

Ticker: SQ | Date: 3/23/17 | Price: \$17.24 | 3-Year Price Target: \$27.46 | Implied Annual Return: 17%

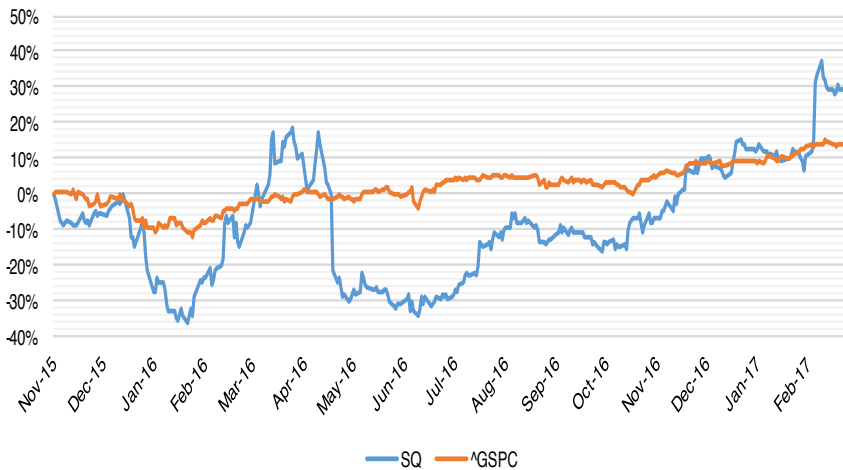
## Business Overview

Square Inc. is a leader in the development of point-of-sale software that enables businesses to accept various payment forms. The company also assists businesses by providing a cloud based dashboard that manages real-time data such as inventory, items, and customers.

## RECOMMENDATION

# BUY

## Price Performance Since IPO



## Key Statistics

Market Cap	6.33B
52-Week Range	\$8.6-\$17.9
FTM Gross Margin	36%
FTM EBITDA Margin	5.75%
Price/Book	8.62

## Investment Thesis

- Square is well positioned to benefit from growth in debit & credit card payment processing.
- Integration between Square's platform and its point of sale feature will drive growth in transaction revenues.
- Square's recent launch of Square for Retail will attract higher GPV retail based clients to the platform. Retail customers currently make up the majority of revenues.

## Risks

- High competition
- Customer security
- Revenue shift towards larger firms
- Mismanagement

# Business Overview

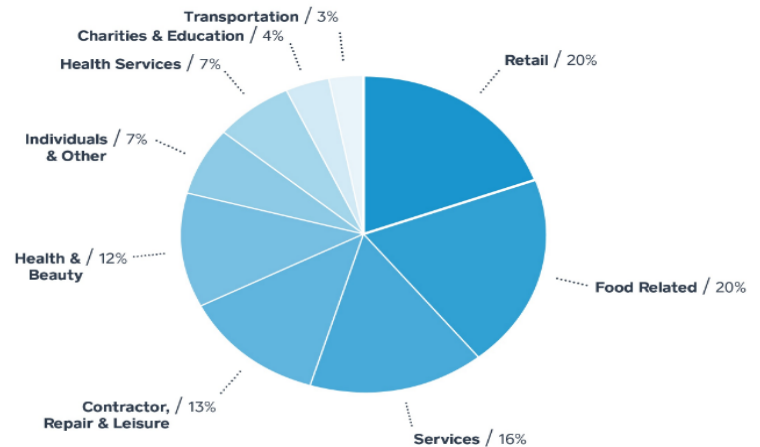
## Business Summary

Since being founded in 2009, Square has become one of the first to market point-of-sale software to enable small businesses accept card payments. The company assists small businesses by providing cloud based analytics that were previously not accessible at a reasonable price. Square sells hardware products to customers at unprofitable prices to bring them into the Square ecosystem. After customers have purchased the hardware, which can range from \$50-\$200, Square charges a payment processing fee for each transaction.

The dashboard feature, which all Square users have access to, allows clients to keep track of inventory, sales, invoices, purchase orders, etc. This additional feature sets Square apart from competitors who may offer just payment processing or business analytics services. Square also has a developers` network where small business owners can create and share custom reports to the Square community. These reports help small merchants make more informed decisions around their business. Square has millions of customers across various industries as highlighted in the pie chart. Last year, over \$130 billion of gross product volume was processed using Square's devices. This was a 40% increase from 2015.

## GPV Mix by Seller Industry

(For 12 months ended December 31, 2016)



## Transaction Based Revenue

Square charges a 2.75% transaction fee for each sale when a customer uses Square's hardware products to process payments. For larger customers that generate significant revenue (> 500k), Square may offer custom pricing.

## Subscription Based Revenue

Currently, the majority of subscription revenue comes from Square Capital & Caviar. Square Capital provides loans to customers who are already using Square's POS system. To generate revenue, this segment holds a fixed percentage of daily sales as interest expense on the loan. Square Capital may also sell these loans to third-party investors. Caviar is a food delivery platform that Square acquired on August of 2014. The platform generates revenue from seller fees, which are a percent of the total ticket value, delivery fees, and a small service fee. We expect subscription revenue to grow as the roll out of Square for Retail hits the market. This new offering will give customers a light enterprise resource planning tool for \$60 monthly.

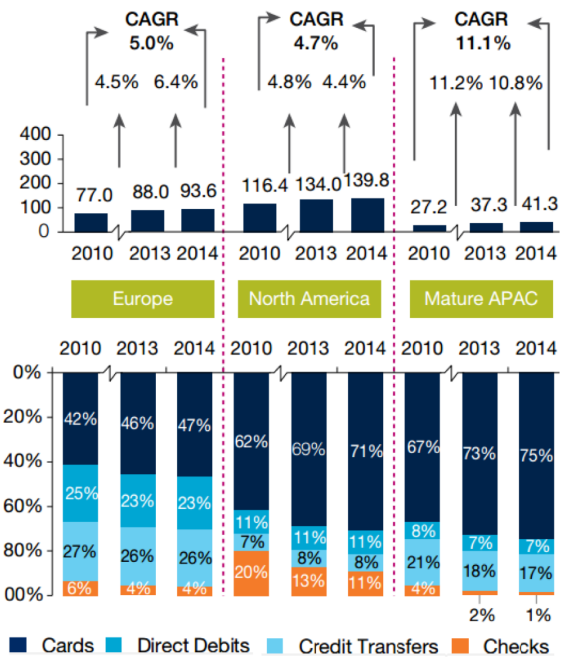
## Hardware Revenue

This segment's revenue is from the physical products that Square sells. These products include Square Stand, mobile payment processors, cash drawers, receipt printers, scanners, etc.

## Square will benefit from growth in debit & credit card payment processing.

Square is well positioned to benefit from the trend of growing non-cash transactions, as well as from a shift in customers' preference from using checks to using credit and debit cards. According to the 2016 World Payments Report by BNP-Paribas, non-cash transactions totaled \$139.8 billion in 2014 and it has grown at a CAGR of 4.7% from 2010 to 2014. We expect this growth to accelerate during the next five years primarily due to the rapid adoption of online payments. The firm will not only benefit from growth in non-cash transactions, but also from the shift towards card payments occurring within the non-cash transaction market. The diagram (right) highlights this shift as check usage decreases while card usage increases from 2010 to 2014. We are confident this trend will continue in the U.S. based on a comparison to other developed countries. For instance, the usage of checks in European and Asia-Pacific countries is still significantly lower than what is observed in the U.S. We expect card payments to account for 79% of total non-cash transactions by 2019. Square will benefit directly from these trends as the demand for payment processing and POS technology increases.

**Trends in the Non-Cash Transaction Market**



## Integration between Square's platform and its point of sale feature will drive growth in transaction revenues.

Square is one of few companies to offer a product that provides both payment processing and business analytics services. This combination contributes to Square's performance primarily in two ways:

> **Transaction Revenues:** In order for a merchant to maximize business growth, it is vital the person understands the intricacies of their business thoroughly. While large firms are increasingly using big data to make educated business decisions, small and mid-sized firms have not had access to high-quality business analytics tools due to its high costs. Square has successfully developed a product that provides business intelligence (BI) to this niche market through the integration of business analysis in Square's POS system. We expect the continued adoption of this service to empower growth within Square's existing clientele, which will ultimately result in higher gross payment volume (GPV) and transaction revenues for the firm. A report recently released by Markets&Markets highlights the increased adoption of business analytics tools. The research group expects the BI market to reach \$26.88 billion by 2021.

> **Competitive Advantage:** There are few products being commercialized that provide BI tools at a low cost to small merchants. As Square continues to develop its dashboard, it will continue to set itself apart from its competitors. The dashboard platform gives potential customers a reason to choose Square over other POS systems. This fully integrated feature has been a key driver of Square's revenue growth and customer retention.

## Square for Retail will attract high revenue generating retailers to the platform.

This platform offers more in depth features and analysis than Square's typical POS system. This platform costs \$60 a month with a 2.75% transaction fee for every purchase processed by Square. Square for Retail allows business owners to track & adjust inventory, manage vendors, send purchase orders, generate financial reports, etc. This gives Square's larger customers a light enterprise resource planning system, without having to spend significant capital. Of Square's approximate 400,000 retail customers, we expect 20% (80,000 customers) will adopt this platform. This will result in a \$57 million accretion to revenue (80,000 \* \$720 yearly fee = \$57.6M).

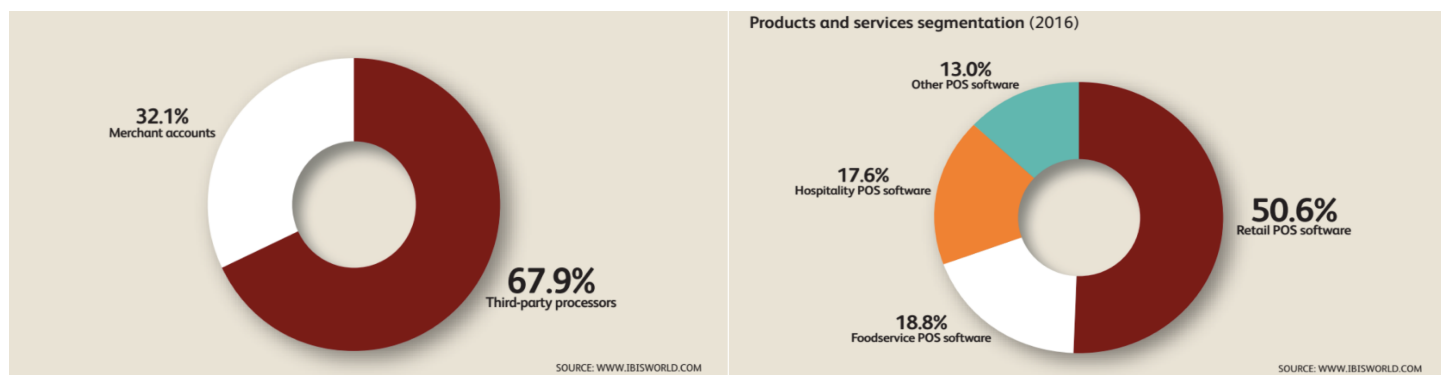
Square is primarily part of two markets; Payment Processing and Point of Sale (POS) Systems. The payment processing market is expected to grow 3.4% annually due to an increase in per capita disposable income, consumer spending, and online services rendered. Per capita disposable income is expected to grow at 2.9% during the period from 2016 to 2022 driven by continued job gains. Meanwhile, services rendered online are expected to grow at 8.6% annually during the same period driven by rising internet data capacity. Square is also positioned to benefit from increased demand of cloud-based business tools, such as Square's Dashboard.

### Payment Processing Industry

Firms in this market facilitate the processing of payments through their access to financial networks. These Firms act as Third Party Processors (TPPs) between businesses and merchant banks, who collect money from issuer banks. Through this process, TPPs ensure payments to businesses from merchant banks, and in turn earn revenues from transaction fees. Industry revenue was \$74.8 billion in 2016 and is expected to grow at 3.4% annually from 2016-2021. The industry is dominated by TPPs that provide processing services to a larger range of businesses than merchant banks would be willing to.

### Point of Sale Systems Industry





Companies in this industry provide POS systems comprised of hardware and software that facilitate consumer payments. Industry revenue was \$1.7 billion in 2016 and is expected to grow 9.5% annually from 2016-2021. This growth will be driven by increasing demand for POS systems that provide relevant real-time data, and integrate with the supply chain. Products that offer this integration include remote data backups and automated reconciliation systems. The POS systems are turning into a Software as a Service platform due to the value addition provided by cloud computing. This transition will provide industry players with steady recurring revenues from the subsequent subscription revenue model. The POS systems market provides products and services to three main industries; retail, hospitality and food services. The retail industry makes up 50% of the market and has historically been quicker to adopt new technologies, which indicates there is growth potential within the hospitality and food services industries.



*(Market Share b/t Third Party Processors & Banks)*

*POS Market Segmentation*

## Competition

	 Square	 PayPal	 intuit	 clover
<b>Monthly Fee &amp; Processing Cost</b>	No Monthly Fee  2.75% per swipe and 3.5%+ 15cents per manual entry	No Monthly Fee  2.7% per swipe and 3.5% + 15¢ per manual entry	2 Plans  Plan 1: No monthly fee. 2.4% + 25¢ per swipe, 3.4% + 25¢ per manual entry  Plan 2: \$19.99 per month fee. 1.6% + 25¢ per swipe, 3.2% + 25¢ per manual entry	First station: \$49/mo additional stations: \$25/mo  Swiped: Varies from 2.5% + \$0.20 to 1.89% + \$0.20  Manually entered: swipe fee + 1.1%
<b>Hardware Cost</b>	FREE Swipe Reader  \$49 for Chip Card (EMV) and NFC (like Apple Pay) Reader	FREE Swipe Reader  \$149 for Chip Card and NFC Reader (\$100 rebate if you process \$3,000 or more in first 3 months)	FREE Swipe Reader  \$30 for Chip Card Reader (no NFC functionality)	FREE Swipe Reader  \$29 for Chip Card Reader (no NFC functionality) \$129 for NFC
<b>Merchant Account Required?</b>	No	No	Yes	Yes
<b>How quickly do you get your money back</b>	In 1-2 business days into checking account  Immediately for a 1% fee	In 3-5 business days into checking account  Immediately into PayPal account	In 2-4 business days into checking account	In 2-4 business days into checking account
<b>Inventory Tracking</b>	Yes	Yes	No	Yes

### Financial Comparison

Even the loss of Starbucks' revenue, we expect Square's annual revenue growth rate to decrease from 35% to 28%. Nevertheless, Square's 28% expected annual growth rate is still greater than the 17% expected from PayPal. Intuit's annual revenue growth is even lower, at an expected 8-9% due to the near-term impacts related to a shift to cloud-based subscriptions from traditional software sales. Currently, PayPal trades at 4x EV/EBITDA and Intuit at 7x. We believe Square's revenue multiple will expand as profitability shines through. In Q4, we saw Square was able to generate 16% EBIDTA margins. It is important to note that both PayPal and Intuit are much larger companies than Square.

## Intense Competition

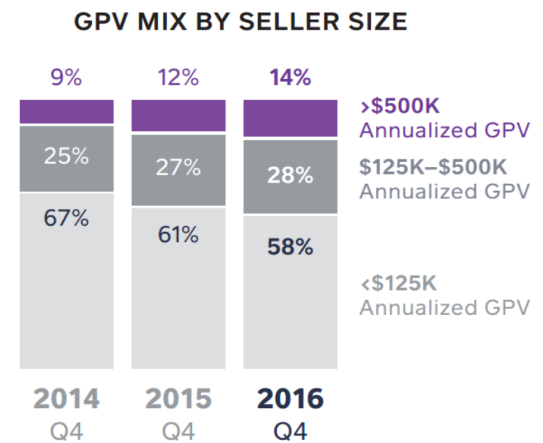
Competition will increase rapidly during the next 5 years. Square has built its brand by offering small and mid-sized merchants an affordable and efficient payment processing system. Larger payment processing providers have found this niche market hard to profitably serve. However, Square has created the product necessary to generate a profit in this market, which is attracting larger competitors. For instance, PayPal, Intuit, and Capital One have released similar products to steal market share from Square. Those larger competitors have the resources to offer higher quality products at a lower price point.

In addition, Square will face fierce competition as it expands into new markets. To widen its reach and establish a competitive moat, the company has expanded into the financing (SquareCapital), business analytics (Dashboard), and food delivery (Caviar) businesses. Differently from what the payment processing business has been in the past, those markets are brutally competitive.

We believe the risk of losing market share will be minimized as the firm offers new services to its existent client base, creating a competitive moat. For instance, Square has successfully pushed its business analytics software to its clients. This initiative increases switching costs as clients accumulate data into Square's cloud platform and creates the possibility of establishing long-term contracts.

## Shift towards larger firms

Square will suffer pricing pressure as revenues increasingly come from larger clients. In 2016, 14% of revenues came from clients that generate over 500k in gross product volume, compared to only 2% in 2012. This transition occurred because of Square's ability to gain new customers and help existing ones grow. These firms have more pricing power than their smaller counterparts and could demand lower fees from Square.



## Customer Security

The company would be materially damaged if it loses, mishandles, or allows client information to be breached. Square's business analytics tools gather valuable information from clients and place it into a platform for which the firm is responsible. In case of a security breach, the brand would lose credibility and the firm would be unable to maintain its stock performance.

## Mismanagement

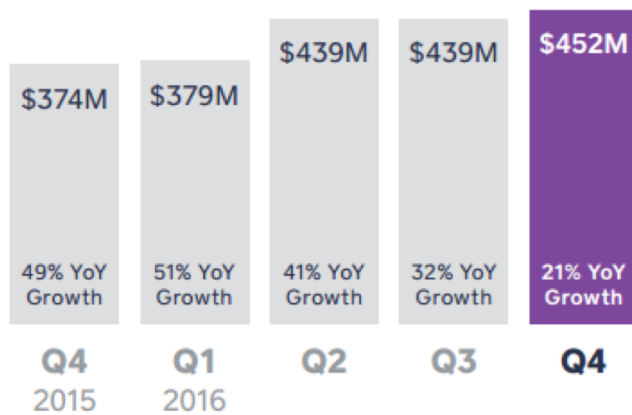
Square could be negatively impacted by its CEO, Jack Dorsey, being unable to invest appropriate time into managing the firm. Jack Dorsey holds the CEO position in two publicly traded firms; Square and Twitter. Both companies operate in high-growth industries that are undergoing changes, and will likely require a large time investment. If he proves unable to manage both companies simultaneously during this time of turbulence, Square could either suffer from mismanagement or require a CEO replacement.

## 4Q Performance

Square posted strong fourth quarter results on Wednesday, February 22<sup>nd</sup>. The firm posted a loss per share of \$.04 compared to analysts' expectations of \$.09, and sales rose 20% to \$452 million compared to analysts' expectations of \$450 million. In addition, Square posted EBITDA margin of 16%, highlighting the firm's ability to generate cash. The positive results were driven by growth in Square Capital and Caviar, as well as continued adoption of Square's payment processing services. SQ shares rose 8% after earnings were released, reflecting not only better-than-expected results but also the announcement of a partnership with Apple. The partnership will allow clients to transfer funds from Square Cash to their Apple Wallets, which extends the functionality of the application.

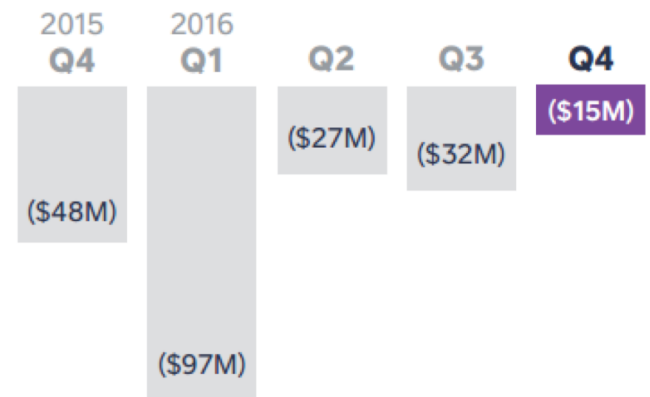
### TOTAL NET REVENUE

**\$452 Million** +21% YoY



### NET INCOME (LOSS)

**(\$15) Million** +\$33M YoY



## Valuation

We found Square's price target by taking a weighted average of our EV/EBITDA & EV/Sales model. The market is under appreciating Square's sales multiple because the company will be capable of generating significant cash in the future. As operating margins start to expand, we expect Square to trade closer to 4x sales and the market to rely less on EV/EBITDA.

<b>Weighted Average of EV/EBITDA &amp; EV/Sales</b>				
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
EV/EBITDA Value	4,953,454	7,596,656	9,119,834	9,410,814
Weight	50%	50%	50%	50%
EV/Sales Value	9,298,279	11,828,756	14,511,298	17,072,985
Weight	50%	50%	50%	50%
<b>Weighted Market Cap</b>	<b>7,125,867</b>	<b>9,712,706</b>	<b>11,815,566</b>	<b>13,241,899</b>
Shares Outstanding	368,879	398,390	430,261	464,682
Equity Value per Share	<b>\$19.32</b>	<b>\$24.38</b>	<b>\$27.46</b>	<b>\$28.50</b>

<b>EV/EBITDA Valuation</b>				
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Total Revenues	2,186,190	2,803,053	3,438,801	4,023,380
Operating Income (EBIT)	(83,349)	41,432	109,517	160,059
Stock-Based Compensation	163,767	183,420	205,430	230,082
Depreciation	45,294	54,353	65,223	78,268
EBITDA	125,712	279,204	380,170	468,408
EBITDA Margin	5.75%	9.96%	11.06%	11.64%
EV/EBITDA Multiple	35	25	22	18
Enterprise Value	4,399,935	6,980,112	8,363,740	8,431,350
Less Debt	400,000	400,000	400,000	400,000
Plus Cash	953,520	1,016,544	1,156,093	1,379,464
Market Cap	4,953,454	7,596,656	9,119,834	9,410,814
Shares Outstanding	368,879	398,390	430,261	464,682
Equity Value per Share	<b>\$13.43</b>	<b>\$19.07</b>	<b>\$21.20</b>	<b>\$20.25</b>

<b>EV/Sales Valuation</b>				
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Total Revenues	2,186,190	2,803,053	3,438,801	4,023,380
EV/Sales Multiple	4	4	4	4
Enterprise Value	8,744,759	11,212,212	13,755,204	16,093,520
Less Debt	400,000	400,000	400,000	400,000
Plus Cash	953,520	1,016,544	1,156,093	1,379,464
Market Cap	9,298,279	11,828,756	14,511,298	17,072,985
Shares Outstanding	368,879	398,390	430,261	464,682
Equity Value per Share	<b>\$25.21</b>	<b>\$29.69</b>	<b>\$33.73</b>	<b>\$36.74</b>



## Valuation

SQUARE, INC.	2014	2015	2016	2017	2018	2019	2020
<b>CONSOLIDATED STATEMENTS OF OPERATIONS</b> (In thousands, except per share data)							
Revenue:							
Transaction-based revenue	707,799	1,050,445	1,458,160	1,893,008	2,347,329.92	2,816,795.904	3,287,483.249
Starbucks transaction-based revenue	\$ 123,024	\$ 142,283	\$ 78,903	\$ -	\$ -	\$ -	\$ 0
Subscription and services-based revenue	12,046.00	58,013	129,351	213,429	320,144	432,194	518,632.8345
Hardware revenue	7,323	16,377	44,307	79,753	135,579	189,811	237,253.985
Total net revenue	850,192	1,267,118	1,708,721	2,186,190	2,803,053	3,438,801	4,023,380.068
Revenue Growth		0	0	0	0	0	0.169994986
Cost of revenue:							
Transaction-based costs	450,858	672,667	943,200	1,207,296	1,497,047	1,796,456	2,065,924.915
Starbucks transaction-based costs	150,955	165,438	69,761	0	0	0	0
Subscription and services-based costs	2,973	22,470	43,132	66,855	96,939	145,409	218,113.1325
Hardware costs	18,330	30,874	68,562	102,843	143,980	194,373	248,977.8556
Amortization of acquired technology	1,002	5,639	8,028	9,232	10,432	11,789	13,321.11368
Total cost of revenue	624,118	897,088	1,132,663	1,386,226	1,748,399	2,148,027	2,546,156.947
Gross profit	226,074.00	370,030.00	576,038.00	799,963.95	1,054,654.27	1,290,774.05	1,477,223.121
Gross Margin	0	0	0	0	0	0	0.367159725
Operating expenses:							
Product development	144,637	199,638	269,537	327,615.14	396,595.8652	463,903.0382	514,932.3724
Sales and marketing	112,577	149,518	173,976	199,957.4	229,951.862	255,325.6041	280,958.1645
General and administrative	\$ 94,220	\$ 143,466	\$ 251,993	\$ 302,392	\$ 344,726	\$ 403,330	\$ 459,796.1043
Transaction, loan and advance losses	24,081	54,009	51,235	52,516	55,142	57,899	60,793.6898
Amortization of acquired customer assets	1,050	1,757	850	833	816	800	794,012,936
Total operating expenses	376,565	544,488	746,491	883,313	1,019,222	1,181,257	1,317,164.344
Operating loss	-150,491	-174,458	-170,463	-83,349	41,432	109,517	160,058.7772
Operating Margin	-0	-0	-0	-0	0	0	0.039782167
Interest and other (income) expense, net	2,182.00	1,613.00	(780)	1,400	1,470	1,544	1,620.675
Loss before income tax	-152,653	-176,071	-169,673	-84,749	39,962	107,973	159,439.1022
Provision for income taxes	1,440	3,746	1,917	1,695	3,996	10,797	15,943.81022
Net loss	-154,093	-179,817	-171,590	-86,444.0463	35,965.99815	97,175.90502	142,594.292
Deemed dividend on Series E preferred stock	0	-3,220	0	0	0	0	0
Net loss attributable to common stockholders	-154,093	-212,017	-171,590	-86,444.0463	35,965.99815	97,175.90502	142,594.292
Net loss per share attributable to common stockholders:							
EPS	-1.084841103	-1.243516053	-0.502378826	-0.234342298	0.090278171	0.225653425	0.306864374
Weighted-average shares used to compute net loss per share attributable to common							
Shares outstanding	142,042.00	170,498.00	341,555.00	368,879.40	398,389.75	430,260.93	464,681.8067

## Valuation

SQUARE, INC.						
CONSOLIDATED BALANCE SHEETS						
(in thousands, except share and per share data)						
	2015	2016	2017	2018	2019	2020
<b>Assets</b>						
<b>Current assets:</b>						
Cash and cash equivalents	\$ 461,329	\$ 452,030	\$ 871,488	\$ 933,737	\$ 1,072,485	\$ 1,295,026
Short-term investments	-	59,901	59,901	59,901	59,901	59,901
Restricted cash	13,537	22,131	22,131	22,906	23,707	24,537
Settlements receivable	142,727	321,102	393,514	504,550	618,984	724,208
Customer funds held	9,446	43,574	87,448	112,122	137,552	160,935
Loans held for sale	604	42,144	83,075	106,516	130,674	152,888
Merchant cash advance receivable, net	36,473	4,212	5,465	7,008	8,597	10,058
Other current assets	41,447	56,331	69,958	89,698	110,042	128,748
Total current assets	705,563	1,001,425	1,592,980	1,836,437	2,161,943	2,556,303
Property and equipment, net	87,222	88,328	91,419	93,248	95,113	97,015
Goodwill	56,699	57,173	57,173	57,173	57,173	57,173
Acquired intangible assets, net	26,776	19,292	17,363	16,147	15,017	13,966
Long-term investments	-	27,366.00	27,366.00	27,366.00	27,366.00	27,366.00
Restricted cash	14,686	14,584	14,292	14,006	13,726	13,452
Other assets	3,826	3,194	3,034	2,943	2,855	2,769
Total assets	\$ 894,772	\$ 1,211,362	\$ 1,803,628	\$ 2,047,321	\$ 2,373,193	\$ 2,768,044
<b>Liabilities and Stockholders' Equity</b>						
<b>Current liabilities:</b>						
Accounts payable	\$ 18,869	\$ 12,602	\$ 11,972	\$ 11,254	\$ 10,578	\$ 9,944
Customers payable	215,365	388,058	504,475	580,147	667,169	767,244
Customer funds obligation	9,446	43,574	52,289	61,701	70,956	80,180
Accrued transaction losses	17,176	20,064	20,666	20,253	19,848	19,451
Accrued expenses	44,401	39,543	38,752	37,977	37,218	36,473
Other current liabilities	28,945	73,623	117,797	123,687	129,871	136,365
Total current liabilities	334,202	577,464	745,951	835,017	935,639	1,049,656
Long-Term Debt	-	-	400,000	400,000	400,000	400,000
Other liabilities	52,522	57,745	59,477	60,964	62,488	64,051
Total liabilities	386,724	635,209	1,205,428	1,295,982	1,398,127	1,513,707
Additional paid-in capital	1,116,882	1,357,381	1,465,971	1,583,249	1,709,909	1,846,702
Accumulated other comprehensive loss	-1,185	-1,989	-2,088	-2,193	-2,303	-2,418
Accumulated deficit	-607,649	-779,239	-865,683	-829,717	-732,541	-589,947
Total stockholders' equity	508,048	576,153	598,200	751,339	975,065	1,254,337
Total liabilities and stockholders' equity	\$ 894,772	\$ 1,211,362	\$ 1,803,628	\$ 2,047,321	\$ 2,373,193	\$ 2,768,044