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# CONTENTS

	<b>Page</b>
<i>Boards and Committees</i>	<i>iii</i>
<i>Contents</i>	<i>vii</i>
<b>Understanding the Management and Leadership Culture Type in European Automotive Industry</b> Kağan OKATAN	<b>1</b>
<b>Two Dimensional Hotelling Model with Conditions of Dirichlet Problem for First Order Equation</b> Bahriye KARACA	<b>3</b>
<b>The Determination of Wage Growth in Turkey and the United Kingdom: The Role of Workdays Lost to Strikes</b> Emre ÜNAL, Nezir KÖSE	<b>5</b>
<b>How Does Financial Development Affect Environmental Degradation?: Empirical Evidence from G-20 Countries</b> Sercan DEMİRALAY, Çağrı ARSLAN	<b>6</b>
<b>Relationship Between Income Inequality and Economic Growth: A Comparative Analysis of Developed and Developing Countries</b> Erdem BAĞCI	<b>8</b>
<b>The Relationship Between Authentic Leadership Style and Employees' Voice Behavior</b> Melda KEÇEÇİ, F. Ceyda SÜER	<b>10</b>

<b>Modelling the Economic Benefits of Inter-city Connectivity</b>	<b>12</b>
David PIERCE	
<b>Adoption of EU Directive 2013/34/EU IN 10 European Countries and Comparison with the Standards Applied in Turkey</b>	<b>14</b>
Neslihan ÇETİNKAYA BİLGİN, Nalan AKDOĞAN	
<b>Financialization and the Distribution of Income: A Panel Data Analysis for OECD and Non-OECD Countries</b>	<b>16</b>
Onur ÖZDEMİR	
<b>On the Stochastic Differential Equations in Mathematical Finance</b>	<b>18</b>
Mustafa BAYRAM, Tuğçem PARTAL	
<b>Sectorial and Regional-Based Benchmarking Study for Dimensions of the Learning Organization Questionnaire (DLOQ) Measurements</b>	<b>19</b>
Tutku Tuncalı YAMAN	
<b>Choosing Wisely: A Theoretical Framework to Support the Strategic Use of Systems Methods in Meeting the Sustainability Challenge in Organisations</b>	<b>20</b>
Rachel FREEMAN	

# Understanding the Management and Leadership Culture Type in European Automotive Industry

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## Abstract

Management and leadership styles and approaches have always been important for business and management literature. The dominance of management and leadership on companies' success or failure has been highlighted and investigated by important amount of studies in existing literature. Therefore, it is not hard to estimate more studies will take place on identifying the management's and leadership's effect on business results. This study is one of them. We aimed to figure out the management and leadership type for a specific industry with the specific geography. The underlying motivation of this study is to approach management and leadership by considering them as strong organizational culture dimensions, which act important roles in the organizational culture framework. In order to identify the type of management and leadership in a company, a well-known organizational culture framework has been selected. 'Competing Values Framework' defines 'Management of Employees' and 'Organizational Leadership' as two of the six major dimensions which form the organizational culture. Since, it is suitable to investigate management and leadership culture type by this framework; we applied this tool for the organizational culture assessment on the companies in our scope, which will give us to

understand their management and leadership culture, too. This study also determines the general organizational culture of the companies in scope. The scope exists of three outstanding companies in automotive sector in Europe. They are motor vehicle producers and vehicle part supplier with having success in their markets by their innovative production approaches. This study opens a road to understand management and leadership culture in a mass production area, which requires harmonization of technology and process efficiency for the achievement of business success. On the other hand, independent from the business area, it gives a view to understand the interrelationship of organizational cultural dimensions.

**Keywords:** Management, leadership culture type, European automotive industry, harmonization of technology

# Two Dimensional Hotelling Model with Conditions of Dirichlet Problem for First Order Equation

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## Abstract

This paper examines the location equilibrium in spatial competition framework with two dimensional spaces inside a unit disc. Firstly, we give the technical background in complex partial differential equations. Then the model is described briefly; we consider a unit disc market with two dimensional space in which two competing firms exist and both firms offer identical products in all respects except for the location of availability and firms choose locations inside the unit disc. Consumers are uniformly distributed inside the unit disc. Each consumer demands a single unit of product and faces transportation cost to buy one unit of product. Under these settings, we explore the perfect Nash equilibrium By the help of theorem about Dirichlet problem for inhomogeneous Bitsadze equation and theorem about Dirichlet problem for complex conjugate inhomogeneous Bitsadze equation in the unit disc, the model and its equilibrium are defined. We drive the general conditions for location function under the indirect utility function of consumers. We found the unique solution of symmetric location problem with conditions of Dirichlet Problem for first order equation in complex space for a pin point. We analyzed the two-dimensional unit disc market with spatial

restriction. We provide location function for the competing firms based on the market range framework in generalized Hotelling model in complex plane with boundary conditions. We find the firm locations in symmetric opposite points in the plane. On the contrary to the previous studies, we consider only location game in our model to satisfy spatial restriction of the two-dimensional unit disk market. The model could be extended with inclusion of price game for further research

**Keywords:** Spatial competition, location choice, game theory, complex analysis

# **The Determination of Wage Growth in Turkey and the United Kingdom: The Role of Workdays Lost to Strikes**

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## **Abstract**

In this research, the long- and short-term impacts of workdays lost to strikes, inflation and real GDP growth on wages have been analyzed in Turkey and the United Kingdom, using the Engle-Granger co-integration test and error correction model on annual data collected for the years 1963-2015. The results revealed that wage levels in these two countries are determined by real GDP growth only in the short-term, but are influenced by inflation in both the short- and long-terms. In addition, it was found that wage levels are positively affected by workdays lost to strikes in the long-term, whereas the impact of workdays lost to strikes on wages is not statistically significant in the short-term.

**Keywords:** Co-integration, error correction, input-output analysis, wage setting, strikes, mathematical base social contract

**JEL Codes:** C32, C67, E02, J30, J50

# How Does Financial Development Affect Environmental Degradation?: Empirical Evidence from G-20 Countries

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## Abstract

The nexus between environmental degradation and economic growth has been the subject of academic studies over the past decades. However, most of the studies do not address the role of financial development in environmental degradation. Financial development affect environment quality in different ways. First, financial development may attract foreign direct investment. Second, financial deepening makes access to external financing easier, which may promote the deployment of renewable energy. Third, increased financial market development makes it easier for consumers to satisfy their wants and needs with purchasing big ticket items. The aim of this paper is to examine the impacts of financial development on environmental degradation for G-20 countries. Using the period from 1992 to 2014, we conduct GMM panel model to control for endogeneity and to circumvent the short sample limitation. We measure the degree of environmental degradation by carbon dioxide per capita emissions. The financial development variables are divided into two categories: stock

market deepening and banking sector developments. As proxies for stock market variables, stock market capitalization, stock traded total value, stock value to turnover are selected. The bank related variables are bank net interest margin, Z-scores, return on asset, return on equity. We also use GDP per capita, trade openness, foreign direct investment, urbanization, inflation and energy consumption variables to control other factors. There is no correlation between stock market variables and CO2 in G20 countries. Our analysis also suggests that bank performance and deepening variables increase CO2 emissions. We believe that our empirical results are of particular interest to policymakers in mitigating the adverse effects of environmental pollution.

**Keywords:** Financial development, environmental degradation, Stock market, Banking sector, GMM-Panel

# **Relationship Between Income Inequality and Economic Growth: A Comparative Analysis of Developed and Developing Countries**

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## **Abstract**

Slow productivity growth, rising income inequality, inadequate employment and the lack of sustainable economic growth all are important problems for all countries. Economic growth is seriously indicator for economic welfare. But, if there is income distribution inequality, economic growth does not provide economic prosperity. Inequality also has been widening for decades. Income distribution inequality has attracted the attention of all societies in terms of economic, political, social and moral. Because, the negative consequences of income inequality are multidimensional. When literature is examined, it is seen that a significant part of the studies done are economic development and growth as the cause of the inequality. Economic growth must be ensured before the income (in)equality in a country is discussed. For this reason, an understanding of the relationship between the income inequality and the economic growth has grown in importance through time. Rising inequality in income distribution is a widespread concern. Income inequality within most advanced and emerging markets and developing countries (EMDCs) has increased. Some economists argue that income inequality is an inevitable part of a successful economy. For example, Kaldor maintains that lower-inequality

economies have lower profit margins and relatively low levels of investment. Therefore, lower consumption, lower employment, and lower total income are occurred in these economies. High levels of investment need accumulation of capital, these lead to increasing concentration of capital. Concentration of capital results in increasing income inequality.

In this paper, the relationship between income inequality and economic growth is examined by analyzing the related literature. Later, the relationship between economic growth and income distribution inequality between developed and developing countries in 1995 - 2014 was presented comparatively. At the end of the study, the possible consequences of inequality of income distribution and the economic policies that should be applied are discussed. The literature on income inequality includes a lot of studies that some of these studies have tried to identify relationship between income inequality and economic growth rate. In this study, 15 studies are analyzed. Most of these studies argued that there is negative relationship between economic growth and income inequality. Some of these studies argued that there is positive relationship between economic growth and income inequality. However, indicators about inequality shows that the economic growth does not provide income equality. In addition, experience shows that economic improvements does not reduce income inequality in the short-run, and the long-run. Therefore, increase in economic growth rate is not alone enough to overcome income inequality problem. All of countries must determine serious economic policy in order to cope with income inequality by evaluating its reasons that are the level of economic development, rate of economic growth, education, differences in resource endowment, price instability, black market for foreign exchange, unemployment rate, taxation policy, monopolization of markets and etc.

**Keywords:** Economic growth, inequality, Gini Index, Human Development Index

# **The Relationship Between Authentic Leadership Style and Employees' Voice Behavior**

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## **Abstract**

The main purpose of this study is to show the relationship between authentic leadership and employees' voice behavior. Voice behavior has become an important and influential topic that can be associated with many positive organizational outcomes like effectiveness, conflict resolution, correcting the mistakes and improving the processes (e.g., Mackenzie, Podsakoff, & Podsakoff, 2011). The researchers aimed to find out if there were a relationship between authentic leadership and employees' voice behavior. For this purpose, an empirical research was carried out on a total of 140 employees. This study and the literature unceasingly deliberate the effect of authentic leadership style on employees' voice behavior. Since authentic leaders pursue organizational mission and goals, they are eager to take action when employees report an incidence contradicting to these goals or may be promoting them. Additionally, authentic leaders establish connected relationships with everyone including their subordinates which build trust. Subordinates would feel secure to share their ideas with their supervisor. The mean value of authentic leadership is 4,03 and employee voice behavior is 3,65 which is

quiet high for a collectivist country like Turkey. This can be explained by the authentic leadership style of the employees. Since employees perceive their leaders as authentic, they trust that if they share their opinions, their supervisor would not blame them and would take action.

**Keywords:** Voice behavior, authentic leadership, leadership behavior, prosocial behavior

# Modelling the Economic Benefits of Inter-city Connectivity

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## Abstract

There is a high level of interest in investing in inter-city connectivity schemes. The rationale for these schemes is improved economic performance through increased productivity, jobs and output. Many of the impacts are likely to take place over long timeframes which are currently modelled coarsely in many models and some of the more detailed modelling methods which take account of the micro-foundations of trade and specialisation and agglomeration effects are based on static rather than dynamic frameworks. Inter-city transport schemes require significant capital investment and without dependable methods to assess their impact it raises policy questions about whether it is beneficial to invest in improving links between places. To investigate the economic impacts of inter-city transport a stock and flow model of two cities has been developed. The model has two sectors and a 20-minute reduction in rail travel times is introduced to understand the dynamics and the extent of barriers to localisation benefits and to understand the degree to which these can be unlocked through inter-city transport. The results show that when the employment and GDP per worker inputs are similar for each sector in each zone and capital is fixed the transport improvement leads to productivity gains from increased economic density but there is

only a marginal reallocation of labour between sectors. With mobile capital the model tends towards the corner solution with full specialisation but the speed of adjustment is slow and the new steady state is reached only after several decades. The results show that the potential benefits from full specialisation may be significant and inter-city transport can contribute to these through the realisation of localisation impacts more quickly.

**Keywords:** Inter-city transportation, specialisation, productivity, urbanisation, localisation

# **Adoption of EU Directive 2013/34/EU IN 10 European Countries and Comparison with the Standards Applied in Turkey**

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## **Abstract**

On 26 June 2013, European Parliament and Council has published Directive 2013/34/EU “Directive”, to be applied in the annual financial statements, consolidated financial statements and related reports of certain undertakings. This Directive has focused on amending directive 2006/43/EC, and repeal directives 78/660/EC and 83/349/EC. European Union member states were obliged to bring into force the new laws, regulations and administrative provisions necessary to comply with this directory within 24 months, which was filled by 31 December 2015. Thus, the new regulations should have been in use by the entities by 1 January 2016. Directive defines the entities as Micro, Small, Medium and Large undertakings and Small, Medium and Large groups by using three defining amounts; balance sheet total, net turnover and average number of employees during the financial year. General Financial Reporting principles are listed briefly in the Directive in 10 items. In general, it is expected that the member states to accept and adopt the general principles. But it is possible that member states may exempt undertakings from some units or define limits

for some scopes. This research aims to find out the degree of compliance in accounting standards in EU member states with the new EU Directive 2013/34/EU, specifically 10 EU countries (France, Germany, Italy, Romania, Netherlands, Portugal, Spain, United Kingdom, Belgium and Austria). The paper is comprised of three parts, first part explains the regulations of Directive 2013/34/EU, second part explains the differences and similarities with the Directive's provisions and member states' domestic accounting regulations. And the last part will give a brief review of Turkey's standing point in between these different regulations. Turkey government has prepared new standards for Large and Medium Sized Entities (BOBI FRS), which is applicable in undertakings which do not have the obligation to present financial statements to public.

**Keywords:** EU Directive 2013/34/EU, BOBI FRS, Adoption of standards, Accounting Standards

**Jel Codes:** M40, M41, M48

# **Financialization and the Distribution of Income: A Panel Data Analysis for OECD and Non-OECD Countries**

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## **Abstract**

The literature on finance has to a large extent focused on the finance-growth nexus, but only few have analyzed the effects of finance on the labor share of national income. This study discusses the special case of finance which is called the financialization of the economic system in order to understand the increasing degree of income disparities referring to the heterodox perspectives. In addition, it investigates the reasons why the financialization has increased its impact on economic relations and the factors that affect the income distribution between capital and labor. The explanations about financialization comprise of different characteristics which are both economic and social in the general framework. However, it is limited to understand the big picture for making an analysis of what is financialization as a whole. This is primarily problematic especially for investigating through its effect on income distribution. Therefore, I simplify the empirical framework by only focusing on the specific indicators which are particularly important for our sample countries (note that sample countries are classified as OECD and non-OECD in the empirical analysis). In this regard, I measure the financialization by the following three distinct variables: (i) dividend payments; (ii) interest payments; and (iii) stock market turnover ratio. I use time-

series cross-section data set of 89 countries over the period from 1995 until 2015 to explore the relationship between financialization and the labor share of national income. Besides the financialization indicators, the labor's share is measured by the compensation of employees as a share of GDP. It is also adjusted from the self-employment to make a strong distinction for which income type is attributed to capital and labor. Finally, in addition to these, I take into account of the role of bargaining options of labor by considering the following variables: (i) unemployment rate, (ii) union density, and (iii) strike intensity. While the specifications are primarily estimated by using Driscoll-Kraay method, I also alternatively list the results of the estimations from the models measured by Panel Corrected Standard Errors (PCSE) and Feasible Generalized Least Squares (FGLS). The preliminary results suggest that there is indeed a negative relationship between payments including both dividend and interest, and the share of wages in national income. Other factors that can be accounted for the decline related to a decrease in the bargaining power of labor and economic globalization.

**Keywords:** Financialization, income distribution, labor share of income, bargaining power, economic globalization

# On the Stochastic Differential Equations in Mathematical Finance

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## Abstract

In this paper Black-Scholes model and Heston stochastic volatility model have been discussed. Black Scholes option pricing model was introduced by Black and Scholes (1973) and it is one of the most influential model of capital market. Stochastic volatility models are an approach proposed to overcome the shortcoming of the Black-Scholes model. The Heston model, which is widely used stochastic volatility model in the literature, proposed by Heston in 1993 extends to Black-Scholes model and the special case of it. The aim of this work is to compare the performance of the two models based on the data set from Borsa Istanbul-30 (BIST30). We have collected data for BIST30 index from [borsaistanbul.com](http://borsaistanbul.com). Both models is solved also numerically and our aims are supported with graphs and the last section offers a brief discussion and some concluding remarks.

**Keywords:** Mathematical finance, volatility, Black-Scholes model, Heston model

# **Sectorial and Regional-Based Benchmarking Study for Dimensions of the Learning Organization Questionnaire (DLOQ) Measurements**

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## **Abstract**

Main purpose of the benchmarking studies is providing a more objective point-of-view for business professionals to identify gaps in the organization's processes in order to achieve a competitive advantage (Ketter et al. 2016). In this study it is aimed that gathering benchmark values for Watkins and Marsick's (1993) model for measuring performance of organizations, Dimensions of the Learning Organization Questionnaire (DLOQ), in terms of being a learning organization. Academic articles in last decade, which have "DLOQ" keyword, were scanned and 40 articles were used for calculation in total. As a result sectorial and regional-based benchmarking figures were reckoned.

**Keywords:** Learning organization, The Dimensions of the Learning Organization Questionnaire (DLOQ), Benchmarking, Sectorial and Regional-Based Benchmarking

# Choosing Wisely: A Theoretical Framework to Support the Strategic Use of Systems Methods in Meeting the Sustainability Challenge in Organisations

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## Abstract

**Purpose:** One of the biggest challenges facing organisations in the 21st century is that of sustainability. There are two key drivers for sustainability actions in organisations: meeting regulation on greenhouse gas emissions, solid waste, and other toxic emissions (reducing negative environmental impacts); becoming more resilient in an increasingly-resource constrained world (improving resource efficiency). Systems methods have the potential to help managers in balancing the triple bottom line – economic, social and environmental – but there are many methods to choose from and their suitability for different types of problem situations is not always clear. The structuring process draws upon some of the key authors in the systems science field, including (Reynolds et al. 2017), (Jackson 1990), (Forrester 1993), (Yearworth & White 2014), (Checkland & Scholes 1999); (Mingers & Rosenhead 2004); (Fowler 2003); (Williams & Hummelbrunner 2010); (Ison 2010), (Dunphy et al. 2014), (Pidd 2010). The framework structure is complemented with supporting information. Firstly, some demystifying guidance on terms used in systems science. Secondly, implementation considerations, including the time commitment

for carrying out the methods, who has the expertise to carry them out (internal or external to the organisation), the need for data availability, the need to champion methods within the organisation, how methods can be combined in a multi-methodology approach, and how trust in the results can be built.

**Originality and value:** The theoretical framework provides value to managers who need to improve their organisation's sustainability planning and strategy making and are looking for more transformational approaches than those provided by conventional management approaches. The paper is original in that it combines concepts and methodological theory from several sources to provide a new formation of knowledge in this subject area. No such theoretical framework already exists that focuses specifically on the applicability of systems methods to implementing sustainability within organisations. The paper provides value to the field of management science and systems science in promoting these methods to a wider audience.

**Practical and theoretical contributions:** While the theoretical framework is designed to aid managers in choosing systems methods, it also highlights the methodological issues that can arise in the application of these methods in different situations. Thus, it allows a more realistic evaluation of the likely benefits and drawbacks of these approaches. The intention is that the theoretical framework can help to avoid failure and the wasting of valuable resources, which can happen when the methods chosen – with the best intentions – prove to be unsuitable for the situation at hand.

**Limitations:** The theoretical framework presented has not been field tested and is presented as a conceptual structure rather than a robust guide to practice.

**Keywords:** Methodological theory, Systems methods, Systems science, Sustainability, Managers, Organisations