

Fall 2011

The Future Development for Slots in Macau to the Mainland China Market

Sok In Leong

University of Nevada, Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesesdissertations>

 Part of the [Gaming and Casino Operations Management Commons](#), and the [International Business Commons](#)

Repository Citation

Leong, Sok In, "The Future Development for Slots in Macau to the Mainland China Market" (2011). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 1156.

<https://digitalscholarship.unlv.edu/thesesdissertations/1156>

This Professional Paper is brought to you for free and open access by Digital Scholarship@UNLV. It has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

The Future Development For Slots In Macau To The Mainland China Market

by

Leong Sok In, Beatrice

Bachelor of Science in Business Administration

University of Macau

2006

A professional paper submitted in partial fulfillment
of the requirements for the

Master of Hospitality Administration
William F. Harrah College of Hotel Administration

Graduate College
University of Nevada, Las Vegas
December, 2011 (December 2011)
Chair: Dr. Carl Braunlich

Part One

Introduction

Macau's gaming revenue exceeded the Las Vegas Strip as the world's biggest casino market since 2006. The gaming revenue in Macau was four times than the Las Vegas strip. Annual gaming revenue in Macau last year reached over \$23 billion (Gamut News, 2011). However, the importance of slots in Macau is totally different compares with other jurisdictions. Although the slot revenue keep to falls in Las Vegas, 48% of the total gaming revenue is still from slot. In Macau, slot play is just a minor part of the overall revenue picture, only 4.6% of the total gaming revenue. Although the growing rate in 2010 of slot is impressive (32.5% compare with 2009), table games still play the main role in Macau (UNLV Center of Gaming Research, 2011).

In September 2011, about 57.5% of visitors to Macau were from Mainland China. Visitors from Mainland China surged by 39.3% year-on-year to 1,246,256. Among different place of residence, Mainland Chinese is the richest visitor in Macau, the per-capita spending of Mainland China visitors was MOP 1,868. (Statistics and Census Service, 2011). Besides, China economy is experiencing sustainable and expositive growth. China's economy surpassed Japan and has become the world's second largest in 2010. By 2020, China will have overtaken the USA to lead the list of the world's top ten largest economies by GPD measured in PPP terms (TheRichest.org, 2011). Therefore, Macau casino operator targets to the China player, who has the greatest potential to provide long term revenue.

This paper is an exploratory study of slot development in Macau to the Mainland China market. Although Macau's gambling has been legal since the 1847 (DICJ, n.d.), the opening of the Mocha in 2003 truly led in a new age for Macau gaming, especially for slot. The revenue of slot was boosted to 171% in one single year (UNLV Center of Gaming Research, 2011). Slot development is still in the initial stage of development. From the increase of both slot machine number and revenue within the past 7 years, it shows the potential growth of slot market.

Purpose

There are lots of optimistic comments to slots industry in Macau. The purpose of this paper is to provide an insight overview and examine the future development of Macau slot market to Mainland China player.

Justification

Due to the late development of slots in Macau, there is lack of study and research relates to slots. This paper can provide new insights for casino industry of managerial implication purpose.

Part Two

Introduction

In Part one, an overview was made of this paper. Slots perform a totally different function in the United States compared with Macau. In Part two a detailed explanation and the history development slots and Macau gaming industry are presented.

Literature Review

History of Slots

The first coin-operated machines were invented in the late 1880's in the East and they soon became widespread in California (Kiso, 2008). Slot machines started with mechanical card games and developed to reel slots. Charles Fey introduced the first mechanical reel slot, Liberty Bell in 1899.

Then Fey made the Operator Bell Slot machine. This slot features the famous fruit design, and became the standard for slot machine aesthetics. The Bell-Fruit Gum Company, who is reputed to have stolen a slot machine from Fey, were the first to mass produce machines that dispensed gum for every pull in order to mask the nature of the slot machine. It was an effort to market their gum (Kiso, 2008).

During the anti-gambling stage, slots became illegal in lots of the states. It was the black day in the history of slots. In the late 40's, Bugsy Siegel brought slots to the Flamingo Hilton hotel in Las Vegas. Originally, the slots were installed to entertain the wives and girlfriends of high rollers, but revenue from the slots soon began succeeding table games's. In the mid 1980's, the popularity of slots and table games were on par with each other, but by the 90's slots had taken over (Casino info, n.d.).

Through the century, many of new technologies, likes microprocessor, video screen, TITO, 3D display, server-based gaming and sensory touch screen were adopted to slot machines. Although slot machines have only one hundred years of history, which is short compares with table game (Kiso, 2008). It plays an important part of the worldwide gaming industry today.

Definition of Electronic Gaming Machine

Today, electronic gaming machine is being used instead of slots. Electronic gaming machine is defined as any machine that is used for gaming purposes, which does not require dealer to regulate the game. TNS (2010) classifies gaming machine as slot-casino style, video lottery terminal (VLT) and Pachinko/ Pachislo.

Slots includes both stepper slot and video slot machines. Video lottery terminal (VLT) is known as multi-gaming device, which is connected to a centralized computer system. Pachinko/Pachislo is popular in Japan with the former commonly referred to as a ball bearing game and the latter a token in/token out game.

TSN (2010) estimate of the worldwide gaming machines is 7,249,919. Fifty-eight percent of them are slots. Forty-one percent of them is pachinko/pachisto. VLT only represents 1% of total gaming machines.

Gaming Machine Presence in the World

Base on the world count of gaming machines research report (TSN, 2010), the largest number of gaming machines is found in Japan with 4,590,246 machines, but more than half of them are pachinko/pachisto. The United States has the largest

number of gaming machines outside of Japan, while Europe heavily dominates the minor placing.

Although Macau is the world's most lucrative gaming jurisdiction, it only has 2.8% of gaming machines in the world. Compares the casino slot-to-table ratio with other gaming jurisdiction, likes 30:1 in Nevada, 7:1 in Korea and 6:1 in Genting (Kale, 2008), Macau has the lowest ratio, only 2.88 :1 (Gaming Inspection and Coordination Bureau, 2011). Obviously, table game leads the gaming revenue in Macau because of its history.

The Gaming History and Background of Macau

Gambling in Macao has existed almost from its outset, with the legalization of gambling in Macao in the 1850's to raise much needed funding (Gunn, 1996).

In 1934, the Macau Government granted monopoly rights for the first time for casino operation. This first monopoly right went to Tai Hing Company. Only Chinese games were played at that time. The most popular game played was believed to be Fantan and Pai Kao. In 1961, the monopoly granted to Tai Hing Company expired. On 1st January 1962, The Sociedade de Turismo e Diversoes de Macau, SARL (STDM) successfully took over the gambling franchise and since then gambling has developed an industry of its own. Western games like roulette, baccarat, blackjack, craps were introduced.

The gaming industry in Macau was liberalized in 2002. Three gaming licenses were granted to Galaxy-Las Vegas Sands, Wynn Resorts, and Sociedade de Jogos de Macau S.A. respectively. (Koo, 2005, para. 3)

Macau government had restricted the casino concessions to three, each of the three concessionaires may grant sub-concessions. The 6 casino operating concessions are Sociedade de Jogos de Macau, Wynn Resorts, Las Vegas Sands, Galaxy Entertainment Group, MGM Macau and Melco Crown Entertainment. There are 34 casinos operated in Macau today, 20 of them are operated by Sociedade de Jogos de Macau (Gaming Inspection and Coordination Bureau, 2011). In 2004, the opening of the Sands Macau broke the monopoly and ushered in a new era for Macau gaming.

Macau overtook the Las Vegas Strip as the world's biggest gambling market since 2006 and its gaming revenue was about four times the Strip's last year. Analysts expect Macau's gambling revenue to grow to five times of the Las Vegas Strip's this year (O'Keeffe, 2011). Thousands of Mainland Chinese assemble in Macao because it's still the only place in China where casino gaming is legal. Refer to the gaming revenue data on 2011,

VIP baccarat generated gross revenue of MOP135.65 billion (US\$16.96 billion) last year, accounting for 72 % of the casino sector's overall revenue. VIP baccarat revenue increased 69.91 percent year-on-year, according to official data from the Gaming Inspection and Coordination Bureau. This means VIP baccarat grew faster than the overall market – 2010 ended with gross revenue of MOP188.34 billion, a 57.78 % increase over 2009. Mass market baccarat was the second most popular casino game, generating revenue of US\$4.43 billion, up by 36.94 % year-on-year. Slot machines closed the podium of the most popular gaming casinos in 2010, with MOP8.62 billion in revenue, a jump

of 32.52 % over the previous year. Slots made up 4.58 percent of the overall casino gaming gross revenue last year (“VIP baccarat”, 2011, para. 1).

Slots History of Macau

Slots were distinctly lacking an image during the monopoly era. Asian players tend to prefer table gaming. Before Sands Macau opened, Macau had only 814 slot machines at Casino Lisboa in 2003 (“The Serious Slot Player”, 2007). Macau consisted mainly of traditional 3 steppers slot machines and playing table games can only be offered in casinos. In order to beat out the Las Vegas competitors in bringing slots to the masses, Lawrence Ho, the son of Dr. Stanley Ho saw the opportunity of electronic gaming and established the Mocha Slot in 2003. Mocha Slot brought s new era of slots play in Macau.

According to the interview with Mr. Ted Chan, General Manager of Mocha Slot (“The Serious Slot Player”, 2007), Mocha introduced multi-terminal, likes Sic Bo, baccarat and roulette first in order to convince table-loving Chinese players to try out slots. The multi-terminal games made up 70% of the machine mix at Mocha. Then Mocha successfully introduced regular slots to the public and controlled the multi-terminal games mix less than 50%. Until now, Mocha Slot has opened 9 clubs within Macau with approximately 1800 gaming machines. Mocha Slot believes strongly in the potential of slots, given their “variety of interface, theme and design,” which makes them “more entertaining” than tables games, which are “always played the same way.”

In 2004, the opening of Sands Macau brought extra 405 slots into the market (“Goings-On in Gambling”, 2004). It represents the beginning of slots booming. The number of slot machines in Macau had increased more than threefold from 2254 in

2004 to the present 15098 (Gaming Inspection and Coordination Bureau, 2011).

Everyone in the casino industry feel optimistic to the slots future, including slot manufacturers.

Optimistic Expectation of Slot Manufacturers

At the slot manufacturers' point of view, American market continues to struggle with unpredictable economy, the casino gaming revenue growth in the US last year is just 2.7%, but it is just the opposite for the gaming industry in Asia-Pacific with 27.7% gaming revenue increase in 2010 alone. PricewaterhouseCoopers predicts gaming revenues in the region should grow at an average of 23.6 % per year between 2010 and 2014 (Romann & Lee, 2011). Therefore, slot manufacturers are extremely optimistic about demand in Asia and believe it would continue to grow (Wee, 2010).

Asia is a growth phase with tremendous potential. Aristocrat, the market leader in Asia that had a 55 % share of Macau slots market (Whiting, 2008), has long considered Asia to be an integral part of their international gaming business. IGT, the market leader in US market, sees the Asian markets as key global growth areas and have a long-term outlook in partnering with their customers to deliver the most innovative gaming products. Thousands of new slot manufacturers want to step into Asian market, especially Macau. Incredible Technologies is one of them. They had spent four years to study this market and come out the conclusion as following:

While VIP table gaming is the vast breadwinner in Macau, the exponential growth of slot machines over the past few years can be linked to a high population density, a growing middle class and a maturing gaming market. As Macau makes an effort to develop its MICE and family tourism segments, new

customers will arrive, casinos will continue to transform and entertainment offerings will proliferate. Under these market conditions, slot machines in Macau should continue to benefit and thrive. (Casino Enterprise Management, 2011, para. 5)

All slot manufacturers foresee the positive future in Macau. However, Kale (2008) argued that the high growing rate in Macau slots market just because of the low base figure for slot machines in the past. It cannot reflect the future of slots. Will slot manufactures overestimate the market potential? This paper would examine the future development of Macau slots market objectively.

Part Three

Introduction

Part three will investigate the future of slots market in Macau. By using the information of part three and the literature review in part two, a conclusion that reach the paper objective can be identified. In part three, both external and internal would be investigated in order to figure out how's the future slots development in Macau. External factor is the government policy. Internal factor includes Chinese player's gaming behavior and casino operator initiative.

Government policy

The most important factor that affects the Macau gaming development is the government policy, including both controlled by Mainland China's and Macau's. Mainland China Government takes the initiative of the Pearl River Delta Region Development strategy, which influence the infrastructure within the region including Macau. Besides, Mainland China Government controls the individual visit scheme that directly affects Macau's visitation of China visitors. For Macau Government, they are responsible to control the health growth of the gaming industry though controlling the table cap.

Pearl River Delta Region Development Strategy

Macau is located at the Pearl River Delta Region, nearly all the landscape has undergone drastic changes due to rapid industrialization and urbanization. The '9+2 city-region' forms the most important city region in China. Cities covered within the boundary of the city region include Hong Kong, Macau, Guangzhou, Shenzhen, Zhuhai, Foshan, Dongguan, Zhangshan, Jiangmen, Huizhou and Zhaoqing

(Development Bureau of Hong Kong Special Administrative Region, 2009). The Government of Guangdong, Hong Kong and Macau would implement the strategy for high accessibility within Pearl River Delta traffic network through the achievement of regional transportation hub, 'inter-city one-hour traffic circle' and 'seamless connection' in cross-boundary. Macau is planned to develop as 'the world's most attractive' tourism and recreation center. This strategy would encourage cooperation within the region, as well as speeding up Macau's integration into the Pearl River Delta. The strategy of 'inter-city one-hour traffic circle' allows transportation between any two places within the delta's the bay area and the three metropolitan areas to be completed in one hour, mainly by railways and expressways. The construction of Macau's light rail transit and Hong Kong-Zhuhai-Macao Bridge are part of this project. They aim to be operating by 2015 and 2016 (Wikipedia, 2011). The high accessibility within the region is expected to bring more tourists from Mainland China and Hong Kong to Macau in future. This policy definitely has positive impact to Macau gaming industry, including slots business.

Policy Of Individual Visit Scheme (IVS)

Since July 2003, Mainland China Government introduced Individual Visit Scheme (IVS), which allowed Mainland Chinese visit Hong Kong and Macau to travel as individuals, instead of on business or tour groups, as previously required ("China's Macau travel policy", 2008). This new policy doesn't only increase the tourist visitation, but also bring more new tourists to Macau.

However, in order to attack on gambling-related corruption in Mainland China and slow down the rapid speed of Macau's growth, Guangdong Government

announced the amendments to the administration of the IVS in 2007. Guangdong ended the practice of accepting urgent permit applications and that there should be at least three-month gap between each application to visit Macau. Additionally, Mainland Chinese travelling to Hong Kong have been required to apply for a separate permit to visit Macau. Due to this reason, Macau gaming business had fallen by half. The number of individual tourists in 2008 experienced a 26% drop from the previous year (Fan, 2008).

Mainland China Government takes an important role to control the gaming industry in Macau. The gaming revenue can be influenced by the Government policy dramatically.

Macau Gaming Table Cap

In order to maintain a sustainable growth for gaming industry, Macau Government introduces the gaming table restriction policy. It restricts the number of table growth to 3% from 2013 until 2020. There is a gaming table cap of 5,500 in place until 2013 (Quinta, 2011). By the third quarter of 2011, there were 5,379 tables in operation (Gaming Inspection and Coordination Bureau, 2011). With a 3% yearly increase the industry could hit 6,866 tables by 2020.

Although there is gaming table cap, there are presently no plans to limit the number of slots. It is an opportunity for casino operator to start discovering other game to reach the mass market. Electronic gaming table is one of the video lottery terminals (VLT), which allow for several player to bet at the same time, are officially classified as slot machines in Macau. Electronic gaming table can solve the problem of gaming table cap. Besides, the latest unemployment rate in Macau for the period of July to September 2011

reached 2.6% (Statistics and Census Service, 2011). According to MacauHR (2003), the most challenging task in Macau is talent acquisition and retention. Skill shortages in the labor market, low unemployment rate and high turnover rates were obstacles to the development of the gaming industry of Macau. Consequently, investment in electronic gaming tables would be a solution for casino operators to solve the labor shortage problem and increase the revenue at the same time.

Chinese Player's Gaming Behavior

Ozorio and Fong (2004) conducted a study on Chinese casino gambling behavior. They found that Chinese players' high risk-taking appetite was fueled by their desire to win and to fulfill their sense of excitement. They have the tendency to seek motivation and the chance to make money through risk-taking. The strong desire to win means that player would go for games that offer the highest perceived probability of winning. To Chinese, the perceived probability of winning appears to be higher for table games than for slots (Lam, 2005). Table games offer higher wager which means larger winnings to player. Besides, Chinese also perceived that one wins more quickly at table games than on slots. It makes table games particularly attractive to impatient Chinese who wish to grow rich quickly.

The other reason of Chinese player preferring table game is socialization. Historically, gambling is functioned as a form of social activity. For Chinese, table game players gain enjoyment not only from the game excitement, but also from their interactions with other players. Lam and Ozorio (2008, para. 3) points out that “many Chinese consider gambling in friends or relatives’ home an acceptable form of social activity. Gambling is, historically, performed as a form of social activity and part of

festival celebration. This has become a form of habit for many Chinese. While engaging in these gambling activities, Chinese deepen their friendship with each other and realize the real characters of those who gamble. For some Chinese, gambling provides a form of business networking or guanxi opportunities.”

The recent research of Liu and Wan (2011) shows 87.65% of the respondents prefer table games to slots. Compared with table games, Chinese players generally perceive slots to be less fair, less honorable, less likely to pay out large amounts, more likely to result in quick losses and more difficult to play. Most importantly, most of them have limited knowledge of slots rule.

Although slots have not yet become popular in Macau at this moment, Jason Gao, gaming professor at the University of Macau, said that slots will slowly take over table games in the mass market, as they did in Vegas during the 80s (“Slotting In”, 2005). Base on the Chinese player’s behavior of high risk-taking and socialization, the existing slots that provide private gaming environment and low denomination might not suitable for China market. Recommendation will be provided in the later session.

Casino Operator Initiative

In order to have an in-depth understanding of the current market situation and the casino operator’s point of view, an interview is conducted with Mr. Wong Kai Hong, Michael, the Executive Director of Main Floor Casino Marketing of MGM Macau. Following are the questions and answers for the interview.

1. Base on your observation, how does the slots business being change in Macau?

The slots business started to grow after Mocha opened in 2003. Due to the location advantage and stylish decide. Mocha successfully drawn player’s attention. Afterward,

Wynn Macau is the one who brought the big whale to play slots and expanded the slots market. Market continuous to grow after different property is opened. Since the slot market is still small compares with table, there is tight competition for the high-end slots segment.

2. In Macau, slots only contributed 4.58% gaming revenue last year, 72% of the overall gaming revenue was from VIP table. Compare with Las Vegas, slots in Macau makes a little contribution. What do you think about the difference?

In Macau, junket business can achieve such an impressive result because of marker that allows player plays without bringing in any money. Junket also has also good connection with player in China. Although property in Vegas also allows marker for main floor player, the main floor business in Macau doesn't have this privilege due to limited players' information and the difficulty to collect money in China. Junket business has long history in Macau. It takes time for slots to grow. Although he Slots captures the junket player and main floor table player, table game is still the dominate game in Macau.

The culture difference of Western and Asia is the major reason of why slots are so popular in Las Vegas. Western player loves to play slots as an entertainment and kill time. For Asian player, they are heavy gambler and love to take high risk. They may keep playing the same machine with maximum bet for a whole day without sleeping. It explains why the net win per unit per day in Macau is a double of Las Vegas's. The player behavior of these two groups is totally different.

3. What do you think the strength and weakness of Macau as a tourist destination?
Although there is more and more casinos opens and plans to open in Asia, likes

Singapore, Taiwan, Vietnam and etc., Macau still owns the greatest advantage of being the only place within China allows gaming. It's the strength, but also weakness as well. The future of Macau is completely controlled by Mainland China's Government regulation and economy. The monopoly gaming industry became an unstable factor to Macau's sustainable development. Lack of diversification is apparently the weakness when Macau comes across financial crisis and a tough policy on the Mainland China Government. Even though Macau won the award of World Culture Heritage for its historical and cultural district in 2005 and Macau Government actively develop MICE, it does not successfully to diversify Macau's tourism industry. It may take decade to diversify Macau social economy.

4. Are all casino operators willing to develop slots market in Macau? What do you think the competition of slots market in Macau?

During the past few years, the slots market was having explosive growth, I would like to say Wynn Macau, Galaxy, Venetian Macau and MGM Macau takes majority effort to develop slots market. Base on the main floor table to slots gross win ratio, Wynn Macau and MGM Macau have the highest ratio of 3:1. Galaxy is the only casino locates in Cotai Strip that performs very well in slots session, it has 4:1. Venetian Macau, including Sands has 5.6:1. City of Dream and Lisboa mainly concentrate on table game business, their table to slots gross win ratio are respectively 8:1 and 10:1. Different casino operator has different marketing strategy of slots business, but not all of them have their own team of slot host and casino event to target to this segment. I would consider Wynn Macau is the best operator to develop slots and owns the major slots market share. Venetian Macau is the second one due to its mega size and early

development of Sands. MGM Macau is the third one as we target to high end slots market and emphasis on high quality of service.

During this beginning stage of slots development in Macau, although only a few of the casino operators target to this segment, Mr. Michael Wong still believes that slots will overcome table in future, but it won't happen within this century. Slots just like other electronic device and technology, it takes time for people to adapt and become popular.

Recommendations

Based on Mainland Chinese players' traits and the Macau Government table limit restriction policy, video lottery terminal, likes electronic table games can be a new way to solve the Macau Government table cap's problem. Mainland Chinese is more likely to be perceived electronic table games more positively than slots. With a lower stake required, this new type of games offers a new market for casino operators in Macau and appears to fit the motivational needs of Chinese gamblers in order to encourage leisure players.

Besides, slots are perceived for players who don't want to socialize with others and provide high level of privacy to players. The old decide of slots can't fit for the Mainland Chinese player behavior who loves to social with other players. Progressive jackpot is actually the community game because every player contributes to the jackpot. Community slots are a new bonus feature with multi-player capability. Community slots consist of a group of machine that contains the same game. Each player would play on their own machine but there will be a bonus at random times and it allows all players to take part. For some games, it can also allow player to compete for the

jackpot. This new decide of feature has invented already, likes the eBay machine from IGT, Monopoly Big Event from WMS Gaming and etc. Slots manufacture should import more community slots into Macau's market and casino operator make effort target to Mainland Chinese market. Research and development for this market can be done for future study.

Conclusion

Base on the gaming revenue that Macau has achieved in the past few years, market is optimistic of the future. Especially for slots, an industry that truly developed for just 8 years in Macau since Mocha opened, but the number of slot machines had increased more than threefold, slots suppliers have positive expectation in the future. Three factors are being considered to measure the future for slots in Macau to the mainland China market. They are government policy, Chinese player's gaming behavior and casino operator initiative.

Mainland China Government has great impact to Macau gaming development. Pearl River Delta Region development strategy can increase the accessibility and bring in more traffic in the future. Nevertheless, in order to control the overheated gaming economy in Macau, both Guangdong Government and Macau Government implement different strategy to control the growth. Guangdong Government controls the individual visit frequency by adjusting the Individual Visit Scheme. Macau Government controls the gaming table limit via setting up cap. Macao's gambling industry largely depends on Chinese high rollers who are often victims of problem gambling. Reasonable gaming may be the reason for government to control the

business. It is hard to predict the future government policy. Government policy is being an independent variable to influence slots in the future.

The characteristic of Chinese players is high risk taking and socialization, which makes their preference for table games over slots. It seems unlikely that slots will replace tables as the preferred game of the Chinese in the near future. However, as China progresses economically, one predicts that increasingly wealthy Mainland Chinese will start to treat gambling in Macau more as a form of entertainment. With more slot machines are being introduced by casino operator and upcoming new properties would be opened in the next few years, it would potentially enhance Chinese slot play (Lam, 2005).

At the casino operators' point of view, only a few of them considers slots as beneficial and are willing to invest on it. It does not only take time for casino player, but also operator to adapt to this game type.

As a conclusion, the market is over optimistic to the future of slots. There is still independent government policy can influence its future. Slots in Macau are still at the beginning stage of development, it takes time for market to adapt slots.

References

- Casino Enterprise Management. (2011, June 1). *Easter engagement: Manufacturers' take on the Asian gaming market*. Retrieved from <http://www.casinoenterprisemanagement.com/articles/june-2011/eastern-engagement-manufacturers-take-asian-gaming-market>
- Casino info. (n.d.). *Slots*. Retrieved from http://www.casino-info.com/gambling_tips/slots.html
- China's Macau travel policy. (2008, November 12). *Inside Asian Gaming*. Retrieved from http://www.asgam.com/article.php?id_article=1928&page=1
- Department Bureau of Hong Kong Special Administrative Region. (2009). *Building coordinated and sustainable world-class city-region*. Retrieved from http://www.pland.gov.hk/pland_en/misc/great_prd/events/PR-EN-html.pdf
- Fan, M. (2008, December 18). China's restrictions hurt Macau casinos. *The Washington Post*, pp. B3.
- Gaming Inspection and Coordination Bureau. (2011). *Gaming statistics*. Retrieved from <http://www.dicj.gov.mo/web/en/information/DadosEstat/2011/content.html#n4>
- Gaming Inspection and Corrdination Bureau. (2011). *Macao gaming history*. Retrieved from <http://www.dicj.gov.mo/web/en/history/index.html>
- Gaskell, M. (2011, May 17). *Newest world-class gaming: Battling Las Vegas...A "smack down" in Macau*. Gamut News. Retrieved from <http://gamutnews.com/20110517/5577/newest-world-class-gaming-battling-las-vegas%E2%80%A6%E2%80%9Csmack-down%E2%80%9D-in-macau.html>

- MacauBusiness.com. (2004, July 1). *Goings-on in gambling*. Retrieved from <http://www.macaubusiness.com/news/gaming/goings-on-in-gambling/396/>
- Gunn, G. C. (1996). *Encountering Macau. A Portuguese City-State on the Periphery of China* (pp. 1557-1999). Oxford, England: Westview Press.
- Kale, S.H. (2008, August 4). Mining for gold in Macau's slot market. *Casino Journal*. Retrieved from <http://www.casinojournal.com>
- Kiso, T. (2008). *History of slot machines*. Retrieved from University of Nevada, Las Vegas, Center for Gaming Research website: <http://gaming.unlv.edu/subject/slotmachinehistory.html>
- Koo, L.C. (2005) Staying ahead of the game in Macau. *Journal of Macau Gaming Research Association*, 3. Retrieved from <http://mgra.org.mo/journal/第三期學刊稿件/Staying%20ahead%20of%20the%20game%20in%20Macau.pdf>
- Lam, D. (2005). Slot or table? A Chinese perspective. *UNLV Gaming Research & Review Journal*, 9(2), 69-72
- Lam, D. & Ozorio, B. (2008). An investigation into Chinese betting behavior. In Esposito, Editor (Ed.). *Psychology of Gambling* (pp. 15-32). New York, NY: Nova Science Publishers.
- Liu, X. R. & Wan, Y.K.P. (2011). An examination of factors that discourage slot play in Macau casinos. *International Journal of Hospitality Management*, 30, 167-177.
- MacauHR. (2003). *The Asian Casino Executive Summit held at Singapore*. Retrieved from <http://www.macauhr.com/resource/2008-09-17/The-Asian-Casino-Executive-Summit-held-at-Singapore---macauHR,-Staged-on-1-of-the-2-Pre-con-Marterclasses/59>

- O'Keefe, K. (2011, June 1). Macau gambling revenue hits another record high. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/>
- Ozorio, B., & Fong, D. K. C. (2004). Chinese casino gambling behaviors: Risk taking in casinos vs. investments. *UNLV Gaming Research & Review Journal*, 8(2), 27-38.
- Quinta, V. (2011, September 28). Gaming cap to boost electronic tables. *The Macau Daily Times*. Retrieved from <http://www.macaudailytimes.com.mo/macau/29974-Gaming-cap-boost-electronic-tables.html>
- Romann, A. & Lee, J. (2011, July 15). Big bucks in casinos. *China Daily USA*. Retrieved from <http://usa.chinadaily.com.cn>
- Schwartz, D.G. (2011). *Major Gaming Jurisdictions: Ten-Year Comparison*. Las Vegas: Center for Gaming Research, University Libraries, University of Nevada Las Vegas. Retrieved from http://gaming.unlv.edu/reports/10_year_comp.pdf
- MacauBusiness.com. (2005, July 1). *Slotting in*. Retrieved from <http://www.macaubusiness.com/news/gaming/slotting-in/218/>
- Statistics and Census Service. (2011). *Employment Survey*. Retrieved from http://www.dsec.gov.mo/getAttachment/531ff88c-087f-4959-840b-3e1a587894ab/E_IE_FR_2011_M07.aspx
- Statistics and Census Service. (2011). *Visitor arrivals*. Retrieved from http://www.dsec.gov.mo/getAttachment/1f9b57de-a7c8-448e-82d9-4cacb60243ea/E_MV_FR_2011_M09.aspx
- Statistics and Census Service. (2011). *Visitor expenditure survey*. Retrieved from http://www.dsec.gov.mo/getAttachment/f83c3159-ee9e-475f-a832-09f18e97df33/E_IDV_FR_2011_Q2.aspx

- The Richest.org. (2011). *The world largest economies 2011*. Retrieved from <http://www.therichest.org/world/worlds-largest-economies/>
- Inside Asian gaming. (2007, February 1). *The serious slot player*. Retrieved from http://www.asgam.com/article.php?id_article=1191&page=1
- TSN (2010). *World count of gaming machines 2010*. Retrieved from http://www.gamingta.com/pdf/World_Count_2010.pdf
- VIP baccarat accounted for 72 percent of Macau's gaming revenues in 2010. (2011, January 17). *MacauBusiness.com*. Retrieved from <http://www.macaubusiness.com/news/vip-baccarat-accounted-for-72-percent-of-macau%E2%80%99s-gaming-revenues-in-2010/7036/>
- Wee, S.L. (2010, June 9). Slot machine makers see big wins from Asia. *Thomas Reuters*. Retrieved from <http://in.reuters.com>
- Whiting, D. (2008, June 5). Casino hub of Macao is cool to slot machines. *The New York Times*. Retrieved from <http://www.nytimes.com>
- Wikipedia. (2011). *Hong Kong-Zhuhai-Macau bridge*. Retrieved from http://en.wikipedia.org/wiki/Hong_Kong-Zhuhai-Macau_Bridge