

CONTEMPORARY ISSUES IN BEHAVIORAL FINANCE

CONTEMPORARY STUDIES IN ECONOMICS AND FINANCIAL ANALYSIS

Series Editors: Robert J. Thornton &
J. Richard Aronson

Recent Volumes:

- Volume 88: European Responses to Globalization: Resistance, Adaptation and Alternatives
Edited by Janet Laible and Henri J. Barkey
- Volume 89: Globalization: Perspectives from Central and Eastern Europe
Edited by Katalin E. Fabian
- Volume 90: Privatization in Transition Economies: The Ongoing Story
Edited by Ira W. Lieberman and Daniel J. Kopf
- Volume 91: Personal Injury and Wrongful Death Damages Calculations: Transatlantic Dialogue
Edited by John O. Ward and Robert J. Thornton
- Volume 92: Moving Beyond Storytelling: Emerging Research in Microfinance
Edited by Todd A. Watkins and Karen Hicks
- Volume 93: The Impact of the Global Financial Crisis on Emerging Financial Markets
Edited by Jonathan A. Batten and Peter G. Szilagyi
- Volume 94: Derivative Securities Pricing and Modelling
Edited by Jonathan A. Batten and Niklas F. Wagner
- Volume 95: The Developing Role of Islamic Banking and Finance: From Local to Global Perspectives
Edited by Fouad Beseiso
- Volume 96: Risk Management Post Financial Crisis: A Period of Monetary Easing
Edited by Jonathan A. Batten and Niklas F. Wagner
- Volume 97: Contemporary Issues in Bank Financial Management
Edited by Simon Grima and Frank Bezzina
- Volume 98: Contemporary Issues in Finance: Current Challenges from across Europe
Edited by Simon Grima, Frank Bezzina, Inna Romānova and Ramona Rupeika-Apoga
- Volume 99: Governance and Regulations' Contemporary Issues
Edited by Simon Grima and Pierpaolo Marano
- Volume 100: Contemporary Issues in Business and Financial Management in Eastern Europe
Edited by Simon Grima and Eleftherios Thalassinou

CONTEMPORARY ISSUES IN ECONOMIC AND
FINANCIAL ANALYSIS VOLUME 101

CONTEMPORARY ISSUES IN BEHAVIORAL FINANCE

EDITED BY

SIMON GRIMA

University of Malta, Malta

ERCAN ÖZEN

University of Usak, Turkey

HAKAN BOZ

University of Usak, Turkey

JONATHAN SPITERI

University of Malta, Malta

ELEFThERIOS THALASSINOS

University of Piraeus, Greece



United Kingdom – North America – Japan
India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2019

Copyright © 2019 Emerald Publishing Limited

Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-78769-882-6 (Print)

ISBN: 978-1-78769-881-9 (Online)

ISBN: 978-1-78769-883-3 (Epub)

ISSN: 1569-3759 (Series)



ISOQAR certified
Management System,
awarded to Emerald
for adherence to
Environmental
standard
ISO 14001:2004.

Certificate Number 1985
ISO 14001



INVESTOR IN PEOPLE

CONTENTS

<i>List of Contributors</i>	vii
<i>Series Editor's Introduction</i>	ix
<i>About the Contributors</i>	xiii
<i>About the Editors</i>	xxi
Chapter 1 Risk and Control in Consumer Behavior: A Discussion	
<i>Erdoğan Koç, Çağatan Taşkın and Hakan Boz</i>	1
Chapter 2 Using Artificial Intelligence Techniques for Economic Time Series Prediction	
<i>Utku Kose</i>	13
Chapter 3 Volatility Spillovers between BIST100 Index and S&P500 Index	
<i>Letife Özdemir and Serap Vurur</i>	29
Chapter 4 Brand Reputation and Its Influence on Consumers' Behavior	
<i>Marica Mazurek</i>	45
Chapter 5 An Investigation of Augmented Reality Applications from the Perspectives of Brand Trust and Purchase Intentions of Customers	
<i>Bilsen Bilgili, Emrah Özkul, Erdoğan Koç and Mehmet Oğuz Ademoğlu</i>	53
Chapter 6 Women's Cooperatives as a Tool of Employment Policy in Turkey	
<i>Duygu Kızıldağ</i>	65
Chapter 7 The Impact of Financial Literacy on Cognitive Biases of Individual Investors	
<i>Ercan Özen and Gürsel Ersoy</i>	77

Chapter 8 Retirement Planning: A Literature Review <i>Sara Pavia and Simon Grima</i>	97
Chapter 9 A Comparative Survey Over Time between Cash and Cashless Payments in Poland <i>Beata Świecka</i>	139
Chapter 10 Marketing Communications and Experiential Marketing in the Context of Augmented Reality <i>Songül Bilgili Sülük and Kenan Aydın</i>	153
Chapter 11 Exports, Imports, and the Exchange Rate: A Causality Analysis for Turkey (2004–2017) <i>Erdoğan Kotil</i>	163
Chapter 12 Herd Behavior in the Borsa Istanbul <i>Reyhan Can and Işın Dizdarlar</i>	171
Chapter 13 Factors Affecting Internet Banking Preferences and Their Relation to Demographic Characteristics <i>Eser Yeşildağ</i>	187
Chapter 14 Who Wants to be a Millionaire? A Behavioral Economy Analysis <i>Ekrem Tufan, Burcu Engin, Yonca İmer and Merve Aycan</i>	205
Chapter 15 Herd Behavior and Its Effects on the Purchasing Behavior of Investors <i>Çağatay Başarır and Özer Yılmaz</i>	215
Chapter 16 Retirement Planning by Maltese Nationals: A Study of Influential Factors <i>Simon Grima and Sara Pavia</i>	227
Chapter 17 How Does Governance Help World Stock Market Development? <i>Tarek Eldomiaty, Rasha Hammam, Yasmeen Said and Alaa Safwat</i>	261
<i>Index</i>	283

LIST OF CONTRIBUTORS

EDITORS

<i>Hakan Boz</i>	University of Usak, Turkey
<i>Simon Grima</i>	University of Malta, Malta
<i>Ercan Özen</i>	University of Usak, Turkey
<i>Jonathan Spiteri</i>	University of Malta, Malta
<i>Eleftherios Thalassinou</i>	University of Piraeus, Greece

CONTRIBUTORS

<i>Alaa Safwat</i>	Arab Academy for Science, Technology & Maritime Transport, Egypt
<i>Beata Świecka</i>	University of Szczecin, Poland
<i>Bilsen Bilgili</i>	Kocaeli University, Turkey
<i>Burcu Engin</i>	Çanakkale Onsekiz Mart University, Turkey
<i>Çağatan Taşkın</i>	Bursa Uludağ University, Turkey
<i>Çağatay Başarır</i>	Bandırma Onyedi Eylül University, Turkey
<i>Duygu Kızıldağ</i>	Izmir Democracy University, Turkey
<i>Ekrem Tufan</i>	Çanakkale Onsekiz Mart University, Turkey
<i>Emrah Özkul</i>	Kocaeli University, Turkey
<i>Ercan Özen</i>	University of Usak, Turkey
<i>Erdoğan Koç</i>	Bandırma Onyedi Eylül University, Turkey
<i>Erdoğan Kotil</i>	Bolu Abant İzzet Baysal University, Turkey
<i>Eser Yeşildağ</i>	Uşak University, Turkey
<i>Gürsel Ersoy</i>	Usak University, Turkey
<i>Hakan Boz</i>	University of Usak, Turkey
<i>Hatice Isin Dizdarlar</i>	Nigde Ömer Halisdemir University, Turkey

<i>Kenan Aydin</i>	Yıldız Technical University, Turkey
<i>Letife Özdemir</i>	University of Afyon Kocatepe, Turkey
<i>Marica Mazurek</i>	University of Zilina, Slovakia
<i>Mehmet Oğuz Ademoğlu</i>	Kocaeli University, Turkey
<i>Merve Aycan</i>	Çanakkale Onsekiz Mart University, Turkey
<i>Özer Yılmaz</i>	Bandırma Onyedi Eylül University, Turkey
<i>Rasha Hammam</i>	Misr International University, Egypt
<i>Reyhan Can</i>	Nigde Omer Halisdemir University, Turkey
<i>Sara Pavia</i>	MAPFRE MSV Life, Malta
<i>Serap Vurur</i>	University of Afyon Kocatepe, Turkey
<i>Simon Grima</i>	University of Malta, Malta
<i>Songül Bilgili Sülük</i>	Yıldız Technical University, Turkey
<i>Tarek Eldomiaty</i>	Misr International University, Egypt
<i>Utku Kose</i>	Suleyman Demirel University, Turkey
<i>Yasmeen Said</i>	Misr International University, Egypt
<i>Yonca İmer</i>	Çanakkale Onsekiz Mart University, Turkey

SERIES EDITOR'S INTRODUCTION

The Emerald book series: **Contemporary Studies in Economic and Financial Analysis**, edition CSEF101 includes studies on *Contemporary Behavioral Issues*, mainly by authors invited from participants in the International Applied Social Science Congress (C-IASOS) held in Demre (Myra), Antalya, Turkey (hometown of Saint Nicholas – Father Christmas) between April 19–21, 2018.

The first authors (Chapter 1) study the relationship that exists between risk and control in consumer behavior. Herein the authors present the feeling of consumers when faced with different perceived risks, which in this context is defined as lack of control. They then show how businesses can adjust these perceptions to give a feeling of control to consumers and use this knowledge for marketing purposes.

Next in Chapter 2, the author analyzes the employment of Machine Learning techniques for predicting future states of economy data. He uses Artificial Neural Networks (ANNs), Adaptive Neuro-Fuzzy Inference System (ANFIS), Dynamic Boltzmann Machine (DyBM), Support Vector Machine (SVM), Hidden Markov Model (HMM), Bayesian Learning on Gaussian process model (BG) (Brahim-Belhouari & Bermak, 2004), Autoregressive Integrated Moving Average (ARIMA), Autoregressive Model (ARM) (Poggi et al., 2003), and K-Nearest Neighbor Algorithm (K-NN) for his prediction techniques. He reveals positive results in terms of predicting economy data.

Volatility spillover between the BIST100 Index and the S&P500 Index is the topic of the third chapter. The authors here carry out an assessment of the interdependence between stock markets with the aim of examining the shock and volatility spillover between the S&P500 index from the US Stock Exchange and the BIST100 index from the Stock Exchange Istanbul stock indices. Results using the variance causality test indicate that there is a bi-directional volatility spillover between S&P500 index and BIST100 index. When the return spillover between the markets is examined, a one-way spillover from the S&P500 index to the BIST100 index emerged. Diagonal BEKK model results show that each market is affected by its own news (unexpected shocks) and volatility. Furthermore, the volatility is persistent for both markets. These findings demonstrate that the US market and the Turkish market interact with each other.

The author of the fourth chapter carries out a literature review on brand reputation and discusses the way this influences consumer behavior. She highlights studies by Anholt – GMI Brand Index (2007), which evaluates the perception of countries as brands and measures the power and appeal of a nation's brand image. She notes that this approach can be helpful to understand behavior and decisions of visitors to the destinations and to improve their competitiveness.

Authors in Chapter 5 investigate the augmented reality (AR) applications from the perspectives of brand trust and purchase intentions of customers. They note that with the development of information technologies and the increase in the number of new generations of technology-based consumers, significant changes in the promotion and positioning strategies implemented in consumer markets are needed and are carried out using applications such as AR. In fact, in this chapter the authors aim to determine whether there was a difference between customers' brand trust and purchase intentions regarding real experiences of the consumers at the store, experiences about AR applications, and traditional advertisements. It is determined that it will be beneficial to develop strategies in AR applications to enrich the real experience.

In the sixth chapter the author aims to determine the effect of women cooperatives as an employment policy in Turkey. In this context, she carries out a literature review on the effects of women's cooperatives movement on the social and economic development and participation of the labor force by also looking at sustainability development goals. She found that cooperatives are an opportunity for the employment of women and highlighted that women cooperatives are a contribution to the sustainable development goals. Moreover, she notes that women's cooperatives can be regarded as an effective policy for increasing women's employment in regions with traditional structures.

The authors of the seventh chapter study the impact of financial literature on cognitive biases of individual investors in relation to financial investments. They find that (i) financial literacy leads to differences in cognitive biases and (ii) that cognitive biases of individuals who do not receive finance education are different from individuals who receive finance education and professionals in the business world.

A literature review of retirement planning is carried out by the authors of Chapter 8. They highlight that proper retirement planning starts by looking at the level of income an individual is likely to continue receiving at retirement if they were to take no action, then compare this to what they would need to lead the lifestyle they desire. They review the traditional expected behavioral economic theories, which many are accustomed to when interpreting financial matters (i.e., rational behavior) and compare this to the various studies and articles found in literature. They then dig into retirement planning in Malta and the behavioral obstacles to proper planning and how they are tackled in different European countries.

The author in Chapter 9 used the data from a primary survey to analyze the consumer cash and cashless payments in Poland. They carried out a comparative analysis on the 2018 cash and cashless payments in Poland in the background of the previous surveys carried out in Poland and the other EU countries. Results show that although cashless payments are a dynamic group of products that Polish consumers use more and more often, the position of cash is still strong.

Marketing communications and experiential marketing in the context of AR is the topic of the 10th chapter. Authors here carry out an experiment using experimental AR mobile applications to market/communicate paint products

and compare this with attitudes towards competing brands not using AR mobile applications. The targeted participants included consumers, painters, and interior designers in Istanbul. Their findings highlight the importance of digital applications on the influence of intention of buying consumers and marketing communication.

The author of the 11th chapter focuses on the dual relationship between export and import, export and foreign exchange rate, import and foreign exchange rate by using causality methods. He finds that there is only one causality relationship between export and import with the direction flow being from import to export.

A study of herd behavior on the Borsa Istanbul is the theme of Chapter 12. Here the authors investigated whether herd behavior, in the period between January 2011 and December 2017, was present in Stock Exchange Istanbul. Using regression analysis, they show that results obtained support previous works on the subject.

In Chapter 13, the author determines the factors affecting the internet banking preferences of the bank customers and the relationships between the demographic characteristics of bank customers and internet banking usage in the Usak city of Turkey. Seven factors were found to be effective in using internet banking. These are "effect of social circle," "benefits of internet banking," "the usefulness of internet banking," "speed and time savings," "ease of use and cost," "the ability to use the internet and the advantages of internet banking," and "the suitability to life and work style." In addition, it was determined that there is a significant relationship between the demographic characteristics of bank customers and the internet banking usage.

The authors of Chapter 14 ask the question "who wants to be a millionaire?" and studied cognitive biases such as certainty effect, isolating effect and overconfidence effect on the Turkish version of *Who Wants to be a Millionaire?* television show during the period between September 2013 and April 2015. They found evidence for both certainty and isolation effects.

In Chapter 15, herd behavior and its effects on the purchasing behavior of investors were studied. It is shown through cases exemplified, that investors do not act rationally in their financial decisions and take irrational decisions by following the majority.

In this penultimate chapter (Chapter 16) continues building on Chapter 8, with the same authors aiming to determine what affects Maltese individuals' behaviors when it comes to retirement planning. With the use of a self-administrated online survey, they gathered data which was later analyzed using a mixed approach to determine that of the most prominent of behaviors, procrastination, myopia, and inertia were observed.

The final chapter (Chapter 17) studies how government governance helps world stock market development. This chapter offers an empirical examination of the impact of World Governance indicators (WGIs) on stock market development. The Empirical findings show that (a) a negative association exists between Voice and Accountability and stock market development; (b) a positive association exists between each of political stability, government effectiveness, regulatory

quality, rule of law and control of corruption, and stock market development for most World's regions stock markets; (c) both Voice and Accountability and Political Stability indicators are the major influential indicators for the stock market development across world stock markets.

Simon Grima

Series Editor

ABOUT THE CONTRIBUTORS

Mehmet Oğuz Ademoğlu is a Master's student of the Department of Production Management and Marketing at Kocaeli University. He was born in 1992 in Yalova. He started his Business Administration education in Yıldırım Beyazıt University and completed at Yalova University. He was graduated from Yalova University in 2017. He still continues his education as a master student at the Kocaeli University.

Merve Aycan was born in Balıkesir (Oct. 27, 1992). She received her Bachelor degree in Tourism and Hotel Management (2014) and MA in Tourism Management (2016). Now she is a PhD candidate in Tourism Management at the Institute of Social Sciences, Balıkesir University. She is working as Academician at the Istanbul Arel University Vocational School. Her subjects of interest include office management, tourism, marketing, and tourist psychology.

Kenan Aydın is a Professor at the Yıldız Technical University in Istanbul Turkey. He is the Dean of Faculty of Economic and Administrative Sciences. He serves on the editorial boards of a number of journals. His research interests are retail marketing, services marketing, brand perception, consumer behavior, and category management in retail.

Çağatay Basarır is an Assistant Professor of Accounting and Finance at Bandırma Onyedi Eylül University, Bandırma-Balıkesir-Turkey. Dr Basarır has a BSc in Business Administration from the Ege University (2003), an MBA from the Balıkesir University (2006), and a PhD in Business Administration-Finance from the Balıkesir University (2013). His research interests lie in behavioral finance, financial, and capital markets such as forecasting of stock prices, commodity prices, investment strategies in financial crises periods and in forecasting methodologies such as time series analysis and panel data analysis. He has taught capital markets, portfolio management, international finance, accounting, financial management, and financial statement analysis, among others, at both graduate and undergraduate levels.

Bilsen Bilgili is an Associated Professor at Faculty of Tourism and Hotel Management Kocaeli University, Turkey. She serves on the editorial boards of a number of journals. Her research primarily focuses on marketing (brand equity, brand management, tourism marketing).

Songül Bilgili Sülük is a Product Marketing Specialist at a leading company in the Information Technology sector in Turkey. She was graduated from Business Administration at the Dogus University, Istanbul. She studied Master degree in Innovation, Entrepreneurship, and Management at the Yıldız Technical

University. Her research interests are brand personality, customer satisfaction, and innovation.

Hakan Boz is an Assistant Professor at the Usak University, School of Applied Sciences. Prior to joining academia, he has held various positions in the tourism and hospitality sector. He has over 10 years of experience in tourism and hospitality. He has published several journal articles and book chapters in tourism marketing with a specific emphasis on neuromarketing. His research focuses on gaining a deeper understanding of consumer and employee behavior in the tourism and hospitality sectors, especially by using equipments such as Eye Tracker, EEG, HR, GSR, FACE, and fMRI.

Reyhan Can is a Doctoral student in Accounting and Finance program in Nigde Omer Halisdemir University, Social Sciences Institute. Can was graduated from Nigde University Social Sciences Institute Accounting and Finance MBA program after she finished undergraduate program in Business Administration at Anadolu University. She has been preparing a doctoral thesis “on Heuristic Decision Making Errors and Firm Value.” She graduated the thesis subject on “Pecking Order Theory and a research on Borsa İstanbul (BIST) 100 index.” She has written and published several articles and papers on the subject of behavioral finance and capital structure. She is married and has a son. She is living in Kırşehir, Turkey.

İşin Dizdarlar, PhD, is an Associate Professor at the Department of Business Administration at the Faculty of Economics and Administrative Sciences at Nigde Omer Halisdemir University. She was graduated from Istanbul University, Institute of Social Sciences Finance Program. Dizdarlar worked as an Assistant in the Department of Finance at Istanbul University, Business Administration Faculty. Her PhD thesis subject is “a Research on Factors Affecting the Risk Premium of Euro Bonds in International Financial Markets.” Master’s thesis subject is “Capital Structure Theories and Empirical Findings.” Dizdarlar wrote many articles on finance. Dizdarlar has national and international publications on finance.

Tarek Eldomiaty got his PhD at the City University Cass Business School in London in 1998. He is currently the Dean of the Faculty of Business Administration and International Trade. His research interests and publications cover the areas of corporate capital structure, corporate governance, and securities analysis. He published many papers in scholarly journals such as *International Journal of Financial Engineering*, *Advances in Quantitative Finance & Accounting*, *Journal of Behavioural Accounting and Finance*, *International Journal of Emerging Markets*, *Journal of Economic and Administrative Sciences*, *Asia-Pacific Journal of Business & Economics*, *International Journal of Revenue Management*, *International Business & Economics Research Journal*, *Applied Econometrics and International Development*, *International Journal of Accounting & Finance*, *European Business Review*, *Quarterly Review of Economics & Finance*, *Journal of Emerging Markets Finance*, *Corporate Governance: International Journal of Business in Society*, *Journal of Business Ethics*, and *Advances in Financial Planning & Forecasting*.

Burcu Engin was born in Izmir. In 2013, she was graduated from Çanakkale Onsekiz Mart University, Tourism and Hotel Management. She worked at Gökçeada School of Applied Sciences Gastronomy Department in 2014. She started her Master's degree at Çanakkale Onsekiz Mart University, Social Sciences Institute, and continues her graduate education. Her subjects of interest are accounting, finance, and behavioral economics.

Gürsel Ersoy was born in Usak (July 24, 1986). He was graduated from Usak Trade Vocational High School in 2003 with honorary degree. In 2010, he graduated from Gazi University, Department of Accounting and Finance, and in 2015, he was graduated from Anadolu University, Department of Business Administration. In 2017, he started his Master's degree at Usak University, Social Sciences Institute and continues his graduate education. He has been working at Karacasu Multi-Program Anatolian High School since 2016. During his years of service, he worked as the Chief and Accounting Coordinator of the Accounting and Finance Department. Since 2016, he has been working as the coordinator of Accounting and Finance Field at Karacasu Multi-Program Anatolian High School and involved in the preparation of strategic plan of the school.

Simon Grima, PhD (Melit.), MSc (Lond), MSc (BCU), BCom (Hons) (Melit.), FFA, FAIA (Acad), is the Head of the Insurance Department, in charge of Bachelor of Commerce in Insurance, Bachelor of Commerce (Honours), and master's degree in Insurance and Risk Management, and a Senior Lecturer at the University of Malta. He served as the President of the Malta Association of Risk Management between 2013 and 2015 and is the current President of the Malta Association of Compliance Officers since 2016. Moreover, he is among the first Certified Risk Management Professional, the Chairman of the Scientific Education Committee of PRIMO, and a Member of the Curriculum Development Team of PRIMIA in 2014. His research focus and consultancy is on governance, regulations, and internal controls (i.e., risk management, internal audit, and compliance) and has over 30 years of experience varied between financial services and with public entities in academia, Internal controls, investments, and IT. He acts as an independent director for financial services firms, sits on Risk, Compliance, Procurement, Investment, and Audit Committees, and carries out duties as a Compliance Officer, Internal Auditor, and Risk Manager.

Simon has acted as Co-chair. He is a Member of the Scientific Program Committee on some international conferences, and a Chief Editor, an Editor, and a Review Editor of some journals and book series. He has been awarded Outstanding Reviewer for the *Journal of Financial Regulation and Compliance* in the 2017 Emerald Literati Awards.

Rasha Hammam received the MA in Economics from the American University in Cairo, Egypt, in 2010 and the PhD in Economics from Faculty of Economics and Political Science, Cairo University, Egypt, in 2014. Since 2015, she has been Assistant Professor of Economics at Faculty of Business Administration and International Trade, MISR International University, Cairo, Egypt. Her research interests are in international economics and macroeconomics.

Yonca İmer was born in İzmir (July 29, 1992). In 2014, she was graduated from Çanakkale Onsekiz Mart University, Tourism and Hotel Management. She graduated her Master's degree at Çanakkale Onsekiz Mart University, Social Sciences Institute, Turkey. She is still working as a freelance expert in tourism and doing her own business in tourism.

Duygu Kızıldağ is an Associate Professor of Management Science at Faculty of Economics and Administrative Sciences, İzmir Democracy University, Turkey. She received her Bachelor's degree in Business Administration and completed her MA degree with her thesis on the re-engineering of human resources processes according to competency-based perspective. During these periods she worked in large international automotive and textile companies in Turkey. She took part in different projects such as job analysis and descriptions, training management, performance management, quality management, and occupational safety. After returning to academia, Kızıldağ received her PhD in Management from Afyon Kocatepe University with her thesis titled "Problematic Behaviors in Organizations and Behavioral Risk Management."

Dr Kızıldağ's current topics of interest revolve around the intersection of organizational behavior, human resources management, entrepreneurship, and family business research. In particular, she is interested in the problematic behaviors in organizations, behavioral risk management and ISO 31000, the efficiency of human resources management processes, women entrepreneurship, and the dynamics of family businesses in Turkey.

Erdogan Koc is a Professor of Marketing at Bandirma Onyedi Eylul University, Faculty of Economics and Administrative Sciences. He specializes in services marketing and management, particularly in tourism and hospitality. His research primarily focuses on the human element (both as consumers and employees). His scholarly works have been published in top tier international journals. He also serves on the editorial boards of a number of journals and acts as an ad hoc referee for several journals.

Utku Kose received his BS degree in 2008 from Computer Education of Gazi University, Turkey as a Faculty Valedictorian. He received his MS degree in 2010 from Afyon Kocatepe University, Turkey, in the field of computer and DS / PhD degree in 2017 from Selcuk University, Turkey, in the field of computer engineering. Between 2009 and 2011, he has worked as a research assistant in Afyon Kocatepe University. Following, he has also worked as a lecturer and Vocational School – Vice Director in Afyon Kocatepe University between 2011 and 2012 and as a lecturer and Research Center Director in Usak University between 2012 and 2017. Currently, he is an Assistant Professor in Suleyman Demirel University, Turkey. He has more than 100 publications including articles, authored and edited books, proceedings, and reports. His research interest includes artificial intelligence, machine ethics, artificial intelligence safety, optimization, the chaos theory, distance education, e-learning, computer education, and computer science.

Erdoğan Kotil is an Assistant Professor of Economics at Faculty of Economics and Administrative Sciences, Bolu Abant İzzet Baysal University, Turkey. His teaching interests largely focus on international economics. His research interests include econometrics, economic aspects of tourism, and natural resources.

Marica Mazurek (MSc., PhD candidate)'s research interest is competitiveness of tourism destinations, branding, marketing, place marketing, place branding, and innovations in tourism. She participated in several academic exchanges and research activities, and she is a visiting Professor in Canada (Brock University, University of Waterloo). She is the author of several academic publications, for example, in the *International Journal of Emerging Markets*, *Journal of Internet Commerce*, the book chapter in *Tourism Marketing: On Both Sides of the Counter* edited by Cambridge Scholars Publishing (edited by Prof. Metin Kozak et al.), *Kybernetes*. Recently she participated at the international conferences in Turkey, Fethiye (2nd Interdisciplinary Conference in Tourism Research), 4th ATMC international conference in Maribor, Slovenia, the 5th ATMC international conference in Algarve, Portugal and the Multidisciplinary International Conference in Porvoo, Finland (Haaga-Helia University), the 5th International Conference of Marketing in Algarve, Portugal, the International Conference of Tourism, Hospitality and Recreation in Poznań, Poland, and the 3rd Interdisciplinary Tourism Research Conference in Istanbul, Turkey, conferences in Taipei, Taiwan, and Joensuu, Helsinki and the 2nd EATSA (The European and Asian Tourism Association) conference in Lisbon, Peniche and Coimbra, etc. She teaches Marketing, Digital Marketing, Economics and Management at the University of Zilina, Slovakia.

Letife Özdemir received her BSc in Business (2002), MSc in Business (2005), PhD in Business Finance (2011) from University of Afyon Kocatepe. Now she is an Associate Professor of Finance in the Department of Logistics Management, School of Applied Sciences, University of Afyon Kocatepe, Turkey. Her current research interests include different aspects of finance. She has authored 19 papers and more than 10 conferences participation. She has been involved in two scientific projects and has awarded third prize in the 21st Finance Symposium. She is a member of TEMA (Turkey Combating Soil Erosion, for Reforestation and the Protection of Natural Resources Foundation).

Ercan Özen (born on April 11, 1971) received his BSc in Public Finance (1994), MSc in Business-Accounting (1997), PhD in Business Finance (2008) from University of Afyon Kocatepe. Now he is an Associate Professor of Finance in the Department of Banking and Finance, School of Applied Sciences, University of Uşak, Turkey. His current research interests include different aspects of finance. He has (co-)authored three book chapters and more than 30 papers, more than 20 conferences participation, member in International Program Committee of three conferences and workshops. Dr Özen is also a certificated accountant, a member of Aegean Finance Association and a member of TEMA (Turkey Combating Soil Erosion, for Reforestation and the Protection of Natural Resources Foundation).

Emrah Özkul is an Associate Professor of Tourism at School of Tourism and Hotel Management, Kocaeli University, Turkey. He serves on the editorial boards of a number of journals. His doctorate and associate professorship field is tourism. His research primarily focuses on the tourism sociology, CRM in tourism.

Sara Pavia serves as Business Development Manager at MAPFRE MSV Life, where she started her insurance career in 2009 while reading for her Bachelor of Commerce (Hons.) degree in Insurance and Finance at the University of Malta. Her dissertation was concerned with the role of private insurance companies in the introduction of second and third pillar pension schemes in Malta. After obtaining her degree at the top of her class in 2011, she was awarded top student by the Institute of Financial Services (UK) on obtaining her Certificate for Financial Advisors (CeFA) in 2013. In her 14 years in the insurance and financial services industry, she has been focused on the life insurance and investments area and has been developing and contributing to the business within her role, authoring articles, focusing on financial literacy, developing products (among which was the first insurance-based third pillar pension product in Malta) among other things. In 2013, Sara started reading for her Masters in Financial Services at the University of Malta. Again, her studies focused on the issues around retirement planning, this time focusing on behavioral finance to determine factors which influence the Maltese market. Sara is today co-lecturing at the University of Malta's Faculty of Economics, Management and Accountancy (FEMA). She continues to work toward increasing financial literacy locally, particularly with respect to retirement planning, through her work and studies.

Alaa Safwat is an Assistant Lecturer at the Arab Academy for Science, Technology & Maritime Transport. She is currently involved in research in financial markets and financial institutions.

Yasmeen Said is an Assistant Professor of Finance. She got her PhD in Finance at the University of Nottingham. She has research interests in financial markets and Investments in financial securities and published in scholarly journals such as *Journal of Economics Finance and Administrative Science*.

Beata Świecka is a Professor of Economics at the University of Szczecin. She is the Director of Household and Behavioral Finance Center, a member of the Finance and Banking Association, and the Chairman of Scientific Council in the Social Cluster. Her research interests are focused in the areas of household and behavioral finance. She awarded for the best scientific publication by the Foundation for the Development of Cashless Transactions. Multiple times she was winner of the Rector of the US Award for achievements in science and teaching. She was awarded for scientific publication "Contemporary problems of personal finance." She is the winner of the prize Amicus Scientiae at Veritatis by Polish prestigious organization – Polish Economic Association. She is an expert of European Consumer Debt Network. She is a reviewer of many Polish and foreign journals.

Çağatan Taşkın is a Professor of Marketing in Bursa Uludağ University, Turkey. He was graduated from the Industrial Engineering Department, Uludağ University in 1999. He completed his Master's degree in Production Management and Marketing and his PhD degree in Business Administration. Çağatan Taşkın currently works at the Department of Business Administration (Faculty of Economics and Administrative Sciences), Bursa Uludağ University. His research focuses on brand management and destination branding.

Ekrem Tufan (Aug. 12, 1968) received his Bachelor's degree in Business Administration (1991), MSc in Finance (1995), PhD in Business Finance (1999) from University of Anadolu. He is a Professor in Finance and working for Çanakkale Onsekiz Mart University. He is studying on Behavioral Finance and Behavioral Economics. His main duties involved in teaching General Accounting, Accounting Applications, Cost Accounting, and Finance to students from year 1 to 4 classes at the Department of Health Management. He is also been delivering Financial Management, Corporate Finance, Behavioral Economics, Behavioral Finance and EU and Tourism lessons for both graduate and post-graduate levels (MBA, PhD) and international program students who come from EU countries.

Serap Vurur received her BSc in Economy (2002), MSc in Business-Accounting (2004), PhD in Business Finance (2009) from University of Afyon Kocatepe. Now she is an Assistant Professor of Finance in Department of Accounting, School of Applied Sciences, "University of Afyon Kocatepe, Turkey. Her current research interests include different aspects of finance. She has (co-) authored more than 15 papers, more than 20 conferences participation. She is a member of TEMA (Turkey Combating Soil Erosion, for Reforestation and the Protection of Natural Resources Foundation).

Eser Yeşildağ was born in Hatay City (Turkey) in 1983. In 2005, he was graduated from Adnan Menderes University, Faculty of Economics and Administrative Sciences, Department of Business Administration. He holds a Master's degree in 2008 and PhD degree in Business Administration in 2013. He wrote his theses on Finance. Between 2006 and 2010, he worked as investment expert in Evgin Securities, Şeker Investment and Anadolu Investment Brokerage houses. Between 2010 and 2013, he worked as a lecturer in Çivril Vocational School of Pamukkale University. In 2013 he started to work with the title of Assistant Professor in the School of Applied Sciences of Uşak University. In 2014, he was appointed as the Deputy Director of the School of Applied Sciences. He teaches finance courses such as Financial Mathematics, Financial Management, and Derivative Markets.

Özer Yılmaz is an Assistant Professor of Marketing as Bandırma Onyedi Eylül University, Bandırma-Balıkesir-Turkey. Dr Yılmaz has a BS in Business Administration from Balıkesir University (2003), MBA and PhD in Business Administration from Balıkesir University (2014). His research interests are customer behavior and marketing research. Dr Yılmaz has taught marketing research, principles of marketing, international marketing, service marketing, etc. at both graduate and undergraduate levels.

This page intentionally left blank

ABOUT THE EDITORS

Hakan Boz is an Assistant Professor at the Usak University, School of Applied Sciences. Prior to joining academia, he has held various positions in the tourism and hospitality sector. He has over 10 years of experience in tourism and hospitality. He has published several journal articles and book chapters in tourism marketing with a specific emphasis on neuromarketing. His research focuses on gaining a deeper understanding of consumer and employee behavior in the tourism and hospitality sectors, especially by using equipments such as Eye Tracker, EEG, HR, GSR, FACE, and fMRI.

Simon Grima, PhD (Melit.), MSc (Lond), MSc (BCU), BCom (Hons) (Melit.), FFA, FAIA (Acad), is the Head of the Insurance Department, in charge of the undergrad and postgrad degrees in Insurance and Risk Management, and a senior Lecturer at the University of Malta. He is the outgoing President of the Malta Association of Risk Management and the Current President of the Malta Association of Compliance Officers. Moreover, he is among the first Certified Risk Management Professional, is the Chairman of the Scientific Education Committee of PRIMO, and a Member of the curriculum development team of PRIMIA. His research focus and consultancy is on internal controls (i.e., risk management and internal audit and compliance) and has over 25 years of experience varied between Financial Services and with public entities in Internal Controls, Investments, and IT. He acts as an Independent Director for Financial Services Firms sits on Risk, Compliance, Procurement, Investment, and Audit Committees, and carries out duties as a Compliance Officer, Internal Auditor, and Risk Manager. Simon has acted as Co-chair in various international conferences and is a Reviewer of a number of journals. He has been awarded Outstanding Reviewer for *Journal of Financial Regulation and Compliance* in the 2017 Emerald Literati Awards.

Ercan Özen (born on April 11, 1971) received his BSc in Public Finance (1994), MSc in Business-Accounting (1997), PhD in Business Finance (2008) from University of Afyon Kocatepe. Now he is an Associate Professor of Finance in the Department of Banking and Finance, School of Applied Sciences, University of Uşak, Turkey. His current research interests include different aspects of finance. He has (co-)authored three book chapters and more than 30 papers, more than 20 conferences participation, member in International Program Committee of three conferences and workshops. Dr Özen is also a certificated accountant, a member of Aegean Finance Association and a member of TEMA (Turkey Combating Soil Erosion, for Reforestation and the Protection of Natural Resources Foundation).

Jonathan Spiteri is a Resident Academic within the Department of Insurance at the University of Malta and a Visiting Lecturer in Economics at the University of Edinburgh. He graduated with Honours in Economics (First Class) from the University of Malta, a Master of Science in Economics (with Distinction), and, as an ESRC Scholar, a PhD in Economics, both from the University of Edinburgh. Jonathan's current research interests include behavioral economics, environmental economics, and health. He is currently involved in the R2Pi Horizon 2020 project which examines the shift from the concept of Circular Economy to one of Circular Economy Business Models in Europe. He also forms part of the Nudge-It FP7 project which aims to develop and implement novel scientific approaches across various disciplines to better understand people's nutritional choices and health outcomes.

Eleftherios I. Thalassinos, PhD, (UIC, Chicago), MBA, (De-Paul U Chicago), BA, (University of Athens), is a Jean Monnet Chair Professor experienced in European economic integration and international finance. He is the Editor-in-Chief of European Research Studies Journal, a 21-year-old international publication, International Journal of Economics and Business Administration, a 5-year-old international publication, and is International Conference on Applied Business and Economics, a 15-year-old international conference and Editorial Board Member in various journals. His professional experience includes, quantitative analysis, technical and financial analysis, banking, business consulting, project evaluations, and international business financing and shipping.

CHAPTER 1

RISK AND CONTROL IN CONSUMER BEHAVIOR: A DISCUSSION

Erdoğan Koç, Çağatan Taşkın and Hakan Boz

ABSTRACT

Consumers are faced with many new products. In almost every product category it is seen that there are more alternatives than provided in previous years. This situation may cause consumers to feel uncomfortable/uncertain, especially about new products. Therefore, since they perceive this uncertainty, customers want to be in control. Control is one of the ways to help customers to decide on perceived risky situations.

The main purpose of the study is to explain the effects of the risk and control drive on consumer behavior and determine how businesses reduce the risk that consumers feel.

It is critical for enterprises to increase their brand awareness in order to reduce consumers' risk perceptions and increase their controls (cognitive, behavioral, and decision) during purchasing decisions. Also, it will be useful for them to focus on activities increasing brand loyalty. They can especially carry out marketing activities allowing consumers to try new products or providing money back guarantees. Moreover, in order to reduce the risk perception and increase control by the customers, making the promotional contents of the product understandable and simple without hidden factors will contribute in a positive way.

Keywords: Risk; cognitive control; behavioral control; decisional control; consumer's buying behavior; neuromarketing

1. INTRODUCTION

The ability to feel and escape from bad situations is vital for the survival of all living organisms. Human beings live and gain experiences from life. They learn what to use with care or avoid according to their life experiences. They also have the choice to change things in life in order to reduce or eliminate risk. Every innovation or advancement in life results from some kind of risk being taken. Thus, it is important for policymakers to balance the benefits and the risks. From the beginning of humankind, risk has been an ever-present issue within the lives of people. An extensive body of literature exists regarding risk within fields such as marketing, consumer behavior, recreation/leisure, tourism, economics, psychology, decision sciences, management, insurance, public policy, and finance. Each of these fields takes a different approach to the study of risk and examines different aspects (Carroll, 2009, pp. 34–35).

2. DEFINITION OF THE RISK CONCEPT

The concept of risk is mostly seen as the alteration of outcomes, their possibilities, and their subjective values. Risk can be defined as the situation where a decisionmaker has an a priori knowledge of both the consequences of alternatives and their probabilities of occurrence. Risk can be viewed as an expectation of loss. This perspective is different from the traditional one that treats the risk concept as “probability times the pay-off” that has origins to the disciplines of mathematics and economics. It is a psychological-driven focus for risk. Thus, the concept of risk can be defined as an expectation of loss which is subjectively determined; the greater the probability of this loss, the greater the risk thought to exist for an individual (Mitchell, 1999, pp. 167–168).

The usage of risk concept is increasing in various disciplines and the definition of risk may differ from one discipline to another. However, the most general assumption shared is the distinction between reality and possibility. The concept of risk is related to the possibility that the future can be changed by human activities. The risk concept is related to the term “expectations” that refers to knowledge and experiences of the past. They can be developed in a formalized, more or less conscious way, referring to statistical techniques, or in a less formalized manner, referring to everyday knowledge and personal experiences (Zinn, 2008, pp. 3–4).

2.1. The Risk Concept in Consumer Behavior

The concept of risk or perceived risk was originally proposed by Bauer (1960) in consumer behavior research. Formally, perceived risk is defined as “a combination of uncertainty plus seriousness of outcome involved.” The perceived risks are regarded as “the expectation of losses associated with purchases and acts as an inhibitor to purchase behaviour” (Bauer, 1960).

The main problem with consumer behavior is the choice under uncertainty. Because the result of a choice cannot be known until the usage of the product or services, the consumer is facing various risks. The risk perception is considered as

a major aspect of consumer behavior since risk is usually thought to be difficult and painful because it may cause stress which must be handled by consumers. Consumers' self-esteem would affect the amount of perceived risk and the way of dealing with risks in a particular choice situation and the way chosen to handle risks (Taylor, 1974, p. 54).

After Bauer's (1960) proposition, the concept of perceived risk was used to explain consumers' behavior. Consumers may worry about their buying decisions because they may not be sure about their purchase decisions whether they will satisfy them or not. That's why, the concept of perceived risk is a function of uncertainty and is consumer uncertainty about the loss or gain in a consumer buying transaction (Forsythe & Shi, 2003, p. 869). The concept of perceived risk occurs in consumer buying decisions because consumers' actions may face negative results (Littler & Melanthiou, 2006, p. 433).

In other disciplines, the concept of risk is related to choice situations involving both potentially positive and potentially negative outcomes; however, the focus has primarily been on potentially negative outcomes only in consumer behavior. This is an important difference between risks, as understood in marketing, versus how it is understood in other disciplines (Stone & Grønhaug, 1993, p. 40).

Research on perceived risk has grown since Bauer's (1960) advocacy of risk-taking behavior as a possible measure of consumer attitude toward a purchase. Perceived risk is considered to be a situational and personal construct. Research on perceived risk has laid emphasis on two components: the likelihood of a loss and the subjective feeling of unfavorable results. However, there is a lack of a universally agreed definition (Pires, Stanton, & Eckford, 2004, p. 119).

If individuals perceive risk, this means that they are expecting some kinds of loss. In particular, psychology research includes a relation between risk concept and gambling behavior. The perceived risk is measured by various models in the literature. The perceived risk theory was introduced in 1960 from the perspective of consumer behavior. According to Bauer, consumers' behavior involved risk because their purchasing actions "will produce consequences which he cannot anticipate with anything approximating certainty, and some of them which at least are likely to be unpleasant." Since 1960, many consumer types of research confirmed that perceived risk is one of the important factors in consumer behavior (Bauer, 1960).

As noted above, risk is one of the significant factors influencing consumer behavior and is perceived "in terms of the probability of an outcome and the importance of cost associated with the outcome." Perceived risk can be seen in all purchase decisions especially if the outcome is uncertain. Under these conditions, consumers may postpone or cancel their purchase and this means that they perceive the existence of risk (Pappas, 2017, pp. 197–198).

Perceived risk is closely related to the potential negative outcome of one's decision. If the consumer believes that he or she cannot control the purchase outcomes or the consequences of a wrong decision would be important and serious, a risk may appear (Mohseni, Jayashree, Rezaei, Kasim, & Okumus, 2018, p. 625). Consumer behavior is influenced by many factors one of which is the level of uncertainty and anxiety consumers feel regarding the purchase decision. This can be identified as perceived risk (Lacey, Bruwer, & Li, 2009, p. 99). According to

Yeung and Morris (2006), risk perception can be defined as the individual judgment of the likelihood that a consequent loss could occur and the seriousness of its likely consequences (Yeung & Morris, 2006, p. 295). It is known that people try to avoid or minimize their losses as much as possible when they are about to make decisions on risky situations (Sung & Jo, 2018, p. 1009).

2.2. *Perceived Risk as a Multi-dimensional Concept*

A risk is a multi-dimensional concept that has two components such as certainty and consequences. In addition, it can be classified into five categories: functional risk, physical risk, financial risk, social risk, and psychological risk (Yüksel & Yüksel, 2007, p. 704). However, according to Mohtar and Abbas (2015), the most common categories of perceived risk include financial risk, performance risk, physical risk, psychological risk, social risk, and convenience risk (p. 5). The definitions of each component are given below:

- *Financial risk*: This risk is defined as the financial loss to a customer. It includes the possibility that the product may need to be repaired, replaced, or the purchase price refunded (Sweeney et al., 1999, p. 81).
- *Performance risk*: This risk refers to the perception that a product or service may not perform as needed or expected (Brosdahl & Almousa, 2013, p. 5). In other words, it can be defined as the risk associated with an inadequate and/or unsatisfactory performance of the product (Rijsdijk & Hultink, 2003, p. 207).
- *Physical risk*: This risk is related to the possibility of the risk that the purchased product physically harms the consumer (Chu & Li, 2008, p. 214).
- *Psychological risk*: This risk can be defined as anxiety and/or uncomfortable feelings arising from anticipated post-behavioral emotions such as worry and tension (McLeay, Yoganathan, Osburg, & Pandit, 2018, p. 521).
- *Social risk*: This risk can be defined as the potential loss of esteem, respect, and/or friendship offered to the consumer by other individuals (Laroche, McDougall, Bergeron, & Yang, 2004, p. 376).
- *Convenience risk*: This risk addresses a loss of time and effort associated with achieving satisfaction with a purchase (Murray & Schlacter, 1990, p. 54).
- *Overall risk*: The chance of the purchase of a product or service ending up with a general dissatisfaction of someone (Pires et al., 2004, p. 120).

According to Featherman and Pavlou (2003), perceived risk has been classified into two main categories – (a) performance and (b) psychosocial. The category of performance includes three types: (i) economic, (ii) temporal, (iii) effort; and the category of psychosocial includes two types – (i) psychological and (ii) social. In addition, perceived risk has six dimensions: (1) performance, (2) financial, (3) opportunity/time, (4) safety, (5) social, and (6) psychological loss (Featherman & Pavlou, 2003, p. 454).

Perceived risk may occur in a purchasing situation. It may depend on many factors. It may depend on external factors. However, also the level of perceived risk is related to the consumer him/herself. In literature, these two-factor groups

are called extrinsic (product/store characteristics) and intrinsic (involvement, past experiences) factors. If there are negative feelings toward a product, this will increase the level of the perceived risk. On the contrary, the risk perceived by consumers tends to decline as the consumer experience with the product or service increases. In addition, the personality of the consumers also influences the level of their risk perception (Lacey et al., 2009, p. 99).

When the consumer is faced with a buying situation, he or she perceives a risk because of his or her decision to buy that product or service. Since first introduced in 1960, perceived risk concept has been explored in many disciplines. It is a function of uncertainty and consequences. For instance, there can be uncertainty inherent in the product, there can be uncertainty in place and mode of buying, there may also be some consequences such as financial and psycho-social, and the consumer may feel subjective uncertainty because of his or her buying experience (Stern, Lamb, & MacLachlan, 1977, p. 312).

2.3. Risk Reduction Strategies

The concept of perceived risk refers to the truth that consumers are generally uncertain about their buying decisions' consequences. Thus, marketing managers try to seek competitive advantages by reducing consumers' perceived risk. Risks can be totally different according to product types, lack of information, and prior experience (Havlena & DeSarbo, 1991, p. 927). Consumers use various risk reduction methods to minimize their risks about buying decisions. These methods include seeking information from different sources and regarding brands as a quality guide, etc. In addition, marketing managers have methods such as money back guarantees, warranties, and free trials (Jiuan, 1999, p. 165).

Consumers mostly think of products for their consequences. Consequences refer to the results which occur when consumers purchase and consume the products. Consumers may think of possible positive and negative outcomes after the usage of products as potential benefits or risks. Benefits refer to positive outcomes consumers try to get when purchasing products while perceived risks are seen as unwanted outcomes that customers desire to avoid when they purchase products. People generally try to avoid buying products with higher risks. If the perceived risk of a product seems to be low, then consumers would be more likely to try and purchase it (Termprasertsakul & Kulsiri, 2011, p. 12).

Consumers tend to reduce risk in their buying situations especially if they perceive a risk related to the unexpected outcomes. If the risk perception of the consumers is higher than their minimum tolerance levels, then they will try to reduce their risks. Common examples of risk reduction strategies are buying branded or quality-assured products or buying from trusted places. However, the use of these strategies depends on the risk perception tolerance of the consumers. In literature, there are many risk-reducing strategies. Some of these risk-reducing strategies, such as brand loyalty, product testing, store image, special offer, money-back guarantee, shopping around, expensive product, celebrity endorsement, and family/friends' recommendation are frequently used in general purchases where products could possibly under-perform (Yeung, Yee, & Morris, 2010, pp. 307–308).

The risk-taking theory proposes that a great number of consumers face a certain amount of uncertainty when they are deciding to buy a product or service. Consumers try to reduce the number of risks they face by taking some steps. They may buy certain brands that they trust or collect information from web or opinion leaders. Usually, consumers cannot affect the consequences of using a brand. Instead, they may change the uncertainty levels about those consequences. There are three ways of reducing the risks or to learn about what consequences there may be in the future from various brands. The first one is information seeking from the social environment such as family, friends, and reference groups. Second, they may consider what alternatives they have before they make the purchase. Lastly, they may choose to rely on the brand image, which is a helpful asset of a brand that helps creating brand loyalty (Sheth & Venkatesan, 1968, p. 307).

The consumer trust can be defined as the function of a degree of risk involved in the situation. Trust is considered to be highly important, especially in economic transactions because of its function to reduce the risks of being a victim to opportunistic behaviors. Trust has been also seen as a risk reliever by consumers for gaining an advantage against sellers in channel relationships and inter-organizational transactions (Pavlou, 2003, p. 79).

When consumers are about to make a decision they face two aspects of risk. The first one is the uncertainty about the outcome and the second one is about the consequences of their choice. Both types of risks are existing in almost every situation related to choices but their importance varies from one situation to another. The amount of each type of risks in a specific choice affects the decisions made by the consumers to reduce those risks. The first type of risk can be reduced by gathering information and using them wisely. The risk about the consequences can be handled by reducing the amount or by delaying the choice. When consumers face a choice, the risk can be interpreted as the possible amount of loss consumers may get. The loss can be social, functional, economical, or a combination of them (Taylor, 1974, p. 54–58).

3. THE CONCEPT OF CONSUMER CONTROL

Kahneman and Tversky (2013) indicate that people give more importance to not losing rather than winning when they perceive risk and uncertainty against a particular stimulus (i.e., about a product). Similarly, Miller (1979) states that people must minimize the maximum danger to be motivated (taking action or buying a product), because a risky and uncertain situation is a threat to people in terms of surviving. In such cases, people generally tend to control more (Hagen, Bujdoso, & Nedela, 2015). Reducing consumers' perceived risk and uncertainty is vital for enterprises as today's consumers are faced with too much stimulus during the day (Ding & Keh, 2016; Koç & Boz, 2017; Perlmutter, Scharff, Karsh, & Monty, 1980). According to Harari (2015), risk and uncertainty should be reduced and the future should be predictable in order to enable people to take action through the time periods from hunting and gathering to modern age's people.

Control behavior has a vital importance in consumer consumption and purchasing decisions. Consumers have a higher tendency to control especially in the service sector. Consumers feel more risk and uncertainty with the content and performance (because service is abstract) of a service (i.e., education quality) rather than a tangible good (Laroche et al., 2004). According to Zeithaml, Bitner, and Gremler (2012), intangibility, heterogeneity, and inseparability of services increase risk and uncertainty. That situation then may lead consumers to need more control over services.

The “Control Theory” was proposed by Averill (1973). Averil (1973) states that people tend to require three different types of control. These are *decisional control*, *cognitive control*, and *behavioral control*.

- (1) *Decisional control* means that customers can choose from different alternatives in the process of product purchase, without feeling pressured by other people (Koç, 2017). That control expresses the customer’s power on getting what he/she wants among different options at the time of purchasing a product. For example, when you go to a store, the salesperson comes near you and constantly interferes because of the fact that they do not want to leave the decision control to the customer. In that case, the customer may feel uncomfortable and leave the store and not return to the store again.
- (2) *Cognitive control* is associated with customers’ motivation for eliminating or reducing the possibility of experiencing negative situations (Faranda, 2001; Koç, 2017). In addition, it is possible to indicate that cognitive control can be related to the customer’s ability in forecasting psychological, sociological, or functional benefit that will be obtained from a product after its purchase. An example of cognitive control can be that customers are able to be sure that there will be no extra cost after buying a product. For example, a commitment made to a customer buying a mobile number (service) that s/he will receive bills not exceeding a certain price. This will satisfy the related customer’s need for cognitive control. Additionally, giving back a product without a fee after a certain period following its purchase will meet with the customer’s cognitive control motive. Finally, allowing customers to cancel their holiday before its date without a fee will also meet with the cognitive control motive (Koç, 2016).
- (3) *Behavioral control* defines the situation that a person can free himself/herself from a purchase process in order to eliminate any possible negative experience that may occur in the future (Faranda, 2001; Koç, 2017, p. 150). For example, a person is able to cancel a (money oriented) task on an ATM when s/he has a doubt is associated with the behavioral control. That situation may occur even when a person has a doubt about some bank staff. Customers may psychologically hesitate giving up at the last stages of a task when carrying this out at a bank branch. However, it is difficult to have such a feeling at the ATM. Therefore, the customer has all control at the stages of the services over ATMs. Whenever he/she feels risk or uncertainty, he/she can easily cancel the whole service. Similarly, customers have the decision control when they shop over the internet. In that case, the customer can cancel the payment

until he/she clicks on the confirmation button after he/she even puts products into the basket. When a product is bought from a store, the seller can feel psychological pressure in not to stop the transaction. But that situation is not applicable over the internet.

In addition to Averil's (1973) theory, Langer (1975) developed the Illusion of Control Theory. According to that theory, people give a higher value to the things that they have (ideas, goods, and religion) (Koç, 2017, p. 152). The illusion of control is a frequent bias in this context (Houghton et al., 2000). An illusion of control bias occurs when people believe that they used their own skills and abilities when successful no matter if this happened as a chance (Houghton, Simon, Aquino, & Goldberg, 2000; Langer, 1975).

3.1. Control as a Coping Strategies Against Risks

Studies regarding control behavior have been carried out for more than 50 years. While studies on control behavior are focusing more on the field of psychology, limited studies are reported in the field of marketing (Koç & Boz, 2017). Customer participation has become an important part of enterprise strategy for control drives of customers (Vargo & Lusch 2004). Customer participation in production is very important for control behavior. According to the study by Koc (2016), customers enjoy the taste of their products (e.g., salad) more than the products by the service enterprises when they participate in the preparation process of the product. In the study, a detailed description of each customer's favorite salad was noted. Then, after the customers took a salad from the kiosk, the same salad was prepared by a service enterprise. Although salads were prepared similar to the recipes explained by the customers, the related customers enjoyed the salad they prepared more. According to the results of this study, it is possible to indicate that customers' control motive is satisfied more when they take part in the production process.

Strategies for reducing the illusion of control are important also for enterprises selling physical products. Kahneman and Tversky's (2013) "Prospect Theory" is important for such enterprises. According to the Expectations Theory, and as noted above, people care more about not losing rather than winning. A similar trend applies to the control theory. The need for control is associated with reducing losses and increasing earnings. Because of that, expressing the 60% success rate instead of a 40% death risk for patients at the hospitals helps customers to decide.

The service sector is abstract because of its structure and because of that, the risk that customers feel increases the need for control. Information that customers have before the purchase will also be less. That situation will increase the customer's risk feeling and his/her uncertainty motive. Risk and uncertainty improves people's control desire (Hagen et al., 2015). Because of that, it is required that strategies are created, which are control based and can reduce customers' risk motive. For example, an open buffet in the restaurants is a good application for improving customers' decision control. In this way, a customer will decide which food to have himself/herself. Because he/she can have as much as he/she wants, uncertainty on the portion amount will be eliminated (Koç & Boz, 2017). It can