

5-2010

Which financing model is right for hotel properties? An exploratory study of financing models highlighting the practice and effects of different financing models adopted by hotel industries in USA and Singapore

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**WHICH FINANCING MODEL IS RIGHT FOR HOTEL PROPERTIES?
AN EXPLORATORY STUDY OF FINANCING MODELS HIGHLIGHTING THE
PRACTICE AND EFFECTS OF DIFFERENT FINANCING MODELS ADOPTED BY
HOTEL INDUSTRIES IN USA AND SINGAPORE**

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A professional paper submitted in partial fulfillment
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May 2010**

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ABSTRACT

***WHICH FINANCING MODEL IS RIGHT FOR HOTEL PROPERTIES?
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The high debt-financing model adopted by hotel owners in United States had contributed to a large number of foreclosures during the economic downturn. In contrast, the conservative financing model adopted by hotel owners in Singapore had sheltered them through the past recessions. Cultural values may have influenced the types of financing model adopted by hotel owners. Americans have a value system of using borrowed money to invest, while Singaporeans have a value system of saving for rainy days and spending within one's means.

The studies concluded that hotel owners in the United States and Singapore should consider Juglar's nine to eleven year business cycle as reference (Juglar, n.d.), and adopt a financing model that undertakes an appropriate level of debt at early stage of economic upturns and when the hotel properties are increasingly enjoying high profitability. At the peak of economic upturns, hotel owners should revert to conservative financing model in preparation for potential economic downturns. As hotel business is a high-risk industry, a Quick Ratio of at least 1.5, and Interest Coverage of at least two must be maintained all the time.

ACKNOWLEDGEMENT

I was influenced by Professor Zheng Gu with his views on the financial implications of the hospitality industry. The hotel industries would not have seen so many business failures if hospitality managers understood the basics of finance. I would like to thank Professor Gu for creating an impact on the importance of hospitality finance and his acceptance to be my chair for this professional paper. Professor Gu's in-depth knowledge of hospitality finance, and the large number of articles he has published, had helped me tremendously in my research and writing for this professional paper. I would also like to thank Professor Sammons for her guidance on the proper completion on my professional paper.

In order to balance between academia concepts and practical applications, objective views from industry practitioners and academia were needed. I was privileged to have Mr. Ian Ang, the finance director of Royal Plaza on Scotts for his advise on financing strategies adopted by hotel owners in Asia, and the practical applications of my proposed financing model for hotel owners in Singapore and in the United States. Mr. Ang's wide industry's knowledge of hospitality finance, especially at the property owner's level, has helped me to conceptualize the financing model for this professional paper. The strong support from my family was important to ensure the successful completion of my professional paper. I would like to thank my wife Danielle Lee and my son, Zan Goh for their understanding and support during the period of my master program. I appreciate the sacrifice they have made during that period, and hope to share with them the fruits we have worked together for the past years.

PART ONE

Introduction

In 2009, the Wall Street Journal reported the rise in hotel forfeitures being the greatest in United States since the early 1990's (Hudson, 2009). Distressed "non-casino" hotel loans comprised of more than 1,000 properties and delinquencies of loans on casino-hotel added another 31 properties into the stable of hotel loan delinquency (Hudson, 2009). The late repayment of loan from the hotel industry has exceeded that of multi-family, with a total volume of \$3 billion (Drummer, 2009). Fitch reported that hotel has become the leading property type with the biggest percentage of commercial-backed mortgage securities (CMBS) delinquencies of 5.83% (Drummer, 2009). The amount of delinquencies of loans on hotel properties is a worrying trend, as it mirrored the last catastrophic decline of property market in the early 1990s that saw some 2,000 hotels' bankruptcy filings in America (Butler, 2009).

During the latest economic boom, many hotel owners went on acquisition sprees that left their properties loaded with debt (Hudson, 2009). The price of hotel properties went through the roof from 2005 to 2008 as property owners went on aggressive buying sprees that resulted in an enormous amount of mortgage debt (Hudson, 2009). The USA Today reported that the United States' hotel industry was seeing more foreclosures or bankruptcies in 2009 as owners increasingly failed to repay maturing loans or they were falling behind payments (Yu, 2009).

During the recession in the late 1990s, instead of being forced into foreclosure, a few hotels in Singapore were converted into luxury condominiums

or sold for redevelopment (Rahiwala, 2002). To the best of the author's knowledge, the number of foreclosure of gazette hotels in Singapore since 1990s was insignificant, with only one hotel, Katong Park reported in 1998 (Rahiwala, 1998) and another hotel, Asia Radio Hotel reported in 2002 (Tan, 2002). The last reported foreclosure of hotel in Singapore was the former Crown Prince hotel in 2005 (Jones Lang LaSalle Hotels, 2005). The failure of Crown Prince hotel was not due to the failure of hotel operations, but the failure of non-hotel related businesses owned by the hotel owner. In fact, the Crown Prince hotel was sold at a profit to another hotel operator. The insolvency rate of hotel properties in Singapore was in great contrast with that of hotel properties in US.

Purpose

The decline of the property market in the early 1990s saw some 2,000 hotels' bankruptcy filings in the US (Butler, 2009). The recent financial crisis saw the rise of distressed hotel loan bankruptcies and restructurings. In 2009, Extended Stay Hotels, a 680-property chain hotel in the US filed for Chapter 11 bankruptcy protection pending legal battle over its debt restructuring (Elowitz, 2009). Another hotel, the Staten Island Hotel also filed for bankruptcy due to credit crunch (O'Shea, 2009). The hotel loan bankruptcy in the US appeared to be unacceptably high during recessions, and this phenomenon has been repeated during each economic downturn. Loan delinquency has been the cause of major failures in the hotel business. As a result, the need to identify the right financing model for hotel industries has become more apparent. The purpose of the professional paper is to identify the right financing model for hotel properties

that can minimize the risk of insolvency throughout the economic cycle and to maximize profits during economic upturns.

The objectives of the professional paper are to study the financing models of hotel industries in the US and in Singapore; to identify the positive effects and negative effects of the two financing models based on the variables suggested by a study to predict Korean lodging firm failure (Youn & Gu, 2009); to identify the cultural differences that influence the financing models adopted by hotel owners in the US and Singapore; and to recommend the right financing model for hotel owners in the US and Singapore. Historical data was collected and used to perform ratio analysis for hotel industries in the US and Singapore. The results of the ratio analysis were examined to identify the positive effects and negative effects of the two financing models, based on the variables suggested by a study to predict Korean lodging firm failure (Youn & Gu, 2009). The findings from the literature review and ratio analyses were used to develop a financing model for hotel industries that could enable solvency throughout the economic cycle and to maximize profits during economic upturns.

Justification

The professional paper would be of interest to property owners and hotel management to identify the right financing model for their hotel properties, and to look out for warning signals that the hotels may be heading for business failures caused by debt and loan delinquency. Investors and bankers would also be keen to identify the financial risks of hotel properties for the purpose of investment and provision of credit facilities.

Constraints

The financial data for the hotel industry in Singapore were limited to hotel operations. Data such as investment, debt and interest expenses were proprietary information available to property owners only. As such, publicly available information from public companies that have substantial businesses in the hotel and resort industry were used as samples to represent the hotel industry in Singapore. The long-term debt incurred by these companies may not be entirely due to hotel business, but includes residential, commercial and industrial development as well. The lack of reports on mortgage issues relating to Singapore's hotel properties may be due to the lack of hotel delinquency and foreclosure incidents in Singapore.

Glossary

Bankruptcy.

Under US federal law, corporate bankruptcy can be filed under Chapter 11 to enable the companies to recover from debt; or Chapter 7 when the companies run out of business (SEC, 2009). For Chapter 11 bankruptcy, companies still operate their businesses, and efforts are made to return the companies back to profitability, though some may end up liquidating. For Chapter 7 bankruptcy, companies have to be liquidated, as they are so serious in debt that they can no longer continue with their business operations.

Debt financing.

It is a method of raising capital for companies by borrowing money from financial institutions, organizations and/or individuals by issuing bills, bonds or notes (Investopedia, 2010a).

Debt ratio.

It is a measurement of total liabilities over total assets. The ratio gives an indication on the amount of debt the company used to finance its asset (InvestorWords.com, n.d.).

Delinquency.

It is defined as non-payment of debt when it is due for payment (Princeton University, n.d.).

Equity financing.

It is a method of raising capital for companies by issuing stocks to investors (Investopedia, 2010b).

Equity ratio.

The ratio is defined as the owner's equity over the total assets of the company, which represents the percentage of the assets that are financed by stockholders as compared to creditors (Wikipedia, 2010).

Insolvency.

It is a situation when a company can no longer make loan repayment. Insolvency may occur even when the total assets are more than its total liabilities. As such, insolvency may or may not lead to corporate bankruptcy (Dictionary.com, 2010).

Junk bond.

It is a high-risk corporate bond that offers high yield to investors. Such bond normally has low rating that associates with risk (Answers.com, 2010).

Ratio analysis.

It is a quantitative analysis tool used to study the financial performance of a company, in terms of liquidity, solvency, operation efficiency and profitability for the purpose of planning, prediction and investment (Investopedia, 2010c).

RevPar.

It represents revenue per available room, which is commonly used by hotel industry to measure the performance of the room operations. RevPar can be calculated by multiplying the hotel average daily room rate (ADR) by occupancy rate (Financial Times, 2009).

PART TWO

Literature Review

Introduction

The hotel industry is considered a high-risk business by lenders and mortgage investors (Elgonemy, 2002). One major concern of hotel financing is the debt to equity ratio, as excessive debt increases the costs of finance that reverse the positive effects of leverage. According to Kwansa and Parsa (1991) quoted in a study by Gu and Gao (2000), loan default was found to be one of the events unique to the bankrupt companies. Hotels typically have high operating expenses in comparison to other types of property. For example, in a hotel environment where the variable cost is 40% and the rest are fixed cost, every 1% of revenue lost only trims 0.4% of expenses (Mammoser, 2009). At the same time, if revenue declines 20%, the net cash flow would generally drop 35% to 40% (Fitch, 2009). As such, during a recession, a decline in hotel revenues will seriously impact the solvency of hotel properties that incurred large amount of debt.

Financing model used by hotel industry in United States.

According to Upneja and Dalbor (2001), the reliance on debt financing by the hotel industry in the United States was significant. The 2010 total debt to equity ratio of the hotel industry in the United States was reported by Reuters as 77.52%, which means the capital of the hotel properties in the United States was largely funded by debt instead of equity (See Table 1). The high debt-financing model adopted by hotel owners in the United States can be observed by the

relatively high delinquencies rate. According to Ishmael (2009), a report from Fitch indicated that the delinquencies rate in the United States had increased to two billion dollars per month. The new hotel delinquencies during that period included about \$180 million by RRI Hotel; \$90 million by Four Seasons San Francisco; and about \$80 million by Crown Plaza Hotel at New Orleans (Ishmael, 2009). In the United States, many hotels had problems restructuring their loans because they were bundled into commercial mortgage-backed securities (CMBS), which merged numerous property payments into a single bond (Hudson, 2009). Since many mortgage investors bought the junk bonds, the property owners have virtually no way to negotiate for a new loan structure. In the first quarter of 2010, California alone saw seventy-nine hotels went into foreclosures, an increase of about twenty-five percent (Pierceall, 2010). The high debt-financing model adopted by hotel owners in the United States had contributed to a relatively large number of foreclosures during the economic downturn.

Table 1

Financing Strength of Hotel Industry in US and Singapore

| Gearing Ratio | US Hotel 2010 April 7 | SG Hotel 2008 Dec 31 | S&P 500 2010 April 7 |
|----------------------|-----------------------------|----------------------------|----------------------------|
| Quick Ratio | 0.78 | 2.50 | 0.81 |
| Current Ratio | 1.01 | 2.63 | 0.97 |
| LT Debt to Equity | 57.30 | 0.38 | 141.48 |
| Total Debt to Equity | 77.52 | 0.76 | 202.73 |
| Interest Coverage | 0.64 | 14.06 | 10.33 |

Note: Data source from <http://www.reuters.com> and Thomson Reuters.

Negative effects.

The main disadvantage of debt financing is the need for hotel properties to produce sufficient cash flow to cover the interest payment. During an economic downturn or in a saturated market, hotel properties may not be able to generate

enough operating income to repay interest expenses. According to Gu and Gao (2000), unprofitable companies burdened with debt and short-term liabilities have the higher probability of bankruptcy. Hotel properties with large amount of debt faced the risk of insolvency and financial rigidness (Elgonemy, 2002). According to Elgonemy (2002), debt financing could enslave the hotel owner to the mortgagees, and restrict their ability to practice flexibility and creativity. The major negative effect of an aggressive financing model adopted by hotel owners in the United States could be seen by the unprecedented delinquency rate during the economic downturn. In September 2009 alone, the amount of default in hotels was 240, and the amount of foreclosures was 40 (Lewis, 2009).

According to a Fitch Ratings report on delinquency index in the United States, hotel scored the highest delinquency rate of 16.61% among the property types (See Table 2). The findings may be due to the relatively larger debt incurred by hotel properties and higher default risk due to high volatility of income caused by fluctuation of demand in room occupancy. As indicated in Table 3, a total of ten large and public hotel companies in the United States filed for bankruptcy in 1989 to 2009 (LoPucki, 2010). The category for large hotel properties is one that has more than \$100 million assets filed with the Securities Exchange Commission before filing for bankruptcy (LoPucki, 2010). For a hotel property to be considered as public, the company must maintain public in the three years prior to bankruptcy, and did not become private more than one year prior to bankruptcy (LoPucki, 2010). Although the number of large and public hotel companies that filed for Chapter 11 bankruptcy from 1989 to 2009 was only ten, the size of the hotel companies were significant. It is important to note

that Table 3 excluded hotels that were privately owned or less than \$100 million in assets.

Table 2

Delinquency Rates by Property Type in February 2010

| Property Types | Delinquency Rate (%) |
|----------------|----------------------|
| Office | 3.50 |
| Hotel | 16.61 |
| Retail | 5.09 |
| Industrial | 4.16 |

Note: Source from <http://www.businesswire.com> (Business Wire, 2009).

Table 3

Large and Public Hotels Bankruptcy Chapter 11 Filings

| Year filed | Corporation Name |
|------------|--|
| 1989 | Resorts International Inc. (1989) |
| 1990 | Prime Motor Inns Inc. |
| 1991 | Days Inns of America Inc. |
| 1991 | Divi Hotels, N.V. |
| 1991 | Trump Taj Mahal Funding Inc. |
| 1992 | Trump Plaza Funding Inc. |
| 1994 | Resorts International Inc. (1994) |
| 2001 | Lodgian, Inc. |
| 2004 | Trump Hotels & Casino Resorts Inc. |
| 2009 | Trump Entertainment Resorts, Inc. (2009) |

Note: Source was obtained from Lynn M. LoPucki Bankruptcy Research Database (2010).

Research has shown that the number of bank foreclosures of hotels in the United States was expected to rise in 2010; many hotels have been struggling from huge debts as of December 2009 (Hanz, 2010). The overcapacity of the US lodging industry, coupled with the 1990 to 1991 economic downturn had bankrupted two-thirds of the United States' hotels (Romeo, 1997; Gu & Gao, 2000). The Gu and Gao (2000) study suggested that in the US hospitality

industry, unprofitable companies burdened with debt and short-term liabilities have a higher probability of bankruptcy. The study also suggested that fast expansion and sales growth of these companies could increase their bankruptcy likelihood, while profitable companies with less debt and short-term debt and slow sales growth have a lower risk of bankruptcy (Gu & Gao, 2000). According to a study by Campello (2006), to establish whether debt increases or decreases a firm's product market performance, it was found that a small amount of debt was related to a gain in the company's sales, relative to the sales of its competitor; while a large amount of debt would lead to low product market performance.

Positive effects.

Debt financing has the advantage of rising capital for hotel owners, who were unwilling to forgo part of the ownership of the company, through the equity channel. Debt financing allows hotel owners to retain 100% ownership of the company. According to Elgonmy (2002), the use of a small amount of cash in addition to debt financing has the leverage effect of increasing the return on equity (ROE) for hotel property investment. For example, a debt financing of 70% equity can improve the hotel property return on equity (ROE) from 10% to 15.8% (Table 4). Debt financing produces best positive effect when the values of property appreciate faster than the amount of interest incurred on borrowed money. Looking positively, debt financing has the positive effect of forcing the management of the hotel to reduce operating cost and improve efficiency; otherwise the interest expenses would eat up the earnings if the hotel net operating income declines (Elgonemy, 2002).

Table 4

Effect of Debt Financing on ROE

| | Without Leverage | With 70% Leverage |
|------------------------------------|------------------|-------------------|
| Equity contributions | \$100,000,000 | \$30,000,000 |
| Total revenues | \$30,000,000 | \$30,000,000 |
| Total fixed and operating expenses | \$20,000,000 | \$20,000,000 |
| Interest expenses | 0 | \$5,250,000 |
| Net income to owner | \$10,000,000 | \$4,750,000 |
| Return on Equity (ROE) | 10% | 15.8% |

Note: Assume interest rate 7.5% per year.

Although more long-term borrowings increase the company risk of insolvency, a study by Gu and Gao (2000) suggested that long-term debt enhances short-term liquidity, which reduces the probability of default caused by short-term liabilities. The argument was that more long-term debt could provide liquidity coverage for hotel owners to prevent potential foreclosures. The study has also shown that profitable companies with more long-term debt was less likely to encounter business failures compared to unprofitable companies with heavy burdens of current liabilities, which are likely to go into bankruptcy (Gu & Gao, 2000).

Financing model used by hotel industry in Singapore.

Generally, the financing model adopted by hotel property owners in Singapore was prudent and conservative. To illustrate the conservative financing approach, Bonvest Holdings that owns Sheraton Towers Singapore and The Residence Resorts has reduced its Debt to Equity ratio from 0.46 in 2004 to 0.23 in 2005, 0.08 in 2006, 0.03 in 2007 and 0.01 in 2008 despite the expansion to Zanzibar and Maldives (Bonvest, 2009). Bonvest Holdings was in a net cash position and had funded the constructions of The Residence Resorts in Zanzibar

and Maldives through cash and recurring cash flows, though the company has bank credit facilities for further expansion (Bonvest, 2009). Another example is Furama holdings, which owns Furama Riverfront Hotel and Furama City Center in Singapore. The company's bank borrowings has reduced from \$135 millions in 2004 to \$124 millions in 2005, \$52 millions in 2006, \$43 millions in 2007, and zero borrowing in 2008, despite putting \$14 million annually from 2004 to 2008 for investment (Furama, 2008). Both Bonvest and Furama have demonstrated the conservative financing policy adopted by hotel property owners in Singapore.

The Hotel Grand Central, which owns hotels in Singapore, Malaysia, China, Australia and New Zealand, has increased its bank loans from S\$76.7 million in 2007 to S\$87.6 million in 2008 to finance the hotel development in little India, Singapore (Hotel Grand Central, 2008). Although Hotel Grand Central was one of the few hotels in Singapore to grow the company through debt financing, the debt to equity ratio remained low at 0.17 in 2008 (Hotel Grand Central, 2008). The more aggressive financing approach adopted by Singapore's hotel owner was Amara Holdings. The company's bank borrowings as at December 31, 2008 were S\$196.4 million, a reduction from S\$215.5 million as at December 31, 2007 (Amara Holdings, 2008). However, the borrowings were primarily meant for property development instead of purely hotel related operations or expansion (Amara Holdings, 2008). The Amara has maintained a healthy cash position of S\$27.3 million in FY2008 as compared to S\$12.3 million in FY2007. According to Amara 2008 annual report, the hotel group would continue to be prudent in conserving cash reserves to navigate the current economic storm (Amara Holdings, 2008).

Hotel owners in Singapore preferred to leverage on company's retained earnings for growth, or rely on equity market to raise fund instead of debt financing (See Table 5). Generally, raising funds through equity was less costly than debt financing. It may explain why Singapore hotel owners prefer equity than debt if there is a need to raise funds. In debt financing, companies have to fulfill debt-servicing obligations, regardless of profitability or economic conditions. A corporate debt carries the burden of repayment on maturity in addition to external forces that may affect the risk on debt, such as financial crisis and economic downturns. Therefore, excessive debt financing is risky for hotel owners. In the case of equity, there is no obligation for dividend distribution, thus no risk of repayment. The financing model adopted by hotel property owners in Singapore was prudent and conservative.

Table 5
2008 Gearing Ratios and ROE of Hotel Industry in Singapore

| Hotel | QR | CR | LTDE | TDTE | IC | ROE |
|---------------------|-------|-------|------|------|-------|-------|
| Amara | 1.47 | 1.48 | 0.89 | 1.46 | 3.42 | 6.80 |
| Banyan Tree | 1.19 | 1.25 | 0.47 | 1.64 | 2.84 | 1.25 |
| Bonvests | 2.09 | 2.22 | 0.00 | 0.27 | 72.50 | 7.82 |
| CDL | 1.12 | 2.86 | 0.61 | 1.31 | 6.26 | 10.69 |
| Furama | 0.99 | 0.99 | 0.00 | 0.12 | 70.50 | 14.88 |
| Genting | 4.54 | 4.55 | 0.50 | 0.72 | -2.28 | -4.07 |
| Gluoculeisure | 1.76 | 1.76 | 0.43 | 0.68 | 1.72 | 6.33 |
| HL Global | 0.48 | 0.48 | NA | NA | 0.85 | NA |
| Hotel Grand Central | 4.50 | 4.53 | 0.14 | 0.35 | 44.57 | 2.75 |
| Hotel Properties | 1.50 | 1.51 | 0.81 | 1.35 | 3.48 | 2.75 |
| Hotel Royal | 0.50 | 0.50 | 0.11 | 0.33 | 10.79 | 4.50 |
| L.C. Development | 1.71 | 1.71 | 0.22 | 0.72 | -0.63 | -4.27 |
| Mandarin Oriental | 5.61 | 5.64 | 0.65 | 0.86 | 2.71 | 6.22 |
| OUE | 10.66 | 10.67 | 0.26 | 0.35 | -4.35 | 1.93 |
| Pan Pacific Hotels | 0.90 | 0.93 | 0.14 | 0.35 | 11.18 | 1.66 |
| Stamford Land | 1.03 | 1.04 | 0.48 | 0.93 | 1.37 | 1.02 |
| Industry Average | 2.50 | 2.63 | 0.38 | 0.76 | 14.06 | 4.02 |

Note: Data source from Thomson Reuters.

Negative effects.

The main disadvantage of conservative financing policy is the missing of opportunities for hotel owners to maximize profits through financing leverage. During boom economy, hotel owners in Singapore may have missed the opportunity to accelerate growth by the adoption of conservative financing policy. The preference to raise capital through equity instead of debt means hotel owners in Singapore have to sacrifice part of the company's ownership to outsiders, which might lead to possible loss of management control. Having low debt financing would also reduce the company's return on equity, and investors with high-risk appetite would not view the company favorably. Hotel owners also missed the opportunity to increase profits when the values of the properties appreciated faster than the interest expenses of debts. In addition, hotel management may not be motivated to improve efficiency as low debt enable them to achieve earnings much easier, since they need not worry about the interest expenses that come with the debt.

Positive effects.

Hotel properties in Singapore have weathered well during recessions, due to conservative financing model adopted by most hotel owners in Singapore. In late 1990s recession, instead of being forced into bank foreclosures, a few hotels in Singapore were converted into luxury condominiums by the hotel owners or sold for redevelopment (Rahiwala, 2002). The only known hotels that encountered foreclosures were Katong Park Hotel in 1998 (Rahiwala, 1998); Asia Radio Hotel in 2002 (Tan, 2002); and Crown Hotel Orchard in 2005 (Jones Lang LaSalle Hotels, 2005). In the case of Crown Hotel Orchard, the failure of the

hotel was not due to over leveraging on the part of hotel business, but the failure of other businesses owned by the hotel owner. During the last financial crisis in 2008, not a single hotel property in Singapore has reported insolvency or foreclosure. The phenomenon indicates that the strict financing policy has helped hotel owners in Singapore to ride through recessions and unexpected events such as epidemics and the global credit crunch.

Financial institutions and mortgage investors prefer to lend money to companies with low debt to equity ratio because lower debt means higher probability for borrowers to repay loan. Generally, lenders are more willing to extend loans to hotel properties with low debt since hotel business incurs high capital investment. In addition, long-term investors prefer to invest in companies with strict financing policy, as the risk of insolvency is minimum. In terms of risk management, hotel owners in Singapore were in a better position to ride through the economic downturn and unforeseeable events that would negatively affect the economy.

Cultural Implications.

Although Singapore has inherited the British education system during the colonial period, the value systems of Singaporeans were influenced by their Chinese heritage and Confucian values. According to an article on Characteristic Traits of the Chinese People, Cheng (1946) suggested that the Chinese have the virtue of saving for rainy days. A country study in the United States reported that Singapore had the world's highest savings rate of 42% of income (Lepoer, 1989). In 2009, Singapore's Gross National Savings was reported to be 46% (Ministry of Trade and Development, 2009). The value of saving could be seen by the

conservative approach of Singapore business owners, where building company reserves and prudent spending were the guiding principles for business strategy. The risk management approach taken by Singapore hotel owners could be explained by the teaching of Confucius, “The superior man, when resting in safety, does not forget that danger may come. When in a state of security he does not forget the possibility of ruin. When all is orderly, he does not forget that disorder may come. Thus his person is not endangered, and his States and all their clans are preserved” (Confucius, n.d., p. 391). As such, accumulation of retained earnings, during economic upturns in preparation for potential downturns in the future, has been a business strategy for some hotel owners in Singapore.

On the other hand, the great capitalism of the United States has a value system of using borrowed money to spend. Americans believed that it is wimpered to save money (Associated Press, 2006). In 2006, two years before the financial crisis, the savings rate in the United States was in the negative region, meaning they had spent more than they had saved (Associated Press, 2006). The situation seems to get worse, as the savings rate in the United States dropped to almost negative four percent in 2010, the lowest ever recorded since the depression (Karlsson, 2010). The value system of using borrowed money for spending has influenced the business strategy practices of the hotel owners in the United States.

Conclusion

The insolvency rate of hotel properties in the United States was in great contrast with that of hotel properties in Singapore. The literature review has

shown that hotel owners in United States have excessively used debt financing for expansion, and high leverage approach has caused exceptionally high delinquency rates and foreclosures of hotel properties in the United States. The huge debt incurred during aggressive expansions coupled with decreasing room revenues caused by the recession would have reduced the hotels ability to generate enough cash flow to pay for its interest expenses. In the United States, hotel owners tend to borrow high level of debt, which explains why hotel owners seemed to be perpetually faced with financial woes. The benefits from debt financing have more than offset by the financial-distress costs.

In Singapore, hotel property owners have adopted a more conservative financing policy. At a low level of debt, hotel owners in Singapore have the financial flexibility to make changes, and the chances of financial woes were slim. The positive effects from debt would surpass the financial cost, especially when the hotel properties enjoy high profitability. The literature review has shown that hotel properties with too much debt are at risk even for well-run hotels. According to Elgonemy (2002), a good balance between too much debt and too little debt needs to be attained.

Cultural values may play a part in the types of financing model adopted by hotel owners in the United States and Singapore. The great capitalism of the United States has a value system of using borrowed money to spend and leverage, which partly explains why American hotel owners preferred aggressive financing model. On the other hand, the cultural values of Singaporeans were influenced by their Chinese heritage and Confucian values, where the virtue of saving and spending within one's mean were inculcated in the minds of

Singaporeans. Therefore, cultural values may have partly influenced hotel owners in Singapore to adopt a more conservative financing model.

PART THREE

Introduction

Analysis and Methodology

Methodology.

According to a study by Beaver (1996) quoted in Gu and Gao (2000), there were five important financial ratios that could be used to predict bankruptcy of businesses, namely: cash flow to total debt; net income to total assets; total debt to total assets; working capital to total assets; and current ratio. The results of Beaver's study indicated that ratio analysis was effective in providing warning signals on potential business failures five years before the actual event. Therefore, financial ratio analysis was used in this exploratory study to investigate the financing models of hotel properties in the United States and Singapore, and to determine the risk of insolvency during different business cycles.

According to Youn and Gu (2009), the Artificial Neural Network (ANN) model adopted by a study to predict business failures has shown that Interest Coverage ratio was the most important signal to predict business failures for the hotel business in Korea. It was found that interest coverage was correlated to solvency and profits of hotel properties, and the ratio could be used by hotel owners in Korea as a warning signal for potential financial failures (Youn & Gu, 2009). The importance of using Interest Coverage to identify insolvency risk associated with debt could be substantiated by another study conducted by Mammoser (2009). The Mammoser study simulated the correlation of RevPAR

on Debt Service Cover Ratio (DSCR), which found that a decline of 15% in RevPAR would decrease the DSCR from 1.40 to 0.91. The results support the view that during a recession, a reduction in RevPAR would drastically affect hotels' ability to generate enough cash flow to service the debt. Mammoser study has proven the correlation between DSCR and insolvency.

With reference to the studies by Beaver's (1996) and Youn and Gu (2009), the following five financial ratios were selected for ratios analysis: Quick Ratio and Current Ratio that represent the liquidity of the hotel properties; Long-Term Debt to Equity (LTDE), Total Debt to Equity (TDE), and Interest Coverage that represent the solvency of the hotel properties. The financial data for both the United States and Singapore hotel industries were collected from Thomson Reuters websites. For Singapore hotel industry, only 2008 data was available at the time of research. The financial ratios for Singapore hotel industry were calculated based on the average of sixteen public hotel properties listed in the Singapore Stock Exchange (See Table 5). The final ratios for both the United States' and Singapore's hotel industries were compiled and tabulated in Table 1.

Sampling Method.

The historical data of hotel properties in Singapore were limited, and data such as debt and interest expenses were proprietary to properties' owners. Therefore, Singapore public companies with substantial hotel businesses were selected as samples to represent the hotel industry in Singapore. In 2010, a total of sixteen hotel properties were listed in the Singapore Stock Exchange, and all were selected as samples for the research. As the latest financial data was not available at the time of research, 2008 data was used instead. The Singapore data

samples comprised of a balanced mix of four to five star hotels and resorts, which provided a good representation of the hotel industry in Singapore. The source of data was obtained from Thomson Reuters, and the average ratios of the sixteen Singapore hotel properties were calculated as shown in Table 5.

For United States' data samples, the financial ratios of hotel industry were collected from Reuters public website, which included hotels, motels, cruise lines industries that engaged in the operation of hotels, bed and breakfast inns, motels, cabins, cottages, youth hostels, cruise lines and other tourist and boarding lodges (Reuters, 2010). A total of forty-four public companies were included in the US sample, which provided a good representation of the hotel industry in US.

Ratio analysis.

Refer to Table 6, the hotel properties in the United States were facing liquidity crunch while their counterparts in Singapore were operating under a healthy liquidity condition. The Quick Ratio provides a measurement of the company's ability to satisfy its short-term debt with its most liquid assets. The Quick Ratio of 0.78 means for every one-dollar of current debt, hotel properties in the United States only have \$0.78 cash or cash equivalent, a shortfall of \$0.22 to fulfill its short-term debt obligation. Having a Quick Ratio of below one means hotels in the United States did not have sufficient cash or liquid assets to meet its short-term debt obligations. This was a warning sign that the hotel industry in the United States was facing a major liquidity crisis. Comparing its Current Ratio of 1.01 with Quick Ratio of 0.78, it showed that hotel properties in the United States might be holding too much inventories, or the inventories might not be

able to turn around fast enough to meet its short-term debt obligations. The Gu and Gao (2000) study suggested that unprofitable companies burdened with debt and short-term liabilities have higher probability of bankruptcy.

Table 6

Financing Strength of Hotel Industry in US and Singapore

| Gearing Ratio | US Hotel 2010 April 7 | SG Hotel 2008 Dec 31 | S&P 500 2010 April 7 |
|----------------------|-----------------------------|----------------------------|----------------------------|
| Quick Ratio | 0.78 | 2.50 | 0.81 |
| Current Ratio | 1.01 | 2.63 | 0.97 |
| LT Debt to Equity | 57.30 | 0.38 | 141.48 |
| Total Debt to Equity | 77.52 | 0.76 | 202.73 |
| Interest Coverage | 0.64 | 14.06 | 10.33 |

Note: Data source from <http://www.reuters.com> and Thomson Reuters.

In contrast with hotel properties in the United States, Singapore hotels were holding excessive cash or cash equivalent, which have a Quick Ratio of 2.50 and Current Ratio of 2.63 (See Table 6). That means for every one-dollar of current liability, hotels in Singapore have 2.5 dollars of cash or cash equivalent. The small gap between the Quick Ratio and Current Ratio showed that hotels in Singapore were holding lesser inventories and prepayment, or inventories could be turned around quickly into cash. Although the findings suggested that hotel properties in Singapore were less likely to go into bankruptcy due to debt, the large amount of cash holding did not reflect well on its management efficiency, as the liquid asset could be freed up for better use. Generally, the benchmark for Current Ratio is 1.5 for most industries (Cunningham, 1962, p. 121). Depending on the types of industries, a Quick Ratio of one is considered risky, as the hotel properties marginally met its short-term liabilities. A Quick Ratio of below one is

a warning sign that the hotel cannot meet its short-term debt obligations, and the potential of bankruptcy is high (Gu & Gao, 2000).

The Debt to Equity Ratio of hotel properties in the United States was 77.52 (See Table 6), which means for every one dollar of equity, the hotel had \$77.52 of debt to match it. Hence, for every \$78.52 of asset, hotel properties in United States had \$77.52 of debt, which translated to a Debt Ratio of 98.73%. If only long-term debt was considered, the Long-Term Debt to Equity Ratio of 57.30 means hotel properties in United States had a Long-Term Debt Ratio of 98.28%. The findings showed that the amount of debt used to finance hotel properties in the United States was exceptionally large compared to equity, which could be very risky during economic volatility. Hotel properties with large amount of debt would face the risk of insolvency and financial rigidity (Elgonemy, 2002). The negative effect of high debt financing could be seen by the burden to pay interest expenses during down economy. The Interest Coverage of 0.64 means for every one-dollar of interest expense, hotel properties in the United States only make \$0.64 to cover. The shortfall of \$0.36 for every one-dollar of debt made the hotel properties in the United States vulnerable to bankruptcy. According to Youn and Gu (2009) study, Interest Coverage is correlated to insolvency risk associated with debt. The high debt financing combined with low interest coverage had provided a perfect storm for hotel properties in the United States to fall into bankruptcy.

In contrast to the hotel industry in the United States, hotel owners in Singapore had a Total Debt to Equity Ratio of 0.76 and Interest Coverage of 14.06 (See Table 6). That means for every one-dollar of equity, hotel properties in Singapore had \$0.76 of debt to match it. Hence, for every \$1.76 of asset, \$0.76

was financed by debt, which translated to a Debt Ratio of 43.18%. If only long-term debt was considered, the Long-Term Debt to Equity Ratio of 0.38 mean hotel properties in Singapore had a long-term debt ratio of only 27.54%. This was in great contrast with hotel properties in the United States, which had a Debt Ratio of astonishing 98.73%, and a long-term debt ratio of 98.28%. In addition, hotel properties in Singapore had an Interest Coverage of 14.06, which mean for every one-dollar of interest expenses, the hotel had \$14.06 of income, more than sufficient to cover its interest expenses. According to Bongini, Ferri and Hahm (2000) quoted in Youn and Gu (2000), companies that were less likely to fail typically have larger profits, lower debts, and higher Interest Coverage. The findings suggested that hotel owners in Singapore had adopted conservative financing model, which weathered them through the economic downturn.

Risk management

In order to determine the effectiveness of different financing models in a given environment, a good understanding of risk management associated with debt financing is critical. Financial risk is risk associated with insolvency due to the use of debt (Investopedia, 2010). According to Elgonemy (2002), there were four major factors that influenced debt financing, namely: business risk; risk aversion of owners; financial flexibility; and tax implication. Business risk is affected by seasonal fluctuations of the hotel business; exchange rate; and competition. Business risk is also affected by cost structures of hotel properties, such as the proportion of variable cost versus fixed cost. In general, business risk of the hotel industry is greatly influenced by economic cycles, which affect room revenues due to volatility of tourists and business travelers' arrivals. In a high

business-risk environment, one way to manage business risk is to adopt a more conservative capital structure, such as higher equity and lower debt financing.

Hotel owners with high risk-aversion would typically adopt more conservative financing models and enjoy the highest financial flexibility during market volatility. The pitfall of high risk-aversion is the missed opportunity to grow the hotel properties by financial leverage. On the contrary, low risk-aversion owners tend to adopt aggressive financing model with the intention to accelerate growth and maximize returns on equity. Therefore, a good balance between too much debt and too little debt needs to be attained.

Financial flexibility influences the ability of property owners to take financial risks. Hotel owners who incurred large amount of debts are obligated to pay high interest coverage regardless of hotel profitability, and loss the financial flexibility by enslaving themselves to the lenders. As such, lenders who had underestimated the financial risks of hotel borrowers would affect the hotel debt to equity ratio; thereby increased the borrowers' risk of insolvency and foreclosure. On the other hand, hotel owners who preferred financial flexibility tend to borrow less and preferred to raise capital through equity. During an economic crisis or a recession, the provision of financial flexibility would allow hotel owners to make changes and increase cash flow to cushion the impact of the down economy.

The last factor that influences debt financing is taxation. Generally, interests paid to lenders were tax deductible for debt capital, whereas dividends paid to equity holders were not tax deductible. As a result, in a high tax environment, hotel owners were more motivated to raise capital through debt instead of equity. In a failed economy, tax deductible on interest was useless if

the hotel was making a loss. The risk of insolvency would be high if hotels were not able to generate enough cash flow to cover the interest expenses.

Who should adopt aggressive financing model?

Refer to the findings of ratios analysis and risk management, aggressive financing model should only be adopted when the following two conditions have been fulfilled: the economy is in the early stage of upswing; and hotel property is increasingly enjoying high profitability. Under such an environment, the positive effects from debt would surpass the financial cost, especially when the hotel properties enjoy high profitability. However, hotels that adopt the aggressive financing model during an economic upturn have to keep watch of Quick Ratio and Interest Coverage to avoid potential pitfalls caused by unexpected events.

Generally, in a stable environment, a Quick Ratio of one was sufficient to ensure liquidity of the hotel properties, as the current liability would be perfectly covered by cash or liquid assets. However, in an imperfect environment, a Quick Ratio of more than one is necessary for risk management purposes. As the hotel business is a high-risk industry, profitability can be adversely affected by external events, even in a boom economy situation. Therefore, a Quick Ratio of at least 1.5 must be maintained at all times (Cunningham, 1962, p. 121).

The question of the ideal Interest Coverage ratio during different economic cycles was debatable, as any deviation in room revenues could drastically affect the hotel's profitability, due to the nature of high fixed cost in the hotel business. From the risk management perspective, a large cushion of Interest Coverage was needed to prepare any unexpected external events that might adversely affect the hotel revenue, even during economic upswings. With reference to the

Singapore hotel industry, the Interest Coverage of 14.06 during the economic downturn had provided an exceptionally large safety net for hotel owners in Singapore, as zero bankruptcy was evident during the last recession. On the contrary, a low Interest Coverage of 0.64 saw large number of hotel bankruptcy cases in the United States. Therefore, during economic upturns, hotel properties should maintain a minimum Interest Coverage of two to provide a safety cushion for any potential impact on revenues caused by unexpected events.

Who should adopt conservative financing model?

According to Juglar quoted in Greene (1916), the time to shingle a house is when it is not raining; and the time to consider panic is the time of unprecedented prosperity. Juglar's study on the fluctuation of interest rates and prices during 1860s found that the business cycle was approximately nine to eleven years (Juglar, n.d.). Juglar had also determined four stages waves, namely prosperity, crisis, liquidation and recession. As such, conservative financing model could be adopted when the economy is at the late stage of prosperity. When that happened, hotel properties need to restructure its capitalization by reducing debt and increasing equity. The recapitalization strategy would help to increase Interest Coverage of hotel properties, and provide larger cushion for a possible economic downturn.

Results

Refer to the computed data as shown in Table 6 and Table 7 hotel owners in the United States adopted the high debt financing model for rapid growth while their counterparts in Singapore adopted the conservative financing model for slower and stable growth. During the recession, the Quick Ratio and Interest

Coverage of hotel properties in the United States declined to below one, which had resulted in a relatively high rate of bankruptcy in the hotel industry. On the contrary, the Quick Ratio and Interest Coverage for hotel properties in Singapore were exceptionally high, which provided a large safety cushion for economic volatility, and contributed to zero rate of bankruptcy during the last recession. The results of the study suggested that during economic upturns, hotel owners should take on appropriate level of debt financing to improve returns on equity and to accelerate growth; but revert to a conservative financing model during economic downturns to reduce risk of bankruptcy due to debt. The right financing model for hotel properties was developed as shown in Figure 1.

Table 7

2008 Gearing Ratios and ROE of Hotel Industry in Singapore

| Hotel | QR | CR | LTDE | TDTE | IC | ROE |
|---------------------|-------|-------|------|------|-------|-------|
| Amara | 1.47 | 1.48 | 0.89 | 1.46 | 3.42 | 6.80 |
| Banyan Tree | 1.19 | 1.25 | 0.47 | 1.64 | 2.84 | 1.25 |
| Bonvests | 2.09 | 2.22 | 0.00 | 0.27 | 72.50 | 7.82 |
| CDL | 1.12 | 2.86 | 0.61 | 1.31 | 6.26 | 10.69 |
| Furama | 0.99 | 0.99 | 0.00 | 0.12 | 70.50 | 14.88 |
| Genting | 4.54 | 4.55 | 0.50 | 0.72 | -2.28 | -4.07 |
| Gluoculeisure | 1.76 | 1.76 | 0.43 | 0.68 | 1.72 | 6.33 |
| HL Global | 0.48 | 0.48 | NA | NA | 0.85 | NA |
| Hotel Grand Central | 4.50 | 4.53 | 0.14 | 0.35 | 44.57 | 2.75 |
| Hotel Properties | 1.50 | 1.51 | 0.81 | 1.35 | 3.48 | 2.75 |
| Hotel Royal | 0.50 | 0.50 | 0.11 | 0.33 | 10.79 | 4.50 |
| L.C. Development | 1.71 | 1.71 | 0.22 | 0.72 | -0.63 | -4.27 |
| Mandarin Oriental | 5.61 | 5.64 | 0.65 | 0.86 | 2.71 | 6.22 |
| OUE | 10.66 | 10.67 | 0.26 | 0.35 | -4.35 | 1.93 |
| Pan Pacific Hotels | 0.90 | 0.93 | 0.14 | 0.35 | 11.18 | 1.66 |
| Stamford Land | 1.03 | 1.04 | 0.48 | 0.93 | 1.37 | 1.02 |
| Industry Average | 2.50 | 2.63 | 0.38 | 0.76 | 14.06 | 4.02 |

Note: Data source from Thomson Reuters.

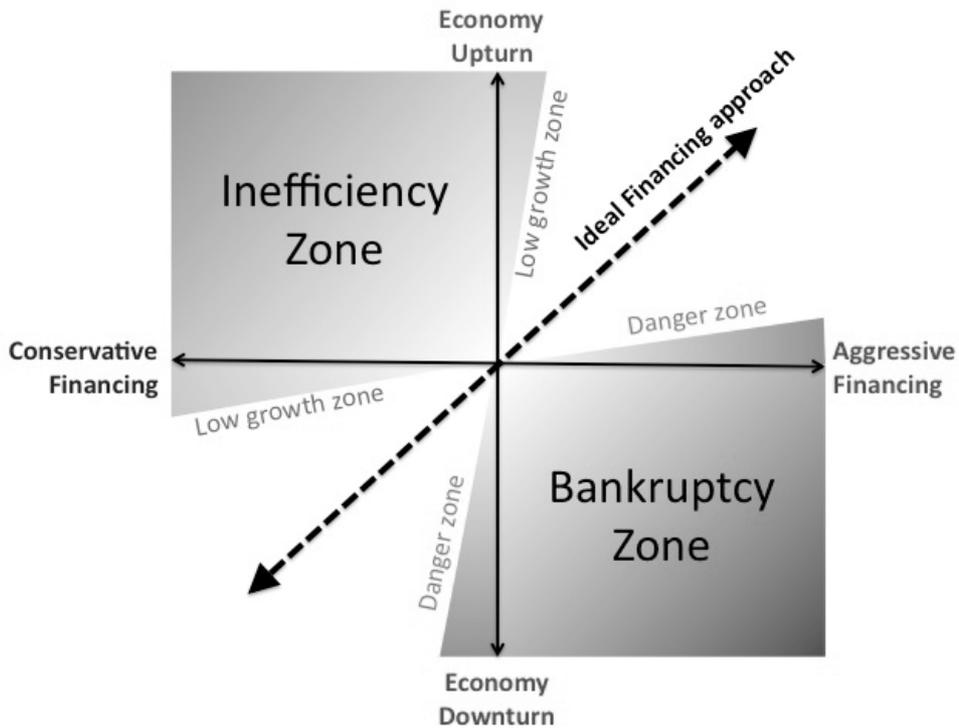


Figure 1. Financing model for hotel properties: Ideal financing model.

Note: The financing model was developed based on 2010 study of financial implications on hotel industries in United States and Singapore.

The horizontal axis in Figure 1 represents the types of financing models, while the vertical axis represents the economic conditions. The right side of the vertical axis represents the intensity of aggressive financing approach while the left side represents the intensity of conservative financing approach. The upper part of the horizontal axis represents the intensity of economic upturn while the lower part represents the intensity of economic downturn. Hotel owners who adopted the aggressive financing approach during the economic downturn would fall into the Bankruptcy Zone, which means high probability of bankruptcy due to insolvency. The results of the study have shown that hotel properties in the United States fell into the Bankruptcy Zone during the

economic downturn and Danger Zone during the economic upturn (See Figure 2).

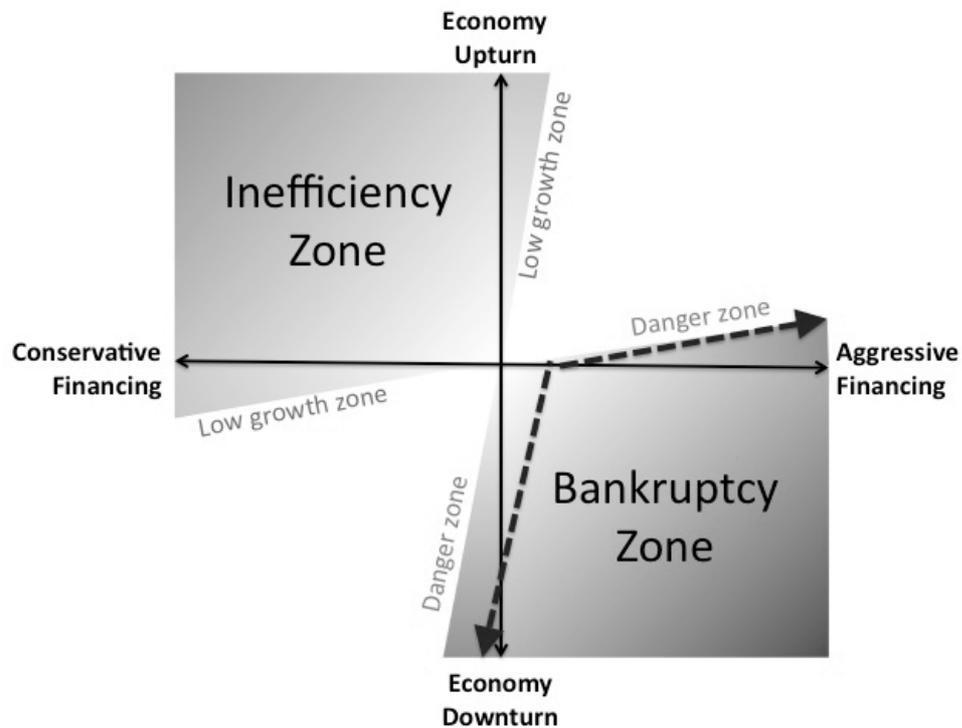


Figure 2. Financing model for United States hotel properties.

Note: The financing model was developed based on 2010 study of financial implications on hotel industries in United States and Singapore.

On the contrary, hotel owners who adopted conservative financing approach during the economic upturn would fall into Inefficiency Zone, which means the hotel owners were inefficient in managing their assets. The results of the study have shown that hotel properties in Singapore fell into Low Growth Zones during the economic upturn and downturn (See Figure 3). The study found that the ideal financing model for hotel properties would be along the dotted line as shown in Figure 1, which indicates the appropriate levels of debt financing during economic upturn and downturn. Hotel properties that adopted

financing model along the dotted line would enjoy the leverage effect of debt financing during economic upturns and weather against bankruptcy due to debt financing when the economic downturn hits the industry (See Figure 1).

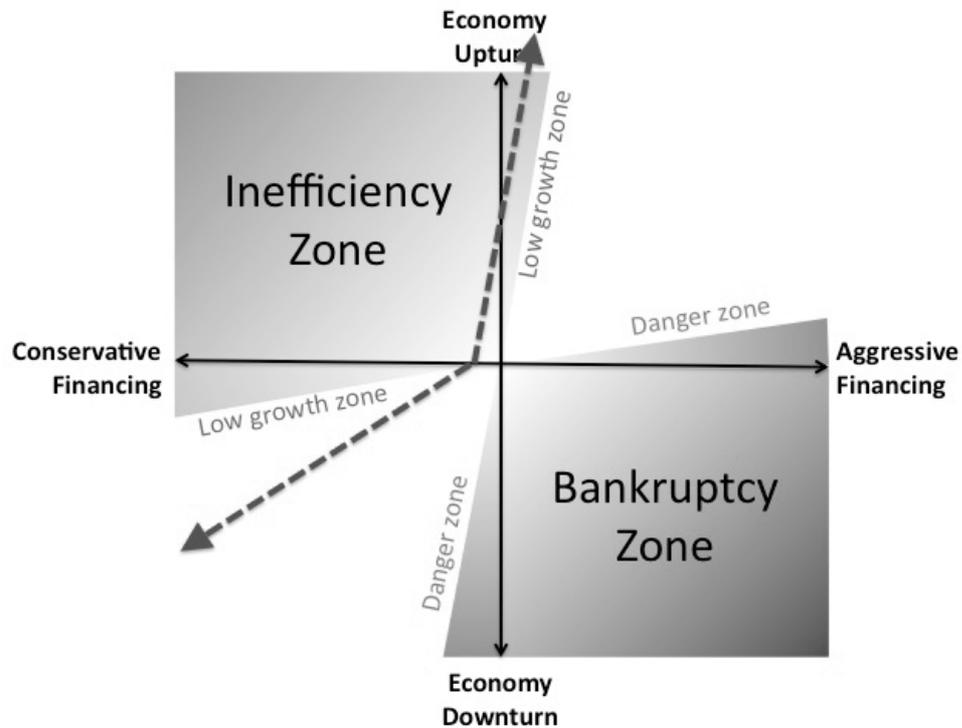


Figure 3: Financing model for Singapore hotel properties.

Note: The financing model was developed based on 2010 study of financial implications on hotel industries in United States and Singapore.

The right financing model for hotel owners in United States.

The right financing approach for hotel owners in the United States would be to moderate their overly aggressive debt financing model during an economic upswing, and to implement a conservative financing policy when the economy achieves unprecedented prosperity, which may signal the ending stage of the economic boom (Juglar, n.d.). The proposed financial model would allow hotel owners to ride on the bull economy for growth by leveraging on debt financing, taking into consideration risk management to cushion potential unexpected

events. By reverting to a conservative financing policy near the peak of economic upturn, hotel owners would be in better positions to sail through the recession. The ideal financing model for hotel properties in the United States is shown in Figure 1.

The right financing model for hotel owners in Singapore.

Hotel owners in Singapore should moderately loosen up the overly conservative financing approach, and implement a more aggressive financing approach during economic upswings. By adapting different financing models according to different stages of the business cycle, and using Quick Ratio, Debt Ratio and Interest Coverage as indicators for the purpose of risk management, hotel properties in Singapore would be able to leverage on debt for growth during economic upturns, and revert to a conservative financing approach during recessions. The ideal financing model for hotel properties in Singapore is shown in Figure 1.

Paper Limitations

Due to limited data of the Singapore hotel industry, the financial ratios for Singapore hotel industry were based on December 31, 2008 data collected from Thomson Reuters whereas the United States were based on April 7, 2010 data from Thomson Reuters. Despite the time gap between the two hotel industries, the comparison was acceptable since both were experiencing a similar type of recession due to the credit crisis.

The proposed financing model (See Figure 1) was based on the context of hotel properties in the United States and Singapore. As such, the financing model may not be applicable to other industries where the environment conditions,

product characteristics and cost structures were distinctive for the United States and Singapore. The study assumed that the business cycle behaviors defined by Juglar (n.d.) was still relevant. The paper also assumed both hotel owners in the United States and Singapore had similar accessibility to the credit market, and were subjected to similar costs of financing, interest rates and equity market, which would otherwise affect the proposed financing model.

Many hotel properties in the United States have debt financings that were tied to complex commercial-mortgage backed securities fund owned by many mortgage investors. As such, hotel properties in the United States might face challenges in capital restructuring as recommended by the proposed financing model. Hotel property owners should minimize involvement in such complex commercial-mortgage backed securities fund that would restrict their financial flexibility during economic volatility.

Financial and Managerial Implications and Recommendations

The American value system of using borrowed money to spend and leverage seems to work against the fundamental principle of risk management. The aggressive debt-financing model adopted by hotel owners in the United States had consistently contributed to a relatively large number of hotel foreclosures during the economic downturn. During economic upturns, when businesses were enjoying high profitability, adopting high debt financing for growth seemed to be working well for hotel owners in the United States. However, history has proven repeatedly that during a recession, a relatively large number of hotels in the United States went bankrupt due to a large amount of debt. Therefore, hotel owners in the United States need to manage its financial

risk by keeping an appropriate level of Quick Ratio (e.g. above 1.5) and Interest Coverage (e.g. above 2.0).

When the economy reaches unprecedented prosperity, which may signal the end stage of the economic boom (Juglar, n.d.), hotel owners could implement a recapitalization exercise to further increase the Quick Ratio and Interest Coverage in preparation for a potential economic downturn. In addition to the recapitalization program, hotel properties need to reduce operating cost if a recession occurs. However, cost reduction strategy would not be discussed in this paper, as it was not the objective of this study. Raising hotel equity could increase its cash holding and reduce its debt financing, thereby reduce the hotel risk of falling into bankruptcy if the economy did go into recession. For example, Fairmont Raffles has recently turned to equity market for recapitalization, selling 40% of the company to partially repay its debt (Mazurkewich, 2010).

Singaporeans have a value system of saving for rainy days, and the influence of Confucianism was apparent in the conservative financing approach adopted by hotel owners in Singapore. Although the conservative financing model helped hotel properties in Singapore to weather economic downturns, they had also missed the opportunity to leverage on debt for growth. An ideal financing approach would be a good balance of debt and equity during different economic cycles. Hence, hotel properties in Singapore need to improve its efficiency by redeploying their excessive cash and cash equivalents for better yield. This could be done by moderating their Quick Ratio from a high of 2.50 in 2008 (See Table 1), keeping in mind not to breach below 1.5 for the purpose of risk management. The high Interest Coverage of 14.06 (See Table 6) for hotel properties in Singapore had provided a large margin for hotel owners in

Singapore to take on more financial risks. When hotels are experiencing high profitability, debt financing has the leverage effect of increasing the ROE for hotel property investment (See Table 8).

Table 8

Effect of Debt Financing on ROE

| | Without Leverage | With 70% Leverage |
|------------------------------------|------------------|-------------------|
| Equity contributions | \$100,000,000 | \$30,000,000 |
| Total revenues | \$30,000,000 | \$30,000,000 |
| Total fixed and operating expenses | \$20,000,000 | \$20,000,000 |
| Interest expenses | 0 | \$5,250,000 |
| Net income to owner | \$10,000,000 | \$4,750,000 |
| Return on Equity (ROE) | 10% | 15.8% |

Note: Assume interest rate 7.5% per year.

The results of the study suggested that hotel owners in the United States and Singapore should adopt the right financing model as shown in Figure 1. The proposed financing model would allow hotel properties to take on an appropriate level of debt to accelerate growth and to improve ROE during economic upturns; and revert to the conservative financing model during economic downturns, so as to reduce the risk of bankruptcy due to debt.

Conclusion

The study has shown that high debt-financing model adopted by hotel owners in the United States contributed to a relatively large number of foreclosures during the economic downturn. On the other hand, the conservative financing model adopted by hotel owners in Singapore had weathered them through the last recession. During the economic upturn, hotel owners in the United States grew exponentially by aggressively acquiring properties through debt financing, while their counterparts in Singapore maintained the

conservative financing model and missed the growth opportunities. The study concluded that an appropriate level of debt financing during an economic upturn will accelerate the growth of the hotel business and has the leverage effect of increasing returns on equity. By adopting the proposed financing model as shown in Figure 1, hotel owners in the United States and Singapore would be able to ride on the bull economy for growth, and remain solvent during recessions.

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