



# Casinos Are Dealt a Bad Hand

## U.S. Casino & Gaming Industry

On March 24th, 2020, the American Gambling Association announced that all 973 casinos across America had been shut down due to the COVID-19 pandemic. The first major price drop occurred on February 21st across major industry leaders as the global spread of COVID-19 spooked investors.

This report will analyze the implications on the Casino & Gaming industry in a post-COVID environment.

## Table of Contents

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### Industry Overview

Industry Description.....	3
Key Stats .....	3
Hotel v. Non-Hotel .....	4

### Industry Drivers

Revenue .....	5
Costs .....	7

### Key Trends

New Markets .....	9
Legalization .....	9
Online Gambling .....	10
M&A Action .....	11

### Macro Analysis and Valuation

Macro Environment.....	12
Comparable .....	13

### Outlook

Short-Term Outlook.....	14
Long-Term Outlook.....	15

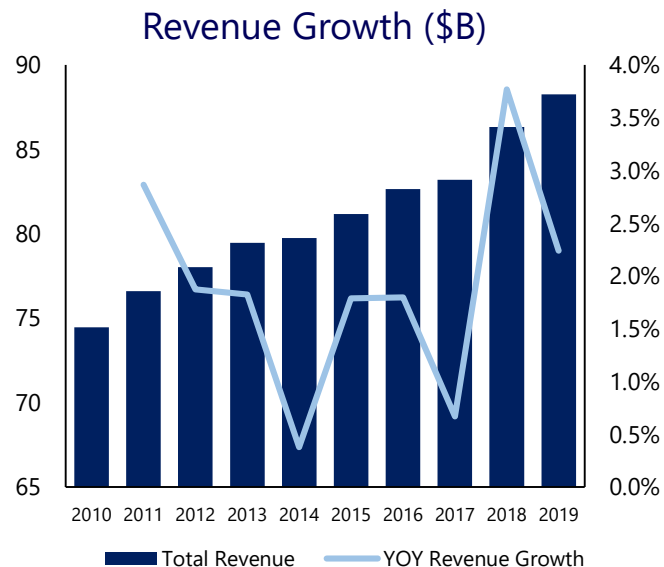
## Industry Overview

### Industry Description

The Casino & Gaming industry in the United States includes all forms of in person and online gambling activities, with more ways to gamble across the industry. Over the course of its history, the sector can be very volatile, showing various periods of strong growth and decline in revenues. This is mainly because the interest and popularity of casinos as well as other streams of gambling is highly driven by macroeconomic conditions. These include metrics such as consumer spending, domestic travel, and consumer confidence, all of which are taking a huge hit as a result of COVID-19, directly impacting the industry. Over the previous 5 years, casino and gaming revenue growth has been positive, but at a volatile rate. Revenues across the sector are expected to drop 10-15% in the year 2020, slowly reviving from these levels as the economy recovers consumer spending is stimulated

### Key Industry Stats

As the industry innovates and expands, a greater percentage of revenue is being driven from gambling machines, and food and other table games are less of a major factor. The high competition in the casino market is now growing with more Americans using international online casinos. The concentration within the industry is low, with the leading four operators (Caesars, MGM, Las Vegas Sands and Wynn) only comprising 30% of total revenues. COVID-19 shocked two of the main drivers in the US Casino industry - travel and consumer spending - which may take years to fully recover to pre-pandemic levels.



## Industry Overview

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### Hotel Casinos

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Hotel Casinos make up around 75% of industry revenues in the U.S casino market. The various entertainment, lodging, restaurants, and convention facilities in combination with casinos attract millions of customers each year. The strategic layouts of these resorts are designed to have central casinos that you must walk through to get around the property, tempting consumers into gambling more often. This segment has had gradual revenue growth over the past 5 years driven by coinciding favorable macroeconomic conditions. Slot and other gambling machines have developed their importance in Hotel Casinos and generate 53.2% of revenues, more than table games, food and accommodation combined. Las Vegas Sands, MGM Grand and Wynn Resorts are leaders among this highly competitive and saturated space, with other competitors taking up a healthy 68% of market share. Technology has played a large role in the enhancement of customer experience through modernized gaming floors and machines, including amenities such as cashless slots and games.

### Non-Hotel Casinos

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The Non-hotel casinos side of the industry operates gambling facilities that offer table games, slot machines, sports betting and other gambling activities. This includes floating casinos on cruises, independent commercial casinos, and sports betting venues. Major players in this space include Penn Gaming, Caesars Entertainment, and Boyd Gaming Corporation. Penn National gaming continues to lead the space in market share with 10.7% and has been expanding its portfolio with over 40 casino and horse racing facilities across 18 different states. In January of 2020, Penn purchased a 36% stake of sports media powerhouse Barstool Sports for \$163 million, with a promise to increase the stake to 50% in three years. Penn will be able to leverage the massive brand recognition that Barstool has across America in order to directly align with a growing sports betting industry as well as open and operate Barstool branded casinos and events. Non-hotel Casino's continue to be impacted by the influx of Hotels.

## Revenue Analysis

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### Handle and Drop

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The handle and drop provide the fundamental revenue drivers for casino operations both in a virtual and physical setting. The monetary sum the casino collects from the handle and drop is based on the house edge, or the theoretical advantage the casino has over the player in any given bet. Regardless of the house edge, any party may win or lose at any given time, which affects the casinos *hold percentage*. The hold percentage compares the original drop, to the amount the casino wins or loses. The most important driver of the gaming system is the handle, as it is the facet for potential revenues the casino may earn. A casino can increase its handle through incorporating new ways to enhance both the average bet and the capacity of use, a term referred to as "time on device". It doesn't matter if a casino has a massive volume of machines or a favorable house edge, these entities only matter if they are in use. This development has given rise to the popularity of machine gambling devices such as slots, or the trend of online gambling. The creation of online gambling platforms allows consumers to continuously play in their own homes or setting of choice, promoting comfort

for the average consumer while enticing higher bets and longer playing times.

### Table Games

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In recent years, table based games have encountered rapidly declining popularity with the general public. However remains a steady source of revenue due to popularity with high stakes players, a predominant 48.3% of the consumer group in the gambling scene. Casinos have been required to shift and appeal to household consumers who make up the largest portion of the market. This is becoming increasingly factual as predominant US destinations such as Las Vegas and Atlantic City lose international high rollers to foreign gambling destinations such as Macau, China. Regular "once in a while" household gamers demand comfortability and ease of use, which is not provided by table games. Table games provided an estimated 12.9% of industry revenue for casinos in 2019, a steep decline from previous periods. In 1985, booming games such as blackjack and craps accounted for 77% of all casino games on the Las Vegas strip, but in 2016, this number has dwindled down to just 51%.

## Revenue Analysis

### Electronic Gaming Machines

An estimated 62% of casino revenues stemmed from use of electronic gaming machines such as slots in 2019. Popularity of electronic machine gaming exceeding that of table games. Low upfront costs with as little as a 25 cent minimum has attracted a wider base of consumers at all levels of discretionary income. In contrast, table games typically require a high minimum

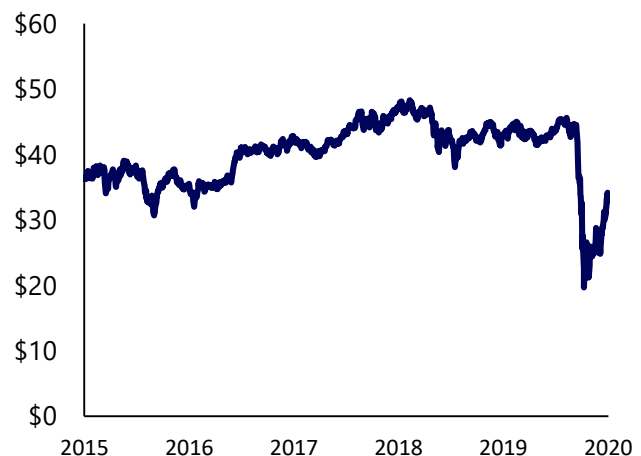
### Food and Alcohol

Total food and alcohol sales contributed approximately 14.2% of industry revenue in 2019. This share is expected to increase as physical casinos continue to integrate fine dining into their shops. Predominant market leaders attract consumers through the advertising of world renowned chefs to enhance consumer experience. These fine dining food services produce margins much higher than average, contributing substantial revenues to establishments industry wide. As the integration of fine dining into casino establishments around the country becomes a norm, we expect these higher margins to prompt a larger portion of industry revenues.

### Entertainment

Entertainment is an important revenue driver in the casino industry. Admissions to clubs, performances, nightclubs and parties on casino grounds accounted for 2% of industry revenue in 2019. With the ease of gambling regulations throughout the United States, more states are chasing tax revenue potentials giving rise to regional casino builds in communities across the country. Gambling connoisseurs are now able to play at casinos in their local communities, contrary to former obligatory travels to legal gambling destinations. Gambling destinations such as Las Vegas and Atlantic City are now forced to invest further into additional entertainment amenities such as night clubs and popular performers to administer an attraction to gamblers beyond just gaming services.

Invesco Entertainment ETF (5yr)





## Cost Analysis

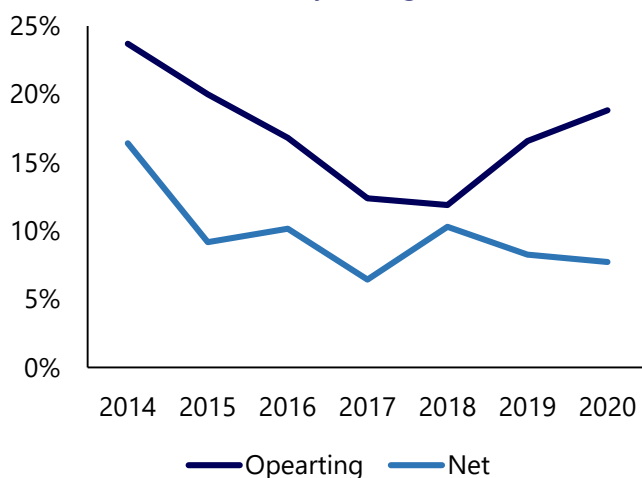
### Rent

Casino companies traditionally thrive in the realm of “the bigger the better”, therefore the industry tends to be very real estate intensive. Physical casinos rely heavily on being located in popular places easily accessed by high volumes of people. This requires large amounts of valuable commercial property, subject to high initial costs and lease requirements. Since just last year real estate prices in Las Vegas have increased an average of 4.5%. With valuable land becoming scarce and development projects becoming more costly, casino companies may struggle with this higher cost.

### Purchases

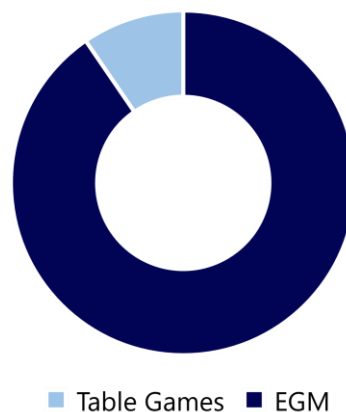
Purchases account for the largest portion of costs across the casino industry, accounting for 25.7% of revenues. This portion has seen a decreasing trend over past years as operators effectively manage costs by utilizing economies of scale, driven by increased acquisitions of longer lasting electronic gaming machines (EGM). Establishment purchasing costs rely heavily on the amenities they provide customers as well as the scale of operations. Purchase costs include gaming machines and tables, as well as services they provide through spas, nightclubs, hotels, etc.

Industry Margins



Over the last 5 years there has been a decrease in industry net and operating margins.

Las Vegas Sands Casino Machines



Las Vegas Sands has over 1,900 EGM's and 200 table games at its Vegas casino facility alone.

## Cost Analysis

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### Licensing Fees and Taxes

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Licensing fees and gambling taxes provide exceptional upfront and ongoing costs for casino ventures varying on a multitude of factors. These costs are not considered as part of the industry cost structure, however they are very important to consider for casino operations. Different jurisdictions around the United States implement distinct policies when regulating online and physical gambling. Taxes and fees are progressive on scalability (% of gross revenue earned, # devices, etc). Additionally, taxes and fees alter depending on the state, for example in New York a 10 year physical license fee costs 10 million upfront, with 15% tax on revenue, but in Pennsylvania, a 10 million upfront fee is met with 25% tax on all revenues. As regulation increases throughout the country these additional costs are only expected to increase as potential tax revenues are realized.

### Employee Wages

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Labour accounts for the 2nd most substantial cost in the gaming sector, capturing revenues of 24.6% industry wide. In recent years, employee wages have seen a decreasing trend as casinos transform operations towards a more digital stance through the decrease of industry employee to electronic machine ratios. However, casinos should prepare for future increases in this stake as wages face upward pressure through union popularity. A multi-year long battle between Station Casinos, one of the industries largest players, and 4000 of its employees looking to be unionized is likely to come to an end with the union winning 6 straight elections for union formation. Past scenarios suggest that unionization of this size is likely to create a domino effect throughout the gaming industry in the near future.

### Depreciation

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In association with large requirements for upfront purchases of equipment and other necessities for casino establishment, depreciation costs make up a substantial portion of costs in the industry at 6.6%. Recently, a large volume of casinos have been moving away from cash based machines, towards ticket or card occupied instruments as they become legal in specific states. This trend has required an influx of additional expenditures in recent periods for new electronic machines, one that has increased depreciation as larger values are accounted for in the early life cycle of the assets



## Key Trends

### New Markets

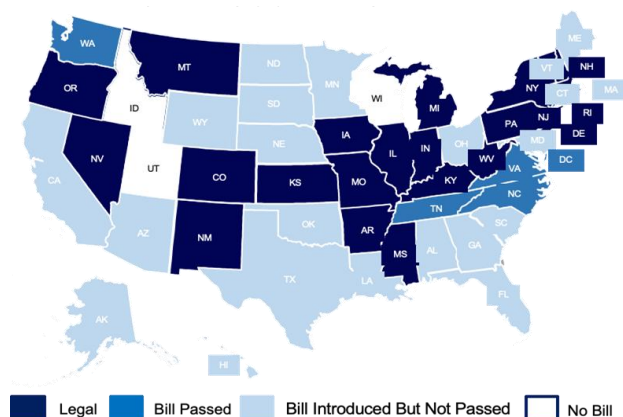
As more state legislation is eased regarding limitations of land-based, online, and sports betting across the U.S, the number of available markets are rapidly expanding. These new markets are emerging through both in-person casinos and online gambling options. As technology advances and consumer preferences adjust, casinos are finding new ways to attract customers and generate revenue. One of the main leaders of this change is development and implementation of hybrid games which combine the fast-pace of slot machines with the thrill of a live-dealer. With future generations of gamblers becoming more tech savvy and comfortable with electronics, this stream is expected to expand in the long-term. Lastly, some casinos are experimenting with augmented reality and virtual reality-based gambling channels. Innovative software has the potential to penetrate the casino market and give customers a unique and new casino experience.

### Leading VR Casino Providers



### Legalization

With the supreme court overturning the Professional and Amateur Sports Act, mobile sports betting is growing, posing a threat to physical casinos. Over \$20 billion USD has been bet with U.S sports books since the overturning of the act.



As of May 2020, 18 states have fully legalized sports betting and others are in the process. Idaho, Wisconsin and Utah are the only three states to not have any bills in progress. Analysts believe it is very unlikely it will ever be passed in Utah given the anti-gambling stance is written into their constitution. This legalization trend across the United States will continue to drive revenues in the already expanding sports betting market.

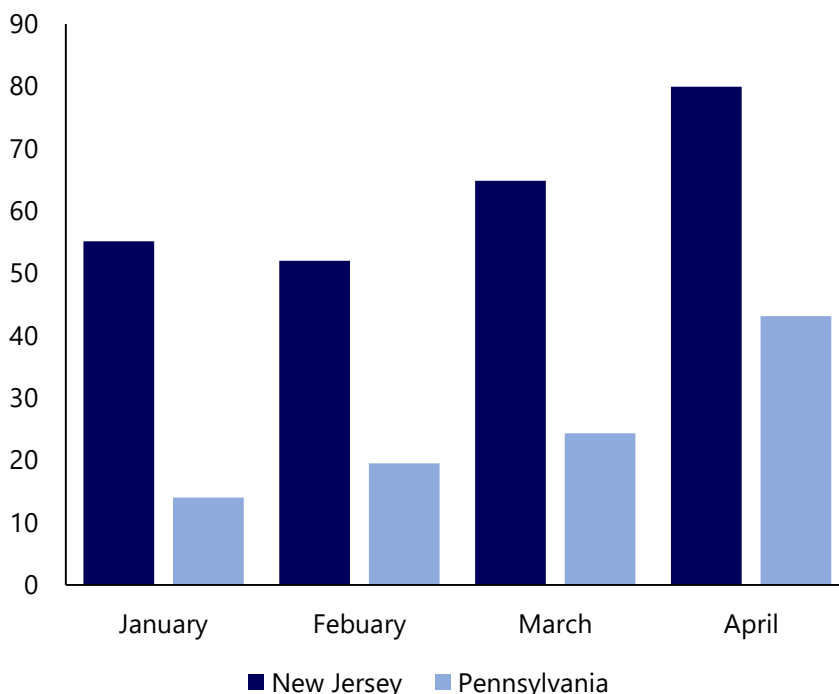
## Key Trends

### Online Gambling

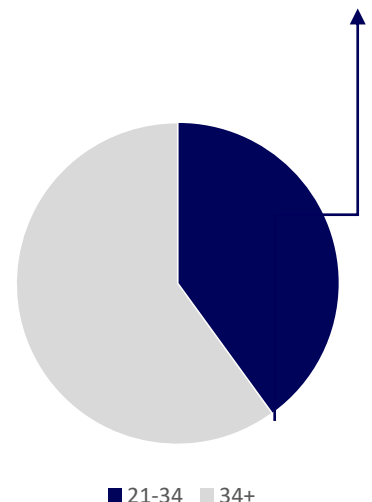
Mass internet adoption and unimaginable technological advances has given rise to a new gambling era, one that is solely online. An industry analysis report published by MarketWatch estimated that the online gambling market will reach USD \$87.75 billion by 2024 at a CAGR of 8.77% during the forecast period 2019-2024. Online gambling will continue to penetrate into new markets as regulation continues to generate massive tax revenues. Recent AI advancements and digital currency has made it safer and improved the experience of online gambling. Consumers are now given access to a variety of payment options and can experience realistic illustrations, mimicking the exciting atmosphere of an actual casino, attracting gamblers to these virtual platforms. A predominant driver of the online gambling industry has been sports betting/wagering.

### Online Adoption

Online Bets Placed YTD (\$M)



40% OF ONLINE GAMBLERS WERE BETWEEN THE AGES OF 21-34



## M&A Action

### Flutter Acquisition of Stars Group



On May 5, 2020 Flutter Entertainment completed the horizontal merger with the Stars group Inc for a US \$6 Billion deal. The objective behind the deal was to create the world's biggest online gaming group and take advantage of the legalization in the US. The acquisition was an all-share deal with Flutter offering 0.2253 for each share of Stars. Lastly, the newly combined business will split into an initial five reporting segments, including TSG International, excluding current US operations; and Sky Betting and Gaming, both from the TSG business.

### DraftKings Acquisition of SBTech



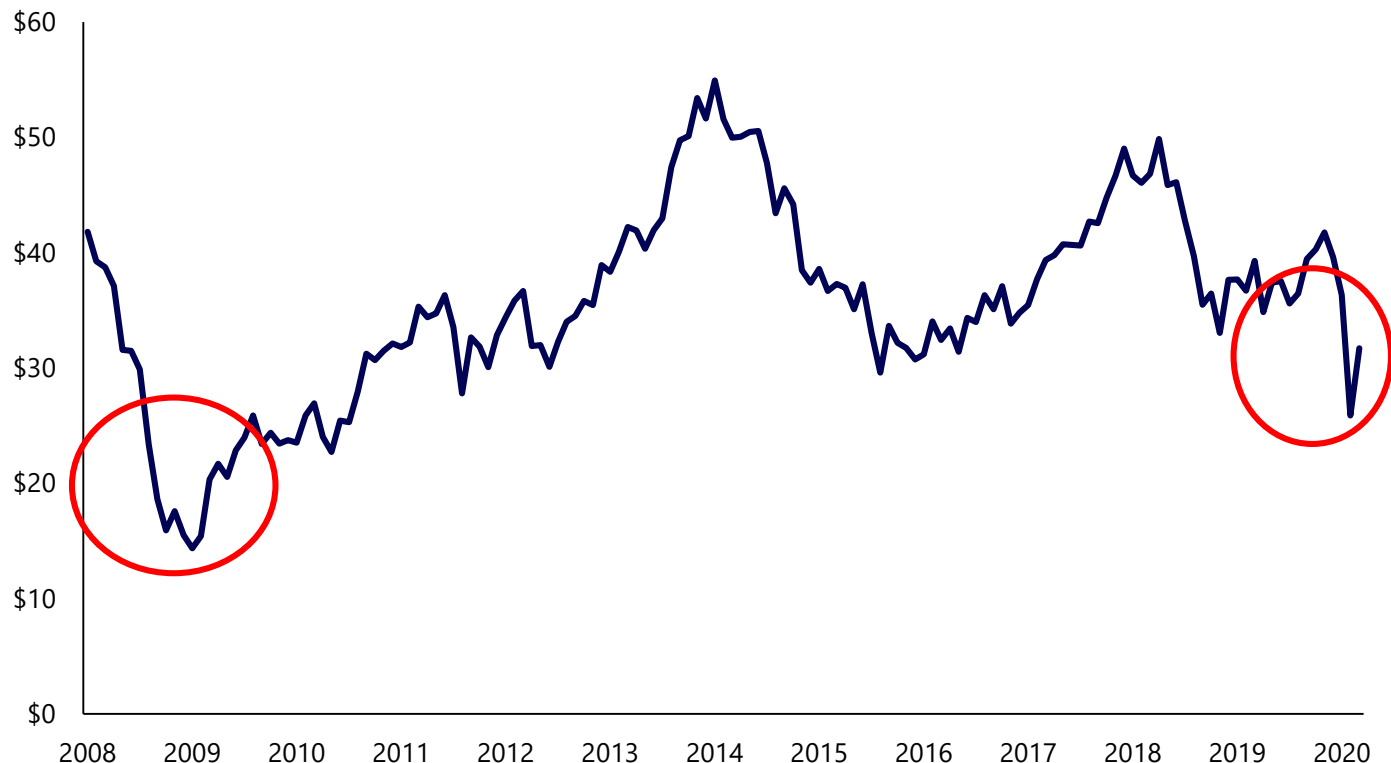
On December 23, 2019 DraftKings engaged in a reverse merger with Diamond Eagle and SB tech to create the only vertically integrated US sports betting and online gaming company. The deal was valued at ~ \$3.3 Billion making DraftKings a publicly traded company. The objective of the deal was to capitalize on synergies to fuel growth and increase market share by leveraging DraftKings's existing fantasy sport platform and combining it with SBTech's cutting edge technology.

## Macroeconomic Outlook

### Comparison to Financial Crisis

During the crisis of '08, the Casino industry was severely impacted due to high unemployment rates and low consumer confidence. Lack of aggregate demand decreased industry revenue and operating income significantly. The operating income for WYNN and MGMM decreased by 24% and 55% respectively, while the net income for WYNN changed by -90%. This caused share prices of MGM and WYNN to drop by 83% and 62% respectively. A similar trend is observed in the current crisis where share prices have dropped by an average of ~ 70 %. There is a correlation between the Casino industry and consumer confidence index - meaning that when CCI drops, consumers tend to save more, thereby reducing discretionary spending. The graph below portrays the decline in price of Vanecks Gaming ETF when the consumer confidence is below 100.

### Vaneck Vectors Gaming ETF and Consumer Confidence



## Comparable Analysis

### Hotel Casino Comparables

Company Name	Ticker	\$USD Billions		EV/EBITDA		EV/EBIT		Net Debt/EBITDA		Price/Earnings		Operating Margin	
		Market Cap	EV	2019	TTM	2019	TTM	2019	TTM	2019	TTM	2019	TTM
MGM Resorts	MGM	10.9	30.6	11.70x	14.33x	21.40x	35.20x	21.40x	35.20x	27.20x	4.00x	22.10%	18.50%
Las Vegas Sands	LVS	41.0	51.6	10.20x	12.83x	13.20x	18.00x	13.20x	18.00x	17.50x	19.50x	36.80%	33.90%
Wynn Resorts	WYNN	11.0	19.4	10.70x	18.08x	15.40x	46.20x	15.40x	46.20x	19.20x	N/A	26.90%	18.20%
Eldorado Resorts	ERI	3.3	6.7	13.50x	11.11x	19.70x	17.40x	19.70x	17.40x	34.90x	N/A	24.20%	25.60%
Mean		16.54	27.10	11.53x	15.08x	17.43x	29.20x	17.43x	29.20x	24.70x	5.88x	28%	24%
Median		11.01	30.65	10.70x	14.33x	15.40x	35.20x	15.40x	35.20x	19.20x	4.00x	27%	19%

Hotel Casinos include companies that provide short-term lodging services in hotels with casinos and gaming establishments on the premise.

### Non-Hotel Casino Comparables

Company Name	Ticker	\$USD Billions		EV/EBITDA		Net Debt/EBITDA		YOY Revenue Growth		Price/Earnings		Operating Margin	
		Market Cap	EV	2019	TTM	2019	TTM	2019	TTM	2019	TTM	2019	TTM
Penn National Gaming	PENN	4.40	15.49	15.20x	10.30x	8.91x	118.37x	13.1%	27.6%	34.90x	N/A	28.20%	19.80%
Caesars Entertainment	CZR	8.30	25.93	12.80x	13.76x	9.50x	57.93x	69.9%	-1.1%	17.87x	N/A	24.70%	22.90%
Boyd Gaming	BYD	2.64	7.12	12.10x	10.60x	5.55x	38.99x	9.4%	11.6%	23.70x	N/A	22.50%	21.10%
DraftKings	DKNG	12.32	12.32	0.00x	0.00x	0.00x	0.00x	17.9%	42.9%	0.00x	N/A	0.00%	0.00%
Mean		5.11	16.18	10.03x	8.66x	5.99x	53.82x	0.28x	20.3%	19.12x	N/A	25.1%	21.3%
Median		4.40	15.49	12.45x	10.45x	7.23x	48.46x	0.16x	19.6%	20.79x	N/A	23.6%	20.5%

Non-Hotel Casinos consist of companies with gambling facilities that offer table games and other gambling facilities such as slot machines and sports betting.

## Short-Term Outlook

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### Vacant Time on Device

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"Time on Device" is the most crucial component of a casino's gaming revenues as it is what drives "The Handle". "Time on Device" measures the capacity in which each gaming machine is in use for a given time, aligning with the volume of customers passing through a casino. Due to COVID-19, all 989 commercial and tribal casino properties have halted operations in association with the high volume and close proximity in which gamers interact. This closure means that casinos' "Time on Device" measure has been halted to basically 0. This means that casinos no longer possess a handle and cannot generate revenues from gaming or normal operation.

### Tourist Deficiency

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Casinos rely heavily on tourists as a crucial portion of traffic, specifically renowned destinations such as Las Vegas. With approximately 42.52 million people visiting Las Vegas in 2019 both internationally and domestically, the closure of the states most popular tourist attractions as well as the travel ban has limited visitors that make up about 17% of Las Vegas tourist traffic and spend an average of about \$5.325 billion yearly. Until a vaccine is provided, it is likely international tourists will be very hesitant on leisure travel even after lockdowns have been lifted. Even as casinos have begun opening again recently, the US border remains closed to external countries, producing a devastating impact on casino revenues and potential traffic.

### Chinese Political Tensions

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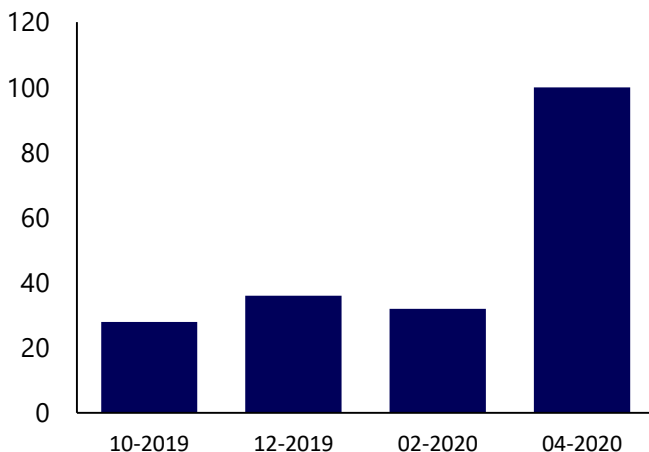
Since 2007, Las Vegas high roller visitation from Hong Kong and China has increased 79%. The highest income quintile segments, a group of consumers added by Chinese tourists, contributes about half of gaming revenues to United States Casinos. Most recently Trump has escalated the feud between these two nations over his talks about removing Chinese based companies from US stock exchanges if they don't comply with SEC regulations. Just recently, China halted certain US farm imports putting the trade deal at risk. Looking at past events between these two superpowers, this will likely result in increased tensions between the nations in the future, discouraging Chinese citizens from travelling and gambling in the US. A move like this could result in negative short-term impacts and decrease gambling volume that Asian tourists have heavily contributed to in the past.

## Long-Term Outlook

### Shift Toward Online Gambling

With the impact of COVID-19 closing all physical entities across the world, businesses had to learn how to adapt through more virtual methods. When the majority of brick and mortar casinos around the United States were ordered to shut their doors beginning March 16, gamblers looked to recently regulated online casinos as their new gateway to the gambling world. While physical casinos across the United States reported a plunge in March gross revenues of less than half compared to an all time high in February, early adapters such as New Jersey took in revenues of \$79.9 million from online casinos in the same month, a 118% increase since April of last year. The important question is whether this COVID-19 induced spark allow online gambling to outperform physical platforms in the long run.

#### Online Poker' Google Search Volume (\$M)



### New Consumer Segment

Since the pandemic started, online casino platforms saw a immediate plethora of traffic. However, the majority of the traffic was fueled by a new segment - a segment created due to the sudden amount of excess free time residents across the world possessed. While people were unemployed and forced to the confinement of their homes, they actively looked for other new endeavours to take up their free time – online gambling. According to research firm Optimove, there was an increase in the number of daily poker players by 43% since the quarantine. Furthermore, an astronomical 255% increase in first-time poker players compared to averages before lockdown. For the same reason physical casino players will likely return to these establishments upon reopening is the same reason these new online players will stay active on these platforms. This consumer segment's first gambling experiences were enjoyed on their laptop while sitting on the couch in their living room, or on their mobile devices. Online gambling has become a part of their routine and is the type of gaming they know.



## Long-Term Outlook

### Adverse Online Trends

Physical casinos have experienced trends favoring electronic gaming machines over table games. However, with rise of online gambling allows consumers to easily play games virtually. Upon regulation, most legislations around the United States such as Pennsylvania were quick to identify the highly weighted revenue pattern toward slot games and implemented a much higher tax rate. Pennsylvania implemented a bifurcated system that realized online slot machines taxed at 54% with online casino table games taxed at just 16%. This taxing system has shown signs directly correlating with gaming popularity, as revenue breakdowns quickly indicated alteration towards a 50-50 trend between table games and slots in Pennsylvania online casinos. In New Jersey, tax rates were initially implemented identical across all gaming sectors and online slots continued to contribute 75-80% of gaming revenue. With further states mimicking Pennsylvania's regulatory structure, it is likely that a majority of states will adapt to a similar bifurcated taxing system. This type of tax system may alter perceptions consumers have on online machine gaming versus table games, changing the online landscape towards a historical outlook when table games dominated the gaming scene.

### Recovery of Physical Casinos

The majority of players who regularly gamble at physical casinos find themselves most attached to the ambience and the experience of visiting one of these establishments. It's the flashing lights, the unique slot sounds and the people that make the gambling experience so unique. Subsequently to the pandemic, it is likely these people will continue to gamble at these physical shops in their chase for these experiences they've grown so accustomed to. With Las Vegas establishments just starting to open, casinos are already reporting large lineups of travellers from around the United States waiting eagerly to resume play. With the massive floor space the majority of these casinos possess, they are in a different situation than airline companies, where the dilemma is primarily attributed to the lack of adequate space.

#### Average Casino Spending Categories

