DATA RELEASE

Stock Market | April 28, 2020

DATA RELEASE: Silicon Valley and San Francisco stock trends amid COVID-19

How Silicon Valley and San Francisco Public Companies Fared Amid Pandemic-Related Stock Market Disturbances

- Eventbrite lost 60% of market cap, Zoom gained 50% -

April 28, 2020 – Joint Venture Silicon Valley's Institute for Regional Studies has released new analysis that examines how Silicon Valley and San Francisco's publicly-traded companies have performed on the heels of the COVID-19 pandemic. The analysis reveals that Silicon Valley stocks lost a slightly smaller share of market cap than San Francisco during the decline and that, as of April 23, the market cap of Silicon Valley and San Francisco public companies remained \$1.18 trillion below what it was on February 20. The decline and subsequent rebound of the market cap for Silicon Valley stocks was less pronounced than for San Francisco stocks, the S&P 500, or the Dow Jones Industrial Average.

Stock market declines due to the COVID-19 crisis began across U.S. exchanges on February 20, 2020, through the first market-wide trading halt since 1997¹ (which was the first halt, or suspension of trading, of the "modernized" Market-Wide Circuit Breaker²) and subsequent trading halts. The Silicon Valley Institute for Regional Studies examined how the region's companies have fared overall. The analysis included stock prices and changes in market cap for both Silicon Valley and San Francisco public companies (327 in total).

"The region was more resilient to this particular market disturbance because of our dense concentration of internet-based tech companies, which are being used more heavily now with everyone sheltering-in-place." -Rachel Massaro, Director of Research, Silicon Valley Institute for Regional Studies

Volatilities in the market began early in the year as a result of multiple factors, including trade worries amid the COVID-19 outbreak in China, worries about the spread of COVID-19 beyond China, and disagreement in Russian dealings with the Saudi Arabian oil market. The market reacted to the World Health Organization's declaration of COVID-19 as a pandemic,³ President Trump's declaration of impending limitations on international travel, and the announcement that the NBA postponed its season (which served as an indicator of the severity of the outbreak to the American public). The "Market-Wide Circuit Breaker" across U.S. exchanges was subsequently triggered on March 9, March 12, March 16, and March 18.⁴

"There are three main reasons to care about stock prices – for the health and future of the companies themselves, for investments as a stakeholder, or in consideration of economic health," said Rachel Massaro, Director of Research for the Silicon Valley Institute for Regional Studies. "In the spirit of the latter, we aggregated regional public company performance for a better understanding of how Silicon Valley and San Francisco companies are faring as a whole during the pandemic thus far."

The S&P 500, Dow Jones Industrial Average, and Nasdaq Composite all began repaid declines beginning on February 20, bottomed-out on March 23, then began to rebound to some extent. The Institute analysis examined, in aggregate, all of Silicon Valley and San Francisco's public companies between February 20 and March 23 (decline period), then from March 23 to April 23 (one month post-market-low).

Key finding from the analysis included:

- Silicon Valley stocks, in aggregate, lost a slightly smaller share of market cap during the decline period (down 29%) than San Francisco stocks (down 35%).
- In total, Silicon Valley and San Francisco public companies lost \$2.32 trillion in market cap during the decline period, then rebounded by \$1.13 trillion in the month afterward. As of April 23, the market cap of Silicon Valley and San Francisco public companies (\$6.45 trillion) remains \$1.18 trillion below what it was on February 20 (\$7.63 trillion).
- The decline and subsequent rebound of market cap for Silicon Valley stocks, in aggregate, was less pronounced than for San Francisco stocks, the S&P 500, or the Dow Jones Industrial Average; the Nasdaq Composite percent decline and rebound was similar to that of Silicon Valley companies, in aggregate.
- Out of the 327 public companies in Silicon Valley and San Francisco included in the analysis, there were only 14 that increased in market cap during the overall pandemic-related decline.

"Silicon Valley's public companies fared pretty well, overall, given the circumstances of the pandemic-related stock market declines," said Massaro. "The region was more resilient to this particular market disturbance because of our dense concentration of internet-based tech companies, which are being used more heavily now with everyone sheltering-in-place."



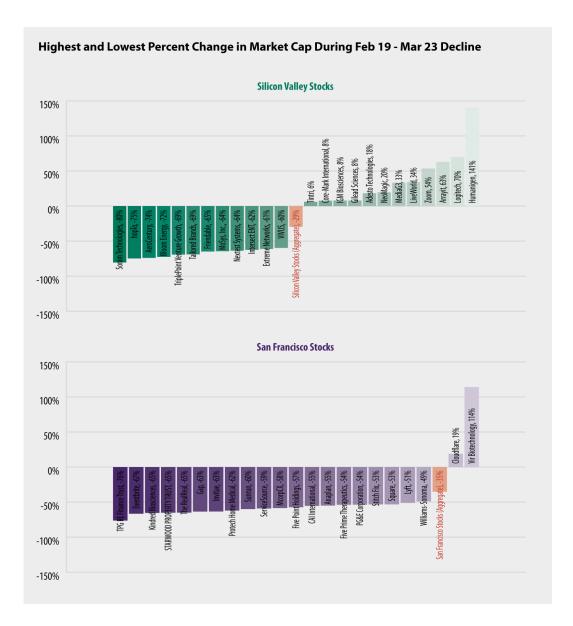
The region's stocks that lost the greatest share of market cap during decline period (February 20 to March 23) were Sonim Technologies (-80%), TPG RE Finance Trust (-76%), hopTo (-75%), AeroCentury (-74%), Bloom Energy (-72%), TriplePoint Venture Growth (-69%), Tailored Brands (-69%), and Eventbrite (-67%).

Out of the 327 public companies in Silicon Valley and San Francisco that were included in the analysis, there were *only 14 that increased in market cap* during the overall pandemic-related decline, including:

- Tintri (+6%)
- Core-Mark International (+8%)
- IGM Biosciences (+8%)
- Gilead Sciences (+8%)
- Adesto Technologies (+18%)
- Cloudflare (+19%)
- NeoMagic (+20%)
- MediaG3 (+33%)
- LiveWorld (+34%)
- Zoom (+54%)
- Arrayit (+63%)
- Logitech (+70%)
- Vir Biotechnology (+114%)
- Humanigen (+141%)

Some notable individual companies' performance:

- San Francisco-based Eventbrite lost 67% of its market cap during the decline period; as of April 23, it remains down 60% (compared to Feb 20).
- San Jose-based Zoom increased by 54% while the market was declining overall; as of April 23, Zoom's market cap is up 57% since February 20. This growth is consistent with the rapid increase in consumer spending on Zoom services, which was up nearly 2000% year-over-year as of the end of March.⁶
- During the overall decline period, the two companies that gained the most market cap were in the biotech sector: San Francisco-based Vir Biotechnology (+114%) and Brisbane-based Humanigen (+141%).



For comparison, in the 20-day period prior to March 12, major averages had already fallen more than 20%, and globally exchanges in aggregate lost more than \$16.1 trillion in market cap.⁷ During that period, the S&P 500 fell by nearly 26%. In the "decline" period of the Institute's analysis (February 20 – March 23) the S&P 500 fell by 34%, the Dow Jones Industrial Average fell by 37%, and the Nasdaq Composite fell by 30%.⁸

While the effect of earlier pandemics on financial markets is difficult to obtain, one analysis indicated that the S&P 500 fell by 24.7% in 1918 (the year of the Spanish Flu) then rose 8.9% the following year; the 1918 decline, however, was also influenced by World War I and so cannot be attributed to the pandemic alone.

In conjunction with this data release, the Institute has launched a near-real-time online tracker for the region's public company market performance (https://siliconvalleyindicators.org/stock-tracker). The site employs Silicon Valley and San Francisco public companies (as indicated on Crunchbase) and a widget powered by TradingView.

Data Sources: Crunchbase (www.crunchbase.com) and IEX Cloud (https://iexcloud.io) **Analysis:** Silicon Valley Institute for Regional Studies

Notes: The analysis includes all public companies in Silicon Valley (Joint Venture's city-defined region) and San Francisco, as of April 7, 2020 and listed on Crunchbase. Includes multiple exchanges worldwide (e.g., NASDAQ, NYSE, OTC, LSE, SSE), excluding

companies listed on the Australian Securities Exchange (ASX) and Toronto Stock Exchange (TSX) as those are not included in the IEX Cloud database. Does not include special purpose acquisition company (SPAC) IPOs. Shares outstanding as of each company's last balance sheet report was used to calculate market cap, unless it was unavailable on IEX Cloud (in which case, the market cap from the closest date was used). Analysis from February 20 begins with the closing price on February 19. Closing prices are unadjusted.

For further reference

To access Silicon Valley's online data hub, visit www.SiliconValleyIndicators.org

About the Silicon Valley Institute for Regional Studies

The Silicon Valley Institute for Regional Studies is the research arm of Joint Venture Silicon Valley, and is housed within the organization. The Institute provides research and analysis on a host of issues facing Silicon Valley's economy and society. https://jointventure.org/institute/about-the-institute.

About Joint Venture Silicon Valley

Established in 1993, Joint Venture provides analysis and action on issues affecting the Silicon Valley economy and quality of life. The organization brings together established and emerging leaders—from business, government, academia, labor and the broader community—to spotlight issues, launch projects and work toward innovative solutions.

www.jointventure.org

¹ Wall Street Journal, *Circuit Breaker Halts Stock Trading for First Time Since 1997*. March 9, 2020 (www.nsj.com/articles/traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-traders-

² New York Stock Exchange, Assessing NYSE Model Performance During 2020 Volatility. March 16, 2020 (www.nyse.com/article/assessing-nyse-model-performance)

³ World Health Organization, Who Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020 (www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020)

⁴ New York Stock Exchange, *Assessing NYSE Model Performance During 2020 Volatility*. March 16, 2020 (www.nyse.com/article/assessing-nyse-model-performance)

⁵ Google Finance

⁶ Earnest Research, Insights (April 8, 2020). Coronavirus is Changing How We Spend Money. Part 3. (www.earnestresearch.com/insights/coronavirus-is-changing-how-we-spend-money-part-3/)

⁷ Forbes, Should You Buy The Panic? March 16, 2020 (www.forbes.com/sites/greatspeculations/2020/03/16/should-you-buy-the-panic/#17cf307a2420)

⁸ Google Finance

⁹ Fidelity International, *What happened to stock markets during previous pandemics?* April 6, 2020 (<u>www-stat.wharton.upenn.edu/~steele/Pandemic/Resources/FidelityPandemic.pdf</u>)