

Dividend Payouts of Travel and Leisure Companies in Western Europe: An Analysis of the Determinants

Mahboubah Bahreini

Submitted to the
Institute of Graduate Studies and Research
in partial fulfillment of requirements for the degree of

Doctor of Philosophy
in
Finance

Eastern Mediterranean University
July 2018
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

Assoc. Prof. Dr. Ali Hakan Ulusoy
Acting Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Doctor of Philosophy in Finance.

Assoc. Prof. Dr. Nesrin Ozatac
Chair, Department of Banking and Finance

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Doctor of Philosophy in Finance.

Prof. Dr. Cahit Adaoglu
Supervisor

Examining Committee

1. Prof. Dr. Cahit Adaoglu
2. Prof. Dr. Mustafa Besim
3. Prof. Dr. Hatice Dogukanli
4. Prof. Dr. M. Banu Durukan Sali
5. Assoc. Prof. Dr. Nesrin Ozatac

ABSTRACT

This study examines the dividend payout determinants of travel and leisure companies in five Western European countries that are ranked among the world's top ten tourist destinations, namely, France, Spain, Italy, Germany, and the United Kingdom. The study analyzes the sector and carries out a comparative analysis of six sub-sectors: gambling, hotels, airlines, recreational services, restaurants and bars, and travel and tourism. Hypotheses are developed focusing on four main theories of dividend policy, namely "pecking order", "free cash flow", and "life-cycle" and "trade-off" theories. Panel data random-effects Tobit estimation methodology is used during a ten year period (2005- 2015). In addition to the traditional dividend determinants, sector and country specific determinants such as leverage, asset intangibility, capital intensity and effective dividend tax rate are used. The estimation results show that company size, profitability, investment opportunities and asset intangibility are positive drivers of dividend payout, whereas the leverage ratio and capital intensity deter dividend payout. The study provides international empirical evidence for the positive relationship between investment opportunities and dividend payout. This positive relationship, which is regarded as a puzzle, is unique for companies operating in the travel and leisure sector.

The empirical findings of this study can provide financial managers and investors with a clear understanding of the determinants of dividend payouts for companies in the travel and leisure sector as well as for the companies that operate in the specific sub-sectors. The identification of unique dividend determinants and the recognition

of differences among the sub-sectors help investors and managers to shape their investment and financial management decisions.

Keywords: dividend determinants, capital intensity, asset intangibility, investment opportunities, tax, travel and leisure.

ÖZ

Bu çalışma, beş Batı Avrupa ülkesindeki seyahat ve eğlence şirketlerinin temettü dağıtım oranlarını etkileyen faktörleri incelemektedir. Bu beş ülke Fransa, İspanya, İtalya, Almanya ve Birleşik Krallık olup, ilk on turizm destinasyonu ülkeleri arasında yer almaktadırlar. Bu çalışma, seyahat ve eğlence sektörünü bir bütün olarak incelemekte ve ayrıca, bu sektöre bağlı altı alt sektörün karşılaştırmalı analizini gerçekleştirmektedir. Bu altı alt sektör şunlardır; kumar, oteller, havayolları, eğlence hizmetleri, restoranlar ve barlar, seyahat ve turizm. “Finansman hiyerarşisi”, “serbest nakit akışı” ve “yaşam döngüsü” teorileri kullanılarak, seyahat ve eğlence sektörü için hipotezler geliştirilmiştir. 2005-2015 yıllarını kapsayan panel veri seti kullanılarak, “rassal etkiler Tobit metodolojisi” ile ekonometrik analiz yapılmıştır. Geleneksel temettü dağıtım oranı faktörlerine ek olarak kaldıraç, gayri maddi varlık, sermaye yoğunluğu ve net temettü vergi oranı gibi sektör ve ülkeye özgü faktörler kullanılmıştır. Tahmin sonuçları şunlardır; şirket büyüklüğü, kârlılık, yatırım fırsatları ve gayri maddi varlık temettü dağıtım oranını pozitif yönde etkilerken, kaldıraç oranı ve sermaye yoğunluğu negatif yönde etkilemektedir. Diğer uluslararası ampirik çalışmalarda olduğu gibi, bu çalışmada da yatırım fırsatları ve temettü dağıtım oranı arasında pozitif bir ilişki bulunmuştur. Seyahat ve eğlence sektöründe faaliyet gösteren şirketlere özgü olan bu pozitif ilişki, literatürde henüz tam olarak açıklanamamıştır.

Bu çalışmanın ampirik sonuçlarının, finans yöneticilerine ve yatırımcılara ışık tutması ve yatırım ve finansal yönetim kararlarının şekillenmesinde yol göstermesi beklenmektedir.

Anahtar Kelimeler: temettü dağıtım oranı, belirleyici faktörler, sermaye yoğunluğu, gayri maddi varlık, yatırım fırsatları, vergi, seyahat ve eğlence.

DEDICATION

To My Family

ACKNOWLEDGMENT

I take this opportunity to extend my appreciation to all those who helped me to make this Ph.D. dissertation possible.

First and foremost, I would like to extend my sincere gratitude to my supervisor Prof. Dr. Cahit Adaoglu for his constant guidance, advice, cooperation, encouragement and continuous support that have always kept me going ahead. His enthusiasm, integral view on research and his mission for providing high-quality work, has made a deep impression on me.

I am also grateful to each jury member of the dissertation committee; Prof. Dr. Mustafa Besim, Prof. Dr. Hatice Dogukanli, Prof. Dr. M. Banu Durukan Sali, Assoc. Prof. Dr. Nesrin Ozatac. Their comments, contributions and constructive critiques were of great value.

I would also like to thanks my parents, sister and brothers, whose love and unwavering support were and are with me in whatever I pursue.

TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZ.....	v
DEDICATION.....	vii
ACKNOWLEDGMENT.....	viii
LIST OF TABLES.....	xii
LIST OF ABBREVIATIONS.....	xiii
1 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Motivations.....	2
1.3 Objectives.....	3
1.4 Limitations.....	3
2 THEORIES, LITERATURE AND HYPOTHESES.....	5
2.1 Theoretical background.....	5
2.1.1 Theories.....	6
2.1.2 Literature review.....	7
2.2 Determinants and hypotheses.....	10
2.2.1 Traditional determinants.....	10
2.2.2 Sector-specific determinants.....	12
2.2.3 Country-specific determinants.....	15
3 METHODOLOGY.....	16
3.1 Data.....	16
3.2 Methodology and Model.....	16
4 EMPIRICAL RESULTS.....	21

4.1 Descriptive statistics.....	21
4.2 Tobit estimation results.....	26
4.2.1 The travel and leisure sector.....	26
4.2.2 The sub-sectors.....	29
4.2.2.1 Hotels.....	29
4.2.2.2 Gambling.....	29
4.2.2.3 Airlines.....	32
4.2.2.4 Travel and tourism.....	32
4.2.2.5 Restaurants and bars.....	35
4.2.2.6 Recreational services.....	35
4.3 Comparative analysis: Company-specific determinants.....	38
4.3.1 Size.....	39
4.3.2 Profitability.....	40
4.3.3 Investment opportunity.....	41
4.3.4 Maturity.....	43
4.3.5 Leverage.....	44
4.3.6 Asset intangibility.....	44
4.3.7 Capital intensity.....	45
4.3.8 Effective dividend tax rate.....	45
4.3.9 Stock market and geographical location effects.....	46
4.3.10 Year specific effects.....	46
5 CONCLUSION.....	47
REFERENCES.....	50
APPENDICES.....	59
Appendix A: Variable Descriptions.....	60

Appendix B: Pearson Correlation Matrix.....	62
Appendix C: Effective dividend tax rate for sample countries.....	64

LIST OF TABLES

Table 1: Number of observations by year and sub-sector.....	21
Table 2: Descriptive statistics	25
Table 3: Results of the panel data random-effects Tobit estimation methodology, Travel & Leisure Sector.....	28
Table 4: Results of the panel data random-effects Tobit estimation methodology, Hotels Sub-sector.....	30
Table 5: Results of the panel data random-effects Tobit estimation methodology, Gambling Sub-sector.....	31
Table 6: Results of the panel data random-effects Tobit estimation methodology, Airlines Sub-sector.....	33
Table 7: Results of the panel data random-effects Tobit estimation methodology, Travel & Tourism Sub-sector.....	34
Table 8: Results of the panel data random-effects Tobit estimation methodology, Restaurant & Bar Sub-sector.....	36
Table 9: Results of the panel data random-effects Tobit estimation methodology, Recreational Services Sub-sector.....	37
Table 10: Comparative estimation results: sector and sub-sectors.....	39

LIST OF ABBREVIATIONS

CI	Capital Intensity
DPR	Dividend Payout Ratio
EDT	Effective Dividend Tax rate
EU	European Union
H	Hypothesis
IARD	Intangibility Asset Ratio Dummy Variables
ICB	Industry Classification Benchmark
LR	Leverage Ratio
M/B	Market Value of Company to Common Equity
N	Number of Observations
OLS	Ordinary Least Square
RE/E	Ratio of Retain Earning to Total Equity
ROA	Return on Assets
SD	Standard Deviation
SSEC	Sub-Sector Dummy Variables
SXD	Stock Exchange Dummy Variable
TA	Total Assets
U.S.	United State
UK	United Kingdom
UKD	United Kingdom Dummy Variable
UNWTO	World Tourism Organization
WTTC	World Travel and Tourism Council
YD	Year Dummies

Chapter 1

INTRODUCTION

1.1 Background

Dividend policy is one of the most challenging topics of finance theory and is still considered as a puzzle in the finance literature. Since Miller and Modigliani's (1961) dividend irrelevance proposition, several theories have been developed, and a vast amount of empirical work has been conducted focusing on the dividend policy of financial and non-financial companies. The theories and empirical evidence do not fully explain dividend policy.

In particular, there is a lack of research investigating the dividend policy of companies operating in the travel and leisure sector. The travel and leisure sector is one of the world's largest industries, having a global economic contribution of almost 7.6 trillion U.S. dollars for the sixth consecutive year in 2016 (World Travel and Tourism Council report (WTTC, 2017)). Europe is the top tourist region in terms of worldwide arrivals. In 2016, EU countries had 620 million international tourist arrivals, an increase of 2% relative to 2015. The tourism industry boasts the third largest economic activity in the European Union (EU). Furthermore, among the 28 EU member states, five ranks among the top-ten tourist destinations by worldwide arrivals, namely, France, Spain, Italy, Germany and the United Kingdom (World Tourism Organization (UNWTO, 2017)).

1.2 Motivations

The unique fundamental characteristics of companies operating in the travel and leisure sector have encouraged researchers to examine the financial management theories and practices in this sector.¹ Typically, these studies examine the existing theories considering the unique fundamental characteristics.² Singal (2015) studies empirically the structural (i.e., fundamental) characteristics of hospitality and tourism (HT) sector and finds that “...the HT industry has higher leverage, higher risk, higher capital intensity and higher competitive rivalry than other industries in the U.S. economy” (p. 116). Moreover, Singal argues that “The formal identification and recognition of these differences provides justification for using the HT industry as a context for testing business theories, and can explain differences in decision-making and firm outcomes such as financial and social performance, as well as efficiency, growth, and survival of HT firm” (p. 116).

As such, this study³ focuses on the determinants of dividend payouts among travel and leisure companies that operate in Western Europe—a topic yet to be examined within the tourism literature involving financial management. Theoretically, the study also investigates how well the traditional “pecking order”, “free cash flow”, “life-cycle” and “trade off” theories explain the dividend payouts of the travel and leisure sector. This study aims to contribute to the overall picture of the subject of

¹ Travel and leisure companies are same as the ones in the hospitality and tourism sector. In the database used for the study, they are classified as “travel and leisure” companies.

² For instance, Sheel (1994) studies the determinants of capital structure for the hotel companies and compares them to the capital structures of manufacturing companies. Dalbor and Upneja (2007) examine the dividend policy in the U.S. restaurant sector. Karadeniz et al. (2009) examine the determinants of capital structure in Turkish lodging companies and test the validity of traditional capital structure theories for this sector. Dewally, Shao, & Singer (2013) examine the stock performance of companies in the U.S. hospitality sector.

³ Some results of this study are published in: Adaoglu, C., & Bahreini, M. Dividend payouts of travel and leisure companies in Western Europe: An analysis of the determinants. Forthcoming in *Tourism Economics*. DOI: [10.1177/1354816618780867](https://doi.org/10.1177/1354816618780867)

dividend policy by investigating the dividend payouts of travel and leisure companies.

1.3 Objectives

The objectives can be summarized under four headings. First, the study examines the dividend payouts by using the traditional determinants as well as the sector and country specific fundamentals such as asset intangibility, capital intensity and country specific effective dividend taxation. The study also controls for the stock exchange market differences, the geographical location effect, and the variations among the years that cover the global financial crisis of 2008. Second, a comparative analysis is conducted for the six sub-sectors; namely hotels, airlines, gambling, travel and tourism, restaurants and bars, and recreational services. This makes this study unique in the way that it is a comprehensive study of the sector. Third, the empirical findings of this study provide managers and investors with an understanding of the determinants of dividend payouts of companies in the sector as well as in the sub-sectors. Fourth, the dependent variable, namely the dividend payout ratio, is censored at zero, and therefore, the pooled Ordinary Least Squares (OLS) estimation methodology cannot be used since the estimates are inconsistent and biased towards zero (Wooldridge, 2010). The appropriate methodology is the panel data Tobit estimation and is used in the study (e.g., Kim & Maddala, 1992; Kennedy, 2003).

1.4 Limitations

This study represents the analysis of dividend determinants in the travel and leisure sector and its six main sub-sectors, but it is not without limitations. The data capture only public companies from the top five Western European countries between the years 2005 and 2015. Examining both public and private companies over a long period from a global dataset may yield different results. Although the selection of

these countries was intentional based on their tourist arrival figures and region, the inclusion of additional countries may yield differences in the results. Additional work should consider the inclusion of data from other countries and should include data from private companies if available. Such an approach would give a better understanding of the dividend decision-making process for the travel and leisure sector.

Chapter 2

THEORIES, LITERATURE AND HYPOTHESES

2.1 Theoretical background

The dividend irrelevance proposition by Miller and Modigliani (1961) states that dividend policy does not affect company value under the assumptions of perfect capital markets, no taxes, fixed investment policy and no uncertainty risk. However, these assumptions are not valid in a business environment. Hence, the dividend irrelevance proposition has paved the way for investigating market imperfections such as taxes, agency costs, information asymmetries and institutional constraints—all of which have been incorporated in subsequent theories surrounding dividend policy.

Dividend policy theories such as the pecking order theory, the free cash flow, the trade off theory, the life-cycle theory and the trade-off theory have been studied rigorously and empirically tested in the literature (e.g., Allen & Michaely, 1995; Megginson, 1997). These theories have different justifications for the determinants of dividend policy. In developing the hypotheses, the study uses these prominent theories as well as the previous empirical findings on the determinants of dividend policy in the travel and leisure sector.

2.1.1 Theories

According to the pecking order theory, less profitable companies tend to pay less dividends and use the internal financing to finance profitable projects rather than using external financing that has significantly higher costs due to higher asymmetric information. This theory states companies that have investment opportunities must use their earnings (i.e., internal financing) to finance these profitable investments. Hence, they must not pay dividends (e.g., Myers & Majluf, 1984, Fama & French, 2002).

The free cash flow theory states that after financing profitable investments using internal cash flows, any free cash flows should be paid out as dividends to alleviate the agency problems between managers and shareholders. Managers can use the free cash flow for their private benefits and invest in unprofitable investments with the motive of creating a larger company, gaining perks and higher compensations (e.g., Easterbrook, 1984; Jensen, 1986).

According to the life-cycle theory (e.g., Mueller, 1972; Bulan & Subramanian, 2009), in the early stages of the life cycle, companies pay low dividends or do not pay dividends at all since financial deficits are typically observed in the early stages. As the companies become more mature, profitable investment opportunities decrease and free cash flows can accumulate under the control of managers. To limit the possibility of wasting free cash flows, companies should pay out the excess cash as dividends (i.e., the free cash flow and the agency theories).

The trade-off theory states that companies set a target debt ratio and move towards it gradually (e.g., Myers, 1984, Fama & French, 2002). An increase in the level of debt

causes an increase in financial distress, and leads to a decrease in company value. Hence, highly leveraged companies are less likely to pay out dividends because of high external financing costs, financial distress costs and restrictive debt covenants. Such companies keep their cash to avoid the financial distress costs and lessen the probability of bankruptcy. However, there is also a tax advantage of debt financing. Companies that are less prone to these financial problems have more flexibility and can borrow more to benefit from the debt tax advantage. Consequently, such companies are more likely to pay dividends (e.g., Jensen & Meckling, 1976; Myers, 1977).

2.1.2 Literature review

Canina et al. (2001) examine the dividend policy of the U.S. lodging companies and find that the dividend payout of these companies is relatively lower on average. They argue that this lower payout is due to volatile earnings, high investment requirements, and high interest payments in lodging companies. Furthermore, they find that managers change dividends slowly relative to the change in earnings; and highly profitable and larger companies are more willing to pay dividends in the lodging industry.

Kim and Gu (2009) consider U.S. hospitality companies and look at the dividend policy of these companies. As it is found for hospitality companies in the study by Fama and French (2001), Kim and Gu state that “The much higher proportion of dividend-paying firms in the hospitality industry [relative to U.S. firms in general] suggests that hospitality firms’ dividend policy may have some unique features that deserve our investigation” (p. 359). They find a positive effect of company profitability and size on the probability of paying dividends, whereas investment opportunities lower the probability. Hospitality companies that have investment

opportunities, are small and less profitable, and pay out fewer dividends. They argue that big hospitality companies are typically in the mature stage, have few investment opportunities and have more access to the capital markets. Therefore, their pay outs of dividends are higher. Smaller hospitality companies are typically in the growth stage with higher investment opportunities, and these companies typically face financial deficits that lead to the lower probability of paying dividends.

Kim and Jang (2010) study the determinants of dividend payment decisions and the corresponding amounts for the U.S. lodging companies. They find that payment decisions are positively affected by company-specific characteristics such as company size, investment opportunities, profitability, life-cycle stage, year-specific events and the previous year's dividend amount. The variation in the dividend amount is not affected by such company characteristics. However, year-specific events and the previous year's dividend amount have significant effects on the change in the dividend amount. Moreover, their descriptive trend analysis shows that the industry, in general, pays out high amount of dividends (i.e., minimum 22% between 1997 and 2006) while lodging companies only pay out less than 10% at most.

Moon, Lee & Dattilo (2015) examine the determinants of dividend payout in the airlines companies. They find that company size and life-cycle stage are the positive drivers of dividend payouts, whereas financial leverage decreases dividend payouts. In another study on the U.S. restaurant companies, Dalbor & Upneja (2007) show the ownership structure affects the dividend payments. They find those restaurant companies that have a widely dispersed ownership structure use the dividend policy as a mechanism to alleviate the agency problems. Their findings show restaurant

companies that pay dividends are different in terms of the number of shareholders and debt ratio when they are compared to those that do not pay dividends. The number of shareholders positively affects the dividend payout whereas the debt ratio affects negatively. Both results support the managerial motivation of decreasing agency costs. Dalbor & Upneja also find that on average, the U.S. restaurant companies pay out more than 18% of their earnings as dividends and this figure is higher than the average payout of the U.S. hotel companies. They argue that this may be due to the lower need to reinvest in fixed assets for restaurant companies and relatively lower debt levels than the perceived level. Sheel (1998) investigates the relationship between equity returns and dividend yield for hotel and lodging companies, and suggests a positive nonlinear relationship between them. Moreover, it is the only study having a global perspective in the hospitality literature and finds distinct cross-country differences in this relationship for hotel and lodging companies located in the U.S., the U.K., and Japan.

Focusing on the determinants of dividend policy literature, studies examine the U.S. hospitality and tourism companies, and lack an international perspective. As discussed above, there are studies that examine the dividend behavior in several different U.S. sub-sectors, but the dividend policy of other sub-sectors such as gambling, travel and tourism and recreational services are ignored in the existing literature. Furthermore, studies typically incorporate traditional determinants found in the literature of other non-financial sectors and fail to incorporate unique determinants that are specific to the travel and leisure sector. Specifically, as discussed above, there are some contradictory results about the effect of investment opportunities on dividends.

2.2 Determinants and hypotheses

2.2.1 Traditional determinants

The four traditional determinants, namely profitability, investment opportunities, maturity and company size of Fama and French (2001) dividend policy model, are discussed in this section. Hypotheses are developed within the framework of the discussed theories and the unique sector fundamentals.

In the finance literature, the positive relationship between profitability and dividend payouts is strongly supported (Kim & Jang, 2010). In line with the predictions of the pecking order and trade-off theories, profitable companies are more likely to accumulate retained earnings and less likely to face financial distress costs. Consequently, they can avoid the high costs of external financing by using the accumulated retained earnings. Such companies pay out more dividends relative to the companies with fewer profitability (e.g., La Porta et al., 2000; Fama & French, 2001, 2002; Denis & Osobov, 2008; Labhane et al., 2015). The free cash flow and the agency theories also predict a positive relationship between profitability and dividend payout (Hubbard, 1998). Profitable companies are more likely to accumulate free cash flows and such cash flows can be invested in unprofitable investments by managers in pursuit of their self-interests. Therefore, managers should pay out free cash flows as dividends to shareholders (e.g., Easterbrook, 1984; Jensen, 1986). This positive relationship should also hold for travel and leisure companies, and the following hypothesis is developed.

H1: There is a positive relationship between profitability and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

The pecking order theory suggests a negative relationship between investment opportunities and dividends. Companies that have investment opportunities must use their earnings and must not pay dividends (e.g., Myers, 1977; Myers & Majluf, 1984). This negative relationship is also argued by the free cash flow theory and the agency theory. Profitable companies are more likely to have free cash flows that should be distributed to shareholders (e.g., Easterbrook, 1984; Jensen, 1986). Several studies support the negative relationship (e.g., Rozeff, 1982; Abor & Bokpin, 2010). One exceptional study is by Aivazian, Booth & Cleary (2003) who study a sample of emerging markets and find a positive relationship between investment opportunities and dividend payouts. Considering the unique financial fundamental characteristics of high fixed costs, high capital expenditures, high volatility in cash flows, low operating margins and low cash holdings in the highly competitive travel and leisure sector, the following hypothesis is developed.

H2: There is a negative relationship between investment opportunities and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

The life-cycle theory, the free cash flow theory and the agency theory suggest a positive relationship between company maturity and dividend payout (e.g., Fama & French, 2001, 2002; DeAngelo et al., 2006; Denis & Osobov, 2008). These theories predict that as companies become more mature, profitable investment opportunities decrease and free cash flows can be available. To limit the possibility of wasting free cash flows, companies should pay out the excess cash as dividends. As discussed before, although the travel and leisure companies have unique financial characteristics of high leverage, high fixed costs, high capital expenditures, high volatility in cash flows, low operating margins and low cash holdings, this study

argues that mature and established companies in this sector are less likely to suffer from these restrictive financial characteristics. Hence, the following hypothesis is developed.

H3: There is a positive relationship between company maturity and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

Several studies study the relationship between company size and dividend payout (e.g., Fama & French, 2001, 2002; Denis & Osobov, 2008). The results show a positive relationship between size and dividend payout, implying that bigger companies (i.e., less volatile, more mature and higher free cash flows) have higher dividend payout ratios. This argument is also supported by Denis and Osobov (2008) who show that dividends are higher in bigger and mature companies. As discussed in the introduction section, travel and leisure sector companies are relatively smaller in size and the size effect should be present. Similarly, the following hypothesis is put forward in this study.

H4: There is a positive relationship between company size and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

2.2.2 Sector-specific determinants

In this section, three prominent sector specific determinants, namely the financial leverage, the asset intangibility, and the capital intensity (e.g., Karadeniz et al., 2009; Singal, 2015), are discussed and hypotheses are developed.

The trade-off theory predicts a negative relationship between financial leverage and dividend payout (e.g., Fama & French, 2002). Highly leveraged companies are less

likely to pay out dividends because of high external financing costs and financial distress costs. Considering the empirical findings that travel and leisure companies are highly levered, financially constrained and have different capital structures relative to other sectors (e.g., Sheel, 1994, 1998; Singal, 2015), the following hypothesis is developed.

H5: There is a negative relationship between financial leverage and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

The asset intangibility captures the magnitude of intangible assets relative to total assets in the company's balance sheet. The trade-off theory predicts a negative relationship between asset intangibility and dividend payout. The relationship can be negative since intangible assets have less collateral value, uncertain liquidation value, and higher information asymmetry, and can eventually decrease the borrowing capacity of companies (e.g., Shleifer & Vishny, 1992; Williamson, 1988; Holthausen & Watts, 2001). This can lead to operational and financial inflexibility that will then affect the dividends negatively.

The relationship can also be positive due to the unique significance of intangible assets in the travel and leisure sector. Companies have increased their intangible asset investments to have a competitive edge (Lev, 2001; Nakamura, 2001). Both measurable intangible assets (i.e., brands, customer lists, licenses and franchises, copyrights and patents) and unmeasurable intangible assets (i.e., leadership, alliances and networks, reputation, human capital and innovation) have significant importance in the travel and leisure sector (Krambia-Kapardis & Thomas, 2006; Kwansa, Mayo, & Demirciftci, 2008).

For instance, the hospitality sector has gone through information technology advancements over the past decades (Ip, Leung, & Law, 2011). Hospitality customers demand more technology-intensive services (Gursoy & Swanger, 2007). Hence, through the effective implementation of information and communication technologies in the travel and leisure sector, companies can gain a competitive edge and become more profitable. This will eventually have a positive effect on dividends. Depending on the extent that intangible assets are captured in the balance sheets, the following hypothesis is developed.

H6: There is a positive relationship between asset intangibility and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

The capital intensity captures the magnitude of capital expenditures relative to total assets. The trade-off theory predicts a negative relationship between capital intensity and dividend payout. As pointed out by Karadeniz et al. (2009) and Singal (2015), hospitality and tourism companies have high levels of capital expenditures, especially tangible assets such as land, building, and equipment. Investing intangible assets can increase the operational expenses, especially the fixed costs. High capital intensity may result in lower profitability and hence, affect the dividends adversely. Focusing on the prediction of the trade-off theory and the unique fundamental characteristic of high capital intensity in this financially constrained sector, the following hypothesis is developed.

H7: There is a negative relationship between capital intensity and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

2.2.3 Country-specific determinant

In this section, a country specific determinant, namely the effective dividend tax rate, is discussed and a hypothesis is developed. Following the dividend taxation framework of Elton and Gruber (1970), the effective dividend tax rate combines the effects of personal dividend income and capital gains taxes. This study adopts the methodology adopted by Berk and DeMarzo (2014, pp. 597-598) for calculating this rate. The effective dividend tax rate (T^*) measures “the additional tax paid by the investor per dollar of after-tax capital gains income that is instead received as dividends” (p. 598). Due to the differences in tax systems and rates, the effective dividend tax varies among sample countries (e.g., Sheel, 1998). The higher this tax rate, the more tax disadvantage for distributing cash dividends; and hence, companies refrain from distributing dividends. The following hypothesis is developed.

H8: There is a negative relationship between effective dividend tax rate and dividend payout for companies operating in the travel and leisure sector and its sub-sectors.

Chapter 3

METHODOLOGY

3.1 Data

Sample data are obtained from Thomson Reuters' Worldscope and Datastream databases for the period of 2005-2015. Publicly traded companies in these databases are classified based on the Industry Classification Benchmark (ICB) code, which is a system of classifying sectors that has been used by Thomson Reuters since 2005. Based on the ICB, all publicly traded companies (i.e., an initial sample of 65 companies) operating in the travel and leisure sector within the five Western European countries that are among the top ten country destinations for tourist arrivals are identified: France, Spain, Italy, Germany, and the United Kingdom. As classified by the ICB, these 65 companies are also grouped under six sub-sectors, namely, hotels, gambling, airlines, travel and tourism, restaurants and bars, and recreational services. The data constitute an unbalanced panel data set. Since the currency used in the UK is the British pound and the currency used in the rest of Eurozone sample countries is the euro, all UK company data are converted into euro to avoid any potential currency effects.

3.2 Methodology and model

In the study, the dependent variable is censored at zero. The Ordinary Least Squares (OLS) estimates of coefficients may be inconsistent and biased towards zero (Wooldridge, 2010). Hence, pooled OLS estimation is not appropriate, and panel data Tobit estimation is used (Kim & Maddala, 1992; Kennedy, 2003; Nizar, 2007).

Moreover, the Tobit model is a nonlinear function and the likelihood estimator for fixed effects can be biased and inconsistent (Wooldridge, 2010). By using the likelihood-ratio test, the pooled Tobit model is compared against the random-effects Tobit model, and the appropriate model is presented in the estimation results.

To analyze the dividend payouts of travel and leisure companies, the prominent dividend policy model of Fama and French (2001) is adopted, focusing on the characteristics of publicly traded dividend paying and non-paying companies. Their model incorporates three fundamentals, namely, profitability, size, and investment opportunity. The life-cycle stage is also important factor affecting dividend payout decision (e.g., Grullon, Michaely & Swaminathan, 2002). Appendix A shows the full descriptions of all variables. The financial leverage, the asset intangibility and the capital intensity explanatory variables are the sector specific determinants, and the effective dividend tax rate is the country specific determinant.

For the dependent variable, the traditional dividend payout ratio (DPR), calculated as the ratio of dividends per share over earnings per share, is used. In line with previous studies (e.g., Nizar, 2007; Kim & Jang, 2010), the yearly observations in which companies have negative dividend payout ratios are excluded from the initial sample. For company size (TA), the natural log of total assets is used as a proxy (e.g., Kim, J., Woods, D., & Kim, H., 2013). The natural log corrects for any skewness in the data distribution. Profitability is measured by the return on assets (ROA). Future investment opportunity is proxied by the market-to-book ratio (M/B). The life-cycle stage is proxied by the retained earnings to total equity ratio (RE/E). The leverage ratio is measured by the total liabilities to total assets ratio (LR). Capital intensity is measured by the ratio of capital expenditures to total assets (CI). The asset

intangibility is measured by a dummy variable (IARD). It is equal to one if the ratio of total intangible assets to total assets is above the sector average and it is equal to zero if otherwise.

As defined in hypothesis H8, the effective dividend tax rate (T^*) is calculated as follows (Berk & DeMarzo, 2014, p. 597).

$$T^* = \frac{T_d - T_g}{1 - T_g} \quad (1)$$

T_d is the net personal dividend tax rate and T_g is the top personal capital gains tax rate. Appendix C shows T_d , T_g , T^* and the mean T^* for each sample country over the sample period.

A stock exchange dummy variable (SXD) is used to detect dividend policy differences between the companies listed in the main stock market and those listed in other sub-stock exchange markets. Moreover, unlike the other four European Union (EU) sample countries, the UK is not in the Eurozone and is not located in continental Europe geographically. To control for the Eurozone and geographical location effects, a UK dummy variable (UKD) equal to one if the company is in the UK is used.

To control for the sector-specific effects, dummy variables are used in the model. Six dummies (SSEC) are used for the hotels, gambling, airlines, travel and tourism, restaurants and bars, and recreational services sub-sectors. Finally, ten year dummies (YD) are added to control for the effect of unobserved time-varying factors, such as regulatory changes, business cycles and macroeconomic dynamics that may affect

the dividend payouts. Appendix A shows the full descriptions of variables as defined in the Worldscope and Datastream databases.

The standard panel random-effects Tobit model is as follows.

$$Y_{i,t}^* = \alpha_i + \beta_k X'_{k,i,t} + \varepsilon_{i,t} \quad (2)$$

$Y_{i,t}^*$ is the latent (unobserved) variable; i stands for observations; t presents the time; α_i is the individual-specific random component; β_k are the k parameters that will be estimated; $\varepsilon_{i,t}$ stands for the idiosyncratic error term assumed to have zero mean and constant variance. The latent variable $Y_{i,t}^*$ is left/right censored. $X'_{k,i,t}$ is a k -dimensional vector of explanatory variables.

In line with the standard random-effects Tobit model in Equation (2), the model for the study is as follows.

$$\begin{aligned} \text{DPR}_{i,t} = & \alpha + \beta_1 \text{TA}_{i,t} + \beta_2 \text{ROA}_{i,t} + \beta_3 \text{M/B}_{i,t} + \beta_4 \text{RE/E}_{i,t} + \beta_5 \text{LR}_{i,t} + \beta_6 \text{IARD}_{i,t} + \beta_7 \text{CI}_{i,t} + \\ & \beta_8 \text{EDT}_{i,t} + \beta_9 \text{SXD}_{i,t} + \beta_{10} \text{UKD}_{i,t} + \sum_1^J \gamma_j \text{SSEC}_{j,t} + \sum_1^T \delta_i \text{YD}_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (3)$$

i is the specific company having a range from 1 to 65; and t represents the specific year having a range from 2005 to 2015.

Before estimating the model, the sample data are winsorized at the 1% level. The sample data is winsorized to correct for bias from potential outliers and inflation in measurement errors. The winsorization moderates the effects of extreme values in the estimations and makes the sample data distribution closer to the normal

distribution. Subsequently, it is checked whether the distributions of the dependent and six independent variables are normally distributed. The Shapiro-Wilk normality test is performed on the winsorized data. To cross check for normality, a natural logarithmic transformation of the winsorized data is also performed, and the Shapiro-Wilk normality test is performed on these data. Then, the data that are closest to a normal distribution are accepted as the final variable (i.e., noted in Appendix A).

Chapter 4

EMPIRICAL RESULTS

4.1 Descriptive statistics

Table 1 shows the total number of observations for each year and for each sub-sector during the sample period 2005-2015. In total, the number of company specific observations is 588.

Table 1: Number of observations by year and subsector.

<i>Year</i> <i>Sub-sectors</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
<i>Hotels</i>	9	9	10	10	10	9	10	10	8	10	9	104
<i>Gambling</i>	5	7	10	10	10	10	10	11	10	10	8	101
<i>Airlines</i>	5	6	6	6	5	5	5	8	6	7	8	67
<i>Travel & Tourism</i>	4	7	8	8	8	8	8	8	7	8	7	81
<i>Restaurants & Bar</i>	13	15	14	13	13	15	15	13	13	13	15	152
<i>Recreational Services</i>	4	4	6	8	8	9	9	9	9	9	8	83
<i>Total</i>	40	48	54	55	54	56	57	59	53	57	55	588

Table 2 shows the descriptive statistics for the travel and leisure companies and its six sub-sectors. The table reports the number of observations (N), mean, standard deviation (SD), minimum and maximum values. For the travel and leisure sector

(Panel 1), DPR has a mean value of 0.23, showing that for one unit of currency earned per share, 0.23 currency unit is paid out as dividends. The mean of total assets (TA) is 12.81 with a standard deviation of 2.11, indicating a wide variation in size across companies. The mean ROA is 0.03, revealing that 0.03 units of currency are earned from one unit of currency in total assets. The mean M/B is 0.32, implying that the market does not value the travel and leisure companies at a premium over the book value of its assets. RE/E with mean value 0.25, showing that for one unit of earnings, 0.25 units of currency are kept as retained earnings. LR has a mean value of 58.19%, which indicates that on average, travel and leisure companies rely more on debt financing than equity financing. CI has a mean value of 0.06. The mean IARD is 0.28 with a standard deviation 0.45, indication a wide variance of intangible asset composition across companies.

Among the sub-sectors, the restaurants and bars sub-sector, with a mean value of 0.30, has the highest mean dividend payout ratio, and the airlines industry sub-sector, with a mean value of 0.15, has the lowest. Relative to the mean value of 0.23 for the whole sector (Panel 1), hotels, gambling, and airlines pay out lower, on average (see Panels 2, 3, and 4), whereas the travel and tourism, restaurants and bars, and recreational services sub-sectors pay out higher, on average (see Panels 5, 6, and 7). The recreational services sub-sector has the highest standard deviation in terms of DPR among the six sub-sectors.

As for company size (TA), the airlines sub-sector has the highest mean, whereas the hotels sub-sector has the lowest mean.

In terms of mean profitability (ROA), the restaurants and bars sub-sector is found to be the most profitable sub-sector (0.05, Panel 6), followed by the gambling sub-sector (0.04, Panel 6). The other four sub-sectors, namely, hotels, airlines, travel and tourism, and recreational services, have the same mean profitability of 0.02 (see Panels 2, 5 and 7), lower than the mean value of 0.03 for the sector (Panel 1). The gambling sub-sector has the highest variability (SD) among the six.

In terms of investment opportunity (M/B), recreational services sub-sector has the highest mean followed by restaurants and bars, gambling, travel and tourism, airlines, and hotels sub-sectors in descending order. It should be noted that the sector and its six sub-sectors have mean M/B ratios less than one which indicates that the market does not value favorably.

In terms of the life-cycle stage (RE/E), the mean maturity in the six sub-sectors are ranked in descending maturity order as restaurants and bars (0.41), airlines (0.30), hotels (0.25), gambling (0.17), and recreational services (0.08).

In terms of leverage ratio (LR), the airlines sub-sector has the highest percentage mean value of 73.39%, followed by travel and tourism (62.77%), restaurants and bars (59.90%), recreational services (59.70%), gambling (50.74%) and hotels (47.02%) sub-sectors in descending order. Except for the hotels sub-sector, the other five industries use debt financing more than equity financing.

In terms of capital intensity (CI), the airlines sub-sector has the highest mean value of 0.10 followed by restaurants and bars (0.07), travel and tourism (0.05), recreational services (0.05), gambling (0.04) and hotels (0.04).

In terms of asset intangibility dummy, (IARD), has the highest mean value of 0.74 in the gambling sub-sector followed by recreational services (0.37), travel and tourism (0.31), restaurant and bars (0.15), hotels (0.11), and airlines (0.01) sub-sectors.

The results of the Pearson correlation matrix are shown for both the sector and the sub-sectors in Appendix B. Considering the statistically significant correlations, for the travel and leisure sector, a positive correlation between the dependent variable DPR and the independent variables M/B, TA, and RE/E is found. A negative correlation between DPR and ROA is found.

Table 2: Descriptive statistics

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum</i>	<i>Maximum</i>
<i>Panel 1: Travel & leisure, N (588)</i>				
DPR (Dividend Payout Ratio)	0.23	0.26	0	0.90
TA (Total Assets)	12.81	2.11	8.72	17.14
ROA (Return on Assets)	0.03	0.06	-0.24	0.24
M/B (Market Value to Book Value)	0.32	0.84	-1.69	1.69
RE/E (Retained Earnings to Total Equity)	0.25	0.55	-2.23	1.08
LR (%) (Leverage Ratio)	58.19	18.69	11.05	94.08
CI (Capital Intensity)	0.06	0.07	0	0.39
IARD (Intangibility Asset Dummy)	0.28	0.45	0	1
<i>Panel 2: Hotels, N(104)</i>				
DPR (Dividend Payout Ratio)	0.18	0.22	0	0.90
TA (Total Assets)	12.58	1.90	9.93	15.04
ROA (Return on Assets)	0.02	0.03	-0.07	0.24
M/B (Market value to Book Value)	-0.16	0.67	-1.69	1.38
RE/E (Retained Earnings to Total Equity)	0.25	0.27	-0.24	0.91
LR (%) (Leverage Ratio)	47.02	19.69	11.05	77.25
CI (Capital Intensity)	0.04	0.05	0	0.35
IARD (Intangibility Asset Dummy)	0.11	0.31	0	1
<i>Panel 3: Gambling, N(101)</i>				
DPR (Dividend Payout Ratio)	0.17	0.28	0	0.90
TA (Total Assets)	12.33	1.43	9.72	14.52
ROA (Return on Assets)	0.04	0.10	-0.24	0.24
M/B (Market Value to Book Value)	0.52	0.89	-1.66	2.21
RE/E (Retained Earnings to Total Equity)	0.17	0.65	-2.23	1.04
LR (%) (Leverage Ratio)	50.74	18.33	11.05	92.66
CI (Capital Intensity)	0.04	0.05	0	0.39
IARD (Intangibility Asset Dummy)	0.74	0.44	0	1
<i>Panel 4: Airlines, N(67)</i>				
DPR (Dividend Payout Ratio)	0.15	0.21	0	0.79
TA (Total Assets)	14.65	2.21	9.90	17.14
ROA (Return on Assets)	0.02	0.05	-0.22	0.11
M/B (Market Value to Book Value)	0.11	0.86	-1.69	1.81
RE/E (Retained Earnings to Total Equity)	0.30	0.59	-2.23	1.08
LR (%) (Leverage Ratio)	73.39	10.70	47.87	94.08
CI (Capital Intensity)	0.10	0.08	0	0.39
IARD (Intangibility Asset Dummy)	0.01	0.11	0	1
<i>Panel 5: Travel & tourism, N(81)</i>				
DPR (Dividend Payout Ratio)	0.26	0.28	0	0.89
TA (Total Assets)	12.88	2.16	8.72	16.61
ROA (Return on Assets)	0.02	0.05	-0.17	0.11
M/B (Market Value to Book Value)	0.18	0.69	-1.23	1.92
RE/E (Retained Earnings to Total Equity)	0.22	0.43	-2.23	1.07
LR (%) (Leverage Ratio)	62.77	16.46	13.69	94.08
CI (Capital Intensity)	0.05	0.06	0	0.39
IARD (Intangibility Asset Dummy)	0.31	0.46	0	1
<i>Panel 6: Restaurants & bars, N(152)</i>				
DPR (Dividend Payout Ratio)	0.30	0.24	0	0.88
TA (Total Assets)	13.52	2.20	8.92	15.89
ROA (Return on Assets)	0.05	0.06	-0.24	0.21
M/B (Market Value to Book Value)	0.55	0.81	-1.69	2.21
RE/E (Retained Earnings to Total Equity)	0.41	0.57	-2.23	1.08
LR (%) (Leverage Ratio)	59.90	18.66	11.05	93.92
CI (Capital Intensity)	0.07	0.07	0	0.39
IARD (Intangibility Asset Dummy)	0.15	0.35	0	1
<i>Panel 7: Recreational services, N(83)</i>				
DPR (Dividend Payout Ratio)	0.25	0.31	0	0.90
ROA (Return on Assets)	0.02	0.06	-0.24	0.17
M/B (Market Value to Book Value)	0.57	0.81	-1.17	2.11
RE/E (Retained Earnings to Total Equity)	0.08	0.66	-2.23	0.99
LR (%) (Leverage Ratio)	59.70	13.37	24.02	87.05
CI (Capital Intensity)	0.05	0.07	0	0.39
IARD (Intangibility Asset Dummy)	0.37	0.48	0	1

In the hotels sub-sector, DPR is positively correlated with M/B and ROA. In the gambling sub-sector, DPR was positively correlated with M/B, ROA, TA and RE/E, and negatively correlated with LR. In the airlines sub-sector, DPR is positively correlated with M/B, ROA, TA and RE/E. In the travel and tourism sub-sector DPR was positively correlated with M/B, ROA, TA and LR. Finally, in the restaurants and bars sub-sector, DPR is positively correlated with M/B, ROA, TA and RE/E and negatively correlated with LR. The positive correlation between DPR and ROA in the six sub-sectors contradicts with the negative correlation between DPR and ROA in the sector. As the correlation matrices show, there are no signs of multicollinearity problem.

4.2 Tobit estimation results

4.2.1 The travel and leisure sector

In Table 3, Model 1 shows the Tobit random effects estimation results of Equation (3), which includes the eight company-specific independent variables as well as seventeen dummy variables controlling for sub-sector effects, the stock exchange market, the Eurozone, and year effects. A likelihood ratio (LR) test is performed to compare the pooled Tobit model and the random effects panel Tobit model. The results indicate that the panel-level variance component is important, and the random effects Tobit model is the appropriate one.

The eight company-specific determinants (size: TA; profitability: ROA; investment opportunities: M/B; maturity: RE/E, financial leverage: LR; intangibility ratio: IRAD; capital intensity: CI; and effective dividend tax rate: EDT) have the hypothesized signs in relation to the dividend payout ratio (DPR). TA (z -value of 2.85), ROA (z -value of 3.77), M/B (z -value of 4.52), and IARD (z -value of 2.16)

have statistically significant positive effects, and RE/E (z -value of 1.32) has a positive but statistically insignificant effect. LR (z -value of -3.15) and CI (z -value of -2.35) have statistically significant negative effects on DPR. UKD (z -value of 2.63) has a statistically significant positive effect on DPR, and SXD (z -value of 1.39) has a positive but statistically insignificant effect.

The base (reference) year is chosen as 2005 to avoid the dummy variable trap. Except for the year 2010 dummy, the year dummies are statistically significant. All year dummies have negative signs, indicating that over time, dividend payouts decrease relative to the level in the year 2005. The Wald χ^2 test results (i.e., 109.10) show that the estimated coefficients are jointly statistically significant (see Table 3).

Table 3: Results of the panel data random-effects Tobit estimation methodology.
Travel & Leisure Sector

(Model 1)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.034 (2.85)***	<i>Airlines</i>	-0.129 (-1.63)	<i>2006</i>	-0.078 (-2.24)**
<i>ROA</i>	0.810 (3.77)***	<i>Gambling</i>	-0.346 (-4.47)***	<i>2007</i>	-0.082 (-2.40)**
<i>M/B</i>	0.079 (4.52)***	<i>Hotels</i>	-0.077 (-1.13)	<i>2008</i>	-0.052 (-1.43)
<i>RE/E</i>	0.039 (1.32)	<i>Recreational</i>	-0.058 (-0.82)	<i>2009</i>	-0.114 (-2.83)***
<i>LR</i>	-0.002 (-3.15)***	<i>Restaurants & bars</i>	-0.116 (-1.70)*	<i>2010</i>	-0.109 (-2.54)**
<i>IARD</i>	0.074 (2.16)**			<i>2011</i>	-0.086 (-2.07)**
<i>CI</i>	-0.418 (-2.35)***			<i>2012</i>	-0.089 (-2.11)**
<i>EDT</i>	0.044 (0.66)			<i>2013</i>	-0.139 (-3.30)***
<i>SXD</i>	0.088 (1.39)			<i>2014</i>	-0.138 (-3.36)***
<i>UKD</i>	0.130 (2.63)***			<i>2015</i>	-0.084 (-2.06)**
No of observations			588		
Left censored observations			258		
Wald χ^2			109.10***		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

4.2.2 The sub-sectors

Tobit estimations are run for each sub-sector in Models 2, 3, 4, 5, 6 and 7 and are presented in Table 4, 5, 6, 7, 8 and 9. Except for the hotels sub-sector model (Model 2), the Wald χ^2 test result shows that the estimated coefficients are jointly statistically significant in the models.

4.2.2.1 Hotels

For the hotels sub-sector, the results in Model 2 show that ROA and M/B are statistically significant determinants and positively affect DPR.

4.2.2.2 Gambling

In the gambling industry (Model 3), size (TA) and investment opportunity (M/B) positively and statistically significantly, affect dividend payout. The intangibility ratio (IARD) is statistically significant, but the relationship is negative. UKD is also a positive significant driver of the dividend payout ratio, and UK gambling companies pay out more on average. Except for the year 2008 dummy, all year dummy variables are statistically insignificant. Relative to the base year 2005, it is interesting to note that in the global financial crisis year (2008), gambling sector companies increased their dividend payouts.

Table 4: Results of the panel data random-effects Tobit estimation methodology.
Hotels Sub-sector

(Model 2)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.007 (0.21)	<i>Airlines</i>	–	<i>2006</i>	–0.097 (–1.34)
<i>ROA</i>	1.021 (1.67)*	<i>Gambling</i>	–	<i>2007</i>	–0.056 (–0.66)
<i>M/B</i>	0.082 (1.69)*	<i>Hotels</i>	–	<i>2008</i>	–0.134 (–1.67)*
<i>RE/E</i>	–0.108 (–0.01)	<i>Recreational</i>	–	<i>2009</i>	–0.037 (–0.49)*
<i>LR</i>	–0.001 (–0.58)	<i>Restaurants & bars</i>	–	<i>2010</i>	–0.118 (–1.40)
<i>IARD</i>	–0.054 (–0.83)			<i>2011</i>	–0.045 (–0.55)
<i>CI</i>	–0.208 (–0.53)			<i>2012</i>	–0.055 (–0.67)
<i>EDT</i>	0.129 (0.83)			<i>2013</i>	–0.139 (–1.36)
<i>SXD</i>	0.155 (0.69)			<i>2014</i>	–0.124 (–1.41)
<i>UKD</i>	0.120 (0.70)			<i>2015</i>	–0.085 (–0.96)
No of observations			104		
Left censored observations			51		
Wald χ^2			25.40		
P-value			(0.186)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

Table 5: Results of the panel data random-effects Tobit estimation methodology. Gambling Sub-sector.

(Model 3)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.060 (3.02)***	<i>Airlines</i>	–	<i>2006</i>	–0.083 (–0.77)
<i>ROA</i>	–0.434 (–1.25)	<i>Gambling</i>	–	<i>2007</i>	–0.002 (–0.03)
<i>M/B</i>	0.177 (4.38)***	<i>Hotels</i>	–	<i>2008</i>	0.180 (1.69)*
<i>RE/E</i>	0.031 (0.65)	<i>Recreational</i>	–	<i>2009</i>	0.028 (0.26)
<i>LR</i>	–0.002 (1.44)	<i>Restaurants & bars</i>	–	<i>2010</i>	–0.048 (–0.35)
<i>IARD</i>	–0.129 (–1.66)*			<i>2011</i>	–0.000 (–0.01)
<i>CI</i>	0.043 (0.06)			<i>2012</i>	0.025 (0.23)
<i>EDT</i>	0.209 (0.99)			<i>2013</i>	–0.055 (–0.53)
<i>SXD</i>	0.913 (0.03)			<i>2014</i>	–0.040 (–0.36)
<i>UKD</i>	0.222 (3.70)***			<i>2015</i>	–0.011 (–0.08)
No of observations			101		
Left censored observations			73		
Wald χ^2			50.97		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

4.2.2.3 Airlines

In Model 4, for the airlines sub-sector, the positive, statistically significant determinants are investment opportunity (M/B) and company maturity (RE/E), whereas the negative statistically significant determinant is size (TA). Dividend payout in the airlines industry is also negatively affected by the UKD dummy, which indicates that UK airlines companies pay out less on average. The 2006, 2007, 2009, and 2014 year dummy variables are statistically significant and have negative coefficients. Relative to the base year 2005, airlines companies continually decreased their dividend payouts, and the highest coefficient of -0.25 is observed in 2009, the year following the global financial crisis in 2008.

4.2.2.4 Travel and tourism

In Model 5, considering that travel and tourism sub-sector, the dividend payout ratio is positively affected by size (TA), profitability (ROA), investment opportunity (M/B). The 2012 and 2014 year dummy variables have positive coefficients, indicating higher dividend payouts in these two years relative to the base year 2005. During the sample period, the 2006, 2007, 2008, and 2009 year dummy variables have negative coefficients but are statistically insignificant. Statistically, it is not possible to conclude that the dividend payouts of travel and tourism companies are negatively affected by the global financial crisis.

Table 6: Results of the panel data random-effects Tobit estimation methodology. Airlines Sub-sector.

(Model 4)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	−0.032 (−1.85)*	<i>Airlines</i>	–	<i>2006</i>	−0.135 (−2.21)**
<i>ROA</i>	1.116 (1.21)	<i>Gambling</i>	–	<i>2007</i>	−0.107 (−1.72)*
<i>M/B</i>	0.097 (2.27)**	<i>Hotels</i>	–	<i>2008</i>	−0.031 (−0.42)
<i>RE/E</i>	0.222 (3.30)***	<i>Recreational</i>	–	<i>2009</i>	−0.254 (−2.30)**
<i>LR</i>	−0.006 (−1.64)	<i>Restaurants & bars</i>	–	<i>2010</i>	−0.129 (−1.42)*
<i>IARD</i>	−0.375 (−0.00)			<i>2011</i>	0.054 (0.61)
<i>CI</i>	−0.216 (−0.78)			<i>2012</i>	−0.057 (−0.71)
<i>EDT</i>	0.138 (0.90)			<i>2013</i>	0.006 (0.08)
<i>SXD</i>	−0.047 (−0.070)			<i>2014</i>	−0.168 (−1.84)*
<i>UKD</i>	−0.355 (−2.92)***			<i>2015</i>	−0.099 (−1.18)
No of observations			67		
Left censored observations			34		
Wald χ^2			55.54		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

Table 7: Results of the panel data random-effects Tobit estimation methodology. Travel & Tourism Sub-sector.

(Model 5)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.095 (2.66)***	<i>Airlines</i>	–	<i>2006</i>	–0.165 (–1.45)
<i>ROA</i>	3.443 (3.48)***	<i>Gambling</i>	–	<i>2007</i>	–0.133 (–1.27)
<i>M/B</i>	0.236 (4.04)***	<i>Hotels</i>	–	<i>2008</i>	–0.150 (–1.25)
<i>RE/E</i>	–0.197 (–1.57)	<i>Recreational</i>	–	<i>2009</i>	–0.203 (–1.52)
<i>LR</i>	–0.005 (–1.47)	<i>Restaurants & bars</i>	–	<i>2010</i>	–0.088 (–0.66)
<i>IARD</i>	0.002 (0.03)			<i>2011</i>	–0.082 (–0.58)
<i>CI</i>	–0.202 (–0.26)			<i>2012</i>	0.036 (0.26)
<i>EDT</i>	0.208 (1.19)			<i>2013</i>	–0.019 (–0.14)
<i>SXD</i>	–0.090 (–0.68)			<i>2014</i>	0.076 (0.57)
<i>UKD</i>	0.002 (0.02)			<i>2015</i>	–0.030 (–0.22)
No of observations			81		
Left censored observations			36		
Wald χ^2			46.61		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

4.2.2.5 Restaurants and bars

In the restaurants and bars sub-sector (Model 6), there are two statistically significant positive determinants: investment opportunity (M/B) and maturity (RE/E). Effective dividend tax rate (EDT) has a statistically significant negative effect. Except for the years 2007, all year dummy variables are statistically insignificant.

4.2.2.6 Recreational services

Similarly, in the recreational services sub-sector, the three statistically significant determinants are profitability (ROA) (positive effect) and intangibility ratio (IARD) and capital intensity (CI) (negative effects). Statistically, year effect is only detected in 2014 for this sub-sector and all of the year dummy variables have negative coefficients, indicating that over time, dividend payouts decrease relative to the level in the year 2005.

Table 8: Results of the panel data random-effects Tobit estimation methodology. Restaurant & Bar Sub-sector.

(Model 6)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.027 (0.72)	<i>Airlines</i>	–	<i>2006</i>	–0.056 (–1.07)
<i>ROA</i>	–0.213 (–0.44)	<i>Gambling</i>	–	<i>2007</i>	–0.121 (–2.11)**
<i>M/B</i>	0.061 (1.93)**	<i>Hotels</i>	–	<i>2008</i>	–0.006 (–0.10)
<i>RE/E</i>	0.275 (3.69)***	<i>Recreational</i>	–	<i>2009</i>	0.032 (0.41)
<i>LR</i>	–0.002 (–0.99)	<i>Restaurants & bars</i>	–	<i>2010</i>	0.147 (1.61)
<i>IARD</i>	–0.053 (–0.36)			<i>2011</i>	0.077 (0.96)
<i>CI</i>	–0.100 (–0.26)			<i>2012</i>	0.031 (0.37)
<i>EDT</i>	–0.534 (–3.15)***			<i>2013</i>	–0.019 (–0.25)
<i>SXD</i>	0.114 (0.67)			<i>2014</i>	–0.043 (–0.55)
<i>UKD</i>	0.069 (0.46)			<i>2015</i>	0.021 (0.28)
No of observations			152		
Left censored observations			48		
Wald χ^2			46.01		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity; EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

Table 9: Results of the panel data random-effects Tobit estimation methodology. Recreational Services Sub-sector.

(Model 7)					
DPR					
Independent Variables	Statistics	Sub-sectors	Statistics	Years	Statistics
<i>TA</i>	0.072 (1.56)	<i>Airlines</i>	–	<i>2006</i>	–0.011 (–0.09)
<i>ROA</i>	3.172 (3.09)***	<i>Gambling</i>	–	<i>2007</i>	–0.182 (–1.64)
<i>M/B</i>	–0.079 (–1.48)	<i>Hotels</i>	–	<i>2008</i>	–0.100 (–0.84)
<i>RE/E</i>	0.002 (0.03)	<i>Recreational</i>	–	<i>2009</i>	–0.082 (–0.78)
<i>LR</i>	–0.002 (–0.94)	<i>Restaurants & bars</i>	–	<i>2010</i>	–0.045 (–0.44)
<i>IARD</i>	–0.108 (–1.82)*			<i>2011</i>	–0.028 (–0.28)
<i>CI</i>	–1.101 (–1.89)**			<i>2012</i>	–0.011 (–0.10)
<i>EDT</i>	0.120 (0.73)			<i>2013</i>	–0.170 (–1.52)
<i>SXD</i>	0.979 (0.01)			<i>2014</i>	–0.251 (–2.11)**
<i>UKD</i>	0.186 (1.01)			<i>2015</i>	–0.121 (–1.08)
No of observations			83		
Left censored observations			47		
Wald χ^2			38.02		
P-value			(0.000)		

Notes: Regression coefficients represent the marginal effects on the latent variable y, z statistics are in parentheses. DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, TA (total assets) is a proxy for size, ROA (return on assets) is a proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) a proxy for life-cycle stage, LR (leverage ratio) a proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables, SXD is the stock exchange market dummy variable and UKD is the UK dummy variable. Six dummy variables are defined to control for the sub-sector effects which are represented by SSEC; and year dummies represent a set of 10 years dummy variables (YD) that control for year specific effects from 2006-2015 (i.e., 2005 is the base year). Travel and tourism sub-sector dummy variable used as a reference sub-sector. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

4.3 Comparative analysis: Company-specific determinants

In Table 10, three empirical findings stand out. First, in both the travel and leisure sector and the sub-sectors, there is a statistically positive significant relationship between investment opportunity (M/B) and dividend payout. It has a positive effect on the dividend payout decision except in the recreational services sub-sector (a negative effect). This positive relationship, which is regarded as a puzzle, is unique for companies operating in the travel and leisure sector. Second, the only sub-sector, which is negatively affected by effective dividend tax rate is restaurant and bar sub-sector. Third, on average, UK travel and leisure companies and gambling companies pay out more dividends relative to the companies operating in the four continental Eurozone countries; this result could be due to the fact that UK is market based country, whereas the other four continental Eurozone countries are bank oriented countries.

Table 10: Comparative estimation results: sector and sub-sectors.

<i>Explanatory variables</i>										
<i>Sector & sub-sectors</i>	<i>TA</i>	<i>ROA</i>	<i>M/B</i>	<i>RE/E</i>	<i>LR</i>	<i>IARD</i>	<i>CI</i>	<i>EDT</i>	<i>SXD</i>	<i>UKD</i>
<i>Travel & Leisure</i>	+	+	+	+	—	+	—	+	+	+
<i>Hotels</i>	+	+	+	—	—	—	—	+	+	+
<i>Gambling</i>	+	—	+	+	+	—	+	+	+	+
<i>Airlines</i>	—	+	+	+	—	—	—	+	—	—
<i>Travel & tourism</i>	+	+	+	—	—	+	—	+	—	+
<i>Restaurants & bars</i>	+	—	+	+	—	—	—	—	+	+
<i>Recreational Services</i>	+	+	—	+	—	—	—	+	+	+

Notes: TA (total assets) proxy for size, ROA (return on assets) proxy for profitability, M/B (ratio of market value to book value) present a proxy for investment opportunity, RE/E (return earnings to total equity) proxy for life-cycle stage, LR (leverage ratio) proxy for debt ratio, CI (capital expenditures to total assets) proxy for capital intensity, EDT (effective dividend tax rate), IARD is the intangibility asset ratio dummy variables. SXD stock exchange market dummy variable, UKD represent UK dummy variable. ***, ** and * represent statistical significance at 1%, 5% and 10% levels respectively.

4.3.1 Size

Overall, a positive effect is found in all instances except for the airlines sub-sector (see Table 10). The positive, statistically significant effect on the travel and leisure sector and in the gambling and travel and tourism sub-sectors supports hypothesis **H4**. Larger companies (i.e., less volatile and more mature) have a higher dividend payout ratio (e.g., Obembe et al., 2014).

Considering the characteristics of the companies in the sample, the gambling and travel and tourism sub-sectors are more dependent on intangible assets (i.e., service oriented). In particular, the gambling sub-sector in the sample is mainly composed of information technology-focused and service-oriented companies (i.e., online gambling). The larger the company of these two sub-sectors are, the less volatile and

more mature they become. In Table 2, gambling and travel and leisure companies have the lowest mean total assets. Although size has a positive effect, it is not statistically significant in the hotels, restaurants and bars, and recreational services sub-sectors.

For airlines, a highly tangible asset intensive sub-sector, a statistically significant negative effect on the dividend payout ratio is found, and the sign is inconsistent with the proposed hypothesis. As shown in Table 2, airlines sub-sector has the highest mean TA and CI, and the lowest mean IARD and ROA. However, airlines are a highly competitive and cyclical sub-sector characterized by low profit margins and high fixed costs (e.g., Keynes, 2009). Hence, larger airlines companies may suffer more from cyclicity, lower profit margins and higher fixed costs. In other words, larger size does not mean less volatility and more maturity for this sub-sector.

4.3.2 Profitability

In Table 10, the results for the travel and leisure sector, as well as the airlines, travel and tourism and recreational services sub-sectors, show a positive significant effect of profitability on dividend payout. The positive effect is in line with both hypothesis **H1** and the results of Fama & French (2001), Labhane et al. (2015), Moon et al. (2015) and Khan & Nawaz (2017). The results support pecking order theory and free cash flow theory. Among the determinants, ROA coefficients are the highest ones and hence, profitability has the highest effect on dividend payouts. However, profitability is not a statistically significant determinant of dividend payout in the hotels (+), gambling (-), and restaurants and bars (+) sub-sectors. Similarly, Chen and Steiner (1999) and Ooi (2001) find no significant relationship between profitability and dividends.

4.3.3 Investment opportunity

The results for the travel and leisure sector, as well as the hotels, gambling, airlines, travel and tourism, and restaurants and bars sub-sectors, show a positive, statistically significant coefficient for the investment opportunity proxy as Moon et al (2015) found in airlines. The positive sign is inconsistent with the hypothesized relationship (**H2**) and does not support pecking order theory or free cash flow theory. Alternatively, the positive sign may indicate that companies with more investment opportunities are more profitable and have better earnings prospects, which result in higher dividend payouts. Moon et al. (2015) and Kim and Jang (2010) find a similar positive relationship for the airlines and lodging subs-sectors respectively. Kim and Jang (2010) characterize this finding as an “anomaly.” The result of this study supports this positive relationship. Kim and Jang (2010) posit some explanations for this puzzling relationship, and in the following paragraphs, these explanations are extended.

First, the substitute agency model of dividends states that dividend policy can be used as a substitute mechanism to build a reputation in order to alleviate the agency and the expropriation concerns of shareholders, and to treat them well. Having a good reputation in the capital markets eventually leads to cheaper external financing for the investment opportunities (La Porta et al., 2000). This could be an explanation for this positive relationship in the financially constrained travel and leisure sector.

Second, Kim and Jang (2010) argue that within the framework of the pecking order model, lodging companies may follow a different financial hierarchy, and may prefer debt and equity financing. The positive relationship could be due to this difference in the financing hierarchy. Kim and Jang state that some travel and leisure sector

studies provide “indirect” support by finding a positive relationship between long-term debt financing and investment opportunities (e.g., Dalbor & Upneja, 2004; Tang & Jang, 2007; Karadeniz et al., 2009).

Several studies show that the traditional capital structure theories, namely the trade-off model and the pecking order model, fail to explain the financing decisions of lodging companies (e.g., Dalbor & Upneja, 2004; Tang & Jang, 2007; Karadeniz et al., 2009). Especially, Upneja and Dalbor (2001) state that the determinants proposed by the traditional capital structure theories do not explain the financing decisions of lodging companies. In the pioneering study, Sheel (1994) compares the capital structures of the hotel and manufacturing sectors, and focuses on the “conventional” determinants developed in the traditional capital structure theories such as “...the non-debt tax shields, firm size, collateral assets, past profitability, and earnings volatility” (p. 4). He finds differences in the short-term and long-term financing behavior of the two sectors. Specifically, in the hotel sector, short-term financing is determined by past profitability and collaterals whereas the long-term debt financing is determined by the debt tax shields. Sheel (1994) also finds “...a stronger dominance of pecking order in the short-term debt behavior of manufacturing firms relative to hotel firms” (p. 11).

Kizildag (2015) tries to explain the variability in the capital structures of hotel and lodging, retail, restaurant industry, airline and air transportation sub-sectors. He finds that the variations within each sub-sector are dependent on the market capitalizations of companies. Overall, the capital structure of travel and leisure sector companies is more puzzling than the capital structures of companies in other non-financial sectors; and the financing for investment opportunities is vital.

For the recreational services sub-sector, the sign is negative and statistically significant. This result supports hypothesis **H2** for this sub-sector. In Table 2, the recreational services sub-sector has the highest mean market-to-book ratio, indicating ample investments opportunities. High investment opportunities indicate more need for funding; hence, the negative sign is in line with the predictions of pecking order theory and free cash flow theory.

4.3.4 Maturity

For the whole travel and leisure sector, the sign is positive but is not statistically significant. The sign of maturity proxy (RE/E) is positive and is statistically significant for the airlines and restaurants and bars sub-sectors. As shown in Table 2, the restaurants and bars and airlines sub-sectors have the highest mean retained earnings-to-earnings ratio. Both sub-sectors are highly asset intensive (i.e., ranked as the top two in term of total assets in Table 2), highly cyclical, and highly competitive (e.g., Keynes, 2009; Kim et al., 2013).

This positive relationship is consistent with hypothesis **H3** and the findings of numerous studies (e.g., Fama & French, 2001; DeAngelo, et al., 2006; Denis & Osobov, 2008; and Moon et al., 2015). The positive relationship supports life-cycle theory, free cash flow theory and agency theory.

The travel and tourism sub-sector is an exception, having a statistically significant negative sign and the second lowest mean retained earnings-to-earnings ratio. This sub-sector is a highly intangible asset intensive with relatively low investment costs. Companies in this sub-sector can still afford to pay out cash dividends without the need to accumulate retained earnings for low investment costs.

4.3.5 Leverage

The leverage ratio (LR) has a statistically significant negative sign in the travel and leisure sector. In terms of sub-sectors, a statistically negative effect is also found in the airlines sub-sector consistent with the result of Moon et al. (2015), which is a highly tangible asset intensive and leveraged sub-sector (i.e., ranked first in terms of mean total assets and leverage in Table 2). Although this sub-sector is highly asset intensive, its high leverage decreases its borrowing capacity and increases its financial distress costs. Overall, these results are consistent with hypothesis **H5** and support tradeoff theory, which states that highly leveraged companies pay less dividends because of the costs of financial distress. A negative, yet not statistically significant, effect is found in the rest of the sub-sectors except gambling sub-sector.

Relative to the coefficients of other explanatory variables, LR seems to have the lowest impact on dividend payouts. This is not the case since this relatively small coefficient results from the fact that for LR, non-decimalized numbers are used in the estimations (i.e., see the mean values for leverage in Table 2). Hence, companies that have higher leverage are less likely to pay out dividends because of high external financing costs and financial distress costs (i.e., the trade-off theory).

4.3.6 Asset intangibility

The asset intangibility ratio dummy variable (IARD) has a positive effect on dividend payout in the travel and leisure sector and supports the hypothesis H8. However, a negative sign is found in both gambling and recreational services sub-sectors. For instance, gambling companies are becoming more service and technology oriented; and internet gambling is growing swiftly (e.g., Griffiths & Parke, 2002, 2004). Therefore, the need for continuous and up-to-date intangible asset expenditures is high, and can adversely affect dividends in these sub-sectors.

This also holds for the recreational services sub-sector that consists of leisure, sport activities, fitness, and live entertainment. These two sub-sectors are ranked in the top two in terms of having an intangible asset ratio higher than the sector average (see Table 2).

4.3.7 Capital intensity

The capital intensity ratio (CI) has a statistically significant negative sign in the travel and leisure sector and in the recreational services sub-sector. The negative sign supports the hypothesis H7. Singal (2015) shows that hospitality and tourism companies have higher capital intensity compared to other U.S. industries. They need high amount of capital for capital expenditures and are confronted with high fixed costs at both operating and investment stages.

Recreational services sub-sector also has a negative sign for CI. In the financial analysis of entertainment sub-sector, Vogel (2014) finds that capital is the most important supply for this sub-sector. For competing effectively, these companies spend considerable time and capital to acquire the technical knowledge, experience and human capital. Such high dependency on capital can hinder the dividend payments.

4.3.8 Effective dividend tax rate

The effective dividend tax rate (EDT) only affects the dividend payouts in the restaurants and bars sub-sector, and has a negative sign supporting the hypothesis H8. Empirical evidence suggests that a firm's dividend policy tends to attract different groups of investors (i.e., different clienteles), depending on how these investors wish to receive their total rate of return in the company's stock. It seems that there is a tax-preference of investors group in the restaurants and bars

companies, and they may not prefer to receive dividends due to higher tax rate position. However, this argument needs further empirical research.

4.3.9 Stock market and geographical location effects

The stock market dummy variable (SXD) differentiates companies listed in the main stock market from those listed in other sub-stock exchange markets. However, it is not found to be a statistically significant determinant of dividend payouts for the sector or its sub-sectors.

The UKD dummy variable has an effect on dividend payout for companies operating in the travel and leisure sector as well as the gambling and airlines sub-sectors. Except for the airlines sub-sector, the UK companies operating in the travel and leisure sector and the gambling sub-sector pay out more dividends relative to their counterparts operating in the four Eurozone countries. This relationship holds even after controlling for country specific effective dividend tax rates.

4.3.10 Year-specific effects

For the travel and leisure sector, dividend payouts are affected by year-specific effects. Relative to the base year 2005, travel and leisure companies continually decreased their dividend payouts over the sample period. Specifically, the negative effect became stronger during the post-global financial crisis period between 2009 and 2015. In terms of sub-sectors, the airlines sub-sector is the one whose dividend payouts were the most affected by year-specific effects, such as the global financial crisis.

Chapter 5

CONCLUSION

This study investigates the determinants of dividend payout in the travel and leisure sector and its six main sub-sectors in Western Europe. The hypotheses are developed focusing on the pecking order, free cash flow, trade-off and life-cycle theories of dividend policy. The results of the random-effects Tobit estimation methodology show that, in general, the dividend payouts of travel and leisure companies are positively affected by company size, profitability, investment opportunities and asset intangibility, whereas the leverage ratio and capital intensity deter dividend payout.

The unique fundamental characteristics of hospitality and tourism sector (e.g., Sheel, 1998; Karadeniz et al., 2009; Singal, 2015) provide an opportunity to investigate the determinants of dividend payout in the travel and leisure sector and its sub-sectors. In addition to traditional determinants established in the literature, this study captures sector and country specific determinants by focusing on the unique fundamental characteristics of this sector. The results for the traditional determinants such as profitability, maturity, and size are in line with the findings in other non-financial sectors. Among all traditional determinants, profitability has the highest effect on dividend payouts. The unusual finding is the positive effect on investment opportunities, another traditional determinant. In the literature for other non-financial sectors, empirical evidence favors a negative relationship. Further research is needed

to explain this unique positive relationship in the travel and leisure sector and should not be regarded as a puzzle in the literature.

Sector, sub-sector and country specific determinants are the key contributions of this study. These include the financial constraints, the asset intangibility, the capital intensity and the effective dividend taxation. In the financially constrained travel and leisure sector, leverage has a negative effect on dividend payout. The study also finds that dividend payout in the sector is positively affected by the magnitude of asset intangibility and provides indirect empirical evidence for the importance of intangible assets in this sector. Such assets can create a competitive edge and increase profitability in the sector.

Furthermore, this study shows that dividend payouts are negatively affected by the magnitude of capital intensity in the sector and in the recreational services sub-sector. This is an expected relationship as Singal (2015) shows that hospitality and tourism sector is highly capital intensive relative to other sectors. In terms of country specific effect, the effective dividend tax rate that captures the combined effects of personal dividend income and capital gains taxes is included in the model. The only sub-sector whose dividend payouts are negatively affected by the effective dividend tax is the restaurants and bars sub-sector. This sub-sector is the most profitable one among the sub-sectors and has the highest mean dividend payout ratio. Even after controlling for tax and currency effects across the sample countries, companies operating in the U.K. pay out more relative to their counterparts in the continental Western Europe.

The dividend payout policy is one of the key decisions for financial managers and provides information to investors about the company's future performance and equity valuation. The empirical findings of this study can provide financial managers with a clear understanding of the traditional and unique determinants of dividend payouts for companies in the travel and leisure sector as well as for the companies that operate in the specific sub-sectors. Investors can also use both the traditional and the unique determinants as the key factors in their fundamental analysis and invest accordingly. Clearly, travel and leisure sector are fundamentally different than other sectors. Particularly, managers and investors should consider the unique findings for investment opportunities, asset intangibility and capital intensity as determinants as well as the differences in the determinants among the sub-sectors. Academically, the study provides indirect empirical evidence for the validity of the trade-off, the pecking-order, the free cash flow and the agency theories in this sector. However, further direct empirical tests are needed.

REFERENCES

- Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets. *Studies in Economics and Finance*, 27(3), 180-194.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from US firms? *Journal of Financial research*, 26(3), 371-387.
- Allen, F., Michaely, R., 1995. Dividend policy. In: Jarrow, R., Maksimovic, V., Ziemba, W. (Eds.), *Handbooks in operations research and management Science: Finance*, 793-838. North Holland, Amsterdam.
- Berk, J., & DeMarzo, P. (3rd Global Ed.). (2014). *Corporate Finance*. Harlow: Pearson Education.
- Bulan, L. T., & Subramanian, N. (2009). The firm life cycle theory of dividends. In: Baker, H. K. (Ed.), *Dividends and Dividend Policy*, John Wiley and Sons, Inc., Hoboken, NJ, 201–214.
- Canina, L., Advani, R., Greenman, A., & Palimeri, I. (2001). Dividend policy in the lodging industry. *Journal of Hospitality & Tourism Research*, 25(1), 69-89.

- Chen, C. R., & Steiner, T. L. (1999). Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. *Financial Review*, 34(1), 119-136.
- Dalbor, M. C., & Upneja, A. (2004). The investment opportunity set and the long-term debt decision of US lodging firms. *Journal of Hospitality & Tourism Research*, 28(3), 346-355.
- Dalbor, M. C., & Upneja, A. (2007). An examination of dividend policy in the US restaurant industry. *Journal of Foodservice Business Research*, 10(2), 83-91.
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics*, 81(2), 227-254.
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89(1), 62-82.
- Dewally, M., Shao, Y., & Singer, D. (2013). The liquidity crisis: Evidence from the US hospitality industry. *Tourism Economics*, 19(3), 545-563.
- E. Elton & M. Gruber (1970). Marginal stock holders tax rates and the clientele effect. *Review of Economics and Statistics*, 52, 68-74.

- Easterbrook, F. H. (1984). Two agency-cost explanations of dividends. *The American Economic Review*, 74(4), 650-659.
- Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60(1), 3-43.
- Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *The Review of Financial Studies*, 15(1), 1-33.
- Griffiths, M. D., & Parke, J. (2002). The social impact of internet gambling. *Social Science Computer Review*, 20(3), 312-320.
- Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity? *The Journal of Business*, 75(3), 387-424.
- Gursoy, D., & Swanger, N. (2007). Performance-enhancing internal strategic factors and competencies: Impacts on financial success. *International Journal of Hospitality Management*, 26(1), 213-227.
- Holthausen, R. W., & Watts, R. L. (2001). The relevance of the value-relevance literature for financial accounting standard setting. *Journal of Accounting and Economics*, 31(1-3), 3-75.
- Hubbard, R. G. (1998). Capital-market imperfections and investment. *National Bureau of Economic Research*, (No. w5996).

- Ip, C., Leung, R., & Law, R. (2011). Progress and development of information and communication technologies in hospitality. *International Journal of Contemporary Hospitality Management*, 23(4), 533-551.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323-329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Karadeniz, E., Yilmaz Kandir, S., Balcilar, M., & Beyazit Onal, Y. (2009). Determinants of capital structure: Evidence from Turkish lodging companies. *International Journal of Contemporary Hospitality Management*, 21(5), 594-609.
- Kennedy, P. (5th Ed.). (2003). *A Guide to Econometrics*. MIT press, Cambridge, MA.
- Keynes, J. (2009). Characteristics of the Airline Industry. In A. Cento (Ed.), *The Airline Industry: Challenges in the 21st Century*, 13-44. Berlin: Springer-Verlag.
- Khan, F. A., & Nawaz, A. (2017). Determinants of dividend pay-out: An empirical study of pharmaceutical companies of Pakistan stock exchange (PSX). *Journal of Financial Studies & Research*.

- Kim, B. S., & Maddala, G. S. (1992). Estimation and specification analysis of models of dividend behavior based on censored panel data. *Empirical Economics*, 17(1), 111-124.
- Kim, H., & Gu, Z. (2009). Financial features of dividend-paying firms in the hospitality industry: A logistic regression analysis. *International Journal of Hospitality Management*, 28(3), 359-366.
- Kim, J., & Jang, S. S. (2010). Dividend behavior of lodging firms: Heckman's two-step approach. *International Journal of Hospitality Management*, 29(3), 413-420.
- Kim, J., Woods, D., & Kim, H. (2013). Identifying the financial characteristics of cash-rich and cash-poor restaurant firms: A logistic regression analysis. *Tourism Economics*, 19(3), 583-598.
- Kizildag, M. (2015). Financial leverage phenomenon in hospitality industry sub-sector portfolios. *International Journal of Contemporary Hospitality Management*, 27(8), 1949-1978.
- Krambia- Kapardis, M. & Thomas, A. (2006). Hospitality industry in Cyprus: The significance of intangibles, *International Journal of Contemporary Hospitality Management*, 18(1), 6-24.

- Kwansa, F. A., Mayo, C., & Demirciftci, T. (2008). The importance of intangible assets: Trends and patterns. In M. Olsen & J. Zhao (Eds.), *Handbook of hospitality strategic management*, 181-202.
- La Porta, R., Lopez- de- Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1-33.
- Labhane, N. B., & Das, R. C. (2015). Determinants of dividend payout ratio: evidence from Indian companies. *Business and Economic Research*, 5(2), 217-241.
- Lev, B. (2001). *Intangibles: Management, measurement, and reporting*. Washington, DC: Brookings Institution Press.
- Meggison, W. L. (1st Ed.). (1997). *Corporate Finance Theory*. Reading, Mass.: Addison-Wesley.
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411-433.
- Moon, J., Lee, W. S., & Dattilo, J. (2015). Determinants of the payout decision in the airline industry. *Journal of Air Transport Management*, 42, 282-288.
- Mueller, D. C. (1972). A life cycle theory of the firm. *The Journal of Industrial Economics*, 199-219.

- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 574-592.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
- Nakamura, L. I. (2001). Investing in intangibles: Is a trillion dollars missing from the GDP? *Business Review*, Federal Reserve Bank of Philadelphia, Q4, 27-36.
- Obembe, O., Imafidon, J., & Adegboye, A. (2014). Product market competition and dividend payouts of listed non-financial firms in Nigeria. *International Journal of Economics and Finance*, 6(11), 117.
- Ooi, J. (2001). Dividend payout characteristics of UK property companies. *Journal of Real Estate Portfolio Management*, 7(2), 133-142.
- Parke, A., & Griffiths, M. (2004). Why Internet gambling prohibition will ultimately fail. *Gaming Law Review*, 8(5), 295-299.
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*, 5(3), 249-259.

- Sheel, A. (1994). Determinants of capital structure choice and empirics on leverage behavior: A comparative analysis of hotel and manufacturing firms. *Hospitality Research Journal*, 17(3), 1-16.
- Sheel, A. (1998). The relationship between dividend yields and common equity returns for hotel and lodging firms in the United Kingdom, the United States, and Japan: some empirical evidence. *Journal of Hospitality & Tourism Research*, 22(1), 84-97.
- Shleifer, A., & Vishny, R. W. (1992). Liquidation values and debt capacity: A market equilibrium approach. *The Journal of Finance*, 47(4), 1343-1366.
- Singal, M. (2015). How is the hospitality and tourism industry different? An empirical test of some structural characteristics. *International Journal of Hospitality Management*, 47, 116-119.
- Tang, C. H. H., & Jang, S. S. (2007). Revisit to the determinants of capital structure: a comparison between lodging firms and software firms. *International Journal of Hospitality Management*, 26(1), 175-187.
- Upneja, A., & Dalbor, M. C. (2001). An examination of capital structure in the restaurant industry. *International Journal of Contemporary Hospitality Management*, 13(2), 54-59.
- Vogel, H. L. (9th Ed.). (2014). *Entertainment industry economics: A guide for financial analysis*. New York and Cambridge: Cambridge University Press.

Williamson, O. E. (1988). Corporate finance and corporate governance. *Journal of Finance*, 43, 567-592.

Wooldridge, J. M. (2nd Ed.). (2010). *Econometric Analysis of Cross Section and Panel Data*, Volume 1 of MIT Press Books. The MIT Press.

World Tourism Organization, Tourism Market Trends UNWTO. (06 Nov 2017). *UNWTO Tourism Highlights* (Ed., 2017). Retrieved from <http://mkt.unwto.org/publication/unwto-tourism-highlights>.

APPENDICES

Appendix A: Variable Descriptions

<i>DPR</i>	Dividend payout ratio. Ratio of dividends per share to earnings per share. <i>Winsorized</i> DPR used in the model.
<i>TA</i>	Total assets. Natural logarithm of <i>winsorized</i> TA used in the model.
<i>ROA</i>	Return on assets. Percentage of (net income + ((interest expense on debt – interest capitalized)*(1- tax rate))) to average of last years and current year total assets. <i>Winsorized</i> ROA used in the model.
<i>M/B</i>	Market value of company to common equity. Natural logarithm of <i>winsorized</i> M/B ratio used in the model.
<i>RE/E</i>	Ratio of retained earnings to total equity. <i>Winsorized</i> RE/E ratio used in the model.
<i>LR</i>	Leverage ratio. Percentage of total liabilities to total assets. <i>Winsorized</i> LR used in the model.
<i>IARD</i>	Intangibility asset ratio dummy variable. The intangibility asset ratio is equal to total intangible assets divided by total assets. The dummy variable is equal to “1” if the intangibility asset ratio is higher than sector mean and is “0” if otherwise.
<i>CI</i>	Capital intensity. Ratio of capital expenditures to total assets <i>Winsorized</i> CI ratio used in the model.
<i>EDT</i>	Effective dividend tax rate (T*).

	$T^* = (T_d - T_g)/(1 - T_g)$
	T_d: The net personal dividend tax rate T_g: The top personal capital gains tax rate
	Stock exchange dummy variable.
<i>SXD</i>	To differentiate between the companies listed in the main stock market and the ones listed in other sub-stock exchange markets. It is equal to “1” if the company listed in the main stock market and “0” if otherwise.
<i>UKD</i>	United Kingdom dummy variable. It is equal to “1” if the company is in the UK and “0” if otherwise.
	Sub-sector dummy variables.
<i>SSEC</i>	Six dummy variables for hotels, gambling, airlines, restaurants and bars, travel and tourism and recreational services industries defined. It is equal to “1” for each respective sub-sector and “0” if otherwise.
<i>YD</i>	Year dummies. A set of 10 dummy variable that control for year specific effects from 2005-2015.

Appendix B: Pearson Correlation Matrix

<i>Travel & Leisure</i>	<i>M/B</i>	<i>TA</i>	<i>ROA</i>	<i>CI</i>	<i>LR</i>	<i>RE/E</i>	<i>DPR</i>	<i>SXD</i>	<i>UKD</i>
<i>M/B</i>	1.00								
<i>TA</i>	−0.16*	1.00							
<i>ROA</i>	0.33*	0.13*	1.00						
<i>CI</i>	0.08	0.00	−0.09	1.00					
<i>LR</i>	0.00	0.53*	−0.07	−0.08	1.00				
<i>RE/E</i>	0.13*	0.22*	0.46*	−0.12	0.01	1.00			
<i>DPR</i>	0.30*	0.15*	−0.40*	−0.10	−0.02	0.29*	1.00		
<i>SXD</i>	−0.01	0.45*	0.10*	−0.21	0.31*	0.01	0.15*	1.00	
<i>UKD</i>	0.16*	0.06	0.27*	0.06	−0.11*	0.23*	0.26*	−0.31*	1.00
<i>Hotels</i>									
<i>M/B</i>	1.00								
<i>TA</i>	0.09	1.00							
<i>ROA</i>	0.22*	0.04	1.00						
<i>CI</i>	−0.01	−0.07	0.26	1.00					
<i>LR</i>	−0.03	0.52*	0.09	0.22	1.00				
<i>RE/E</i>	−0.01	0.15	0.15	−0.05	0.15	1.00			
<i>DPR</i>	0.33*	−0.05	0.26*	−0.07	−0.16	−0.09	1.00		
<i>SXD</i>	0.39*	0.50*	0.09	0.02	0.14*	0.00	0.08	1.00	
<i>UKD</i>	−0.38*	−0.15	−0.00	−0.08	−0.51*	0.11	0.04	−0.75*	1.00
<i>Gambling</i>									
<i>M/B</i>	1.00								
<i>TA</i>	−0.03	1.00							
<i>ROA</i>	0.38*	0.31*	1.00						
<i>CI</i>	−0.09	−0.26	−0.32	1.00					
<i>LR</i>	−0.07	0.34*	−0.28*	−0.01	1.00				
<i>RE/E</i>	0.22*	0.26*	0.64*	−0.43	−0.23*	1.00			
<i>DPR</i>	0.44*	0.34*	0.47*	−0.13	−0.09	0.35*	1.00		
<i>SXD</i>	−0.29*	0.45*	0.12	0.05	0.19*	−0.16	0.19*	1.00	
<i>UKD</i>	0.45*	0.16	0.41*	−0.25	−0.18	0.49*	0.50*	−0.30*	1.00
<i>Airlines</i>									
<i>M/B</i>	1.00								
<i>TA</i>	−0.47*	1.00							
<i>ROA</i>	0.55*	−0.17	1.00						
<i>CI</i>	0.04	−0.13	0.19	1.00					
<i>LR</i>	−0.43*	0.18	−0.62*	−0.28	1.00				
<i>RE/E</i>	0.05	−0.26*	0.29*	0.10	−0.24*	1.00			
<i>DPR</i>	0.50*	0.32*	0.48*	−0.15	−0.30*	0.33*	1.00		
<i>SXD</i>	−0.05	0.35*	−0.18	−0.46	0.05	−0.36*	0.04	1.00	
<i>UKD</i>	0.53*	−0.76*	0.36*	0.20	−0.56*	0.38*	0.25*	−0.43*	1.00

Pearson Correlation Matrix (*continued*)

<i>Travel & tourism</i>	<i>M/B</i>	<i>TA</i>	<i>ROA</i>	<i>CI</i>	<i>LR</i>	<i>RE/E</i>	<i>DPR</i>	<i>SXD</i>	<i>UKD</i>
<i>M/B</i>	1.00								
<i>TA</i>	0.10	1.00							
<i>ROA</i>	0.23*	0.11	1.00						
<i>CI</i>	-0.04	-0.00	-0.03	1.00					
<i>LR</i>	0.38*	0.72*	0.15	0.10	1.00				
<i>RE/E</i>	-0.16	0.35*	0.19	-0.02	0.14	1.00			
<i>DPR</i>	0.58*	0.24*	0.41*	-0.08	0.29*	0.06	1.00		
<i>SXD</i>	0.18	0.32*	0.15	-0.05	0.03	0.44*	0.17	1.00	
<i>UKD</i>	0.19	0.19	0.26*	-0.04	0.29*	-0.00	0.33*	-0.18	1.00
<i>Restaurants & bars</i>									
<i>M/B</i>	1.00								
<i>TA</i>	-0.17*	1.00							
<i>ROA</i>	0.32*	0.25*	1.00						
<i>CI</i>	0.30	-0.43	-0.21	1.00					
<i>LR</i>	-0.10	0.76*	0.19*	-0.55	1.00				
<i>RE/E</i>	0.19*	0.40*	0.53*	-0.31	0.25*	1.00			
<i>DPR</i>	0.31*	0.25*	0.39*	-0.17	0.12	0.53*	1.00		
<i>SXD</i>	-0.04	0.89*	0.29*	-0.42	0.73*	0.32*	0.26*	1.00	
<i>UKD</i>	-0.24*	-0.19*	0.03	0.02	-0.29	-0.07	-0.02	-0.17*	1.00
<i>Recreational services</i>									
<i>M/B</i>	1.00								
<i>TA</i>	-0.68*	1.00							
<i>ROA</i>	0.16	0.00	1.00						
<i>CI</i>	-0.10	0.19	-0.08	1.00					
<i>LR</i>	0.12	-0.28*	-0.29*	-0.00	1.00				
<i>RE/E</i>	0.29*	-0.08	0.38*	0.03	-0.34*	1.00			
<i>DPR</i>	-0.28*	0.44*	0.42*	-0.08	-0.40*	0.16	1.00		
<i>SXD</i>	-0.40*	0.30*	-0.02	0.17	0.10	-0.35*	0.26*	1.00	
<i>UKD</i>	0.61	0.35*	0.27*	0.03	-0.03	-0.03	0.40*	0.10	1.00

Notes: The correlation matrix (a) and (b) tables show the correlations between dividend payout ratio and firm financial characteristics as well as correlations among the firm financial characteristics for the whole travel and leisure companies and sub-sectors. As M/B (ratio of market value to book value) present a proxy for investment opportunity, TA (total assets) is a proxy for size ROA (return on assets) is a proxy for profitability, CI(capital intensity) a proxy for asset intensity, LR (leverage ratio) a proxy for debt ratio, RE/E (return earnings to total equity) a proxy for life-cycle stage, DPR represent dividend payout ratio and calculated as dividends per share to earnings per share, SXD present stock exchange market dummy variable and UKD present UK dummy variable. * Statistically significant at least 5% level.

Appendix C: Effective dividend tax rate for sample countries

Country	Tax	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
France	T_g	0.26	0.27	0.27	0.29	0.30	0.30	0.31	0.32	0.32	0.38	0.34
	T_d	0.32	0.32	0.32	0.29	0.30	0.30	0.35	0.385	0.44	0.44	0.44
	T^*	0.08	0.07	0.07	0.00	0.00	-0.00	0.05	0.08	0.17	0.09	0.14
Spain	T_g	0.45	0.18	0.18	0.18	0.18	0.21	0.21	0.27	0.27	0.27	0.27
	T_d	0.23	0.23	0.18	0.18	0.18	0.19	0.19	0.27	0.27	0.27	0.23
	T^*	-0.40	0.06	0.00	0.00	0.00	-0.02	-0.02	0.00	0.00	0.00	-0.04
Italy	T_g	0.45	0.43	0.44	0.44	0.44	0.45	0.44	0.20	0.20	0.20	0.26
	T_d	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.20	0.20	0.20	0.26
	T^*	-0.59	-0.53	-0.58	-0.58	-0.58	-0.59	-0.57	0.00	0.00	0.00	0.00
Germany	T_g	0.47	0.42	0.43	0.43	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	T_d	0.22	0.22	0.23	0.263	0.26	0.26	0.26	0.26	0.26	0.26	0.26
	T^*	-0.48	-0.35	-0.35	-0.31	0.01	0.01	0.01	0.01	0.01	0.01	0.01
UK	T_g	0.40	0.40	0.40	0.18	0.18	0.18	0.28	0.28	0.28	0.28	0.28
	T_d	0.25	0.25	0.25	0.25	0.25	0.36	0.36	0.36	0.30	0.30	0.30
	T^*	-0.25	-0.25	-0.25	0.08	0.08	0.22	0.11	0.11	0.03	0.03	0.03

Notes: T^* : Effective dividend tax rate T_d : The net personal dividend tax rate, T_g : The top personal capital gains tax rate. Sources: The net personal dividend tax rates are obtained from http://stats.oecd.org/index.aspx?DataSetCode=TABLE_II4. The top personal capital gains tax rates are obtained from several internal sources such as <https://taxfoundation.org/top-capital-gains-tax-rate-oecd-2011-2014>.