Factors Affecting Profitability at Casinos in the Competitive Northeast

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INTRODUCTION

Casino gaming is a maturing industry. The proliferation of gaming throughout the United States means that almost every American has, or will have, convenient access to a casino within close proximity. This maturation has had profound impacts on the legacy gaming operations. Operators can no longer rely on room expansion or other capital expenditure projects to induce growth or create reasonable returns on invested capital. Revenues in almost every U.S. market (except those with new gaming supply) have experienced anemic or even negative revenue growth. The casino industry is now firmly entrenched in a new era of share stealing and hyper-competitiveness. Operators must now rationalize their offerings and reposition themselves to compete more effectively in this environment.

Global Gaming & Hospitality and Morowitz Gaming Advisors ("GGH") acknowledge the reality of this dilemma and are committed to providing gaming operators and investors with analytics that can help them optimize the financial performance of their gaming operations and investments. In that regard, we have undertaken a project to codify our observations analyzing gaming operations throughout the U.S., while providing our perspective regarding ongoing trends and best practices in the management of casino operations. This is the first of a series of White Papers that are devoted to informing gaming operators of the results of our analyses as well as providing actionable recommendations to enhance operating performance.

The Northeast casino marketplace is one of the most competitive gaming markets in the U.S. and, therefore, has experienced some of the most significant impacts of competition. The analysis that follows focuses on this dynamically competitive market.

EXECUTIVE SUMMARY

GGH recently analyzed data in the competitive Northeast gaming market. We undertook this analysis in order to identify the drivers of profitability among a sample of casinos who report this data, including the importance of promotional allowances and free play. The results of our analysis are interesting in that they show that driving profitability (defined as EBITDA) is not just a function of tax rates or marketing spend. There is much more to the story. As the gaming industry matures and markets become more competitive, managing the interplay between taxes, marketing spend and operational complexity will become of critical import to all operators. Our analysis indicates the following:

- Driving revenue per unit capacity vs. peers is the most important predictor of profitability and net operating margin (EBITDA/Net Revenues). This ability is related mostly to location (proximity to population concentrations) and then to overall strategic positioning and execution; however, achieving high revenues relative to capacity requires the right balance of amenities and facilities for the particular market and competitive situation. Achieving that balance requires diligence among operators to not over-spend on facilities or amenities that are often low or negative profit margin producers.

- There is no correlation between high taxes and margins because profitable operators adjust marketing strategies and operational complexity (i.e. mix of amenities and capital spending) in order to maximize EBITDA margins.

- Optimizing promotional allowances and free play is critical to achieving high margins – Casinos that over use free play and promotional allowances to maximize revenue may be doing more harm than good to their bottom line. More is not always better as often times casinos spend too much on low profit or unprofitable customers. Achieving the right mix of spend requires an understanding of the casino's positioning in the market and a disciplined approach to deployment of promotional allowances expenditures.

In a hyper competitive market, for properties that have to do more with less, understanding your position in the market, focusing on the core customer and developing a value proposition for which customers are willing to pay, while reducing overall marketing spend, is the best strategy to producing higher margins and EBITDA.

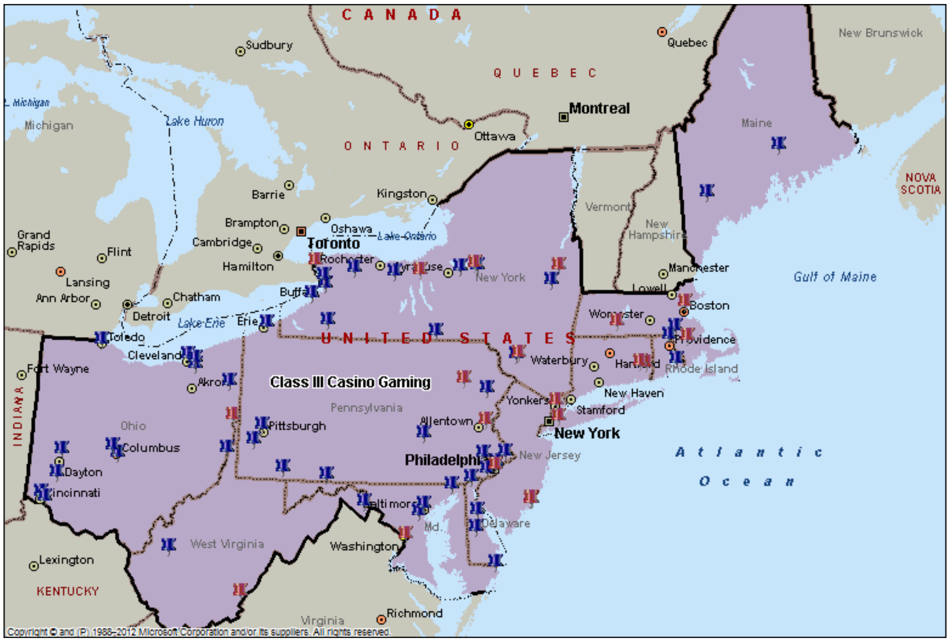
THE ANALYSIS

In the competitive Northeast gaming sector, gaming taxes, marketing costs and payroll are the three largest expenses on the casino's profit and loss statement. As the gaming industry continues to mature and revenue growth is no longer assured, managing these expense categories is the key to maintaining or growing operating margins. Labor costs are typically managed through sophisticated processes such as balancing staffing to demand, optimizing the part time and full time employee mix, and replacing labor with technology and capital investment to enhance productivity.

In some jurisdictions, like Nevada and Atlantic City, gaming taxes are fixed and applied to both slot and table revenues at the same rates. However, in many other jurisdictions, table revenues are taxed at rates significantly lower than slot revenues and balancing the interaction of these revenue streams is extremely important to optimizing operating profits.

Marketing costs, including promotional allowances, are a controllable expense area in which casino operators can manage the often significant impact on their property's bottom line. Optimizing marketing costs requires the operator to hit the sweet spot where the marginal return on marketing dollars remains positive - that is, the last dollar of marketing expense results in more than a dollar of additional revenue. Unfortunately, many operators do not use a systematic approach to identifying/deploying these costs on a per player or per tier basis, which oftentimes results in over-spending on low (or negative) margin customer retention.

In the hypercompetitive Northeast gaming sector, managing the interplay between marketing, gaming tax rates and promotional costs can be the difference between success and failure, including operating at a premium to the Market's average profitability margins or, conversely, at a deficit. Competition in the Northeast heated up at the end of 2006, with the opening of casinos in the Pocono Mountains and at Yonkers Raceway, which altered the previous supply/demand dynamic. Consequently, since the end of 2006, the Northeast and Mid-Atlantic states have become a hypercompetitive market place, with 53 casinos serving patrons in almost every geographic area from Maryland through Maine.



To identify the best approaches to achieving profitability, GGH analyzed casino tax rates, promotional costs (including free play), gaming revenues and operating margins from 2007 through the present at several casinos in the Northeast that report this data publicly.

Our analysis indicates some important trends. First, tax rates are not the most important determinant of net EBITDA margins. Second, the ability to drive outsized gaming revenue is the most important driver of margin, regardless of tax rate. Third, promotional allowances and free play are an important part of a casino's ability to drive gaming revenue and margins, and ultimately in whether a casino succeeds or fails as a consequence of the effective, profitable use of these tools. Conversely, over-spending or deploying promotional allowances and free play ineffectively can have a highly negative impact on profitability. Achieving the correct balance in promo spend is critical.

Tax rates are not the most important determinant of Net EBITDA margins.

Casinos in the Northeast operate under significantly different tax regimes, depending on the state of origin. Connecticut imposes no tax on table revenues but a 25% tax on slot revenues. Pennsylvania imposes an approximate 54% tax on slot revenues and a 16% (previously 14%) tax on table revenues. Atlantic City charges one tax (9.25%) on both slot and table revenues.[1] Yet many of the casinos in these different states ultimately compete with each other for the same customers. Importantly, our analysis indicates that tax rates are not the most important determinant of operating margins, especially in more recent years.

Before competition heated up, most of the Atlantic City casinos operated at fairly high margins because of favorable gaming supply/demand metrics. However, as competition increased,

[1] Gaming tax rates are based on statutory rates in different states (see state regulatory bodies for explanation).

revenues declined at many casinos and marketing costs increased, leading to lower profit margins and failures at several casinos.

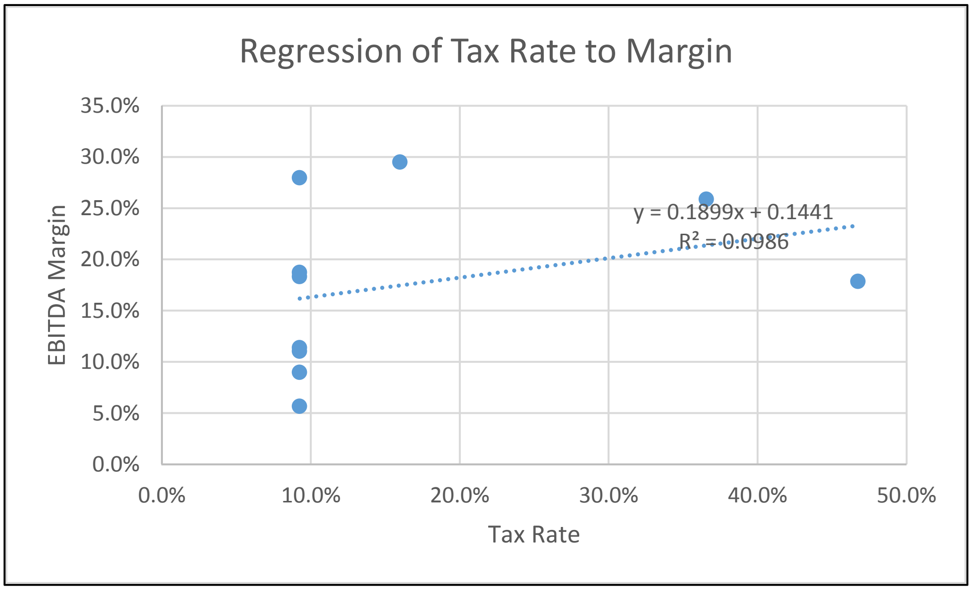
In 2016, the market stabilized and the casinos with the highest margins were Mohegan Sun in Connecticut, the Borgata in Atlantic City and Sands Bethlehem in Pennsylvania - casinos with widely disparate tax rates. As the following charts indicate, these casinos owe their higher margins to a combination of higher revenues and more efficient use of promotional allowances and free play.

Northeast Benchmarks – EBITDA Margins and Tax Rates Since 2007

	Blended Tax Rate									
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Mohegan Sun Connecticut	17.3%	17.0%	17.4%	17.3%	16.9%	16.9%	16.3%	16.3%	16.3%	16.0%
Mohegan Sun Pocono	55.0%	55.0%	55.0%	52.0%	48.6%	48.0%	47.1%	46.0%	46.2%	46.7%
Sands Bethlehem			55.0%	50.6%	42.4%	41.0%	38.6%	37.6%	36.9%	36.6%
Atlantic City	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
	EBITDA Margins									
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Mohegan Sun Connecticut	26.1%	21.8%	23.2%	22.3%	25.6%	24.9%	27.0%	25.2%	28.5%	29.5%
Mohegan Sun Pocono	15.9%	14.1%	15.2%	15.4%	10.4%	18.6%	19.0%	17.1%	19.6%	17.8%
Sands Bethlehem	0.0%	0.0%	11.4%	19.5%	22.7%	24.2%	24.8%	23.9%	24.7%	25.9%
Borgata	28.6%	23.6%	25.6%	23.0%	21.8%	16.8%	17.2%	21.1%	25.4%	28.0%
Golden Nugget	12.7%	4.3%	-0.8%	-11.6%	-7.0%	-9.4%	-8.3%	1.3%	10.0%	11.4%
Tropicana	26.9%	14.9%	9.7%	11.0%	3.3%	4.4%	7.2%	17.2%	13.3%	11.0%
Resorts	6.4%	-0.4%	-14.0%	-14.9%	-12.2%	-3.3%	-10.1%	0.4%	8.8%	9.0%
Taj Mahal	21.8%	18.3%	16.2%	7.4%	13.1%	12.5%	5.0%	-7.6%	-2.6%	-7.9%
Harrah's	28.8%	25.9%	23.0%	19.0%	13.5%	15.3%	13.9%	11.7%	19.2%	18.3%
Caesars	28.9%	25.2%	20.4%	13.1%	15.1%	15.2%	12.6%	10.3%	18.0%	18.7%
Bally's	20.7%	18.6%	17.1%	10.9%	5.5%	9.2%	1.9%	-3.0%	6.4%	5.7%
Atlantic Club	9.5%	-0.3%	-11.8%	-14.8%	-17.4%	-18.3%	-11.8%	-47.2%		
Revel						-73.5%	-69.3%	-37.9%		
Showboat	22.4%	16.7%	15.8%	9.9%	12.2%	9.5%	7.0%	-2.2%		
Trump Plaza	14.1%	11.3%	1.1%	-7.0%	-1.3%	6.4%	-15.4%	-35.8%		

Source: Company earnings releases and public filing and State gaming commission reports

GGH analyzed the relationship between tax rates and margins further by regressing tax rates to EBITDA margins for 2016. The regression analysis indicates that there is virtually no correlation between tax rates and margins, with lower taxed casinos exhibiting a wide variation in margins, while, somewhat paradoxically, higher taxed casinos generally were among the highest margin casinos. GGH concludes that the higher tax rate environment requires gaming operators to utilize efficiency strategies, including facility capital investment, marketing spend and amenity availability, that result in a stream of revenues that achieve higher profit margins.



Source: GGH analysis, state regulatory filings and company public filings

<u>The ability to drive outsized gaming revenue is a driver of margin, regardless of tax rate</u>

GGH also analyzed gaming revenue to determine if there is a relationship between revenues and margins. Intuitively, higher revenues should drive higher operating margins because of the operating leverage & economy of scale inherent in gaming win. Most gaming operations are characterized by high fixed costs and minimal variable costs, which is great once certain win thresholds are achieved – creating out-sized operating profits. This profitability is complicated by gaming tax rates and the operating complexity of certain casinos, which, depending on these factors, pressures profit margins.

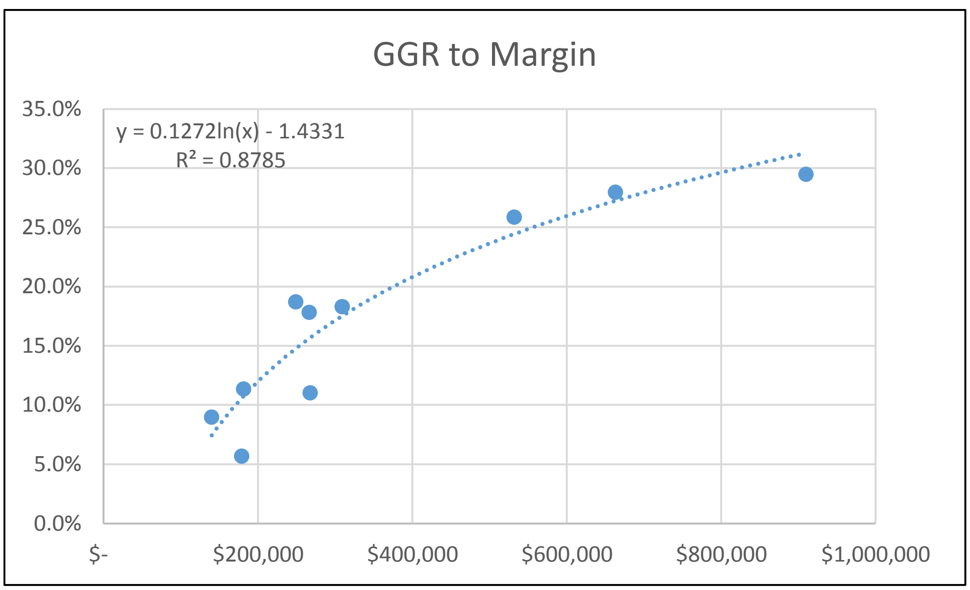
The following table depicts gaming revenues at the casinos in our sample. The highest grossing casinos (Mohegan Sun, Borgata and Sands Bethlehem) are also the top three casinos in terms of gross operating margin. Interestingly, in 2007, when the Taj Mahal, Caesars, Harrah's, Bally's and the Tropicana all had gaming revenues in excess of $430 million, their margins all exceeded 20%. As those casinos saw their gaming win shrink, their margins shrunk as well.

Northeast Casinos – Gross Gaming Revenues (GGR) Net of Free Play (Net Gaming Revenue) $000

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mohegan Sun Connecticut	$1,308,008	$1,231,219	$1,097,495	$1,054,891	$1,023,651	$ 977,745	$ 928,646	$ 875,354	$ 879,719	$ 909,937
Mohegan Sun Pocono	$ 157,185	$ 176,173	$ 217,679	$ 231,742	$ 268,353	$ 280,790	$ 263,631	$ 263,142	$ 262,030	$ 266,221
Sands Bethlehem			$ 142,268	$ 285,900	$ 376,700	$ 437,600	$ 461,900	$ 468,000	$ 511,100	$ 531,700
Borgata	$ 687,482	$ 669,395	$ 625,824	$ 570,418	$ 563,203	$ 527,743	$ 532,039	$ 580,425	$ 639,455	$ 663,119
Golden Nugget	$ 204,272	$ 169,487	$ 135,182	$ 120,604	$ 99,645	$ 101,711	$ 97,535	$ 145,555	$ 175,011	$ 181,091
Tropicana	$ 347,506	$ 300,047	$ 257,740	$ 245,331	$ 219,024	$ 202,637	$ 184,602	$ 239,896	$ 255,033	$ 267,482
Resorts	$ 233,481	$ 196,610	$ 147,138	$ 121,584	$ 113,926	$ 105,801	$ 103,144	$ 113,709	$ 132,764	$ 139,916
Taj Mahal	$ 436,773	$ 405,327	$ 375,206	$ 331,104	$ 281,960	$ 236,085	$ 211,590	$ 172,634	$ 141,040	$ 130,153
Harrah's	$ 451,421	$ 470,342	$ 420,087	$ 389,852	$ 372,723	$ 345,040	$ 305,381	$ 308,519	$ 321,999	$ 309,118
Caesars	$ 512,945	$ 475,718	$ 390,814	$ 340,711	$ 333,788	$ 297,172	$ 274,982	$ 263,938	$ 257,460	$ 248,852
Bally's	$ 559,736	$ 491,754	$ 408,538	$ 358,162	$ 310,205	$ 248,980	$ 204,584	$ 182,335	$ 177,200	$ 178,731
Atlantic Club	$ 250,358	$ 200,796	$ 150,762	$ 129,447	$ 113,521	$ 91,315	$ 101,581			
Revel							$ 124,792			
Showboat	$ 340,425	$ 297,986	$ 249,020	$ 223,025	$ 201,869	$ 184,097	$ 159,049			
Trump Plaza	$ 238,421	$ 223,925	$ 171,746	$ 147,511	$ 109,628	$ 80,054	$ 59,332			

Source: Company earnings releases and public filing and State gaming commission reports

GGH prepared a regression analysis of 2016 gaming revenues to EBITDA margins and the results are not surprising. Applying a logarithmic regression results in a correlation of almost 88% - meaning that 88% of the change in EBITDA can be explained by the change in gaming revenue for the 2016 data. Despite varying tax rates, the operating leverage inherent in gaming operations leads to higher profit margins.



Source: GGH analysis, state regulatory filings and company public filings

Promotional allowances and free play are an important part of a casino's ability to drive revenue and margins, and ultimately in whether a casino succeeds or fails

The efficient deployment of promotional allowances and free play is a complicated issue. The relationship between these two items and margin is critically important but there is more to the story. The following table depicts the percentage of promotional allowances and free play to gaming revenues (net of free play) at the casinos in our benchmark set. The data shows that, as promotional costs approach 50% of gaming revenue, the casino is in danger of closing its doors. Only Resorts was able to weather that storm and mainly because they quickly reduced their promotional costs to below 40%.

Harrah's and Caesars saw their promotional costs balloon to close to 50% and their margins declined to 11.7% and 10.3% respectively. Those two casinos have brought their promotional costs back down to 43% and their margins have responded back to over 18%. Conversely, the Borgata and Sands Bethlehem both have extremely high promotional costs but are among the highest margin casinos. The Borgata maintains their high margin partly because it drives extremely high volume and the Sands maintains a high margin because of its high volume and a higher reliance on free play than comps (which reduces the additional costs associated with providing free goods and services).

The question is whether better strategic control & deployment of promotional allowances and free play at Borgata and Sands Bethlehem would result in even higher margins.

Northeast Benchmarks – Promotional Allowances and Free Play as % of Net Gaming Revenue

	Promo Allowances and Free Play as % of Net Gaming Revenue									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Mohegan Sun Connecticut	9.8%	12.6%	12.4%	15.5%	15.3%	15.1%	15.6%	16.4%	15.3%	14.8%
Mohegan Sun Pocono	2.3%	6.1%	16.3%	24.6%	29.9%	27.7%	35.7%	26.4%	25.4%	25.5%
Sands Bethlehem			26.9%	34.2%	34.8%	34.0%	36.8%	36.5%	35.1%	33.8%
Borgata	28.5%	32.0%	34.1%	37.1%	39.8%	41.2%	40.9%	40.0%	36.4%	35.7%
Golden Nugget	35.5%	37.1%	36.7%	40.7%	44.1%	47.1%	47.7%	45.7%	40.8%	40.8%
Tropicana	33.8%	39.1%	44.2%	44.4%	50.9%	41.4%	39.9%	35.5%	32.7%	32.5%
Resorts	37.2%	36.1%	47.0%	46.2%	61.6%	53.2%	50.3%	41.5%	39.0%	39.4%
Taj Mahal	30.2%	33.8%	36.3%	41.6%	43.1%	48.7%	45.4%	50.2%	53.4%	47.8%
Harrah's	36.6%	36.6%	39.9%	40.8%	43.6%	41.8%	42.3%	47.5%	45.0%	43.0%
Caesars	28.9%	28.6%	34.1%	37.8%	37.6%	42.2%	43.4%	49.8%	43.7%	42.9%
Bally's	33.5%	32.5%	35.6%	40.3%	45.4%	44.7%	44.4%	47.4%	42.4%	43.4%
Atlantic Club	43.9%	46.7%	47.7%	45.1%	43.9%	58.6%	60.9%	28.4%		
Revel						45.0%	48.7%	43.7%		
Showboat	41.8%	42.4%	50.3%	51.4%	53.9%	50.2%	49.1%	55.3%		
Trump Plaza	32.5%	32.3%	34.5%	37.1%	44.3%	50.0%	47.8%	47.6%		

Source: Company earnings releases and public filing and State gaming commission reports

Promotional allowances include the retail value of food, beverage, rooms and other items that are booked to revenue and then removed through a contra entry to promotional allowances.[2] This results in casinos reporting revenues net of promotional allowances. Most benchmarks such as operating profits or EBITDA margin are reported as a function of this net revenue.

In GGH's opinion reporting in this manner impacts the comparability of the operating margins of casinos because some casino operations are more complex than others. In some jurisdictions, especially in many Tribal gaming environments, casinos might only be sprung structures, with little in the way of amenities such as hotels or restaurants. In these environments, promotional allowances are very low, because there is simply very little to give away. In other environments, casinos can be quite complex.[3]

In Las Vegas, rooms, restaurants, entertainment and retail facilities are as important as gaming facilities and are used both as profit centers and as enticements to draw gamers.[4] In most competitive markets, casinos typically offer many of these same amenities, but not at the same scale of a Las Vegas casino. These amenities are used to drive gamers to facilities; consequently, promotional allowances in these environments are much higher as a percentage of non-gaming revenues and the mix of cash to comp revenue is much lower than in a typical Las Vegas Strip casino. This ultimately reduces overall profitability because the costs of these free goods and services is not offset by cash paying customers.

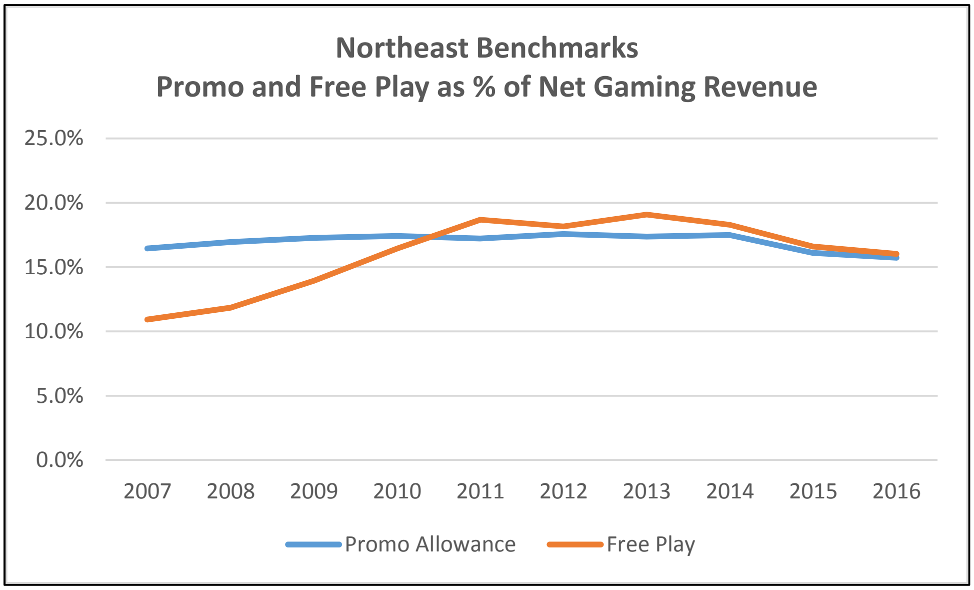
The key issue however is the level of complexity that is introduced when a casino loads up on amenities, which are typically low margin (outside Las Vegas), and uses them to entice gamers. Those amenities add complexity to operations, requiring more employees, management, back of the house and other inefficiencies. Most of the casinos in our benchmark set have a fair amount of complexity. Each of them has a hotel, several restaurants, entertainment facilities, etc., and all of these casinos rely on gaming revenue for the lion's share of their profits, as opposed to cash revenue from hotels, restaurants and other non-gaming revenue streams.

Free play is another important part of the promotional spend. This form of marketing has become the preferred method of marketing among many casinos in the Northeast and accounts for about half of all promotional spending among the benchmark casinos, while casinos in Atlantic City continue to lean heavily on comps.

[2] The AICPA is studying this accounting treatment and is considering changes to its revenue recognition guidelines. However, current accounting convention reports revenues in the manner described.

[3] GGH or affiliates have consulted with, managed and studied casinos in almost every jurisdiction in the U.S. and Canada.

[4] Affiliates of GGH and its principals have operated casinos in Nevada and have studied the annual Nevada Gaming Abstracts to gain an understanding of the operating characteristics of Las Vegas casinos.



Source: Company earnings releases and public filing and State gaming commission reports

The following table shows the relationship between promotional allowances, taxes and margins for 2016. Mohegan Sun Connecticut is among the most complex gaming facilities but has a relatively low tax rate, spends very little on promotional allowances and free play, and has the highest gaming revenue (GGR) in the benchmark set. Its margin is the highest in the group. Borgata, another highly complex offering, uses promotional allowances and free play at a very high rate but offsets this with high volume and a low tax rate to drive a margin almost as high as Mohegan Sun. Sands Bethlehem has less complexity than both Mohegan Sun and the Borgata (smaller hotel, fewer restaurants). This, along with high volume and a reliance on free play as opposed to comps, allows it to overcome its high tax rate to drive a high margin.

Sands Bethlehem's high table game volume also lowers its tax rate relative to other Pennsylvania casinos. For instance, Mohegan Sun Pocono has a weighted tax rate over 10% higher than Sands Bethlehem because its business is skewed more toward slots. This higher tax rate drives down its overall profit margin. Casinos in Atlantic City are hampered by highly complex offerings, low volume and higher promotional costs, which explains their generally lower profit margins.

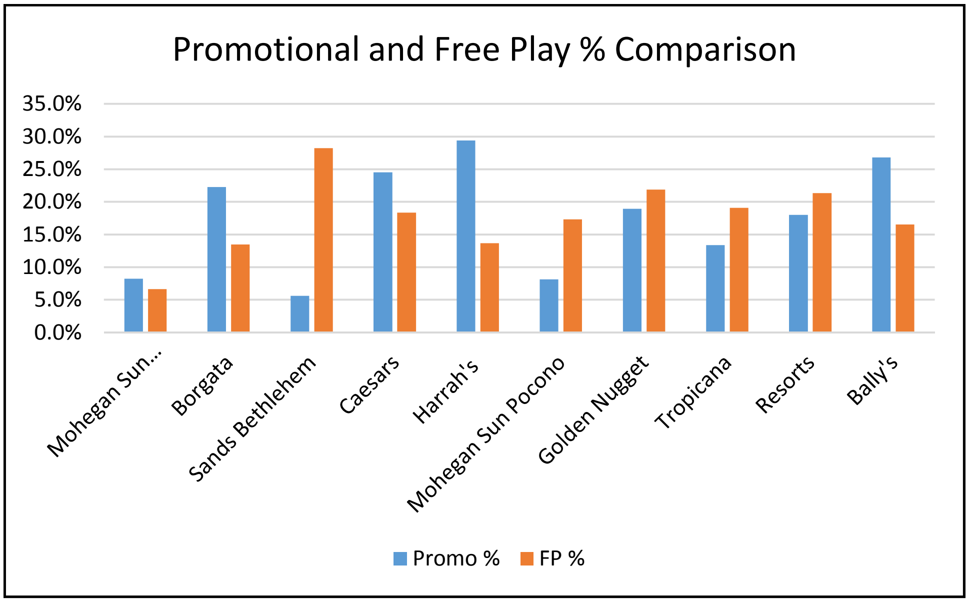
Northeast Benchmarks – Tax Rate, GGR, Promo & Margin Comparison

	Tax Rate	GGR	Promo and FP	Margin
Mohegan Sun Connecticut	16.0%	$ 909,937	14.8%	29.5%
Borgata	9.3%	$ 663,119	35.7%	28.0%
Sands Bethlehem	36.6%	$ 531,700	33.8%	25.9%
Caesars	9.3%	$ 248,852	42.9%	18.7%
Harrah's	9.3%	$ 309,118	43.0%	18.3%
Mohegan Sun Pocono	46.7%	$ 266,221	25.5%	17.8%
Golden Nugget	9.3%	$ 181,091	40.8%	11.4%
Tropicana	9.3%	$ 267,482	32.5%	11.0%
Resorts	9.3%	$ 139,916	39.4%	9.0%
Bally's	9.3%	$ 178,731	43.4%	5.7%

Source: Company earnings releases and public filing and State gaming commission reports

The differences in promotional strategies is highlighted by the following chart. Several Atlantic City casinos rely more heavily on comps than on free play and, those that do, generally have higher margins. The Borgata, Caesars and Harrah's all spend considerably more as a percentage of gaming revenue on promotional allowances as opposed to free play than any of the other casinos in the benchmark set.

The data in this chart clearly identifies each firm's promotional strategy. Mohegan Sun Connecticut, due to limited competition, regulation and its history, spends very little on both promotional allowances and free play (because they don't have to) but we suspect this will change once casinos open in Massachusetts. The Sands Bethlehem and Mohegan Sun Pocono both rely more on Free Play (due to tax rate). The Sands is known to use free slot play to drive table game play among a certain cohort of players and this drives up their free play percentage. The Borgata, Harrah's, Caesars and Bally's all rely more on comps (and all but Bally's have higher margins) while the Golden Nugget, Tropicana and Resorts all are more selective in their promotional strategies but lean more towards free play.



Source: Company earnings releases and public filing and State gaming commission reports

Tax Adjusted Margins add more to the Story

While we have established that gaming tax rates are not the most important determinant of operating margin, it can be instructive to analyze operating margins on a tax adjusted basis (i.e. EBITDA + Gaming Tax / Net Revenue). GGH analyzed the competitor set based on size (hotel and gaming capacity combined) and the ratio of gaming positions to rooms.

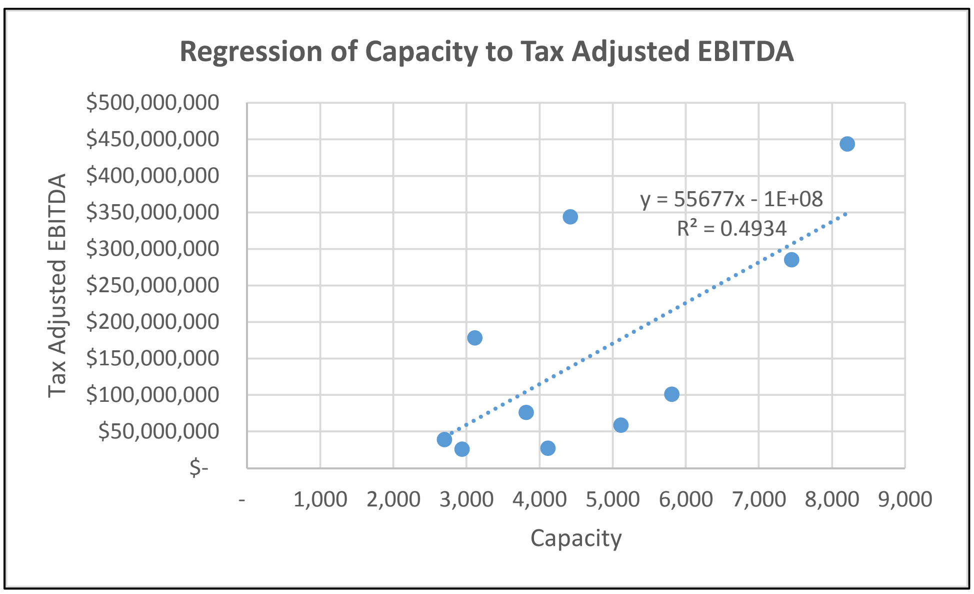
The table below shows that on a tax adjusted basis, the Sands Bethlehem is the second most profitable casino in the peer group in terms of tax adjusted EBITDA and the most profitable in terms of operating margin. Only Mohegan Sun Pocono, another Pennsylvania based casino, comes close in terms of margin. Other notable findings are that the two Pennsylvania casinos have gaming positions to rooms ratios well above the Atlantic City casinos and Connecticut. Sands Bethlehem and both Mohegan Sun casinos rely principally on drive-in customers and less on hotel guests than Atlantic City based casinos and this is reflected in the capacity related ratio. This leads to a much higher reliance on gaming revenue and significantly higher tax adjusted margins. If not for Pennsylvania's high tax rates, the Sands and Mohegan Sun Pocono would be enormously profitable both relative to the size (in terms of room and gaming capacity) of their offerings and to other casinos. As discussed earlier in this analysis, this is mostly due to proximity to large populations and the ability to drive outsized gaming revenue.

Analysis of Tax Adjusted EBITDA

	Capacity (Rooms plus Positions)	Gaming Positions to Rooms Ratio	Net Rev/Unit of Capacity	Net Rev	Tax Adjusted EBITDA	Tax Adjusted Margin	% Net Revenue from Gaming
Mohegan Sun CT	8,213	5.8	$ 124,446	$ 1,022,076,000	$ 443,819,000	43.4%	87.2%
Sands Bethlehem	4,421	14.7	$ 129,247	$ 571,400,000	$ 343,697,000	60.1%	93.1%
Borgata	7,450	1.7	$ 111,338	$ 829,469,000	$ 284,971,520	34.4%	79.9%
Mohegan Sun Pocono	3,116	12.1	$ 95,853	$ 298,677,000	$ 177,934,788	59.6%	92.3%
Harrah's	5,813	1.2	$ 71,691	$ 416,738,000	$ 101,028,440	24.2%	74.2%
Caesars	3,818	2.3	$ 78,606	$ 300,116,000	$ 76,060,160	25.3%	82.9%
Tropicana	5,115	1.5	$ 65,684	$ 335,976,000	$ 58,477,560	17.4%	79.6%
Golden Nugget	2,700	2.8	$ 78,648	$ 212,349,000	$ 38,629,280	18.2%	85.3%
Ballys	4,118	2.3	$ 54,350	$ 223,813,000	$ 27,021,480	12.1%	79.9%
Resorts	2,942	2.1	$ 55,300	$ 162,694,000	$ 25,815,280	15.9%	86.0%

Source: Company earnings releases and public filing and State gaming commission reports[5]

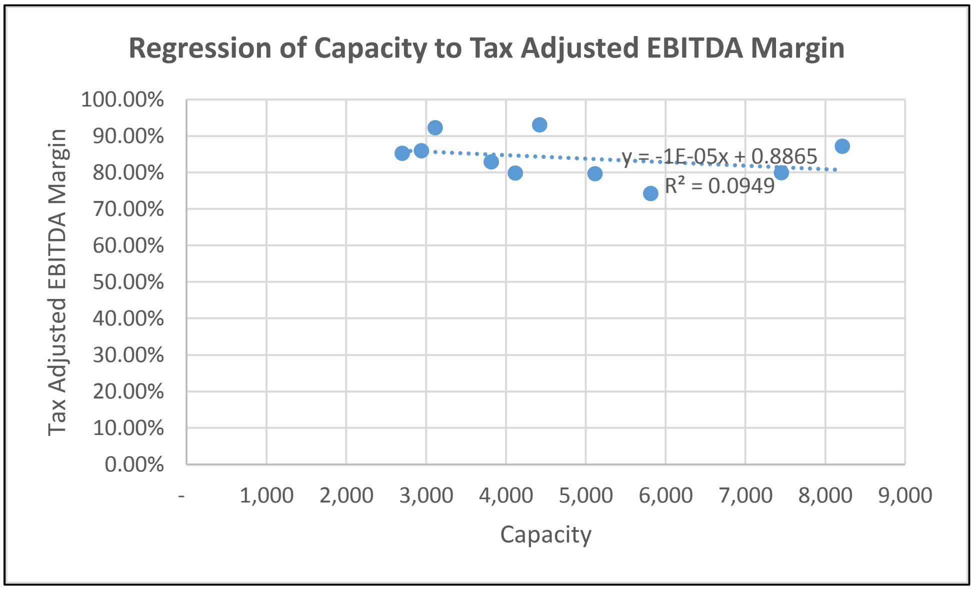
One key question is whether size maters - i.e. does size translate into tax adjusted EBITDA. The following regression analysis indicates that there is a positive relationship between size and tax adjusted EBITDA, but that is not all of the story. At less than 50% correlation, the correlation of size to adjusted EBITDA is not perfect. While Mohegan Sun Connecticut and the Borgata are large properties and generate significant EBITDA, other properties like the Sands Bethlehem and Mohegan Sun Pocono drive outsized EBITDA relative to other properties with similar capacity.



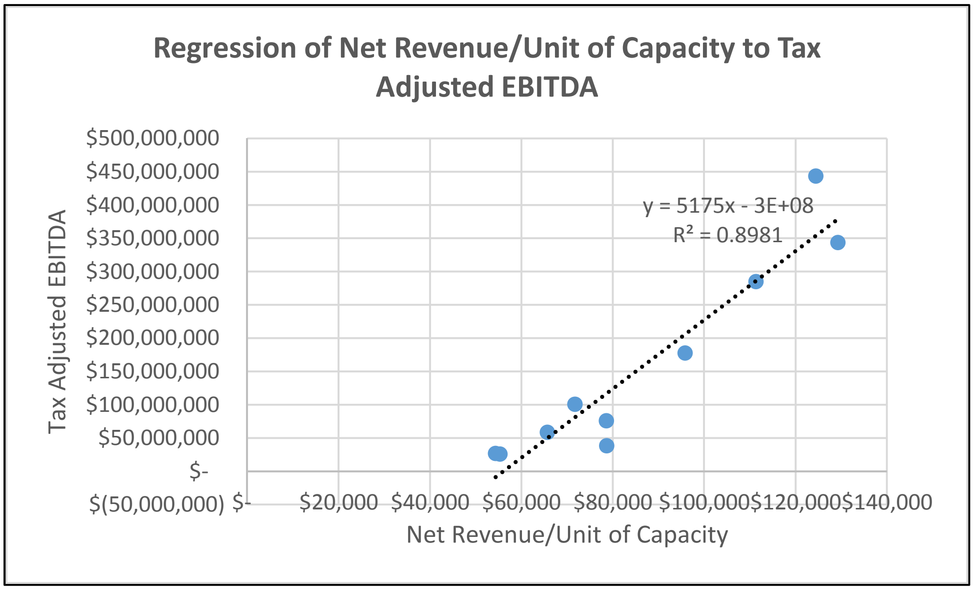
Source: GGH analysis, state regulatory filings and company public filings

[5] Capacity derived by adding hotel rooms to gaming positions. Gaming positions are defined as the number of slot machines plus 6 times the number of table games. The % of net revenue from gaming statistic is derived by dividing gaming revenue (net of free play) into net revenue.

This relationship breaks down when comparing capacity to tax adjusted operating margin. There is no correlation between size and margin, indicating that other factors are the principal driver of margin. While no great revelation, it helps pinpoint the strategies that these casinos are using to drive both margin and total EBITDA. For instance, the two casinos with the highest tax adjusted margin (Sands Bethlehem and Mohegan Sun Pocono) rely more on a drive-in customer and convenience markets than almost all of the other casinos in our data set. This translates to shorter trip duration and less reliance on amenities to drive visitation, reducing overall costs.

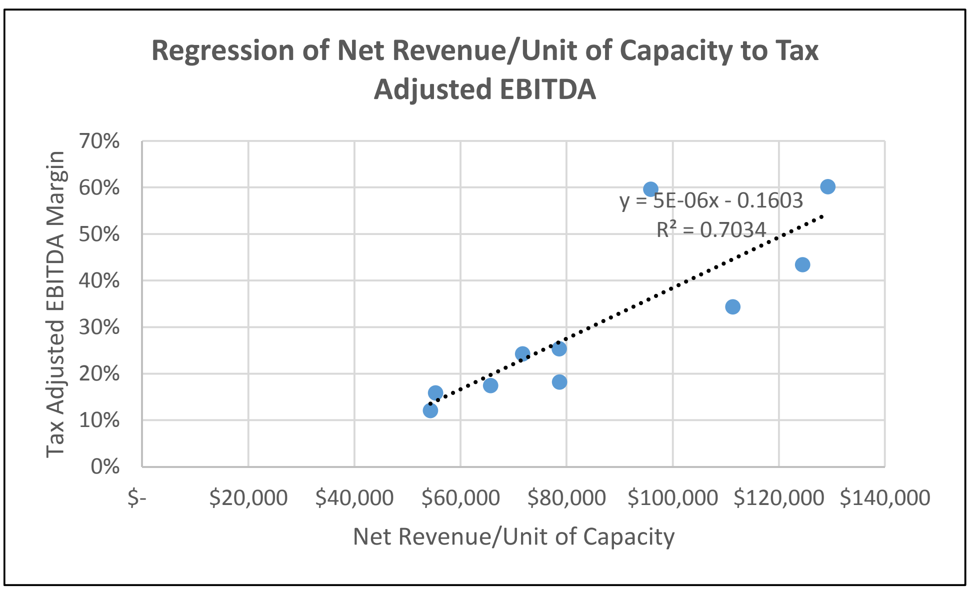


Here is where it gets interesting. GGH performed a regression of net revenue generation per unit of capacity (defined as rooms and gaming positions combined) to Tax Adjusted EBITDA. This resulted in a correlation of approximately 90%. This indicates that the ability to drive net revenue in relation to capacity has a large impact on a casino's tax adjusted EBITDA. The two most profitable properties (Mohegan Sun Connecticut and Sands Bethlehem) drive outsized revenue relative to capacity and the Borgata and Mohegan Sun Pocono both outperform the other peer casinos significantly. This makes total sense as a result of the power of "economy of scale" realities. These casinos have achieved the appropriate balance of capacity and potential revenues.



Source: GGH analysis, state regulatory filings and company public filings

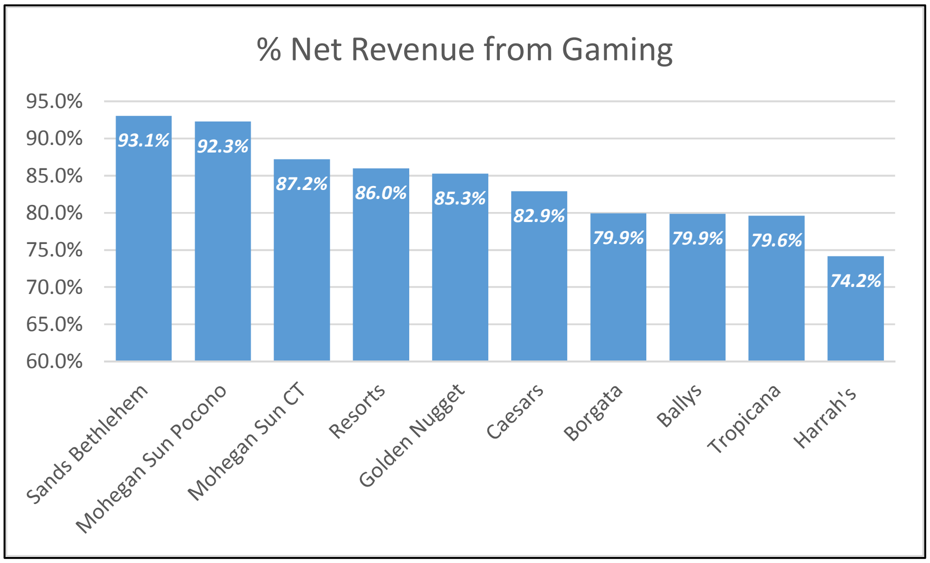
GGH also compared revenue generation per unit of capacity to tax adjusted operating margin and while not as conclusive as the relationship to total tax adjusted EBITDA, the results are still impressive. Over 70% of the change in tax adjusted margin can be explained by the ability to drive revenue relative to capacity.



Source: GGH analysis, state regulatory filings and company public filings

So where does this leave us? It seems that net margin and EBITDA are mostly a function of the ability to drive outsized revenue relative to capacity and taxes, therefore taking advantage of economy of scale realities.

This is where promotional allowances play an important role. The tax adjusted data above highlights the importance of strategy and complexity on operating margin. The casinos that rely on drive-in markets have significantly less complexity than the destination casinos in Atlantic City.[6] As noted above, Sands Bethlehem and Mohegan Sun generate significant revenue relative to their capacity and also rely to a very large extent on gaming revenue vs. non-gaming revenue. These two properties have the highest tax adjusted margins because of their high margin mix of revenues.



Source: GGH analysis, state regulatory filings and company public filings

All of the other casinos can be characterized as more complex than the two Pennsylvania casinos. This is obviously dictated by location (further from population density) and the lower tax rates in Connecticut and Atlantic City. This complexity results in significantly lower operating margins (again because of the mix of revenues) but there is still wide variation among the various properties. GGH sorted each of the properties in our analysis by capacity in order to determine if there is clear segmentation among properties.

The larger casinos (Mohegan Sun Connecticut and the Borgata) do stand out in terms of total EBITDA and net margin (EBITDA %) but there is significant variability among other casinos and all of those casinos, except Sands Bethlehem, report significantly lower EBITDA and margins.

The highlights are as follows. Casinos with higher tax rates and less complexity give away comparatively little in terms of promotional allowances and rely more on free play. The casinos in Atlantic City that rely more on free play generally have lower margins than their peers

[6] For purposes of this analysis, drive-in markets are defined as markets proximate to casinos where trips are naturally of a short duration (less than two hours). Destination markets in the Northeast are those that have a more significant reliance on overnight customers or where customer trips are of a longer duration.

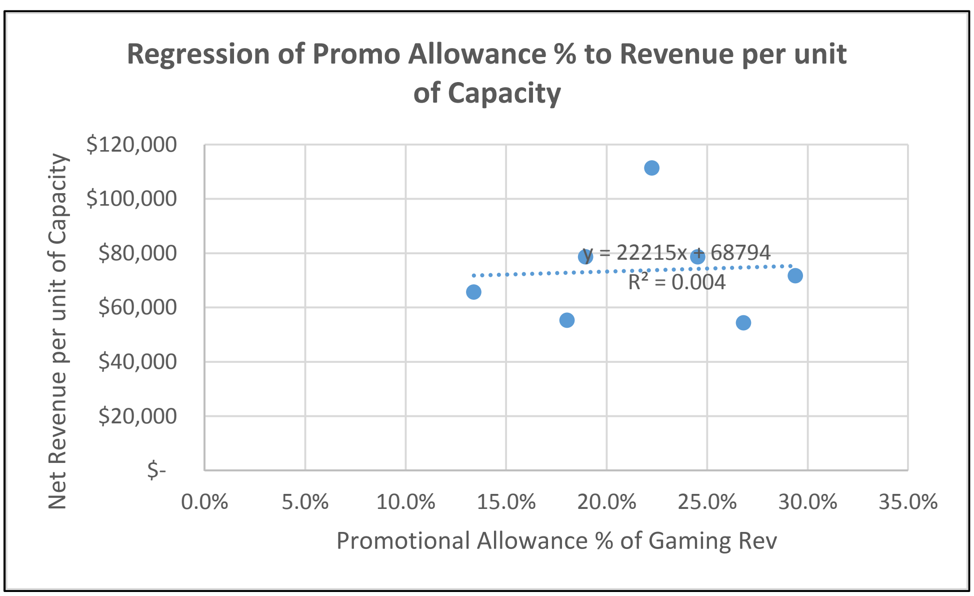
indicating that they possibly have exceeded the correct balance of free play issuance and are displacing out of pocket cash gaming win, which is very high margin, as discussed previously.

Comparison Sorted by Capacity (Rooms + Gaming Positions

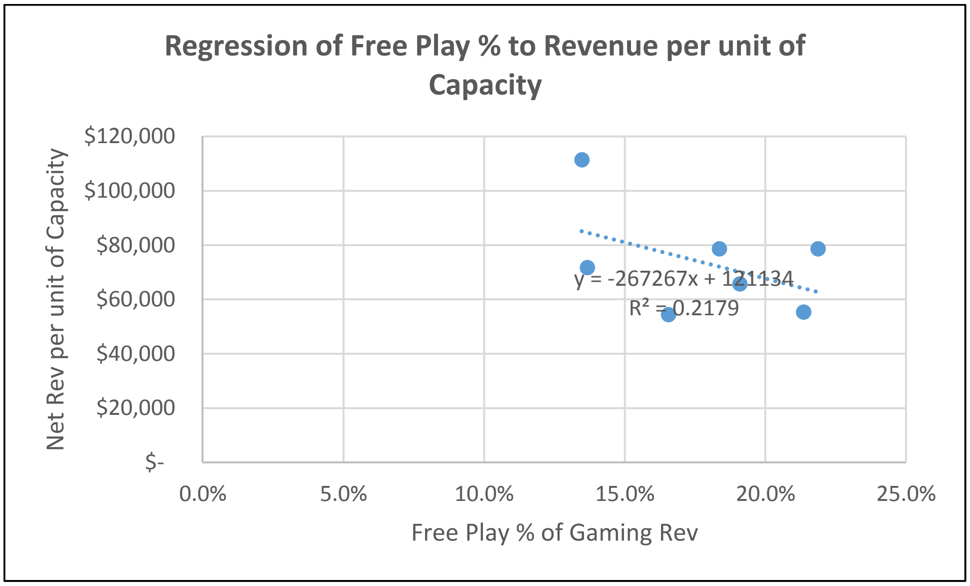
	Capacity (Rooms plus Positions)	Gaming Positions Per Room	Net Rev/Unit of Capacity	Total EBITDA	EBITDA %	Promo Allowance as % of Total Revenue	Promo Allowance as % of Gaming Revenue	Free Play as % of Gaming Revenue
Mohegan Sun CT	8,213	5.8	$ 124,446	$ 301,387,000	29.5%	6.8%	8.4%	6.8%
Borgata	7,450	1.7	$ 111,338	$ 231,922,000	28.0%	15.1%	22.2%	13.5%
Sands Bethlehem	4,421	14.7	$ 129,247	$ 147,800,000	25.9%	5.0%	5.6%	28.2%
Caesars	3,818	2.3	$ 78,606	$ 56,152,000	18.7%	16.9%	24.5%	18.4%
Ballys	4,118	2.3	$ 54,350	$ 12,723,000	5.7%	17.6%	26.8%	16.5%
Harrah's	5,813	1.2	$ 71,691	$ 76,299,000	18.3%	17.9%	29.4%	13.7%
Tropicana	5,115	1.5	$ 65,684	$ 37,079,000	11.0%	9.6%	13.4%	19.1%
Mohegan Sun Pocono	3,116	12.1	$ 95,853	$ 53,281,000	17.8%	6.8%	7.9%	16.7%
Golden Nugget	2,700	2.8	$ 78,648	$ 24,142,000	11.4%	13.9%	18.9%	21.9%
Resorts	2,942	2.1	$ 55,300	$ 14,622,000	9.0%	13.4%	18.0%	21.4%

Source: Company earnings releases and public filing and State gaming commission reports

Finally, GGH analyzed both promotional allowances and free play to the ability to generate outsized revenue compared to capacity, for just the Atlantic City casinos. The results are intriguing. There is no relationship between the percentage of promotional allowances and net revenue generating comparison and there is a negative (although weak) relationship between the use of free play and net revenue generating capacity.



Source: GGH analysis, state regulatory filings and company public filings



Source: GGH analysis, state regulatory filings and company public filings

These analyses indicate that casinos in Atlantic City might be buying unprofitable business with their promotional strategies. Casinos that manage their promotional costs tend to do better than peers (see any casino vs. Bally's) and **the overall ability to manage margins requires a disciplined approach to managing promotional costs and free play.**

<u>CONCLUSIONS</u>

So here is the bottom line. Driving EBITDA and net margin is a function of a casino's ability to drive excess revenue relative to its hotel and gaming capacity than its market peers along with achieving the correct balance of high-margin revenues to total revenues. This ability is related mostly to location (proximity to population) and then to overall strategic positioning and execution (see Borgata and Mohegan Sun Connecticut). **Casinos that over issue free play and promotional allowances in an effort to increase gaming revenue may be doing more harm than good to their bottom line.**

In a hyper competitive market, for properties that have to do more with less, understanding your position in the market, focusing on the core customer and developing a value proposition for which customers are willing to pay, while reducing overall marketing spend, including promotional allowances and free play, is the best strategy.

ABOUT GGH AND THE AUTHOR

GGH is a consortium of consulting firms serving the world wide gaming industry. GGH member firms are Global Gaming & Hospitality, LLC and Morowitz Gaming Advisors, LLC. GGH provides myriad services devoted to the gaming industry from pure consulting to M&A advisory. Service lines include Industry Knowledge, Capital Markets and Asset Management – exclusively dedicated to casino operators and investors. Most recently, GGH was the gaming licensee acting as owner/operator in the successful turnaround of the former John Asquaga's Nugget in Sparks, Nevada, a 1,400 hotel room casino resort.

GGH used all of its available experience, tools and resources to acquire, operate, turn-around and sell this large casino resort, which was acquired in partnership with one of its clients. Other recent initiatives include the launch of M^2G, a data analytics platform that allows casinos to visualize and manage casino data to make optimal decisions involving marketing and promotional spend, labor deployment, capital expenditures and other important facets of casino operations. GGH also recently launched initiatives in the emerging AML reporting and compliance arena. These varied experiences have allowed GGH to develop a unique perspective & knowledge regarding casino operations throughout the U.S.

Cory Morowitz is the author of this study and one of GGH's three managing partners (along with Carlton L. Geer and Michael S. Kim). He is responsible for the firm's industry knowledge and analytics practice and has consulted to gaming firms throughout the world for over 25 years. Mr. Morowitz received his MBA from the Wharton School of the University of Pennsylvania, has been an adjunct professor in Drexel University's hospitality program and is the author of numerous studies, articles and white papers. This is a first of a series of White Papers that GGH will be releasing for the benefit of the gaming industry. Cory can be reached at cory@morowitzgaming.com.