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**Square, Inc. Class A (SQ-US)****Data Processing & Outsourced Services**

- We reiterate our Buy rating on SQ as it continues to benefit from growing GPV (Gross Payment Volume) and its expanding customer service base.
- SQ's comprehensive e-commerce ecosystem continues to drive accelerating customer service base and GPV growth.
- New business developments include the launch of Square Terminal and a comprehensive Square Payroll.
- The integration and automation of its business process platform will continue to drive ongoing growth as SQ goes beyond the payment, leveraging its massive customer and payer databases.

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**Company Note**
**Square, Inc. Class A (SQ-US)**  
**Data Processing & Outsourced Services**

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**Research Action:**

Reiterate rating

Rating: Buy

Prior Rating: Buy

Price 12/17/2018: \$58.62

52 Week High / Low: \$101.15 / \$34.14

**Key Data: (TTM as of Sep-18)**

Excess Cash per Share: \$3.91

Annual Dividend: \$0.00

Dividend Yield: 0.00%

Avg. Volume (30 Day): 16.9M

Shares Outstanding: 420.9M

Float: 411.8M

Short Interest: 28.5M

SI % / Float 6.92%

Equity MV: \$24,670.8M

Sales TTM: \$2,981.7M

Beta: 2.22

EBITDAR: \$542.4M

NOPAT: \$38.5M

Total Invested Capital: \$2,267.3M

Return on Capital: 2.24%

Cost of Capital: 10.80%

 Economic Profit: **(\$147.0)M**

Market Value Added: \$16,925.8M

Current Operations Value: \$356.1M

Future Growth Value: \$18,836.9M

- **We reiterate our Buy rating on SQ as it continues to benefit from growing GPV (Gross Payment Volume) and its expanding customer service base.** SQ continues to grow its ecosystem driven by increasing contribution from key product lines including Square® Register and Virtual Terminal, along with Cash Card, Caviar, Instant Deposits, Reader SDK, and its recently introduced Square Terminal and Square Payroll App. The acquisitions of web- building platform Weebly and catering service Zesty are also making positive contributions. SQ's automated client onboarding process continues to help it increase the reach of its financial systems to more clients as it scales up its own operations, and further helps sellers with advanced CRM and business management tools. SQ's innovative capabilities will continue to drive the introduction of new products that take it beyond the payment and continue to drive growth, increasing Return on Capital, greater Economic Profit, and growing shareholder value creation. SQ currently has an ongoing search for a new CFO and could make an announcement sometime in Q1 of 2019. We believe further upside in the shares exists from current levels and continue to recommend purchase.
- **SQ's comprehensive e-commerce ecosystem continues to drive accelerating customer service base and GPV growth.** SQ's integrated platform of business management software, payment hardware, and services enables its growing customer base to manage their business as well as process payments. SQ reported a 29.3% Y/Y and a 5.1% sequential increase in GPV of \$22 billion driven by an increasing contribution of large sellers (defined as over \$500,000 of annualized revenue). Large sellers contributed 52% of total GPV, up 41% Y/Y which continues to be driven by SQ's comprehensive and robust product portfolio. Subscription and Services-Based revenue increased 155% Y/Y driven by Caviar, Cash Card, Instant Deposit, and Square Capital. Square Capital loan origination growth increased 34% Y/Y. SQ's Build with Square Virtual Terminal along with the newly launched Square Reader SDK and Square Terminal are all contributing to strong gains.

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- **New business developments include the launch of Square Terminal and a comprehensive Square Payroll.** Square Terminal is an all-in-one portable payment device which fills the gap between the portable lightweight Square Reader and the full-service, countertop based Square Register. SQ launched its new Square Payroll App to offer its customers the ability to manage payrolls from a simple-to-use integrated mobile-based application. The App makes it easy for employers to manage one of the most complex parts of running a business. SQ continues to go beyond the payment and offers integrated applications to better enable its users which are primarily small business operators extensively in the quick casual and casual restaurant space. SQ recently launched a comprehensive cloud-based restaurant management solution that provides functionality for managing floor layouts, keeping menus up-to-date, splitting tips among waitstaffs, and other functionality as it continues to penetrate the \$800 billion in sales of the full-service restaurant industry.
- **The integration and automation of its business process platform will continue to drive ongoing growth as SQ goes beyond the payment, leveraging its massive customer and payer databases.** SQ's CRM product, Square Marketing, can provide sellers a significant return on their marketing efforts, and Square Loyalty, its digital rewards program, has shown to improve customer frequency by over 70%. SQ can support the opportunities created by these products based on its two-sided network of over two million sellers and a directory of over 90 million cardholders linked to their email/mobile phone with whom SQ's merchants can connect. SQ employs a technology-focused approach that enables it to develop products and services to help its customers grow and expand their businesses by providing application-based services for SQ's sellers to manage their resources better. This includes providing financing and customer intelligence, managing employee schedules, and customer appointment and reservation scheduling. We believe this will continue to evolve as SQ's key growth driver.

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**Investment Thesis**

SQ has evolved from being the pioneer of micro-merchant electronic transaction processing to a full-service, technologically-advanced POS platform. Before Square, micro and casual merchants were unable to accept electronic-based payments as merchant card services and traditional POS technology were too expensive, and banks were unwilling to underwrite the cost of electronic payment systems because of low volumes. SQ unlocked and developed a large, underserved market and now is driving additional growth through the increasing adoption of its service by larger merchants and service providers. SQ's ability to drive growth through ongoing innovation within its advanced comprehensive commerce ecosystem will drive further market share as a mainstream merchant card service, and as a payment facilitation platform provider. SQ's ability to grow its service base and ecosystem will continue to drive its growing Return on Capital, increasing Economic Profit and greater shareholder value creation.

**Company Overview**

**Square, Inc. (SQ-US)** is a technologically-advanced provider of business financial and marketing services. Square provides electronic payment and point-of-sale (POS) services including fixed and mobile terminals and smartphone applications to accept payments, manage business operations and analyze business performance. Square's POS and payment services include In-Person Payments, Online Payments, and Square Cash. Square's business management services include Square Analytics, Square Appointments, Square App Marketplace, Square Gift Cards, and Square® Register. Square's financial services include Square Capital, which loans money to its clients based on their payment volume and Square Payroll which manages employee schedules and hours worked. Square earns revenue from both processing payments and its subscription and services-based product offerings.

Square provides value-added services to its customers and users by providing a comprehensive commerce ecosystem combining hardware, software, and payment services. Square's payment solutions allow sellers to accept payments through all forms of media including swipe (magnetic strip), EMV (Europay, MasterCard, and Visa) chip-enabled cards, NFC (near field communications), and online through Square Invoices, Square Virtual Terminal or a seller's website. SQ's POS (point-of-sale) software and services help sellers manage employees, inventory, locations, orders, and payroll. SQ also provides a marketing platform to help sellers connect with its customers through promotional emails and other forms of electronic messaging.

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**Square operates and reports revenue in three Business Segments:** Transaction-Based (87% of revenue); Subscription & Service-Based (11% of revenue); and Hardware (2% of revenue).

**Square reports revenue into Geographic Segments:** United States (96% of revenue) and International (4% of revenue).

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Company Report – Research Update

Square, Inc. Class A (SQ-US)

Data Processing & Outsourced Services

Financial Data

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	0	09/30/2014	09/30/2015	09/30/2016	09/30/2017	09/30/2018	09/30/2019	Average	Average	Trend
<b>Net Sales Revenue</b>	\$0.0	\$765.3	\$1,143.7	\$1,631.2	\$2,050.1	\$2,981.7	\$2,251.0	\$1,714.4	\$2,221.0	\$2,616.3
Sales Growth	0.00%	0.00%	49.44%	42.63%	25.69%	45.44%	-24.51%	32.64%	37.92%	10.47%
Sales Growth Trend	0.00%	0.00%	29.67%	45.35%	32.46%	37.54%	3.47%	29.00%	38.45%	20.50%
<b>Operating Cash Flow (EBITDAR)</b>	\$1.6	\$28.3	\$113.4	\$206.2	\$352.2	\$542.4	\$360.3	\$248.5	\$367.0	\$451.3
EBITDAR Margin	0.00%	3.69%	9.92%	12.64%	17.18%	18.19%	16.01%	12.33%	16.01%	17.10%
EBITDAR Growth	0.00%	1666.00%	301.49%	81.81%	70.78%	53.99%	-33.58%	434.81%	68.86%	10.21%
<b>Net Operating Profit Before Tax (NOPBT)</b>	\$0.0	(\$121.9)	(\$102.3)	(\$101.0)	\$12.9	\$38.5	(\$32.1)	(\$54.8)	(\$16.5)	\$3.2
NOPBT Margin	0.00%	-15.93%	-8.95%	-6.19%	0.63%	1.29%	-1.42%	-5.83%	-1.42%	-0.07%
NOPBT Growth	0.00%	0.00%	16.05%	1.35%	112.74%	199.15%	-183.32%	65.86%	104.41%	7.91%
<b>Cash Operating Income Tax</b>	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$6.7)	\$0.0	\$0.0	(\$3.4)
Economic Tax Effective Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	21.00%	0.00%	0.00%	10.50%
<b>Net Operating Profit After Tax (NOPAT)</b>	\$0.0	(\$121.9)	(\$102.3)	(\$101.0)	\$12.9	\$38.5	(\$25.3)	(\$54.8)	(\$16.5)	\$6.6
NOPAT Margin	0.00%	-15.93%	-8.95%	-6.19%	0.63%	1.29%	-1.12%	-5.83%	-1.42%	0.08%
NOPAT Growth	0.00%	0.00%	16.05%	1.35%	112.74%	199.15%	-165.82%	65.86%	104.41%	16.66%
<b>Cash &amp; Equivalents</b>	\$0.0	\$0.0	\$200.7	\$566.5	\$1,094.8	\$1,751.7	\$1,812.5	\$722.7	\$1,137.7	\$1,782.1
Total Assets	\$0.0	\$0.0	\$597.9	\$1,052.2	\$2,083.9	\$3,973.4	\$4,111.3	\$1,541.5	\$2,369.8	\$4,042.3
Non - Interest Bearing Liabilities (NIBLs)	\$0.0	\$0.0	\$361.5	\$535.1	\$973.3	\$1,802.9	\$1,865.5	\$734.6	\$1,103.8	\$1,834.2
Net Assets	\$0.0	\$0.0	\$236.5	\$517.1	\$1,110.5	\$2,170.5	\$2,245.8	\$806.9	\$1,266.0	\$2,208.2
Economic Asset Adjustments	\$0.0	\$0.0	\$107.4	\$111.1	\$104.3	\$96.8	\$100.1	\$83.9	\$104.1	\$98.4
Net Operating Assets	\$0.0	\$0.0	\$343.9	\$628.2	\$1,214.9	\$2,267.3	\$2,346.0	\$890.8	\$1,370.1	\$2,306.6
<b>Debt &amp; Debt Equivalents</b>	\$0.0	\$0.0	\$118.6	\$107.1	\$453.3	\$1,114.8	\$1,153.5	\$358.8	\$558.4	\$1,134.1
Equity & Equivalents	\$0.0	\$0.0	\$236.5	\$510.4	\$732.9	\$1,122.1	\$1,161.1	\$520.4	\$788.5	\$1,141.6
Total Capital - Financing Sources	\$0.0	\$0.0	\$355.0	\$617.5	\$1,186.3	\$2,236.9	\$2,314.6	\$879.1	\$1,346.9	\$2,275.7
Capital Adjustments	\$0.0	\$0.0	(\$11.2)	\$3.9	\$5.2	\$6.0	\$6.2	\$0.8	\$5.0	\$6.1
Net Capital Financing Sources	\$0.0	\$0.0	\$343.9	\$621.5	\$1,191.5	\$2,242.9	\$2,320.7	\$879.9	\$1,351.9	\$2,281.8
<b>Net Working Capital</b>	\$0.0	\$38.3	(\$22.0)	(\$84.5)	(\$7.3)	\$102.3	\$105.9	\$5.4	\$3.5	\$104.1
Cost of Net Working Capital	\$0.0	\$0.0	\$0.1	(\$5.5)	(\$4.7)	\$5.1	\$5.3	(\$1.0)	(\$1.7)	\$5.2
% of Revenue	0.00%	0.00%	0.01%	-0.34%	-0.23%	0.17%	0.24%	-0.08%	-0.13%	0.20%
<b>Operational Capital</b>	\$0.0	\$38.3	\$165.0	\$111.9	\$180.5	\$323.3	\$334.5	\$163.8	\$205.2	\$328.9
Cost of Operational Capital	\$0.0	\$0.0	\$0.8	\$14.2	\$14.9	\$27.2	\$28.2	\$11.4	\$18.8	\$27.7
% of Revenue	0.00%	0.00%	0.07%	0.87%	0.73%	0.91%	1.25%	0.52%	0.84%	1.08%
<b>Productive Capital</b>	\$0.0	\$38.3	\$242.6	\$188.9	\$253.1	\$664.4	\$687.5	\$277.4	\$368.8	\$675.9
Cost of Productive Capital	\$0.0	\$0.0	\$1.1	\$22.2	\$22.5	\$49.6	\$51.3	\$19.1	\$31.4	\$50.4
% of Revenue	0.00%	0.00%	0.10%	1.36%	1.10%	1.66%	2.28%	0.84%	1.37%	1.97%
<b>Total Operating Capital</b>	\$0.0	\$38.3	\$200.4	\$143.2	\$222.6	\$664.6	\$687.7	\$253.8	\$343.5	\$676.2
Cost of Total Operating Capital	\$0.0	\$0.0	\$0.9	\$17.7	\$18.7	\$47.9	\$49.6	\$17.0	\$28.1	\$48.8
% of Revenue	0.00%	0.00%	0.08%	1.08%	0.91%	1.61%	2.20%	0.74%	1.20%	1.91%
<b>Non - Operating Capital</b>	\$0.0	(\$38.3)	\$143.5	\$484.9	\$992.3	\$1,602.6	\$1,658.3	\$637.0	\$1,026.6	\$1,630.5
Cost of Non - Operating Capital	\$0.0	\$0.0	\$0.4	\$32.3	\$75.4	\$140.2	\$145.0	\$49.6	\$82.6	\$142.6
% of Revenue	0.00%	0.00%	0.04%	1.98%	3.68%	4.70%	6.44%	2.08%	3.45%	5.57%
<b>Total Capital</b>	\$0.0	\$0.0	\$343.9	\$628.2	\$1,214.9	\$2,267.3	\$2,346.0	\$890.8	\$1,370.1	\$2,306.6
Cost of Total Capital	\$0.0	\$0.0	\$0.0	\$50.0	\$94.0	\$188.1	\$194.6	\$66.4	\$110.7	\$191.4
% of Revenue	0.00%	0.00%	0.00%	3.06%	4.59%	6.31%	8.65%	2.79%	4.65%	7.48%
<b>Cost of Capital (WACC)</b>	0.00%	0.00%	0.79%	10.28%	10.20%	10.80%	10.80%	6.42%	10.43%	10.80%
<b>Capital Structure</b>										
<b>Debt &amp; Debt Equivalents</b>	\$0.0	\$0.0	\$118.6	\$107.1	\$453.3	\$1,114.8	\$1,153.5	\$358.8	\$558.4	\$1,134.1
Debt & Debt Equivalents % of Market Value	0.00%	0.00%	18.72%	5.34%	5.88%	3.60%	3.60%	4.34%	4.12%	3.60%
<b>Preferred Equity</b>	\$0.0	\$0.0	\$514.9	\$0.0	\$0.0	\$0.0	\$0.0	\$103.0	\$0.0	\$0.0
Preferred Equity % of Market Value	0.00%	0.00%	81.28%	0.00%	0.00%	0.00%	0.00%	1.25%	0.00%	0.00%
<b>Market Value of Common Equity</b>	\$0.0	\$0.0	\$0.0	\$1,900.5	\$7,256.6	\$29,862.6	\$30,899.4	\$7,803.9	\$13,006.5	\$30,381.0
Common Equity % of Market Value	0.00%	0.00%	0.00%	94.66%	94.12%	96.40%	96.40%	94.41%	95.88%	96.40%
<b>Total Economic Market Value (MV)</b>	\$0.0	\$0.0	\$633.5	\$2,007.6	\$7,709.9	\$30,977.4	\$32,052.9	\$8,265.7	\$13,565.0	\$31,515.1
Total %	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	80.00%	100.00%	100.00%
<b>Excess Cash</b>	\$0.0	(\$38.3)	\$143.5	\$484.9	\$992.3	\$1,602.6	\$1,658.3	\$637.0	\$1,026.6	\$1,630.5
Economic Enterprise Value	\$0.0	\$38.3	\$490.0	\$1,522.6	\$6,717.6	\$29,374.7	\$30,394.6	\$7,628.7	\$12,538.3	\$29,884.7
<b>Average Capital</b>	\$0.0	\$0.0	\$0.0	\$482.7	\$906.5	\$1,717.2	\$2,281.8	\$621.3	\$1,035.4	\$1,999.5
Capital Δ	\$0.0	\$0.0	\$343.9	\$277.6	\$570.0	\$1,051.4	\$77.9	\$448.6	\$633.0	\$564.6

Source: Company Data, Financial statements and Tigress Research

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Square, Inc. Class A (SQ-US)

Data Processing & Outsourced Services

Financial Analysis

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	0	09/30/2014	09/30/2015	09/30/2016	09/30/2017	09/30/2018	09/30/2019	Average	Average	Trend
Return on Market Value (NOPAT / MV)	0.00%	0.00%	-16.16%	-5.03%	0.17%	0.12%	0.13%	-4.18%	-1.58%	0.13%
Return on Enterprise Value (NOPAT / EV)	0.00%	-318.62%	-20.89%	-6.63%	0.19%	0.13%	0.14%	-69.16%	-2.10%	0.13%
Return on Capital (NOPAT / Average Capital)	0.00%	0.00%	0.00%	-20.92%	1.42%	2.24%	2.32%	-3.45%	-5.75%	2.28%
Cost of Capital (WACC)	0.00%	0.00%	0.79%	10.28%	10.20%	10.80%	10.80%	6.42%	10.43%	10.80%
Economic Return Spread	0.00%	0.00%	-0.79%	-31.19%	-8.78%	-8.56%	-8.86%	-9.87%	-16.18%	-8.71%
Capital Charge	\$0.0	\$0.0	\$0.0	\$49.6	\$92.5	\$185.5	\$191.9	\$65.5	\$109.2	\$187.7
Economic Profit (EP)	\$0.0	(\$121.9)	(\$102.3)	(\$150.6)	(\$79.6)	(\$147.0)	(\$152.1)	(\$120.3)	(\$125.7)	(\$149.6)
Economic Profit Improvement (EPI)	\$0.0	(\$121.9)	\$19.6	(\$48.2)	\$70.9	(\$67.4)	(\$5.1)	(\$29.4)	(\$14.9)	(\$36.3)
EP Growth	0.00%	0.00%	16.05%	-47.12%	47.11%	-84.65%	-3.47%	-13.72%	-28.22%	-44.06%
Economic Profit Margin on Sales	0.00%	-15.93%	-8.95%	-9.23%	-3.88%	-4.93%	-6.76%	-8.59%	-6.02%	-5.85%
Economic Profit Per Share	\$0.00	(\$0.37)	(\$0.31)	(\$0.45)	(\$0.23)	(\$0.39)	(\$0.40)	(\$0.35)	(\$0.36)	(\$0.39)
GAAP Earnings Per Share	\$0.00	(\$0.45)	(\$0.51)	(\$0.70)	(\$0.16)	(\$0.06)	\$0.64	(\$0.38)	(\$0.31)	\$0.29
Excess Cash Per Share	\$0.00	(\$0.12)	\$0.43	\$1.41	\$2.58	\$3.91	\$4.05	\$1.64	\$2.64	\$3.98
<b>Performance Drivers</b>										
Sales Growth	0.00%	0.00%	49.44%	42.63%	25.69%	45.44%	-24.51%	32.64%	37.92%	10.47%
Sales Growth Trend (ROC Sales Growth)	0.00%	0.00%	29.67%	45.35%	32.46%	37.54%	3.47%	29.00%	38.45%	20.50%
EBITDAR Margin	0.00%	3.69%	9.92%	12.64%	17.18%	18.19%	16.01%	12.33%	16.01%	17.10%
EBITDAR Growth	0.00%	1666.00%	301.49%	81.81%	70.78%	53.99%	-33.58%	434.81%	68.86%	10.21%
NOPBT Margin	0.00%	-15.93%	-8.95%	-6.19%	0.63%	1.29%	-1.42%	-5.83%	-1.42%	-0.07%
NOPBT Growth	0.00%	0.00%	16.05%	1.35%	112.74%	199.15%	-183.32%	65.86%	104.41%	7.91%
NOPAT Margin	0.00%	-15.93%	-8.95%	-6.19%	0.63%	1.29%	-1.12%	-5.83%	-1.42%	0.08%
NOPAT Growth	0.00%	0.00%	16.05%	1.35%	112.74%	199.15%	-165.82%	65.86%	104.41%	16.66%
Economic Profit Margin on Sales (EP / Sales)	0.00%	-15.93%	-8.95%	-9.23%	-3.88%	-4.93%	-6.76%	-8.59%	-6.02%	-5.85%
Economic Profit Growth	0.00%	0.00%	16.05%	-47.12%	47.11%	-84.65%	-3.47%	-13.72%	-28.22%	-44.06%
Economic Return Spread (ROC-WACC)	0.00%	0.00%	-0.79%	-31.19%	-8.78%	-8.56%	-8.86%	-9.87%	-16.18%	-8.52%
Economic Return Ratio (ROC / WACC)	0.00%	0.00%	0.00%	-203.53%	13.90%	20.74%	21.46%	-33.78%	-56.30%	21.10%
Economic Profit Momentum (ΔEP/Capital)	0.00%	0.00%	5.69%	-7.76%	5.95%	-3.01%	-0.22%	0.18%	-1.60%	-1.61%
Economic Profit Momentum Margin (ΔEP/Sales)	0.00%	-15.93%	1.71%	-2.96%	3.46%	-2.26%	-0.23%	-3.20%	-0.59%	-1.24%
Capital Growth	0.00%	0.00%	0.00%	0.00%	91.73%	88.24%	3.47%	35.99%	59.99%	45.86%
Capital Turns	0.00X	#DIV/0!	3.33X	2.62X	1.72X	1.33X	0.97X	#DIV/0!	1.89X	1.15X
EVC Acceleration Margin	0.00%	0.00%	2.56%	-4.22%	4.35%	-3.29%	-0.17%	-1.31%	-0.87%	-1.63%
EVC Acceleration Spread	0.00%	0.00%	0.00%	0.00%	14.70%	-7.44%	-0.30%	-1.29%	-2.40%	-3.50%
<b>Risk Factors</b>										
Free Cash Flow (NOPAT - Δ Capital)	\$0.0	(\$121.9)	(\$446.2)	(\$378.5)	(\$557.2)	(\$1,012.9)	(\$103.2)	(\$503.3)	(\$649.5)	(\$558.0)
Free Cash Flow Rate (FCF / Capital)	0.00%	0.00%	-129.76%	-60.91%	-46.76%	-45.16%	-4.45%	-56.52%	-50.94%	-24.80%
Free Cash Flow Yield (FCF / MV)	0.00%	0.00%	-70.44%	-18.86%	-7.23%	-3.27%	-0.32%	-19.96%	-9.78%	-1.80%
Total Debt / Total Capital	0.00%	0.00%	34.48%	17.24%	38.05%	49.70%	49.70%	27.89%	35.00%	49.70%
Total Debt / EBITDAR	0.00%	0.00%	104.53%	51.94%	128.71%	205.52%	320.15%	98.14%	128.72%	262.84%
Excess Cash	\$0.0	(\$38.3)	\$143.5	\$484.9	\$992.3	\$1,602.6	\$0.0	\$637.0	\$1,026.6	\$801.3
Financial Leverage (Total Debt - Excess Cash) / Pension Leverage (Net Pension Liability / MV)	0.00%	0.00%	-3.93%	-18.82%	-6.99%	-1.57%	3.60%	-6.26%	-9.13%	1.01%
Equity Risk Index (S&P 500 = 1.00)	1.75	1.76	1.80	1.78	1.83	1.81	1.81	1.80	1.81	1.81
Stock Price Volatility	0.00	0.00	3.37	7.34	6.85	6.88	6.88	4.89	7.02	6.88
Sales Index (NL Sales)	0.00	6.64	7.04	7.40	7.63	8.00	7.72	7.34	7.67	7.86
Market Value Index (NL Market Value)	0.00	0.00	6.45	7.60	8.95	10.34	10.38	6.67	8.97	10.36
Size Index (NL Sales: MV)	0.00	3.32	6.75	7.50	8.29	9.17	9.05	7.01	8.32	9.11
Beta	2.13	2.14	2.20	2.16	2.23	2.22	2.22	2.19	2.20	2.22
TFP Adjusted Beta	1.75	1.76	1.80	1.78	1.83	1.81	1.81	1.80	1.81	1.81
Stock Price Volatility	0.00	0.00	3.37	7.34	6.85	6.88	6.88	4.89	7.02	6.88
<b>Valuation Measures</b>										
Total Economic Market Value (MV)	\$0.0	\$0.0	\$633.5	\$2,007.6	\$7,709.9	\$30,977.4	\$32,052.9	\$8,265.7	\$13,565.0	\$31,515.1
Economic Enterprise Value	\$0.0	\$38.3	\$490.0	\$1,522.6	\$6,717.6	\$29,374.7	\$30,394.6	\$7,628.7	\$12,538.3	\$29,884.7
Equity Market Value	\$0.0	\$0.0	\$0.0	\$1,900.5	\$7,256.6	\$29,862.6	\$30,899.4	\$7,803.9	\$13,006.5	\$30,381.0
Total Capital	\$0.0	\$0.0	\$343.9	\$628.2	\$1,214.9	\$2,267.3	\$2,346.0	\$890.8	\$1,370.1	\$2,306.6
Market Value Created MVC (MV - Capital)	\$0.0	\$0.0	\$289.6	\$1,379.4	\$6,495.0	\$28,710.1	\$29,706.9	\$7,374.8	\$12,194.9	\$29,208.5
MVC Margin (MVC / Sales)	0.00%	0.00%	25.33%	84.57%	316.81%	962.88%	1319.72%	430.17%	549.07%	1116.39%
MVC Spread (MVC / Capital)	0.00%	0.00%	84.22%	219.59%	534.62%	1266.29%	1266.29%	827.85%	890.07%	1266.29%
Current EVC Value (EP / WACC)	\$0.0	\$0.0	(\$12,895.9)	(\$1,465.1)	(\$780.4)	(\$1,361.1)	(\$1,408.3)	(\$1,875.2)	(\$1,205.9)	(\$1,384.7)
Current Operations Value COV	\$0.0	\$0.0	(\$12,895.9)	(\$982.4)	\$126.0	\$356.1	\$873.5	(\$1,253.9)	(\$170.4)	\$614.8
Current Operations Value Per Share	\$0.00	\$0.00	(\$38.84)	(\$2.93)	\$0.37	\$0.94	\$2.54	(\$3.65)	(\$0.48)	\$1.70
Future Growth Value (MVC - EVA Value)	\$0.0	\$0.0	\$13,529.4	\$2,990.0	\$7,583.9	\$30,621.2	\$31,179.4	\$9,519.6	\$13,735.4	\$30,900.3
Future Growth Value Reliance (FGV / MV)	0.00%	0.00%	2135.57%	148.93%	98.37%	98.85%	97.27%	115.17%	101.26%	98.05%
Share Price	\$0.00	\$0.00	\$0.00	\$11.66	\$28.81	\$99.01	\$99.01	\$27.90	\$46.49	\$99.01
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)	0.00%	0.00%	0.00%	0.00%	147.08%	243.67%	0.00%	-71.83%	66.67%	112.96%
MV to IC Ratio	0.00X	0.00X	1.84X	3.20X	6.35X	13.66X	13.66X	9.28X	9.90X	13.66X
EV / EBITDAR Multiple	0.00X	1.35X	4.32X	7.38X	19.07X	54.16X	84.36X	30.70X	34.17X	66.21X
EV / NOPBIT Multiple	0.00X	-0.31X	-4.79X	-15.08X	522.36X	763.55X	-948.21X	-139.26X	-757.89X	9314.70X
EV / NOPAT Multiple	0.00X	-0.31X	-4.79X	-15.08X	522.36X	763.55X	-1200.26X	-139.26X	-757.89X	4545.83X
EV / EP Multiple	0.00X	-0.31X	-4.79X	-10.11X	-84.36X	-199.78X	-199.78X	-63.41X	-99.71X	-199.78X
Future Growth Value (% of MV)	0.00%	0.00%	2135.57%	148.93%	98.37%	98.85%	97.27%	115.17%	101.26%	98.05%
Current Operations Value (% of MV)	0.00%	0.00%	-2035.57%	-48.93%	1.63%	1.15%	2.73%	-15.17%	-1.28%	1.95%
Market Value (COV + FGV %)	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Basic Shares Outstanding	332.0	332.0	332.0	334.9	341.6	379.3	344.0	344.0	351.9	361.7

Source: Company Data, Financial statements and Tigress Research

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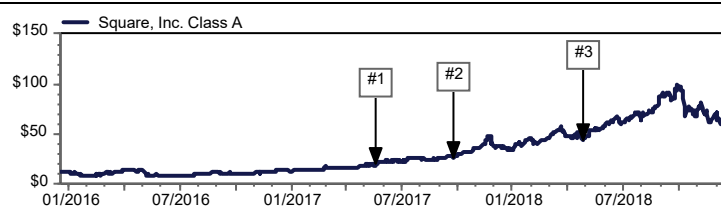
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**Square, Inc. Class A (SQ-US)**
**Data Processing & Outsourced Services**
**Ratings History**

Square, Inc. Class A (SQ-US)				
Item #	Date	Research Action	Rating	Price
#3	04/25/2018	Reiterate Rating	Buy	\$44.75
#2	09/25/2017	Reiterate Rating	Buy	\$27.45
#1	05/19/2017	Initiation of Coverage	Buy	\$19.91


**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

*For more information on the key terms and measures, please review the Tigress Investment Research Guide to Company Valuation and Analysis.*

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Rating:	Meaning:
<b>Strong Buy:</b>	Expect significant price gains in the price of the stock relative to its industry peer group and general market over the next 12 months.
<b>Buy:</b>	Expect out-performance for the price of the stock relative to its industry peer group and general market over the next 12 months.
<b>Neutral:</b>	Expect little or no outperformance opportunity over the next 12 months.
<b>Underperform:</b>	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.
<b>Sell:</b>	Expect price decline or significant relative market and industry underperformance over the next 12 months.
<b>Not Rated</b>	No Current Research Rating

**Rating Distribution (12/17/2018)**

	Companies Under Coverage		Relationship Companies Under Coverage*	
	#	%	#	%
<b>Strong Buy:</b>	16	14%	1	15%
<b>Buy:</b>	51	44%	5	70%
<b>Neutral:</b>	43	38%	1	15%
<b>Underperform:</b>	5	4%	0	0%
<b>Sell:</b>	0	0%	0	0%
<b>Not Rated</b>	NA	NA	65	NA
<b>Total</b>	115	100%	72	100%

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<b>Company:</b>	<b>Disclosure:</b>
Square, Inc. Class A (SQ-US)	14

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