

ELON MUSK'S TWITTER DEAL: VALUATION AND FINANCING OF THE LEVERAGED BUYOUT¹

Atif Ikram and Zhichuan Frank Li wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

This publication may not be transmitted, photocopied, digitized, or otherwise reproduced in any form or by any means without the permission of the copyright holder. Reproduction of this material is not covered under authorization by any reproduction rights organization. To order copies or request permission to reproduce materials, contact Ivey Publishing, Ivey Business School, Western University, London, Ontario, Canada, N6G 0N1; (t) 519.661.3208; (e) cases@ivey.ca; www.iveypublishing.ca. Our goal is to publish materials of the highest quality; submit any errata to publishcases@ivey.ca.

Copyright © 2022, Ivey Business School Foundation

Version: 2023-02-14

"Twitter has extraordinary potential. I will unlock it."

Elon Musk, chief executive officer (CEO) of Tesla Inc.²

In January 2022, Elon Musk, CEO of Tesla Inc., began acquiring an equity stake in Twitter Inc. (Twitter). The purchase was fuelled by his desire to drive changes at the social media company that would promote free speech.³ Twitter responded by offering Musk a seat on its board of directors. Musk initially agreed, but then decided to decline the offer. Subsequently, on April 14, 2022, Musk made a surprise hostile takeover bid to purchase Twitter's outstanding stock at US\$54.20 per share,⁴ a move that would change the company's public status and make it a privately held company.⁵ The offer price represented a 38 per cent acquisition premium over Twitter's stock price at the beginning of April. On April 25, Twitter accepted Musk's buyout offer. On May 13, Musk posted a surprise early morning tweet that the Twitter deal was "temporarily on hold." Musk claimed that his offer had assumed that "fake" accounts (i.e., accounts operated by robots or "bots") consisted of less than 5 per cent of Twitter's entire user base, as suggested by Twitter's financial reports filed with the U.S. Securities and Exchange Commission (SEC). However, Musk believed that a more accurate number of "fake" accounts was closer to 20 per cent.⁶

On July 8, 2022, after contending that Twitter's board had failed to provide sufficient evidence to alleviate his concerns about the true magnitude of fake accounts, Musk announced that he was formally terminating the deal to acquire Twitter. Almost immediately, Twitter's board responded by filing a lawsuit against Musk in the Delaware Court of Chancery, attempting to force him to follow through with his original \$44 billion bid.⁷ Musk would have to decide what to do regarding his original plan to acquire Twitter and the impending lawsuit filed against him by Twitter's board.

HISTORY OF TESLA

Tesla Inc. (Tesla) was created in 2003 as a technology company focused on the design and manufacture of electric vehicles. Musk became Tesla's majority shareholder soon after the company's launch and was appointed its chief executive officer in 2008. Under Musk's control, the company developed the high-end Tesla Roadster, helping it overcome the typical high entry barriers of the mainstream vehicle market. The

company started a revolution characterized by a completely automated factory setting. Final products such as the Model S sedan in 2013 and later the Model 3 were not only breakthroughs in technology—they represented the first successful business model for bringing electric cars to the market.⁸ With financial support from the US government, Tesla was able to invest billions of dollars into strategic initiatives, including a manufacturing plant in California, a “gigafactory” in China for lithium-ion battery production, and the acquisition of the solar energy company SolarCity Corporation.⁹

As Musk integrated energy storage and other innovative ventures, including autonomous vehicles, into Tesla’s existing business, he developed a reputation as an unpredictable genius. In 2021, *Time* magazine named Musk “Person of the Year,” describing him as a “clown, genius, edgelord, visionary, industrialist, (and a) showman.”¹⁰ In fact, Musk had bolstered his reputation as an unconventional business mogul several years earlier, in 2018,¹¹ when he had settled a fraud case launched by the SEC for falsely announcing (via a Twitter tweet) that he had secured funding to take Tesla private at \$420 per share.¹²

Under Musk’s leadership, Tesla became profitable for the first time in 2020. Its enterprise value rose from \$125 billion at the beginning of 2020 to over \$1 trillion at the end of 2021, reflecting market participants’ extraordinary expectations of Musk.¹³ Meanwhile, there were muted concerns about Musk’s eccentric leadership style, as well as his ability to effectively lead Tesla while also managing his spacecraft engineering company SpaceX, plus the two other smaller companies Neuralink Corporation and The Boring Company.¹⁴ Investors who doubted Musk believed that hiring an outside chief executive for Tesla could be more productive than having Musk allocate his time and effort to managing multiple companies. The acquisition of Twitter was likely to exacerbate this belief.¹⁵ Additionally, the synergies between Tesla, SpaceX, and Twitter seemed unclear to critics.¹⁶ Between January and mid-June 2022, the stock performance of both Tesla and Twitter seemed to highlight various key events of the acquisition taking place during that period (see Exhibit 1).

HISTORY OF TWITTER

Twitter was established in 2006 by the board members of Odeo, an early facilitator of podcast creation and related instruments. Jack Dorsey, the company’s chief executive officer at the time, proposed using a short messaging service for internal group communication. The service was subsequently rolled out to the public in July 2006 as a messaging tool that allowed a maximum of 140 words per message.¹⁷ In 2007, the platform became increasingly popular after its debut at the South by Southwest (or SXSW) Interactive Festival, which led to a successful first round of additional funding. By 2011, real-time news coverage using Twitter messages (or tweets) during major events such as the National Basketball Association finals (5,531 tweets per second) and the killing of Al Qaeda leader Osama Bin Laden by US forces (5,131 tweets per second) led to exponential growth in Twitter’s established user base (see Exhibit 2).¹⁸

By 2016, Internet traffic had grown to over 3.4 billion online and mobile users. Twitter focused on improving its own user interface by joining the transition to mobile-based platforms. This included adding a newsfeed and a Trending tab, as well as restructuring profiles as a timeline of posts. The resulting social media network was comparable to Meta Platforms Inc.’s platform Facebook in terms of size, reaching over 400 million monthly active users by 2022.¹⁹ With an increasingly widespread user base, Twitter increased its revenues to over \$5 billion by 2021. Twitter’s revenue growth was supported by marketing, advertising, and strategic partnerships, including an alliance with the popular Russian search engine Yandex.²⁰

Along with overwhelming success, Twitter encountered various controversies. For example, although the 140-word limit per tweet served as Twitter’s main product differentiator, it also fostered conflict and hate

that resulted from misunderstandings. This issue was compounded in 2012 by the censorship of content that the platform deemed “sensitive,” which critics claimed made Twitter a biased network.²¹

The company also went through three leadership changes in two of its formative years, and it was often plagued by hackers due to lax security measures. A tendency to delay mundane assignments, such as minor programming issues, led to the platform’s slow development of key strategic changes when required. Employees claimed that in such times of crisis, leadership was difficult to find due to Twitter’s highly decentralized operations.²² Twitter’s ongoing failure to retain the attention of its user base had remained a problem from the start. Unable to convert Twitter’s user data and information into targeted advertisements, leading potential marketers chose to look elsewhere.²³ The company was also spending approximately 20 per cent of its revenues on research and development (R&D) and capital expenditures each year, but failed to see significant growth in earnings or active users, which highlighted the company’s poor management culture.²⁴ Between 2018 and the first quarter of 2022, operating margins had been trending downward and the company’s cash flow showed great volatility after dropping from its peak in 2018 (see Exhibit 2).

* In 2022, in the quarter before Musk’s April 14 offer, Twitter was generating about \$5 for every daily active user. This was almost half of what industry leaders such as Facebook were generating at the time.²⁵ At its peak, on March 1, 2021, Twitter had an enterprise value of just under \$60 billion and a net profit margin of 17 per cent. However, by May 13 of that same year, its enterprise value fell as low as \$36 billion and its net profit margin went below 7 per cent. Similarly, Twitter’s stock price dropped from a high of \$73 in 2021 down to \$43, which reflected its performance difficulties (see Exhibit 3).²⁶

Overall, at the time of Musk’s offer, in April 2022, Twitter seemed to be underperforming compared to other social media platforms, with a negative price-to-earnings ratio and a below average enterprise value-to-revenue ratio of 6.8. Where rival companies like Instagram and TikTok seemed to be thriving by creating innovative ways to attract, retain, and monetize users, Twitter was left with significant room for operational improvement under new management, especially given its widespread user base.²⁷ In a letter to Twitter’s board accompanying his offer, Musk stated, “Twitter has extraordinary potential. I will unlock it.”²⁸

THE FINANCING PLAN AND MERGER AGREEMENT

* In the first quarter of 2022, Twitter had just over \$4 billion in debt. Moody’s Investors Service, one of the three US credit rating agencies, rated Twitter at its junk bond level of Ba2.²⁹ Musk planned to acquire Twitter with a total debt of about \$25 billion. With the high debt-service requirement arising under Musk’s proposed financing plan, and with Twitter’s low credit rating at the time, the leveraged buyout was certain to reduce cash flow to equity holders. Specifically, approximately \$12.5 billion of the total amount was expected to be a personal margin loan backed by Musk’s own Tesla stock (see Exhibit 4).³⁰

* A margin loan came with its own set of requirements. For example, if the value of the collateral held by the lender (i.e., Musk’s shares in Tesla, in this case) dropped below a pre-determined percentage of the outstanding debt (known as the *maintenance margin*), the lender could demand that Musk increase the number of shares in the collateral (known as a *margin call*). Otherwise, the lender could decide to seize the stock already pledged and sell it to recoup the loan amount. In this particular case, Musk could receive a margin call from the lender if Tesla’s stock dropped in value by 40 per cent or if Twitter failed to service its debt obligation after the acquisition. Given Tesla’s historical market conditions and Musk’s planned radical operational transitions for Twitter (e.g., a subscription-based business model), either scenario seemed possible.³¹ By the end of June 2022, Tesla’s stock was trading at \$673 per share, already 25 per cent lower than the price that prevailed at the end of April when Twitter’s board had decided to accept Musk’s buyout offer.

When Musk made his original offer to buy Twitter, he waived his right to conduct due diligence. In addition, he agreed to what was known as “Specific Performance” in the event of a legal dispute, which allowed Twitter to compel Musk to follow through with the buyout offer via a court order, if it was deemed fair and equitable. There were also no binding financing contingencies to inhibit Musk from following through with the acquisition—that is, he had received the needed financing commitments from his partners and lenders and was unable to turn them away.³² The agreement called for a \$1 billion (reverse) break-up fee, in case Musk decided to back out of the deal, but also contained a “Material Adverse Effect/Material Adverse Change” (MAE/MAC) clause, giving Musk the right to walk away from the deal if Twitter suffered a material adverse change between the agreement’s signing date and the closing date.³³

On July 15, 2022, Musk announced his decision to “terminate the deal,” citing the agreement’s MAE/MAC clause. Specifically, Musk claimed that although Twitter had identified 5 per cent of its accounts as being fake (or “bot” accounts), Musk’s own research (conducted after the agreement was signed) found the number of fake accounts was closer to 20 per cent.³⁴ Fake accounts not only could hurt the creditability of the platform, but also damage Twitter’s value as a marketing medium; the vast majority of Twitter’s revenue was generated from advertising to users on the platform.³⁵ Before making the offer, Musk had stated, “If our Twitter bid succeeds, we will defeat the spam bots or die trying,” indicating that he was aware of the fake accounts issue.³⁶ Nonetheless, in July 2022, Musk requested internal data on these fake accounts from Twitter, creating doubt among market participants about the likelihood of the acquisition being completed under the initial terms. Consequently, Twitter’s stock price dropped from \$51.70 per share on the day the agreement was approved, to \$36.81 after Musk announced that he was walking away from the deal.³⁷

TYPES OF INVESTORS AND LEVERAGE EFFECTS

Musk’s acquisition bid was structured as a leveraged buyout—the acquisition of a company by using large amounts of debt. Transactions of this type were most successful when targeting companies with low capital expenditures, low R&D expense, and stable cash flows to ensure timely debt service.³⁸ The economic boom starting in 2009 provided low interest rates and favourable debt covenants.³⁹ As a result, by the end of 2021, global funding known as “dry powder” (i.e., capital committed to a private equity fund but not yet contributed to any specific investment) had reached an all-time high of \$3.4 trillion.⁴⁰ Many of the funding sources that had this type of capital had been committed to invest since 2019, which added pressure on these firms to quickly find attractive investments for their dry powder.⁴¹ This situation presented Musk with an abundant pool of potential equity contributors (due to his very high net worth) and an enviable opportunity to exit the investment in the future possibly through an initial public offering.⁴²

high R&D & CAPEX
means firm still needs
to grow → debtors want
cash to be used
to pay debt
*** ↑
low invt need
& stable CFs
≠
Twitter

In 2021, as a result of the abundance of dry powder and flexible credit markets, the average purchase price multiple peaked at over 12. A company’s purchase price multiple was calculated by dividing its purchase price by its earnings before interest, taxes, depreciation, and amortization (EBITDA).⁴³ However, Musk’s offer implied a rather high purchase price multiple of 22.61, based on Twitter’s expected 2023 EBITDA. And yet, a conservative estimate assumed that Twitter’s revenue would grow by 15 per cent annually and gain an EBITDA margin of 25 per cent over the next five years (see Exhibit 6). Generally, technology companies received much of their valuation from growth expectations, so a purchase price multiple as high as 22 was not uncommon.⁴⁴

P/EBITDA = 12.x

TWITTER’S FINANCIAL FORECAST

Twitter held a three-year average EBITDA margin of 21.17 per cent, which skewed slightly higher due to an activity surge during the COVID-19 pandemic, as people sought new forms of social interaction (see

advertisement
↓
want to know
audiences
(but Twitter’s
accounts are
anonymous)

Exhibit 5).⁴⁵ Pinterest, one of Twitter's closest competitors by size, had lower annual EBITDA margins, although some smaller rivals (e.g., China's blogging platform Weibo) boasted higher margins that were close to those of Facebook. Despite its smaller size, the Chinese platform Weibo achieved high margins through innovations such as support for pictures, short videos, and live streaming, along with underlying economic support.⁴⁶ This suggested that Twitter too could improve its 2022 EBITDA margin by approximately 6 or 7 per cent over 2021 levels after Musk's acquisition.⁴⁷

Some analysts projected this ^{*}best-case scenario (see Exhibit 6), partially based on Musk's planned and potential pools of equity partners and sponsors (see Exhibit 7). These analyst projections also included potential improvements such as reducing ineffective spending in R&D, sales, and marketing, as well as further optimization of these investments.²⁵⁴⁸ Other analysts commonly used monthly active users as a metric for platform engagement and valuation (see Exhibit 5). These analysts predicted that without an ^{*}acquisition, Twitter's 2023 revenue would be approximately \$5.9 billion.⁴⁹ For the rest of 2022, Twitter's EBITDA margin was estimated at 21.17 per cent, earnings before interest and taxes were estimated at 14.37 per cent, and profit was estimated at 7.87 per cent.⁵⁰

EBIT margin

average of 3 years

profit margin

After a decade of low interest rates and quickly increased inflation in 2021, the US Federal Reserve System had started tapering bond purchases in late 2021, effectively raising interest rates.⁵¹ The prior period had seen considerable flexibility in debt covenants, which were likely to tighten in the wake of economic uncertainty caused by the enduring COVID-19 pandemic and Russia's invasion of Ukraine in February 2022.⁵² These trends presented concerns for exit multiples in the near future, although dry powder was keeping demand for equity investments strong at the time.⁵³

THE DECISION

The main factors influencing the success of Musk's buyout for equity partners included operational improvements and debt financing benefits.⁵⁴ Proposed changes such as a reduced reliance on advertising revenues and less censorship would also create additional business risk.³⁰⁵⁵ Equity investors would attempt to maximize internal rates of return, with an average rate of 20–25 per cent.⁵⁶ Tesla's stock price was down by 40 per cent from January to June 2022, which had an adverse impact on Musk's personal wealth and the value of his personal Tesla shares (i.e., the collateral for the margin loan).⁵⁷ Musk would face the complex challenge of determining his options, considering the acquisition agreement, Twitter's valuation, and the impending lawsuit and penalty.⁵⁸ Analyst projections for Twitter after the acquisition, resulting valuations, and Twitter's standalone value (derived from comparable company trading multiples) would play a major role in his decision (see Exhibits 5 and 6). The Delaware Court of Chancery had ruled in favour of MAE/MAC clause violation only once before. Musk potentially faced an uphill battle to prove the existence of an MAE,⁵⁹ and his proposed acquisition of Twitter was the first time an MAE case of this magnitude would take place, involving an unwilling buyer that planned to actively manage the targeted firm.⁶⁰ Any outcome of the legal battle promised to be a defining moment in mergers and acquisitions history.

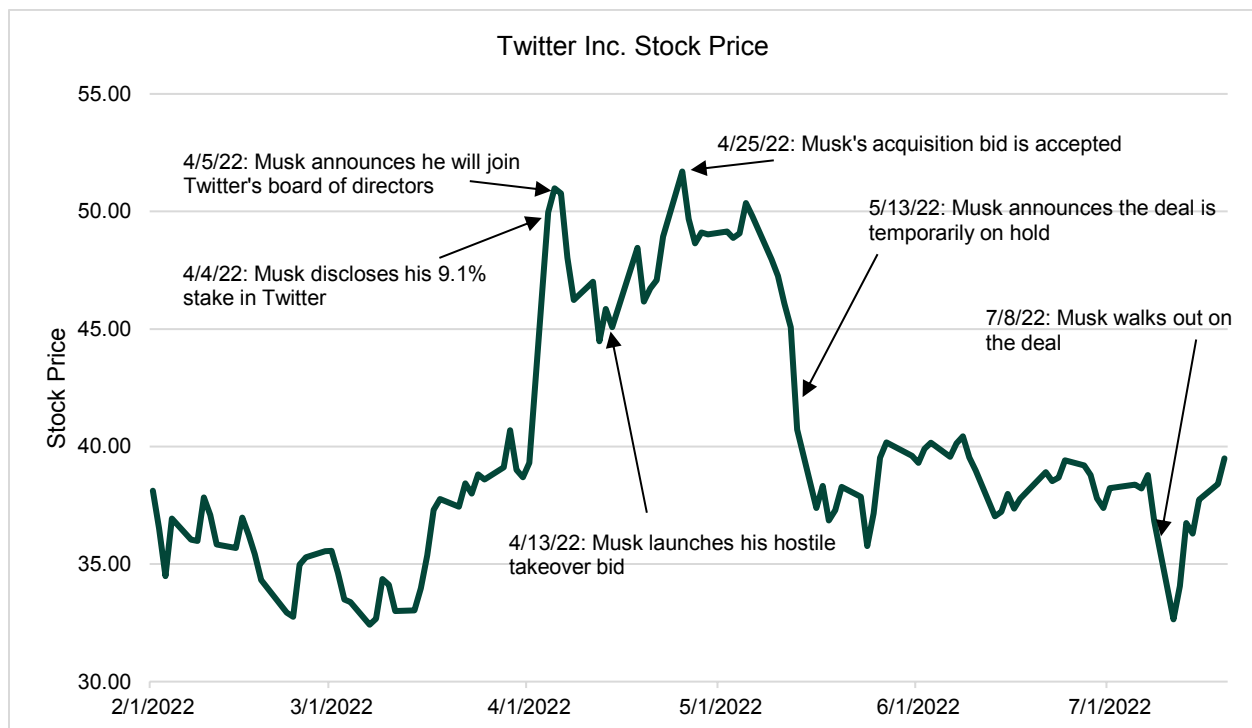
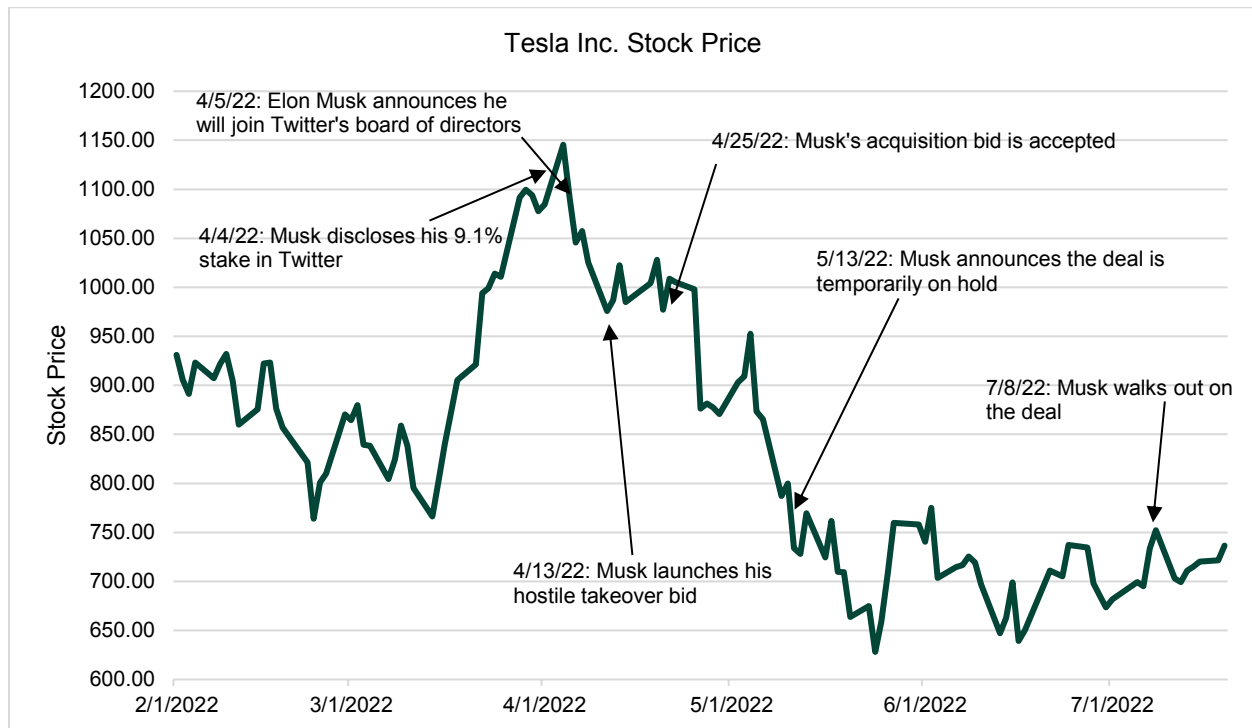
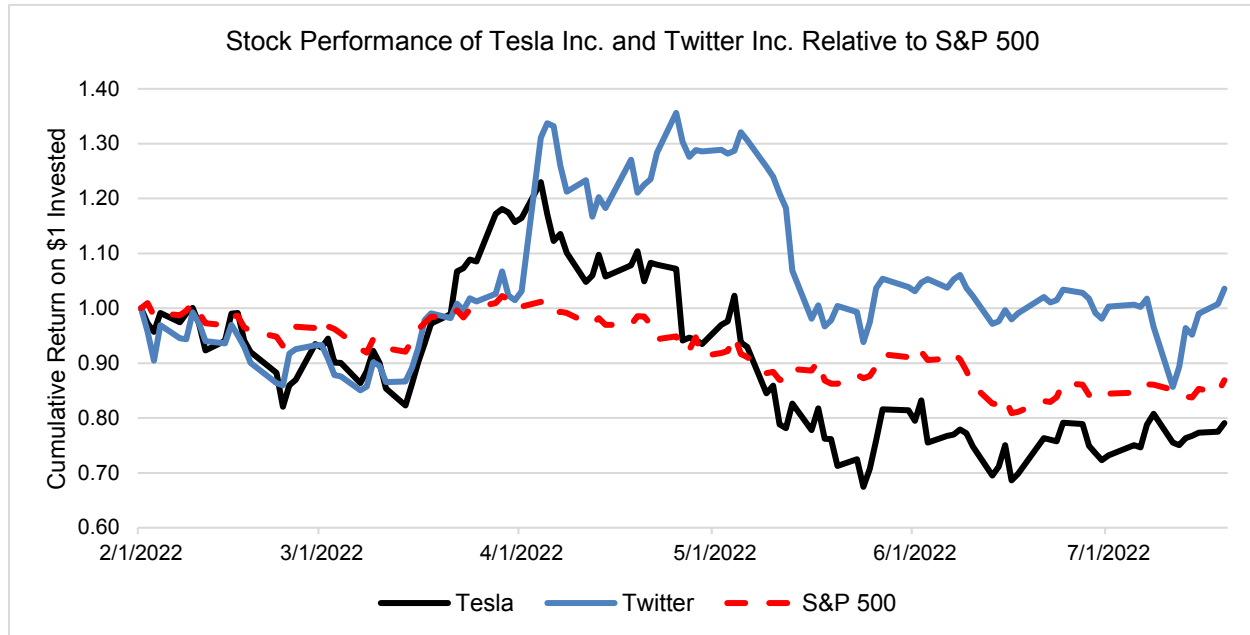
EXHIBIT 1: STOCK PERFORMANCE OF TESLA INC. AND TWITTER INC.

EXHIBIT 1 (CONTINUED)

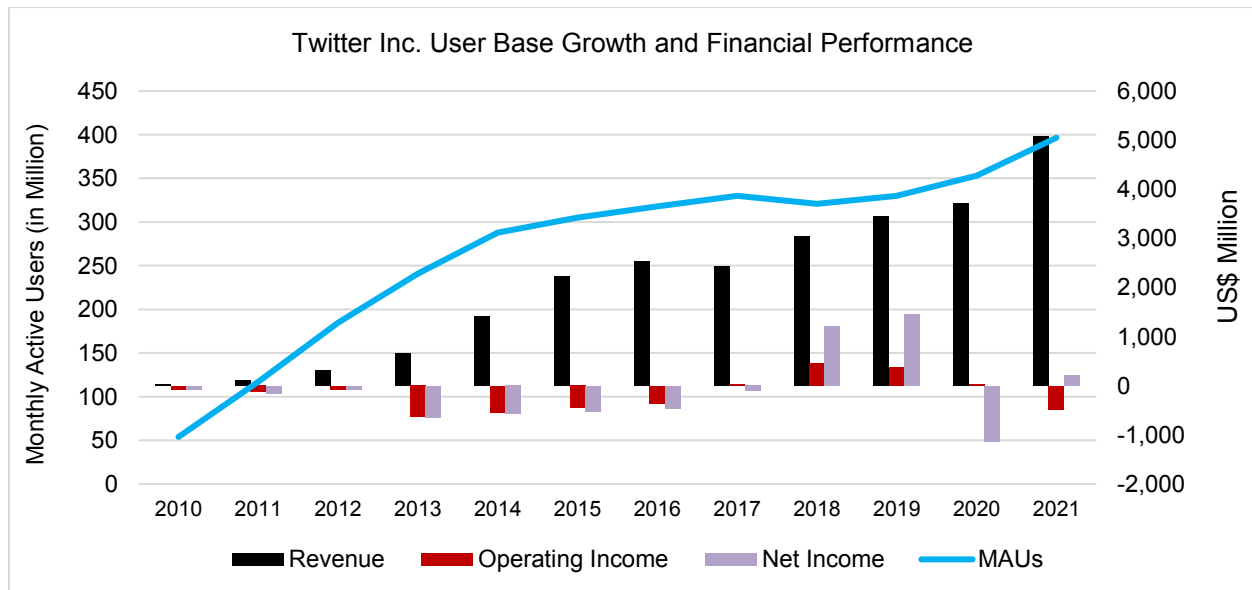


Note: Tesla = Tesla Inc.; Twitter = Twitter Inc.; S&P 500 = Standard & Poor's 500 stock market index

Source: Adapted by the case authors from "Twitter Inc. (TWTR), September 13, 2021–September 13, 2022 Historical Prices Daily," Yahoo! Finance, accessed July 19, 2022, <https://finance.yahoo.com/quote/TWTR/history?period1=1643673600&period2=1658275200&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>; "Tesla Inc. (TSLA), September 13, 2021–September 13, 2022 Historical Prices Daily," Yahoo! Finance, accessed July 19, 2022, <https://finance.yahoo.com/quote/TSLA/history?p=TSLA>; "S&P 500 (^GSPC), September 13, 2021–September 13, 2022 Historical Prices Daily," Yahoo! Finance, accessed July 19, 2022, <https://finance.yahoo.com/quote/%5EGSPC/history?p=%5EGSPC>.

EXHIBIT 2: TWITTER INC. MONTHLY ACTIVE USER GROWTH AND FINANCIAL PERFORMANCE

Year	Monthly Active Users (in Million)			US\$ Million			
	Total	5%	20%	Revenue	Operating Income	Net Income	Free Cash Flows
2010	54.0	3	11	28	-67	-67	-54
2011	117.0	6	23	106	-127	-164	-82
2012	185.0	9	37	317	-77	-79	-78
2013	241.0	12	48	665	-636	-645	-74
2014	288.0	14	58	1,403	-539	-578	-120
2015	305.0	15	61	2,218	-450	-521	36
2016	318.0	16	64	2,530	-367	-457	544
2017	330.0	17	66	2,443	39	-108	708
2018	321.0	16	64	3,042	453	1206	869
2019	330.0	17	66	3,459	366	1466	769
2020	353.0	18	71	3,716	27	-1136	129
2021	396.5	20	79	5,077	-493	221	-370



Note: MAU = monthly active users

Source: Adapted by the case authors from Brian Dean, "How Many People Use Twitter in 2022? [New Twitter Stats]," Backlinko, January 5, 2022, <https://backlinko.com/twitter-users>; "Twitter Revenue 2011–2022 | TWTR," Macrotrends, accessed September 13, 2022, <https://www.macrotrends.net/stocks/charts/TWTR/twitter/revenue>.

EXHIBIT 3: HISTORICAL FINANCIAL DATA OF TWITTER INC. (IN US\$ MILLIONS)

	2019	2020	2021
Income Statement			
Revenue	3,459.33	3,716.35	5,077.48
<i>Growth</i>		7.43%	36.63%
Recurring Operating Expenses (including D&A)	(3,092.96)	(3,689.69)	(4,804.52)
Non-Recurring Operating Expenses	—	—	(765.70)
Operating Income / (Loss)	366.37	26.66	(492.74)
Operating Margin	10.59%	0.72%	−9.70%
Depreciation and Amortization	465.50	495.18	544.85
EBITDA	831.87	521.84	817.81
EBITDA Margin	24.05%	14.04%	16.11%
Interest Expense	(138.18)	(152.88)	(51.19)
Interest Income	157.70	88.18	35.68
Other Income / (Expense)	4.24	(12.90)	97.13
Net Interest Income / (Expense)	23.77	(77.60)	81.63
Taxable Income	390.14	(50.94)	(411.11)
Provision / (Benefit) For Income Taxes	1,075.52	(1,084.69)	189.70
Net Income / (Loss)	1,465.66	(1,135.63)	(221.41)
Balance Sheet			
Cash and cash equivalents	1,799.08	1,988.43	2,186.55
Short-term investments	4,839.97	5,483.87	4,207.13
Total Current Assets	7,620.08	8,637.11	7,918.37
Property and Equipment, Net	1,031.78	1,493.79	2,082.16
Intangible Assets, Net	55.11	58.34	69.32
Goodwill	1,256.70	1,312.35	1,301.52
Total Assets	12,703.39	13,379.09	14,059.52
Convertible Notes, Short-Term	—	917.87	—
Total Current Liabilities	832.48	1,952.83	1,343.87
Convertible Notes, Long-Term	1,816.83	1,875.88	3,559.02
Senior Notes, Long-Term	691.97	692.99	694.00
Total Liabilities	3,999.00	5,409.01	6,752.32
Total Stockholders' Equity	8,704.39	7,970.08	7,307.20

Note: D&A = depreciation and amortization; EBITDA = earnings before interest, taxes, depreciation, and amortization.

Source: United States Securities and Exchange Commission, *Twitter, Inc: Fiscal Year 2019 Annual Report*, accessed September 13, 2022, [https://s22.q4cdn.com/826641620/files/doc_financials/2019/FiscalYR2019_Twitter_Annual_Report-\(3\).pdf](https://s22.q4cdn.com/826641620/files/doc_financials/2019/FiscalYR2019_Twitter_Annual_Report-(3).pdf); United States Securities and Exchange Commission, *Twitter, Inc: Fiscal Year 2020 Annual Report*, accessed September 13, 2022, <https://www.sec.gov/Archives/edgar/data/1418091/000141809121000031/twtr-20201231.htm>; United States Securities and Exchange Commission, *Twitter, Inc: Fiscal Year 2021 Annual Report*, accessed September 13, 2022, <https://www.sec.gov/Archives/edgar/data/1418091/000141809122000029/twtr-20211231.htm>.

EXHIBIT 4: TRANSACTION SUMMARY

Transaction Summary (All Amounts in Million, Except per Share Data)		
Public shares	727.5	90.9%
Elon Musk's shares	73.1	9.1%
Total shares outstanding	800.6	100.00%
Musk's bid price	\$54.20	
Implied equity value	\$43,393	
Total debt (excludes operating leases)*	\$4,253	
Cash**	-\$6,394	
Implied transaction value	\$41,252	

Sources and Uses Table					
Sources (US\$ Million)			Uses (US\$ Million)		
New debt***	\$25,000	47.72%	Purchase of public equity	\$39,431	75.26%
Existing Twitter cash	\$6,394	12.20%	Musk equity rollover at buyout price	\$3,962	7.56%
Equity	\$21,000	40.08%	Refinancing of existing debt	\$4,476	8.54%
Musk's equity roll-over	\$3,962	7.56%	Minimum cash****	\$4,025	7.68%
Sponsor equity	\$17,038	32.52%	Fees	\$500	0.95%
Total	\$52,394	100.00%	Total	\$52,394	100.00%

Note: *Total debt calculated as sum of short-term and long-term interest-bearing debt; **Cash and cash equivalents calculated as sum of cash and short-term investments; ***Estimate based on details provided in the financing documents, indicating Term Loan of \$6.5 billion, secured bridge loan of \$3 Billion, unsecured bridge loan of \$3 billion, (Elon Musk's) margin loan of \$12.5 billion and aggregate equity commitment of \$21 Billion; ****Minimum cash expected to be maintained at the time of acquisition to support the high level of debt

Source: Adapted by the case authors from FT Alphaville, "Alphaville's Twitter LBO Model," *Financial Times*, April 17, 2022, <https://www.ft.com/content/c52aea67-9e6a-4e04-adc2-744bc4e0b738>; United States Securities and Exchange Commission, *Twitter Inc.: Amendment No. 4 to Schedule 13d*, April 25, 2022, https://www.sec.gov/Archives/edgar/data/1418091/000110465922049844/tm2213189d8_sc13da.htm.

EXHIBIT 5: COMPARABLE COMPANY FINANCIAL BENCHMARKS

	Market Cap (US\$ Billion)			Gross Profit Margin		
	2021	2020	2019	2021	2020	2019
Twitter Inc. (TWTR)	\$34.55	\$42.96	\$24.83	64.59%	63.23%	67.13%
Meta Platforms Inc. (FB)	\$935.65	\$778.04	\$585.37	80.34%	80.58%	81.94%
Pinterest Inc. (PINS)	\$23.71	\$40.73	\$10.41	79.47%	73.45%	68.59%
Snap Inc. (SNAP)	\$76.15	\$75.27	\$23.12	57.49%	52.82%	47.78%
Weibo Corporation (WB)	\$6.93	\$8.68	\$10.75	82.11%	82.12%	81.39%
Match Group Inc. (MTCH)	\$36.37	\$40.28	\$13.28	71.86%	73.41%	76.30%
Bumble Inc. (BMBL)	\$4.11	—	—	72.58%	—	—

	Adjusted EBITDA Margin			Equity Beta	Equity Value (US\$ Billion)
	2021	2020	2019	2021	2021
Twitter Inc. (TWTR)	18.72%	16.07%	28.73%	0.59	\$34.55
Meta Platforms Inc. (FB)	46.52%	46.14%	43.39%	1.37	\$935.65
Pinterest Inc. (PINS)	13.88%	—	—	1.24	\$23.71
Snap Inc. (SNAP)	—	—	—	1.18	\$76.15
Weibo Corporation (WB)	38.07%	38.12%	39.83%	0.88	\$6.93
Match Group Inc. (MTCH)	—	—	—	1.24	\$36.37
Bumble Inc. (BMBL)	15.31%	—	—	—	\$4.11

	Debt Value (US\$ Billion)	Stock Price (December 31)	Shares (in Million)	Revenue (US\$ Million)
	2021	2021	2021	2021
Twitter Inc. (TWTR)	\$4.25	\$43.22	798	5,077.48
Meta Platforms Inc. (FB)	\$0.58	\$336.35	2,859	117,929.00
Pinterest Inc. (PINS)	\$0.25	\$36.35	692	2,578.03
Snap Inc. (SNAP)	\$2.25	\$47.03	1,559	4,117.05
Weibo Corporation (WB)	\$1.54	\$30.98	230	2,257.08
Match Group Inc. (MTCH)	\$3.83	\$132.25	305	2,983.28
Bumble Inc. (BMBL)	\$0.68	\$33.86	193	765.67

	MAU (in Million)	PE Ratio	EV/Revenue	EV/EBITDA	EV/MAU
	2021	2021	2021	2021	2021
Twitter Inc. (TWTR)	353.00	−94.29	6.8	41.9	92.17
Meta Platforms Inc. (FB)	2,900.00	24.06	8.6	16.1	302.24
Pinterest Inc. (PINS)	431.00	66.09	8.9	56.8	50.49
Snap Inc. (SNAP)	428.00	−32.13	20.1	—	175.86
Weibo Corporation (WB)	573.00	20.79	2.6	7.4	9.60
Match Group Inc. (MTCH)	16.33	70.72	14.5	46.0	2516.78
Bumble Inc. (BMBL)	12.33	57.20	7.7	105.4	452.64

Note: EBITDA = earnings before interest, taxes, depreciation, and amortization; equity value = market value of equity; debt value = market value of debt estimated using book value; adjusted EBITDA accounts for irregular or one-time line items; equity betas use five-year periods and monthly returns; MAU = monthly active users; PE = price-to-earnings; EV = enterprise value
Source: Adapted by the case authors from Yahoo! Finance, accessed April 26, 2022, <https://finance.yahoo.com/>; Macrotrends, accessed April 26, 2022, <https://www.macrotrends.net/>; Finbox, accessed April 27, 2022, <https://finbox.com/>.

EXHIBIT 6: PROJECTED NET INCOME GIVEN EBITDA GROWTH (BEST-CASE SCENARIO)

Twitter Inc.								
Metric	2021 A	2022 E	2023 E	2024 E	2025 E	2026 E	2027 E	2028 E
Revenue Growth	36.63%	25%	15.00%	15.00%	15.00%	15.00%	15.00%	10%
Depreciation and Amortization			9.5%	9.0%	8.5%	8.0%	7.5%	
EBITDA Margin (Pre-Tax)	16.11%		25.00%	25.00%	25.00%	25.00%	25.00%	
Capital Expenditures (% Revenue)			10.0%	10.0%	10.0%	10.0%	10.0%	
Change in NWC (% Change in Revenue)			1.00%	1.00%	1.00%	1.00%	1.00%	
Terminal EBITDA Multiple (x)							25	
Debt		\$25,000						
Minimum Cash Balance								
Blended Interest Rate on Debt*		7%						
Tax Rate		28%						
Elon Musk's Required Return		25%						
Sponsors' Required Return		25%						
Flow to Equity Valuation Analysis								
	2021	2022 E	2023E	2024E	2025E	2026E	2027E	
Revenue	\$5,077.48	\$6,346.85						
EBITDA								
Depreciation and Amortization								
Earnings before Interest and Taxes								
Interest Expense								
Earnings before Taxes								
Taxes								
Net Income								
Capital Expenditures								
Change in NWC								
Cash Flow Available to Repay Debt								
Debt Draw Down / Repayment								
Cash Flow to Equity								
Terminal Value								
Terminal Value of Equity								
Cash Flow to Equity with TVE and Initial Equity								
PV of Equity (@25%)								
Excess Cash**								
Enterprise Value								
Implied share price								
Sponsor and Musk's Five-Year IRR								
Interest Coverage (EBITDA/Interest)								
Total Debt / EBITDA								
(EBITDA – CAPEX) / Interest Expense								

Note: A = actual; E = estimated; EBITDA = earnings before interest, taxes, depreciation, and amortization; NWC = net working capital; TVE = terminal value of equity; PV = present value; IRR = internal rate of return; CAPEX = capital expenses; SOFR = secured overnight financing rate; *Assuming US\$12.5 billion margin loan with a SOFR spread of 3%, \$9.5 billion senior secured debt with a SOFR spread of 5.42%, and \$3 billion unsecured debt with SOFR spread of 10%; projected SOFR over holding period assumed to be approximately 2.25%; **Calculated as the difference between cash at the end of 2021 and minimum cash assumed to be maintained at the time of acquisition

Source: See also "Transaction Summary" in Exhibit 4; adapted by the case authors from FT Alphaville, "Alphaville's Twitter LBO Model," *Financial Times*, April 17, 2022, <https://www.ft.com/content/c52aea67-9e6a-4e04-adc2-744bc4e0b738>; United States Securities and Exchange Commission, *Twitter Inc.: Amendment No. 4 to Schedule 13d*, April 25, 2022, https://www.sec.gov/Archives/edgar/data/1418091/000110465922049844/tm2213189d8_sc13da.htm.

EXHIBIT 7: ELON MUSK'S PROSPECTIVE EQUITY PARTNERS

Equity Investor	Amount (in US\$ Million)
Lawrence J. Ellison Revocable Trust	\$1,000
Sequoia Capital Fund LP	800
Vy Capital	700
Binance	500
AH Capital Management LLC	400
Qatar Holding LLC	375
Aliya Capital Partners LLC	360
Fidelity Management & Research Company LLC	316
Brookfield	250
Strauss Capital LLC	150
BAMCO Inc. (Baron)	100
DFJ Growth IV Partners LLC	100
Witkoff Capital	100
Key Wealth Advisors LLC	30
A.M. Management & Consulting	25
Litani Ventures	25
Tresser Blvd. 402 LLC (Cartenna)	9
Honeycomb Asset Management LP	5

Source: "Elon Musk Secures \$7.1 Billion in New Financing for Twitter," Bloomberg, May 5, 2022, <https://www.bloomberglia.com/2022/05/05/elon-musk-secures-71-billion-in-new-financing-for-twitter>.

ENDNOTES

- ¹ This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of Twitter Inc., Tesla Inc., or any of their employees.
- ² United States Securities and Exchange Commission, *Twitter Inc.: Amendment No. 2 to Schedule 13D/A*, April 13, 2022, 1, https://www.sec.gov/Archives/edgar/data/0001418091/000110465922045641/tm2212748d1_sc13da.html.
- ³ Elon Musk (@elonmusk), "Free speech is essential to a functioning democracy. Do you believe Twitter rigorously adheres to this principle?," Twitter, March 25, 2022, <https://twitter.com/elonmusk/status/1507259709224632344>.
- ⁴ All currency amounts are in US\$ unless otherwise specified.
- ⁵ United States Securities and Exchange Commission, *Twitter Inc.: Amendment No. 2 to Schedule 13D/A*.
- ⁶ Elon Musk (@elonmusk), "20% fake/spam accounts, while 4 times what Twitter claims, could be *much* higher. My offer was based on Twitter's SEC filings being accurate. Yesterday, Twitter's CEO publicly refused to show," Twitter, May 17, 2022, <https://twitter.com/elonmusk/status/1526465624326782976>.
- ⁷ Lauren Feiner and Kif Leswing, "Twitter Sues Elon Musk to Enforce Original Merger Agreement," CNBC, July 12, 2022, <https://www.cnbc.com/2022/07/12/twitter-sues-elon-musk-to-enforce-original-merger-agreement.html>.
- ⁸ Eric Reed, "History of Tesla: Timeline and Facts," TheStreet, February 4, 2020, <https://www.thestreet.com/technology/history-of-tesla-15088992>.
- ⁹ Tomiwa Ademidun, *Tesla: The SolarCity Acquisition* (London, ON: Ivey Publishing, 2017). Available from Ivey Publishing, product no. 9B17N011_P.
- ¹⁰ Edward Felsenthal, "Time 2021 The Choice: Elon Musk," *Time*, December 13, 2021, <https://time.com/person-of-the-year-2021-elon-musk-choice>.
- ¹¹ Elon Musk also developed a reputation for referencing the number "420," a well-known shoutout to cannabis culture—in fact, many people believed that his offer to buy Twitter for \$54.20 per share was also motivated by this cultural aspect; Jack Hough, "Musk's Cannabis-Themed Twitter Offer Looks High But Not Wacky," *Barron's*, April 14, 2022, <https://www.barrons.com/articles/elon-musk-cannabis-twitter-offer-51649941030>.
- ¹² "Elon Musk Settles SEC Fraud Charges; Tesla Charged with and Resolves Securities Law Change," United States Securities and Exchange Commission, September 29, 2018, <https://www.sec.gov/news/press-release/2018-226>.
- ¹³ Tesla, Inc., "Valuation Measures," Yahoo! Finance, accessed May 25, 2022, <https://finance.yahoo.com/quote/TSLA/key-statistics>.
- ¹⁴ Megan Sauer, "Elon Musk Could Try to Run Three Major Companies at Once—the Last Known CEO Who Did It Is Now an International Fugitive," CNBC, April 14, 2022, <https://www.cnbc.com/2022/04/14/elon-musk-could-run-three-major-companies-at-once-like-carlos-ghosn.html#:~:text=%E2%80%9C9C%20wouldn't%20recommend%20running,of%20the%20platform%2C%20was%20revealed>.
- ¹⁵ "Tesla on My Mind 24/7: Elon Musk Amid Concerns Over Twitter Distraction," Reuters, May 20, 2022, <https://www.ndtv.com/world-news/musk-says-tesla-is-on-my-mind-24-7-amid-concerns-about-twitter-distraction-2992337#:~:text=San%20Francisco%3A,at%20the%20electric%20car%20company>.
- ¹⁶ Peter Cohan, "3 Reasons Elon Musk Should Not Take Twitter Private for \$41 Billion," *Forbes*, April 4, 2022, <https://www.forbes.com/sites/petercohan/2022/04/04/3-reasons-elon-musk-should-not-take-twitter-private-for-41-billion/?sh=534e8a14254c>.
- ¹⁷ The maximum word count for a Twitter message (or tweet) was expanded to 280 words in November 2017; Selena Larson, "Welcome to a World With 280-Character Tweets," CNN Business, November 7, 2017, <https://money.cnn.com/2017/11/07/technology/twitter-280-character-limit/index.html>.
- ¹⁸ Jesse Bergman, "The World's 10 Most Tweeted Moments," CNBC, October 19, 2011, <https://www.cnbc.com/2011/10/19/The-Worlds-10-Most-Tweeted-Moments.html>.
- ¹⁹ Mansoor Iqbal, "Twitter Revenue and Usage Statistics (2022)," *Business of Apps*, June 30, 2022, <https://www.businessofapps.com/data/twitter-statistics/>.
- ²⁰ Georgina Prodan, "Twitter partners with Yandex for real-time search," Reuters, February 20, 2012, <https://www.reuters.com/article/twitter-yandex-idUSL5E8DK89H20120221>.
- ²¹ Cassie Buchman, "Is Twitter Really Biased? This Study Takes a Look," *NewsNation*, April 19, 2022, <https://www.newsnationnow.com/business/tech/is-twitter-really-biased-this-study-takes-a-look/>.
- ²² Alexei Oreskovic, "Twitter Insiders: 'Morale Is Beyond Low' and People Are Looking for an Exit," *Business Insider*, August 6, 2015, <https://www.businessinsider.com/twitter-morale-problem-2015-8>.
- ²³ Robbie Allan, "Bye, Users! Twitter's Retention Rate Is Worse Than You Think," *SurveyMonkey*, December 6, 2016, https://medium.com/@sm_app_intel/bye-users-twitters-retention-rate-is-worse-than-you-think-229b406887c4.
- ²⁴ "Twitter, Inc. (TWTR): Cash Flow," Yahoo! Finance, accessed May 25, 2022, <https://finance.yahoo.com/quote/TWTR/cash-flow/>.
- ²⁵ Andrew Bary, "How Elon Musk Can Save Twitter," *Barron's*, April 29, 2022, <https://www.barrons.com/articles/twitter-elon-musk-plan-financial-success-51651250779?mod=Searchresults>.
- ²⁶ "Twitter Inc (TWTR)," *YCharts*, accessed June 9, 2022, <https://ycharts.com/companies/TWTR>.
- ²⁷ Tom Taulli, "TikTok: Why the Enormous Success?" *Forbes*, January 21, 2020, <https://www.forbes.com/sites/tomtaulli/2020/01/31/tiktok-why-the-enormous-success/?sh=24037a1e65d1>.
- ²⁸ United States Securities and Exchange Commission, *Twitter Inc.: Amendment No. 2 to Schedule 13D/A*.
- ²⁹ Will Daniel, "Elon Musk's Twitter Has Struggled to Turn a Profit For Years. Now It's Facing a Massive Debt That Complicates the Future," *Fortune*, April 26, 2022, <https://fortune.com/2022/04/26/twitter-debt-elon-musk-possible-credit-downgrade/>.
- ³⁰ Giulia Morpurgo and Paula Seligson, "Banks on Twitter Deal Extend Debt Commitments to One Year," *Bloomberg*, April 26, 2022, <https://www.bloomberg.com/news/articles/2022-04-26/banks-on-twitter-deal-extend-debt-commitments-to-one-year>.

- ³¹ Gillian Tan, "Elon Musk Seeks to Scrap Tesla Margin Loan With New Twitter Funding," *Fortune*, May 12, 2022, <https://fortune.com/2022/05/12/elon-musk-avoid-tesla-margin-call-twitter-funding/>.
- ³² Michael Kan, "Elon Musk Details \$46.5 Billion Funding Plan to Buy Twitter," *PCMag*, April 21, 2022, <https://www.pcmag.com/news/elon-musk-details-465-billion-funding-plan-to-buy-twitter>.
- ³³ Alon Y. Kapen, "Inside the Merger Agreement Between Elon Musk and Twitter," Farrell Fritz, May 1, 2022, <https://www.nyventurehub.com/2022/05/01/inside-the-merger-agreement-between-elon-musk-and-twitter/>.
- ³⁴ Lauren Feiner and Kif Leswing, "Twitter Sues Elon Musk to Enforce Original Merger Agreement," CNBC, July 12, 2022, <https://www.cnbc.com/2022/07/12/twitter-sues-elon-musk-to-enforce-original-merger-agreement.html>.
- ³⁵ "Does Elon Musk Have a Point?" *Crowell*, June 9, 2022, <https://www.crowell.com/NewsEvents/AlertsNewsletters/all/Does-Elon-Musk-Have-a-Point-The-Impact-of-Bots-on-Twitter-Revenue>.
- ³⁶ Elon Musk (@elonmusk), "If our Twitter bid succeeds, we will defeat the spam bots or die trying!" Twitter, April 21, 2022, <https://www.twitter.com/elonmusk>.
- ³⁷ Lauren Feiner, "Elon Musk Notifies Twitter He Is Terminating Deal," CNBC, July 8, 2022, <https://www.cnbc.com/2022/07/08/elon-musk-notifies-twitter-he-is-terminating-deal.html>.
- ³⁸ "Key Characteristics of a LBO Candidate," *Street of Walls*, accessed May 25, 2022, <https://www.streetofwalls.com/articles/private-equity/learn-the-basics/lbo-candidate/>.
- ³⁹ "The Great Recession and Its Aftermath," Federal Reserve History, November 22, 2013, <https://www.federalreservehistory.org/essays/great-recession-and-its-aftermath>.
- ⁴⁰ Hugh MacArthur et al., "The Private Equity Market of 2021: The Allure of Growth," Bain & Company, March 7, 2022, <https://www.bain.com/insights/private-equity-market-in-2021-global-private-equity-report-2022/#:~:text=In%20a%20year%20marked%20by,their%20second%2Dbest%20year%20ever>.
- ⁴¹ The term "vintage year" refers to when capital is first invested in a private equity fund; firms typically invest for the five to six years after this date and harvest investments in the next five to six years.
- ⁴² "The Twitter Buyout: Is Elon Musk a Madman or a Genius?" YouTube video, 32:53, posted by "Mergers & Inquisitions / Breaking Into Wall Street," May 4, 2022, https://youtu.be/77H_ZAeBdWo.
- ⁴³ "Leveraged Loan Insight & Analysis—11/8/2021," The Lead Left, November 11, 2021, <https://www.theleadleft.com/leveraged-loan-insight-analysis-11-8-2021/>.
- ⁴⁴ "Valuation Multiples for Tech Software Companies [2022 Updated]," microcap.co, accessed May 28, 2022, <https://microcap.co/valuation-multiples-for-tech-software-companies/>.
- ⁴⁵ Rani Molla, "Posting Less, Posting More, and Tired of It All: How the Pandemic Has Changed Social Media," Vox, March 1, 2021, <https://www.vox.com/recode/22295131/social-media-use-pandemic-covid-19-instagram-tiktok>.
- ⁴⁶ Yue Wang, "The Rise of Weibo: Lessons Twitter Can Learn from Chinese Upstart," *Forbes*, June 6, 2017, <https://www.forbes.com/sites/ywang/2017/06/06/the-rise-of-weibo-lessons-twitter-can-learn-from-chinese-upstart/?sh=153570d320b0>.
- ⁴⁷ Sujeet Indap, "Alphaville's Twitter LBO Model," *Financial Times*, April 17, 2022, <https://www.ft.com/content/c52aea67-9e6a-4e04-adc2-744bc4e0b738>.
- ⁴⁸ Bary, "How Elon Musk Can Save Twitter."
- ⁴⁹ "Twitter Inc.: Stock Forecast, Predictions & Price Target," WallStreetZen, accessed: May 31, 2022, <https://www.wallstreetzen.com/stocks/us/nyse/twtr/stock-forecast>.
- ⁵⁰ "EBITDA Margin Forecast for Twitter, Inc." Finbox, accessed May 31, 2022, https://finbox.com/NYSE:TWTR/explorer/ebitda_proj_margin.
- ⁵¹ Jeff Cox, "Fed to Start Tapering Bond Purchases Later This Month as it Begins Pulling Back on Pandemic Aid," CNBC, November 3, 2021, <https://www.cnbc.com/2021/11/03/fed-decision-taper-timetable-as-it-starts-pulling-back-on-pandemic-era-economic-aid.html>.
- ⁵² "The Financial Stability Implications of the War in Ukraine," International Monetary Fund, accessed August 19, 2022, <https://www.imf.org/en/Publications/GFSR/Issues/2022/04/19/global-financial-stability-report-april-2022>.
- ⁵³ David Barry, "Buyout Dry Powder Rises," Markets Group, June 2, 2022, <https://www.marketsgroup.org/news/Private-Equity-Dry-Powder>.
- ⁵⁴ Martin Kemeny, "Paying It Forward: Understanding Leveraged Buyouts," Toptal, accessed August 19, 2022, <https://www.toptal.com/finance/private-equity-consultants/leveraged-buyout>.
- ⁵⁵ Giulia Morpurgo and Paula Seligson, "Banks on Twitter Deal Extend Debt Commitments to One Year," Bloomberg, April 26, 2022, <https://www.bloomberg.com/news/articles/2022-04-26/banks-on-twitter-deal-extend-debt-commitments-to-one-year>.
- ⁵⁶ CFI Team, "LBO Model," Corporate Finance Institute, February 6, 2022, <https://corporatefinanceinstitute.com/resources/knowledge/modeling/lbo-model/#:~:text=The%20acquiring%20firm%20determines%20if,when%20the%20economy%20is%20unfavorable>.
- ⁵⁷ "Tesla Inc. (TSLA): Summary."
- ⁵⁸ Clare Duffy, "Judge Orders October Trial for Lawsuit Between Elon Musk and Twitter," CNN Business, July 20, 2022, <https://www.cnn.com/2022/07/19/tech/twitter-elon-musk-lawsuit-first-hearing/index.html>.
- ⁵⁹ "Delaware Chancery Court Finally Finds an MAE," *Jones Day*, July 21, 2022, <https://www.jonesday.com/en/insights/2018/10/delaware-chancery-court-finally-finds-an-mae>.
- ⁶⁰ Joe Weisenthal and Tracy Alloway, "Matt Levine on What to Watch in Twitter vs. Elon Musk," July 15, 2022, in *Odd Lots*, produced by Bloomberg, podcast, MP3 audio, 30:34, <https://podcasts.apple.com/us/podcast/matt-levine-on-what-to-watch-in-twitter-vs-elonmusk/id1056200096?i=100056994414>.