

Performance Gaps Between U.S. and European Casinos: A Comparative Study¹

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Abstract

Recent years have seen the fast spread of legalized gaming throughout the world. Amid the frenzied gaming boom, new casinos have mushroomed on every continent. Casinos in different continents operate in different legal and market environments and may have performed quite differently. This study examines the performance results of U. S. casinos, those in Nevada and on the Las Vegas Strip in particular, in comparison with Dutch and French casinos in 1998. It was found that Dutch and French casinos outperformed U. S. casinos in both revenue efficiency and profitability. Noncompetitive European gaming markets most likely have helped European casinos achieve better results.

Keywords: casinos, United States, Holland, France, efficiency, profitability

Introduction

Legalized gaming, casino gaming in particular, is spreading all over the world. Thompson (1998) notes that during the period 1986-1996, the number of world gaming jurisdictions increased from 140 to 160. Within the U. S., casinos outside of Nevada and New Jersey increased by more than 300. In Europe, legalized casino operations expanded from 20 countries to 32 during the same period. The casino industry was one of the fastest growing industries in the 1990s. Patterns of gambling operations, however, vary considerably in different countries.

Veer (1998) points out that the European gaming market is a multitude of gaming monopolies guarded by the state. According to Thompson (1998), while corporate casinos have become the normative organizational structure in North America, European casinos, tied in both organizational and marketing terms, have yet to assume the mass-marketed casino models. Many European casinos are typically government-owned, low-volume establishments with access restricted and play dominated by table games. Furthermore, European casinos make few promotions and advertisements. The government plays a major role in the gaming industry either as an owner, or as an owner of the properties where the casinos are located. In some cases, the taxes are so high that the government can be regarded as the primary owner, extracting money from the establishment. Summarizing the status of European casino gaming, Ader, Falcone, and Steinberg (1999) point out that the casino industry in Europe is dominated by small venues tightly regulated and/or owned by the state, with restrictions on marketing, accessibility, and competition.

On the other hand, as noted by Thompson (1998), the North American casino industry, having successfully adopted the corporate structure, operates in an open and competitive atmosphere. This atmosphere has fostered a tremendous growth in the casino industry, particularly in Las Vegas, which has become the leading center of

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casino gaming in the world. Operation practices are in direct contradiction to European operating standards. Every effort is made to satisfy customer demand and profit margins. For example, Las Vegas and Atlantic City draw crowds of players with 24-hour casinos, which are colorful and exciting. Casino firms make every marketing effort possible to fill their hotel rooms to increase gaming profits. The benign gaming taxation in the U.S. has also helped propel the gaming expansion in the U. S. Bos (1996) notes that gaming tax rates in all U. S. jurisdictions are much lower than those in Europe.

Evidently, casinos in the U. S. and Europe operate in quite different legal and market environments. The question is, what has become of the old-fashioned European casinos? Or, how are European casinos doing in comparison with their U. S. rivals in competing for the lion's share of the global casino gaming business? This study attempts to answer the questions by analyzing casino operation results in the U. S. in contrast to those of some European casinos. The findings of the study should help deepen our understanding of casino gaming from a global perspective.

Data and Methodology

All data used in this comparative study were based on 1998 operation results. For U. S. casino operations, the 1998 aggregate performance data of the industry were obtained from the industry ratios provided by <http://www.marketguide.com> (1998). Further, operation data of casinos of Nevada and the Las Vegas Strip were used for more detailed analysis, cost analysis in particular. Nevada and Strip data were obtained from Nevada Gaming Abstract (1998) and Nevada's Gaming Revenue Report (January-December, 1998), published by Nevada Gaming Control Board in 1999. The reason for selecting Nevada, rather than other U. S. gaming jurisdictions, for this comparison study was that Nevada was the largest and oldest gaming jurisdiction in the U. S. Besides, Nevada Gaming Abstract (1998) provided detailed aggregate income statements and balance sheets of casinos, which were unavailable from other U. S. gaming jurisdictions when the study was conducted. It would be ideal to include Native American casinos in the study because they are similar to European casinos in terms of a noncompetitive market environment. Their operating statistics, however, were unavailable due to the fact that they were private clubs (Cabot, Thompson, Tottenham, & Braunlich, 1999).

For European casino operations in this study, due to limited data availability, only casinos of the Netherlands and Group Partouche Casinos-Hotels of France were examined. The lack of mass-marketed corporate models in the European casino industry makes casino operation data extremely hard to obtain. Attempts were made to contact all the European gaming regulatory bodies listed in the European Casino Report (1999). Few responded and provided usable data. Only Holland Casino 1998 Annual Report (Holland Casino, 1999, March) and 1998 Facts & Figures (Holland Casino, 1998, April) contained operation information comparable to that of U. S. casinos. In addition, the 1998 Annual Report of Group Partouche Casinos-Hotels of France (Group Partouche, 1999) and statistics released by the Interior Ministry of France provided some comparable information of French casinos.

The Netherlands legalized casino gambling in 1975 to keep Dutch gamblers in the country. The nation's 10 casinos are all operated by Holland Casino, a public company consisting of national tourism organizations (Ader, et al., 1999). The Gaming Act of the Netherlands allows the government to issue only one licence, which went to Holland Casino in 1975 and was renewed in 1996 for the duration of five years (Cabot, et al., 1999). As the only licence holder, Holland Casino has secured a complete monopoly in the Dutch casino industry. The Partouche Group of France, operators of 23 casinos and 16 hotels throughout Europe, is the largest casino company in France with about 18% of French market shares (Masud, 1999). In France, while a nationwide gaming monopoly is absent, other barriers to entry exist. Casinos are limited to resort areas and in cities with populations in excess of 500,000. All casinos must have majority French ownership (Ader,

et al., 1999). The licensing process is extremely lengthy and slow (Cabot, et al., 1999).

This study first compared casino performance in terms of gaming revenue per slot/table and revenue and profits per employee. Here, figures in French francs and Holland guilders were converted to U. S. dollars using 1998 average daily exchange rates. Secondly, based on available data, six financial ratios were derived to identify the differences in efficiency and profitability. Finally, a vertical analysis of major cost components was conducted to examine cost differences. Cost items of casino operations were expressed as percentages of either total casino revenue or gaming revenue.

Unit Efficiency and Profitability

The size of the European casino industry is by no means comparable to that of Nevada. In 1998, the Las Vegas Strip alone achieved gaming revenue of \$3.4 billion. In comparison, the French casino industry, the largest in Europe, realized \$1.6 billion, less than half of the Strip's gaming revenue. In the same year, Holland's 10 casinos generated a total of \$387 million.

Casinos in the two European countries, however, outperformed Nevada casinos in both efficiency and profitability on a per unit basis. Table 1 demonstrates the performance gaps. In 1998, the average daily win per slot was \$80 for Nevada and \$96 for the Strip. By contrast, daily win per slot was \$152 in Holland and \$319 in France. For table games, Holland casinos raked in \$2,232 per table per day in 1998, comparing favorably with Nevada's average of \$1,302 and the Strip's \$2,182. French casinos' daily win per table was \$2,103, slightly lower than the average of the Strip.

Table 1. Efficiency and Profitability Per Unit (in US \$)

	Holland	France	Partouche	US	Nevada	LV Strip
Rev Per Slot/Day	152	319	NA	NA	80	96
Rev Per Table/Day	2,232	2,103	NA	NA	1,302	2,182
Rev Per Employee/Day	356	NA	256	325	208	248
NI Per Employee/Day	58	NA	71	49	17*	27*

Note: Rev = revenue, and NI = net income.

* For Nevada and the Strip, the figure was income before corporate tax. The after-tax net income figures of Nevada and the Strip were not available. Using after-tax income would make their NI Per Employee/Day (\$) smaller.

Higher labor productivity is another feature of casino operations in the two European countries. In 1998, daily casino revenue per employee in Holland was \$356, greater than the U.S. average of \$325 and substantially higher than Nevada's \$208 and the Strip's \$248. French casinos' nationwide average per employee revenue was unavailable. Group Partouche, the largest casino company in France, achieved daily revenue of \$256 per employee in 1998, beating the Strip's \$248 but lower than the U.S. average of \$325.

On a per employee basis, each employee of Holland Casino created \$58 net income per day in 1998, while French Partouche realized a net income of \$71 per employee daily. By contrast, the U. S. casino industry averaged \$49. Nevada and Strip casinos' per employee profits were even lower. The Strip casinos generated about \$27 before-tax income per employee per day and Nevada casinos averaged only \$17. The after-tax net income figures of Nevada and Strip casinos, which were unavailable, should be even lower.

The lower revenue and profits per employee of Nevada and Strip casinos indicate that they may be more labor-intensive than European casinos. Following the operation philosophy of making every effort to satisfy customer demand and profit margins

(Thompson, 1998), Nevada and Strip casinos are likely to hire more people to perform services, thus leading to lower per employee revenue and profits.

Efficiency and Profitability by Ratios

Six ratios were calculated to further evaluate the revenue efficiency and profitability. Assets turnover (AT) ratio is total revenue divided by total assets. The ratio tells how much revenue is generated for every dollar invested in the assets during a given period. Fixed assets turnover (FAT) is a ratio of total revenue to total fixed assets. It shows the amount of revenue provided by every dollar invested in a firm's fixed assets. Operating efficiency ratio (OER), a profitability measure, is a ratio of operating profits, or income before fixed charges and taxes, to total revenue. This ratio is a better measure of management performance because it excludes the impact of factors such as interest, depreciation, and rents over which the management has no control. Profit margin (PM), also a profitability ratio, is after-tax net income divided by total revenue. The ratio shows from every dollar of revenue how much is left as net profits after subtracting all costs. Return on assets (ROA), which is net income to total assets, measures return on investment in total assets. It is the return on the investment funds provided by shareholders and creditors. Finally, return on equity (ROE) is net income divided by equity. It measures the return to the fund provided by the equity owners. Table 2 presents the six ratios of the casino operations for comparison.

Table 2. Efficiency and Profitability by Ratios

Ratio	Holland	Partouche	US	Nevada	LV Strip
AT	2.38	0.90	0.45	0.81	0.74
FAT	2.95	1.20	0.60	1.05	0.95
OER	0.45	0.58	0.21	0.25	0.26
PM	0.15	0.21	0.08	0.08*	0.11*
ROA	0.35	0.19	0.03	0.09*	0.10*
ROE	2.59	0.40	0.07	0.11*	0.13*

Note: AT = Assets Turnover, FAT = Fixed Assets Turnover, OER = Operating Efficiency Ratio, PM = Profit margin, ROA = Return on Assets, and ROE = Return on Equity

* The after-tax net income was not available for Nevada and the Strip. Before-tax income was used to calculate PM, ROA and ROE for them. Using after-tax income would make those ratios lower.

The better efficiency of Holland and French casinos in generating revenue is reflected in their higher AT and FAT ratios. In 1998, Holland casinos achieved an AT ratio of 2.38. In other words, from \$1 investment in casino assets, Holland casinos were able to create \$2.38 revenue during the year. The ratio for Partouche was 0.90. By contrast, Nevada's AT ratio was 0.81 and the Strip casinos' AT, 0.74, was even lower. The U. S. average, 0.45, was the lowest. One dollar investment in casino assets in the U. S. generated, on average, only \$0.45 revenue, less than one fifth of Holland Casino's achievement. The ranking of FAT ratios among the five is the same as that of AT ratios, suggesting that U. S. casinos were less efficient in using total assets and fixed assets to generate revenue. The higher AT and FAT ratios of Holland Casino and French Partouche indicate that the gaming markets in Holland and France in 1998 were more favorable for casino operators in terms of supply/demand balance. The gaming boom in the U. S. has created many new mega casino resorts, particularly in Las Vegas. This has dramatically increased the assets base of the industry. The lower AT and FAT ratios of

the U. S. casino industry mirror a huge increase in gaming capacity that has been accompanied by a less desirable increase in demand.

Casinos in Holland and France have also demonstrated better profitability in the ratio comparisons. The OER ratios of Holland Casino, 0.45, and Partouche, 0.58, show that operating profits of Holland Casino and French Partouche were more than double the U. S. average of 0.21. Nevada and Strip casinos' OER ratios, 0.25 and 0.26 respectively, were slightly better than the U.S. average but significantly lower than their Dutch and French rivals. In terms of PM ratio, from \$1 of revenue, Holland casinos derived \$0.15 net income, while Group Partouche of France achieved \$0.21. In calculating the PM ratios for Nevada and the Las Vegas Strip, before-tax income was used because after-tax net income was not available in Nevada Gaming Abstract (1998). In Nevada, the before-tax income from \$1 of casino revenue was only \$0.08. The Strip casinos, the best performers of Nevada, managed to earn \$0.11. The after-tax PM ratios of Nevada and the Strip should be even smaller. The overall U. S. casino industry earned \$0.08 after-tax net income per dollar of revenue, which was about half Holland Casino's figure.

With respect to ROA and ROE ratios, the Las Vegas Strip, achieving a ROA of 0.10 or 10% and a ROE of 0.13 or 13%, evidently outperformed the U. S., which averaged a ROA of 3% and a ROE of 7%, and Nevada, which averaged 9% for ROA and 11% for ROE. However, Holland Casino's 35% (ROA) and 259% (ROE) and French Partouche's 19% (ROA) and 40% (ROE) far outshone the Strip's results. Nevada Gaming Abstract (1998) does not report after-tax net income. Therefore, before-tax income had to be used to calculate ROA and ROE ratios for Nevada and the Strip. Using after-tax net income would make their two ratios even lower. High debt leverage should have contributed to the extremely high ROE of Holland Casino. In 1998, Holland Casino had a debt ratio, which was total debt to total assets, of 0.87 (Holland Casino, 1999). In other words, 87% of its casino assets were funded by debts. The debt ratio for French Partouche was 0.54 (Group Partouche Casinos-Hotels, 1999). The U. S., Nevada, and the Strip had the ratio at 0.61 (<http://www.marketguide.com>, 1998), 0.44 and 0.39 (Nevada Gaming Abstract, 1999) respectively. Using more debts and less equity, Holland Casino was able to achieve a substantially higher ROE ratio.

Cost Analysis

A cost analysis should help explain why Holland Casino and French Partouche were more profitable. Table 3 presents major cost items as percentages of gaming revenue or total revenue. The U. S. was not listed because aggregated data of cost items of the U. S. casino industry were not available. Since casinos' marketing and promotion expenditures were incurred mainly for promoting gaming activities, they were presented as a percentage of gaming revenue rather than total revenue. The gaming tax was also expressed as a percentage of gaming revenue because it was levied against gaming revenue only.

Table 3. Casino Cost Comparisons

	Holland	Partouche	Nevada	LV Strip
Gaming Tax (% of gaming revenue)	25.5	28.2	6.3	6.3
Labor Cost (% of revenue)	36.6	22.6	34.8	33.6
Marketing/Promotion (% of gaming revenue)	12.8	2.5	21.0	22.3
Other Taxes (% of revenue)	0.1	4.0	1.1	1.0
Interest (% of revenue)	1.0	1.2	2.6	2.1

Depreciation. & Amortization (% of revenue)	8.5	4.5	7.2	7.4
Other Operation Expenses (% of revenue)	8.1	13.5	30.4	30.2

Note: Other taxes include value added tax for Holland Casino, corporate income tax and value added tax for Partouche, and gaming licence and real estate taxes for Nevada and Las Vegas Strip

European casinos undoubtedly are disadvantageously positioned in terms of gaming tax. The impact of European government involvement on casino expenses is largely reflected on their high average tax rates on gaming revenue. According to Cabot, et al. (1999), the gaming tax structure of Nevada is more favorable for casinos than those of the Netherlands and France. Nevada levies 3% of gross gaming revenue from \$0 to \$50,000, 4% of gross gaming revenue from \$50,000 to \$134,000, and 6.25% of gross gaming revenue in excess of \$134,000. In addition, there are quarterly and annual slot and table fees. In France, taxes are based on theoretical gaming wins with progressive tax rates ranging from 10% for up to 380,000 francs to 80% for wins over 61,875,000 francs. In the Netherlands, the gaming taxes on gross gaming wins are 33.3 % for table games and 17.5% for slots. In Table 3, total gaming taxes levied are expressed as percentages of total gaming revenues, representing their respective average gaming tax rates. In 1998, taxes levied against gaming revenues, on average, were 25.5 % for Holland Casino and 28.2% for Group Partouche of France, much higher than the 6.3% average rate of Nevada and the Strip.

As shown in Table 3, while Holland Casino's labor cost, 36.6% of its total revenue, was slightly higher than Nevada's 34.8% and the Strip's 33.6%, Partouche's labor cost was much lower, 22.6% of the revenue. The low labor cost of Partouche was likely due to two reasons. First, slot revenue constituted a much larger percentage of total gaming revenue in France than in Holland and Nevada. In 1998, slot revenue was 88% of gaming revenue in France (Interior Ministry of France, 1999), compared with 44% for Holland Casino (Holland Casino 1998 Annual Report), 49% on the Strip, and 61% in Nevada (Nevada Gaming Control Board, 1999). Low labor cost associated with slots operation could have substantially brought down the labor cost percentage of Partouche.

The lower labor cost percentage of Partouche may also be due to its accounting method. Holland Casino's labor cost included payroll, social security charges, insurance premiums, and retirement benefits (pension), similar to those of Nevada casinos. The 1998 Annual Report of Group Partouche shows that its 1998 labor cost included wages and salaries, employee profit sharing, paid leave, and social security but excluded commitment on employee retirement benefits, which, as the Report states, was considered insignificant. The exclusion of retirement benefits could lower Partouche's labor cost.

Another major cost item in Table 3 is Marketing/Promotion cost. In comparison with Nevada and Strip casinos, Dutch and French casinos spent much less on marketing and promotion, confirming Thompson's (1998) observation that European casinos make few promotions and advertisements. In 1998, the marketing and promotion expenses of Holland Casino and French Partouche were 12.8% and 2.5% of their gaming revenues respectively, significantly lower than Nevada's 21%. The Strip casinos spent even more on marketing and promotion, 22.3% of their gaming revenue. Holland Casino does not have its own hotels to accommodate players. For its premium customers, Holland Casino provides them with free accommodation at other hotels, making its Marketing/Promotion cost higher than Partouche's.

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Compared with Nevada, Holland and France do not seem to have stricter legal restrictions on casino advertisements. In the Netherlands, the only restriction imposed on casino marketing is the code of conduct for casino gaming supervised by the Dutch Advertisement Board. The code excludes advertising regarding minors, winning easy money and stimulating compulsive gambling (Cabot, et al., 1999). Holland is one of the few countries in Europe allowing casinos to advertise on television (Ader, et al., 1999). France's stance on casino advertisements is even less prohibitive. The national gaming law and regulations place no restrictions on advertising. Various casinos use all media to inform the public of their gaming products. On the other hand, some contracts restrict local advertising, or limit advertising to information regarding shows, restaurants, or other non-gaming products of the resort (Cabot, et al., 1999). Both Holland and France have no restrictions on casino promotion. It is apparent that the lower marketing and promotion costs of Holland Casino and Group Partouche were not due to legal restrictions, but due to the lack of necessity of massive marketing and promotion. The much lower marketing and promotion expenses of Holland Casino and French Partouche were evidence that the gaming markets in Holland and France were less competitive than U. S. markets. Casinos there did not need to spend much on marketing and promotion to maintain or boost their revenues.

The interest expenses of Holland Casino and Partouche, 1.0% and 1.2% of their casino revenues respectively, were less than half of Nevada's 2.6% and about half of the Strip's 2.1%. Their ability to borrow at low costs is surprising. As mentioned earlier, the debt ratios of Holland Casino and Partouche were 0.87 and 0.54 respectively, substantially higher than Nevada's 0.44 and the Strip's 0.39. Obviously, Holland Casino and French Partouche used more debt financing at lower borrowing cost. In particular, Holland Casino had the lowest interest cost percentage, although its debt ratio, 0.87, was the highest. This fact suggests that the business risk associated with Holland Casino was low enough to encourage lenders to provide loans at low interest rates. Having secured market monopoly, Holland Casino faced no competition in the Netherlands. For French Partouche, the competition it had to face, if any, should not be comparable to the cutthroat competition among mass-marketed casino corporations in the U. S. Monopolistic or noncompetitive markets could help stabilize operating cash flow for Dutch and French casinos and hence, lowering their business risk as perceived by lenders. Lower business risk helps offset the perceived financial risk associated with debts (Van Horne, 1998), thus making lenders willing to make loans at lower interests.

The depreciation and amortization costs of Holland, Nevada, and the Strip, 8.5%, 7.2%, and 7.4% of their casino revenues respectively, were much higher than French Partouche's 4.5%. A plausible reason is that Holland, Nevada and Strip casinos might have newer properties and gaming equipment.

The item of Other Operation Expenses in Table 3 included cost of goods sold and operating expenses other than labor and cost of goods sold incurred in revenue centers, general and administrative expenses, operating expenses of various service centers, and miscellaneous expenditures. While the impact of European government involvement on casino expenses is mainly reflected on their high average tax rates on gaming revenue, there are other expenses resulting from such involvement. Holland Casino had "remuneration paid to Supervisory Board" and "contributions to municipal activities." French Partouche had "social agencies" cost. The amounts of those expenses were insignificant and were all included in Other Operation Expenses.

The total Other Operation Expenses of Nevada and Strip casinos, 30.4% and 30.2% of casino revenues respectively, were more than triple Holland Casino's 8.1% and more than double French Partouche's 13.5%. Casino operations in Nevada, especially on the Strip, were typically complex with large multiple non-gaming revenue centers and a series of service centers to support their gaming departments. Nevada casinos, and Strip casinos in particular, have large-scale rooms and food and beverage (F&B) operations. In 1998, the rooms revenue was 16.7% of total revenue for Nevada and 21.9% for the

Strip. The F&B revenue percentages for Nevada and the Strip were 17.8% and 16.1% respectively (Nevada Gaming Abstract, 1999). In contrast, Holland Casino had no lodging operation at all. For French Partouche, only 16 of its 23 casinos had accompanying lodging operations (Masud, 1999). Holland casinos' F&B constituted only 4.3% of its total casino revenue (Holland Casino, 1999). Partouche's rooms and F&B made up 10.4% and 6.6% of its total revenue respectively (Group Partouche Casinos-Hotels, 1999).

In Nevada, the main purpose of non-gaming revenue centers is to entice players into gaming rather than to create profits of their own. The gaming department's revenue increase is often achieved at the cost of other revenue centers. Prices of rooms and meals are often purposely set low to attract players. The food operations of Nevada and Strip casinos actually suffered significant losses in 1998 (Nevada Gaming Abstract, 1999). The operational complexity and the sacrificing of non-gaming revenue centers for the gaming department tactic of Nevada and Strip casinos may well explain why their total other operating expense percentages were so high in contrast to those of Holland Casino and French Partouche.

Different Markets, Different Performance

The comparative analysis shows that in 1998, casinos in Holland and France outperformed casinos in the U. S., those in Nevada and on the Las Vegas Strip in particular, in both revenue efficiency and profitability. Why did European casinos perform better than their U. S. counterparts? There were two conceivable reasons. First, the gaming markets of Dutch and French casinos were less saturated thanks to either monopoly or relatively high barriers to entry. The noncompetitive nature of European markets enabled them to pursue expansions in a less aggressive manner, thus avoiding market saturation. In the two European countries, although gaming demand is strong, there have been no massive gaming expansions, such as those seen in the U. S. The 10 Holland casinos were gradually opened to the public during a long period of 23 years between 1976 and 1998 (Holland Casino, 1999, March). In France, gaming devices including slots and tables increased by 22% from 1994 to 1998, while casino visits increased by 53% (Interior Ministry of France, 1999). Strong demand with relatively limited supply helped casinos in the two European countries realize higher wins per table/slot and higher revenue per employee. Secondly, although Holland Casino and French Partouche had to pay higher gaming taxes, they enjoyed cost advantage in most other areas, especially in marketing and promotion. Their overall low operating cost undoubtedly benefited their profitability. Here again, the absence of intense competition helped them lower operating costs and achieve high profit margins.

In contrast, U. S. gaming markets are quite different. Lack of monopoly and relatively low barriers to entry tend to foster fierce competition among casinos. To compete for market shares, casinos are constantly engaged in massive expansions, quickly leading to overcapacity and market saturation. According to Ader, et al. (1999), there are serious concerns that U. S. gaming markets are either saturated or fast approaching saturation. In general, both Nevada and New Jersey operators continue to face significant competition and challenging business conditions. Emerging markets overall have essentially reached their saturation points. The overbuilding has resulted in a highly competitive environment with increased pressure on gaming revenue and profit margins. Vogel (2001) reports that Nevada gaming profits fell from about \$1.4 billion in 1997 to \$500 million in 2000. The drop in profits for Strip casinos was even worse—from \$1 billion in 1997 to \$200 million in 2000. A most recent example of weak performance from the Las Vegas Strip is the poor operation results of the Aladdin, a \$1.2 billion casino hotel on the Strip that opened in August 2000. As noted by Strow (2001), the property reported a staggering net loss of \$47.2 million for the first quarter of 2001 and the casino was in need of cash infusion to avoid bankruptcy. Aladdin also had a loss

in the 4th quarter of 2000. Analysts have attributed Aladdin's poor performance to new room inventory that doesn't bring increased demand (Berns, 2000).

A noticeable trend of the casino operations in Nevada, and those on the Strip in particular, is the rising weight of non-gaming revenue in total casino revenue. In 1990, non-gaming revenue accounted for 39% of total casino revenue in Nevada and 42% on the Strip (Nevada Gaming Control Board, 1991). By 1998, non-gaming revenue increased to 44% of total revenue for Nevada and 50% for the Strip (Nevada Gaming Abstract, 1999). According to *Nevada Gaming Abstract* (1999 & 2000), since 1999, non-gaming revenue has outweighed gaming revenue on the Strip. To meet the changing market demand, Las Vegas has been making efforts to transform itself from a pure gambling town into a family vacation destination in recent years. Turning to non-gaming sources for revenue reflects such a transition. In contrast, Holland Casino and French Partouche have gaming revenue as their predominant revenue source. In 1998, gaming revenue constituted 80% and 66% of their total revenues respectively. Non-gaming operations are usually less profitable than gaming operations. The lower profitability of Nevada and the Strip also mirrors the impact of rising non-gaming revenue in casino operations.

It must be pointed out that variance in accounting methods could have an impact on the profitability ratios. This study was conducted based on the statistics provided by the 1998 Annual Reports of Holland Casino and French Partouche and Nevada Gaming Abstract 1998. A limitation of the study is that it could not control for the effect of European casinos' different accounting methods on costs and thus on profits. For example, the exclusion of retirement benefits from Partouche's labor cost could push up its profit margins, although its Annual Report notes that the amount of the company's commitment on retirement payments was insignificant. Furthermore, because of government involvement in the gaming industry in Europe, there may be tax reductions, employee severance waiver agreements, asset partnering, net income sharing, low interest financing, etc. All these could have an effect on the expenses and profits. None of these, however, were disclosed in the reports of Holland Casino and French Partouche. Therefore, the derived profitability figures of the two European casino companies, French Partouche in particular, may not be exactly compatible with those of Nevada and Strip casinos. Therefore, readers should focus more on the revenue efficiency comparisons.

Summary

The comparative analysis of U. S. casinos versus their Holland and French peers has shown significant performance gaps in revenue efficiency and profitability. Different market environments should explain, to a large degree, these performance gaps. The noncompetitive market conditions have undoubtedly contributed to Holland and French casinos' better revenue efficiency and profit margins. Although European casinos have to pay more gaming taxes, their lower spending on most other cost items, marketing and promotion in particular, have helped boost their profitability.

Monopoly and high barriers can benefit the revenue and profit margins of European casinos. They are, however, not welcomed by consumers who look upon competition as a means for better prices and products. Monopolistic gaming markets are not suitable for the U. S. where free competition is constantly changing the quantity and quality of gaming products. Commenting on Las Vegas and European casinos, Thompson (1998) points out that Las Vegas casinos are large, ostentatiously colorful, and full of excitement, whereas European casinos are drab in appearance.

Competition can motivate casino firms to provide better services and products, hence benefiting customers. Nevertheless, oversupply, which often results in cutthroat competition among casinos, is detrimental to the healthy growth of the gaming industry. Oversupply and market saturation have already occurred in some U. S. gaming markets

and are hurting casinos' operating results. To improve their performance, U. S. casino operators should take measures to curb the overcapacity and alleviate market saturation.

This study provides only a glimpse of the performance of European casinos in contrast with their U. S. peers. To give a comprehensive picture of the differences between European and U. S. casinos, a study including more European countries and more U. S. gaming jurisdictions is needed. In particular, Native American casinos, whose market environments bear some similarity to those of European casinos, should be added. Including more data from U. S. and European casinos, such a study could thoroughly reveal the operating features of European casinos versus their U. S. counterparts and provide more in-depth explanations for the differences in their performance.

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