The Predictability of Capital Structure Theories in the Current Global Economy: An Analysis of the Debt Maturity Structure of Hotel Operations in The World's Top 20 Tourism Destinations

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Abstract

Variables that affect capital structure decisions and their effect on firm value vary over time. They change by country, industry, time, firm tipe, etc. thats why the subject still being consider. In this context, we investigated the macroeconomic variables that affect the term structure of debt and capital structure decisions in lodging companies by employing the Generalized Moments Method over the period 2004-2017. It has been determined that the macroeconomic factors that affect the debt maturity and the capital structure of the lodging companies vary in the context of the development level. In addition, it can be said that capital structure decisions of accommodation enterprises in developed and developing countries act in line with the assumptions of Trade-off and Pecking Order theories on a variable basis.

INTRODUCTION

With the economic and technological developments experienced, the variables that affect the borrowing decisions of the enterprises are increasing and getting different. This situation has not only affected the term structure of the debt, but it also has caused an increase in the variables that affected the capital structure decisions. The capital structure, which is defined as the share of the fixed capital utilized by the enterprises in the total capital, and the variables affecting this structure have been the issue of the finance literature for many years (Ross, Westerfield, and Jaffe; 2008). Upon examining the theory of finance, it is seen that the theories regarding capital structure are, in general, classified under two categories. In classification, the theories are categorized into two theories such as classical and modern capital structure theories. It is also possible to conduct classification so as to theories that examine whether capital structure decisions affect the firm value and the factors affecting the capital structure. In classical capital structure theories, it is discussed whether or not the level of liabilities usage affects the capital cost, and hence, the firm value as well as the existence of the optimal capital structure (Yılgör, 2012: p.325). The propositions put forth by Franco Modigliani and Merton Miller about capital structure and firm value in their research conducted in 1958 and 1963 later resulted in the emergence of alternative capital structure theories. These theories, also known as the modern capital structure theories, emerged along with research that were conducted to determine the variables which would have affected the capital structure decisions and financing choices of companies (Ross, Westerfield & Jaffe, 2008). Considering the classical capital structure theories, it is argued that the use of debt/equity does not affect the cost of capital and there is no optimal capital structure for the companies regarding the net operating income theory as well as the theory of MM (1958). The modern capital structure theories emerged as a critique of the assumptions made by MM (1963). Modern capital structure theories aim to determine the optimal mix of debt and equity financing for a company to maximize its value and minimize its cost of capital. One prominent theory is the Trade-Off Theory, which suggests that firms strive to balance the tax advantages of debt with the costs of financial distress. Another widely discussed theory is the Pecking Order Theory, proposing that companies prefer internal financing, followed by debt, and only resort to equity issuance as a last resort. Additionally, the Modigliani-Miller Theorem, in its various forms, argues that under certain assumptions, the capital structure is irrelevant to firm value. These modern theories emphasize the importance of considering various factors, such as taxation, bankruptcy costs, and information asymmetry, in making capital structure decisions to achieve optimal financial performance. The fact that the research conducted on the determination of the variables affecting the capital structure vary by country, time, and sector can be considered as a situation that prevents the modern capital structure theories from being criticized.

Lodging companies, which are the most crucial actors of the sector, need fixed asset-weighted investments on large lands at the investment stage. However, the realization of renovation or modernization investments during the operation phase causes them to become companies with fixed capital-intensive characteristics. Fixed assets should be funded with long-term liabilities and own resources, within the scope of the principle of maintaining the minimum funding balance (Damadoran; 1997). Therefore, as a result of the contribution generated by the sector, it is thought that determining the variables affecting the capital structure and decisions is essential for lodging companies in terms of sustaining the development in the sector. Nonetheless, the high level of being affected by systematic risk in the tourism sector brings forth the issue of determining the macroeconomic factors that affect the capital structure decisions based on the term structure of the debt. Developments in the field of tourism enable the sector to progress

rapidly and enhance its positive impacts on economic value-added. The financial crisis and its impacts in the past years have not been overcome yet. In addition to its increased impact due to Covid-19, it has also spread to various types of enterprises around the world. These developments and the contribution of the multiplier effect of the tourism sector once again reveal the importance of the socio-economic value-added provided by the sector. The contributions of the tourism sector, in general, generate a positive perception in terms of the economy. In 2022, the tourism sector contributed 7.6% to global GDP and 22% increase from 2021(WTTC; 2023). Nevertheless, it is thought that tourism enterprises operating in the sector cannot benefit from these contributions sufficiently. Lodging companies' knowledge of macroeconomic factors affecting their capital structure decisions is also important in terms of maximizing and managing firm value in a sustainable way. Determining the most appropriate capital structure combination to be used in funding these investments is as important as making the most appropriate investment decisions in ensuring the financial success of enterprises operating in the tourism sector and maintaining their sustainability. In the finance literature, it is seen that the studies conducted on the variables affecting the capital structure decisions were mainly concentrated on the internal factors (Özer & Yamak (2000); Upneja & Dalbor (2001); Fama & French (2002); Jang, Tang, & Chen (2008); Proença, Laureano & Laureano (2014)). As a result of the literature review on the subject, it is seen that there are only a few studies on the determination of macroeconomic variables affecting the capital structure. On the other hand, there is limited international research on the tourism sector, which deals with capital structure and macroeconomic variables, has been found as a result of the literature review. However, in the studies in the literature; it is seen that relations are established among micro (company-specific) variables and capital structure theories, and it is observed that there are references to which of the theories are compatible. It is seen that the research that associate macroeconomic variables and capital structure theories or that refer to which theory is valid for which sector are quite limited. In this context, the aim of this research is to present the macroeconomic factors affecting the capital structure along with the term structure of the debt in the lodging companies in an international context and to evaluate these variables in terms of capital structure theories. It is thought that the research would be original in terms of contributing to both finance and tourism literature besides being guidance for lodging company managers in capital structure decisions.

The study consists of five main parts. In the introduction part, brief information regarding the objective, scope, and importance of the research is given. In the second part of the study, a literature review of studies that examined the macroeconomic variables affecting capital structure decisions is included. In the third part; under the title of material and methodology, information about issues such as purpose, scope, importance, data, model, and analysis methodology are presented. In the fourth part; according to the United Nations World Tourism Organization (UNWTO) 2018 data; the findings of the Generalized Moments Method (GMM) analysis, which is performed to determine the macroeconomic variables that affect the capital structure decisions of the lodging companies operating in the top-20 countries with the highest tourism revenues in the world, and the discussion are included. In the last part of the study, evaluations and suggestions obtained as a result of the analyses are made.

Literature Review

Studies on capital structure, in general, concentrated on issues such as determining the variables that affect borrowing decisions of enterprises, determining the relationship between capital structure and financial performance, determining the capital structure adjustment, and revealing the ability of capital structure theories to explain the

capital structures of enterprises. So, there are few studies being investigate the macroeconomic variables that affect the capital structure decision.

Twite (2001) determined that the change in the tax system in Australia led to a decline in the ratio of debt in the capital structure of enterprises. Desai, Foley, and Hines (2004) stated that the borrowing preferences of enterprises were related to the level of development of interest rates, capital markets, and credit markets. Antoniou, Güney, and Paudyal (2006) determined that the firm-specific variables, the financial system of the country in which they operated, and the institutional traditions were effective on the term structure of the debt preferred by the enterprises. Another result involves the fact that the protection of creditor rights, the improvement of the bond market, and the GDP growth rate had positive impacts on the capital structure. Leary (2009) determined that a positive relationship between the interest rates and the debt usage in the manufacturing enterprises that predominantly included bank loans in their capital structures.

Akhtar and Oliver (2009) found that, over the period between 1994-2003, the variables of leverage, company's age, the value of assets, political risk, cash flow, growth, non-debt tax shield, exchange rate, return on assets, and size of enterprises operating in Japan differed, whereas they were similar within the context of business risk. Wu and Yue (2009) concluded that the debt usage rate in publicly traded enterprises increased throughout the periods of increased tax rates in China over the periods 1999-2000 and 2001-2003. Sinha and Ghosh (2010), over the period 1995/96-2006/07, found that capital structure decisions were affected by company-specific and macroeconomic variables (long-term bank interest rate, short-term interest rate, inflation rate, and bond yield rate), whereas target leverage and harmonization behaviors varied by being reactive/proactive. Hanousek and Shamshur (2011) found that no significant relationship between the expected inflation as well as growth in gross domestic product and leverage of enterprises operating in Eastern European countries over the period 1996-2006; a negative relationship observed between the maturity of assets (tangible asset ratio) and leverage; whereas a positive relationship between corruption perception index and leverage. Fan, Titman, and Twite (2012) determined that, over the period 1991-2006 in 39 countries, enterprises tended to use more debt when the tax arising from the use of leverage was positive, and the level of benefiting from leverage was higher in countries where corruption was high, especially in the short-run. Yeh and Roca (2012) determined that a positive and significant relationship between debt ratio and macroeconomic conditions (economic expansion and contraction) in the textile, petrochemical, and electronics industries in Taiwan over the period 1983-2007.

Jöeveer (2013) indentified that a negative and significant relationship between tangible fixed assets, inflation rate, credit rating, tax rate, gross domestic product, and leverage ratios in publicly-traded enterprises operating in nine selected European countries over the period 1995-2002. Köksal and Orman (2015) found that a positive relationship between leverage rates and inflation rate, tax rate, business size, and cash flows in enterprises, whereas a negative relationship existed between GDP growth rate, tangible asset ratio, and business risk. Memon, Rus, and Ghazali (2015) found that a negative significant relationship between debts that were not subject to tax shields and borrowing decisions, an insignificant relationship between GDP growth and tax rate and borrowing, whereas a positive significant relationship between inflation rate and interest rates and long-term borrowing, on enterprises operating in Pakistan over the period 2001-2012.

Şahin (2018) determined that a positive relationship between the exchange rate and debt utilization rate of

enterprises in Turkey, Indonesia, Brazil, South Africa, and India, which are referred to as the Fragile Five, prior to the crisis, whereas a negative relationship existed in the post-crisis model. Moreover, it was observed that a statistically significant and positive relationship between the GDP growth rate and the debt utilization rate for Turkey and India over the period 2006-2013, and a positive relationship between the inflation rate and the debt utilization rate throughout the post-crisis periods. It was also stated in the study that the results changed due to the shift in the countries included in the model.

Material and Methodology

The importance of the tourism sector is increasing day by day in terms of its contribution to the economy in parallel with the welfare and population growth all around the world. In this regard, the decisions about generating the capital structures of the enterprises in the tourism sector and the factors affecting those decisions have become an important issue. It is thought that the contribution of the tourism sector to the country's economy is quite crucial throughout the economic crisis periods, which once again reveals the importance of comprehending the sector's financial resource usage and capital structure decisions. This research, according to the UNWTO 2018 data, aims to determine the macroeconomic variables that affect the capital structure decisions of the lodging companies operating in the top-20 countries with the highest tourism revenues in the world and the extent to which the capital structure theories are compatible. In order to minimize the differences in the comparisons to be made and the data to be collected, the hotel, motel, and cruise classification by Thomson Reuters Business Classification have been taken into account, and the companies with job titles of the hotel are included in the analysis. In this context, it is revealed that the macroeconomic variables affecting the capital structure over the period 2004-2017, which the number of lodging companies and observations was being highest, are analyzed on the basis of developed and developing countries. As a result of the extraordinary measures required by the COVID-19 pandemic, which emerged at the end of 2019 and affected the whole world in a short period and many tourism enterprises had to suspend or terminate their activities. In this context, the study is limited over the period 2004-2017 due to the fact that the number of lodging companies to be included in the analysis is the highest within the period for the dates on which the data are obtained. According to the data of the UNWTO 2018, the lodging companies in line with the determined purposes, constitute the population of the research and categorized into two groups as developed and developing countries. It is observed that the distinction between developed and developing countries in the world differs on the basis of institutions. In this context, the classification in which the level of national income per capita is accepted as an indicator of development by the International Monetary Fund (IMF) is taken as a basis in the research. The financial data of the lodging companies examined in the study are obtained from the Thomson Reuters Eikon database. Information on the macroeconomic variables of the countries is obtained from Thomson Reuters Datastream, OECD (Organization for Economic Cooperation and Development), World Bank, International Monetary Fund-IMF (International Monetary Fund), and Tradingeconomics databases.

Within the context of the classification made, developed and developing countries and the number of lodging companies in these countries are presented in Table 1. In this context, a total of 203 lodging companies trading in the stock exchanges of the aforementioned countries constitute the sample of the research.

Table 1. Countries and the Number of Lodging Companies within the Scope of the Analysis

Order	Developed Countries	Tourism Revenues 2017 (Million USD)	Number of Lodging Companies 2004-2017	Developing Countries	Tourism Revenues 2017 (Million USD)	Number of Lodging Companies 2004-2017
1	USA	210,747	18	Thailand	57,477	10
2	Spain	67,964	2	China	32,617	19
3	France	60,681	13	India	27,365	15
4	England	51,211	15	Turkey	22,478	6
5	Australia	41,732	7	Mexico	21,333	2
6	Germany	39,823	2	United Arab Emirates	21,048	3
7	Japan	34,054	24	Malaysia	18,323	15
8	Hong Kong	33,304	32			
9	Canada	20,328	3			
10	Singapur	19,707	11			
11	Portugal	17,119	3			
12	Greece	16,528	2			
13	Netherlands	15,867	1			
	Total		133	Total		70

Source: United Nations World Tourism Organization 2018 Report (UNWTO, 2018), Thomson Reuters Eikon Database

Upon examining the finance literature, it is seen that the studies conducted on the variables affecting the capital structure have been mainly carried out on micro (company-specific) variables, and the studies on the macroeconomic variables are more limited in number. In the studies examining the term structure of debt, micro-variables and short-term resources have been taken into account. In this context, the econometric model which is developed as a result of the literature review and the dependent and independent variables in the model are presented below.

The GMM Regression Model:

$$STLEV = \beta_1 STLEV_{t-1} + \beta_2 GDP_{i,t} + \beta_3 ETR_{i,t} + \beta_4 INF_{i,t} + \beta_5 RFINT_{i,t} + \beta_6 FOREXR_{i,t} + \beta_7 TFAR_{i,t} + \beta_8 ROA_{i,t} + \beta_9 Saleslog_{i,t} + \varepsilon_{i,t}$$

$$LTLEV = \beta_1 LTLEV_{t-1} + \beta_2 GDP_{i,t} + \beta_3 ETR_{i,t} + \beta_4 INF_{i,t} + \beta_5 RFINT_{i,t} + \beta_6 FOREXR_{i,t} + \beta_7 TFAR_{i,t} + \beta_8 ROA_{i,t} + \beta_9 Saleslog_{i,t} + \varepsilon_{i,t}$$

As presented in the model, STLEV represents short-term leverage, LTLEV; long-term leverage, , GDP; the growth rate of the gross domestic product, ETR; effective tax rate, INF; inflation rate, RFINT; ten-year government bond's interest rate, FOREXR; foreign exchange rate, TFAR; tangible fixed asset ratio, ROA; return on assets, and SALESlog; size of sales.

Panel data methods, upon considering different tendencies and behaviors of households, enterprises, and countries, as well as differences specific to similar cross-sectional units, have been used frequently in the finance literature in terms of allowing these differences to be controlled and measured within the model. Also, panel data methods allow obtaining more information about the countries included in the analysis and the enterprises whose data are used. Furthermore, it is stated that panel data methods (which carry more information than cross-sectional and time-series data) provide a less linear connection between variables, more degrees of freedom, and more efficiency (Gajurel, 2006). In this context, panel data provide the opportunity to better identify and measure impacts that cannot be easily observed in cross-sectional or time-series data, and to study with complex behavior models.

Arellano and Bond's (1991) Generalized Moments Method (GMM) is a panel data method based on transforming the variables in the model using the first difference model instrumental variable matrix and then estimating the transformed model using the generalized least squares method. The analysis was conducted employing the Arellano-Bover/Blundell-Bond System Generalized Moments method, which was introduced by Arellano-Bond (1991) and later developed in the studies of Arellano-Bover (1995) and Blundell-Bond (1998) since the data took into account the time-series feature and did not include biased results.

Findings and Discussion

In this part of the research, the findings of the analyses that are conducted to determine the macroeconomic variables affecting the capital structure are presented within the context of developed and developing countries.

Table 2 presents descriptive statistics for 13 developed countries, which are among the top-20 countries with the highest tourism revenues.

Table 2. Descriptive Statistics for Developed Countries

Variables	Number of Observation	Mean	Standard Deviation	Minimum	Maximum
STLEV		0,200	0,151	0,003	0,851
LTLEV		0,205	0,182	0,000	0,874
TFAR		0,494	0,272	0,000	0,966
ETR		0,180	3,005	-6,960	7,850
ROA		0,019	0,185	-3,187	3,415
SALESlog	1,862	5,198	1,071	0,000	7,436
FOREXR		44,817	65,100	0,682	180,2
INF		1,784	1,539	-1,736	6,627
RFINT		3,643	2,095	-0,066	22,497
GDP		2,407	2,834	-9,132	14,525
STLEV represents short-term leverage, LTLEV; long-term leverage, TFAR; tangible fixed asset ratio, ETR; effective tax rate, ROA; return on assets, SALESlog; size of sales, FOREXR; foreign exchange rate, INF; inflation rate, RFINT; ten-year government bond's interest rate, and GDP; the growth rate of the gross domestic product.					

Upon examining Table 2, it is seen that the average short-term liabilities (STLEV) usage rate of the lodging companies is 20% and the average long-term liabilities (LTLEV) usage rate is 21%. It is observed that lodging companies operating in developed countries predominantly prefer to use equity, and within the context of liabilities, the short- and long-term liabilities usage is quite close to each other, almost the same weight. Moreover, it can be said that there are enterprises that prefer funding entirely with liabilities in lodging companies of developed countries, as well as enterprises that prefer funding entirely with equity. Upon analyzing within the context of company-specific variables, it is observed that the average tangible fixed assets ratio (TFAR) is 49%, return on assets (ROA) is 2%, and firm size (SALESlog) is 5.19. It is possible to claim that 97% of the assets of the companies included in the analysis consist of tangible assets. Moreover, it is seen that there are enterprises with zero TFAR. It can be claimed that the negative value of the ROA is an indication that the lodging companies are not able to make a profit on their assets. It is stated that the economic fluctuations experienced in the periods covered by the analysis may account for the high level of differences between the lowest and highest values in macroeconomic data.

Upon examining Table 3, it is seen that the average STLEV of lodging companies in 7 developing countries is 21%, whereas the average LTLEV is 16%.

Table 3. Descriptive Statistics of Developing Countries

Variables	Number of Observation	Mean	Standard Deviation	Minimum	Maximum
STLEV		0,216	0,162	0,001	0,888
LTLEV		0,163	0,171	0,000	0,858
TFAR		0,527	0,243	0,000	0,984
ETR		0,196	1,106	-7,972	7,401
ROA	980	0,026	0,095	-0,959	1,942
SALESlog		4,824	0,798	0,000	6,804
FOREXR		29,521	30,127	1,984	93,399
INF		8,245	19,560	-0,900	113,3
RFINT		7,068	3,417	2,177	25,740
GDP		6,335	3,180	-5,285	14,231
STLEV represents short-term leverage, LTLEV; long-term leverage, ETR; effective tax rate, ROA; return on assets, SALESlog; size of sales, FOREXR; foreign exchange rate, INF; inflation rate, RFINT; ten-year government bond's interest rate, and GDP; the growth rate of the gross domestic product.					

In this context, it is determined that lodging companies in developing countries with the highest tourism revenues mainly prefer to use STLEV. It is seen that the STLEV usage in the lodging companies of the developing countries included in the analysis is 88% at the highest, and below 1% or even zero at the lowest. For the lodging companies included in the analysis, it can be claimed that almost all of their assets are funded from time to time with short-term or long-term liabilities. Upon examining Table 3, it can be said that lodging companies operating in developing countries with the highest tourism revenues prefer to use equity resources over the period 2004-2017, whereas the STLEV usage is predominant within the context of liabilities.

Upon examining the lodging companies in the developing countries, within the context of company-specific variables, it is determined that the average TFAR is 52%, the ROA is 2%, and the firm size is 4.82%. It is seen that 98% of the assets of the enterprises included in the analysis consist of tangible assets. Besides, it is seen that there are enterprises with zero TFAR. The fact that the ROA has taken a negative value can be accepted as an indication that the lodging companies are not able to make profits on their assets.

Upon analyzing the macroeconomic variables of the developing countries, the FOREXR is 29.52, the ETR is 19%, the INF is 8.24%, the RFINT is 7.06%, and the GDP growth rate is determined as 6.33%. It is determined that the lowest value in the FOREXR is 1.98 and the highest value is 93.39. It is thought that this situation arises from the differences between the development levels of the economies of the countries included in the analysis, as well as the low value of the domestic currency, and the differentiation of the factors affecting the FOREXR. Upon examining the INF, it is seen that the lowest value is -0.90% and the highest value is 113.3%. In this context, it is observed that hyperinflation occurs in developing countries, that is, it reaches three-digit limits, and disinflation occurs in some countries. It is determined that the risk-free interest rate is 2.17% at the lowest, and 25.74% at the highest. It is observed that the growth rate of the GDP is realized as 5% at the lowest, and 14.23% at the highest. It is determined that the ETR is -7.97% at the lowest, and 7.40% at the highest.

Within the scope of the analysis, the GMM estimation results for the determination of the macroeconomic variables that affect the capital structure of 13 developed and 7 developing countries and 203 lodging companies are presented in Table 4, comparatively. Tables with GMM results are presented in the appendices.

Table 4. The GMM Estimation Results According to the Countries' Development Levels

Variables		TFAR	ROA	SALESlog	ETR	FOREXR	INF	RFINT	*GDPbuy*
LTL	**Developed**	+	-	+	-	+	No	No	No
	Developing	+	-	-	-	+	-	+	+
Variables		TFAR	ROA	SALESlog	ETR	FOREXR	INF	RFINT	*GDPbuy*
STL	**Developed**	-	-	-	No	+	+	+	+
	Developing	+	No	-	No	-	No	+	-
STLEV represents short-term leverage, LTLEV; long-term leverage, ETR; effective tax rate, ROA; return on assets, SALESlog; size of sales, FOREXR; foreign exchange rate, INF; inflation rate, RFINT; ten-year government bond's interest rate, and GDP; the growth rate of the gross domestic product.									

As seen in Table 4, it is determined that the tangible assets ratio, size, and FOREXR have positive impacts on the LTLEV ratios of the lodging companies operating in the developed countries within the scope of the analysis. In this context, it can be said that as the assets that can be considered as collateral in lodging companies increase, long-term borrowing increases. In the same manner, it can be claimed that long-term borrowing increases, considering that the ability to pay would be enhanced in case of an increase in size. Also, the expectation that the rise in the FOREXR would increase the interest rates, and the lodging companies are mostly fixed-asset-based enterprises, and they are inclined to long-term borrowing, which they think would be less costly in the current situation. Besides, it can be claimed that the rise in FOREXR, assuming that developed countries have a stronger financial system, does not have a negative impact on credit institutions, and has an impact on keeping their credit channels open. However, it is determined that the ETR and ROA have negative impacts on the LTLEV ratios of the lodging companies. In this case, it can be claimed that as the paid taxes and profitability increase, the long-term debt utilization rates of lodging companies are negatively affected. The fact that an increase in the paid tax rates has a negative impact on the net profit by decreasing the revenues can be explained as that it would prevent the enterprises from having problems in the principal and interest payments of the debt and also prevent them from borrowing again in the future. On the other hand, it can be stated that the increase in the ROA enables the generation of internal funds and causes the long-term debt ratio of the enterprises to decrease. Upon examining in terms of STLEV, it is determined that tangible assets, ROA, and size have negative impacts. In this case, it can be claimed that as the tangible fixed assets ratios, profitability, and size increase in lodging companies, the short-term liabilities usage decreases. Nonetheless, it is determined that FOREXR, INF, risk-free interest, and GDP growth rate have positive impacts on the STLEV ratio. This situation can be considered as an indication that lodging companies prefer to borrow in the short-run with the expectation that the rise in the FOREXR, INF, and risk-free interest rate would increase their borrowing costs in the future. It is thought that the growth in GDP would cause a decline in interest rates in light of the positive expectations that may occur in the economy, and enterprises resort to borrowing due to the decline in short-term borrowing costs. Upon examining the analysis results, it can be asserted that lodging companies operating in developed countries mainly take into account the Trade-off and Pecking Order theories in their capital structure decisions. It is thought that the results differ on the basis of variables due to the fact that the lodging companies act depending on the expectations that macroeconomic variables would increase or decrease the capital cost in their capital structure decisions.

It is determined that the tangible fixed assets ratio, FOREXR, risk-free interest rate, and GDP growth rate have positive impacts on the LTLEV ratios of lodging companies in the developing countries within the scope of the analysis, whereas other variables have negative impacts. In this context, it can be asserted that lodging companies

operating in developing countries prefer long-term borrowing due to the increase in the assets they can provide as collateral due to the rise in the tangible fixed assets ratios, and since the lending institutions provide enterprises with easier funding opportunities in this structure. It can be asserted that lodging companies in developing countries prefer to utilize long-term liabilities without considering the increase in interest rates along with the increase in exchange rates. This situation can be considered as an indication that lodging companies evaluate long-term borrowing opportunities regardless of costs, despite the difficulties in attaining and accessing long-term resources in developing countries. Upon examining the analysis results of STLEV ratios, it is determined that tangible fixed assets and risk-free interest rates have positive impacts. In this context, it can be claimed that lodging companies operating in developing countries prefer short-term liabilities in case the assets to be given as collateral increase in size and long-term borrowing costs are high. Nonetheless, it is determined that SALESlog volume, FOREXR, and GDP growth rate have negative impacts on short-term liabilities use in lodging companies operating in developing countries. It can be claimed that the fluctuations in the FOREXR of lodging companies operating in developing countries affect the short-term liabilities preferences negatively by increasing the interest rates. Furthermore, it can be stated that the closing of credit channels due to the transfer of their funds to domains in which they would yield higher returns, within the context of the fluctuations in the FOREXR affecting the interest rates, adversely affects the short-term liabilities usage of the lodging companies.

Conclusion

Lodging companies, essential components of the tourism sector, must make critical capital structure decisions to operate healthily and safeguard their financial stability in an industry marked by high risk and increasingly complex planning. The decisions regarding capital structure, closely linked to debt term structures and the influencing variables, play a pivotal role in ensuring the sustainable operation of lodging companies within the challenging landscape of the tourism sector. In this context, lodging companies should evaluate all funding options within the framework of country and sector conditions, take their advantages and disadvantages into account, and make their capital structure and borrowing decisions.

Within the scope of the research, it is tried to determine the macroeconomic variables that affect the short- and LTLEV ratios, which are effective in the formation of the capital structure, with the thought that it would help to better comprehend the differences. As a result of the research, it is determined that the ETR has a negative impact on the LTLEV ratio of lodging companies operating in both developed and developing countries. The aforementioned finding complies with that of Mokhova and Zinecker (2014). On the other hand, Taoulaou and Burchuladze (2014) obtained different results. It can be stated that the FOREXR, which is another macroeconomic variable, has a positive impact on the STLEV ratios of lodging companies operating in developed countries, and a negative impact on that of lodging companies operating in developing countries. It is determined that the FOREXR has a positive impact on the long-term leverage ratio of lodging companies operating in both developed and developing countries. The aforementioned results are in different directions from that of Memon, Rus, Ghazali (2015), Frank and Goyal (2009), Köksal and Orman (2015). However; they are in parallel with that of Desai, Foley and Hines (2004), Hanousek and Shamshur (2011), Bayrakdaroğlu, Ege and Yazıcı (2013), Jöeveer (2013), Mokhova and Zinecker (2014) on the variable basis. It is determined that the risk-free interest rate, which is another macroeconomic variable, has a positive impact on the STLEV ratios of lodging companies operating in both developed and developing countries. On the

LTLEVratios, it is determined that the risk-free interest rate does not have a significant impact on lodging companies operating in developed countries, but has a positive impact on that of lodging companies operating in developing countries. In this context, the results differ from that of Mokhova and Zinecker (2014). It is determined that the growth rate in GDP has a positive impact on the STLEV ratios of lodging companies operating in developed countries, whereas it has a negative impact on that of lodging companies operating in developing countries. It is determined that the growth rate in GDP does not have a significant impact on the LTLEVratios of lodging companies operating in developed countries, but has a positive impact on that of lodging companies operating in developing countries. In terms of GDP, the results are found to be in different directions with that of Hanousek and Shamshur (2011), Jõeveer (2013), Bayrakdaroğlu, Ege and Yazıcı (2013) and Köksal and Orman (2015). In this context, it can be stated that the impacts of macroeconomic variables on the short- and LTLEV ratios of lodging companies operating in both developed and developing countries differ both within the scope of the variable and the level of development.

Upon evaluating in terms of capital structure theories, it is determined that the results of interest rate and exchange rate in developing countries, and the results of the tax rate, GDP, inflation, tangible fixed assets, and size in developed countries are compatible with the Trade-off theory. Nonetheless, the results of GDP, ROA, and size in developing countries; and the results of FOREXR and ROA in developed countries can be claimed to be compatible with the Pecking Order theory. Therefore, as a result of the study, it can be stated that the lodging companies operating in both developed and developing countries act in line with the Pecking Order and Trade-off theories in their borrowing decisions in parallel with the literature.

While capital structure theory has been a well-explored topic in the finance literature for years, there have been relatively few studies focusing on the examination of macroeconomic factors with international comparisons in the context of the tourism sector. In this regard, it is believed that the information obtained in the study will contribute not only to the literature on the subject but also to the effectiveness of decision-making for sector managers. Based on the results obtained in the study and the comments provided above, it is recommended that lodging businesses consider the economic conditions, the period in which they operate, and the variables taken into account when making capital structure decisions. In this context, it should be noted that the study is limited to the country, enterprise and years included in the analysis and the results are interpreted within the framework of these constraints. It is thought that studies involving more data and different analysis techniques covering other actors of the tourism sector (travel, transportation, food and beverage) in the future will contribute more to the capital structure decisions in the tourism sector. However, although it is not easy to reach the financial data of the accommodation business and other businesses in the tourism sector that are not traded in the stock market, it is thought that the realization of such studies will be beneficial in revealing the capital structure of the sector.

Appendix

Appendix AI: Forecast Results (2004-2017)

Variables	Developed Countries		Developing Countries	
	Sys.GMM	Sys.GMM	Sys. GMM	Sys. GMM
	STLEV$_{i,t-1}$	LTLEV$_{i,t-1}$	STLEV$_{i,t-1}$	LTLEV$_{i,t-1}$
	0.334 (0.000)***	0.504 (0.000)***	0.625 (0.000)***	0.609 (0.000)***
TFAR	-0.039 (0.000)***	0.166 (0.000)***	0.016 (0.007)***	0.067 (0.000)***
ETR	0.000 (0.790)	-0.002 (0.000)***	-0.001 (0.170)	-0.003 (0.000)***
ROA	-0.033 (0.000)***	-0.049 (0.000)***	-0.008 (0.201)	-0.172 (0.000)***
Saleslog	-0.006 (0.008)***	0.026 (0.000)***	-0.027 (0.000)***	-0.021 (0.000)***
FOREXR	0.000 (0.002)***	0.000 (0.001)***	-0.001 (0.000)***	0.000 (0.048)**
INF	0.003 (0.000)***	0.000 (0.843)	-0.000 (0.619)	-0.001 (0.046)**
RFINT	0.005 (0.000)***	0.000 (0.840)	0.002 (0.000)***	0.003 (0.000)***
GDP	0.001 (0.000)***	0.000 (0.482)	-0.002 (0.000)***	0.001 (0.000)***
Constant	0.167 (0.000)	-0.131 (0.000)	0.229 (0.000)	0.097 (0.000)
Sargan/Hansen	88.569 (0.492)	105.421 (0.112)	61.888 (0.987)	60.511 (0.991)
AR (2)	0.950 (0.341)	-0.201 (0.840)	-0.285 (0.776)	0.976 (0.329)
Wald test	6034.02 (0.000)	14038 (0.000)	17269.53 (0.000)	61271.22 (0.000)
F Test	661.94 (0.000)	1539.99 (0.000)	1870.64 (0.000)	6636.93 (0.000)
p values are in parentheses. ***, **, * denote significance at the 1%, 5% and 10% level, respectively.				
STLEV represents short-term leverage, LTLEV; long-term leverage, TFAR; tangible fixed asset ratio, ETR; effective tax rate, ROA; return on assets, Saleslog; size of sales, FOREXR; foreign exchange rate, INF; inflation rate, RFINT; ten-year government bond's interest rate, and GDP; the growth rate of the gross domestic product.				

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