Krause Fund Research
Spring 2004

Gaming

MGM Mirage (NYSE: MGG)

Recommendation: BUY

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Analyst

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Current Price **$44.90**
Target Price **$55-57**

The Winning Hand

- MGM has a premier position in the gaming industry both domestically and internationally. Domestically, MGM is heavily concentrated in Las Vegas, which has not been as impacted by the substantial gaming tax increases that have taken place in other states such as Illinois and New York. MGM is also well positioned in Macau, China and the U.K. where there is considerable potential for the gaming industry in the near-term.

- Significant gains in room rates and increases in slot hold percentages are primary drivers in our revenue forecasts. RevPAR, a key metric that measures revenue per available room, is up over 50% on the Las Vegas Strip compared to this time last year. We expect this metric to continue to increase as lucrative conventioneers replace second-rate leisure vacationers. Slot hold percentages have increased 24 basis points over the last 3 years (2).

- MGM has some of the most valuable assets in the industry. Because their properties are generally of higher quality, they are a leader in the high-end gamblers segment. This segment is poised to outperform the rest of the industry as the economy picks up in the next 1-3 years.

- Risks that MGM will not reach the target price range include increased gaming taxes due to worsening state budget deficits; rising unemployment; and geopolitical instability.

Company Overview

MGM Mirage operates hotel-casinos and resorts. The company's Las Vegas properties include Bellagio, MGM Grand Las Vegas, The Mirage, Treasure Island, New York-New York, Monte Carlo Resort and Casino, the Boardwalk Hotel and Casino, Borgata, and Shadow Creek Golf Resort. Outside of Las Vegas, the company owns hotel-casinos in Primm, NV, Atlantic City, Detroit, MI and Biloxi, MS, as well as in Australia. MGM Mirage operates a total of more than 26,000 rooms and about 1,200,000 square feet of casino gaming area with approximately 26,000 slot machines and over 1,000 gaming tables. Many of the company's hotel-casinos also provide retail, restaurant, entertainment and convention space.

Stock Performance Highlights

52 week High – 4/5/04	$48.89
52 week Low – 5/21/03	$26.40
Beta Value (4 year)	1.11
Average Daily Volume	605 m

Earnings Forecasts:

Estimates	2003A	2004E	2005E
EPS:	$1.64	$1.95	$2.18
P/E:	27.4x	21.9x	19.7x
Consensus EPS:		*$1.90*	*$2.14*

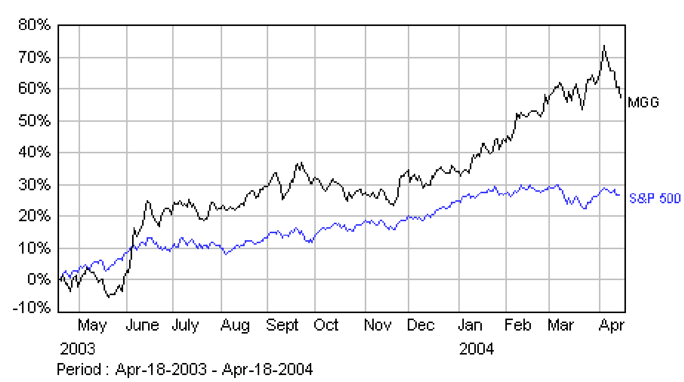
Share Highlights

Market Capitalization	$6.45 b
Shares Outstanding	142.61 m
Book Value per share	$17.8
EPS03	$1.64
P/E Ratio	27x
Dividend Yield	N/A
Dividend Payout Ratio	0%

Company Performance Highlights

ROA	2.8%
ROE	11.0%
Annual Revenue (2003)	$3.91 b

One Year Stock Performance



Source: www.quicken.com

Overview

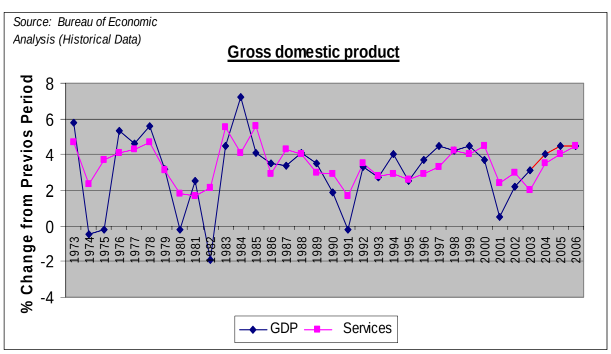
MGM Mirage is one of the world's largest casino-resort companies. The company is part of the Gaming and Lodging industries, which are both a part of the broader Consumer Services sector. We gave MGM a BUY rating (27% potential upside) because increased domestic leisure travel and significant gains in room rates and slot profitability will assure earnings growth for Gaming companies. We also believe MGM has some of the best assets and is better positioned than its competitors to take advantage of growth opportunities to expand overseas in Macau, China and the U.K.

The Economic Cycle is on Our Side

Macro Economy:

Gross Domestic Product

The U.S. officially entered a recovery period in the fourth quarter of 2001. However, the recovery was extremely slow through 2002. In 2003, business and consumer spending picked up and stocks rebounded, posting gains not seen since the second half of 1998. Real GDP, a key indicator of the overall health of the economy, grew 2.2% and 4.1% in 2002 and 2003, respectively. Historically, GDP in the U.S. during recovery years has averaged 6% growth, but we estimate 2004 and 2005 growth to remain steady around 4-4.5%. Delayed recovery in the labor market will hold economic growth at moderate levels.



An expansionary economic environment is positive for the Consumer Services sector, because its growth rate historically follows the growth rate of the economy, or the GDP. Companies in the Consumer Services sector are poised to do well in the next few years as the U.S. economy enters the expansionary period of the business cycle.

Consumer Confidence

Making up two-thirds of the GDP, consumer spending plays a vital role in the health of the economy. Consumer spending correlates with the consumer confidence index (CCI), which measures consumer attitudes toward the economy. The CCI reveals consumers' expectations of their future wealth and spending activities, and therefore is an important indicator for the Gaming and Lodging industries.

Confidence levels fell to record lows after the events of September 11. According to the University of Michigan's CCI, confidence levels have not returned to the high levels of the late 1990s. However, they have steadily increased since the lows at the beginning of 2003 (4).

We expect gradual increases in confidence levels over the next 1 to 2 years. We feel the delayed recovery in the labor market will cause consumer confidence to be volatile in the short-term, but will increase steadily by the second quarter of 2004 as people receive higher-than-expected tax refunds. Increased confidence is positive for the Lodging and Gaming industries, because it will lead to a rise in spending and traveling.

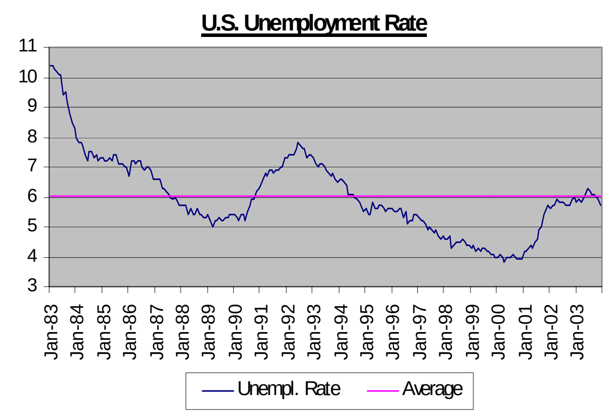
Source: Trend and Projections, Blitzer and Wyss

Employment

The labor market has been slow to recover. Although the unemployment rate has been gradually decreasing, the actual number of people employed remains unchanged. This suggests that discouraged workers are temporarily giving up and dropping out of the work force (7). This will delay recovery in the labor market even further, because as more jobs become available, discouraged workers will re-enter the workforce, raising the unemployment rate.

One reason the labor market remains weak as the economy turns around is that companies have found ways to cut costs and operate more efficiently with fewer workers on the payroll. There are 2.4 million fewer jobs than there were in February 2001 (8). The increase in productivity is due in part to technology and increased use of the Internet. Also, many companies restructured their operations to become more cost-efficient in the last few years in order to survive the recession. The overall increase in productivity will have short-term negative effects on the labor market, but we feel it will make the economy stronger in the long run.

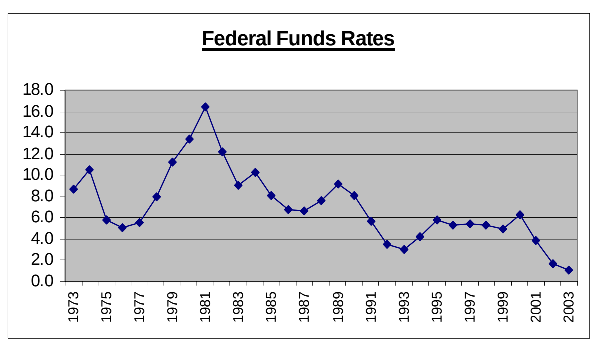
In view of long-term trends, the current 5.7% unemployment rate is positive compared to the previous 20-year average of 6%. However, Americans have gotten accustomed to an unemployment rate between 4 and 5%. The average rate from 1995–2000 was 4.75% (www.forecasts.org/data/index.htm). Future consumer confidence is dependent upon whether the unemployment rate can decrease to 5%. We expect unemployment rates to continue to lag other economic indicators. Although we are concerned that a poor labor market will hurt consumer sentiment, we do not think it will directly impact the Consumer Services sector. Consumers still appear to be spending on luxury goods and services. The sector has gained from increases in productivity levels, because the lower costs have meant increased profits for labor-intensive companies.



Source: www.forecasts.org

Interest Rates

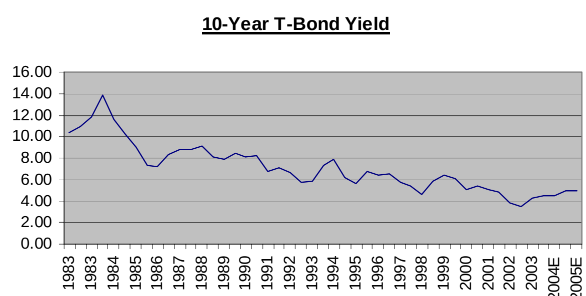
Interest rates continue to remain low in the recovery period. The Federal Funds rate, the interest rate at which banks can borrow from the Federal Reserve, is the lowest it has ever been, at 1%.



Source: The Federal Reserve Board

The rate affects other interest rates and can have an impact on several economic variables. Chairman of the Federal Reserve, Alan Greenspan, says it will remain patient and hold the Federal Funds rate at 1%. The rate should remain there until 2005 unless GDP picks up substantially and the labor market quickly improves, a scenario we think is unlikely.

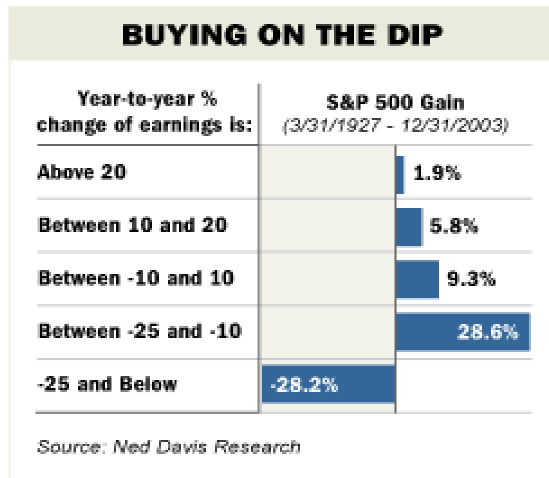
Keeping the official rate down will not prevent bond yields from increasing gradually in the near and long-term future. Currently, commodity prices and healthcare costs are at record highs. At the same time, interest rates are at record lows. One of these two markets must be wrong, and we believe it is the interest rate market. Ten-year treasury yields will be forced up to 4.5-5% by the start of 2005 as the market corrects itself. However, we do not expect yields to increase above the 4.5-5% range over the next two years as the Fed remains conservative and controls inflation. This level of interest rate is still low enough to stimulate business investment and should not impact capital-intensive industries such as Gaming and Lodging. We caution that interest rates could be pushed much higher if the U.S. budget and trade deficits worsen. International investors would demand a higher yield for the additional risk, and this could push yields to levels above 5%, making new investments and growth more costly for Gaming companies. However, we feel this is unlikely.



Source: (historical) www.federalreserve.gov

Stock Market Prospects:

After record gains in the S&P 500 Index in 2003, many investors are worried that the stock market is due for a correction. Historically, in years when company earnings increase, interest rates soar and the stock market does poorly (11). We feel this concern is unwarranted in the current environment, and in fact, we believe the market will continue to do well.



In the current economic environment, companies are posting sizable profits for the first time in a couple of years. However, with interest rates predicted to remain low, there is very little threat of inflation. The Fed's current outlook on inflation is only 1%. High earnings growth coupled with low inflation is positive for the market. Politics are on the market's side in 2004 as well. Markets tend to rise in election years (11).

The market is generally very sensitive to changes in interest rates during a recovery period. Although Greenspan has made it clear that the Federal Funds rate will remain low in the short-term, we recommend lightening up on companies that are highly levered.

	Total Debt	Debt/Equity
MGM	*$5,255.1*	*1.96*
Harrah's	$3,673.5	2.11
Caesar's	$4,619.0	1.51
Mandalay	$3024.5	3.15
Wynn Resorts	$635.4	0.63
Station	$1,168.9	3.44
Boyd	$1,099.1	2.49

Source: www.quicken.com

We believe Consumer Cyclical industries will outperform the general market in the next six months to two years. Companies in this sector are poised for growth as the economy picks up. We also recommend large-cap companies, as they are usually less sensitive to increases in interest rates. (See table on p. 10.)

Gaming and Lodging Industry Outlook

Overview

In order to provide the most accurate analysis of MGM Mirage and the industries in which it operates, this report will primarily focus on the trends within the Gaming industry. We will include some discussion of the Lodging industry since historically over 20% of MGM's revenues have come from rooms. However, since all of MGM's lodging properties reside in gaming markets such as Las Vegas and Atlantic City, their performance is strongly influenced by the performance of the Gaming industry.

The Gaming and Lodging industries are cyclical in nature, so they tend to follow the general economy. Since these companies offer leisure services, their performance slightly exaggerates the broader market, meaning when the economy enters a recession and consumers adjust their spending habits, vacation destinations suffer. When the economy picks up, consumers begin spending a larger proportion on vacations and traveling. The last few years have taken a toll on Gaming and Lodging companies, because the soft U.S. economy and fears of terrorist attacks after September 11 kept most people from leaving the safety of their homes. However, as the economy picks up, gains in the Gaming industry have outperformed the S&P 500 index. Although consumers are still hesitant to travel overseas, domestic travel as picked up. Increased room rates have also helped the industry.

MGG vs. S&P 500 Index:

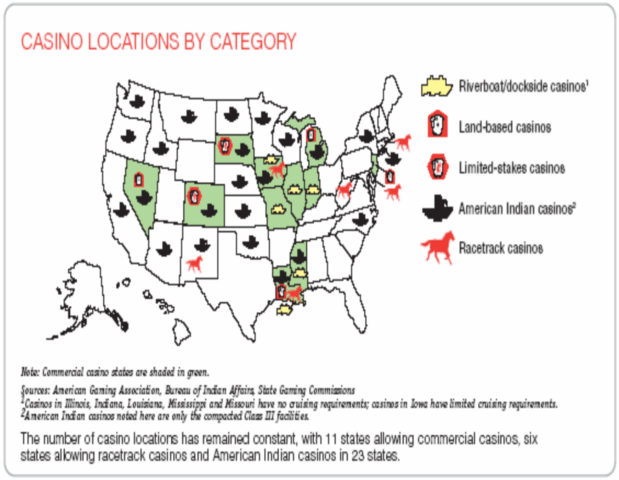
Source: Quicken.com

Both the Gaming and Lodging industries are in the mature lifecycle stage. Companies in the industry perform better than their competitors if they can successfully differentiate themselves. Effective strategies for differentiation include varying price/quality levels, customer loyalty programs, and entertainment.

External Industry Trends:

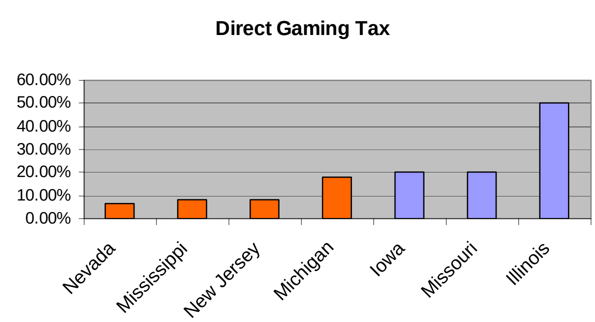
Regulation

Regulation over the Gaming industry plays a significant role in the overall health of the industry. The most important repercussion of regulation is that it restricts expansion. New casino operations require licenses and complex agreements with the states in which they wish to operate. Currently, commercial casinos (non-Native American) operate in only 11 states (1).



Heavy government regulation has served the interests of larger companies in the industry because it protects them from a sudden increase in competition.

Recently, regulation in the form of increased direct gaming taxes has been a controversial topic in the Gaming industry. High budget deficits have led state governments to look to casinos for added tax revenues. In 2003, state taxes on Gaming companies were raised in New York, Illinois, Indiana, and Nevada, with casinos in New York and Illinois now facing taxes anywhere from 50–80% of net income (3). We have already seen the increases in taxes take a toll on Gaming companies' earnings. With state budget deficits projected to top $40 billion in 2005, we consider tax increases to be the most pressing issue for the industry at this time (12). RED = MGM Markets



Source: American Gaming Association

Since the beginning of 2004, we have been seeing a trend that slightly offsets the damages done by increased taxes on Gaming companies. As budget deficits loom, some states have loosened gaming restrictions to create more revenue. This trend has mostly benefited Native American casinos and companies who have riverboat casinos in the Midwest, such as Harrah's.

Technology

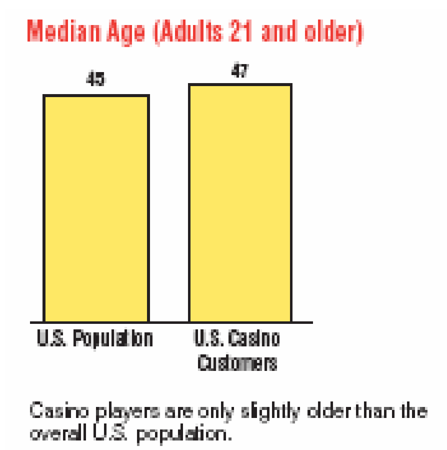
Greater use of computers has made it easier for Gaming and Lodging companies to focus on achieving superior customer loyalty. Using complex databases and reward programs, casino resorts are targeting the best customers and providing incentives for them to come back (6). At MGM, members of the "Players Club", a club that links 7 of their resorts and casinos, receive exclusive benefits and incentives to come back (9).

Loyalty for most lodging and travel destinations has been hurt in recent years by the increase in Internet bookings, because consumers can easily compare prices and find the "best buy." However, casino resorts have not been as impacted by this, because they are better able to differentiate themselves with design themes and exclusive entertainment.

EZ-Pay, introduced by International Gaming Technology, is a new technology in slot machines that uses tickets instead of cash. EZ-Pay is gaining popularity amongst casino operators and their customers. The effect of the new "Ticket-In Ticket-Out" technology is increased slot profitability because of reduced labor costs and increased play (2).

Internet gambling has become a popular trend since its start in the mid-1990s. Although its legality is under question, it is not expected to go away any time soon as it is difficult to regulate its usage (6). We do not see Internet gambling becoming a big threat to casino companies, but we would point out that those casinos providing other forms of entertainment to create a full vacation experience will be best positioned to retain their market share.

Demographics
Changing demographics have an impact on the health of the Gaming and Lodging industries. As baby boomers enter their peak earning years, they prefer expensive luxury goods and services. In addition, as a larger percentage of the population retires, leisure travel will pick up (6). According to a report by the American Gaming Association, the median age of U.S. casino customers is 47.



Source: American Gaming Association

Social Perceptions
Social acceptance of casinos has a dramatic impact on the performance of the industry. When voters form strong opinions about an already heavily regulated industry, negative perceptions can result in increased control over the industry in the form of raising taxes or restricting operations. Fortunately for casino companies in the U.S., acceptability of the Gaming industry has drastically improved over the last 40 years. The American Gaming Association reports that today, "An overwhelming majority of Americans – between 80 percent and 90 percent – have consistently voiced their support for casino gaming for themselves and others."

International – U.K.; Macau, China
The United Kingdom is close to deregulating their Gaming industry through the acceptance of the Budd Report. If accepted, the report will allow U.K. casinos to "control their advertising and marketing programs, and introduce slot machines with unlimited stakes and prizes, allow alcohol on the gaming floor, and use credit cards" (10). This would open up huge opportunities for the industry there, and would result in expansion of U.S. Gaming companies into Great Britain. We feel the Budd Report will be passed by 2005 and will have a positive impact on U.S. Gaming companies who already have exposure in the U.K.

In Macau, China, similar legislation is pending that would open up a gaming market to U.S. casino operators. The market would attract mostly high-end players from Hong Kong, so companies such as MGM and Caesars would benefit most from the legislation passing here.

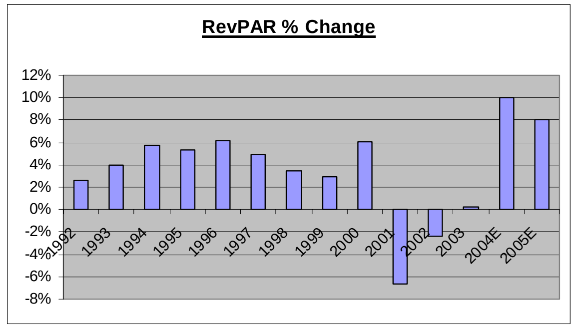
We believe these international opportunities are great and are key to successful growth in the Gaming industry. In the past when Gaming companies have experienced significant stock price appreciation as they have in the past 12 months, they have become too aggressive, overbuilding in existing markets. The outcome has scared investors and lowered stocks. The international opportunities in Macau and the U.K. will allow Gaming companies to grow outside of domestic markets without generating concerns of overbuilding (2).

Demand Analysis:

Revenues in the Gaming industry are calculated by the total amount wagered minus customer winnings paid out. The percentage casino operators make on gamblers' wagers is called the "hold percentage." On average, commercial casinos keep $4.65 of every $100 bet. However, much of the gambler's "winnings" are recycled back in, so casinos actually retain closer to 20% (6).

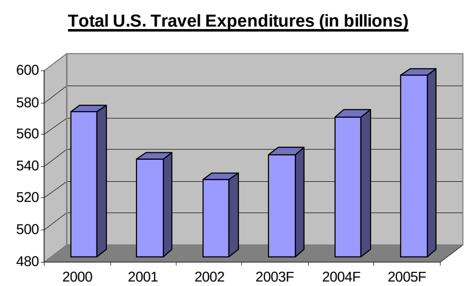
Slot machines, including both spinning-reel and video machines, are the largest source of gaming revenue, and are becoming increasingly popular, representing 69% of U.S. gaming revenues in 2003 compared to only 53% in 1987 (6). Table games, which include Craps, Roulette, Baccarat, and others, are the second biggest source of gaming revenues. On average, table gaming has a 2% hold percentage and slots have a 5-8% hold percentage. Casinos that cater more to high-end gamblers can see large fluctuations in their hold percentage from period to period than casinos catering to the general population (6).

Level of demand in the Lodging industry is determined by revenue per available room (RevPAR), which is the product of Average Daily room rate and Occupancy. RevPAR was soft during the last few years as fewer people traveled due to a weak economy and national security concerns. We believe RevPAR will show significant increases in 2004 and 2005, due to a higher proportion of business and convention travelers. In April of this year, the average room rate in Las Vegas was 67% higher than last year (5).



Source: (historical) S&P Lodging and Gaming Industry Report, February 5, 2004

Demand in both the Gaming and Lodging industries is highly dependent on volume of leisure travel. The downturn in the economy coupled with national security concerns after the September 11 attacks heavily impacted travel in the U.S. The second half of 2003 showed signs that travel was picking up. The Travel Industry Association of America estimates that 2004 U.S. travel expenditures return to pre-September 11 levels, and will further increase in 2005.



Source: Travel Industry Association of America

Supply Analysis:

Restrictive state regulations are the biggest determinate of supply in the Gaming industry. A state license is required for opening a new casino. Obtaining a license is a complex process with some states issuing only a limited number and other states requiring extensive background checks (6). The regulations serve as barriers to entry and are a key asset to the industry. Although many state governments are loosening some of the restrictions placed on casinos, it only benefits companies already in operation.

Opening a new casino resort is extremely capital-intensive. Interest rate levels influence the construction of new facilities in both the Gaming and Lodging industries. In addition, the better the company's credit rating, the easier it is for them to obtain financing to build new facilities.

	S&P Credit Rating
MGM	BB+
Harrah's	BBB-
Caesar's	BB+
Mandalay	BB
Wynn Resorts	CCC+
Station	B+
Boyd	B+

Source: Bloomberg

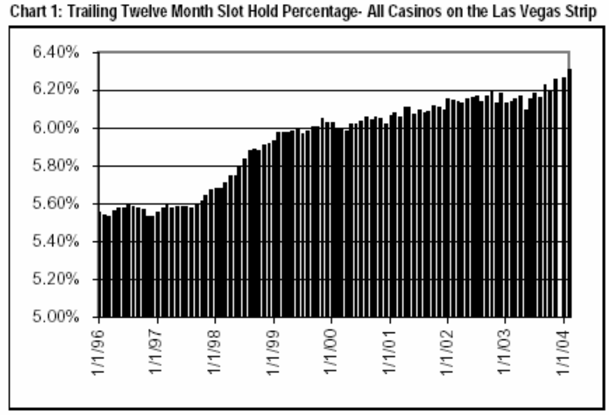
Because casinos are still relatively new in many parts of the U.S., demand tends to follow supply. The exception would be in more saturated markets such as those in Las Vegas and Atlantic City.

<u>Profitability Analysis:</u>

Costs in the Gaming and Lodging industries are essentially fixed. As discussed previously, opening a casino resort is capital intensive. Even after it is open, the majority of the costs come from labor. Because the employees are crucial to the operations of service-oriented companies, labor costs are considered fixed. The benefit to this structure is that after the break-even point, profits increase substantially with revenue. Larger companies with a lower cost of capital will do better especially in a poor economic environment, because they can sustain higher debt levels.

Since 1998, there has been a steady rise in slot hold percentages, the amount of money put into the machine that the casino keeps as revenue. Since 1996, slot hold percentage is up 71 basis points. This equates to over 4% of incremental EBITDA increase (2).

Chart 1: Trailing Twelve Month Slot Hold Percentage- All Casinos on the Las Vegas Strip



Source: Nevada Gaming Control Board

Increasingly, prices are being determined by segmentation in the Gaming and Lodging industries. Whereas in the past, the level of demand determined prices, there has been a trend for casino resorts to more distinctly cater to low-, middle-, or high-end visitors. Casinos that are successful at this have been able to combat the increased price sensitivity that has occurred recently in the Lodging industry.

MGM Mirage – Analysis and Outlook

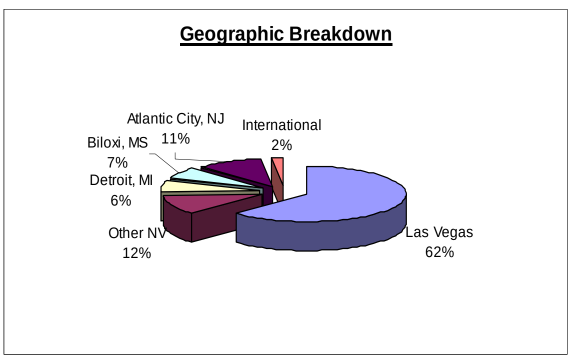
Company Profile

MGM is one of the world's largest Gaming companies. They are the second largest U.S. Gaming company by market cap as of April 2004. Only International Gaming Technology, a company that makes slot machines and gaming equipment, is larger. MGM's operations consist of casino resorts in Las Vegas and other locations in southern Nevada, Detroit, Biloxi, Mississippi, Atlantic City, and Darwin, Australia. In addition, they have recent developments in the U.K.

MGM generates slightly over half of their revenues directly from gaming activities, which is lower than most of their competitors. This is due in part by their acquisition of Mirage Resorts in May of 2000, and also because of their strategy to provide visitors with a complete resort experience which include many non-gaming amenities. MGM's properties represent the some of the finest casino resorts in the U.S., and they attract mostly higher-end visitors.

Markets:

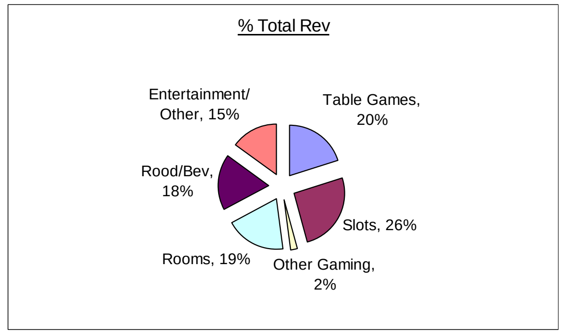
MGM caters to several segments in the gaming markets including leisure travel, premium gaming customers, conventions, and tourism (9). Geographically, the company is highly concentrated in the Las Vegas gaming markets. Their Las Vegas properties include Bellagio, MGM Grand Las Vegas, The Mirage, Treasure Island, New York-New York, Monte Carlo, and Boardwalk.



Source: MGM Mirage Annual Report, 2003

Products:

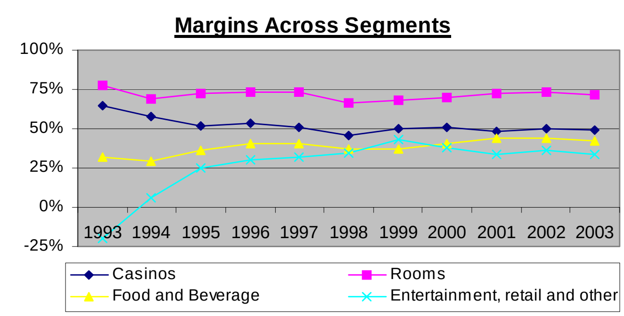
MGM's gaming revenue comes from slots, table games, and others such as racetracks, video lottery terminals, etc. The company's non-gaming revenue comes from rooms, food and beverage, entertainment, retail, and other.



Source: MGM Mirage Annual Report, 2003

As previously discussed, a larger portion of MGM's revenue comes from non-gaming products relative to competitors. This strategy allows them to provide a complete resort experience to guests, enhancing customer loyalty. Offering an assortment of entertainment also allows them to successfully attract customers from other hotels.

We notice trends in MGM's margins are positive for their marketing objectives of providing a complete vacation experience. Since 1998, margins for both rooms and food and beverage have shown steady increases.



Source: 2003 Annual Report

Competitive Analysis:

MGM competes in markets that offer entertainment and leisure vacationing. In addition to competing with other casino resorts, they also compete with non-gaming vacation destinations such as Florida or the Caribbean. The advantage casinos have over other forms of entertainment is that they attract vacationers by offering incentives such as free amenities or low priced hotel stays because they receive other revenue from gaming activities.

For Gaming companies, the competitive environment can be quite different depending on the specific geographic market. Regions that have had gaming activity longer, such as Las Vegas and Atlantic City, are more saturated and therefore less sensitive to new casinos entering the market. However, in many states where gambling is still a recent phenomenon, new casinos take larger proportions of the total market share. Seventy-five percent of MGM's revenues comes from the Las Vegas market (9).

Barriers to entry are high for the Gaming industry. The capital requirements and legal regulations make it very difficult for new companies to enter the market. As a result, the majority of the competition MGM faces is from existing companies. Location, entertainment attractions, quality of service, and promotional programs are all very important ways Gaming companies differentiate themselves.

	Market Cap (bil)	1-Yr Price Performance	% Rev from Gaming
MGM	$6.34	62.06%	53%
Harrah's	$6.20	53.39%	89%
Caesar's	$4.24	65.24%	71%
Mandalay	$4.01	92.96%	49%
Wynn Resorts	$2.99	142.53%	NA
Station	$2.89	100.73%	76%
Boyd	$1.60	69.58%	77%

Source: Company Annual Reports, Yahoo! Finance

Future Prospects and Opportunities:

Strengths

MGM is known for attracting high-end clients. Their facilities are some of the finest in the industry. MGM benefits from attracting this segment of customers, because it allows them to keep prices high. The company's resorts also include a variety of forms of entertainment besides gaming such as golf courses, fine dining, and shopping. This diversity helps MGM stand out in the crowd, and the entertainment options attract visitors staying in near by competing hotels.

MGM operates in the best gaming locations in the U.S. With over 4,600 feet of frontage on the Las Vegas Strip, they have a strong presence in the most popular vacationing city in the U.S. (9).

Weaknesses

Geographic diversification is the biggest weakness MGM faces. Seventy-five percent of MGM's total revenues in 2003 came from operations in the state of Nevada (9).

MGM also heavily concentrates on the high-end customer. During weak economic times, this consumer segment will struggle the most. MGM faces increased risk to their revenue stream by catering to high-wagering customers. Players can win or lose millions of dollars at one time playing games such as baccarat. The fluctuations can throw off MGM's hold percentages and cause short-term volatility in revenues.

Opportunities

MGM is best positioned in the U.S. Gaming industry for opportunities to expand into the U.K. Currently, the highly regulated U.K. gaming market is an unattractive investment for U.S. companies. However a proposal to deregulate the market is close to being accepted, meaning casinos would be allowed to open up anywhere in Great Britain and have fewer restrictions than the U.S. gaming market (10). In 2003, MGM entered into 3 separate joint-ventures with U.K. Gaming companies. In January of 2004, the company agreed to acquire Wembley PLC, an operator that owns 6 greyhound tracks in the U.K. The Wembley properties are key to MGM's expansion into the U.K. if the legislation is passed, because the land and tracks can be used for future gaming developments (6).

Opportunities in the U.S. could arise because as budget deficits sky-rocket, state governments may be inclined to loosen restrictions over Gaming companies, allowing them to expand. In 2003, state governments received $4 billion in revenues from Gaming companies alone (1). In order to make it easier for gamblers to enter casinos, some Midwest states began allowing riverboat casinos to operate "dockside," thus increasing revenues and taxes to the state (6). Instead of raising gaming taxes further, we expect more states to expand the Gaming industry in the form of increased slot machines and new casino licenses issued in the next few years to offset looming budget deficits.

Threats

The looming state budget deficit issue is by far the most pressing threat to MGM and the Gaming industry in the near term. Although opportunities for the industry could arise from the budget deficit problem, increased taxes have already put tremendous pressure on casino earnings in the last 6 months. However, we do not expect MGM to be as affected as some of their competitors by the increased taxes because they are so heavily concentrated in Nevada. It is very unlikely that direct gaming tax in Nevada will reach over 10%, whereas in some states such as Illinois and New York, taxes are currently as high as 50–80% (6).

Another repercussion resulting from budget deficits is the possible expansion of Native American casinos in California that will compete with MGM's Primm Valley resorts that lie on the Nevada/California state line. Newly elected governor Arnold Schwarzenegger is likely to look to Native American gaming to increase tax revenues, since commercial gaming is not legal in the state. Expansion in California could draw visitors away from the Las Vegas Strip as a majority of the customers there are residents of California (1).

Another terrorist attack like September 11 would obviously be negative for MGM and the leisure travel industry. Terrorist alerts were raised at the beginning of 2004, but we do not expect this to be a big issue during the remainder of the year or next year.

Valuation Conclusions

We used several tools to value MGM Mirage including discounted cash flow (DCF), economic profit, multiples analysis and sensitivity testing. We based our target price on the DCF valuation and used the other tools to guide our final target range.

Several assumptions were used in our DCF model. Four key assumptions and their explanations are listed below.

1. Revenue Growth

In forecasting future revenue, we assumed growth rates consistent with historical averages but made some adjustments for recent company, industry, and economic trends. We estimate total revenue growth to be around 10% for the next 3 years because of rising room rates and domestic and international expansion of the industry. We tapered down to 4% for the long-term revenue growth rate, because we feel this is sustainable for a mature company in a mature industry.

2. Beta Estimate

The beta measures how risky a company's returns are compared to the market average. The beta estimate is an important part of our

DCF valuation, because it affects the weighted average cost of capital rate that is used to discount the cash flows. A beta of 1.11 was calculated using 4 years of weekly historical return data. We used this estimate, because it includes all the return data after MGM acquired Mirage Resorts in 2000.

3. Risk-Free Rate

The risk-free rate is also used to calculate the rate we discount the cash flows in our model to arrive at a target price. We used the current 10-year treasury yield for our risk-free rate, because it is the most accurate long-term yield and it reflects market expectations about future interest rates.

4. Weighted-Average Cost of Capital

This is the calculated rate used to discount forecasted cash flows in our model. It is the key to determining a target price for the company. With our beta estimate and risk-free rate discussed above, we used the capital asset pricing model (CAPM) to calculate the cost of MGM's equity to be 9.66%. From MGM's outstanding corporate bonds, we found the market cost of debt (yield) to be 6.25%. Using the current debt-to-equity ratio of 0.937, the weighted-average cost of capital is 7.01%.

5. Continuing Value Growth Rate

Our DCF valuation assumed a 4% continuing value growth rate. MGM is a mature company in a mature industry; therefore its long-term growth rate will trend with overall economic growth. Historical GDP growth has been around 4%.

Our DCF analysis produces a target price of just under $60. Using a price-to-earnings multiples approach with other comparable firms in the Gaming industry, the target price calculated is $40. Some problems we see with the multiples approach is that it does not take into account MGM's qualitative advantages over other casino operation such as its high quality of assets, its concentration in a favorable gaming region, Las Vegas, and its emphasis on high-end customers. Because this crucial data is left out of a multiples analysis, we disregard the results of that method. Our final target price range for MGM is $55-$57.

Sensitivity Analysis

In order to see how well we could rely on our model in volatile economic times, we produced sensitivity tests and came up with worst and best case scenarios.

<u>Worst-Case Scenario:</u>

An economic downturn would severely hurt the Gaming and Lodging industries. Even worse for the industry would be another terrorist strike that would slow travel. MGM's returns would become more volatile, increasing its beta and its required return on equity, lowering the stock price. In addition, higher interest rates, or inflation, would lower MGM's returns. Their cost of debt would increase, interest expense would increase and profits would drop. Considering all of these "worst-case" events, we created a test scenario with our model in which MGM's beta (risk) increases to 1.5, their cost of debt goes up by 2%, and the risk-free treasury yield raises to 5.5%. In this case, MGM's stock price falls to $25.

<u>Best-Case Scenario:</u>

A faster than expected economic recovery would result in a higher target price. If the labor market turned around and consumer confidence jumped, there would be an unexpected increase in consumer spending. In addition, if interest rates fell, MGM would have access to cheaper financing, their interest expense would go down and their profits would increase. In this "best-case" scenario, we assumed MGM's total revenue increases 13% for the next 3 years and then tapers down instead of our original estimation of 10% and then tapering down. We also tested the model by moving the cost of debt from 6.25% to 5%. The result is a target price of $82.

Although the worst-case and best-case scenario price targets are far from our estimated target range, we believe there is a less than 10% chance that either of the above situations will occur. We conclude that the sensitivity of our results is minimal, and that our aggressive target range is warranted based on the improving economy and MGM's strong position in the industry.

MGM Mirage
Income Statement

	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
(in 000s)											
Revenues											
Casinos	2,015,960	2,042,626	2,075,569	2,283,126	2,511,438	2,737,468	2,956,465	3,133,853	3,290,546	3,422,168	3,559,055
Rooms	793,321	798,562	835,938	961,329	1,057,462	1,163,208	1,267,896	1,369,328	1,451,488	1,524,062	1,585,025
Food and beverage	680,538	711,373	765,242	841,766	925,943	1,018,537	1,120,391	1,210,022	1,294,724	1,346,513	1,400,373
Entertainment, retail and other	620,523	637,791	647,710	699,527	748,494	793,403	841,007	883,058	927,211	964,299	1,002,871
	4,110,342	**4,190,352**	**4,324,459**	**4,785,748**	**5,243,337**	**5,712,616**	**6,185,760**	**6,596,261**	**6,963,968**	**7,257,042**	**7,547,323**
Less: Promotional allowances	(378,706)	(398,104)	(415,643)	(454,646)	(498,117)	(514,135)	(556,718)	(560,682)	(591,937)	(616,849)	(641,522)
Net revenues	**3,731,636**	**3,792,248**	**3,908,816**	**4,331,102**	**4,745,220**	**5,198,481**	**5,629,042**	**6,035,579**	**6,372,031**	**6,640,193**	**6,905,801**
Expenses				1.108034	1.095615	1.095520	1.082824	1.072221	1.055745	1.042084	1.040000
Casinos	1,042,011	1,019,761	1,055,536	1,095,900	1,205,490	1,259,235	1,359,974	1,441,573	1,447,840	1,505,754	1,565,984
Rooms	216,548	212,337	236,050	269,172	296,089	325,698	329,653	356,025	348,357	365,775	380,406
Food and beverage	379,313	396,273	441,549	471,389	518,528	570,381	627,419	665,512	712,098	740,582	770,205
Entertainment, retail and other	410,125	404,158	428,834	454,692	486,521	515,712	546,655	573,988	602,687	626,794	651,866
Provision for doubtful accounts	70,690	27,675	12,570	86,622	94,904	103,970	112,581	120,712	127,441	132,804	138,116
General & administrative	552,916	566,080	591,155	614,182	672,907	737,183	798,240	855,890	903,601	941,628	979,294
Corporate expenses	37,637	43,856	61,541	47,642	52,197	57,183	61,919	66,391	70,092	73,042	75,964
Preopening expenses & start-up expenses	4,130	14,141	29,266	34,649	37,962	41,588	45,032	48,285	50,976	53,122	55,246
Restructuring costs (credit)	23,382	(17,021)	6,597	-	-	-	-	-	-	-	-
Write-downs and impairments	-	-	-	-	-	-	-	-	-	-	-
Property transactions, net	46,062	14,712	(18,336)	-	-	-	-	-	-	-	-
Depreciation and amortization	375,945	384,890	404,597	525,221	572,491	624,015	673,936	721,112	757,167	787,454	811,078
	3,158,759	**3,066,862**	**3,249,359**	**3,599,470**	**3,937,090**	**4,234,965**	**4,555,409**	**4,849,487**	**5,020,260**	**5,226,955**	**5,428,159**
Income from unconsolidated affiliates	36,816	32,361	53,612	43,311	47,452	51,985	56,290	60,356	63,720	66,402	69,058
Operating Income	**609,693**	**757,747**	**713,069**	**774,943**	**855,582**	**1,015,500**	**1,129,923**	**1,246,448**	**1,415,491**	**1,479,640**	**1,546,700**
Non-operating income (expense)											
Interest Income	5,630	4,306	4,310	12,993	14,236	15,595	16,887	18,107	19,116	19,921	20,717
Interest Expense, net	(338,783)	(286,636)	(341,114)	(345,415)	(375,835)	(407,451)	(396,101)	(423,060)	(444,535)	(460,170)	(474,657)
Non-operating items from unconsolidated affiliates	(914)	(1,335)	(10,401)	(5,760)	(6,311)	(6,914)	(7,487)	(8,027)	(8,475)	(8,831)	(9,185)
Other, net	(6,036)	(7,611)	(12,160)	-	-	-	-	-	-	-	-
	(340,103)	**(291,276)**	**(359,365)**	**(338,182)**	**(367,911)**	**(398,769)**	**(386,700)**	**(412,981)**	**(433,894)**	**(449,081)**	**(463,125)**
Income from continuing operations before taxes	**269,590**	**466,471**	**353,704**	**436,761**	**487,671**	**616,731**	**743,222**	**833,467**	**981,598**	**1,030,559**	**1,083,575**
Porvision for income taxes	(104,402)	(171,271)	(116,592)	(144,131)	(160,931)	(203,521)	(245,263)	(275,044)	(323,927)	(340,084)	(357,580)
Income from continuing operations	**165,188**	**295,200**	**237,112**	**292,630**	**326,739**	**413,210**	**497,959**	**558,423**	**657,670**	**690,474**	**725,995**
Extraordinary Income/Losses	4,627	(2,765)	6,585	-	-	-	-	-	-	-	-
Net Income	**169,815**	**292,435**	**243,697**	**292,630**	**326,739**	**413,210**	**497,959**	**558,423**	**657,670**	**690,474**	**725,995**
Number of Shares Outstanding	158,771	157,809	148,930	150,000	150,000	160,000	170,000	180,000	200,000	200,000	200,000
EPS	$ 1.07	$ 1.85	$ 1.64	$ 1.95	$ 2.18	$ 2.58	$ 2.93	$ 3.10	$ 3.29	$ 3.45	$ 3.63

MGM Mirage
Balance Sheet

(in 000s)	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
Assets											
Current Assets											
Cash and cash equivalents	208,971	211,234	178,047	259,866	284,713	311,909	337,743	362,135	382,322	398,412	414,348
Accounts receivable, net	144,374	139,935	139,475	151,589	166,083	168,951	182,944	181,067	191,161	132,804	138,116
Inventories	78,037	68,001	65,189	73,629	75,924	77,977	84,436	75,445	79,650	66,402	69,058
Income tax receivable	12,077	-	9,901	-	-	-	-	-	-	-	-
Deferred income taxes	148,845	84,348	49,286	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Prepaid expenses and other	69,623	86,311	89,641	95,284	104,395	103,970	112,581	120,712	127,441	132,804	138,116
Assets held for sale	-	-	226,082	-	-	-	-	-	-	-	1
Total Current Assets	**661,927**	**589,829**	**757,621**	**630,368**	**681,114**	**712,806**	**767,703**	**789,358**	**830,574**	**780,421**	**809,639**
Property and Equipment, net	8,891,645	8,762,445	8,681,339	9,549,473	10,408,925	11,345,729	12,253,387	13,111,124	13,766,680	14,317,348	14,746,868
Other Assets											
Investment in unconsolidated affiliates	632,949	710,802	756,012	792,592	868,375	951,322	1,030,115	1,104,511	1,166,082	1,215,155	1,263,762
Goodwill and other intangible assets, net	103,059	256,108	267,668	281,522	284,713	259,924	281,452	301,779	318,602	332,010	345,290
Deposits and other assets, net	207,863	185,801	247,070	259,866	284,713	311,909	337,743	362,135	382,322	398,412	414,348
Total Other Assets	**943,871**	**1,152,711**	**1,270,750**	**1,333,979**	**1,437,802**	**1,523,155**	**1,649,309**	**1,768,425**	**1,867,005**	**1,945,577**	**2,023,400**
	10,497,443	**10,504,985**	**10,709,710**	**11,513,820**	**12,527,841**	**13,581,690**	**14,670,399**	**15,668,907**	**16,464,259**	**17,043,345**	**17,579,907**
Liabilities and Stockholders' Equity											
Current Liabilities											
Accounts payable	75,787	69,959	85,439	95,284	104,395	103,970	112,581	106,226	111,511	99,603	103,587
Income taxes payable	-	637	-	-	-	-	-	-	-	-	-
Current potion of long-term debt	168,079	6,956	9,008	132,409	144,070	156,189	151,839	162,173	170,405	176,399	181,952
Accrued interest on long-term debt	78,938	80,310	87,711	80,597	87,695	95,072	92,424	98,714	103,725	107,373	110,753
Other accrued liabilities	565,106	592,206	559,445	886,564	964,644	1,045,790	1,016,659	1,085,855	1,140,973	1,181,104	1,218,288
Liabilities related to assets held for sale	-	-	23,456	-	-	-	-	-	-	-	-
Total Current Liabilities	**887,910**	**750,068**	**765,059**	**1,194,854**	**1,300,804**	**1,401,021**	**1,373,502**	**1,452,969**	**1,526,614**	**1,564,478**	**1,614,580**
Deferred Income Taxes	1,746,272	1,769,431	1,765,426	1,585,442	1,770,245	2,238,734	2,452,634	2,750,442	3,239,272	3,400,844	3,575,799
Long-term Debt	5,295,313	5,213,778	5,521,890	5,756,910	6,263,921	6,790,845	6,601,680	7,051,008	7,408,917	7,669,505	7,910,958
Other long-term obligations	57,248	107,564	123,547	106,715	116,687	130,382	130,348	140,680	152,185	157,935	163,767
Commitments and contingencies											
Stockholders' Equity											
Common Stock	2,051,478	2,127,290	2,173,308	2,468,728	2,704,775	2,963,134	3,208,554	3,440,280	3,632,058	3,784,910	3,936,307
Deferred compensation	-	(27,034)	(19,174)	-	-	-	-	-	-	-	-
Treasury stock	(129,399)	(317,432)	(760,594)	(1,025,362)	(1,381,863)	(2,108,909)	(1,760,759)	(2,389,336)	(3,375,320)	(4,105,337)	(4,918,507)
Retained earnings	597,771	890,206	1,133,903	**1,426,533**	**1,753,272**	**2,166,482**	**2,664,441**	**3,222,864**	**3,880,535**	**4,571,009**	**5,297,004**
Accum. other comprehensive income (loss)	(9,150)	(8,886)	6,345	-	-	-	-	-	-	-	-
Total Stockholders' Equity	**2,510,700**	**2,664,144**	**2,533,788**	**2,869,899**	**3,076,185**	**3,020,707**	**4,112,236**	**4,273,808**	**4,137,272**	**4,250,582**	**4,314,803**
	10,497,443	**10,504,985**	**10,709,710**	**11,513,820**	**12,527,841**	**13,581,690**	**14,670,399**	**15,668,907**	**16,464,259**	**17,043,345**	**17,579,907**
	-	-	-	-	-	-	-	-	-	-	-

MGM Mirage
Cash Flow Statement

(in 000s)	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
Cash Flows from Operating Activities											
Net Income	169,815	292,435	243,697	**292,630**	**326,739**	**413,210**	**497,959**	**558,423**	**657,670**	**690,474**	**725,995**
Depreciation and Amortization	390,726	398,623	412,937	525,221	572,491	624,015	673,936	721,112	757,167	787,454	811,078
Amortization of debt discount and issuance costs	30,505	28,527	35,826	28,785	31,320	33,954	33,008	35,255	37,045	38,348	39,555
Porvision for doubtful accounts	71,244	28,352	13,668	86,622	94,904	103,970	112,581	120,712	127,441	132,804	138,116
Property transactions, net	47,955	14,712	(18,336)	-	-	-	-	-	-	-	-
Extraordinary Gains/Losses	1,197	504	9,979	-	-	-	-	-	-	-	-
Income from unconsolidated affiliates	(34,446)	(31,765)	(43,211)	(43,311)	(47,452)	(51,985)	(56,290)	(60,356)	(63,720)	(66,402)	(69,058)
Distributions from unconsolidated affiliates	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000	44,000	45,000	48,000
Deferred income taxes	65,619	90,852	28,362	(179,984)	184,803	468,489	213,900	297,808	488,830	161,572	174,955
Tax benefit from stock option exercises	2,137	18,050	9,505	9,897	9,897	9,897	9,897	9,897	9,897	9,897	9,897
Changes in assets and liabilities:											
Accounts receivable	23,726	(24,107)	(14,330)	(12,114)	(14,494)	(2,868)	(13,993)	1,876	(10,094)	58,357	(5,312)
Inventories	7,464	(5,685)	(2,205)	(8,440)	(2,295)	(2,054)	(6,458)	8,991	(4,206)	13,248	(2,656)
Income taxes receivable and payable	(8,512)	12,714	(10,538)	-	-	-	-	-	-	-	-
Prepaid expenses and other	1,070	(16,142)	(8,500)	(5,643)	(9,111)	425	(8,611)	(8,131)	(6,729)	(5,363)	(5,312)
Accounts payable and accrued liabilities	(5,528)	(18,863)	16,125	9,845	9,111	(425)	8,611	(6,355)	5,284	(11,908)	3,984
Other	(3,089)	2,751	(8,013)								
Net cash provided by operating activities	**795,883**	**827,958**	**702,966**	**742,508**	**1,195,914**	**1,637,628**	**1,506,539**	**1,722,233**	**2,042,586**	**1,853,481**	**1,869,241**
Cash Flows from Investing Activities	(301,096)	(279,699)	(493,618)								
Purchases of property and equipment	(301,096)	(279,699)	(493,618)	(868,134)	(859,453)	(936,803)	(907,658)	(857,737)	(655,556)	(550,667)	(429,520)
Acquisitions of businesses	-	-	-								
Investments in unconsolidated affiliates	(38,250)	(80,314)	(41,350)	(36,580)	(75,784)	(82,947)	(78,793)	(74,396)	(61,571)	(49,074)	(48,606)
Change in construction payable	3,368	6,313	12,953	-	-	-	-	-	-	-	-
Other	(16,227)	(17,510)	(33,673)								
Net cash used in investing activities	**(352,205)**	**(371,210)**	**(555,688)**	**(904,713)**	**(935,236)**	**(1,019,750)**	**(986,451)**	**(932,133)**	**(717,127)**	**(599,741)**	**(478,127)**
Cash Flows from Financing Activities											
Net borrowing (repayment) under bank credit facilities	(819,704)	(270,126)	(285,087)								
Change in Long-Term Debt	(428,233)	(270,974)	261,528	761,926	365,362	368,191	226,799	186,420	(418,410)	279,824	291,018
Issuance of common stock	7,837	45,985	36,254	295,420	236,047	258,359	245,420	231,726	191,777	152,853	151,396
Treasury Stock	(45,716)	(207,590)	(442,864)	(671,344)	(990,550)	(1,388,085)	(546,158)	(1,457,096)	(1,863,190)	(1,657,086)	(1,773,581)
Dividends Paid	-	-	-	-	-	-	-	-	-	-	-
Other	3,437	(21,906)	(20,153)								
Net cash used in financing activities	**(890,908)**	**(725,459)**	**96,293**	**386,002**	**(389,141)**	**(761,535)**	**(73,940)**	**(1,038,950)**	**(2,089,823)**	**(1,224,409)**	**(1,331,166)**
Cash and Cash Equivalents											
Net increase (decrease) for the year	**(447,230)**	**(268,711)**	**243,571**	**223,796**	**(128,463)**	**(143,657)**	**446,149**	**(248,851)**	**(764,363)**	**29,332**	**59,948**
Cash related to discontinued operations	-	-	(15,230)								
Balance, beginning of year	227,968	208,971	211,234	**439,575**	**259,866**	**284,713**	**311,909**	**337,743**	**362,135**	**382,322**	**398,412**
Balance, end of year	**(219,262)**	**(59,740)**	**439,575**	**259,866**	**284,713**	**311,909**	**337,743**	**362,135**	**382,322**	**398,412**	**414,348**

MGM Mirage
Common Size Income Statement

	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
(in 000s)											
Revenues											
Casinos	54.02%	53.86%	53.10%	52.71%	52.93%	52.66%	52.52%	51.92%	51.64%	51.54%	51.54%
Rooms	21.26%	21.06%	21.39%	22.20%	22.28%	22.38%	22.52%	22.69%	22.78%	22.95%	22.95%
Food and beverage	18.24%	18.76%	19.58%	19.44%	19.51%	19.59%	19.90%	20.05%	20.32%	20.28%	20.28%
Entertainment, retail and other	16.63%	16.82%	16.57%	16.15%	15.77%	15.26%	14.94%	14.63%	14.55%	14.52%	14.52%
	110.15%	110.50%	110.63%	110.50%	110.50%	109.89%	109.89%	109.29%	109.29%	109.29%	109.29%
Less: Promotional allowances	-10.15%	-10.50%	-10.63%	-10.50%	-10.50%	-9.89%	-9.89%	-9.29%	-9.29%	-9.29%	-9.29%
Net revenues	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**
Expenses											
Casinos	27.92%	26.89%	27.00%	25.30%	25.40%	24.22%	24.16%	23.88%	22.72%	22.68%	22.68%
Rooms	5.80%	5.60%	6.04%	6.21%	6.24%	6.27%	5.86%	5.90%	5.47%	5.51%	5.51%
Food and beverage	10.16%	10.45%	11.30%	10.88%	10.93%	10.97%	11.15%	11.03%	11.18%	11.15%	11.15%
Entertainment, retail and other	10.99%	10.66%	10.97%	10.50%	10.25%	9.92%	9.71%	9.51%	9.46%	9.44%	9.44%
Provision for doubtful accounts	1.89%	0.73%	0.32%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
General & administrative	14.82%	14.93%	15.12%	14.18%	14.18%	14.18%	14.18%	14.18%	14.18%	14.18%	14.18%
Corporate expenses	1.01%	1.16%	1.57%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%	1.10%
Preopening expenses & start-up expenses	0.11%	0.37%	0.75%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
Restructuring costs (credit)	0.63%	-0.45%	0.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Write-downs and impairments	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Property transactions, net	1.23%	0.39%	-0.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation and amortization	10.07%	10.15%	10.35%	12.13%	12.06%	12.00%	11.97%	11.95%	11.88%	11.86%	11.74%
	84.65%	**80.87%**	**83.13%**	**83.11%**	**82.97%**	**81.47%**	**80.93%**	**80.35%**	**78.79%**	**78.72%**	**78.60%**
Income from unconsolidated affiliates	0.99%	0.85%	1.37%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Operating Income	**16.34%**	**19.98%**	**18.24%**	**17.89%**	**18.03%**	**19.53%**	**20.07%**	**20.65%**	**22.21%**	**22.28%**	**22.40%**
Non-operating income (expense)											
Interest Income	0.15%	0.11%	0.11%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Interest Expense, net	-9.08%	-7.56%	-8.73%	-7.98%	-7.92%	-7.84%	-7.04%	-7.01%	-6.98%	-6.93%	-6.87%
Non-operating items from unconsolidated affiliates	-0.02%	-0.04%	-0.27%	-0.13%	-0.13%	-0.13%	-0.13%	-0.13%	-0.13%	-0.13%	-0.13%
Other, net	-0.16%	-0.20%	-0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	-9.11%	**-7.68%**	**-9.19%**	**-7.81%**	**-7.75%**	**-7.67%**	**-6.87%**	**-6.84%**	**-6.81%**	**-6.76%**	**-6.71%**
Income from continuing operations before income taxes	7.22%	12.30%	9.05%	10.08%	10.28%	11.86%	13.20%	13.81%	15.40%	15.52%	15.69%
Porvision for income taxes	-2.80%	-4.52%	-2.98%	-3.33%	-3.39%	-3.92%	-4.36%	-4.56%	-5.08%	-5.12%	-5.18%
Income from continuing operations	**4.43%**	**7.78%**	**6.07%**	**6.76%**	**6.89%**	**7.95%**	**8.85%**	**9.25%**	**10.32%**	**10.40%**	**10.51%**
Extraordinary Income/Losses	0.18%	-0.02%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Income	**4.55%**	**7.71%**	**6.23%**	**6.76%**	**6.89%**	**7.95%**	**8.85%**	**9.25%**	**10.32%**	**10.40%**	**10.51%**

MGM Mirage
Common Size Balance Sheet

(in 000s)	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
Assets											
Current Assets											
Cash and cash equivalents	5.60%	5.57%	4.56%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Accounts receivable, net	3.87%	3.69%	3.57%	3.50%	3.50%	3.25%	3.25%	3.00%	3.00%	2.00%	2.00%
Inventories	2.09%	1.79%	1.67%	1.70%	1.60%	1.50%	1.50%	1.25%	1.25%	1.00%	1.00%
Income tax receivable	0.32%	0.00%	0.25%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Deferred income taxes	3.99%	2.22%	1.26%	1.15%	1.05%	0.96%	0.89%	0.83%	0.78%	0.75%	0.72%
Prepaid expenses and other	1.87%	2.28%	2.29%	2.20%	2.20%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Assets held for sale	0.00%	0.00%	5.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Current Assets	**17.74%**	**15.55%**	**19.38%**	**14.55%**	**14.35%**	**13.71%**	**13.64%**	**13.08%**	**13.03%**	**11.75%**	**11.72%**
Property and Equipment, net	238.28%	231.06%	222.10%	220.49%	219.36%	218.25%	217.68%	217.23%	216.05%	215.62%	213.54%
Other Assets											
Investment in unconsolidated affiliates	16.96%	18.74%	19.34%	18.30%	18.30%	18.30%	18.30%	18.30%	18.30%	18.30%	18.30%
Goodwill and other intangible assets, net	2.76%	6.75%	6.85%	6.50%	6.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Deposits and other assets, net	5.57%	4.90%	6.32%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Total Other Assets	25.29%	30.40%	32.51%	30.80%	30.30%	29.30%	29.30%	29.30%	29.30%	29.30%	29.30%
	281.31%	**277.01%**	**273.99%**	**265.84%**	**264.01%**	**261.26%**	**260.62%**	**259.61%**	**258.38%**	**256.67%**	**254.57%**
Liabilities and Stockholders' Equity											
Current Liabilities											
Accounts payable	2.03%	1.84%	2.19%	2.20%	2.20%	2.00%	2.00%	1.76%	1.75%	1.50%	1.50%
Income taxes payable	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Construction payable	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Dividend payable	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Current potion of long-term debt	4.50%	0.18%	0.23%	3.06%	3.04%	3.00%	2.70%	2.69%	2.67%	2.66%	2.63%
Accrued interest on long-term debt	2.12%	2.12%	2.24%	1.86%	1.85%	1.83%	1.64%	1.64%	1.63%	1.62%	1.60%
Other accrued liabilities	15.14%	15.62%	14.31%	20.47%	20.33%	20.12%	18.06%	17.99%	17.91%	17.79%	17.64%
Liabilities related to assets held for sale	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Current Liabilities	**23.79%**	**19.78%**	**19.57%**	**27.59%**	**27.41%**	**26.95%**	**24.40%**	**24.07%**	**23.96%**	**23.56%**	**23.38%**
Deferred Income Taxes	46.80%	46.66%	45.17%	36.61%	37.31%	43.07%	43.57%	45.57%	50.84%	51.22%	51.78%
Long-term Debt	141.90%	137.49%	141.27%	132.92%	132.00%	130.63%	117.28%	116.82%	116.27%	115.50%	114.56%
Other long-term obligations	1.53%	2.84%	3.16%	2.46%	2.46%	2.51%	2.32%	2.33%	2.39%	2.38%	2.37%
Commitments and contingencies											
Stockholders' Equity											
Common Stock	54.98%	56.10%	55.60%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
Deferred compensation	0.00%	-0.71%	-0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Treasury stock	-3.47%	-8.37%	-19.46%	-23.67%	-29.12%	-40.57%	-31.28%	-39.59%	-52.97%	-61.83%	-71.22%
Retained earnings	16.02%	23.47%	29.01%	32.94%	36.95%	41.68%	47.33%	53.40%	60.90%	68.84%	76.70%
Accumulated other comprehensive income (loss)	-0.25%	-0.23%	0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Stockholders' Equity	**67.28%**	**70.25%**	**64.82%**	**66.26%**	**64.83%**	**58.11%**	**73.05%**	**70.81%**	**64.93%**	**64.01%**	**62.48%**
	281.31%	**277.01%**	**273.99%**	**265.84%**	**264.01%**	**261.26%**	**260.62%**	**259.61%**	**258.38%**	**256.67%**	**254.57%**
	-	-	-	-	-	-	-	-	-	-	-

MGM Mirage
Value Drivers

(in 000s)	2000	2001	2002	2003	2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
NOPLAT												
EBITA	515,648	572,877	725,386	659,457	731,631	808,129	963,516	1,073,632	1,186,093	1,351,771	1,413,238	1,477,642
Less: Adjusted Taxes												
Marginal Tax Rate	39.60%	38.70%	36.70%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%	33.00%
Total Income Tax Provision	108,880	104,402	171,271	116,592	144,131	160,931	203,521	245,263	275,044	323,927	340,084	357,580
Plus: Tax Shield on Interest Expense	108,051	131,109	105,195	112,568	113,987	124,026	134,459	130,713	139,610	146,697	151,856	156,637
Less: Tax on Interest Income	5,134	2,179	1,580	1,422	4,288	4,698	5,146	5,573	5,975	6,308	6,574	6,837
Plus: Tax shield on Nonoperating Expenses	53,042	27,774	3,451	1,398	1,901	2,083	2,282	2,471	2,649	2,797	2,914	3,031
Plus: Change in Deferred Taxes	1,475,963	30,203	87,656	31,057	(180,698)	184,803	468,489	213,900	297,808	488,830	161,572	174,955
NOPLAT	1,726,772	341,974	534,705	461,378	295,202	710,591	1,096,889	914,658	1,072,572	1,373,489	1,086,529	1,142,186
INVESTED CAPITAL												
Operating Working Capital												
Plus: Normal Cash (0.5% of sales)	160,526	186,582	189,612	195,441	216,555	237,261	259,924	281,452	301,779	318,602	332,010	345,290
Plus: Receivables	236,650	144,374	139,935	139,475	151,589	166,083	168,951	182,944	181,067	191,161	132,804	138,116
Plus: Inventory	86,279	78,037	68,001	65,189	73,629	75,924	77,977	84,436	75,445	79,650	66,402	69,058
Plus: Prepaid Expenses	70,549	69,623	86,311	89,641	95,284	104,395	103,970	112,581	120,712	127,441	132,804	138,116
Plus: Income Taxes Receivable	11,264	12,077	-	9,901	-	-	-	-	-	-	-	-
Less: Accounts Payable	(65,317)	(75,787)	(69,959)	(85,439)	(95,284)	(104,395)	(103,970)	(112,581)	(106,226)	(111,511)	(99,603)	(103,587)
Less: Construction Payable	-	-	-	-	-	-	-	-	-	-	-	-
Less: Accrued Expenses	(646,580)	(644,044)	(672,516)	(647,156)	(967,161)	(1,052,339)	(1,140,862)	(1,109,082)	(1,184,569)	(1,244,698)	(1,288,477)	(1,329,041)
Less: Income Taxes Payable	-	-	(637)	-	-	-	-	-	-	-	-	-
Net Operating Working Capital	(146,629)	(229,138)	(259,253)	(232,948)	(525,389)	(573,071)	(634,010)	(560,251)	(611,793)	(639,355)	(724,060)	(742,048)
Net Property, Plant, and Equipment	9,064,233	8,891,645	8,762,445	8,681,339	9,549,473	10,408,925	11,345,729	12,253,387	13,111,124	13,766,680	14,317,348	14,746,868
NET INVESTED CAPITAL	8,917,604	8,662,507	8,503,192	8,448,391	9,024,084	9,835,854	10,711,719	11,693,136	12,499,331	13,127,325	13,593,287	14,004,820
ROIC (NOPLAT/INV CAP)												
NOPLAT	1,726,772	341,974	534,705	461,378	295,202	710,591	1,096,889	914,658	1,072,572	1,373,489	1,086,529	1,142,186
Invested Capital (Beginning)	2,325,065	8,917,604	8,662,507	8,503,192	8,448,391	9,024,084	9,835,854	10,711,719	11,693,136	12,499,331	13,127,325	13,593,287
ROIC	74.27%	3.83%	6.17%	5.43%	3.49%	7.87%	11.15%	8.54%	9.17%	10.99%	8.28%	8.40%
NOPLAT	1,726,772	341,974	534,705	461,378	295,202	710,591	1,096,889	914,658	1,072,572	1,373,489	1,086,529	1,142,186
Net Investment (change in invested capital)	6,592,539	(255,097)	(159,314)	(54,802)	575,694	811,770	875,865	981,418	806,195	627,994	465,962	411,533
Free Cash Flow (NOPLAT-Net Investment)	(4,865,767)	597,071	694,020	516,180	(280,491)	(101,179)	221,025	(66,760)	266,378	745,495	620,567	730,653
ECONOMIC PROFIT												
Invested Capital (Beginning)	2,325,065	8,917,604	8,662,507	8,503,192	8,448,391	9,024,084	9,835,854	10,711,719	11,693,136	12,499,331	13,127,325	13,593,287
ROIC	74.27%	3.83%	6.17%	5.43%	3.49%	7.87%	11.15%	8.54%	9.17%	10.99%	8.28%	8.40%
WACC	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%	6.85%
EP (Invested Capital*(ROIC-WACC))	1,567,513	(268,850)	(58,645)	(121,059)	(283,482)	92,474	423,169	180,944	271,635	517,330	187,355	211,095
NON-OPERATING ASSETS												
Cash on Hand	227,968	208,971	211,234	178,047	259,866	284,713	311,909	337,743	362,135	382,322	398,412	414,348
"Normal" Cash	160,526	186,582	189,612	195,441	216,555	237,261	259,924	281,452	301,779	318,602	332,010	345,290
Excess Cash	67,442	22,389	21,622	(17,394)	43,311	47,452	51,985	56,290	60,356	63,720	66,402	69,058
Other Assets	820,443	840,812	896,603	1,003,082	1,052,458	1,153,088	1,263,231	1,367,857	1,466,646	1,548,404	1,613,567	1,678,110
Total Non-Operating Assets	887,885	863,201	918,225	985,688	1,095,769	1,200,541	1,315,216	1,424,148	1,527,002	1,612,124	1,679,969	1,747,168

MGM Mirage
WACC Estimation

CAPM	
Risk-Free Rate	4.35%
Market Rate	9.17%
MGG Beta (4-year)	1.03
Cost of Equity (CAPM Calculation)	9.31%
Cost of Debt	
Average YTM on outstanding public bonds	6.20%
Tax Rate	33.00%
WACC	
Market Value of Equity	$ 6,561,486.10
Market Value of Total Debt	$ 6,000,000.00
Market Value of Total Capital	$ 12,561,486.10
D/E	0.914
Weight of Equity	52.23%
Weight of Debt	47.77%
WACC	**6.85%**

MGM Mirage
Discounted Cash Flow (DCF)
Economic Profit (EP) Model Valuation

Assumptions:

CV growth	4.00%
CV ROIC	8.40%
WACC	6.85%
Cost of Equity	9.31%

		2004E	2005E	2006E	2007E	2008E	2009E	2010E	CV
DCF Model									
Free Cash Flow		(280,491)	(101,179)	221,025	(66,760)	266,378	745,495	620,567	730,653
Continuing Value (CV)	$21,001,068.33								
Value of the Firm - DCF	$14,069,128.57								
Plus: Non-Operating Assets	$1,095,768.70								
Less: MV of Debt *(2004 10-K Report)*	($6,000,000.00)								
Less: ESOP	($571,129.79)								
Equity Value	$8,593,767.48								
Shares Outstanding	148,930								
Stock Price	**$ 57.70**								
Appreciated Stock Price - 4/16/2004	***$ 59.72***								
EP Model									
Economic Profit		(283,482)	92,474	423,169	180,944	271,635	517,330	187,355	211,095
NOPLAT		295,202	710,591	1,096,889	914,658	1,072,572	1,373,489	1,086,529	1,142,186
ROIC		3.49%	7.87%	11.15%	8.54%	9.17%	10.99%	8.28%	8.40%
Continuing Value (CV)	$ 7,407,781.26								
Invested Capital	$ 8,448,390.80								
Value of the Firm - EP	$ 14,069,128.57								
Plus: Non-Operating Assets	$ 1,095,768.70								
Less: MV of Debt *(2004 10-K Report)*	($6,000,000.00)								
Less: ESOP	($571,129.79)								
Equity Value	$ 8,593,767.48								
Shares Outstanding	148,930								
Stock Price	**$ 57.70**								
Appreciated Stock Price - 4/16/2004	***$ 59.72***								

MGM Mirage
PE Analysis

	Stock Price	2003 Earnings *(www.quicken.com)*	2004 Earnings Estimate *(www.quicken.com)*	2005 Earnings Estimate *(www.quicken.com)*	P/E Ratio 2003	P/E Ratio 2004	P/E Ratio 2005	5-yr Growth *(www.quicken.com)*	PEG 2003	PEG 2004	PEG 2005	BV/Share	P/B Ratio
Harrahs Entertainment	$ 53.60	$ 2.64	$ 3.08	$ 3.32	20.30	17.40	16.14	13.1%	1.55	1.33	1.23	15.6	3.43
Caesars Entertainment	$ 13.40	$ 0.18	$ 0.57	$ 0.63	*74.44*	23.51	21.27	8.9%	*8.36*	2.64	2.39	10.2	1.31
Mandalay Resort Group	$ 56.07	$ 2.33	$ 2.94	$ 3.35	24.06	19.07	16.74	14.6%	1.65	1.31	1.15	15.6	3.59
Station Casinos	$ 42.91	$ 0.71	$ 1.79	$ 2.10	*60.27*	23.97	20.43	16.5%	*3.65*	1.45	1.24	5.4	*7.90*
Boyd Gaming	$ 22.68	$ 0.62	$ 1.13	$ 1.34	36.64	20.07	16.93	16.9%	2.17	1.19	1.00	6.7	3.36
Kerzner International	*$ 46.18*	*$ 2.41*	*$ 2.56*	*$ 2.75*	*19.15*	*18.04*	*16.79*	*15.7%*	*1.22*	*1.15*	*1.07*	*26.1*	*1.77*
Argosy Gaming	*$ 36.01*	*$ 1.77*	*$ 2.22*	*$ 2.52*	*20.37*	*16.22*	*14.29*	*10.8%*	*1.89*	*1.50*	*1.32*	*9.8*	*3.67*
Ameristar Casinos	*$ 33.78*	*$ 1.76*	*$ 2.11*	*$ 2.27*	*19.23*	*16.01*	*14.88*	*12.2%*	*1.58*	*1.31*	*1.22*	*9.5*	*3.56*
Aztar Corp	*$ 24.77*	*$ 1.66*	*$ 1.57*	*$ 1.90*	*14.97*	*15.78*	*13.04*	*10.5%*	*1.43*	*1.50*	*1.24*	*15.6*	*1.59*
Average		***$ 1.30***			***27.00***	***20.81***	***18.30***	***14.0%***	***1.79***	***1.58***	***1.40***		***2.92***
MGM Mirage	**$ 46.01**	**$ 1.64**	**$ 1.95**	**$ 2.18**	**27.00**	**20.81**	**18.30**	**13.6%**	**1.79**	**1.52**	**1.34**	**17.8**	**2.92**

Relative P/E Price (2003)	**$ 44.18**
Relative P/E Price (2004)	**$ 40.59**
Relative P/E Price (2005)	**$ 39.87**
PEG Ratio Target (2003)	**$ 39.95**
PEG Ratio Target (2004)	**$ 40.59**
PEG Ratio Target (2005)	**$ 39.87**
Relative Price/Book Price	**$ 51.94**

MGM Mirage
Sensitivity Analysis

Key Assumptions:	
Beta	1.03
CV Growth	4.00%
Interest Rates (Risk-Free)	4.35%
Cost of Debt	6.20%
WACC	6.85%
MGG Stock Price (DCF)	**$ 57.70**

Beta and Continuing Value Sensitivity Analysis

$ 57.70	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
2.50%	$ 71.07	$ 66.69	$ 62.61	$ 58.79	$ 55.22	$ 51.87	$ 48.72	$ 45.75	$ 42.95	$ 40.31	$ 37.81	$ 35.44
2.75%	$ 74.21	$ 69.43	$ 65.00	$ 60.88	$ 57.04	$ 53.45	$ 50.08	$ 46.93	$ 43.96	$ 41.17	$ 38.53	$ 36.04
3.00%	$ 77.87	$ 72.61	$ 67.76	$ 63.27	$ 59.11	$ 55.24	$ 51.63	$ 48.25	$ 45.09	$ 42.13	$ 39.34	$ 36.72
3.25%	$ 82.20	$ 76.34	$ 70.98	$ 66.05	$ 61.50	$ 57.30	$ 53.39	$ 49.76	$ 46.38	$ 43.22	$ 40.25	$ 37.47
3.50%	$ 87.38	$ 80.78	$ 74.78	$ 69.30	$ 64.29	$ 59.68	$ 55.43	$ 51.50	$ 47.85	$ 44.45	$ 41.28	$ 38.32
3.75%	$ 93.70	$ 86.13	$ 79.33	$ 73.17	$ 67.58	$ 62.48	$ 57.80	$ 53.50	$ 49.54	$ 45.87	$ 42.46	$ 39.29
4.00%	$ 101.59	$ 92.74	$ 84.88	$ 77.85	$ 71.52	$ 65.80	$ 60.60	$ 55.86	$ 51.51	$ 47.51	$ 43.82	$ 40.41
4.25%	$ 111.71	$ 101.09	$ 91.81	$ 83.62	$ 76.33	$ 69.82	$ 63.96	$ 58.65	$ 53.83	$ 49.43	$ 45.40	$ 41.69
4.50%	$ 125.15	$ 111.99	$ 100.69	$ 90.90	$ 82.33	$ 74.77	$ 68.05	$ 62.03	$ 56.62	$ 51.72	$ 47.27	$ 43.20
4.75%	$ 143.90	$ 126.78	$ 112.50	$ 100.40	$ 90.02	$ 81.03	$ 73.15	$ 66.20	$ 60.02	$ 54.48	$ 49.50	$ 45.00
5.00%	$ 171.86	$ 148.04	$ 128.95	$ 113.30	$ 100.24	$ 89.18	$ 79.69	$ 71.46	$ 64.25	$ 57.89	$ 52.23	$ 47.17
5.25%	$ 217.98	$ 181.18	$ 153.46	$ 131.83	$ 114.47	$ 100.25	$ 88.38	$ 78.31	$ 69.68	$ 62.19	$ 55.63	$ 49.84
5.50%	$ 308.57	$ 240.02	$ 193.87	$ 160.68	$ 135.67	$ 116.14	$ 100.47	$ 87.62	$ 76.89	$ 67.79	$ 59.99	$ 53.21
5.75%	$ 567.67	$ 373.41	$ 273.11	$ 211.86	$ 170.58	$ 140.87	$ 118.47	$ 100.97	$ 86.92	$ 75.39	$ 65.77	$ 57.60
6.00%	$ 7,722.27	$ 967.80	$ 498.76	$ 327.59	$ 238.92	$ 184.69	$ 148.09	$ 121.73	$ 101.84	$ 86.29	$ 73.81	$ 63.56

RANGE: $49.27 - $77.82

Beta and Interest Rate Sensitivity Analysis

$ 57.70	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
3.00%	$ 182.60	$ 162.30	$ 145.28	$ 130.79	$ 118.32	$ 107.46	$ 97.93	$ 89.50	$ 81.99	$ 75.25	$ 69.18	$ 63.67
3.25%	$ 161.61	$ 144.69	$ 130.29	$ 117.88	$ 107.09	$ 97.60	$ 89.21	$ 81.72	$ 75.01	$ 68.96	$ 63.48	$ 58.48
3.50%	$ 144.11	$ 129.80	$ 117.45	$ 106.71	$ 97.27	$ 88.91	$ 81.46	$ 74.78	$ 68.75	$ 63.28	$ 58.30	$ 53.75
3.75%	$ 129.30	$ 117.03	$ 106.33	$ 96.94	$ 88.62	$ 81.20	$ 74.54	$ 68.53	$ 63.09	$ 58.13	$ 53.59	$ 49.43
4.00%	$ 116.60	$ 105.96	$ 96.61	$ 88.33	$ 80.94	$ 74.30	$ 68.32	$ 62.89	$ 57.95	$ 53.43	$ 49.28	$ 45.45
4.25%	$ 105.59	$ 96.28	$ 88.03	$ 80.68	$ 74.07	$ 68.11	$ 62.70	$ 57.77	$ 53.27	$ 49.13	$ 45.32	$ 41.79
4.50%	$ 95.96	$ 87.74	$ 80.42	$ 73.84	$ 67.90	$ 62.51	$ 57.60	$ 53.11	$ 48.98	$ 45.18	$ 41.66	$ 38.41
4.75%	$ 87.46	$ 80.16	$ 73.60	$ 67.69	$ 62.32	$ 57.42	$ 52.95	$ 48.83	$ 45.04	$ 41.54	$ 38.29	$ 35.27
5.00%	$ 79.90	$ 73.37	$ 67.48	$ 62.13	$ 57.25	$ 52.79	$ 48.69	$ 44.91	$ 41.41	$ 38.17	$ 35.16	$ 32.35
5.25%	$ 73.14	$ 67.27	$ 61.94	$ 57.08	$ 52.63	$ 48.54	$ 44.77	$ 41.29	$ 38.06	$ 35.05	$ 32.25	$ 29.64
5.50%	$ 67.06	$ 61.75	$ 56.90	$ 52.47	$ 48.39	$ 44.64	$ 41.16	$ 37.94	$ 34.94	$ 32.15	$ 29.54	$ 27.10
5.75%	$ 61.56	$ 56.73	$ 52.31	$ 48.25	$ 44.50	$ 41.04	$ 37.82	$ 34.84	$ 32.05	$ 29.45	$ 27.01	$ 24.72
6.00%	$ 56.56	$ 52.15	$ 48.10	$ 44.37	$ 40.91	$ 37.71	$ 34.73	$ 31.95	$ 29.35	$ 26.92	$ 24.64	$ 22.49
6.25%	$ 51.99	$ 47.96	$ 44.23	$ 40.79	$ 37.59	$ 34.62	$ 31.85	$ 29.26	$ 26.83	$ 24.56	$ 22.42	$ 20.40
6.50%	$ 47.81	$ 44.10	$ 40.67	$ 37.48	$ 34.51	$ 31.75	$ 29.17	$ 26.75	$ 24.47	$ 22.34	$ 20.33	$ 18.43
6.75%	$ 43.97	$ 40.54	$ 37.36	$ 34.41	$ 31.65	$ 29.07	$ 26.66	$ 24.39	$ 22.26	$ 20.25	$ 18.36	$ 16.57

RANGE: $46.99 - $91.17

Beta and WACC Sensitivity Analysis

$ 57.70	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
5.00%	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41	$ 255.41
5.50%	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76	$ 153.76
6.00%	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00	$ 103.00
6.50%	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60	$ 72.60
7.00%	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37	$ 52.37
7.50%	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96	$ 37.96
8.00%	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18	$ 27.18
8.50%	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82	$ 18.82
9.00%	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15	$ 12.15
9.50%	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72	$ 6.72
10.00%	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21	$ 2.21
10.50%	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)	$ (1.59)
11.00%	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)	$ (4.83)
11.50%	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)	$ (7.62)
12.00%	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)	$ (10.06)
12.50%	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)	$ (12.20)

RANGE: $31.04 - $87.58

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