Corporate Finance
Winter Semester 2021/2022
Supervised by Prof. Markus Fahlbusch

Live Nation Entertainment Inc.

Company Analysis

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TABLE OF CONTENTS

List of Tables and Figures

1. INTRODUCTION

The objective of this report is to analyze the performance of the target company Live Nation Entertainment, Inc. (mentioned as 'Live Nation', 'LYV' or 'the company' throughout this report) through publicly available information. The latest fiscal year's annual report dated December 31st 2020 is used for financial analysis (cited as Annual Report 2020), which includes reported figures from 2018 to 2020. All figures of the company where otherwise not mentioned in this report are taken from this annual report. Due to major changes in the business climate experienced after the global pandemic of 2020, some of the calculations conducted to analyze the company do not represent the true performance capabilities of the company, nor indicate meaningful and comparable measures attributing to negative earnings or equity. Nevertheless, the extent of the effects of the pandemic on the company's performances and reactions of the market contributed to an observation worthy of interest, thus performance figures from fiscal year 2020 is analyzed, alongside figures from 2019 utilized as a comparison indicating 'business as usual'.

1.1. About the Company

Live Nation Entertainment, Inc. operates in the entertainment industry. Headquartered in Beverly Hills, California, as an American corporation, this music industry giant is involved in the production of live music events across multiple continents, as well as hosting a leading global ticketing platform under ticketmaster.com, and acting as owner/operator/equity holder of major venues across the United States. The company also manages musical artists careers and raises revenue from sponsorships and advertisement placements.

In the wake of disruption in music distribution formats in recent decades, seen in the decline of physical sales and increased consumption of music through online and streaming services (IFPI, 2021), live music has become a major source of income for musical artists, at the same time fans' desire for 'live' experiences are rising as a reaction to increasing time spent online (Goldman Sachs Research, 2020). As a result, the live music industry is experiencing a surge in concert attendance, and popularity of music festivals is on the rise, with attendance figures recording a historic high in the pre-pandemic years (Live Nation Entertainment Inc., 2018). The Covid-19 pandemic beginning in early 2020 scathed the live music industry deeply, where most operations came to a halt from mid-March onwards due to social distancing restrictions. Despite these critical conditions and dent in revenue caused by the cease in operations, share prices of LYV soared to an all-time high in 2020, reflecting the optimistic recovery for the post-pandemic industry scape, expecting pent-up demand for live music experiences.

The company as of December 2020 employed approximately 8,200 full-time employees (reduced due to the pandemic from approximately 10,500 full-time employees in December 2019). Because of the nature of businesses which they operate in, they rely heavily on part-time and seasonal employees, approximately 15,400 and up to 28,000 in peak times pre-pandemic. Due to seasonality of events, most of their revenues are recognized in the second and third quarters (summer months).

1.2. Corporate History and Field of Operations

The company in its current form was founded as a result of a merger between Live Nation and Ticketmaster in 2010, dating their original conception back to 1996 and 1976 respectively. Live Nation's stocks are traded on the New York Stock Exchange since 2005. After the merger in 2010, former CEO of Live Nation Michael Rapino became the CEO of Live Nation Entertainment Inc., and former CEO of Ticketmaster Irving Azoff served as executive chairman until December 2012 (Live Nation Entertainment Inc., 2012). The company was added to the S&P 500 index in December 2019, under Communication Services sector, and Movies & Entertainment Sub-Industry index.

The companies' revenue segments consist of 3 main pillars: concert promotion, ticketing services, and advertisement & sponsorship sales. As of 2019 (to indicate pre-pandemic figures), the company's main achievements in numbers are reported as follows according to their annual report:

- Produced 40,000 events for over 5,000 artists connecting 98 million fans in 46 countries
- Owns / operates / or has exclusive booking rights or has equity interest in 289 venues
- Manages more than 500 musical artists careers through 110 managers

- Sold 485 million tickets for 11,500 clients worldwide, through www.ticketmaster.com and www.livenation.com and other websites, mobile apps, retail outlets and call centers (Figures includes ticket re-sale services)

(Source: LYV 2020 Annual Report)

The merger between Live Nation and Ticket Master resulted in a vertical integration of the value chain creating strong synergy, but over concerns of violation of Anti-Trust Laws, the Department of Justice has ordered a consent decree to the company on how the company may operate to prevent monopolistic behavior. The New York Times has reported that the company faces multiple accusations of violation of this decree, in how the company restricts venues' choice of ticketing services using their stronghold on managing artists (Sisario & Bowley, 2018). More on this will be discussed in sections 2.5 Social Corporate Responsibility (as a social cost to society), and in 4.2 Risk Factors (regulatory risk).

Major competitors of the company in the music promotion industry include the Anschutz Entertainment Group (AEG), Another Planet Entertainment, Jam Productions, Ltd., and I.M.P in addition to numerous smaller regional companies.
In the venue management sector, the company faces competition with ASM Global, Madison Square Garden Entertainment Corp., among other numerous smaller companies.
The ticketing services sector has competitors such as Tickets.com, AXS, Paciolan, Inc., CTS Eventim AG, Eventbrite, eTix, Ticketfly and SeatGeek in the primary ticketing services; and secondary ticketing companies such as StubHub, Vivid Seats, TicketNetwork, Viagogo and SeatGeek; and many others (LYV 2020 Annual Report).

2. CORPORATE GOVERNANCE AND SHAREHOLDER ANALYSIS

Questions answered in this Chapter:

2.1 Is this a company where there is a separation between management and ownership? If so, how responsive is management to stockholders?

2.2 What are the potential conflicts of interest that you see in this firm?

2.3 How does this firm interact with financial markets? How do markets get information on the firm?

2.4 How does this firm view its social obligations and manage its image in society?

2.5 What is the breakdown of stockholders in your firm insiders, individuals and institutional?

Live Nation Entertainment, Inc.'s ISS (Institutional Shareholder Services) Governance QualityScore as of September 26, 2021 was reported as 10, where a score of 1 indicates lower governance risk, and a 10 indicates the highest governance risk (Yahoo Finance, n.d.). In the following section we will analyze the corporate governance structures and analysis of shareholders and conflicting interests, which reveal factors that may have contributed to this assessment of at-risk corporate governance.

2.1. Management and Ownership

The company is publicly listed in the New York Stock Exchange (NYSE) under the ticker LYV. The company is the owned by its shareholders and managed by Executive Officers who are overseen by the Board of Directors. There is only one class of shares with equal voting rights. The company is somewhat closely held (not to be mistaken with a Closely Held Corporation per definition by the IRS where the threshold is 50%), from the fact that a parent company (Liberty Media) owns 30-35% of its shares, and another 5% owned by executives and directors of the company. This can make voting against the decisions of the parent company and executive officers difficult for ordinary shareholders. There is a stockholder agreement in place that Liberty Media cannot acquire more than 35% of the company's shares.

The company is managed by the executive officers named as following:

Name	Position
Michael Rapino	President and Chief Executive Officer
Joe Berchtold	President
Brian Capo	Chief Accounting Officer
Michael Rowles	General Counsel
Kathy Willard	Chief Financial Officer

The Management is overseen by the Board of Directors consisting of 12 members across 4 standing committees, 10 of whom are independent. One member of the board is also a member of management, the CEO and President of the company Michael Rapino, who is also a large shareholder. Rapino sits in the executive committee of the board, but not as a chair (see Table 1).

Name	Audit Committee	Nominating and Governance Committee	Compensation Committee	Executive Committee
Maverick Carter		✓		
Ari Emanuel		✓		
Ping Fu	✓			
Jeff Hinson	✓ (Chair)			
Chad Hollingsworth			✓	
Jimmy Iovine			✓	
Jim Kahan	✓			
Greg Maffei				✓ (Chair)
Randall Mays		✓ (Chair)		✓
Michael Rapino				✓
Mark Shapiro			✓ (Chair)	
Dana Walden			✓	

Non-independent   Appointed by Liberty Media

Table 1: Board of Directors

(Source: LYV 2021 Proxy Statement, p.15)

As of April 14th, 2021, 5% of the company shares were held by directors, director nominees and executive officers as a group (total of 16 persons) (see Table 2).
The Liberty Media Corporation holds majority shares (maximum of 35% by stockholder agreement) and has the right to nominate up to two board directors (also by stockholder

agreement, current Liberty appointed directors are Greg Maffei and Chad Hollingsworth, see Table 1).

	Amount and Nature of Beneficial Ownership					
Name of Beneficial Owner	Common Stock	Exercisable Options	Restricted Stock Unvested	Other	Total	Percent
Maverick Carter	5,676	—	4,437	—	10,113	*
Ari Emanuel	2,380	—	4,470	—	6,850	*
Ping Fu	7,827	—	4,602	—	12,429	*
Jeff Hinson (1)	53,336	—	4,800	200	58,336	*
Chad Hollingsworth	—	—	4,481	—	4,481	*
Jimmy Iovine	24,915	—	4,536	—	29,451	*
Jim Kahan (2)	—	—	4,602	89,921	94,523	*
Greg Maffei	89,091	—	7,299	—	96,390	*
Randall Mays (3)	96,753	—	4,569	38,198	139,520	*
Mark Shapiro	39,145	—	4,646	—	43,791	*
Dana Walden	5,827	—	4,371	—	10,198	*
Michael Rapino	895,657	5,180,202	1,704,277	—	7,780,136	3.48%
Joe Berchtold	45,417	630,121	815,200	—	1,490,738	*
Brian Capo	6,730	5,000	4,625	—	16,355	*
Michael Rowles	140,848	357,288	13,850	—	511,986	*
Kathy Willard	205,648	711,022	47,400	—	964,070	*
All directors, director nominees and executive officers as a group (16 persons) (4)	1,619,250	6,883,633	2,638,165	128,319	11,269,367	5.00%
Liberty Media Corporation (5)	—	—	—	69,645,033	69,645,033	31.85%
The Vanguard Group (6)	—	—	—	15,052,744	15,052,744	6.88%
The Public Investment Fund (7)	—	—	—	12,565,167	12,565,167	5.75%
Canada Pension Plan Investment Board (8)	—	—	—	10,712,583	10,712,583	4.90%
BlackRock, Inc. (9)	—	—	—	10,453,911	10,453,911	4.78%

Table 2: Security Ownership Table

(Source: LYV 2021 Proxy Statement, p.22)

(Percentages based on 218,683,278 shares outstanding.)

Because the company is closely held and the CEO sits on the Board of Directors, the managers may not be as responsive to its shareholders as they might prefer, through governance by board decisions and voting rights, but shareholders can also ‘vote with their feet’ and sell their shares if the managers are incumbent, which will cause the share prices to decrease. The company frequently accesses the financial market by issuing convertible bonds and borrowing. Ratings can be affected making debt financing costly because of corporate governance attributes (S&P Global Ratings, 2019). Additionally, the executive officers and directors are compensated with payments in company shares with the aim to minimize agency problems.

2.2. Conflicts of Interest

Conflicts of interest can arise between various stakeholders of the company (Damodaran, 2015, pp14-32). To some extent, conflicts of interest can be resolved by various measures in place, whether by the company or by law or structurally, and we can observe some of these measures at the company (see Table 3).

Stakeholders	Measures in place at LYV to mitigate conflicts of interest
• Managers and shareholders (Agency Problems)	• Annual Meeting • Oversight by the Board of Directors • Stock Compensation and stock ownership requirements for managers and directors • Activist Shareholders (ex. Pension funds)
• Shareholders and debt holders	• Legal requirements • Debt Covenants • Convertible Bonds • Reputational Risks
• Firm and financial Markets	• Laws on Information Disclosure by SEC • Reputational Risks Further in 2.4 Interaction with Financial Markets
• Firm and society (Environmental and cultural impact, Consumers rights)	• Legislation • Reputational Risks Further in 2.5 Corporate Social Responsibility

Table 3: Conflicts of Interest and Measures for Mitigation

Apart from abiding to all SEC regulations required as a publicly traded company (for example audit requirements on related-persons transactions that may benefit managers and certain stockholders at the expense of other stockholders), the company sets forth the following code of conduct to maintain healthy corporate governance (see Table 4).

What We Do:

✓ Chairman of the Board not a member of management

✓ 10 of 12 current directors independent (and only one, our Chief Executive Officer, is a member of management)

✓ Annual election of all members of our board of directors

✓ Majority voting standard for uncontested director elections

✓ Director resignation policy for directors who fail to receive a majority of votes for re-election

✓ Annual advisory vote to ratify independent auditor

✓ Robust stock ownership guidelines

✓ Regular board self-assessments at both individual and group levels

✓ Committee members (other than Executive Committee) are all independent

What We Don't Do:

× No repricing of underwater stock options without stockholder approval

× No hedging of company securities per company policy

× No pledging of company securities without preapproval per company policy

× No former employees serve as directors

(Source: LYV 2021 Proxy Statement, p.6)

Table 4: Governance Highlights

Despite these measures in place, here are some of the concerns that can cause conflicts of interest between managers and owners:

- 6 out of 12 of the board members have been serving on the board for more than 10 years, making the independence of the directors questionable.
- 5 out of 12 board members currently serve on boards of multiple public companies, and it is questionable whether they are able to spend enough time for oversight. When the CEO also sits on the board, the directors may passively support decisions of managers based on the flow of information controlled by the CEO.
- The largest shareholder of the company, Liberty Media may act in the interest of their group company instead of Live Nation.
- The International Alliance of Theatrical Stage Employees which is a worker's union in the entertainment industry has brought to the shareholders attention, the so called 'poison pill' anti-takeover ammendments and high severance pay of managers in case of a take-over are harming shareholder value (IATSE, 2016).
- Although the company sets forth measures for a sound corporate governance, independence of directors is determined by internal guidelines, and the extent to

how effective these guidelines are is questionable. In June 2021, 2 directors of the board (Ari Emanuel and Mark Shapiro, executives of the talent agency Endeavor) resigned due to possible conflicts of interests which was pointed out by the Department of Justice, after serving on the board for over 10 years. (see citation from source below)

Endeavor Executives Resign from Live Nation Board of Directors Following Antitrust Concerns: On June 21, 2021, the U.S. Department of Justice ("DOJ") announced that two Endeavor Group Holdings executives resigned from the board of directors of Live Nation Entertainment following the DOJ's suggestion that their positions on the board might create an illegal interlocking directorate. An illegal interlocking directorate is when an agent of one company or individual serves as an officer or director of multiple companies and the positions do not fall within a safe harbor specified by Section 8 of the Clayton Act (the "Act"). Safe harbors exist where competitive sales fall under certain thresholds specified by the Act.

Though the DOJ has pursued such enforcement actions relatively infrequently, it also has adopted a broad construction of competition under Section 8. As a result, companies and board members should closely monitor their compliance with the Act.

(Sullivan & Cromwell LLP, 2021)

Conflicts of interest between the firm and markets and society at large can arise as well. This will be discussed in 2.4 Interaction with Financial Markets and 2.5 Corporate Social Responsibility.

2.3. Breakdown of Shareholders

As previously mentioned in section 2.1 Management and Ownership, the company is a publicly listed company on the NYSE and outstanding shares less restricted stock are freely traded on the market, but a large portion of these shares are held by the parent company (Liberty Media) and insiders (directors and executive officers) amounting to approximately 35-40% in total. Table 2 (in section 2.1) lists major shareholders of the company as of April 2021. Based on these numbers, Figure 1 describes the breakdown of the company's ownership structure in percentages.

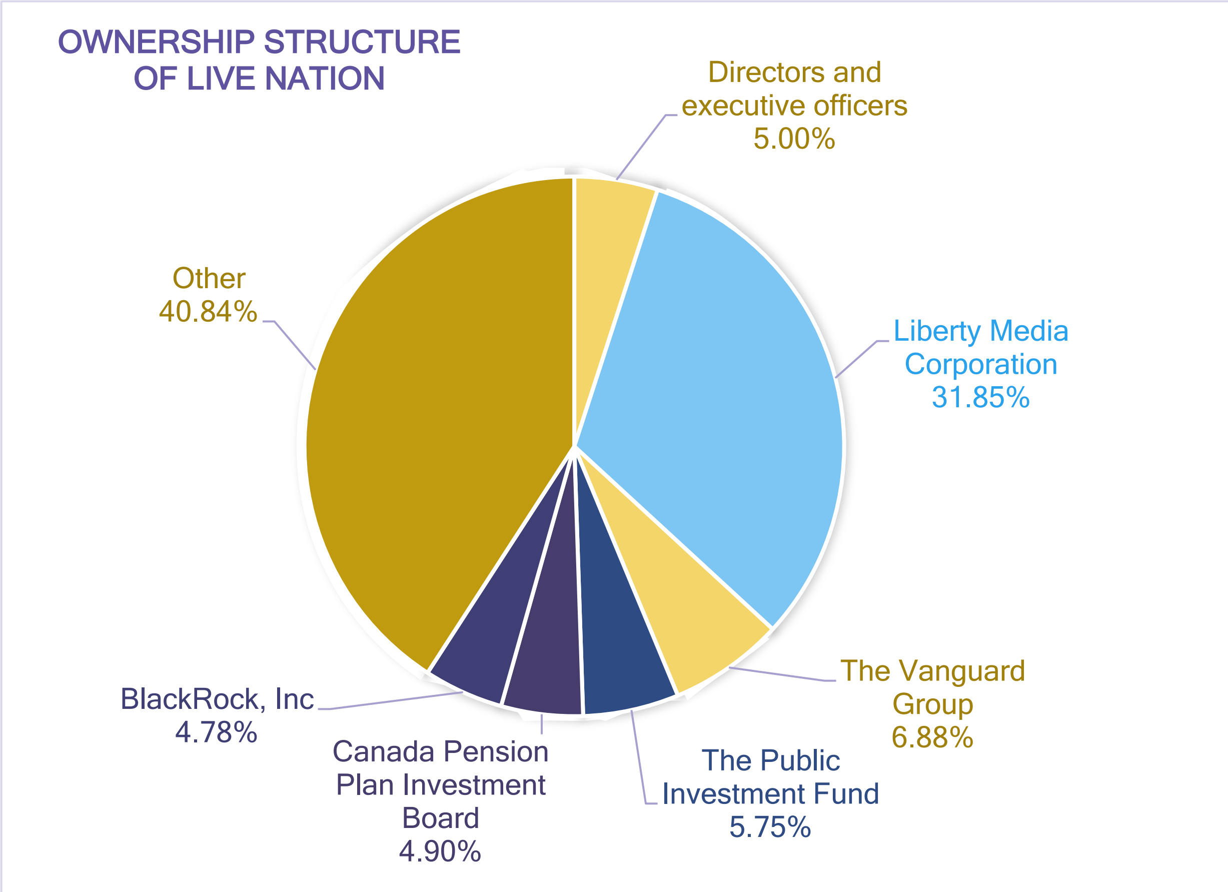


Figure 1: Ownership Structure of Live Nation

(Source: LYV 2021 Proxy Statement, p.22. same as figures from Table 2)

The 'Other' component of the ownership structure is the difference between the total shares outstanding and listed major shareholders. This will be a mix of smaller institutional shareholders and the public. We will use an online source to analyze further the shareholder breakdown structure. Table 4 and 5 shows the breakdown of the shareholders according to an online source.

Major Holders Breakdown

33.05%	% of Shares Held by All Insider
75.05%	% of Shares Held by Institutions
112.10%	% of Float Held by Institutions
801	Number of Institutions Holding Shares

Table 5: Breakdown of Shareholders

(Source: yahoo! finance, 2022)

Top Institutional Holders

Holder	Shares	Date Reported	% Out
Vanguard Group, Inc. (The)	14,807,814	Sep 29, 2021	6.59%
Public Investment Fund	12,565,167	Sep 29, 2021	5.59%
Blackrock Inc.	9,944,267	Sep 29, 2021	4.43%
Canada Pension Plan Investment Board	8,821,547	Sep 29, 2021	3.93%
Price (T.Rowe) Associates Inc	8,805,550	Sep 29, 2021	3.92%
Principal Financial Group, Inc.	7,129,219	Sep 29, 2021	3.17%
State Street Corporation	6,092,426	Sep 29, 2021	2.71%
Melvin Capital Management LP	5,975,000	Sep 29, 2021	2.66%
Amundi	3,676,447	Sep 29, 2021	1.64%
William Blair Investment Management, LLC	3,094,573	Sep 29, 2021	1.38%

Top Mutual Fund Holders

Holder	Shares	Date Reported	% Out
Principal Mid Cap Fund	5,145,441	Oct 30, 2021	2.29%
Vanguard Total Stock Market Index Fund	4,036,391	Sep 29, 2021	1.80%
Vanguard Mid-Cap Index Fund	3,213,069	Sep 29, 2021	1.43%
Vanguard 500 Index Fund	2,767,149	Sep 29, 2021	1.23%
Price (T.Rowe) All-Cap Opportunities Fund	1,995,781	Sep 29, 2021	0.89%
Pioneer Fund	1,947,747	Oct 30, 2021	0.87%
Lord Abbett Securities Trust-Growth Leaders Fund	1,493,537	Oct 30, 2021	0.66%
SPDR S&P 500 ETF Trust	1,393,181	Sep 29, 2021	0.62%
SPDR (R) Idx Shares-SPDR Communication Services Select Sector ETF	1,373,726	Sep 29, 2021	0.61%
Vanguard Explorer Fund, Inc.	1,313,389	Oct 30, 2021	0.58%

Table 6: Top Shareholders

(Source: yahoo! finance, 2022)

2.4. Interaction with Financial Markets

The company accesses the financial market through issuance of common stock, as well as by issuing convertible bonds. Their shares outstanding are publicly traded on the NYSE and investors rely on accurate and timely disclosure of the company's performance figures through financial reporting. As a publicly listed company these reportings are regulated by the US Securities and Exchange Commission (SEC). The company's annual and quarterly reports and all SEC fillings can be found through the SEC or the company's website in the Investor Relations sections.
As an industry leader, the company also issues an industry report called 'The Power of Live study', but these reports are a type of B2B white paper and should be treated as grey literature. Investors may also utilize music industry reports from Nielsen, Deloitte, Goldman Sachs Research, IEG, or Eventbrite, among others, as well as use news and PR sources to inform themselves about industry currents.

Figure 2 describes the historic share prices and numbers of shares outstanding. The increase in shares outstanding in 2010 is a result of the merger. After the merger, the shares outstanding steadily increased from approximately 160 million to 210 million shares. This is assumed to be due to shares issued for employee compensations, and to pay convertible bond holders.
For example (source: LYV 2020 Annual Report):

- During 2020, 2019 and 2018, the company issued 3.2 million, 1.3 million and 2.3 million shares, respectively, of common stock in connection with stock option exercises and vesting of restricted stock awards.
- In 2020, the company issued convertible senior notes worth a total of $950 million, which when fully converted into shares will amount to 11.9 million shares. During 2019, the company issued 0.8 million shares of common stock to holders of 2.5% convertible senior notes due 2019 upon conversion of $28.6 million of the principal amount of the notes.

Shares authorized are at 400 million.

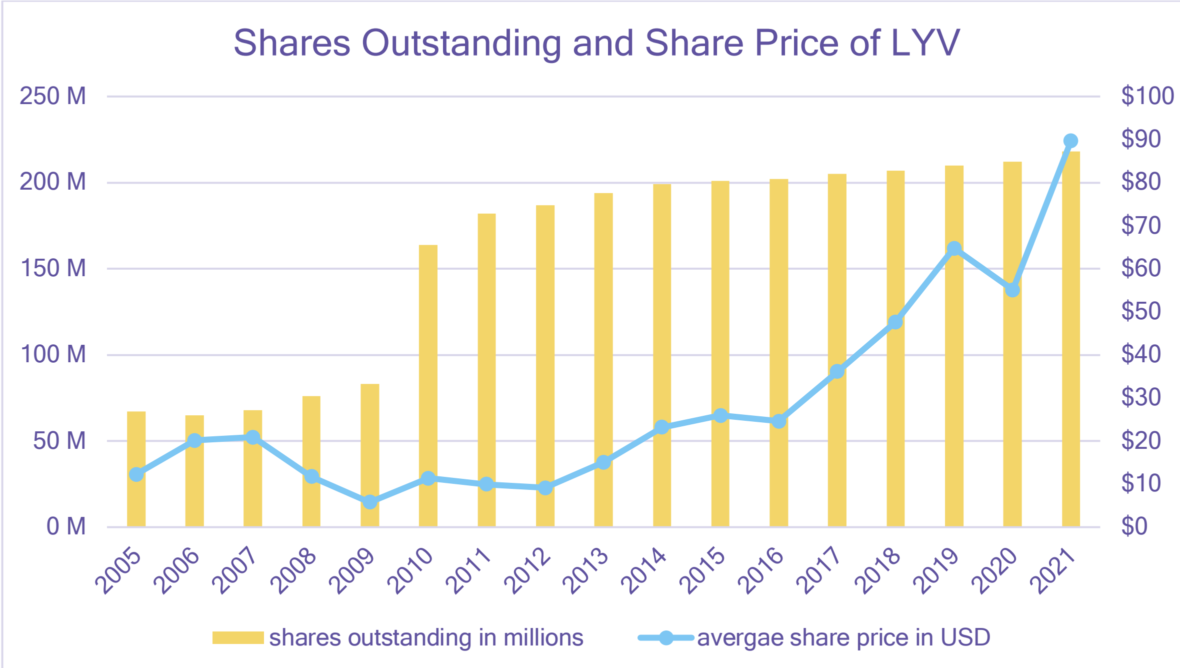


Figure 2: Historic Share Price and Shares Outstanding

(numbers source: macrotrends)

The company also issues senior notes and the company's credit worthiness is rated as below.

Year	S&P Global Ratings	Moody's
2018	BB-	Ba3
2019	BB-	Ba2
2020	BB- to B	Ba3
2021	B	B2
		(Source: Bloomberg Terminal)

Table 7: Credit Ratings

2.5. Corporate Social Responsibility

The company recognizes their social responsibility as a global leader in the live entertainment industry and sets forth internal standards in the fields of environmental, social, and governance aspects of their business (LYV 2021 Proxy Statement). The four main agendas are listed below in Table 8 with select example goals:

Supporting Sustainability GREEN NATION	• 50% reduction of greenhouse gas emissions by 2030 • Ending the sale of single use plastics at all owned and operated venues
Supporting Employees 'Taking Care of Our Own'	• Benefit programs to support personal and professional needs of employees
Supporting Diversity 'Holding ourselves accountable'	• Increasing diversity at every level of the company • Increasing spending with minority-owned vendors
Supporting the Community	• Venue utilization as polling locations and vaccination centers during the pandemic • Providing scholarships for underprivileged youth working with the Music Forward Foundation

Table 8: CSR Initiatives by Live Nation Entertainment

(Source: LYV 2021 Proxy Statement)

Despite these statements from the company, criticism that the company does not uphold their social responsibility is prevalent. Some of the social costs caused by the company can be analyzed from media reports:

- The negative impact of large-scale festivals and tours on the environment causes a concern to the society (Bain, 2013).
- An accident that resulted in multiple deaths (by crowd-crush) of attendees at a concert organized by the company lead to claims that the company did not implement adequate security measures although they were aware of the dangers (Tsioulcas, 2021).
- The company faces accusation of monopolistic behavior by controlling venues' choices of ticket sales and re-sales options by fans, resulting in harsh criticism from artists and fans, and lawsuits in some states (Sisario & Bowley, 2018).

The ESG Score (stands for Environmental, Social and Governance Score) from MSCI was BB which falls under industry average (MSCI, 2022). ESG criteria are an increasingly popular way for environmentally conscious modern-day investors to make investment decisions (Investopedia, 2021) and various agencies are beginning to offer ratings based on their own rating system.

3. MEASURES OF CORPORATE PERFORMANCE

Questions answered in this Chapter:

Prepare common-size balance sheets and income statements for the last two business years.

Calculate the EBIT (earnings before interest and taxes) for last two business years (total and as a percentage of sales).

Calculate Net Working Capital for the last two business years (total and as a percen- tage of sales).

Calculate average tax rate for the last two business years.

Please calculate for your company ROE, ROA, and ROC.

Market Value Added, Market-to-Book Ratio.

All the Efficiency, Profitability, Leverage, and Liquidity Ratios are covered in the lec- ture notes of session 4 as well as the ROA and ROE breakdown.

In the following sections we will look at the company's performance in 2019 and 2020 by analyzing reported figures from the company's 2020 annual report, dated December 31st 2020.

3.1. Financial Statements in Common Size

Below are the Balance Sheet and Income Statement of the company from 2020 and 2019 in common size percentages. In order to analyze the company's performance from the pre-pandemic period, figures from 2018 is included as well.

Some figures needed to be recategorized from the original annual report, as well as some notes to be mentioned are as follows:

- Loss and gain on disposal of assets was originally included in operating income, but the amounts were various over the years, thus it is considered unusual and will be treated as additional expense/income items.
- Operating leases are not included in the Balance Sheet in years prior to 2019, due to difference in accounting standards. If we can assume that the level of operating lease commitments are the same level in 2018 as of 2019, we can use (for simplicity reasons) the amounts from 2019 to calculate book ratios in later sections.

Common Size Balance Sheet (in millions)	Dec. 31, 2020	%	Dec. 31, 2019	%	Dec. 31, 2018	%
Assets						
Cash and cash equivalents	$ 2,538	24.0%	$ 2,470	22.5%	$ 2,372	27.9%
Accounts receivable	$ 487	4.6%	$ 995	9.1%	$ 829	9.8%
Prepaid expenses	$ 577	5.5%	$ 667	6.1%	$ 598	7.0%
Restricted cash	$ 9	0.1%	$ 4	0.0%	$ 7	0.1%
Inventory	$ 22	0.2%	$ 16	0.1%	$ 13	0.1%
Notes Recievable	$ 15	0.1%	$ 35	0.3%	$ 15	0.2%
Other current assets	$ 3	0.0%	$ 6	0.1%	$ 15	0.2%
Total current assets	**$ 3,650**	**34.5%**	**$ 4,193**	**38.2%**	**$ 3,848**	**45.3%**
Property, plant and equipment, net	$ 1,101	10.4%	$ 1,118	10.2%	$ 947	11.1%
Operating lease assets	$ 1,424	13.4%	$ 1,402	12.8%	$ 0	0.0%
Intangible assets						
Definite-lived intangible assets, net	$ 856	8.1%	$ 870	7.9%	$ 661	7.8%
Indefinite-lived intangible assets	$ 369	3.5%	$ 369	3.4%	$ 369	4.3%
Goodwill	$ 2,129	20.1%	$ 1,998	18.2%	$ 1,823	21.5%
Long-term advances	$ 669	6.3%	$ 594	5.4%	$ 421	5.0%
Other long-term assets	$ 391	3.7%	$ 431	3.9%	$ 428	5.0%
Total non current assets	**$ 6,940**	**65.5%**	**$ 6,783**	**61.8%**	**$ 4,649**	**54.7%**
Total assets	**$ 10,589**	**100.0%**	**$ 10,976**	**100.0%**	**$ 8,497**	**100.0%**
Liabilities						
Accounts payable, client accounts	$ 744	7.0%	$ 1,006	9.2%	$ 1,037	12.2%
Accounts payable	$ 86	0.8%	$ 100	0.9%	$ 90	1.1%
Accrued expenses	$ 894	8.4%	$ 1,391	12.7%	$ 1,245	14.7%
Deferred revenue	$ 1,839	17.4%	$ 1,391	12.7%	$ 1,228	14.4%
Current portion of long-term debt, net	$ 53	0.5%	$ 38	0.3%	$ 82	1.0%
Current portion of operating lease liabilities	$ 107	1.0%	$ 122	1.1%	$ 0	0.0%
Other current liabilities	$ 72	0.7%	$ 59	0.5%	$ 67	0.8%
Total current liabilities	**$ 3,797**	**35.9%**	**$ 4,108**	**37.4%**	**$ 3,750**	**44.1%**
Long-term debt, net	$ 4,855	45.8%	$ 3,271	29.8%	$ 2,733	32.2%
Long-term operating lease liabilities	$ 1,446	13.7%	$ 1,374	12.5%	$ 0	0.0%
Long-term deferred income taxes	$ 171	1.6%	$ 178	1.6%	$ 137	1.6%
Other long-term liabilities	$ 183	1.7%	$ 131	1.2%	$ 205	2.4%
Redeemable noncontrolling interests	$ 272	2.6%	$ 449	4.1%	$ 329	3.9%
Total non-current liabilities	**$ 6,926**	**65.4%**	**$ 5,404**	**49.2%**	**$ 3,404**	**40.1%**
Total liabilities	**$ 10,723**	**101.3%**	**$ 9,512**	**86.7%**	**$ 7,154**	**84.2%**
Equity						
Common stock, $0.01 par value	$ 2	0.0%	$ 2	0.0%	$ 2	0.0%
Additional paid-in capital	$ 2,387	22.5%	$ 2,246	20.5%	$ 2,268	26.7%
Accumulated deficit	$ (2,677)	-25.3%	$ (949)	-8.6%	$ (1,019)	-12.0%
Cost of shares held in treasury (408,024 shares)	$ (7)	-0.1%	$ (7)	-0.1%	$ (7)	-0.1%
Accumulated other comprehensive loss	$ (177)	-1.7%	$ (146)	-1.3%	$ (145)	-1.7%
Total Live Nation stockholders' equity	**$ (472)**	**-4.5%**	**$ 1,146**	**10.4%**	**$ 1,099**	**12.9%**
Noncontrolling interests	$ 338	3.2%	$ 318	2.9%	$ 244	2.9%
Total equity	**$ (134)**	**-1.3%**	**$ 1,464**	**13.3%**	**$ 1,343**	**15.8%**
Total liabilities and equity	**$ 10,589**	**100.0%**	**$ 10,976**	**100.0%**	**$ 8,497**	**100.0%**

Table 9: Balance Sheet in Common Size

Common Size P&L Statement (in millions)	Dec. 31, 2020	%	Dec. 31, 2019	%	Dec. 31, 2018	%
Revenue	**$ 1,861**	**100.0%**	**$ 11,548**	**100.0%**	**$ 10,788**	**100.0%**
Operating expenses:						
Direct operating expenses	$ 1,402	75.4%	$ 8,467	73.3%	$ 7,968	73.9%
Gross profit	$ 459	24.6%	$ 3,081	26.7%	$ 2,820	26.1%
Selling, general and administrative expenses	$ 1,524	81.9%	$ 2,145	18.6%	$ 1,997	18.5%
Depreciation and amortization	$ 485	26.1%	$ 444	3.8%	$ 387	3.6%
Corporate expenses	$ 102	5.5%	$ 169	1.5%	$ 153	1.4%
Income from operating activities	**$ (1,653)**	**-88.8%**	**$ 322**	**2.8%**	**$ 283**	**2.6%**
Additional income/expense items:						
Loss (gain) on disposal of operating assets	$ 1	0.0%	$ (2)	0.0%	$ 10	0.1%
Other expense (income), net	$ (17)	-0.9%	$ 2	0.0%	$ 12	0.1%
Equity in losses (earnings) of nonconsolidated affiliates	$ 5	0.3%	$ (5)	0.0%	$ (3)	0.0%
Total expenses	$ 3,503	188.2%	$ 11,220	97.2%	$ 10,525	97.6%
Earnings Before Interest and Tax	**$ (1,642)**	**-88.2%**	**$ 328**	**2.8%**	**$ 263**	**2.4%**
EBITDA	**$ (1,157)**	**-62.1%**	**$ 772**	**6.7%**	**$ 650**	**6.0%**
Interest expense	$ 227	12.2%	$ 158	1.4%	$ 141	1.3%
Interest (income)	$ (12)	-0.6%	$ (14)	-0.1%	$ (9)	-0.1%
Income (loss) before income taxes	$ (1,857)	-99.8%	$ 185	1.6%	$ 131	1.2%
Income tax expense (benefit)	$ (29)	-1.6%	$ 67	0.6%	$ 41	0.4%
Net income	$ (1,828)	-98.2%	$ 118	1.0%	$ 90	0.8%
Net income (loss) attributable to noncontrolling interests	$ (103)	-5.5%	$ 48	0.4%	$ 30	0.3%
Net income (loss) attributable to common stockholders of Live Nation	**$ (1,725)**	**-92.7%**	**$ 70**	**0.6%**	**$ 60**	**0.6%**
Basic and diluted net loss per common share available to common stockholders of Live Nation	$ (8.12)		$ (0.02)		$ (0.09)	
Weighted average common shares outstanding:						
Basic and diluted (in shares)	212,270,944		210,082,696		207,441,468	
Reconciliation to net loss available to common stockholders of Live Nation:						
Accretion of redeemable noncontrolling interests	$ 1	0.0%	$ (75)	0.0%	$ (78)	0.0%
Basic and diluted net loss available to common stockholders of Live Nation	**$ (1,723)**	**0.0%**	**$ (5)**	**0.0%**	**$ (18)**	**0.0%**

Table 10: Income Statement in Common Size

(Figures from Annual Report 2020)

3.2. Basis for Analysis (EBIT, Effective Tax Rate, and Net Working Capital)

Using the figures from the Balance Sheet and Income statements, we will calculate profits and other numbers which will be the basis for further analysis. The results are organized in Table 11.

EBIT

EBIT (Earnings before interest and taxes) is used to analyze the performance of a company's core operations without tax expenses and capital structure costs that distort the profitability analysis (Murphy,2021). In our analysis, the reported operating expenses include Selling, General and Administrative expense, Depreciation and Amortization, and Corporate Expenses. Operating income excludes taxes and interest expenses and is often referred to as EBIT. However, operating income can differ from EBIT, when the company has non-operating income or non-operating expenses (Ibid). Due to the existence of these items, Income from operating activities and EBIT showed a difference, and in further analysis, After Tax Operating Income (or NOPAT: Net Operating Profit After Tax) will be calculated using EBIT and the average effective tax rate.

- *NOPAT = EBIT * (1 – average effective tax rate)*

Average Effective Tax Rate

The average effective tax rate can be calculated by the following formula:

- *Income tax expense / Income (loss) before taxes = 36.14% (in 2019)*

The average effective tax rate at the company is above the industry average of 12.13% (average across money-making companies in the Entertainment industry for January 2020 (Damodaran website)) and above the statutory US corporate tax rate of 21%. This is perhaps due to the international operation of the company, when we analyze effective tax rates with a difference to domestic and foreign income (see table 12). Additionally, the company paid deferred federal taxes in 2019 from past losses, which increased the domestic effective tax rate of that year. In 2020 the company made a loss and recorded a tax benefit amounting to 1.56% of the losses (see table 11).

Net Working Capital

Net working capital is the difference between Current Assets and Current Liabilities. It represents the overall liquid assets the company has for disposal. The company had a negative net working capital in 2020, owing to the effects of the pandemic. The volume of cash refunds for cancelled and postponed concerts had a material negative impact on this figure. Compared to 2019, accounts receivable in current assets are greatly reduced (because sales from tickets decreased due to cancellation) and deferred revenue (ticket sales collected in advance of event) in current liability is greatly increased (because events were postponed).

	2020	2019	2018
EBIT	$ -1,641,570,000	$ 328,219,000	$ 262,120,000
After Tax Operating Income (NOPAT)	$ -1,616,040,174	$ 209,608,784	$ 181,307,050
Average Effective Tax Rate	-1.56%	36.14%	31.09%
Net Working Capital	$ -146,801,000	$ 85,300,000	$ 98,208,000
(as percentage of sales)	(-7.9%)	(0.7%)	(0.9%)

Table 11: EBIT, Effective Tax Rate, and Net Working Capital

Income Taxes and Income by Region (in thousands)	2020	2019	2018
Domestic income tax expense (benefit)	$ (16,081)	$ 11,403	$ 9,223
Foreign income tax expense (benefit)	$ (12,794)	$ 55,489	$ 31,542
Total	$ (28,875)	$ 66,892	$ 40,765
Domestic income before income taxes	$ (1,500,000)	$ 36,100	$ 43,500
Foreign income before income taxes	$ (374,500)	$ 149,000	$ 87,600
Total	$ (1,874,500)	$ 185,100	$ 131,100
Domestic effective tax rate	1.07%	31.59%	21.20%
Foreign effective tax rate	3.42%	37.24%	36.01%
Average effective tax rate	1.54%	36.14%	31.09%

Table 12: Income Tax and Income before Income Taxes by Region

3.3. Book Rates of Return

Returns based on the book values of assets, equity, and capital (ROA, ROE and ROC) are called book rates on return and represents how the company performed in proportion to their balance sheet figures. We will use average book values of year beginning and year end to calculate the rates. For returns, we will use NOPAT (Net operating profit after taxes) for ROA and ROC, and Net Income (also after tax, and attributable to the stockholders) for ROE calculation. The calculation results are organized in Table 12.

ROA

Return on Assets is calculated with the following formula:

- *ROA = NOPAT / Average Total Assets*

This rate gives us information on how efficiently the company utilizes their assets to create profits before the effects of financing. By separating the financing effects from operating effects, we are able to observe a clean measure of return on the assets in place (Damodaran, pA2-8). In 2019 the company had 2.15% returns on each dollar of assets in place.

ROE

Return on Equity is calculated with the following formula:

- *ROE = Net Income / Average Total Equity*

This measure examines the profitability of the firm from the perspective of equity investors, namely the common shareholders of the company (Ibid, pA2-9). Thus, we use Net income attributable to the common stockholders to arrive to the rate.
Equity changed from positive to negative signs in 2020, thus calculations based on negative equity does not represent a meaningful ratio. In 2019, equity investors could expect a 4.98% return on each dollar invested in the company. For comparison, the industry average was 17.7% as of January 2020 (Damodaran website).

ROC

Return on Capital is calculated with the following formula:

- *ROC = NOPAT / Average Total Capitalization*
- *Where, Total Capitalization is the sum of Interest-bearing debt (including current and non-current long-term debt and long-term operating lease liabilities) and Total Equity or,*
- *Total capitalization can also be described as Debt + Equity - Cash*

This measure is useful to analyze the overall returns in relation to the capital that is invested in the company (Idib, pA2-9). The ROC at Live Nation in 2019 was 3.24% which is lower than the ROE because the company has debt. The industry average was 18.6% as of January 2020 (Damodaran website).

Book Rates of Return	2020	2019
ROA (Return on Assets)	-14.99%	2.15%
ROE (Return on Equity)	-259.29%	4.98%
ROC (Return on Capital)	-25.66%	3.24%

Table 13: Book Rates of Return

ROA and ROE Breakdown (The DuPont System)

The ROA and ROE can be broken down into a product of different ratios. The formulas and figures are organized in Table 13. We arrive at the same results as the calculations we conducted earlier, but we are now able to observe the factors that contributed to the profit separately.

Terms	Formula	2020	2019
ROA	Asset Turnover * Operating Profit Margin	-14.99%	2.15%
ROE	Leverage Ratio * Asset Turnover * Operating Profit Margin * Debt Burden	-259.29%	4.98%
Asset turnover	Sales / Assets	17.26%	118.61%
Operating Profit Margin	NOPAT / Sales	-86.83%	1.82%
Leverage Ratio	Asset / Equity	1621.18%	693.79%
Debt Burden	Net Income / NOPAT	106.71%	33.34%

Table 14: Breaking down the ROA and ROE with the DuPont System

[Note: ROC can also be broken down:

ROC =operating profit margin * capital turnover ratio (which is sales/capital)]

3.4. Profitability Analysis by Segment

As we saw in the book rates of return, Live Nation has an underwhelming return to book rates. Next, we observe how the company makes profits in each sector they operate in. These calculations are based on pre-tax Income from operating activities, which excludes additional income and expense items. Corporate expenses have been allocated in proportion to revenues.

The company has three main segments which contribute to raising revenues, which are the Concerts, Ticketing, and Sponsorships & Advertising segments. In usual years, the company has a Pre-tax Profit Margin of 2 to 3%. Although the company loses money in the concerts segment even in pre-pandemic years, the Ticketing segment has a high profitability of double digits, and the revenues from sponsorships and advertising rely on the concerts taking place. The concerts segment has a high variable cost ratio and was able to cut costs when business as usual came to a halt. On the other hand, the ticketing segment has high fixed costs, which resulted in the large losses in 2020.

Operating Profit by Segment			
Total	**2020**	**2019**	**2018**
Revenue	$ 1,861,178	$ 11,547,969	$ 10,787,800
Operating income (loss)	$ (1,653,192)	$ 324,844	$ 272,536
Pre-tax Profit Margin	**-88.8%**	**2.8%**	**2.5%**
Concerts			
Percentages in revenue	79%	82%	81%
Revenue	$ 1,468,433	$ 9,428,094	$ 8,770,031
Operating income (loss)	$ (1,059,245)	$ (203,621)	$ (179,551)
Pre-tax Profit Margin	**-72.1%**	**-2.2%**	**-2.0%**
Ticketing			
Percentages in revenue	10%	13%	14%
Revenue	$ 188,383	$ 1,545,189	$ 1,529,566
Operating income (loss)	$ (624,865)	$ 207,348	$ 176,913
Pre-tax Profit Margin	**-331.7%**	**13.4%**	**11.6%**
Sponsorship and Advertising			
Percentages in revenue	11%	5%	5%
Revenue	$ 203,676	$ 590,274	$ 503,968
Operating income (loss)	$ 30,965	$ 320,869	$ 274,916
Pre-tax Profit Margin	**15.2%**	**54.4%**	**54.6%**

Table 15: Profitability by Segment

3.5. Financial Ratios

In this section various financial ratios of the company are computed. The ratios and formulas are organized in each table. Financial ratios are a useful measure to compare the company's financial performance over time, or with other firms. Where possible we calculated ratios of consecutive years and averages based on year beginning and end, but year 2019 may have been an exceptionally good year, and 2020 the year of the global pandemic was exceptionally bad, thus analysis based on normalized ratios over longer years is recommended.

Market to Book Ratio

	Notes and Formula	2020	2019	2018
Shares Out Standing	As of date of financial reporting	218,015,037	213,709,620	210,326,738
Share Price	Chose opening price for Jan 1 (day after Dec 31st)	$73.37	$72.00	$48.69
Market Capitalization	Shares outstanding * Share price	$ 16.0 B	$ 15.4 B	$ 10.2 B
Market Value Added	Market Cap -book value Equity	$ 16.1 B	$ 13.9 B	$ 8.9 B
Market to Book Ratio	Market Capitalization / book value Equity	(119.59)	10.51	7.63
P/E Ratio (Price to Earnings)	Companies that have no earnings or that are losing money do not have a P/E ratio because there is nothing to put in the denominator.			

Efficiency Ratios

	Formula	2020	2019
Asset Turnover	Sales / Average Total Assets	0.17	1.19
Receivables Turnover	Sales / Average receivables	2.51	12.66
Inventory Turnover Ratio	Cost of Goods Sold / Inventory year beginning	87.07	673.33
Average Days in Inventory	Inventory year beginning / (CoGS/365)	4.19 days	0.54 days
Average Collection Period	Recievables year beginning / (Sales/365)	195.05 days	26.21 days

*Live Nation is a service company and does not have CoGS. In a service company, CoGS is equivalent to cost of revenue. We used Direct operating expenses for cost of revenue.

Profitability Ratios

	Formula	2020	2019	2018
Net Margin	Net Income / Revenue	(98.21%)	1.02%	0.84%
After Tax Operating Margin	NOPAT / Revenue	(86.83%)	1.82%	1.68%
Operating Profit Margin	Operating Income/ Revenue	(88.83%)	2.81%	2.53%
Gross Margin	Gross profit / Revenue	24.65%	26.68%	26.14%

*Live Nation has a high Gross Margin compared to their low Operating Margin, meaning they have high fixed costs. This can indicate that there is room for growth in the operating margin, and economy of scale will come into play when they expand their business (Damodaran, 2020). The live music industry is highly segmented where the majority of concert promoters are small scale and regional. The company is a giant in this industry consolidating operations and taking advantage of their national network to acquire national scale sponsors and advertisers.

Leverage Ratios

	Formula	2020	2019	2018
Debt to Capital Ratio	Interest bearing Debt / (Interest bearing Debt + Equity)	1.02	0.77	0.80
Debt to Equity Ratio	Interest bearing Debt / Equity	(48.31)	3.28	3.97
Total Debt Ratio	Total Liabilities / Total Assets	1.01	0.87	0.84
Times Interest Earned or Interest Coverage Ratio	EBIT / Interest Payments	(7.24)	2.08	1.87
Cash Coverage Ratio	EBIT+Depreciation / Interest Payments	(5.10)	4.90	4.61

*Debt includes current and non-current long-term debt, and operating lease liabilities.

Liquidity Ratios

	Formula	2020	2019	2018
Current Ratio	current assets/ current liabilities	0.96	1.02	1.03
Quick Ratio	(cash + marketable securities + A/R) / current liabilities	0.80	0.85	0.86
Cash Ratio	(cash + marketable securities) / current liabilities	0.67	0.61	0.64
Net Working Capital to Total Assets Ratio	Net Working Capital / Total Assets	(0.01)	0.01	0.01
Times Interest Earned or Interest Coverage Ratio	EBIT / Interest Payments	(7.24)	2.08	1.87
Cash Coverage Ratio	EBIT+Depreciation / Interest Payments	(5.10)	4.90	4.61

4. RISK PROFILE

Questions answered in this Chapter:

What is the risk profile of your company? How much overall risk is there in this firm? Where is this risk coming from (market, firm, industry or currency)? How is the risk profile changing?

Investors in a company, whether an equity investor or a debt financer, will face risks from investing in the company. In this section, we will analyze current risks that the company faces from both quantitative and qualitative perspectives.

4.1. Beta Calculation

Betas represent the volatility of the returns of a company's stock prices and dividends from the overall stock market performance. A beta higher than 1 means that the returns are more volatile compared to the changes in the entire market average. A beta lower than 1 means these stocks have less risk than the average, and a beta of 0 indicates a risk less asset, a minus beta indicates that those stocks move against the average and will act as a hedge.

Betas are a result of the riskiness of projects the company invests in, and the riskiness of the environment surrounding their business such as industry and regions. Cost structures will also affect the riskiness of a company, where high fixed costs lead to high profits in an upside, but large losses in a downside. The amount of debt a company has, has the same effect on betas as a fixed cost because interest payments are a fixed cost. Therefore, we need to differentiate betas between levered betas which accounts for debt, and unlevered betas which does not include the effect of financing structures.

Regression Beta

The regression beta is derived from the company's historic stock performances. According to Bloomberg, the 5-year daily regression beta as of December 2020 for LYV was 1.24 with a standard error of 0.06. Bloomberg does not include dividends in their regression calculation (Damodaran, youtube), which may cause a problem when dividends are high (for example in REITs where law mandates a dividend payout), but in most companies the dividend payout is minor, and in the case of Live Nation the company has never paid out a dividend since its conception. The regression beta is a levered beta that accounts for the debt structures of the company and also includes country risk that comes from the countries where Live Nation operates in.

Bottom-up beta

Regression Betas can change depending on which period is chosen and can be noisy so we will calculate a bottom-up beta, but since our standard error for the regression beta was low, we should be able to expect a similar result.

Cost structures and sensitivity to macroeconomic conditions tend to be similar for businesses operating in the same industry. Due to this we can use industry averages weighted by the company's different business segments to arrive at a bottom-up beta. As previously mentioned, the amount of debt that a company has will have similar effect on beta as fixed costs have, but financing structures can vary within companies in the same industry. Therefore, industry average betas need to be unlevered before comparison to calculate a bottom-up beta. For Industry Averages, we used a data set of unlevered industry average betas collected by Aswath Damodaran (see Table 16).

The company's operating segments were organized as follows:

Segment	Industry	Global Industry Average Beta unlevered (2016–2021)	US Industry Average Beta unlevered (2016-2021)
Concerts	Entertainment	1.07	1.03
Ticketing	Information Services	1.09	0.94
Sponsorships and Advertisement	Advertisement	0.95	0.83

Table 16: Unlevered Beta Industry Averages, Global and US
(Source: Damodaran Website, January 2021)

According to the annual report, 36% of the company's revenues are foreign, therefore we used US and Global Industry average industry unlevered betas weighted by the different segments of the company's estimated value, weighted by origin of revenue, and calculated an unlevered beta of 1.029. Finally, we accounted for the debt-to-equity ratio (we used market value of both components) and arrived at a levered bottom-up beta of **1.296**.

Industry averages of Unlevered Beta and Estimated Value (EV) to Sales Ratios are from Damodaran Website

Multi Business (US Industry Averages)				
Industry	**Revenues at LYV** In thousands	**EV/Sales Ratio** (Industry Averages)	**Estimated Value** In thousands	**Unlevered Beta US**
Entertainment	$9,099,062	6.8090	$61,955,474	1.03
Information Services	$1,573,377	10.5436	$16,589,126	0.94
Advertising	$547,121	1.8280	$1,000,123	0.83
Total	$11,219,560		$79,544,723	**1.01** Weighted for LYV

Multi Business (Global Industry Averages)				
Industry	**Revenues at LYV** In thousands	**EV/Sales Ratio** (Industry Averages)	**Estimated Value** In thousands	**Unlevered Beta Global**
Entertainment	$9,099,062	5.4349	$49,452,264	1.07
Information Services	$1,573,377	9.6657	$15,207,745	1.09
Advertising	$547,121	1.7077	$934,313	0.95
Total	$11,219,560		$65,594,321	**1.07** Weighted for LYV

Table 17: Bottom-up Beta Calculation

The beta of the company is well above 1, and we can conclude that the company is riskier than the market average from a quantitative perspective based on past performance.

4.2. Qualitative Risk Factors and Outlook

Now that we have analyzed the company's risk from a historic performance perspective and the industry averages, we will analyze the riskiness of the company from a qualitative perspective.

Commodity price and Competition risk – market risk

Concerts can be considered a consumer discretionary service that is typically more influenced by market upsides and downturns, and the company's performances in the Ticketing segment are expected to correlate. Target audiences are youths with disposable income, of which spending may be affected by their parents' incomes.

Although the live music industry competes with other formats of entertainment, demand for live music has stayed resilient, and commodity price risk is fairly low because the company has a great ability to control ticket prices from their dominant position in the market, and through vertical integration of the ticketing segment. Advances in the informatic technology in the ticketing industry is enabling concert promoters to skim the market, pricing tickets at the maximum possible price an audience would likely pay. In fact, ticket prices for concerts have outpaced inflation rates by far in the last two decades (Shaw, 2019). On the other hand, these increases in ticket prices may also come from a place of necessity (ibid). Artist fees are increasing in the context of disruptions seen in the music industry caused by streaming, where a top artist may generate of 90% of their earnings from touring (Goldman Sachs Research, 2020), and total performance rights fees in the United States almost quadrupled in the last two decades from 0.6 billion dollars in 2001 to 2.3 billion dollars in 2020 (IFIP, 2021). The company faces intense competition with numerous promotors and management companies. To avoid losing top artists to competitors, the company concludes long term contracts with some spanning over 10 years, as well as multiple tour contracts. This may be a risk factor when an artist loses popularity, or an artist fails to commit to their contractual obligations. The company has cancellation insurance policies in place to cover a portion of losses if an artist cancels a tour, but such policies may not be sufficient and are subject to deductibles (LYV 2020 Annual Report).

Advertisement fees are also a typical corporate discretional spending, which will be affected by market up-sides and downsides. Although, compared to consumer discretionary, contracts with sponsors tend to be long term, and spending may be more stable than the concert sector. As we saw in section 3.4 Profitability Analysis by Sector, the Advertisement and Sponsorship segment owing to low fixed costs and relatively stable revenue, was the only segment which had positive earnings after the effects of the pandemic.

Unprofitable events – industry specific risk, project risk

In general, under guaranteed payment formulas, promoters assume the risks of unprofitable events. Promoters may renegotiate lower guarantees or cancel events because of insufficient ticket sales in order to reduce their losses. Promoters can also reduce the risk of losses by entering into global or national touring agreements with artists and including the right to offset lower performing shows against higher performing shows on the tour in the determination of overall artist fees (LYV 2020 Annual Report). With increasing data collected through social media activities and online ticketing, we can say that the company is better equipped in estimating ticket sales volume as well as adjusting ticket prices to skim the market demand. Nevertheless, not all concerts will be sold out and unprofitable events are an eminent risk factor of the business.

In the wake of the global pandemic beginning in 2020, the company had to cancel most shows in order to comply with public safety regulations. Event cancellation insurance cannot cover such economy wide risks.

Legal Risk – firm risk

The merger between Live Nation and Ticket Master resulted in a vertical integration of the value chain creating strong synergy, but over concerns of violation of Anti-Trust Laws, the Department of Justice has ordered a consent decree to the company on how the company may operate to prevent monopolistic behavior. The New York Times has reported that the company faces multiple accusations of violation of this decree, in how the company restricts venues' choice of ticketing services using their stronghold on managing artists (Sisario & Bowley, 2018). Multiple lawsuits are ongoing, but analysts predict that this type of monopolistic behavior is difficult to prove, and legal risk is low (Motely Fool Staff, 2018). When a legal decision resulting in orders to dismantle the company is issued, this can have a substantial negative impact on the company's value.

Lawsuits from accidents, legal liabilities, and reputational risk

A fatal accident killing 10 attendees and injuring hundreds at a festival run by the company in 2021 resulted in multiple lawsuits filed for the company's liability in the mismanagement of the event. The news caused stock prices to decrease 4% in one day (Tsioulcas, 2021). This kind of accident and incident is not a sole case, and reports claim that over the past 15 years there have been 200 deaths and 750 injuries connected to the company (Ibid). Apart from incidents where the company is liable, holding mass events are in threat of terror attacks, mass shootings, felonies relating to underage drinking and drug usages and the company faces reputational risk from association.

Foreign operations – Country risk and Currency risk

The company's strategy is based on global expansion, acquiring subsidiaries in Brazil, Japan, Europe, and other major music markets (Annual Report 2020). Therefore, the company faces risks from each region's macroeconomic and political climate as well as risk from fluctuation in currency values.

According to the annual report, the financial results of the foreign operations are measured in local currencies. The company's foreign subsidiaries also carry certain net assets or liabilities that are denominated in a currency other than that subsidiary's functional currency. As a result, the financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which they have operations. Currently, the company does not have significant operations in any hyper-inflationary countries. The company primarily uses forward currency contracts, in addition to options, to reduce exposure to foreign currency risk associated with short-term artist fee commitments. They also utilize forward currency contracts to minimize the risks and costs associated with changes in foreign currency rates on forecasted operating income (ibid).

5. STOCK PERFORMANCE PROFILE

Questions answered in this Chapter:
What return would you have earned investing in this company's stock? Would you have under- or outperformed the market? How much of the performance can be attributed to management?

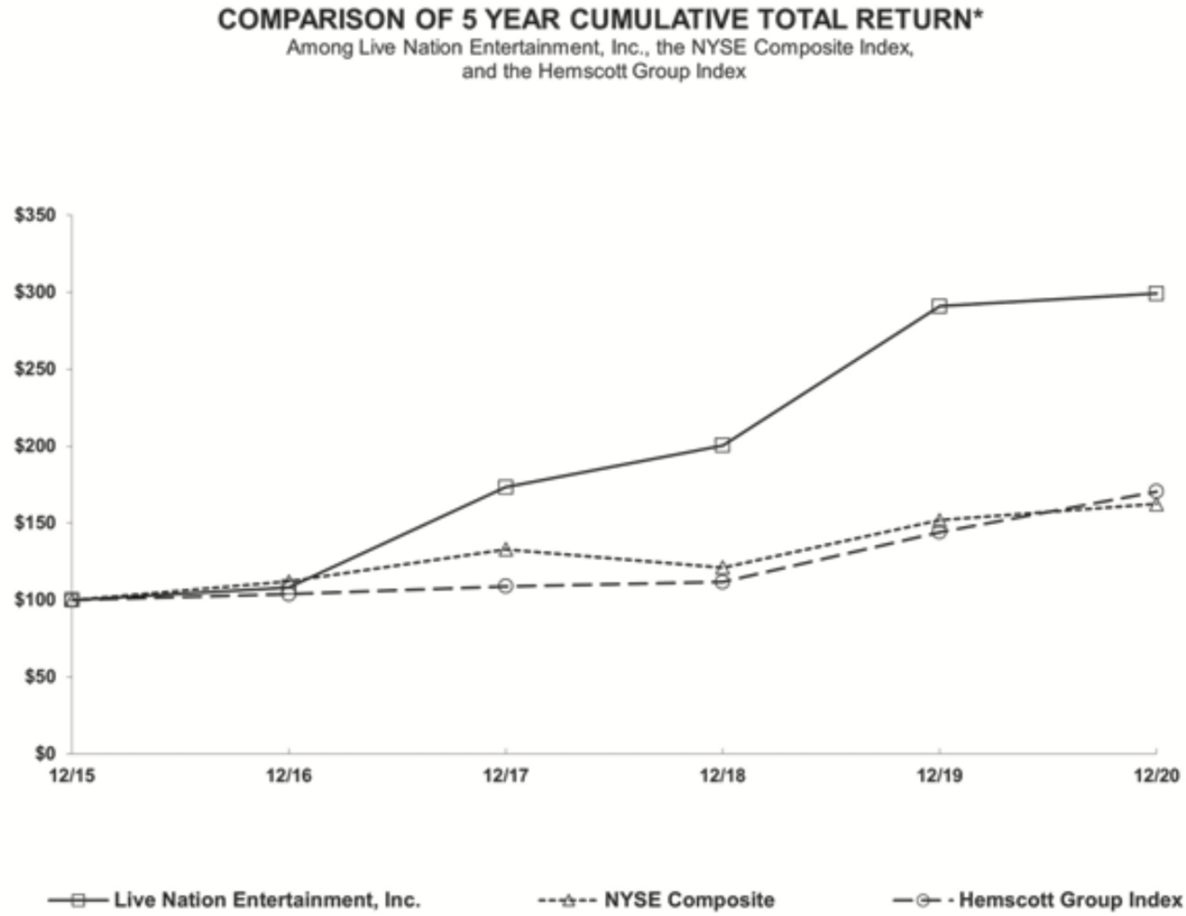
The expected return of an investor is determined by the riskiness of the investment, in which case of a company can be quantified as the beta on top of the Risk-free Rate and Market Risk Premium, as we have calculated in the previous section. This expected return is also called the Cost of Equity, and will be the hurdle rate for an investor in a company stock with the associated riskiness. Investors can compare this expected return to the actual returns of the company to judge how well the stock performed.

Figure 3 indicates the 5 year cumulative returns on $100 invested in the company's stock and comparable indices. The company's stock prices nearly tripled in this period (see also Figure 2 Historic Share Price and Shares Outstanding), while the composite of the NYSE increased around 1.6 times. The Internal Rate of Return for these investments if an investor bought shares 5 years ago and sold them in 2020, were 24% for LYV and 10% for the NYSE composite (see Table 18), and both are higher than the respective hurdle rates (See Table 19 Rates employed for calculations in Cost of Capital).

We must take into account the riskiness of the investments, in order to compare performances on an equal footing. In order to conduct this risk-adjusted performance analysis, we will utilize the Treynor Ratio (cf. Kenton, 2020) described by the formula:

- *Treynor Ratio = (Portfolio Returns + Risk-free Rate) / Beta of the portfolio*

A higher Treynor ratio indicates better performance, with risk considered. The Treynor ratio for LYV was higher compared to the NYSE index (see Table 18) and thus we can say that the company's stock outperformed the market. Part of this outperformance can be attributed to the management, but some may attribute from the specific industry they operate in, and this can be analyzed by comparing Treynor ratios of the company to other similar companies and industry averages (which will not be covered in the scope of this report).



	12/31/15	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20
Live Nation Entertainment, Inc.	$ 100.00	$ 108.26	$ 173.26	$ 200.45	$ 290.88	$ 299.06
NYSE Composite	100.00	111.94	132.90	121.01	151.87	162.49
Hemscott Group Index	100.00	103.74	108.96	111.65	144.06	170.49

Figure 3: Returns on $100 invested in stock or index including reinvestment of dividends

(source: Annual Report 2020)

Based on returns on $100 invested in December 2015	**LYV**	**NYSE Composite**
Internal Rate of Return of Portfolio after 5 years	24%	10%
Risk Free Rate	2%	2%
Beta (using bottom-up levered)	1.296	1
Treynor Ratio = [(Returns – Risk Free Rate) / Beta]	0.17	0.08

Table 18: Calculation of the Treynor Ratio

6. COST OF EQUITY, DEBT AND CAPITAL

Questions answered in this Chapter:
What is the company's cost of equity?
What is the company's cost of debt?
What is the company's current cost of capital?

Cost of equity, debt and capital is useful in making financial decisions. In these calculations, we begin our analysis from book value of debt and leases as of recent (December 2020) but used normalized earnings and effective tax rates of the company using pre-pandemic figures of 2019 and 2018. This is assumed plausible because the level of debt and leases stayed constant and did not drastically change in one year of recession. Betas are derived from the past 5 years during 2015 January to 2020 December. The figures and results are organized in Table 19 and 20.

6.1. Cost of Equity

The cost of equity is the hurdle rate that equity investors require from investing in the company. We will apply the Capital Asset Pricing Model (CAPM) to estimate the cost of equity. We used long term returns on US Treasury Bond yields to estimate a Risk-free Rate, and the US Market Risk Premium for 2020, both figures as analyzed by Credit Suisse. The Beta we used is the bottom-up beta we calculated earlier, which includes the risk from regions the company operates in. The Company has approximately 36% of revenues originating in non-US countries, but because the beta includes this risk, we will not be adding a country risk premium from global operations. The formula for calculating the cost of equity with the CAPM is:

- *Cost of Equity = Risk-Free Rate + Market Risk Premium * Beta*

6.2. Cost of Debt

The cost of debt is the risk that debt investors are willing to take when investing in the company, or from the company perspective, the hurdle rate necessary for investments completely financed by debt. The formula is:

- *Pre-Tax Cost of Debt = Risk Free Rate + Default Spread*
- *After Tax Cost of Debt = Pre-Tax Cost of Debt * (1 - Effective Tax Rate)*

6.3. Cost of Capital

The cost of capital is the basis for the hurdle rate for the projects that the company invests in. It is the average of cost of equity and cost of debt, weighted by the market value of each component.

The formula for calculating Market Value of Equity is:

- *Market Value of Equity = Share Price * Shares Outstanding*

The formula for calculating Market Value (MV) of Debt is as follows:

- *MV of Debt = MV of Straight Debt + Operating Leases as Debt*
- *MV of Straight Debt = C [(1 – (1/ ((1 + KD) ^t)))/Kd] + [FV/ ((1 + Kd) ^t)]*
  Whereas:
  C= Interest expense
  Kd = pre-tax cost of debt in percentage
  t= weighted average maturity in years
  FV= the total debt
- *Operating Leases as Debt = Sum of [Lease Commitments / (1+Kd) ^ time due]*

	Figures	Note Timing is dec.2020/jan.2021
Risk Free Rate	2.00%	Long term returns of US treasury bonds (Credit Suisse, 2021)
Default Spread	3.78%	Based on actual B2/B Rating
Pre-Tax Cost of Debt	5.78%	Risk Free Rate + Default Spread
After-Tax Cost of Debt	**3.83%**	Using tax rate of 33.62% (normalized effective tax rate from 2019 and 2018)
Market Risk Premium	4.40%	US equity returns relative to bonds (Credit Suisse, 2021)
Beta	1.296	Bottom-up Beta, levered
Cost of Equity	**7.70%**	Risk Free Rate + Market Risk Premium*Beta

Table 19: Rates employed for calculations in Cost of Capital

	Market Value as of Dec.31.2020	Component Ratio	Cost of Component
Equity	$ 16 Billion	71.92%	**7.70%**
Debt (Including Operating Leases)	$ 6.2 Billion	28.08%	**3.38%**
Capital	$ 22.2 Billion	100.00%	**6.62%**

Table 20: Cost of Equity, Debt and Capital

In the consequent sections, we will be paying attention to these rates. In Section 7 Projects, investment decisions need to be made so that returns from projects will satisfy the hurdle rate of the company's capital. In section 8 Financing Profile and Optimum Debt Ratio, we will use these rates to analyze the company's optimal debt ratio through the Cost of Capital Approach.

7. PROJECTS

Questions answered in this Chapter:

Is there a typical project for your company (e.g. a drug for a pharmaceutical compa- ny)? If yes, what does it look like in terms of life (long term or short term), investment needs and cash flow patterns?

How good are the projects that the company has on its books currently?

Are the projects in the future likely to look like the projects in the past? Why or why not?

Live Nation's main operating segment is the Concerts segment, where they raise approximately 80% of their revenues through the promotion and/or production of concerts and tours as a promoter, as avenue operator, and as a festival promoter. The other segments' revenues are in conjunction with the projects the company undertakes as a concert promoter, and so we will analyze projects in the Concerts segment. Additionally, Live Nation owns and operates multiple venues and as a venue operator, and where the company owns the venue, the company invests in capital expenditure projects.

7.1. Concerts and Touring Projects

Project Life and Cash Flow Patterns

For music tours, two to nine months typically elapse between initially booking artists and the first performances (LYV 2020 Annual Report). In general, the music industry is influenced by fast paced changes in trends and consumer preferences, so the projects in the Concerts segment are likely to be short term (with the exception of multiple year tour contracts applicable to only a handful of top artists). On the other hand, Festivals can have a longer project life, where on-going festivals around the world can continue for decades, but they are also an annual venture.

Production costs of an event (Direct operating expenses) such as artist fees, event production costs, and advertising expenses are all recognized when the event takes place (Ibid), but the timing of cash flows may differ.

Artist fees can be either fixed or a percentage of sales by contract, and the timing of payments will also depend on the contract. Artist fees are increasing (for reasons previously mentioned in section 4.2 Risk factors), and the sum and timing of payments will be a negotiating factor with artists. This will perhaps be one of the largest cash outflows in the project.

When tickets are sold, ticketing company receives the cash for the ticket sales and related service charges at the time the ticket is sold and periodically remits these receipts to the venue and/or promoter after deducting its fee (Ibid).

The company has labor costs throughout the project for full time employees, but most of the production costs and labor costs for seasonal workers will be paid on the day of the event or shortly after. With the exception of some upfront costs and artist advances, which are recorded in prepaid expenses until the event occurs, the company pays the majority of event-related expenses at or after the event (ibid).

After the event Ticket refunds may result in a cash out flow. The timings of these investments needs are organized in Table .

Time/Phase (Total 2 to 9 months)	**Booking phase**	**Ticket sales period**	**Day of Event**	**After Event**
Recognition	Labor costs for employees (on-going for all phases)	Advertisement costs	Ticket sales revenue All related costs (direct operating expenses)	
Cash flow	Out -Fixed Fee Guarantee to artists Out -Venue Rental Advances Out -Labor costs for employees	In -Ticket Sales Remittance Out -Advertisement Fees (period cost) Out -Advances on stage costs	Out -Production expenses such as sound and light, Venue rental fees Out -Labor costs for seasonal staff	Out -Ticket Refunds if any Out -Artist Fee if based on percentage of ticket sales Out – Remaining production expenses and labor costs

Table 21: Timing of Cash Flows for a typical project at Live Nation

Assessment of Current and Future Projects

The company currently has approximately 577 million dollars of prepaid expenses of which the majority relate to event expenses including show advances and deposits and other costs directly related to future concert events, and worth of approximately 2.4 million dollars of minimum payments associated with non-cancelable contracts related to operations, such as artist guarantees and client ticketing agreements (ibid). These projects on book rely on future events taking place, and the longer the concerts are postponed due to pandemic regulations, audiences' tastes may have changed, artist popularity declined, and may not create as much revenue as initially expected. On the other hand, pent-up-demand may cause favorable ticket sales once the concerts are able to take place.

The business model for live music promotions will likely look similar in the future. But as mentioned previously, the music industry experienced a major disruption in music distribution formats and the significance of tours and concerts in the industry increased. Future concerts and tours may reflect this shift further, where artists depend more and more on live events for earnings and will demand a higher fee. Online formats such as live-streaming might also become a staple in the future live music industry. In these formats the company will face increased competition as the entry barrier is lower. In these future online format projects, the investments and profits of the project may look rather different.

7.2. Capital Expenditure Projects

Project Life and Cash Flow Patterns

The company owns major venues such as amphitheaters and clubs, and construction and maintenance of these properties require capital expenditures. The ticketing sector is also a capital-intensive business, requiring continual investment in order to address fan and artist expectations, technological industry advances and various federal, state and/ or local regulations (Annual Report, 2020). The life term of these projects can be much longer, relative to the economic life of the building or technology. Investments in these projects will also require a rate of return that will satisfy the company’s (or the respective project’s) cost of capital. Cash flow from these investments will incur at the time of the investment but will be depreciated over consecutive periods that match the economic life of the investment. The company also notes that capital expenditures typically increase during periods when venues are not in operation since that is the time that such improvements can be completed (ibid).

Assessment of Current and Future Projects

Venue operations will likely look similar in the future, but energy efficiency may be a factor where future property management may require increased attention and resources. The ticketing sector belongs to the digital economy, thus have high fixed cost structures. Future projects will likely have similar structures.

8. FINANCING PROFILE AND OPTIMUM DEBT RATIO

Questions answered in this Chapter:

What are the different kinds or types of financing that your company has used to raise funds? Where do they fall in the continuum between equity and debt?

How large, in qualitative terms, are the advantages and disadvantages to this company from using debt?

From the qualitative trade off, does this firm look like it has too much or too little debt?

Based upon the cost of capital approach, what is the optimal debt ratio for your firm?

What type of financing should this firm use? Should it be short term or long term? What currency should it be in?

What special features should the financing have?

8.1. Financing Structure, Advantages and Disadvantages

The company raises funds through issuance of common stock (equity), revolving credit facilities and senior notes (debt), and convertible bonds which fall under the continuum of equity and debt (mezzanine). Operating leases and capital leases are also incorporated which are considered debt. The current debt to capital ratio is approximately 28.1%.

According to Damodaran (Damodaran, 2015), financing the company with debt has many advantages, for one that debt investors usually have no say in management, and because they require less returns compared to equity investors, cost of capital will be lower creating a leverage effect, and tax benefits on interest payments up to a certain deductible limit will be beneficial. Where tax rates are high as well as earnings, advantages from tax deduction on interest payment will be high. Additionally, from a behavioral perspective, having debt adds discipline to management because of the risk of bankruptcy, especially when a large portion of the company is held by insiders this aspect may be useful.

Disadvantages to using debt is the risk of bankruptcy, as well as perceived bankruptcy costs. Companies with unstable earnings will have higher probability of bankruptcy and should usually borrow less. Agency costs will arise between debt investors and equity investors, and when the conflict of interest is high the burden is borne by the company as a form of higher cost of debt. This is why credit rating agencies consider the corporate governance structure of a company in their ratings. Another disadvantage to having a high debt ratio is the loss of flexibility for future funding needs.

When the firm value is harmed, risk of takeovers exists because potential investors can lend cash at the lower bank rate to buy cheap stocks. A high debt ratio will also lead to low interest coverage ratios, affecting the credit ratings of the company which will lead to increased interest rates. Therefore, although debt has its advantages, too much debt will harm firm value and increase the overall cost of capital.

Drawing from these advantages and disadvantages of debt, the company has a large portion of insiders and having debt may add discipline to the management, but because of the risky nature of the business, probability of bankruptcy is fairly high, and the company should maintain flexibility for future needs and opportunities. Live Nation has been seeing positive revenue growth in the past decade, in recent years they have recorded double digit revenue growths and can be seen as a company in their rapid expansion or high growth phase. Companies in their early phases of the company lifecycle compared to mature firms should have a lower debt ratio, because their earnings are not high or they are volatile. Live Nation has positive revenue growth but their earnings are still low, and tax deductible interest rates are limited to 30% of EBITDA in the USA since 2017. If the company was basing their financing decisions on a higher tax deductible interest rate prior to this regulation, the company should gradually decrease their debt ratio, or increase earnings to reap the benefits of the interest rate deductibles.

8.2. Optimum Financing Mix

In this section we will calculate the cost of capital and firm value at different levels of debt ratio. Increasing the debt ratio will cause interest payments to increase, affecting interest coverage ratio, that will affect the credit ratings of the company. The cost of debt will rise, as well as the cost of equity because the beta is levered based on levels of debt. Table 22 and Figure 4 organizes the results of the cost of capital and firm value estimation based on different levels of debt.

The current debt to equity ratio at the company is approximately 28%. Based on the cost of capital approach, the Cost of Capital was lowest around 22% debt ratio, maximizing Firm Value. The company is slightly over levered and will face bankruptcy threats as their debt ratio increases further.

D/(D+E)	Cost of Equity	After tax Cost of Debt	Cost of Capital	Firm Value in Billions
0%	6.53%	1.77%	6.53%	$ 20.12
10%	6.86%	1.77%	6.35%	$ 20.93
20%	7.28%	2.18%	6.26%	$ 21.39
22%	7.38%	2.18%	6.23%	$ 21.52
24%	7.48%	2.38%	6.25%	$ 21.41
26%	7.58%	2.61%	6.29%	$ 21.23
28%	7.70%	3.83%	6.62%	$ 19.74
30%	8.09%	8.70%	8.27%	$ 14.53
40%	9.17%	11.18%	9.97%	$ 11.42
50%	10.71%	15.07%	12.89%	$ 8.37
60%	12.88%	15.28%	14.32%	$ 7.39
70%	16.51%	15.43%	15.76%	$ 6.62
80%	23.76%	15.55%	17.19%	$ 6.00
90%	45.53%	15.63%	18.62%	$ 5.48

Table 22: Optimal Debt to Equity Ratio based on Cost of Capital Approach

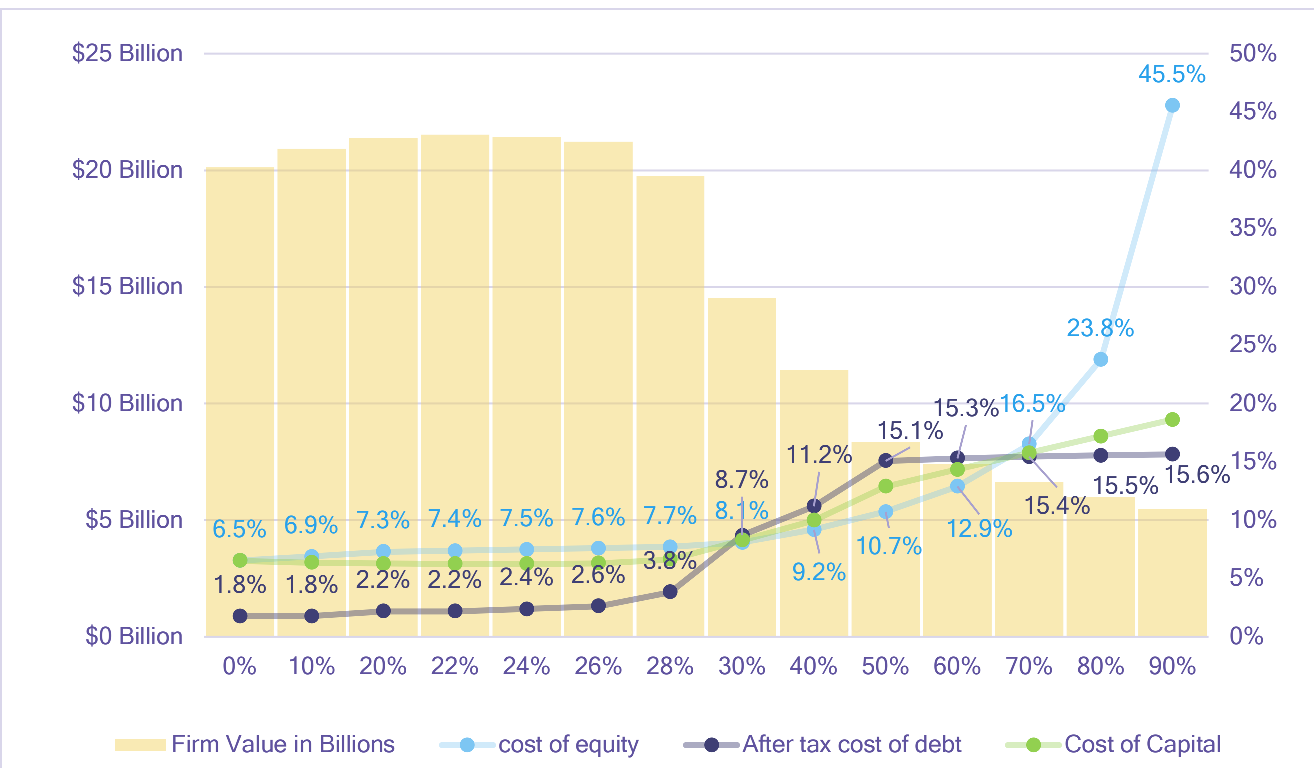


Figure 4: Firm Value based on WACC at various levels of Debt

The type of financing the company should use, should match the duration of projects the company invests in and the currency the company's cashflows are in, as well as the nature of business the company is engaged in (Damodaran, 2015). The company's main revenue segment is the concert business where project durations are short term, thus the company should use debt with duration matching this short term nature. 36% of the company's operations are foreign, thus 64% of the company's debt should be in US dollars, and the remaining in the currency of the foreign operations. When the company's operations face a lot of uncertainty or risk from inflation, a floating rate debt is preferred to a fixed rate. Live Nation's operations face uncertainties, but ticket prices have been increasing much faster than inflation and may not be affected as much by macroeconomic conditions, so I believe that a fixed rate debt is a better choice. From the high growth pattern of Live Nation, the use of convertible bonds is a suitable type of debt, because rates are lower and there is lower risk of bankruptcy because the company can pay back the debt by issuing equity. Because the company has a low credit rating, and is considered a risky business, in order to obtain a low interest rate, it is advisable to add measures to protect bondholders such as covenants and puttable options. This will reduce the flexibility of the company but will make cost of financing cheaper.

9. SUMMARY AND REFLECTION

Coming to our conclusion, although Live Nation Entertainment, Inc. is the major giant dominating the live music industry, they are a company still in their growth phase, expanding their operations and is yet to mature into a stable profit firm. In a global business scape, the company sees many regions for expansion, where they will reap the benefits but will also face increased risk. The company's profits derive from the vertical integration and synergy from the three main segments of the firm, the concerts, ticketing, and advertisement, of which the latter two rely greatly on the success of the concert segment. This proved to be a risky operation in the pandemic, as all segments' revenues plunged in synchronization, and the ticketing sector suffered most from their high fixed cost ratio. How the alleged accusations against the company of violation of anti-trust behaviors indicate, are the high competition in the ticketing industry where major technological advances such as blockchain technology are disrupting the industry, and the company is desperate to hold their position as the chosen ticketing service. Growth through consolidation and further market domination in the vertical sectors are the prevalent strategy of the company that can be observed from this analysis, but this position has been greeted with much scrutiny from fans and artists alike if not from the lawmakers and economists (Perry, 2021). What may be a more favorable strategy is a diversification of operations and democratization of concert promotions through digitalization of processes. The ticket prices for popular artists in recent years are at an unaffordable level for many, and market skimming is at it's limit. Where the company is now competing in the red-ocean attempting to monopolize popular talents and venues, the blue-ocean exists in undiscovered talents and new formats of concert promotions in either online spaces or in the shared and crowd sourced economy.

10. REFERENCES

Bain, K. (2013, July 11). *Trashed: Music Festivals Are Environmental Disasters.* Retrieved 4 January 2022, from LA Weekly website: https://www.laweekly.com/trashed-music-festivals-are-environmental-disasters/

Damodaran, A. (2015). *Applied corporate finance (Fourth edition).* Hoboken, New Jersey: Wiley.

Damodaran, A. (n.d.). *Data (Current and archived).* Retrieved 05 January 2022, from Damodaran Online website: https://pages.stern.nyu.edu/~adamodar/

Goldman Sachs Research. (2020). *Music in the Air: The show must go on (redacted)*. Retrieved from https://www.goldmansachs.com/insights/pages/infographics/music-in-the-air-2020/report.pdf

IATSE. (2016). *Shedule 14A Filing by International Alliance of Theatrical Stage Employees* [SEC Filing]. Retrieved from https://investors.livenationentertainment.com/sec-filings/all-sec-filings/content/0001669021-16-000009/0001669021-16-000009.pdf

IFPI. (2021). *IPFI Global Music Report 2021 | STATE OF THE INDUSTRY*. [Industry Report]. Retrieved from https://www.ifpi.org/wp-content/uploads/2020/03/GMR2021_STATE_OF_THE_INDUSTRY.pdf

The Investopedia Team. (2021, March 5). *Environmental, Social, & Governance (ESG) Criteria Definition*. Retrieved 8 February 2022, from Investopedia website: https://www.investopedia.com/terms/e/environmental-social-and-governance-esg-criteria.asp

Kenton, W. (2020, October 14). *Inside the Treynor Ratio.* Retrieved 6 February 2022, from Investopedia website: https://www.investopedia.com/terms/t/treynorratio.asp

Live Nation Entertainment Inc. (2012, December 31*). Irving Azoff Resigns As Live Nation Entertainment Chairman And Front Line CEO* [Company Website]. Retrieved 3 January 2022, from Live Nation Entertainment website: https://www.livenationentertainment.com/2012/12/irving-azoff-resigns-as-live-nation-entertainment-chairman-and-front-line-ceo/

Live Nation Entertainment, Inc. (2018). *Global Live Music Fan Study | The Power of Live*. [Industry Report]. Retrieved from https://livenationforbrands.com/wp-content/uploads/2019/04/LN_Power-of-Live_WhitePaper.pdf

Live Nation Entertainment, Inc. (2021). *Live Nation Entertainment 2020 Annual Report* [SEC Filing Form 10-K]. Retrieved 4 December 2021, from Live Nation Entertainment website:

https://d1io3yog0oux5.cloudfront.net/_42b1d965673cc1f1330d5b6316dcd3fa/livenationentertainment/db/670/6170/annual_report/2020+Annual+Report.pdf

Live Nation Entertainment, Inc. (2021). *Definitive Proxy Statement 2021* [SEC Filing]. Retrieved 4 December 2021, from https://www.sec.gov/Archives/edgar/data/1335258/000133525821000047/lyv-proxyx2021.htm

macrotrends. (n.d.). *Live Nation Entertainment Shares Outstanding 2006-2021 | LYV.* Retrieved 18 January 2022, from Macrotrends website: https://www.macrotrends.net/stocks/charts/LYV/live-nation-entertainment/shares-outstanding

Motley Fool Staff. (2018). *Breaking Down the Risks Facing Live Nation*. Video transcript. Retrieved from https://www.fool.com/investing/2018/09/13/breaking-down-the-risks-facing-live-nation.aspx

Murphy, C. (2021, April 30). *EBIT vs. Operating Income: Critical Differences and What They Mean*. Retrieved 23 January 2022, from Investopedia website: https://www.investopedia.com/ask/answers/012015/what-difference-between-ebit-and-operating-income.asp

MSCI. (2022). ESG Ratings & Climate Search Tool. Retrieved 8 February 2022, from ESG Ratings & Climate Search Tool website: https://www.msci.com/our-solutions/esg-investing/esg-ratings/esg-ratings-corporate-search-tool

Perry, M. J. (2021, September 21). *Biden's crackdown on monopolies should include live event ticketing* [Opinion Piece]. Retrieved 10 February 2022, from The Hill website: https://thehill.com/blogs/congress-blog/politics/573320-bidens-crackdown-on-monopolies-should-include-live-event

S&P Global Ratings. (2019). *Guide to Credit Rating Essentials* [Company Website]. Retrieved 6 February 2022, from UnderstandingRatings website: https://www.spglobal.com/ratings/_division-assets/pdfs/guide_to_credit_rating_essentials_digital.pdf

Shaw, L. (2019, September 10). Concerts Are More Expensive Than Ever, and Fans Keep Paying Up. *Bloomberg.Com*. Retrieved from https://www.bloomberg.com/news/articles/2019-09-10/concerts-are-more-expensive-than-ever-and-fans-keep-paying-up

Sisario, B., & Bowley, G. (2018, April 1). *Live Nation Rules Music Ticketing, Some Say With Threats.* Retrieved 5 January 2022, from The New York Times website: https://www.nytimes.com/2018/04/01/arts/music/live-nation-ticketmaster.html

Sullivan & Cromwell LLP. (2021, August 18). *S&C's Corporate Governance Quarterly Newsletter–August 2021* [Firm Website]. Retrieved 19 January 2022, from Sullivan & Cromwell LLP website: https://www.sullcrom.com/corporate-governance-quarterly-update-August-2021

Tsioulcas, A. (2021, November 8). *Live Nation, a company behind Astroworld, has a long history of safety violations*. Retrieved 5 January 2022, from NPR website. https://www.npr.org/2021/11/08/1053548075/live-nation-a-company-behind-astroworld-has-a-long-history-of-safety-violations

Yahoo! Finance. (n.d.). *Live Nation Entertainment, Inc. (LYV) Company Profile & Facts.* Retrieved 4 December 2022, from yahoo! finance website: https://finance.yahoo.com/quote/lyv/profile/