debt & Debt Equivalents	\$1,633.7	\$1,721.5	\$4,015.4	\$12,469.2	\$22,690.9	\$22,944.0	\$28,758.0	\$12,768.2	\$19,368.0	\$25,851.0
Equity & Equivalents	\$44,218.0	\$59,194.0	\$74,347.0	\$84,127.0	\$101,054.0	\$128,290.0	\$160,799.2	\$89,402.4	\$104,490.3	\$144,544.6
Total Capital - Financing Sources	\$45,851.7	\$60,915.5	\$78,362.4	\$96,596.2	\$123,744.9	\$151,234.0	\$189,557.2	\$102,170.6	\$123,858.4	\$170,395.6
Capital Adjustments	\$64.0	(\$1,093.0)	(\$2,576.0)	(\$5,566.0)	(\$8,365.0)	(\$12,101.0)	(\$15,167.4)	(\$5,940.2)	(\$8,677.3)	(\$13,634.2)
Net Capital Financing Sources	\$45,915.7	\$59,822.5	\$75,786.4	\$91,030.2	\$115,379.9	\$139,133.0	\$174,389.8	\$96,230.4	\$115,181.0	\$156,761.4
Net Working Capital	\$2,938.4	\$4,188.9	\$6,089.7	\$7,062.9	\$2,899.9	\$6,606.3	\$8,280.4	\$5,369.5	\$5,523.0	\$7,443.3
Cost of Net Working Capital	\$155.7	\$240.3	\$361.8	\$456.0	\$293.2	\$259.3	\$325.0	\$322.1	\$336.2	\$292.2
% of Revenue	0.87%	0.87%	0.89%	0.82%	0.41%	0.30%	0.30%	0.66%	0.51%	0.30%
Operational Capital	\$9,322.0	\$12,611.4	\$20,762.0	\$36,487.1	\$49,200.8	\$62,066.3	\$77,794.1	\$36,225.5	\$49,251.4	\$69,930.2
Cost of Operational Capital	\$480.8	\$739.4	\$1,174.9	\$1,984.7	\$2,521.4	\$3,035.2	\$3,804.3	\$1,891.1	\$2,513.8	\$3,419.7
% of Revenue	2.68%	2.68%	2.89%	3.55%	3.57%	3.53%	3.46%	3.24%	3.55%	3.50%
Productive Capital	\$30,594.0	\$33,268.4	\$40,867.0	\$56,082.1	\$68,809.8	\$81,739.3	\$102,452.3	\$56,153.3	\$68,877.0	\$92,095.8
Cost of Productive Capital	\$1,803.7	\$2,152.9	\$2,609.8	\$3,361.1	\$3,675.0	\$4,106.7	\$5,147.4	\$3,181.1	\$3,714.3	\$4,627.0
% of Revenue	10.06%	7.79%	6.42%	6.02%	5.20%	4.78%	4.68%	6.04%	5.33%	4.73%
Total Operating Capital	\$28,851.0	\$32,391.4	\$36,884.0	\$53,806.1	\$65,563.8	\$77,474.3	\$97,106.5	\$53,223.9	\$65,614.7	\$87,290.4
Cost of Total Operating Capital	\$1,729.1	\$2,064.6	\$2,438.7	\$3,144.1	\$3,512.6	\$3,901.8	\$4,890.6	\$3,012.4	\$3,519.5	\$4,396.2
% of Revenue	9.65%	7.47%	6.00%	5.63%	4.97%	4.54%	4.45%	5.72%	5.05%	4.49%
Non - Operating Capital	\$17,537.7	\$28,067.1	\$39,678.4	\$38,427.1	\$51,520.2	\$64,267.7	\$80,553.4	\$44,392.1	\$51,405.0	\$72,410.5
Cost of Non - Operating Capital	\$861.3	\$1,537.4	\$2,384.9	\$2,707.8	\$2,646.8	\$3,158.5	\$3,958.9	\$2,487.1	\$2,837.7	\$3,558.7
% of Revenue	4.80%	5.56%	5.87%	4.85%	3.74%	3.67%	3.60%	4.74%	4.09%	3.64%
Total Capital	\$46,388.7	\$60,458.5	\$76,562.4	\$92,233.2	\$117,083.9	\$141,742.0	\$177,659.9	\$97,616.0	\$117,019.7	\$159,700.9
Cost of Total Capital	\$2,590.4	\$3,602.0	\$4,823.6	\$5,851.9	\$6,159.3	\$7,060.3	\$8,849.4	\$5,499.4	\$6,357.2	\$7,954.9
% of Revenue	14.45%	13.03%	11.87%	10.48%	8.71%	8.21%	8.05%	10.46%	9.14%	8.13%
Cost of Capital (WACC)	6.13%	6.74%	7.04%	6.93%	5.89%	5.46%	5.46%	6.41%	6.09%	5.46%
Capital Structure										
Debt & Debt Equivalents	\$1,633.7	\$1,721.5	\$4,015.4	\$12,469.2	\$22,690.9	\$22,944.0	\$28,758.0	\$12,768.2	\$19,368.0	\$25,851.0
Debt & Debt Equivalents % of Market Value	0.68%	0.64%	0.95%	3.81%	4.39%	3.38%	3.38%	2.88%	3.81%	3.38%
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	\$239,985.4	\$269,311.9	\$420,821.5	\$314,939.3	\$493,927.6	\$656,668.2	\$823,070.4	\$431,133.7	\$488,511.7	\$739,869.3
Common Equity % of Market Value	99.32%	99.36%	99.05%	96.19%	95.61%	96.62%	96.62%	97.12%	96.19%	96.62%
Total Economic Market Value (MV)	\$241,619.1	\$271,033.4	\$424,836.8	\$327,408.4	\$516,618.5	\$679,612.1	\$851,828.4	\$443,901.9	\$507,879.7	\$765,720.3
Total %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Excess Cash	\$17,537.7	\$28,067.1	\$39,678.4	\$38,427.1	\$51,520.2	\$64,267.7	\$80,553.4	\$44,392.1	\$51,405.0	\$72,410.5
Economic Enterprise Value	\$224,081.4	\$242,966.3	\$385,158.5	\$288,981.3	\$465,098.4	\$615,344.4	\$771,275.0	\$399,509.8	\$456,474.7	\$693,309.7
Average Capital	\$41,879.5	\$52,869.1	\$67,804.4	\$83,408.3	\$103,205.1	\$127,256.5	\$156,761.4	\$86,908.7	\$104,623.3	\$142,008.9
Capital Δ	\$8,072.3	\$13,906.8	\$15,963.9	\$15,243.8	\$24,349.8	\$23,753.0	\$35,256.8	\$18,643.5	\$21,115.5	\$29,504.9

Source: Company Data, Financial statements and Tigress Research

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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	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	Average	Average	Trend
Return on Market Value (NOPAT / MV)	1.77%	3.57%	3.81%	6.95%	4.36%	4.34%	5.44%	4.61%	5.22%	4.89%
Return on Enterprise Value (NOPAT / EV)	1.91%	3.99%	4.21%	7.88%	4.84%	4.79%	6.01%	5.14%	5.84%	5.40%
Return on Capital (NOPAT / Average Capital)	10.22%	18.32%	23.89%	27.29%	21.80%	23.18%	25.14%	22.90%	24.09%	24.16%
Cost of Capital (WACC)	6.13%	6.74%	7.04%	6.93%	5.89%	5.46%	5.46%	6.41%	6.09%	5.46%
Economic Return Spread	4.09%	11.57%	16.85%	20.36%	15.92%	17.72%	22.21%	16.48%	18.00%	19.97%
Capital Charge	\$2,566.0	\$3,564.6	\$4,773.9	\$5,783.3	\$6,073.8	\$6,942.7	\$8,702.0	\$5,427.6	\$6,266.6	\$7,822.3
Economic Profit (EP)	\$1,712.7	\$6,118.7	\$11,427.2	\$16,978.0	\$16,428.1	\$22,554.3	\$28,269.7	\$14,701.3	\$18,653.5	\$25,412.0
Economic Profit Improvement (EPI)	\$8.5	\$4,406.0	\$5,308.5	\$5,550.8	(\$550.0)	\$6,126.2	\$5,715.3	\$4,168.3	\$3,709.0	\$5,920.8
EP Growth	0.50%	257.26%	86.76%	48.58%	-3.24%	37.29%	25.34%	85.33%	27.54%	31.32%
Economic Profit Margin on Sales	9.55%	22.14%	28.11%	30.41%	23.24%	26.24%	25.72%	26.03%	26.63%	25.98%
Economic Profit Per Share	\$0.61	\$2.14	\$3.94	\$5.87	\$5.76	\$7.91	\$9.92	\$5.12	\$6.51	\$8.91
GAAP Earnings Per Share	\$1.31	\$3.32	\$5.49	\$7.66	\$6.48	\$10.23	\$11.33	\$6.63	\$8.12	\$10.78
Excess Cash Per Share	\$6.21	\$9.74	\$13.65	\$13.38	\$18.06	\$22.55	\$28.26	\$15.48	\$18.00	\$25.41
Performance Drivers										
Sales Growth	43.81%	54.17%	47.09%	37.35%	26.61%	21.60%	27.84%	37.36%	28.52%	24.72%
Sales Growth Trend (ROC Sales Growth)	49.63%	50.02%	49.92%	41.25%	30.91%	23.60%	25.34%	39.14%	31.92%	24.47%
EBITDAR Margin	73.96%	76.75%	78.66%	74.00%	71.92%	70.44%	72.12%	74.35%	72.12%	71.28%
EBITDAR Growth	46.91%	59.98%	50.75%	29.22%	23.04%	19.09%	30.89%	36.42%	23.79%	24.99%
NOPBT Margin	35.62%	46.16%	51.51%	46.75%	42.72%	39.06%	42.85%	45.24%	42.85%	40.95%
NOPBT Growth	27.38%	99.79%	64.13%	24.66%	15.70%	11.18%	40.21%	43.09%	17.18%	25.70%
NOPAT Margin	23.87%	35.04%	39.85%	40.76%	31.83%	34.31%	35.86%	36.36%	35.63%	35.09%
NOPAT Growth	27.38%	126.31%	67.31%	40.49%	-1.14%	31.09%	33.61%	52.81%	23.48%	32.35%
Economic Profit Margin on Sales (EP / Sales)	9.55%	22.14%	28.11%	30.41%	23.24%	26.24%	25.72%	26.03%	26.63%	25.98%
Economic Profit Growth	0.50%	257.26%	86.76%	48.58%	-3.24%	37.29%	25.34%	85.33%	27.54%	31.32%
Economic Return Spread (ROC-WACC)	4.09%	11.57%	16.85%	20.36%	15.92%	17.72%	19.68%	16.48%	18.00%	18.70%
Economic Return Ratio (ROC / WACC)	166.75%	271.65%	339.37%	393.57%	370.47%	424.87%	460.81%	359.99%	396.30%	442.84%
Economic Profit Momentum (ΔEP/Capital)	0.02%	7.37%	7.00%	6.10%	-0.48%	4.40%	3.28%	4.88%	3.34%	3.84%
Economic Profit Momentum Margin (ΔEP/Sales)	0.05%	15.94%	13.06%	9.94%	-0.78%	7.13%	5.20%	9.06%	5.43%	6.16%
Capital Growth	21.33%	30.29%	26.69%	20.11%	26.75%	20.59%	25.34%	24.88%	22.48%	22.96%
Capital Turns	0.39X	0.46X	0.54X	0.61X	0.61X	0.62X	0.63X	0.57X	0.61X	0.62X
EVC Acceleration Margin	0.07%	24.58%	19.21%	13.65%	-0.98%	8.67%	6.65%	3.79%	6.60%	8.36%
EVC Acceleration Spread	0.03%	10.52%	10.04%	8.19%	-0.66%	5.94%	4.49%	2.66%	4.27%	5.66%
Risk Factors										
Free Cash Flow (NOPAT - Δ Capital)	(\$3,793.7)	(\$4,223.6)	\$237.2	\$7,517.5	(\$1,847.9)	\$5,744.0	\$4,153.3	\$1,485.5	\$3,804.5	\$4,948.6
Free Cash Flow Rate (FCF / Capital)	-8.26%	-7.06%	0.31%	8.26%	-1.60%	4.13%	2.38%	0.81%	3.60%	3.26%
Free Cash Flow Yield (FCF / MV)	-1.57%	-1.56%	0.06%	2.30%	-0.36%	0.85%	0.49%	0.26%	0.93%	0.67%
Total Debt / Total Capital	3.56%	2.88%	5.30%	13.70%	19.67%	16.49%	16.49%	11.61%	16.62%	16.49%
Total Debt / EBITDAR	12.32%	8.12%	12.56%	30.18%	44.63%	37.89%	36.29%	26.67%	37.57%	37.09%
Excess Cash	\$17,537.7	\$28,067.1	\$39,678.4	\$38,427.1	\$51,520.2	\$64,267.7	\$0.0	\$44,392.1	\$51,405.0	\$32,133.9
Financial Leverage ((Total Debt - Excess Cash) / Pension Liability (Net Pension Liability / MV))	-6.58%	-9.72%	-8.39%	-7.93%	-5.58%	-6.08%	3.38%	-7.54%	-6.53%	-1.35%
Equity Risk Index (S&P 500 = 1.00)	0.95	0.95	0.96	0.96	0.97	0.97	0.97	0.96	0.97	0.97
Stock Price Volatility	3.84	3.39	2.53	4.03	4.34	4.72	4.72	3.80	4.36	4.72
Sales Index (NL Sales)	9.79	10.23	10.61	10.93	11.17	11.36	11.61	10.86	11.15	11.48
Market Value Index (NL Market Value)	12.40	12.51	12.96	12.70	13.16	13.43	13.66	12.95	13.09	13.64
Size Index (NL Sales: MV)	11.09	11.37	11.79	11.81	12.16	12.40	12.63	11.91	12.12	12.51
Beta	0.93	0.92	0.93	0.95	0.96	0.95	0.95	0.94	0.95	0.95
TFP Adjusted Beta	0.95	0.95	0.96	0.96	0.97	0.97	0.97	0.96	0.97	0.97
Stock Price Volatility	3.84	3.39	2.53	4.03	4.34	4.72	4.72	3.80	4.36	4.72
Valuation Measures										
Total Economic Market Value (MV)	\$241,619.1	\$271,033.4	\$424,836.8	\$327,408.4	\$516,618.5	\$679,612.1	\$851,828.4	\$443,901.9	\$507,879.7	\$765,720.3
Economic Enterprise Value	\$224,081.4	\$242,966.3	\$385,158.5	\$288,981.3	\$465,098.4	\$615,344.4	\$771,275.0	\$399,509.8	\$456,474.7	\$693,309.7
Equity Market Value	\$239,985.4	\$269,311.9	\$420,821.5	\$314,939.3	\$493,927.6	\$656,668.2	\$823,070.4	\$431,133.7	\$488,511.7	\$739,869.3
Total Capital	\$46,388.7	\$60,458.5	\$76,562.4	\$92,233.2	\$117,083.9	\$141,742.0	\$177,659.9	\$97,616.0	\$117,019.7	\$159,700.9
Market Value Created MVC (MV - Capital)	\$195,230.4	\$210,574.9	\$348,274.5	\$235,175.3	\$399,534.6	\$537,870.2	\$674,168.5	\$346,285.9	\$390,860.0	\$606,019.3
MVC Margin (MVC / Sales)	1089.03%	761.90%	856.70%	421.17%	565.14%	625.68%	613.47%	616.62%	551.80%	618.83%
MVC Spread (MVC / Capital)	420.86%	348.30%	454.89%	254.98%	341.24%	379.47%	379.47%	354.74%	334.01%	379.47%
Current EVC Value (EP / WACC)	\$27,952.8	\$90,751.1	\$162,301.9	\$244,862.4	\$279,143.6	\$413,412.2	\$518,172.5	\$229,295.2	\$306,221.0	\$465,792.3
Current Operations Value COV	\$69,832.3	\$143,620.2	\$230,106.3	\$328,270.7	\$382,348.7	\$540,668.7	\$674,933.8	\$316,203.9	\$410,844.3	\$607,801.3
Current Operations Value Per Share	\$24.91	\$50.16	\$79.32	\$113.59	\$133.97	\$189.64	\$235.02	\$110.11	\$143.40	\$212.41
Future Growth Value (MVC - EVA Value)	\$171,786.8	\$127,413.2	\$194,730.6	(\$862.2)	\$134,269.8	\$138,943.4	\$176,894.6	\$127,698.0	\$97,035.4	\$157,919.0
Future Growth Value Reliance (FGV / MV)	71.10%	47.01%	45.84%	-0.26%	25.99%	20.44%	20.77%	28.77%	19.11%	20.62%
Share Price	\$104.66	\$115.05	\$176.46	\$131.09	\$205.25	\$273.16	\$273.16	\$180.20	\$203.17	\$273.16
Dividend Yield	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Shareholder Return (TTM)	34.15%	9.93%	53.38%	-25.71%	56.57%	33.09%	0.00%	-34.03%	12.74%	34.45%
MV to IC Ratio	5.21X	4.48X	5.55X	3.55X	4.41X	4.79X	4.79X	4.55X	4.34X	4.79X
EV / EBITDAR Multiple	16.90X	11.45X	12.04X	6.99X	9.15X	10.16X	9.73X	9.70X	8.97X	9.92X
EV / NOPBIT Multiple	35.09X	19.04X	18.39X	11.07X	15.40X	18.32X	16.38X	16.16X	15.23X	17.19X
EV / NOPAT Multiple	52.37X	25.09X	23.77X	12.70X	20.67X	20.86X	19.57X	19.85X	18.32X	20.12X
EV / EP Multiple	130.84X	39.71X	37.71X	17.02X	28.31X	27.28X	27.28X	27.18X	24.47X	27.28X
Future Growth Value (% of MV)	71.10%	47.01%	45.84%	-0.26%	25.99%	20.44%	20.77%	28.77%	19.11%	20.62%
Current Operations Value (% of MV)	28.90%	52.99%	54.16%	100.26%	74.01%	79.56%	79.23%	71.23%	80.89%	79.38%
Market Value (COV + FGV %)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Basic Shares Outstanding	2,803.0	2,863.0	2,901.0	2,890.0	2,854.0	2,851.0	2,871.8	2,871.8	2,865.0	2,861.4

Source: Company Data, Financial statements and Tigress Research

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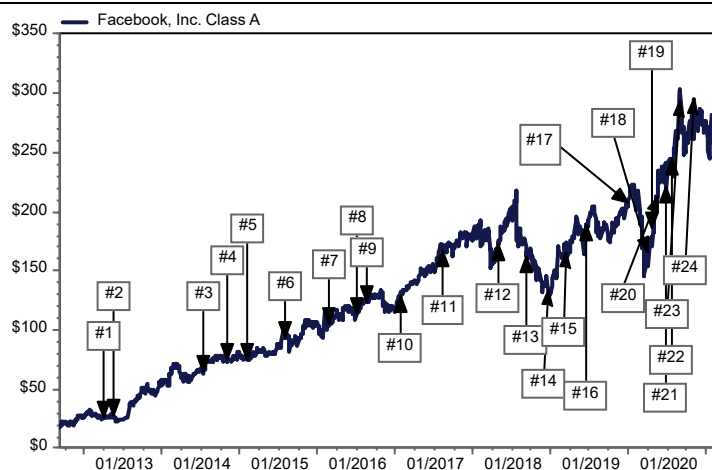
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Facebook, Inc. Class A (FB-US)
Internet Software & Services
Ratings History

Facebook, Inc. Class A (FB-US)				
Item #	Date	Research Action	Rating	Price
\$24	11/05/2020	Reiterate Rating	Strong Buy	\$294.68
#23	08/31/2020	Reiterate Rating	Strong Buy	\$293.20
#22	07/20/2020	Reiterate Rating	Strong Buy	\$242.03
#21	06/29/2020	Reiterate Rating	Strong Buy	\$216.08
#20	05/18/2020	Reiterate Rating	Strong Buy	\$210.68
#19	04/23/2020	Reiterate Rating	Strong Buy	\$183.20
#18	03/30/2020	Reiterate Rating	Strong Buy	\$165.95
#17	12/27/2019	Reiterate Rating	Strong Buy	\$208.10
#16	06/18/2019	Reiterate Rating	Strong Buy	\$188.47
#15	03/15/2019	Reiterate Rating	Strong Buy	\$165.98
#14	12/20/2018	Reiterate Rating	Strong Buy	\$133.40
#13	09/07/2018	Reiterate Rating	Strong Buy	\$162.04
#12	04/30/2018	Reiterate Rating	Strong Buy	\$172.00
#11	08/10/2017	Reiterate Rating	Strong Buy	\$167.40
#10	01/23/2017	Reiterate Rating	Strong Buy	\$128.93
#9	08/16/2016	Reiterate Rating	Strong Buy	\$123.30
#8	06/30/2016	Rating Upgrade	Strong Buy	\$114.28
#7	02/19/2016	Reiterate Rating	Buy	\$104.57
#6	08/03/2015	Reiterate Rating	Buy	\$94.14
#5	02/04/2015	Reiterate Rating	Buy	\$75.63
#4	10/31/2014	Rating Upgrade	Buy	\$74.99
#3	07/09/2014	Rating Downgrade	Neutral	\$64.97
#2	05/14/2013	Reiterate Rating	Buy	\$27.07
#1	04/03/2013	Initiation of Coverage	Buy	\$26.25


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Tigress Research employs a five-tier rating system for evaluating the investment opportunity and potential return associated with owning the common equity of rated firms within our research universe. The potential return is measured on a relative basis to the general market, which is represented by the S&P 500 and to the subject company's industry peer group as indicated.

Rating Distribution (02/09/2021)

Rating:	Meaning:	Companies Under Coverage		Relationship Companies Under Coverage*	
		#	%	#	%
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.	17	13%	2	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.	59	47%	10	77%
Neutral:	Expect little or no outperformance opportunity over the next 12 months.	45	36%	1	8%
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	107	NA

*Relationship Companies under research coverage are companies in which Tigress Financial Partners LLC or one of its affiliates has received compensation for investment banking or non-investment banking services from the company, affiliated entities and/or its employees within the past twelve months or expects to do so within the next three months.

Total	126	100%	120	100%
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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 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

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Specific Disclosures for the companies that are the subject of this report

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