

Chung, Jellna; Choi, Jeong-gil

Article

Conceptualizing global investment evaluation model by understanding the environmental key risk variables and their impacts on the market size of the hotel industry

Global Business & Finance Review (GBFR)

Provided in Cooperation with:

People & Global Business Association (P&GBA), Seoul

Suggested Citation: Chung, Jellna; Choi, Jeong-gil (2018) : Conceptualizing global investment evaluation model by understanding the environmental key risk variables and their impacts on the market size of the hotel industry, Global Business & Finance Review (GBFR), ISSN 2384-1648, People & Global Business Association (P&GBA), Seoul, Vol. 23, Iss. 3, pp. 68-80, <https://doi.org/10.17549/gbfr.2018.23.3.68>

This Version is available at:

<https://hdl.handle.net/10419/224410>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc/4.0/>



Conceptualizing Global Investment Evaluation Model by Understanding the Environmental Key Risk Variables and their Impacts on the Market Size of the Hotel Industry

Jellna Chung^a, Jeong-Gil Choi^b

^a*Department of Hotel Management, Graduate School of Kyung Hee University, Seoul, Republic of Korea*

^b*Department of Hotel Management, Kyung Hee University, Seoul, Republic of Korea*

A B S T R A C T

Finding the size of market potential is essential task for every stakeholder including policy makers, investors, managers, employees in the international hotel industry. This study proposed a conceptualized global investment evaluation model based upon understanding the environmental key risk variables and their impacts on the market size of the industry. Since potential market size cannot be determined by single environmental factor, this study comprehensively reviewed literature articulating environmental variables associated with the market size. This study assumed market size of each country or region is aggregated output of the environmental variables. In this sense this study developed and proposed propositions to be used. The proposed model may represent a blue print for the market size of the hotel industry and environmental variables surrounding the industry worldwide. The information will give a strong tool for the hotel investors considering overseas as a potential market.

Keywords: Hotel Market Size, Environmental Variables, Market Size Evaluation Model

I . Introduction

The international hotel development and investment will make a firm to achieve stability through the geographical spread of risk and to explore the full existing internal potential of the firm in the wider market while taking advantages of economies of scale. Falk (2016) investigated the determinants of foreign direct investment (FDI) activity in the hospitality industry using a gravity model. Results show that the number of hotel FDI projects is significantly and

positively related to the market size. There are some other studies analyzing factors affecting the choice of location. Santos, Brochado & Esperança (2016) conducted study focusing on the largest hotel chain worldwide to shed new light on foreign direct investment (FDI) decisions (i.e., location choices), namely the choice of location according to the customer.

As it was stated above, it is very necessary to understand factors affecting the potential market size in order to firm stability through the geographical spread of risk and to explore the full existing internal potential of the firm in the wider market while taking advantages of economies of scale. No matter whom they are (risk-taker or risk-lover), they should realize what those variables are and how to handle those

Received: Feb. 28, 2018; Revised: Jul. 30, 2018; Accepted: Aug. 31, 2018

† Jeong-Gil Choi

E-mail: jechoi@khu.ac.kr

variables. This is because developing a hotel and investing in the international markets will require a lot of initial capitals and those capitals will not generate profits in time and proper returns as planned if developers or investors do not have clear blue print regarding the dynamic, complex and illeberate environments surrounding the firms and the whole industry.

Focusing more on environmental factors, Zhang, Guillet & Gao (2012) conducted study to analyze the factors that determine the location strategies of MHGs and to assess what factors determine MHG's investment strategies in regard to choice of location. The study found that the market demand and market size measured by number of inbound tourists, tourist spending, and actual foreign direct investment, the business environment measured by GDP per capital, and dummy variables measured by policy and mega events are all significant factors in affecting MHG's locational choices for investment

Potential market size cannot be determined by single environmental factor. Andreu, Claver & Quer (2017) analyzed the relationship between environmental and firm-specific factors and entry mode choice by the largest Chinese hotel chains. Cultural distance, market attractiveness, firm international experience, asset intangibility, firm size and the number of Chinese outbound tourists visiting each country are determining factors of entry mode choice. Favorable macroeconomic environment plays an important role in attracting foreign capital. Countries that have a more favorable macroeconomic environment attract more FDI, and provide a greater presence of global hotel brands, and thus greater competitiveness. Also, the political stability, the encouraging macroeconomic business conditions, the elimination of administrative and legislative barriers, the elimination of the country's image as a corrupt destination and tourism staff education at all levels are particularly important for FDI in tourism (Perić & Radić, 2016).

A firm cannot typically control its general environment. Also, many developments in the general environment are difficult to predict with any degree of accuracy. For example, macroeconomics developments, such

as interest rates, the rate of inflation, and exchange rates, are extremely difficult to predict on a medium and long-term basis. However, some trends in the general environment, such as population distribution by age, ethnicity, and income levels, can be forecast with a high degree of accuracy. When there is clearly defined key environmental risk variables, managers are able to focus on the key variables that have the greatest impact on performance. Thus, they found their investment decision process to be much more effective (Boyd, Dess & Rasheed, 1993). Clearly, the most important stage in the evaluation of an investment opportunity is undoubtedly the stage during which estimates are made for the uncertain variables. If the estimates are well-thought-out and unbiased, the analytic procedures can give a considerable insight into the viability of the investment (Hull, 2014).

So it is quite important to have some guidelines (it is called an investment evaluation model in this study) explaining the environmental variables affecting the international hotel industry. Early researchers in the hospitality industry identified three states of the industry's environment: variability, complexity, and illiberality (Slattery and Olsen, 1984). These states are measurable and quantifiable, although not in all situations. Thus, they offer the possibility of being objective indicators that are present and influence a firm's success whether they are perceived by industry managers or not. It is therefore extremely important that each hospitality manager be aware of their existence and their potential impact on the strategic future of the firm (Olsen, Tse & West 1992). To do so, managers are required to do the systematic analysis of the external environment. The systematic analysis of the external environment should lead to the identification of major trends in various segments. This information becomes useful only if the firm also evaluates the impact of each of the environmental risk variables on its future profitability and growth, and responds appropriately.

In order to measure the impacts of the environmental risk variables on the hotel industry, it will be necessary to develop quantifiable models that can illustrate the relationships. Recently, Erdal (2018) analyzed empirically

the relationship between sectoral Foreign Direct Investment (FDI) and macroeconomic variables in the long-run and short-run in Turkey for the period from 2005 to 2016. The cointegration analysis and error correction models are used to test long-run relationship and short-run effects respectively. Taking into consideration the characteristics of the FDI flows into Turkey, real exchange rate, real GDP, openness of the economy and real interest rate are chosen as macroeconomic variables. The sign of real exchange rate varies depending on the type of sectors as expected. Real GDP has positive effects on agriculture and three sectors. Real interest rate has positive effects on total FDI, financial and insurance activities and banking sectors that have the highest shares in total FDI. Research which quantitatively measures the relationships among the general environmental risk variables is limited. Very few studies have focused strictly on measuring economic relationships within and related to the hotel industry. Most quantitative studies have focused on forecasting the demand for hotel or tourism industry, and other more narrowly defined studies investigating the impacts of prices, energy or inflation on the hotel industry. With the exception of Bonham, Fujii, Im & Mak, (1991); Fish, (1982); Fujii, Khaled & Mak, (1985); and Arbel & Ravid, (1983); there are few quantitative models that evaluate both demand and supply of hotel simultaneously. Moreover, the quantified relationships among the general environmental risk variable around the hotel industry have not been fully explored in the literature. The purpose of this study is to present one resource useful in this quest.

II. Theoretical Underpinnings

A. Business Environment

With the market competition of hotel industry being heated, it is critical that hotels have a breadth of resource and more flexible forms to meet the needs of a changing marketplace (Wang, Chen & Chen, 2012). The globalization of the hospitality industry

has accelerated under the pressure of advances in technology, communication and transportation, deregulation, elimination of political barriers, sociocultural changes, and global economic development, as well as growing competition in a global economy. However, the business environment of the international hotel industry is becoming increasingly competitive for survival and growth in a world economy. Joint ventures with foreign governments, expansion through acquisition of rival firms, easing of hemispheric trade barriers, the threat of foreign competitors in domestic markets-these actions and many more affect the ability of the hospitality firm to survive and grow. With this maelstrom of opportunities and threats swirling about the firm, environmental assessment seems to be dauntingly difficult. It is, however, and extremely important task (Olsen, Tse & West, 1992).

Many of the challenges facing managers today originate outside their firms. A careful analysis of the external environment can identify major opportunities and threats. Environmental analysis provides managers with important information for strategic decision making and encourages strategic thinking in organizations. Successful firms follow broad environmental trends and continually assess changes taking place in their industry. Open systems theory which holds that the firm is a creature of its environment (Selznick, 1948), were introduced the concept of environmental influence on the firm-a concept in which successful firms adapt to changing environmental pressures while unsuccessful firms do not (cited in Olsen, Tse & West, 1992).

Environment is defined as the totality of physical and social factors taken into consideration in the decision-making behavior of individuals in the organization (Duncan 1972). Organizations, therefore, need to be knowledgeable about within and without the boundaries of the organization. This is possible when the firm executives continually scan the environment. The environmental scanning activity is an important part of the strategic management process. Strategic management is referred to as the process of examining both present and future environments, formulating the organization's objectives, and making, implementing

and controlling decisions focused on achieving these objectives in the present and future environments (Smith, Arnold & Bizzell, 1988).

The organizational environment consists of two major components: task (or specific) environment and remote (or general) environment (Olsen, 1980). The task environment has a more direct relationship with the day-to-day success of an organization, and consists of events occurring in the customer, supplier, regulator and competitor segments. The remote environment, meanwhile, is related to events that take place in such categories as economic, technological, sociocultural, ecological, and political. Since these events are so broadly based, it is often difficult to determine how they will influence the organization. This remote environment is especially important to multinational operators because many events have crucial impacts upon corporate decisions to enter and operate in international markets (Olsen, 1980).

B. Business Environment and Investment Overseas

Financial managers frequently are faced with the long-term investment decision. Particularly when the project is the overseas investment the manager's decision is not easy as much as domestic investment decision. The more countries a company enters, the greater are the changes in that company's environment. Every country imposes something new and makes the overall environmental framework more heterogeneous.

The hotel industry is engaging a mature stage characterized by increasing competition, a decreasing in customer counts and real sales dollars, and a decline in the number of new unit openings. The uncertainty of the environment in this mature stage has spurred the quest for increased knowledge about the environment.

This knowledge is necessary in order to help investors understand the amount of environmental uncertainty and complexity which he/she faces in investing overseas.

The complexity and uncertainty is the result of the lack of clarity of information about the environment

obtained by the organization, general uncertainty of causal relationships which exist between the environment and the organization and different factors in the environment itself. The time span of feedback regarding results associated with efforts to manage the environment is often too long and unpredictable (Lawrence and Lorch, 1968). If these elements do indeed represent the underpinning of the uncertainty problem in international investment, one of the ways to cope with it is to develop a comprehensive standardized worldwide model with regard to environmental impacts and analyze the models in each segment of the international hotel markets.

The uncertainty of the international market and its environmental factors in each country creates risks to investment overseas. Analysis of investment potential is usually based on a "best estimate" financial evaluation. The successes of the forecasts which are based on this evaluation vary directly with the quality of the background information which is incorporated into the study. The investor considering going overseas will compare returns on the proposed investment with returns from alternative opportunities. Usually, comparisons are made between the opportunity costs of several investments. It is important, therefore, to evaluate the degree of risk inherent in each project (Marshall, 1988). The investors should analyze the impacts of the environmental risk variables on the potential hotel investment projects since any future cash flows, returns, and the potential to increase the capital value are closely related to the environmental variables as it was discussed above.

Capital investment decisions are among the most important which a company makes (Hull, 2014). Very often they involve a relatively large commitment of a company's resources and are instrumental in shaping its whole future. To a large extent the expenditures which capital budgeting decisions involve are irreversible. Especially, a hotel often requires a substantial capital investment to be built. This is because a hotel's major selling point is rooms, which are very expensive to build and furnish. Once a company has committed itself to building a new hotel or promoting a new product or service it cannot easily turn back. The

problems of capital investment have become more acute in recent years by changing environment. The increasing rate of technological change has meant that new plant and machinery is now liable to become obsolescent in a relatively short period of time. Both consumer and industrial markets have become more volatile. The actions of competitors have become less predictable. In short, the risk in nearly all major capital investment is now greater than ever before. The risk in an investment project arises, essentially, from management's uncertainty about the environmental risk variables. This uncertainty gives rise to uncertainty about the cash flow estimates which, in turn, creates uncertainty as far as the calculated performance is concerned (Hull, 2014).

C. Potential Market Size

As it was stressed before, finding the size of market potential is essential task for every stakeholder including policy makers, investors, managers, employees in the international hotel industry. It is really a starting point of any decision making of them. In this sense, several researches have been conducted. Qian & Soopramanien (2014) stressed that marketing managers have to forecast the market size and this forecast guides strategic decisions whether to continue exporting, open new factories or expand existing production operations. Forecasting sales and the market size is a challenging task; even more so in emerging markets where data is limited and the market demand is changeable (Qian & Soopramanien, 2014). Li et al., (2010) conducted a research on Chinese outbound travel market. This empirical study employed an incidental target-market approach and presents updated research findings concerning this burgeoning market. Primary and secondary tourist-generating cities of Mainland China were identified based on population size and level of socioeconomic development, and their market potential for outbound travel was assessed through a large-scale telephone survey. In addition to estimating market size and making recommendations on target cities, the study also

introduced an effective research design for identifying target markets and customers. Kato & Okubo (2018) presented a three-country footloose capital model with non-constant wages to illustrate the Great Divergence and the Great Convergence in globalization. Focusing on market size differences across countries, our model can explain full agglomeration in large countries, as in the Great Divergence, as well as off shoring in developed countries and industrial development in middle-sized countries, as in the Great Convergence. They found three types of location patterns in the middle-sized country as well as full and two-country agglomerations. Another study by Min, Kim & Zhan (2017) offered explanations of the wide variation in the impact of market size on new market entry decisions - i.e. its positive impact lessens because of unreliable predictability of market size on post-entry profit and entry motivations other than post-entry profit. On the basis of the two explanations, the paper built a contingency frame that the impact of market size on new market entry depends on entry-context-specific variables.

D. Constructing Investment Evaluation Model by Potential Market Size

In this section, literature related to the relationships between environmental variable and hotel industry, as well as modeling techniques for such research is presented. This type of research is scarce, although, in recent years an increase in ad valorem taxes on the hotel industry has spurred some studies designed to estimate the impacts of the taxes. The close similarity between the tax impact studies and the goals of this study make these studies a good starting point for this review. In addition to the taxation studies, there are some related studies that focused on specific impacts on the hotel industry of such phenomena as price changes, inflationary impacts, and energy prices. Another closely related area of work has focused on the forecasting of tourism demand. Forecasting is not the specific purpose of this study; however, the modeling processes and

issues are similar to those proposed in this study and merit review.

Initial studies were prompted by the interest of taxing authorities in estimating the potential revenues of the hotel industry (Mak & Nishimura, 1979; Combs & Elledge, 1979). However, later studies focused on the exportability of the lodging tax, (Fujii, Khaled & Mak, 1985; Mak, 1988) and eventually the impact of taxes on the hotel industry became the focus of study (Bonham, Fujii, Im, & Mak, 1991; Hiemstra & Ismail, 1992a).

In Witt and Martin's (1987) study on economic forecasting of international tourism demand, the dependent variable is the outward tourism from the country of interest, measured in number of visits per capita to various destinations. This model is relevant to review because it is assumed that these tourists would have some impact on the hotel industry demand in the destination countries. Other econometric forecasting studies such as Loeb (1982) have found that exchange rates, real per capita income in country of origin, and relative prices were all significant variables in determining visitation demand to the U.S. Another method of estimating tourism demand in the U.S. was developed by Pyo, Uysal and McLellan (1991) using Stone's (1954) linear expenditure system. They estimate tourism demand for five groups of goods: transportation, lodging, foodservice, entertainment/recreation and other. In 2011, Choi, Mok & Han introduced a Markov model forecasting international tourism demand and its destination switching.

On the other hand, a hotel related study conducted by Greenberg in 1985, was designed to quantify how sensitive consumers are to change in hotel price. The function estimated number of rooms sold as a function of average room rate in constant dollars, nonmanufacturing employment, and corporate profits after tax in constant dollars. Arbel and Ravid (1983) considered two possible functional forms in order to estimate the impact of energy prices on the demand for hotel. A recent study conducted by Choi (2010) presented a business cycle model to forecast industry turning points. The model articulated an industry cycle represents final output of all function of every

environmental variable.

As it has been reviewed above, the study regarding the impacts of the general environmental risk variables on the hotel industry is limited. If it exists the study analyzed few economic variables only and most of the study is related to the tourism not hotel industry directly. There are many qualitative studies that discussed about the impacts of the general environmental variables. The discussions regarding the issue, meanwhile, are very difficult to be justified for sure because the discussions are usually based on researchers' best guess or simply based on their assumptions. Selecting and defining the key environmental variables without having concrete evidence for the relationships among these variables will mislead users' decisions on business in general. Especially, multinational firms, which require comprehensive information regarding the environmental key variables, will be faced with big problems if they use those information having little validity and credibility. Therefore, one possible approach to developing an investment model for the firms going international is to identifying and selecting the key risk variables by conducting the comprehensive literature (both quantitative and qualitative studies), and to measuring the relationships between the selected variables and the size of the hotel industry. In the next section of this paper, the overview of the theory construction regarding this issue is presented.

III. Theory Construction

A. Constructs and Theoretical Proposition

The market size of the hotel industry is not determined by single environmental variable, but determined by unlimited number of environmental variables whether they are risk factors or not. Those environmental variables can affect hotel business either positively or negatively in different degrees. If the important variables and their relationship to one another are identified and analyzed, it will make us possible to develop an investment evaluation model that will give

us crisp and unambiguous information for investing in the international hospitality markets and going or being international with less risk.

The degrees of the impacts of the environmental variables also differ from different segments (country, economic blocks, and economic status). On the other hand, there would be one standardized worldwide model explaining the standardized degrees of associations or explanatory power of each environmental variable with the market size of the hotel industry. Once the models are constructed, by comparing a product of the standardized worldwide models and those of segment models, this study will find the discrepancies regarding the market size of the hotel industry so does the investor.

For example, suppose the worldwide model gives 100 hotels as a potential in Nigeria and there are 60 hotels in the country now, this tells us the 40 discrepancy between the potential market size and the current market size and there is investment opportunity.

This logic is based on an assumption that the standardized levels of explanatory power of each risk variable used for the worldwide model is applicable to the individual segments with the same degrees.

These constructs are derived from the theoretical underpinning and conceptual framework, and are framed into following specific research proposition. First, the market size of the hotel industry interacts with or dependent upon the host countries' general environmental variables (political, sociocultural, technological, ecological, financial, economic, and tourism). These relationships are different at the country, regional, and continental levels. Second, the relationships between the market size of the hotel industry and key environmental variables affecting hotel industry will vary by status of economy (developed, developing, and underdeveloped countries). Third, within the same economic status the major variables affect the size of hotel industry with same pattern. Forth, by determining and using the degrees of associations or explanatory power of each environmental variables with the market size of the hotel industry in the all of the countries in the world, the standardized

market size of the hotel industry in the world can be determined (Standardized Worldwide Model). Fifth, by using the one standardized worldwide model representing the standardized degrees of associations or explanatory power of each environmental variables with the market size of the hotel industry, the standardized market size of the hotel industry in each segments (countries, economic blocks, and economic status) can be determined (Potential Market Size). Note that this theoretical proposition is based on an assumption that the standardized levels of explanatory power of each risk variable used for the worldwide model is applicable to the individual segments with the same degrees.

B. Laws of Interaction and Boundaries

The laws of determinant interaction among the units (variables including endogenous and exogenous variables) in this study are presented by multiple structural equations. The contexts of the analysis to the multinational firms are global markets as a whole. Thus, the elements of domain of this study are geographically worldwide including 177 countries, focusing on the hotel industry and general environmental key risk variables around the industry in each countries and worldwide hotel industry as a whole.

C. Variables

One of the principal difficulties encountered in doing environmental study is determining the variables that should be analyzed and forecast, since there are literally hundreds of different variables that might affect the corporation, and industry as a whole. It is even more complex to analyze the impact of the general environment on the hospitality industry in different countries, regions, and continents, for the contexts of the study are large in size and more dynamic. The key environmental risk variables in international market must be multiple and there is special difficulty in identifying important variables and their relationship

Table 1. The Environmental Key Risk Variables in The Hotel Industry

	Sections	Variables discussed in the literature	Key Variables Selected for Analysis in This Study
HOTEL INDUSTRY	Market Size and Scope of the Hotel Industry	Total number of hotel Total hotel revenues Total number of room Total number of bed	Total number of hotel Total hotel revenues Total number of room Total number of bed
TOURISM	Travel and tourism:	Tourism Receipts Tourism Expenditure Foreign Tourist Arrivals at Frontiers Tourist Nights Average Length of Tourist Stay	Tourism Receipts Tourism Expenditure Foreign Tourist Arrivals at Frontiers Tourist Nights Average Length of Tourist Stay
SOCIOCULTURAL	Demographic: Family: Education: Social:	Population growth, Population shifts, Population aging, Consumer activism Patterns in Family units, Family size, Levels of divorce, Age, sex, and available disposable income Educational levels Changing Eating Behavior, Changing role of women, Religious issue, Local work ethic, Biases regarding gender and race, Language	Total Population Population in absolute Poverty Average Household Size Educational expenditures per capita Urbanization Crime rate data Hospital Bed occupancy rate Living Standards(GDP per head \$)
POLITICAL	Political Stability, Politics & International Relations Government Expenditure: Laws and Regulation	Suffrage, Legislature, Political freedom, National loyalty, Social securities and welfare Housing and community amenities Expenditure on Civil service as percentage of total budget Government policy, The ownership, Length of time that foreign management can stay, The transfer of profits out of country	Most powerful Nations: [(Critical Mass = Population plus Territory) +Economic Capability +Military Capability] x [Strategy & Will] Age of Nations Social securities and welfare Housing and community amenities Expenditure on Civil service as percentage of total budget
ECONOMIC/FINANCIAL	Macroeconomy: Labor: Finance & Banking: Trade:	GNP, Inflation, CPI, Tax, Interest rates, GDP, Exchange rate, Disposable income, Real estate value, Poverty rate, Consumer spending pattern, Stability in the value of the national currency, Saving rate Employment & unemployment rate, Women in Labor Force, Spending on welfare. Capital structure, Shortage of funds, Account Balance, Global efforts at monetary reform, The behavior of the currency markets, , Activities of the international Monetary Fund, Activities of the World Bank, Third World indebtedness. Net import & export	GNP. Inflation(average annual rate). CPI: all items. Taxes on income. Profit and capital gain as percentage of total revenue. GDP on the wholesale and retail trade. restaurants and hotels. Savings rate. Employment/Unemployment rate data Economically Active population Women in labor force Percentage of labor force in services. Foreign debt Exchange Reserves Growth in money Stock Net Direct Foreign private investment, Discount Rate of Central Banks. Import growth rate Export growth rate

Sections	Variables discussed in the literature	Key Variables Selected for Analysis in This Study	
TECHNOLOGICAL	Technologies:	Communication and Transportation, Teleconferencing Equipment, Computer/electronic (expert sys and AI sys), Energy (oil and water supply), Layout and design (usage of certain materials in construction), Maintenance.	Telephones.
	R & D:	The amount the industry spends on R & D The PIMS measure of innovation New product development, productivity improvements, product life cycle changes, patents.	The amount the industry spends on R & D. The PIMS measure of innovation
	Transportation	Distribution, Safety, Supplies	Percentage of paved roads Commercial vehicle production Scheduled Airports Road Accidents
ECOLOGICAL		Recycling, conservation, solid waste/source reduction, air quality, water quality, and pesticides	Air pollution in cities

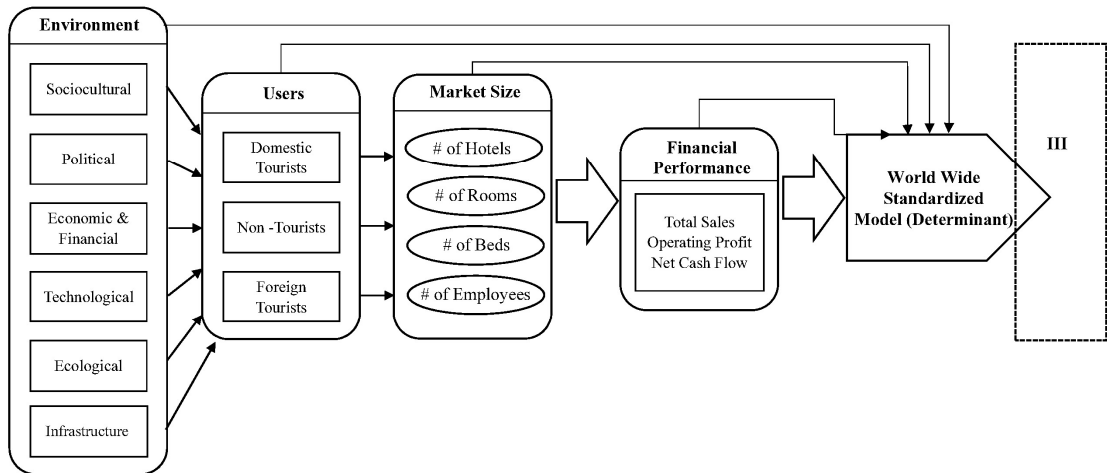


Figure 1. Mapping Macro-environmental Analysis for Global Hotel Investment (I)

to one another.

In this study, in order to capture the environmental key variables, the comprehensive literature review is conducted. Once these variables are addressed whether those are risk variables or not, these variables is classified into six major general environments including socio-cultural, political, economic/financial, technological, ecological, and tourism. Table 1 shows the environmental key risk variables discussed in the

literature and that will be included in the model of this study. The inclusion of the variables in the model in this study is mainly because of the data availability.

D. Proposed Theoretical Models

The proposed theoretical models based on the above theoretical underpinnings are presented next figures.

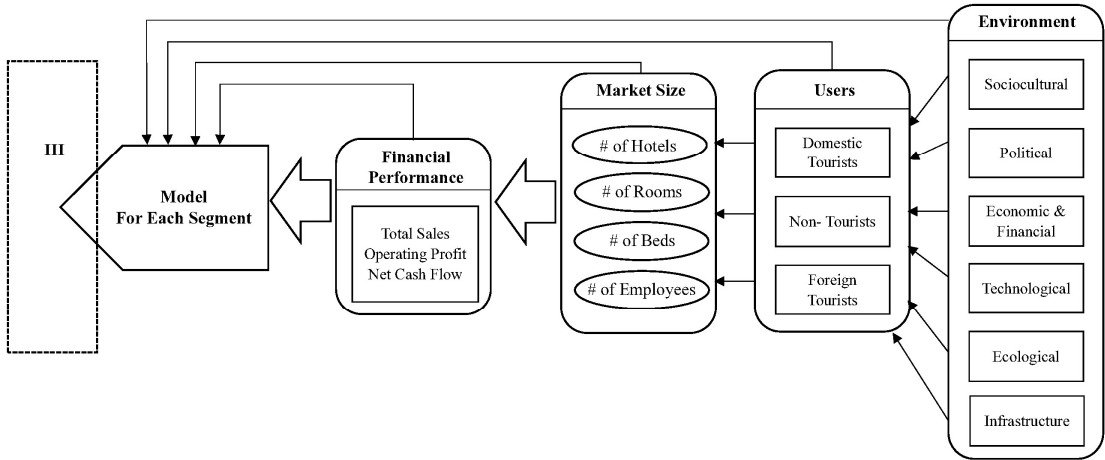


Figure 2. Mapping Macro-environmental Analysis for Global Hotel Investment (II - Segments)

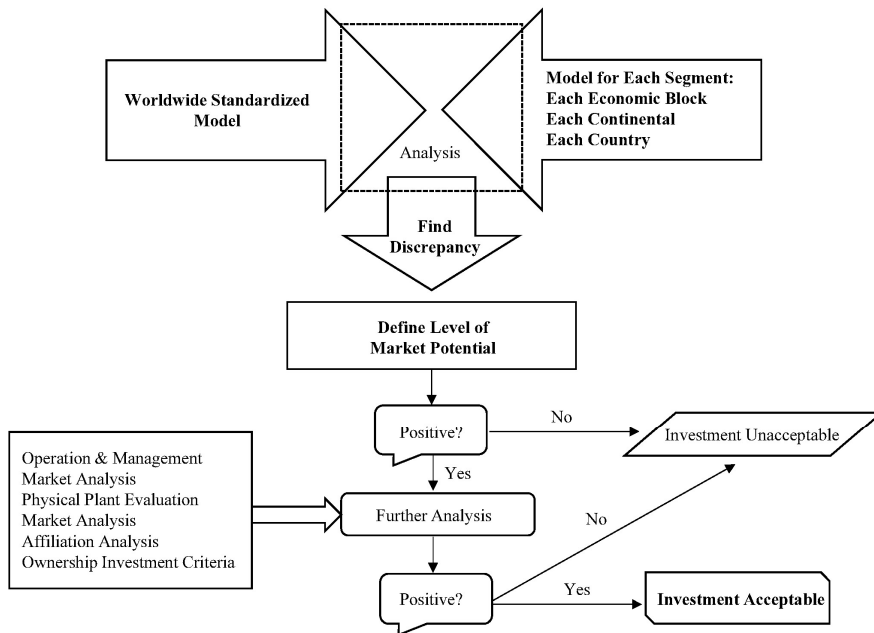


Figure 3. Mapping Macro-environmental Analysis for Global Hotel Investment (III)

Figure 1 and 2 (The mapping macro-environmental analysis for global hotel investment (I) and (II) are for constructing the standardized worldwide models and standardized models for each segments. The (III) shown on the figures one and two is magnified into the Figure 3: the mapping macro-environmental analysis for global hotel investment (III).

IV. Proposed Models

The market size of the hotel industry in the world is expected to be affected by a number of environmental risk variables. The proposition stated below provide a description of the factors that are expected to impact

the hotel market size as well as the proposed specification of the models.

A. Proposition One:

The market size of the hotel industry is a function of the number of domestic (X1), nondomestic (X2), and foreign tourists (X3). The proposition indicates that some form of the following market size function exists.

$$MSh = f(X1, X2, X3) \tag{1.1}$$

Where (Msh) is the market size of the hotel industry represented by the number of hotels and rooms. These relationships are different at the country, regional, and continental levels. Thus, (1.1) will be reformed with different equations by different countries, regions, and continental levels. The (1.1) also will represent the worldwide standardized market size of the hotel industry.

B. Proposition Two:

The second groups of equations to be proposed represent the degrees of associations or explanatory power of environmental risk variables with the X1, X2, and X3. The environmental risk variables are derived from the comprehensive literature review conducted previous section. Those variables were classified into social, political, economic/financial, technological, ecological, and infrastructure.

$$X1 = f (SO_{1 \rightarrow iim}, PO_{1 \rightarrow iim}, EC_{1 \rightarrow iim}, TE_{1 \rightarrow iim}, EL_{1 \rightarrow iim}, IF_{1 \rightarrow iim}) \tag{1-2-A}$$

$$X2 = f (SO_{1 \rightarrow iim}, PO_{1 \rightarrow iim}, EC_{1 \rightarrow iim}, TE_{1 \rightarrow iim}, EL_{1 \rightarrow iim}, IF_{1 \rightarrow iim}) \tag{1-2-B}$$

$$X3 = f (SO_{1 \rightarrow iim}, PO_{1 \rightarrow iim}, EC_{1 \rightarrow iim}, TE_{1 \rightarrow iim}, EL_{1 \rightarrow iim}, IF_{1 \rightarrow iim}) \tag{1-2-C}$$

Where $SO_{1 \rightarrow iim}$ is limited number of social variables,

$PO_{1 \rightarrow iim}$ is limited number of political variables, $EC_{1 \rightarrow iim}$ is limited number of economic and financial variables, $TE_{1 \rightarrow iim}$ is limited number of technological variables, $EL_{1 \rightarrow iim}$ is limited number of ecological variables, $IF_{1 \rightarrow iim}$ is limited number of infrastructure variables. These relationships are different at the country, economic blocks, and economic status (developed, developing, and underdeveloped countries). Thus, (1.2) will be reformed with different equations by different segments of the markets in the world. The (1.2) also will represent the worldwide standardized degree of associations or explanatory power of the environmental risk variables with the standardized market size of the hotel industry.

C. Proposition Three:

By using the degrees of associations or explanatory power of each environmental variables with the market size of the hotel industry in the all of the countries in the world which are developed in (1.1) and (1.2), the standardized market size of the hotel industry in the world can be determined.

D. Proposition Four

By using the one standardized worldwide model representing the standardized degrees of associations or explanatory power of each environmental variables with the market size of the hotel industry, the standardized market size of the hotel industry in each segments (countries, economic blocks, and economic status) can be determined (Potential Market Size).

V. Practical Implications and Limitations

The proposed model may represent a blue print for the market size of the hotel industry and

environmental variables surrounding the industry worldwide. These outputs will give a strong tool for the hotel investors considering overseas as a potential market. However, despite its potential value, environmental analysis should be placed in proper perspective: as with any other type of analysis, it has its limitations. First, environmental analysis does not foretell the future, nor does it eliminate uncertainty for any organization. Thus, organizations that practice environmental analysis sometimes confront unexpected events—events not anticipated during environmental analysis. Environmental analysis, however, should reduce the frequency and extent of surprises that may confront the firm. Second, environmental analysis in and of itself is not a sufficient guarantor of organizational effectiveness. It forms only one input for strategy development and testing. Environmental analysis should be used in conjunction with other forms of analysis such as industry, competitor, and organizational analysis. Third, the potential of environmental analysis is often not realized because of how it is practiced. It is sometimes used as a crutch for post hoc reflection; at times managers place uncritical faith in the data without thinking about the data's variability or accuracy. The primary value of environmental analysis lies in its use for strategic decision making and strategic thinking. However, these benefits do not evolve automatically; they must be created and sustained. Hence, issues of how to manage environmental analysis in organizations beyond those of analytical routines are important. These issues related to the management of environmental analysis are considered in addition to the techniques and frameworks available for engaging in analysis.

References

- Andreu, R., Claver, E., & Quer, D. (2017). Foreign market entry mode choice of hotel companies: Determining factors. *International Journal of Hospitality Management*, 62, 111-119.
- Arbel, A., & Ravid, S. A. (1983). An industry energy price impact model: the case of the hotel industry. *Applied Economics*, 15(6), 705-714.
- Bonham, C., Fujii, E., Im, E., & Mak, J. (1992). The impact of the hotel room tax: an interrupted time series approach. *National Tax Journal*, 433-441.
- Boyd, B. K., Dess, G. G., & Rasheed, A. M. (1993). Divergence between archival and perceptual measures of the environment: Causes and consequences. *Academy of management review*, 18(2), 204-226.
- Choi, J. G. (2010). Analysis of the financial practices of high and low performing firms over periods of peaks and troughs of the restaurant industry cycle. *International Journal of Hospitality Management*, 29(1), 53-61.
- Choi, J. G., Mok, J. W., & Han, J. S. (2011). The use of Markov chains to estimate destination switching and market share. *Tourism Economics*, 17(6), 1181-1196.
- Combs, J. P., & Elledge, B. W. (1979). Effects of a room tax on resort hotel/motels. *National Tax Journal*, 32(2), 201-207.
- Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative science quarterly*, 313-327.
- Erdal, B. (2018). The Relationship between Sectoral Foreign Direct Investment and Macroeconomic Variables: Empirical Evidence from Turkey. *Journal of Applied Finance and Banking*, 8(3), 27-48.
- Falk, M. (2016). A gravity model of foreign direct investment in the hospitality industry. *Tourism Management*, 55, 225-237.
- Fish, M. (1982). Taxing international tourism in West Africa. *Annals of Tourism Research*, 9(1), 91-103.
- Fujii, E., Khaled, M., & Mak, J. (1985). The exportability of hotel occupancy and other tourist taxes. *National Tax Journal*, 169-177.
- Greenberg C. (1985). *The U.S. lodging industry—today and tomorrow*. Leventhol & Horwath 2-6, 15.
- Hiemstra, S. J., & Ismail, J. A. (1992). Analysis of room taxes levied on the lodging industry. *Journal of Travel Research*, 31(1), 42-49.
- Hull, J. C. (2014). *The evaluation of risk in business investment*. Elsevier.
- Kato, H., & Okubo, T. (2018). Market size in globalization. *Journal of International Economics*, 111, 34-60.
- Lawrence, P. R., & Lorsch, J. W. (1986). *Organization and environment: managing differentiation and integration* (Harvard Business School Classics).
- Li, X. R., Harrill, R., Uysal, M., Burnett, T., & Zhan, X. (2010). Estimating the size of the Chinese outbound travel market: A demand-side approach. *Tourism Management*, 31(2), 250-259.
- Loeb, P. D. (1982). International travel to the United States: an econometric evaluation. *Annals of Tourism Research*, 9(1), 7-20.
- Mak, J. (1988). Taxing hotel room rentals in the US. *Journal*

- of *Travel Research*, 27(1), 10-15.
- Mak, J., & Nishimura, E. (1979). The economics of a hotel room tax. *Journal of Travel Research*, 17(4), 2-6.
- Marshall, H. E. (1988). *Techniques for treating uncertainty and risk in the economic evaluation of building investments*. Gaithersburg: US Department of Commerce, National Institute of Standards and Technology.
- Min, S., Kim, N., & Zhan, G. (2017). The impact of market size on new market entry: a contingency approach. *European Journal of Marketing*, 51(1), 2-22.
- Olsen, M. D. (1980). The importance of the environment to the food service and lodging manager. *Journal of Hospitality Education*, 4(2), 35-45.
- Olsen, M. D., Tse, E. C., & West, J. J. (1992). Environmental scanning analysis form. *Strategic management in the hospitality industry*.
- Perić, J., & Radić, M. N. (2016). Macroeconomic Environment and Greenfield Foreign Direct Investment of Hotel Brands. *Ekonomski vjesnik/Econviews-Review of Contemporary Business, Entrepreneurship and Economic Issues*, 29(2), 469-485.
- Pyo, S. S., Uysal, M., & McLellan, R. W. (1991). A linear expenditure model for tourism demand. *Annals of tourism research*, 18(3), 443-454.
- Qian, L., & Soopramanien, D. (2014). Using diffusion models to forecast market size in emerging markets with applications to the Chinese car market. *Journal of Business Research*, 67(6), 1226-1232.
- Santos, M., Brochado, A., & Esperança, J. (2016). Foreign direct investment patterns of global hotel chains. *Journal of Business Research*, 69(11), 5235-5240.
- Selznick, P. (1948). Foundations of the theory of organization. *American sociological review*, 13(1), 25-35.
- Slattery, P., & Olsen, M. (1984). Hospitality organizations and their environment. *International Journal of Hospitality Management*, 3(2), 55-61.
- Stone, R. (1954). Linear expenditure systems and demand analysis: an application to the pattern of British demand. *The Economic Journal*, 64(255), 511-527.
- Slattery, P., & Olsen, M. (1984). Hospitality organizations and their environment. *International Journal of Hospitality Management*, 3(2), 55-61.
- Smith, G. D., Arnold, D. R., & Bizzell, B. G. (1988). *Instructor's Manual [to] Strategy and Business Policy: Cases*. Houghton Mifflin.
- Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *International Journal of Hospitality Management*, 31(1), 119-129.
- Witt, S. F., & Martin, C. A. (1987). Econometric models for forecasting international tourism demand. *Journal of Travel Research*, 25(3), 23-30.
- Zhang, H. Q., Guillet, B. D., & Gao, W. (2012). What determines multinational hotel groups' locational investment choice in China?. *International Journal of Hospitality Management*, 31(2), 350-359.