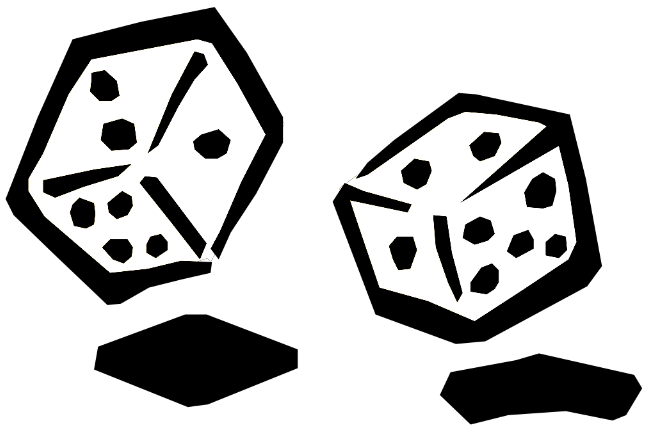
Final Project

Harrah's Entertainment (HET)



New York University

Stern School of Business Administration

Equity Valuation – Executive MBA

Professors Aswath Damodaran – Spring, 2004

Submitted by: Andrew Lorenzetti

Overview

I believe that the current market price of Harrah's Entertainments, $53.95, is below the intrinsic value of the firm ($58.28). Additionally, industry comparable company analysis indicates that Harrah's is undervalued. Therefore, I recommend buying Harrah's Entertainment.

Harrah's Entertainment (HET) operates 26 casinos in 13 states under the Harrah´s, Harveys, Rio, and Showboat brand names. Its operations date back to over 60 years ago. Their strategy is to concentrate on building loyalty and value for their customers, shareholders, employees, business partners, and communities by being the most service-oriented, technology-driven, geographically-diversified company in the gaming industry. Harrah's operates both land-based casino hotels and riverboat and dockside casinos. Harrah's operates three casinos in Las Vegas and two casinos in Atlantic City. Harrah's has major market positions in many of the fastest growing gaming markets in the country, including Louisiana, Indiana and Illinois. As these markets grow, Harrah's is in a strong position to leverage its brand, strong positive cash flow, strong CRM capabilities and reputation for service to expand its business in these areas.

Harrah's revenue grew 5% in 2003 to $4.3 billion, primarily from organic growth. The acquisitions of Louisiana Downs in late 2002 resulted in a slight revenue increase. Fully year net income was $292.6 million, up 24.5% from $235.0 million in 2002. This increase was due to 2003 revenue growth and the recognition of a $91 million impairment charge recognized in 2002. Harrah's is geographically diversified, which reduces the firm's exposure to any one market as new supply is added and/or new legislation is passed. No single region makes up more than 35% of EBITDA and no single property makes up more than 17% of EBITDA.

Harrah's has achieved above market growth rates primarily through their acquisition program. Casino gaming in the US has grown at over a 15% CAGR for the last decade, reaching $42 billion in 2003. The industry grew at a rate of 3% in 2003. Harrah's five-year CAGR is 9.3%. Harrah's has made a number of large acquisitions throughout the years including its recent purchase of the Horseshoe brand.

Name	Year	Purchase Price
Showboat	1998	$550 Million
Rio	1999	$888 Million
Players International	2000	$425 Million
Harvey's	2001	$675 Million
Louisiana Downs	2002	$157 Million
Horseshoe	2003	$1.45 Billion

Discounted Cash Flow Analysis

I have projected Harrah's cash flows for five years based on assumptions regarding revenue growth, profit margins, SG&A spending, effective tax rate and reinvestment rates. This analysis incorporates the acquisition of Horseshoe in 2004, adding over $550 million of revenue.

	Actuals	Projections				
	2003	**2004**	**2005**	**2006**	**2007**	**2008**
Revenue						
Casino	3,853	4,591	4,812	5,010	5,230	5,460
Food & Beverage	631	714	811	864	907	952
Rooms	352	383	406	461	484	508
Management Fees	72	77	81	115	151	159
Other	196	204	216	230	242	254
Promotional Allowance	(782)	(867)	(919)	(921)	(967)	(984)
Total Revenue	**4,323**	**5,101**	**5,407**	**5,758**	**6,046**	**6,349**
Operating Expenses						
Casino	1,974	2,341	2,358	2,455	2,537	2,621
Food & Beverage	262	293	357	380	390	409
Rooms	66	77	97	106	106	112
Cost of Goods Sold	2,302	2,711	2,812	2,941	3,033	3,142
SG&A	918	1,071	1,135	1,209	1,270	1,301
Total Operating Expense	**3,220**	**3,782**	**3,948**	**4,150**	**4,303**	**4,443**
EBITDA	**1,103**	**1,319**	**1,459**	**1,608**	**1,744**	**1,905**
Depreciation	317	374	541	547	574	571
EBIT	**785**	**945**	**919**	**1,061**	**1,169**	**1,334**
Taxes	289	350	340	393	433	494
Earnings Before Interest	**496**	**595**	**579**	**669**	**737**	**840**

	Actuals	Projections				
	2003	**2004**	**2005**	**2006**	**2007**	**2008**
Unlevered Free Cash Flow						
Earnings Before Interest	496	595	579	669	737	840
Net Capital Expenditures	(200)	(1,488)	(579)	(669)	(589)	(504)
Change in Net Working Capital	(46)	(62)	(24)	(28)	(23)	(24)
Free Cash Flow to the Firm	**250**	**(955)**	**(24)**	**(28)**	**124**	**312**

I have assumed the revenue grows by 18% in 2004, 6% in 2005, 6.5% in 2006 and 5% in 2007 and 2008. Harrah's will be able to leverage its CRM capabilities to increase revenues above industry projections (3%). Revenue growth is also fueled by projected increases in gaming square footage and rooms. Harrah's anticipates the completion of a new hotel tower at their Louisiana property by 2006. Harrah's will also take cost of the business by streamlining gaming operation through the installation of new gaming technologies, including coin less slot machines and automatic muckers. Margins are also expected to improve as promotional allowance as a percentage of gross revenue declines from 15% in 2003 down towards the industry average of 12%.

Harrah's will reinvest in the business at levels far out seeding their normalized 5 year reinvestment rate of 61%, as the company acquires Horseshoe in 2004, expands gaming floor space in existing casinos, incurs technology investments to improve operations and constructs new facilities over the next four years.

	Projections				
	2004	**2005**	**2006**	**2007**	**2008**
Reinvestment Rate	250%	100%	100%	80%	60%
NWC % of Revenue	-8%	-8%	-8%	-8%	-8%
ROIC	8%	-3%	16%	13%	23%
growth in EBIT (1-T)	20%	-3%	16%	10%	14%

The projected cash flows were discounted back at a projected weighted average cost of capital based on the following assumptions.

		Projections				
		2004	**2005**	**2006**	**2007**	**2008**
Risk Free Rate (3/23/04)	3.7%					
Debt Spread (BBB-)	1.6%					
Tax Rate	37%					
Implied Market Risk Premium	4%					
Unlevered Beta		60%	60%	75%	75%	90%
D/E		73%	70%	70%	70%	70%
Levered Beta		72%	69%	86%	86%	103%
Cost of Equity		6.6%	6.4%	7.1%	7.1%	7.8%
Cost of Debt		5.3%	5.3%	5.3%	5.3%	5.3%
Weighted Average Cost of Capital		**5.2%**	**5.2%**	**5.6%**	**5.6%**	**6.0%**

Harrah's is currently rated BBB- by S&P and Fitch. The current spread over treasuries for this bond rating is 160 bps. I have assumed that Harrah's will maintain this rating into perpetuity. The unlevered beta for gaming companies is .6. The following table indicates the peer group used to assess the operating risk of the industry.

Company Name	Ticker Syml	*Value Line Beta*	*Eff Tax Rate*	*Market D/E*
Alliance Gaming Corp	AGI	1.15	35.57%	27.53%
Argosy Gaming	AGY	1	44.50%	118.60%
Ameristar Casinos Inc.	ASCA	0.55	36.43%	123.51%
Aztar Corp.	AZR	0.9	39.63%	67.96%
Boyd Gaming	BYD	0.9	36.88%	117.39%
Churchill Downs	CHDN	0.75	40.25%	25.96%
Century Casinos Inc	CNTY	0.55	42.56%	40.53%
Gaylord Entertainm.	GET	0.9	0.00%	94.01%
GTECH Holdings	GTK	0.85	38.00%	10.11%
Harrah's Entertain.	HET	1	36.75%	68.80%
Int'l Game Tech.	IGT	0.95	37.70%	8.02%
Isle of Capri Casinos Inc	ISLE	0.95	36.90%	162.04%
Lakes Entertainment Inc.	LACO	0.8	0.00%	0.00%
Mandalay Resort Group	MBG	0.95	39.23%	97.62%
Monarch Casino & Resort	MCRI	0.6	34.01%	58.54%
Marcus Corp.	MCS	0.85	39.09%	57.88%
MGM Mirage	MGG	1.1	38.39%	94.67%
MTR Gaming Group Inc	MNTG	1.2	35.14%	37.72%
Penn National Gaming Inc.	PENN	0.95	37.37%	41.26%
Pinnacle Entertainment Inc	PNK	0.95	0.00%	199.07%
Park Place Entertain.	PPE	1.15	42.16%	149.31%
Sands Regent	SNDS	0.8	33.58%	48.20%
Station Casinos	STN	0.95	34.89%	64.92%
Average		90.2%	33.0%	74.5%
Unlevered Beta		60.2%		

The industry unlevered beta is levered based on Harrah's current market value of debt to market value of equity ratio of 73%. I have assumed that Harrah's will maintain a 70% debt to equity ratio after 2005, its 5 year historical average. I have also assumed that the industry unlevered beta will approach 100% overtime. Finally, I have assumed that the market risk premium is 4%. Even though the current implied market risk premium is 3.51%, we have seen that the implied market risk premium tends to settle around 4%.

I have assumed that the EBIT(1-t) grows at 3.3% into perpetuity. This assumption is based on a 55% reinvestment rate and a 6% return on invested capital. I have also assumed that the long-term WACC is 6%, holding the Year 5 assumptions constant.

These assumptions have lead to the following Discounted Cash Flow valuation.

Present Value of Forecast	(614)
Present Value of Terminal Value	11,156
Intrinsic Enterprise Value	**10,541**
Cash	410
Market Value of Debt	3,976
Market Value of Capital Leases	0.7
Market Value of Operating Leases	408
Intrinsic Value of Equity	**6,567**
Fully Diluted Shares Outstanding	112.7
Intrinsic Price Per Share	58.29
Market Price Per Share	53.95
Implied Premium	*8%*

Fully diluted shares include both shares outstanding and the dilutive effect of in the money exercisable sock option (treasury method). Harrah's does not hold minority interests in other firms.

Value Enhancement

Harrah's has the ability to enhance shareholder value by extending the length of its high growth period by building on its customer service competitive advantage. Harrah's should increase its management consulting business (to Native American Casino). By leveraging their management know-how, Harrah's can win new contracts with Native Americas, granting them access to a markets to which they are not legally allowed to enter. Harrah's, which is known for their ability to embrace technology, can continue to lead the industry in finding ways to automate certain aspects of the gaming experience, further increasing margins.

Sensitivity

The most important assumptions in this discounted cash flow valuation analysis are primarily the revenue growth rate, discount rate and terminal growth rate. Based on the significant amount of reinvestment in the business over the next three years, the forecast period produces a negative value. Therefore, over 100% of the firm's value is captured in the terminal value. As such, if the firm is unable to meet the Year 5 projected cash flow, the overall valuation will be dramatically changed. Additionally, I have assumed that the industry beta approaches 1 over the life of the model. If for some reason the industry is able to maintain a risk profile which is different than the market, the discount rate will be lower and the valuation will increase. Lastly, I have assumed a terminal growth rate of 3.3%, which is slightly below analyst's projected 3.5%. If the firm is able to achieve greater perpetual growth, primarily through increased ROIC, the projected firm value will be increased.

Relative Valuation

The gaming industry currently trades at 8.9 times 2004 projected EBITDA, while Harrah's trades at only 7.6 times 2004 projected EBITDA. Harrah's historically trades at a discount to the industry average, averaging approximately 91% over the past two years. Harrah's current multiple reflect a 15% discount. Adjusting for the historical discount, Harrah's relative valuation is $58.75 per share.

	Enterprise Values					
	1999	**2000**	**2001**	**2002**	**2003**	**3/23/2004**
Aztar	899	932	1,047	1,292	1,107	1,402
Boyd Gaming	1,260	1,146	1,465	1,993	2,073	2,498
Caesars Entertainment	9,074	8,630	7,743	7,084	7,015	8,374
Harrah's Entertainment	5,643	5,991	7,617	7,772	8,691	9,974
Manadalay Resort Group	3,993	4,248	4,390	4,418	5,853	6,350
MGM Mirage	4,212	9,811	9,897	10,213	10,988	11,858
Station Casinos	1,805	1,636	1,812	2,132	3,044	3,806

	EV/EBITDA Multiple					
	1999	**2000**	**2001**	**2002**	**2003**	**3/23/2004**
Aztar	6.3 x	5.5 x	5.7 x	6.9 x	6.3 x	7.5 x
Boyd Gaming	5.9 x	5.6 x	6.8 x	7.8 x	8.5 x	9.4 x
Caesars Entertainment	11.7 x	7. x	7.8 x	7.1 x	8. x	7.9 x
Harrah's Entertainment	7.6 x	10. x	8.7 x	7.2 x	8.3 x	7.6 x
Manadalay Resort Group	8. x	6.6 x	13.7 x	7.1 x	8.9 x	8.9 x
MGM Mirage	10.3 x	10.2 x	10.4 x	9.2 x	10.3 x	9.9 x
Station Casinos	7.6 x	6. x	8.7 x	9.7 x	14.2 x	10.9 x
Max	11.7 x	10.2 x	13.7 x	9.7 x	14.2 x	10.9 x
Mean	**8.2 x**	**7.3 x**	**8.8 x**	**7.9 x**	**9.2 x**	**8.9 x**
Min	5.9 x	5.5 x	5.7 x	6.9 x	6.3 x	7.5 x

Relative Valuation	11,678
Cash	410
Debt	4,384
Relative Equity Value	7,704

Normalized Relative Valuation	10,592.69
Cash	410
Debt	4,384
Relative Equity Value	6,619
Normalized Relative Price Per Share	58.75
Current Price Per Share	53.95
Implied Premium	9%

Based on a regression of the U.S. Market, Harrah's stock is overvalued. For this analysis, I looked at the firm without the impact of the Horseshoe acquisition, since it has not closed yet. The regression multiple of 7.78 time 2004 EBITDA (per Horseshoe) indicates that Harrah's stock should trade at $51.00 per share.

Relative EV/EBITDA Multiple	**7.784**	
Constant	10.073	
Revenue Growth	0.907	5.0%
Tax Rate	-0.152	37%
Reinvestment Rate	-0.015	80%
R Squared	33.8%	

2004 Pre-Horseshoe EBITDA	1,248.45
Relative Enterprise Value	9,717.96
Cash	410
Market Value of Debt	4,384.06
Relative Equity Value	5,743.84
Price per Share	51.0

Conclusion and Recommendation

I recommend buying Harrah's Entertainment based on the 8% premium implied by the intrinsic value calculation of Harrah's. I gain further confidence in this recommendation when looking at the Gaming Industry EBITDA trading multiples. I believe that Harrah's is undervalued by the market due to the overhang of the closing of the Horseshoe acquisition. Additionally, I believe that the market is still waiting to understand the full year impact that the Borgata (opened in July 2003) will have on the Atlantic City properties.