



CORNERSTONE RESEARCH

Economic and Financial Consulting and Expert Testimony

Trends in Large Corporate Bankruptcy and Financial Distress

Midyear 2022 Update

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Executive Summary

Following the spike in large corporate bankruptcy filings triggered by the COVID-19 pandemic, bankruptcies in 2021 and 1H 2022 (annualized) decreased to levels below historical averages. The relatively low bankruptcy filing pattern was consistent across most industries, including those with the highest filings following the pandemic: Mining, Oil, and Gas; Retail Trade; Manufacturing; and Services.

This report examines trends in Chapter 7 and Chapter 11 bankruptcy filings between January 2005 and June 2022. Unless specified otherwise, the bankruptcies analyzed in this report involve public and private companies with over \$100 million in assets at the time of bankruptcy filing.¹

Number of Bankruptcies

- A total of 70 companies filed for bankruptcy in 2021, below the annual average since 2005 of 78. (page 2)
- Of the 70 bankruptcy filings in 2021, 28 occurred in Q1 2021. There were only 15, 12, and 15 such bankruptcies in Q2, Q3, and Q4 2021, respectively. (page 3)
- In 1H 2022, 20 companies filed for bankruptcy, the lowest midyear total since 2H 2014. (page 3)

Private Company Bankruptcies

- Bankruptcy filings by private companies constituted 60% of all bankruptcies in 1H 2022, substantially higher than the annual average of 40% from 2005 to 2021.

Mega Bankruptcies

- There were 20 “mega bankruptcies” (those filed by companies with over \$1 billion in reported assets) in 2021, a substantial decline from the 60 mega bankruptcies filed in 2020. (page 2)
- Only four Chapter 11 mega bankruptcies were filed in 1H 2022. This is considerably below the 2005–2021 half-year average of 11. (page 3)
- The largest bankruptcies in 2021 and 1H 2022 were filed by Seadrill Limited, with \$7.29 billion in assets at the time of filing, and Talen Energy Supply LLC, with \$10 billion in assets at the time of filing. (page 6)

Bankruptcy Venues

- Consistent with prior years, the most common venue for bankruptcy filings was Delaware, which accounted for 34% of all bankruptcy filings in 2021 and 50% of all bankruptcy filings in 1H 2022. (page 7)

Figure 1: Key Trends in Bankruptcy Filings 2005–1H 2022

	2005–2021 Annual Average	1H 2021	2H 2021	1H 2022
Chapter 11 Bankruptcy Filings	75	43	27	20
Chapter 11 Mega Bankruptcies	22	9	11	4
Chapter 11 Bankruptcy Filings by Public Companies	44	9	7	8
Chapter 11 Bankruptcy Filings by Private Companies	31	34	20	12
Chapter 7 Bankruptcy Filings	3	0	0	0
Average Asset Value at Time of Filing (Billions)	\$2.08	\$0.62	\$0.59	\$1.04

Source: BankruptcyData

Note: Only Chapter 7 and Chapter 11 bankruptcy filings by companies (both public and private) with over \$100 million in reported assets are included. For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation. Mega bankruptcies are defined as those for companies with over \$1 billion in reported assets at the time of their bankruptcy filings.

Bankruptcy Filings

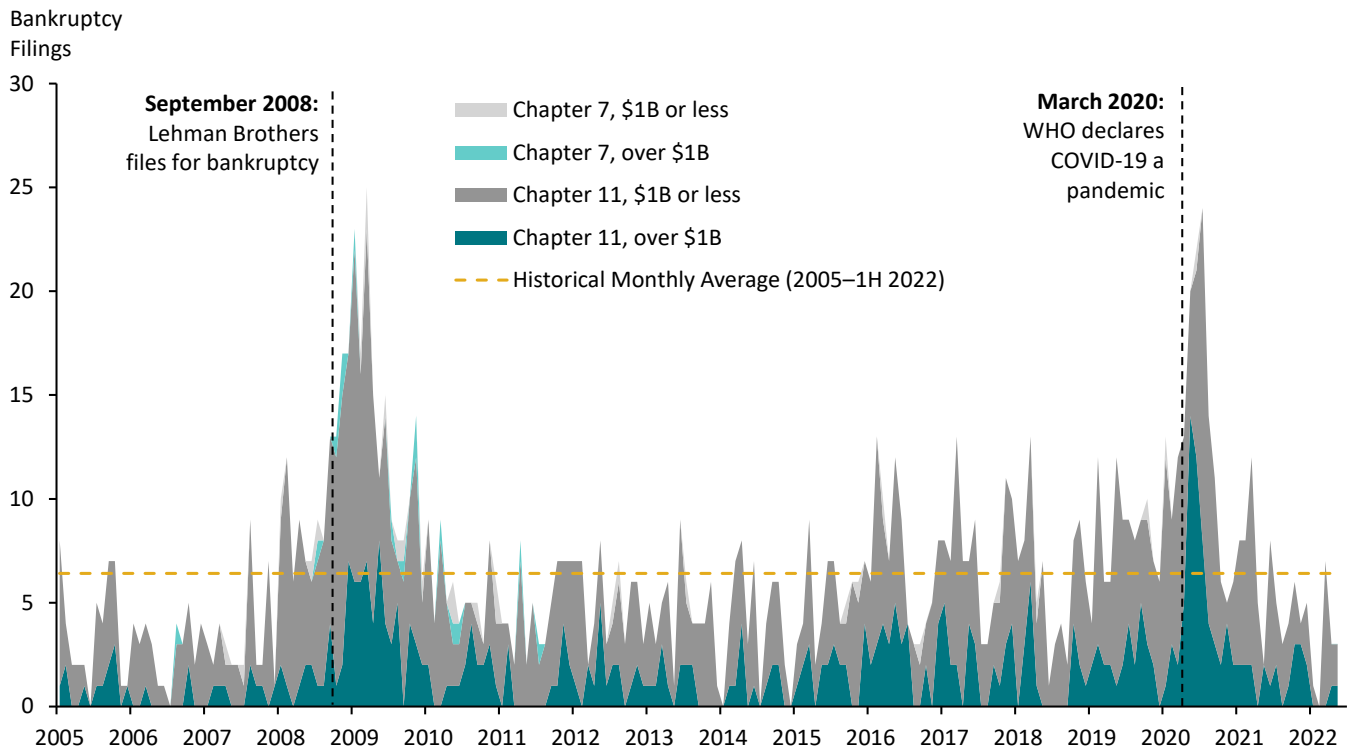
Number of Bankruptcies

- Bankruptcy filings in 2021 were below the historical annual average of filings observed since 2005, and less than half of filings in 2020. A total of 70 companies filed for Chapter 7 or Chapter 11 bankruptcy in 2021, compared to 155 in 2020.
- There was an uptick in bankruptcy filings in Q2 2022. Bankruptcies rose from eight in Q1 2022 to 12 in the second quarter. Half of Q2 2022 bankruptcy filings were in June.
- In 2021, there were 20 mega bankruptcies (those filed by companies with over \$1 billion in reported assets), a third of the mega bankruptcies filed in 2020.
- There were four mega bankruptcies in 1H 2022, the lowest number of mega bankruptcies in a half-year period since 2H 2013.
- There were no mega bankruptcies in Q1 2022 and no bankruptcy filings in February 2022 by any company with over \$100 million in assets.

70

Number of bankruptcy filings in 2021 by companies with over \$100 million in assets.

Figure 2: Monthly Chapter 7 and Chapter 11 Bankruptcy Filings 2005–1H 2022



Source: BankruptcyData

Note: Only Chapter 7 and Chapter 11 bankruptcy filings by companies (both public and private) with over \$100 million in assets are included. For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation. Lehman Brothers filed for bankruptcy on September 15, 2008. The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020. Years are labeled at January 1.

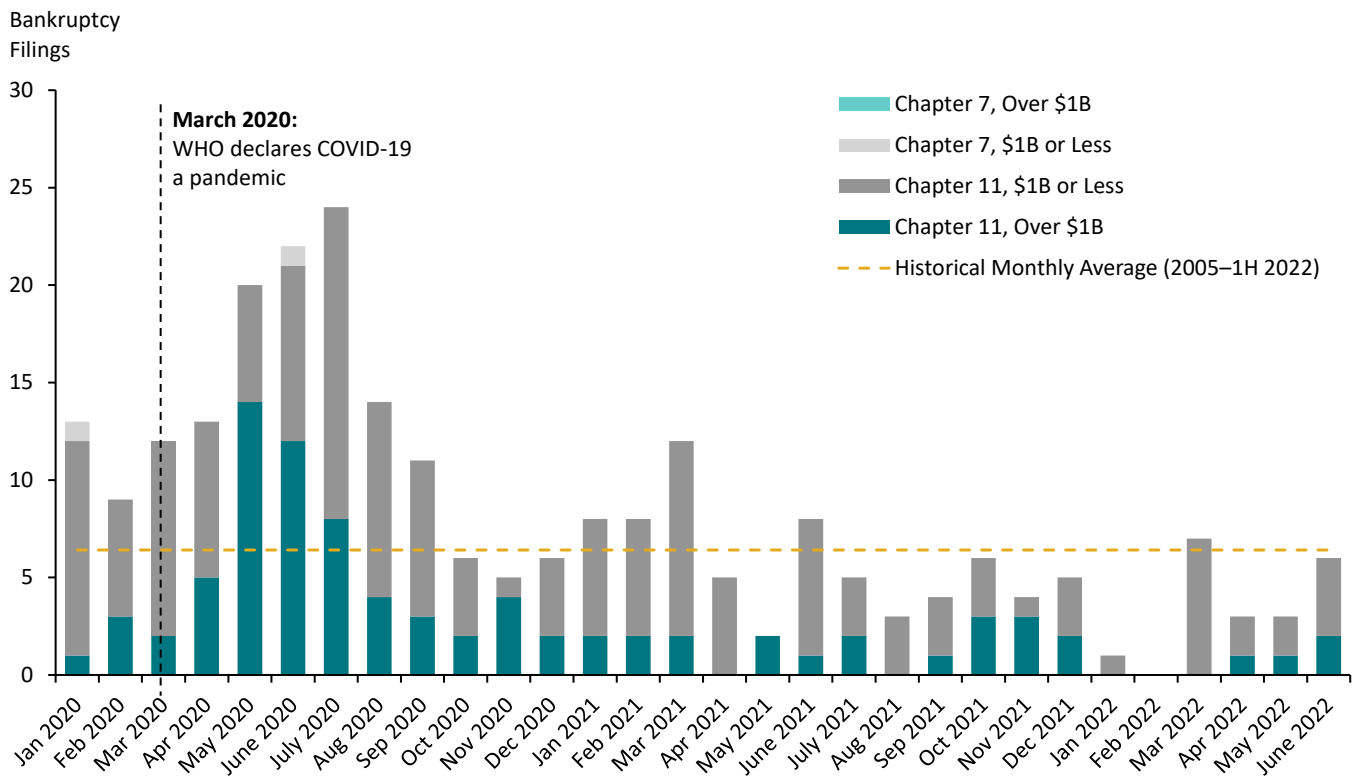
- Pandemic-driven bankruptcies peaked in July 2020 when 24 companies filed for bankruptcy. The monthly rate of bankruptcies remained near or above historical average levels through Q1 2021.

20

Number of bankruptcy filings in 1H 2022 by companies with over \$100 million in assets.

- Starting in Q2 2021, monthly bankruptcy filings have generally been below historical averages, with filings below average in 13 of the last 15 months.
- In 1H 2022, 20 companies filed for bankruptcy, compared to 43 in 1H 2021 and 89 in 1H 2020.
- Four of the bankruptcies in 1H 2022 were mega bankruptcies, compared to nine in 1H 2021 and 37 in 1H 2020.
- All bankruptcies in 1H 2022 were filed under Chapter 11 of the U.S. Bankruptcy Code.

Figure 3: Monthly Chapter 7 and Chapter 11 Bankruptcy Filings (Recent Trends) 2020–1H 2022



Source: BankruptcyData

Note: Only Chapter 7 and Chapter 11 bankruptcy filings by companies (both public and private) with over \$100 million in assets are included. For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation. The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020.

Bankruptcies by Industry

- Bankruptcy filings decreased across most industries in 2021, including those industries with the most filings following the pandemic: Mining, Oil, and Gas; Retail Trade; Manufacturing; and Services.
- In 1H 2022, bankruptcy filings across most industries continued to decline from mid-2020 pandemic highs.
- Forecasts of a continued trend of increased bankruptcies in 2021 were disrupted by government stimulus programs, low borrowing rates, and high debt forbearance.² Oil prices also rose by 55.8% in 2021, and surged another 43.1% in 1H 2022.³ Consumers spent \$163 trillion in 2021, 7.9% and 3.8% higher than in 2020 and 2019, respectively.⁴
- Consistent with oil price and consumer spending increases, Mining, Oil, and Gas and Retail Trade bankruptcies, which together accounted for 48% of bankruptcies in 2020, declined to 21% in 2021 and 15% in 1H 2022.
- While Retail Trade bankruptcies have declined, supply chain disruptions, rising inflation, labor shortages, and high debt burdens and interest rates have increased expectations for future Retail Trade bankruptcies among some commentators.⁵ Although classified as Manufacturing, cosmetics company Revlon Inc. filed for bankruptcy in June 2022, citing supply chain issues, combined with labor shortages and rising inflation.⁶
- A notable exception to the trend of substantially declining bankruptcies was Finance, Insurance, and Real Estate, which increased from 10 bankruptcies in 2020 to 15 in 2021, and remained elevated with six in 1H 2022—the most by any industry in 1H 2022.
- Real estate investment remains challenged by struggles of traditional shopping centers and hotels, as well as changes in consumer and worker behavior, in the wake of the pandemic. In addition, signs of a potential global recession and high inflation have increased concerns for cryptocurrency and financial firms.⁷

30%

Percentage of bankruptcies filed in 1H 2022 by Finance, Insurance, and Real Estate companies.

Figure 4: Heat Map of Bankruptcies by Industry 2005–1H 2022

SIC Industry Division	Average 2005–2020	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	1H 2022
Mining, Oil, and Gas	12.3	3	0	0	5	13	0	3	2	3	9	32	30	14	13	26	44	9	2
Retail Trade	9.7	4	2	5	22	16	4	10	2	3	5	5	9	13	11	13	31	6	1
Transportation, Communications, and Utilities	10.2	9	4	2	18	11	7	13	13	11	11	1	12	10	9	16	16	12	3
Services	11.6	5	5	4	16	20	14	11	11	12	5	9	10	12	12	15	24	13	2
Manufacturing	20.4	18	19	10	32	64	21	11	20	15	12	12	16	16	14	20	26	8	5
Wholesale Trade	1.7	1	0	2	0	0	2	0	1	3	1	0	2	5	5	2	3	5	1
Finance, Insurance, and Real Estate	10.2	3	2	13	25	31	19	7	12	5	3	4	3	14	6	6	10	15	6
Construction	1.9	0	2	3	8	5	1	2	0	0	1	0	1	4	3	0	1	1	0
Agriculture, Forestry, and Fishing	0.4	0	0	0	1	1	1	0	0	1	0	0	1	1	0	0	0	1	0
Number of Bankruptcies	79	43	34	39	128	161	69	57	61	54	47	64	84	89	73	98	155	70	20

Legend: 0–4, 5–9, 10–19, 20–29, 30 and above

Source: BankruptcyData

Note: Only Chapter 7 and Chapter 11 bankruptcy filings by companies (both public and private) with over \$100 million in assets are included. The Standard Industrial Classification (SIC) Industry Division “Mining” is labeled as “Mining, Oil, and Gas” to reflect the specific industries under the Industry Division. The SIC Industry Division “Transportation, Communications, Electric, Gas, and Sanitary Services” is labeled as “Transportation, Communications, and Utilities.” There are no bankruptcies in two SIC Industry Divisions—“Public Administration” and “Nonclassifiable.” These two SIC Industry Divisions are therefore not shown. For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation.

Largest Bankruptcies by Assets

- The largest bankruptcy filing by assets in 2021 was Seadrill Limited, an offshore drilling contractor that had struggled after the plunge in energy prices in 2020. On October 26, 2021, Seadrill Limited's plan of reorganization was confirmed, and it announced it emerged from Chapter 11 on February 23, 2022.⁸
- In a related bankruptcy filing, Seadrill New Finance Limited filed for bankruptcy on January 11, 2022, the sixth-largest filing in 1H 2022. Seadrill New Finance Limited received approval for its "one-day" Chapter 11 restructuring on January 12, 2022, and emerged from bankruptcy on January 20, 2022.⁹
- Four of the 10 largest bankruptcies in 2021 were real estate firms Washington Prime Group, Hospitality Investors Trust, Knotel, and Le Jeune Villas Development, which invested in shopping centers, hotels, co-working spaces, and multifamily housing developments, respectively. All four bankruptcies occurred during 1H 2021.
- In November 2021, global cloud networking provider GTT Communications Inc. filed for bankruptcy following the previously announced sale of its infrastructure division.
- Bankruptcy filings in 1H 2022 were generally smaller than in 2021. However, the largest bankruptcy in 1H 2022 exceeded the size of any bankruptcy in 2021.
- Talen Energy Supply LLC was the largest bankruptcy in 1H 2022, with total assets at the time of filing of \$10 billion. Talen Energy Supply sought Chapter 11 bankruptcy protection in May 2022 after rising power and gas prices disrupted its hedges and sparked a liquidity crisis.¹⁰

36%

Decline in total assets of the 20 largest bankruptcies in 1H 2022 versus the 20 largest in 2021.

- Although the Finance, Insurance, and Real Estate industry accounted for the most bankruptcies in 1H 2022, only one such filing was a mega bankruptcy.
- GWG Holdings Inc. was the second-largest bankruptcy in 1H 2022, with \$3.49 billion in assets at the time of filing. GWG Holdings, an alternative asset manager known for selling insurance bonds to individual investors, filed for bankruptcy after a regulatory investigation prompted it to stop selling the securities, causing liquidity issues.¹¹
- Cosmetics giant Revlon Inc. filed for bankruptcy in June 2022 citing pandemic-related challenges, including supply chain issues, combined with labor shortages and rising inflation.¹² Just prior to filing, Revlon's stock price fell to an all-time low but subsequently rose over 600%, which commentators have suggested may have been due in part to the attention of retail investors.¹³
- The average asset size of the largest 20 bankruptcies in 1H 2022 was 36% smaller than that of the 20 largest in 2021. The average asset size of the largest 20 bankruptcies was \$1.6 billion and \$1.0 billion for 2021 and 1H 2022, respectively, both well below the comparable average size for the 20 largest bankruptcies in 2020 of \$10.3 billion.

**Figure 5: Largest 20 Recent Bankruptcies
2021 vs. 1H 2022**

Rank	2021			1H 2022		
	Company	Assets (In Billions)	SIC Industry Division	Company	Assets (In Billions)	SIC Industry Division
1	Seadrill Limited	\$7.29	Mining, Oil, and Gas	Talen Energy Supply LLC	\$10.00	Transportation, Communications, and Utilities
2	Washington Prime Group Inc.	\$4.03	Finance, Insurance, and Real Estate	GWG Holdings Inc.	\$3.49	Finance, Insurance, and Real Estate
3	GTT Communications Inc.	\$2.80	Transportation, Communications, and Utilities	Revlon Inc.	\$2.33	Manufacturing
4	Hospitality Investors Trust Inc.	\$1.70	Finance, Insurance, and Real Estate	TPC Group Inc.	\$1.00	Manufacturing
5	Ferrellgas Partners L.P.	\$1.67	Wholesale Trade	Armstrong Flooring Inc.	\$0.52	Manufacturing
6	Knotel Inc.	\$1.00	Finance, Insurance, and Real Estate	Seadrill New Finance Limited	\$0.50	Mining, Oil, and Gas
7	Belk Inc.	\$1.00	Retail Trade	Footprint Power Salem Harbor Development LP (n/k/a Salem Harbor Power Development LP)	\$0.50	Transportation, Communications, and Utilities
8	Brazos Electric Power Cooperative Inc.	\$1.00	Transportation, Communications, and Utilities	Ruby Pipeline LLC	\$0.50	Transportation, Communications, and Utilities
9	Le Jeune Villas Development LLC	\$1.00	Finance, Insurance, and Real Estate	Sungard AS New Holdings LLC	\$0.50	Services
10	Kumtor Gold Company CSJC	\$1.00	Mining, Oil, and Gas	First Guaranty Mortgage Corporation	\$0.50	Finance, Insurance, and Real Estate
11	Limetree Bay Services LLC	\$1.00	Manufacturing	Enjoy Technology Inc.	\$0.11	Retail Trade
12	GBG USA Inc.	\$1.00	Manufacturing	Kenwood Commons LLC	\$0.10	Finance, Insurance, and Real Estate
13	Philippine Airlines Inc.	\$1.00	Transportation, Communications, and Utilities	Rockall Energy Holdings LLC	\$0.10	Mining, Oil, and Gas
14	LTL Management LLC	\$1.00	Services	ExWorks Capital LLC	\$0.10	Finance, Insurance, and Real Estate
15	PWM Property Management LLC	\$1.00	Finance, Insurance, and Real Estate	Cherry Man Industries Inc.	\$0.10	Wholesale Trade
16	Carlson Travel Inc.	\$1.00	Transportation, Communications, and Utilities	MD Helicopters Inc.	\$0.10	Manufacturing
17	Riverbed Technology Inc.	\$1.00	Manufacturing	Northwest Senior Housing Corporation	\$0.10	Services
18	Alto Maipo Delaware LLC	\$1.00	Transportation, Communications, and Utilities	WC Braker Portfolio LLC	\$0.10	Finance, Insurance, and Real Estate
19	All Year Holdings Limited	\$1.00	Finance, Insurance, and Real Estate	GT Real Estate Holdings LLC	\$0.10	Finance, Insurance, and Real Estate
20	Nordic Aviation Capital Designated Activity Company	\$1.00	Manufacturing	Gold Standard Baking LLC	\$0.10	Manufacturing

Source: BankruptcyData

Note: All companies in this table filed for Chapter 11 bankruptcy. The SIC Industry Division “Mining” is labeled as “Mining, Oil, and Gas” to reflect the specific industries under the Industry Division. The SIC Industry Division “Transportation, Communications, Electric, Gas, and Sanitary Services” is labeled as “Transportation, Communications, and Utilities.” For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation.

Bankruptcy Venues

- Consistent with prior years, the most common venue for bankruptcy filings was Delaware, which accounted for 34% in 2021 and 50% in 1H 2022.
- The second-largest venue was the Southern District of Texas, which accounted for 24% of filings in 2021 and 20% in 1H 2022. This decline is consistent with the drop in bankruptcies filed by companies in the Mining, Oil, and Gas industry.
- Of the 17 bankruptcies filed in the Southern District of Texas in 2021, nine (53%) were by energy companies— five in the Mining, Oil, and Gas industry and four energy companies in the Transportation, Communications, and Utilities industry.
- The two largest bankruptcies in 2021 and the two largest bankruptcies in 1H 2022 were filed in the Southern District of Texas.
- The third most common bankruptcy venue in 2021 was the Southern District of New York, which accounted for 16% of the total that year. In 1H 2022, the number of filings in this venue declined to two, representing only 10% of total bankruptcy filings.
- These three venues (Delaware, Southern District of Texas, and Southern District of New York) accounted for 74% of bankruptcies in 2021 and 80% in 1H 2022.

80%

Combined percentage of 1H 2022 bankruptcy filings in Delaware, Southern District of Texas, and Southern District of New York.

Figure 6: Heat Map of Bankruptcies by Venue 2005–1H 2022

Court	Average 2005–2021	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	1H 2022
Delaware	33	10	14	19	54	67	25	33	21	34	25	33	39	30	37	39	57	24	10
Texas - Southern	8	1	0	1	4	4	0	2	1	1	2	5	13	14	9	14	47	17	4
New York - Southern	14	10	11	4	20	28	22	10	22	9	10	5	14	18	11	18	21	11	2
Virginia - Eastern	2	0	1	1	3	0	2	0	1	0	1	3	2	2	2	1	6	2	0
Georgia - Northern	1	2	0	1	6	2	0	1	1	0	0	0	0	1	0	2	1	0	0
Texas - Northern	2	0	1	1	2	5	0	0	2	0	1	2	2	3	2	3	1	4	2
California - Central	2	0	0	3	5	8	3	0	2	0	0	1	0	0	1	2	0	2	1
Other	17	20	7	9	34	47	17	11	11	10	8	15	14	21	11	19	22	10	1
Number of Bankruptcies	78	43	34	39	128	161	69	57	61	54	47	64	84	89	73	98	155	70	20

Legend: < 5, 5–10, 11–20, 21–50, Over 50

Source: BankruptcyData

Note: Only Chapter 7 and Chapter 11 bankruptcy filings by companies (both public and private) with over \$100 million in reported assets are included. For companies where exact asset values are not known, the lower bound of the estimated range is used. Asset values are not adjusted for inflation. “Other” includes courts with fewer than five bankruptcies in all years during the time period.

Market Indicators

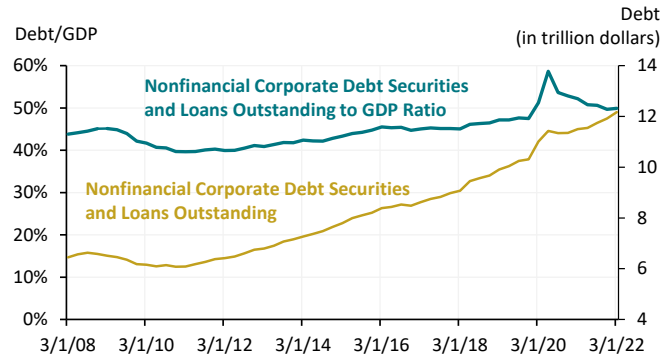
Government stimulus programs, low borrowing rates, and high debt forbearance disrupted forecasts for a continued trend of increased bankruptcies in 2021.¹⁴ However, some market commentators have expressed concerns about high corporate debt levels, rising interest rates and inflation, and a potential global recession, with particular concern for increased retail company bankruptcies.¹⁵

U.S. nonfinancial corporate debt outstanding stands at \$12.2 trillion as of Q1 2022, 18.1% higher than at year-end 2019. U.S. nonfinancial corporate debt has grown at a compound annual rate of 6.5% since 2011.

Figure 7 Source: FRED Economic Data

Figure 7 Note: GDP levels and nonfinancial corporate debt securities and loans outstanding are reported on a quarterly basis and are seasonally adjusted.

Figure 7: Nonfinancial Corporate Debt Securities and Loans Outstanding Q1 2008–Q1 2022

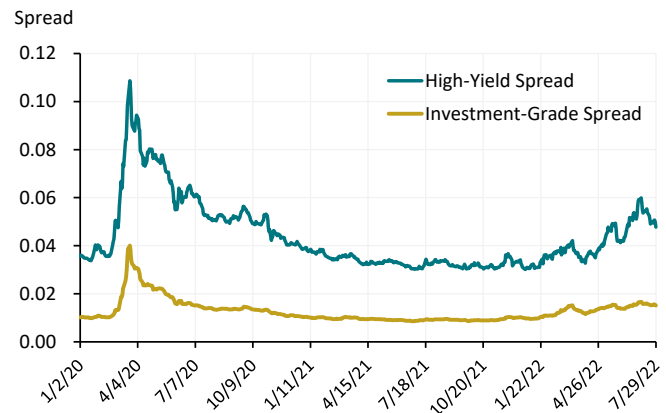


High-yield and investment-grade spreads relative to Treasury yields continued to decline during 2021 after increasing sharply following the onset of the pandemic in March 2020. In 1H 2022, however, high-yield and investment-grade spreads increased 89.4% and 67.3%, respectively, albeit to levels below the peak reached in 2020.

Figure 8 Source: FRED Economic Data

Figure 8 Note: ICE BofA US High Yield Index Option-Adjusted Spread is used as the high-yield spread, and ICE BofA US Corporate Index Option-Adjusted Spread is used as the investment-grade spread.

Figure 8: High-Yield and Investment-Grade Spreads January 2020–July 2022

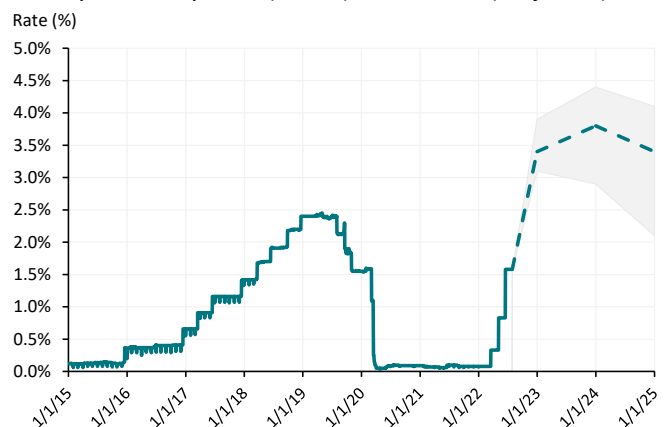


Interest rates in 1H 2022 increased following the Federal Reserve’s March 16, 2022, decision to raise the federal funds rate, the first rate increase since December 2018.¹⁶ The federal funds rate increased from 0.08% to 1.58% during 1H 2022, with the median forecasted rate from the Federal Open Market Committee reaching 3.4% by year-end 2022.

Figure 9 Source: FRED Economic Data; Board of Governors of the Federal Reserve

Figure 9 Note: Dashed line represents the median predicted value from the June 2022 meeting of the Federal Open Market Committee, plotted on December 31 of the predicted year. The gray shaded area indicates the range of predictions.

Figure 9: Effective Federal Funds Rate January 2015–July 2022 (Actual), 2022–2024 (Projected)



Annualized CPI inflation increased 250% from March 31, 2021, to June 30, 2022, reaching 9.1%—the highest level in over four decades. At 9.1%, inflation was nearly 4.5x the average historical level since 2002.

Figure 10: Annualized Inflation Rate July 2002–July 2022

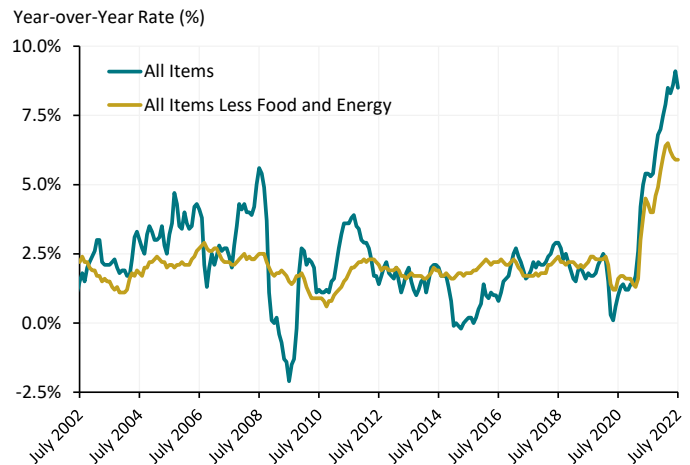


Figure 10 Source: U.S. Bureau of Labor Statistics

The spread on the 10-year minus two-year U.S. Treasury yields inverted (i.e., became negative) on July 6, 2022, while the 10-year minus three-month U.S. Treasury yield spread has declined sharply since May 6, 2022, but remains positive. An inverted yield curve has closely predated each of the prior three U.S. recessions.

Figure 11: Inversions in the U.S. Treasury Yield January 1997–July 2022

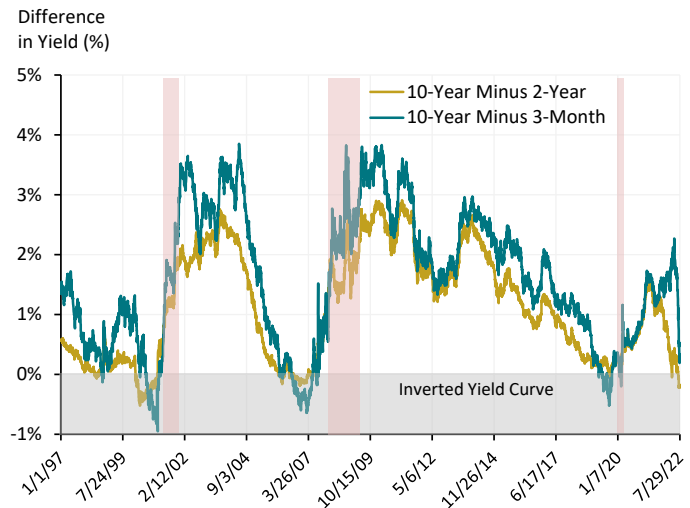


Figure 11 Source: FRED Economic Data; National Bureau of Economic Research (NBER)

Figure 11 Note: Each line represents the daily series of differences between the 10-year U.S. Treasury yield and either the two-year U.S. Treasury yield or the three-month U.S. Treasury yield, respectively. Vertical shading indicates recessions, as dated by NBER.

Market commentators note that fears of a global recession and rapidly increasing inflation have precipitated declining equity markets, and have particularly affected the relatively nascent cryptocurrency and related markets.¹⁷ The price of Bitcoin declined over 70% from a high of \$67,582.60 on November 8, 2021 to \$19,985.60 on June 30, 2022. Numerous cryptocurrency firms have paused withdrawals and transfers, and several firms have filed for bankruptcy protection.¹⁸

Figure 12: Cryptocurrency Market Performance January 2020–July 2022

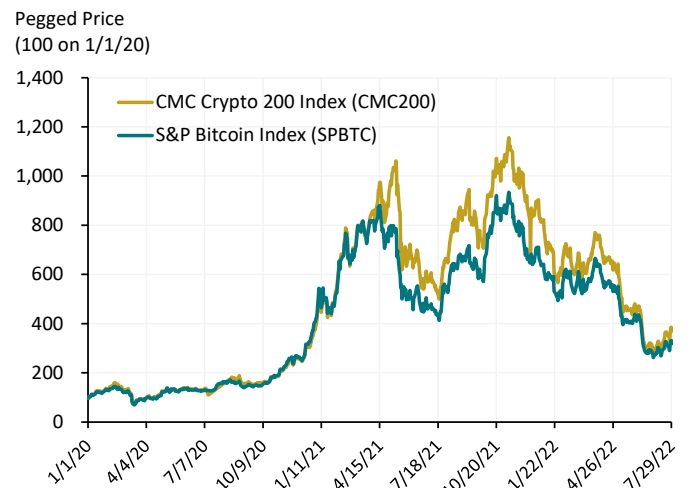


Figure 12 Note: The Nasdaq Crypto Index is constituted by the most liquid and representative cryptocurrencies available in the market, weighted by market capitalizations. The S&P Bitcoin Index tracks the performance of the digital coin Bitcoin.

Research Sample

The research sample in this report uses BankruptcyData to identify Chapter 7 and Chapter 11 bankruptcies filed by public and private companies with over \$100 million in assets.

The sample contains 1,346 such bankruptcies from January 1, 2005 through June 30, 2022.

BankruptcyData incorrectly records the asset size of Emergent Capital Inc. as \$17.5 billion. This number is corrected to \$175 million based on Emergent Capital Inc.'s bankruptcy petition form.

Mega bankruptcies are defined as Chapter 7 or Chapter 11 bankruptcies filed by companies with over \$1 billion in reported assets. The sample contains 392 mega bankruptcies from January 1, 2005, through June 30, 2022.

Asset values at the time of bankruptcy filings are used to measure bankruptcy size, due to the higher prevalence of missing information on liabilities in BankruptcyData. For companies with subsidiaries, separate bankruptcy filings by subsidiaries do not count toward the total number of bankruptcies.

Endnotes

- ¹ This report relies on data obtained from BankruptcyData on August 8, 2022. It focuses on asset values at the time of bankruptcy filings, due to the higher prevalence of missing information on liabilities in BankruptcyData.
- ² “Corporate Bankruptcy Wave Turns to Dust, Defying Expectations,” *Bloomberg Law*, January 5, 2022, <https://news.bloomberglaw.com/bankruptcy-law/corporate-bankruptcy-wave-turns-to-dust-defying-expectations>.
- ³ U.S. Energy Information Administration, “Crude Oil Prices: West Texas Intermediate (WTI) – Cushing, Oklahoma (DCOILWTICO),” Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/DCOILWTICO>.
- ⁴ U.S. Bureau of Economic Analysis, “Real Personal Consumption Expenditures (PCE96),” Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/PCE96>.
- ⁵ “US Corporate Bankruptcy Pace Likely to Speed Up in 2022,” *S&P Global Market Intelligence*, October 11, 2021, <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-corporate-bankruptcy-pace-likely-to-speed-up-in-2022-67011237>; “The Retail Industry Is Facing a Potential Wave of Bankruptcies – Here’s Why,” *CNBC*, June 24, 2022, <https://www.cnbc.com/2022/06/23/why-retail-industry-is-facing-bankruptcy-wave.html>; “Here Comes a ‘Flurry’ of Retail Bankruptcies, Former Retail CEO Warns,” *Yahoo Finance*, July 26, 2022, <https://finance.yahoo.com/news/flurry-retail-bankruptcies-warns-former-ceo-105209430.html>.
- ⁶ “Revlon Files for Bankruptcy, Blames Supply Chain Snags,” *Reuters*, June 16, 2022, <https://www.reuters.com/business/retail-consumer/revlon-files-bankruptcy-protection-2022-06-16/>. Although having a significant retail presence, Revlon Inc.’s primary SIC industry code is 2844—Perfumes, Cosmetics, and Other Toilet Preparations, which is a final level code of the “Manufacturing” division.
- ⁷ “Crypto Winter Watch: All The Big Layoffs, Record Withdrawals and Bankruptcies Sparked by the \$2 Trillion Crash,” *Forbes*, July 14, 2022, <https://www.forbes.com/sites/jonathanponciano/2022/07/14/crypto-winter-watch-all-the-big-layoffs-record-withdrawals-and-bankruptcies-sparked-by-the-2-trillion-crash/?sh=f2363ba20f5a>.
- ⁸ “SDRL - Seadrill Announces Emergence from Chapter 11,” *PRNewswire*, February 23, 2022, <https://www.prnewswire.com/news-releases/sdrl--seadrill-announces-emergence-from-chapter-11-301488254.html>.
- ⁹ “Seadrill New Finance Limited (the ‘Issuer’) Announces Confirmation of Pre-Packaged Financial Restructuring,” *PRNewswire*, January 12, 2022, <https://www.prnewswire.com/news-releases/seadrill-new-finance-limited-the-issuer-announces-confirmation-of-pre-packaged-financial-restructuring-301459949.html>; “Seadrill New Finance Limited (to be renamed Paratus Energy Services Ltd.) (the ‘Issuer’) Announces Emergence from Chapter 11,” *PR Newswire*, January 20, 2022, <https://www.prnewswire.com/news-releases/seadrill-new-finance-limited-to-be-renamed-paratus-energy-services-ltd-the-issuer-announces-emergence-from-chapter-11-301465461.html>.
- ¹⁰ “Texas Power Generator Talen Energy Files for Bankruptcy,” *Bloomberg*, May 9, 2022, <https://www.bloomberg.com/news/articles/2022-05-10/talen-energy-files-for-bankruptcy-battling-high-debt-load>.
- ¹¹ “Asset Manager GWG Files for Bankruptcy as Risky Bond Sales Dry Up,” *Wall Street Journal*, April 20, 2022, <https://www.wsj.com/articles/asset-manager-gwg-files-for-bankruptcy-as-risky-bond-sales-dry-up-11650459769>; “Life Insurance Bond Seller GWG Goes Bankrupt amid SEC Probe,” *Bloomberg Law*, April 20, 2022, <https://news.bloomberglaw.com/bankruptcy-law/life-insurance-bond-seller-gwg-files-for-bankruptcy-in-texas>.
- ¹² “Revlon Files for Bankruptcy, Blames Supply Chain Snags,” *Reuters*, June 16, 2022, <https://www.reuters.com/business/retail-consumer/revlon-files-bankruptcy-protection-2022-06-16/>. As noted above, although having a significant retail presence, Revlon Inc.’s primary SIC industry code is 2844—Perfumes, Cosmetics, and Other Toilet Preparations, which is a final level code of the “Manufacturing” division.
- ¹³ “Why Is Revlon Stock up 600% after Filing for Bankruptcy?,” *Forbes*, June 23, 2022, <https://www.forbes.com/sites/qai/2022/06/23/why-is-revlon-stock-up-600-after-filing-for-bankruptcy/?sh=44e7ca34b3df>.
- ¹⁴ “Corporate Bankruptcy Wave Turns to Dust, Defying Expectations,” *Bloomberg Law*, January 5, 2022, <https://news.bloomberglaw.com/bankruptcy-law/corporate-bankruptcy-wave-turns-to-dust-defying-expectations>.
- ¹⁵ “Risky Borrowers Largely Dodged Bankruptcy So Far This Year. Now the Easy Money Is Ending,” *Wall Street Journal*, July 1, 2022, <https://www.wsj.com/articles/risky-borrowers-largely-dodged-bankruptcy-so-far-this-year-now-the-easy-money-is-ending-11656709790>; “Another Retail Bankruptcy Wave May Be On Its Way,” *Law360*, July 15, 2022, <https://www.law360.com/articles/1511949/another-retail-bankruptcy-wave-may-be-on-its-way>.
- ¹⁶ “Implementation Note Issued March 16, 2022,” *Federal Reserve*, March 16, 2022, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220316a1.htm>.
- ¹⁷ “Crypto Winter Watch: All The Big Layoffs, Record Withdrawals and Bankruptcies Sparked by the \$2 Trillion Crash,” *Forbes*, July 14, 2022, <https://www.forbes.com/sites/jonathanponciano/2022/07/14/crypto-winter-watch-all-the-big-layoffs-record-withdrawals-and-bankruptcies-sparked-by-the-2-trillion-crash/?sh=f2363ba20f5a>.
- ¹⁸ “Crypto Winter Watch: All The Big Layoffs, Record Withdrawals and Bankruptcies Sparked by the \$2 Trillion Crash,” *Forbes*, July 14, 2022, <https://www.forbes.com/sites/jonathanponciano/2022/07/14/crypto-winter-watch-all-the-big-layoffs-record-withdrawals-and-bankruptcies-sparked-by-the-2-trillion-crash/?sh=f2363ba20f5a>.

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The authors acknowledge the research efforts and significant contributions of their colleagues at Cornerstone Research.

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